Artivism for Cleaner Air? An Exploration of the Artistic Representation of 'Haze' in Southeast Asia

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Abstract

Art has long mediated human-non-human relationships. As anthropogenic environmental change intensifies, artists use their work to depict these changes, express emotions towards them, and more recently, advocate for action against further environmental degradation through "artivism". Much of the literature on artivism focuses on Western contexts. Comparing two art exhibitions in Chiang Mai and Kuala Lumpur dedicated to 'haze' - a recurrent air pollution phenomenon in Southeast Asia - our paper offers the first analysis of the role that 'artivism' plays in the public discourse of mitigating and/or adapting to anthropogenic environmental change in a non-Western context. We examined the curation, artworks (n=144), and media coverage of these exhibitions. We found that haze artivism simultaneously instigates material, affective, and idealist pathways for driving social change by fostering sensory connections between visitors and the environment, elucidating emotional responses such as nostalgia for a haze-free past or frustration with the persistent pollution, and motivating visitors to envision more sustainable, 'haze-free' futures. We show that art has successfully transcended the otherwise seasonal/episodic nature of the haze experience to advocate for haze action even when skies are clear. Moreover, the exhibitions created physical, cognitive, and political discursive spaces, in which critical opinion towards environmental governance could be voiced publicly. They bridge grassroots environmentalism and mainstream environmental politics in these otherwise censored and regulated civil societies in Southeast Asia. To this end, we argue that art holds the power to

navigate challenging political landscapes towards progressive environmental action, affording it an increasingly relevant role in global environmental action as climate-hostile politics gain increasing influence internationally.

1 Introduction

Recurrent haze from biomass burning in northern and maritime Southeast Asia has worsened over the past three decades, threatening public health across the region (Koplitz, 2016; Kiely, 2020). In northern Thailand and bordering Laos and Myanmar, haze is caused by burning agricultural waste, particularly sugarcane, rice, and maize, from February to April (Arunrat et al., 2018; Faulder, 2023; Phairuang et al., 2016). Seasonal smoke from fires enhances background sources of pollution from urban transport and industry in Chiang Mai and long-range transported secondary sulphates, largely originating in the Indian continent (Chansuebsri et al., 2024). Concentrations are further exacerbated during the winter period due to the city's basin topography and stable atmospheric conditions (Amnuaylojaroen et al., 2023). In Indonesia, Malaysia, and Singapore, haze results from tropical peatland deforestation for palm oil and pulpwood production, exposing peat soil to decomposition and fire risk (Evers et al., 2017). Peatland fires are difficult to control, resulting in prolonged burning and releasing toxic smoke, affecting neighbouring countries (Hu et al., 2018).

Despite differing causes, haze in both regions manifests similar negative social and environmental impacts. Biomass burning produces yellowish-brown smog that obscures visibility, irritates the eyes and throat, and can cause acute and chronic health issues (Cheong et al., 2019). The pollution can disproportionately harm rural populations in close proximity to the burning, as well as children, the elderly, and those with pre-existing health conditions, while also disrupting economies (Varkkey & Copeland, 2020). Haze-inducing fires damage ecosystems, including carbon-rich peatlands and habitats of endangered species like the orangutan (Cervarich et al., 2016; Hughes, 2017; Von Rintelen et al., 2017). Historical divisions, rooted in colonialism, ethnic conflicts, and urban-rural tensions, add to the challenge of environmental governance (Ng et al., 2020; Varkkey, 2016).

The increasing severity and recurring nature of haze, along with its negative economic and health impacts, have prompted multi-scalar efforts to address the issue (Cheong et al., 2019; Koplitz et al., 2016; Tacconi, 2016). International, regional, and grassroots attempts to tackle haze have seen limited success, as documented in extensive literature (Heilmann, 2015; Jones, 2006; Nesadurai, 2016; Nguitragool, 2010; Nurhidayah et al., 2014; Varkkey, 2016, 2022). Innovative, bottom-up approaches are being explored, with grassroots movements playing a key role despite state regulations limiting activism (Alfajri et al., 2019; Forsyth, 2014; Angela et al., 2019; Luger, 2016; Suman, 2020). Complementing this focus on bottom-up theories of change, studies have highlighted the importance of public communication of the haze crisis and the 'haze season' in shaping societal behaviour and influencing mitigation and adaptation actions (Forsyth, 2014; Liu et al., 2020; ; Liu & Smith

2025; Manzo et al., 2020; Mostafanezhad & Evrard, 2021; Varkkey et al., 2025). These studies have relied on printed and online media as proxies of public communications and perceptions of haze, which is heavily influenced by the state through ownership, self-censorship, and formal regulation (Ong, 2021; Sinpeng, 2020), thus limiting the iteration of alternative viewpoints and dissenting voices.

An emerging form of civil society-led environmental communication in Southeast Asia is art, which has been largely overlooked in literature (except Jurriëns, 2020). Internationally, artistic depictions of environmental crises are growing (Nurmis, 2016), with art uniquely capable of creating personal connections to inspire action compared to other forms of environmental communication (Roosen et al., 2018). Artivism, combining art and activism, is gaining traction in environmental movements to spark socio-ecological change (Jordan, 2020; Stammen & Meissner, 2024). Whilst literature on environmental artivism is growing, it has largely focused on campaigns based in Western liberal democracies, thus falling short of understanding the roles that art can play in alternative cultural and political-ecological contexts.

In this paper, we apply the 'theory of change' artivism framework (Duncombe 2023) to Southeast Asian environmental politics, and explore whether and how environmental art offers an avenue for more progressive environmental discourse in the region's regulated and muted civil society. To achieve this objective, we map out how and where art fits into the unique environmental governance ecosystems of Southeast Asia and how art can drive change to eradicate haze. We focus on two distinctive art exhibitions dedicated to haze episodes that take place in cities affected by the adverse environmental phenomenon in recent years, namely 'Art for Air' (AFA) held by Breath Council in Chiang Mai in February 2023 and 'Haze: Coming Soon' (HCS) held by Greenpeace Malaysia in Kuala Lumpur in May 2023; both strategically timed outside of the typical 'haze season' (Mostafanezhad and Evrard 2021; Varkkey et al. 2025).

We will answer the following questions in the paper:
1. What are the motivations for, and key messaging of the two 'haze' art exhibitions?
2. How were these messages being communicated in the public?
3. What is the role of art in driving environmental action in Southeast Asia?

The remainder of the article will be organised as follows. The next section reviews existing literature on the intersections between art and the environment, followed by a methodology section. We then present our key findings, followed by a discussion section evaluating the implications of our findings. The final section concludes the article.

2 Literature review

2.1 Art in Environmental Change Discourse

There are multiple ways of understanding environmental change. However, decision-makers have primarily relied on positivist scientific approaches, reinforcing their dominance in guiding environmental action (Sarewitz, 2011; Steel et al., 2004). However, critics argue that environmental science is often inaccessible and detached from subjective, cultural, and value-laden experiences of change (Hulme, 2016). Devoid of these values, scientific evidence alone may fail to drive behavioural change (Rudiak-Gould, 2013). By contrast, incorporating non-positivist perspectives allows for the imagination of a wider range of climate futures. Adopting non-positivist approaches enhances the equitability of environmental policy-making, as it embraces a wider variety of value systems and population groups to contribute to the conversation of what 'livable' or 'desirable' futures could look like in different social and cultural contexts (Appadurai, 2013; Castree, 2014; Hulme, 2015). This is particularly relevant in Southeast Asia's agroforestry sector, as scientific critiques are sometimes framed as Western interference, leading to the rejection of evidence by local politicians and communities (Goldstein, 2016; Liu et al., 2020).

Art serves as one of the non-positivist avenues for reflecting on environmental change, shaping how humans perceive their relationship with nature. Throughout history, it has mirrored evolving sentiments toward the environment. Contemporarily, environmental art highlights anthropogenic impact on the environment, with 'eco-art' emerging to address climate issues (Weintraub, 2012). Rather than challenging science, art complements it by bridging communication gaps, humanising environmental change phenomena, and evoking sensory, cognitive, and emotional responses that can inspire behavioural shifts and creative solutions (Landau & Toland, 2021; Renowden et al., 2022).

Visual art can trigger alternative psychological reactions to scientific representations of environmental change (Roosen et al., 2018). Its creative agency enables the use of symbolism, analogy, and metaphor to foster abstract thinking and personal connections to environmental issues (Capstick et al., 2018; van Lente & Peters, 2022). For example, images like a stranded polar bear has elicited empathy and motivate action to protect its habitat in Western discourse, though the imagery essentialises climate risks faced by the Arctic and its hegemony restricts the voice of Indigenous communities (Born, 2019; O'Neill, 2022; Tam et al. 2021). Similarly, the *Blue Marble* photo initially inspired awe and a sense of Earth's fragility (Petsko, 2011; Wuebbles, 2012). However, its origins in military technology complicate its role as an environmental symbol, and its perspective—humans looking down on Earth—has been critiqued as a colonial model of care (Poole, 2008; Wuebbles, 2012). Triggering psychological reactions towards environmental topics is important in an increasingly modernised, urbanised world, where populations are becoming disconnected from the environment and its changes (Knebusch, 2007; McDonald et al., 2015). Any subsequent critical debates (such as the ones triggered by the stranded polar bear and Blue Marble images) could inspire meaningful, productive conversations as to how modern society is organising its relationship with the environment.

Unlike science, which is largely confined to publications in academic journals and scholarly media, art permeates popular media and culture, reaching a broader audience (Bulfin, 2017; Boykoff & Osnes, 2019) and evoking responses ranging from sentiment to awareness, education, and protest (Burke et al., 2018; Guy et al., 2020). While production of

environmental science often marginalises non-experts (Forsyth, 2003), art can represent diverse lived experiences and inspire imaginative visions of environmental futures, potentially influencing behavior (Duncombe, 2023). Moreover, unlike prescriptive scientific approaches, art presents environmental issues without dictating outcomes, instead fostering creative exploration of possible solutions (Miles, 2010; Landau & Toland, 2021; Roosen et al., 2018; van Lente & Peters, 2022). Art's open-ended interpretation encourages collective discussion, raising awareness, and stimulating conversations about environmental challenges and solutions (Baldwin & Chandler, 2010; Roosen et al., 2018).

2.2 The Rise of Artivism

As anthropogenic environmental change enters the public consciousness, artists increasingly recognise the power of art to inspire action (Kollmuss and Agyeman, 2002). This includes artists who deploy their creative medium to convey messages of dissent and advocate change (Gabrys & Yusoff, 2012; Landau & Toland, 2021; Whiteley, 2010), giving rise to 'artivism'.

'Artivism' is defined broadly as art explicitly created, disseminated, and consumed as a medium to raise awareness of environmental issues and inspire change (Duncombe, 2023; Rodríguez-Labajos, 2022). In analysing how art can drive social change, Duncombe (2023) puts forward three interrelated 'theories of change' for artivism. First, idealism envisions art as representing certain philosophical ideals that inform critical perspectives and alternative imaginations that can change the way society currently interacts with the environment. This is seen in examples of environmental education, where art fosters cognitive processes of complex socio-ecological systems, encouraging critical reflection, and bolstering creative sustainability solutions (Molderez and Ceulemans, 2018). Second, materialism contends that art is shaped by the material conditions of everyday lives - that is, artistic ideas come from the bottom up, including everyday struggles and environmental degradation - which in turn directs artistic creation to communicate and motivate change. This is seen in examples of participatory art (Burke et al., 2018), where art has become a medium for congregating people to exchange ideas about visions for sustainable futures. Finally, affectivism posits that art can trigger an emotional reaction that drives an urge for change. Emotions and feelings play an integral role in motivating the struggles for social change (Kaufman et al., 2023). Different types of artwork can instil positive, negative, or reflective responses in different audiences (with or without intention by the artist).

As a recent emergent cross-disciplinary movement between art and environmentalism, artivism is not without its critics. Some believe art should not exist as a means to other ends (such as environmental action) as the value of art lies in its creativity and aesthetic which is independent of an audience's interpretation and experience of it (Kenning, 2008; van Lente and Peters, 2022). Others have warned of the dangers of deploying art instrumentally for political purposes - even if it was created with the intention to bring positive environmental action - recognising this search for instrumentality was the underpinning pattern of thought that has driven the climate crisis in the first place (Miles, 2020).

Despite critiques, art history increasingly embraces eco-critical perspectives amid the ecological crisis (Nisbet, 2017), while artists recognize 'artivism' as a powerful force in environmental discourse. For example, Capstick et al. (2018) found that Fijian artistic expressions of grief over nature's loss have inspired climate awareness and action (Capstick et al., 2018). In another example, by deploying visual metaphors, artists participating in *The Canary Project* invited viewers to challenge the 'growth ontology' that is embedded in modern societies (Cozen, 2013). In authoritarian contexts like China, art provides a space for critical thought without direct confrontation (Brunner, 2015), while in Indonesia, environmental artivism fosters cross-scalar connections for reimagining urban sustainability (Jürriens, 2020). Progressive art forms can also challenge the underpinning extractive human-non-human nature relationships depicted in traditional art forms (Hodgins and Thompson, 2011). In sum, art does not only inform or offer viewers a disinterested 'aesthetic experience', but can encourage a shift to pro-environmental behaviour and political engagement with the issues represented (Ginnachi, 2012; van Lente & Peters, 2022).

2.3 Can 'Artivism' Forge New Space for Environmental Movements in Southeast Asia?

Civil society and environmental activism in Southeast Asia vary widely and do not follow a single model (Forsyth, 2007). Likewise, government responses to dissent differ. However, commonly, civil society is often regulated and censored. Here, we focus on Thailand and Malaysia, where the exhibitions were hosted.

Thailand, despite transitioning to an elected government, remains influenced by its historic military authoritarian developmentalism (Simpson & Smits, 2021; Wong, 2004). The military has opposed some large-scale environmental projects, it has also promoted fossil fuel exploitation for economic growth (Simpson & Smits, 2021). Over the past two decades, environmental dissent has faced repression, including violent crackdowns on groups like the Thai Climate Justice Network (So & Yok-shiu, 2020). However, environmentalism persists through strategic navigation of the complex but porous political fabric of Thailand to drive change, especially through non-politically sensitive channels. For instance, forest conservation gains traction when framed as benefiting national green economic development, whereas efforts linking labor rights to conservation receive less support (Forsyth, 2007). Some view this as compromising broader activism, while others see it as enabling tangible policy change (Banpasirichote, 2004).

Malaysia, similarly, has a strong economic growth imperative. Malaysia's development discourse revolves around two key ideas: using natural resources to address racial economic imbalance and the right to development through resource exploitation. This has made agroforestry a strategic sector, particularly in rubber and palm oil (O'Reilly & Varkkey, 2019). Government-linked companies dominate, while agencies like Federal Land Development Authority and Federal Land Consolidation and Rehabilitation Authority encourage rural Malays and Bumiputeras to establish smallholdings. This configuration also served political aims by redistributing voters to maintain control by the United Malays National Organisation. A "soft authoritarianism" regime uses legal instruments like sedition acts and restrictions on

assembly to limit dissent, without frequent violence (Yew, 2016). While civil society has grown, activists must navigate the political space carefully (Weiss and Hassan, 2003).

What, then, is the role of art in driving environmental action in societies with limited space for critical political discourse? To understand this, we may learn from Jurriens' (2023) exploration of artivism in Indonesia. Like the countries in our study, Indonesia has had a strong developmentalist imperative under the *Pembangunan* (lit. 'development'/'modernisation') underpinned by a strong commodity-based economy driven by primary resource extraction (Warburton 2017). This regime is defended by political elites (Choi 2014), where activism and dissent are deemed sensitive and met with hostility (Setiawan and Tomsa 2023) - especially if it infringes on embedded economic and political interests. Notwithstanding, Indonesian artists draw upon visual culture to critique systemic environmental destruction. Artistic agency and creativity becomes a medium for driving new political ideas and change. Crudely overlaying Duncombe's (2023) theory of change of artivism on Jurrien's (2023) deep empirical analysis, Indonesian artists have deployed materialism to represent the realities of environmental degradation, and idealism to frame their resistance against the drivers for ecological harm. Art has been deployed to "politicise and historicise ecological issues by discussing the intersections between natural, political, cultural and social problems" (Jurriens, 2023, p.4). Art, then, is not just a "space of exception" outside of mainstream Indonesian politics, but an instrument of sparking public discourse, encouraging audience to question the status quo and engage in resistance.

Caused by localised burning, the emission and dispersal of pollutants has rendered a transboundary problem. Moreover, it is not exclusively problematised locally or domestically but rather has gained ASEAN-level and to a lesser extent, international attention with its implications for tropical forest and peatland degradation. How, then, do artists navigate the complex political and economic structures that both contribute to and shape interpretations of the multi-scalar and multidimensional impacts of haze? And what kinds of futures and creative solutions can artistic media propose? These questions will be explored in the remainder of this article.

3 Methodology

To answer our research questions, we deployed a three-step research design drawing from previous research on artistic representation of climate and nature (Cameron, 2011; Miles, 2010). First, we sought to identify the objectives and intended messages of the exhibitions. To do so, we conducted content analyses of exhibition websites, social media websites, and press releases and noted key information whenever available, including exhibition locations, the organiser and funders, exhibiting artists and the artistic medium used, the recorded number of visitors, and notable visitors of the exhibition.

Then, we explored the public reception of these exhibitions, using media reporting as a proxy. We noted that media reporting is often censored by the state (Forsyth, 2014), so we triangulated media representation with alternative, independent sources such as international art reviews and blogs.

Third, we analysed 144 pieces of artwork, from the Kuala Lumpur (n=8) and Chiang Mai (n=136) exhibitions for in-depth analysis (see Appendix A for a sample list of art pieces analysed and our analytical codes. All of the analysed pieces were assigned a number but Appendix A will display an abridged version of our analysis). We have chosen these image-based pieces for our analysis and omitted other forms of art, such as contemporary dance pieces, because of their relative comparability. We also note that not all artwork exhibited in the Chiang Mai exhibition has been documented with titles and the artists' names attributed to the pieces, in order to protect their identities (Drahmoune 2021). Staying true to the original intention to protect the identities of these artists and allow them an anonymous, safe space to use art to communicate their environmental dissent, we decided against conducting further investigation into the identities of the artists.

We deployed content analysis to identify the key themes that appear in artworks, and 'code' them according to a set of categories we deemed relevant. This method is widely used in the analysis of texts, though it is also often used in the analysis of photographs and media images (Rose, 2001b). There are inherent limitations to a content analysis of visual representations, including artistic representations. While visual representation is recognised as being analogical to its referent, textual representation is based on the arbitrary medium of language to communicate the referent with letters, words, and a propositional syntax (Hansen 2017). Images do not have a propositional syntax, so cues to interpret them are loose, imprecise, and unsystematic (ibid.). Unless combined with other methods it will only provide surface-level descriptions of artworks that can be used to make generalised statements (i.e. 70% of our sample contained depictions of ...) and would set up a barrier to us presenting the more powerful and intended meanings. Culloty et al. (2019) have applied this method to climate change images in the media. We base our imagery coding on the key elements of human and non-human ecologies implicated in the haze crises (Zhang and Savage 2019), such as people, animals, nature, agriculture, and technology. These were broken down further into sub-categories. For example, we identified businessmen, activists, women, children, Indigenous people, tourists, and politicians under the 'people' category; orangutans, Sumatran tigers, and pets under the 'animal' category; air, smoke, fire, dust, trees, forests, grassland, mountain, and logs under the 'nature' category; oil palm, maize, tractors, and bulldozers under the 'agroforestry' category; masks, oxygen tanks, protective eyewear, safety helmet under the 'technology' category (see also "Elements Depicted" column in Appendix A). We then wrote short descriptions of how these elements interacted with one another in the piece, and coded the core message(s) of the piece according to 'representation of haze realities', 'representation of emotions related to haze', 'references to pathways to haze (free) futures'. Our coding table is exemplified in Appendix A.

We complemented our content analysis with a semiotic analysis rooted in the work of Roland Barthes (1967, 1977). Essentially, semiology tries to identify the 'signs' that are used in expression – be they representations of bodies, manners, activities, or the props and setting of the image in order to investigate how 'ideology' is portrayed, and power is legitimated by symbolic representation (Rose, 2001a). By analysing how different elements interacted with each other and how they are portrayed in the piece (e.g. if a business is hugging a cloud of smoke, or if a gas mask is placed amidst stumps of logged wood), and

cross referencing with curatorial material, we determined the different 'theories of change' the piece of artwork seeks to evoke. Four authors have extensive knowledge and experience in conducting research on environmental change in Southeast Asia, with one of the authors hailing from Thailand and currently conducting his PhD research in northern Thailand and another permanently residing in Kuala Lumpur, enabling authors to decipher culturally specific symbols

While we aim to align our interpretation with the artists' intention as best we can through referring to curatorial material, a limitation to these methods is that our interpretations certainly do not exhaustively reflect all possible meanings that can be drawn from a piece of work. Furthermore, our own lived experience and prior knowledge of haze, art, and activism in Southeast Asia could influence and bias the analysis. To reduce the risk of this, the final interpretation of this publication is the product of the independent analysis and deliberation of four researchers, and we refer to sources that cite the artists' motivation.

4 Results

AFA 2021, AFA (2022-2023) and HCS are among the first art exhibitions to depict and protest against the annual haze pollution episodes that both cities suffer from. In many ways, the AFA series and HCS are similar.

First, both exhibitions took place in the urban heart of Kuala Lumpur and Chiang Mai. AFA exhibitions were hosted across multiple locations in the old town of Chiang Mai, including traditional tourist attractions (such as museums and temples) and creative spaces (such as galleries and cafes). Similarly, HCS was hosted in RexKL, an old theatre located in the old town of Kuala Lumpur that has been refurbished into a creative space, close to key tourist attractions. The choice of the locations of these two exhibitions does not only entail higher footfall for the exhibition, but it also appeals primarily to a young, creative crowd who are more likely to be sympathetic to critical ecological causes (Heo and Muralidharan, 2019; Naderi and van Steenburg, 2018).

Second, both exhibitions were organised and funded by well-known, well-resourced, institutionalised environmental groups, displaying the power of art in enabling the building of coalitions between environmental groups, grassroot activists, and artists. The AFA series is hosted by the Chiang Mai Breath Council (CMBC) in collaboration with the Chiang Mai City Art and Culture Centre and Chiang Mai University. CMBC is a non-governmental coalition of academics, businesses, civil society, and local administration that seeks to improve air quality through collaborative, educational approaches, like monitoring clean air policies and public education, including collaborations with the Thai Health Promotion Foundation (Thiengburanathum, 2021). Chiang Mai University's involvement aligns with its historic role in supporting civil society to conserve the environment and heritage of Chiang Mai (Denes and Pradit, 2022). Indeed, as the organisers have put it themselves, "Art for Air has become a demonstration of the power of civil society, artists and culture in Chiang Mai" (Art for Air, 2023). HCS is hosted by Greenpeace Malaysia, the local branch of an international environmental NGO with a reputation for its non-violent but confrontational approach and

radical stance on environmental matters. It is supported by CERAH (which means 'bright' in Malay), a local environmental coalition formed in response to the chronic and persistent haze pollution in Malaysia. While CERAH operates independently, its members—including academics, lawyers, and civil society advocates—bring diverse disciplinary and professional perspectives.

Third, both exhibitions have explicit environmental policy goals. The AFA series seeks to deploy art as a "tool to push for solving the problem in the immediate, medium and long term" and "raise the voice of air and environmental issues to become an important agenda for the world (Art for Air, 2023). HCS calls for three key solutions: restoring peatlands, securing corporate commitments to zero deforestation, and enacting the Transboundary Haze Act in Malaysia (Husna, 2021).

Two primary distinctions are the scale of the exhibitions and the variety of artworks. AFA spanned two editions: a smaller 2021 exhibition during the Covid-19 lockdown, followed by a larger 2022–2023 sequel featuring over 60 contemporary artworks across multiple locations and mediums (see Table 1). This scale and diversity were supported by Chiang Mai University's art faculty and the city's strong art culture (Somnuxpong, 2020). In contrast, HCS was smaller, featuring fewer than ten artworks, primarily street art, alongside poetry and documentary. Street art, known for its open resistance, aligned with Greenpeace's adversarial environmental messaging (Doyle, 2007). The commissioned artists had backgrounds in environmental or political art. The following sections examine how both exhibitions employed 'materialism,' 'affectivism,' and 'idealism' (see Section 2) to drive change.

Table 1. Summary of the different types of artwork exhibited across the three exhibitions

	Art for Air	Art for Air 2	Haze: Coming Soon
Sculpture	38	15	1
Performance (performative art, music and dance)	7		
Video	6	1	1
Mixed Media	5	3	-
Painting (including line drawing and printmaking)	5	10	-
Textile Art	4	-	-
Photography	3	6	-
Graffiti	2	28	5
Sketches	1	2	-
Other	2	-	-

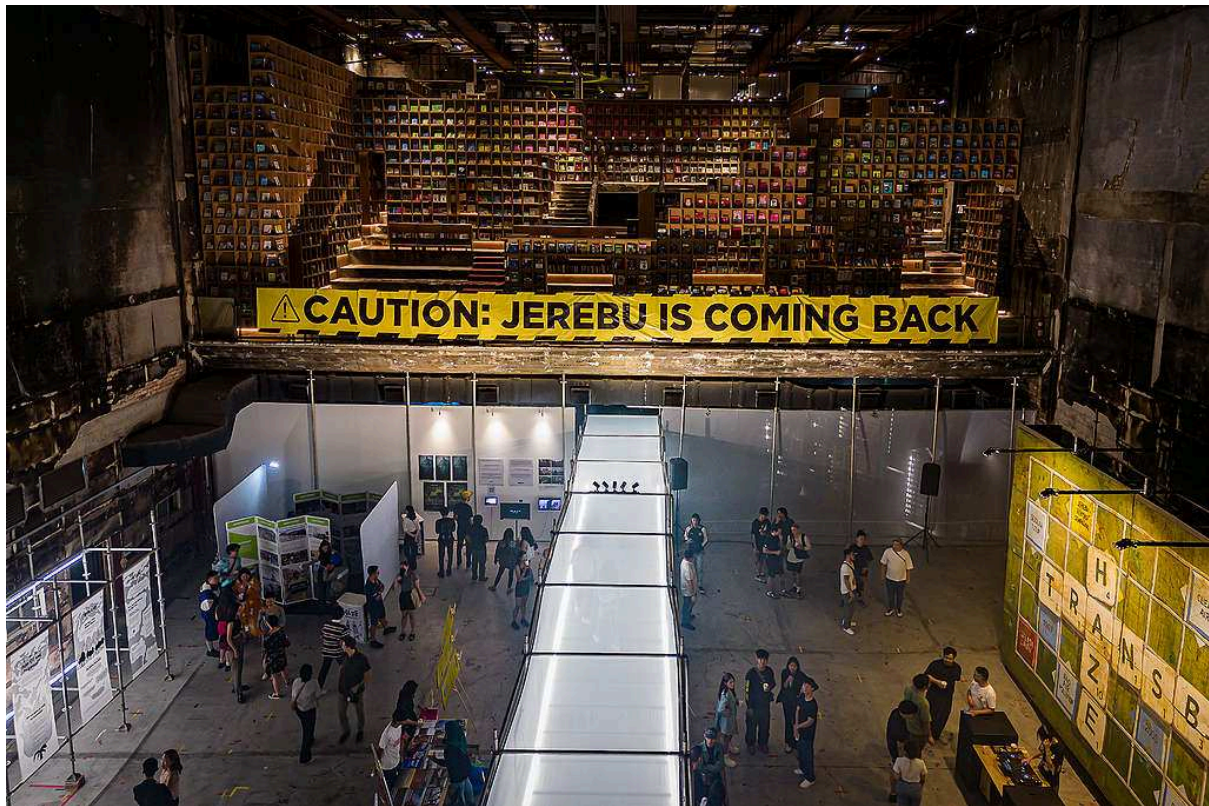## 4.1 Evoking Materialism: (Re)connecting with the lived realities of haze

Fig. 1 Exhibition hall of *Haze: Coming Soon* (Credit: Greenpeace Malaysia 2023)

The organisers and artists participating in both exhibitions emphasise the role of art in awakening the sensory memory of haze to drive environmental action, appealing to 'materialism' for art to represent the material conditions of everyday lives from the bottom up. In this case, it is the diversity of lived realities of haze.

The exhibition statement of the AFA series stated that the objective of the exhibition is to "shine a light on the widely accepted issue of dust and smog pollution from reckless burning of materials" (CityLife Chiang Mai, 2021). Similarly, Ernest Zachaveric, the curator and one of the participating artists of HCS, lamented the lack of consistent haze mitigation owing to the seasonal peaks and troughs of political and social attention towards haze. Lithuanian by origin but a long-time resident of Penang, Malaysia at the time of the exhibition, he uses his art to represent the environmental challenges he observed in Malaysia (Bernama Fokus, 2023). Having previously curated '*Splash and Burn*', which is another artist-led initiative to encourage a wider conversation on sustainable agriculture and its adverse environmental impacts (Street Art News 2017), his curation of HCS sought to challenge the "silence in between every haze season and we want to keep the conversations going so that people remember to look for solutions" (Zacharevic, 2023, quoted in The Star 2023).

Artistic representation breaks away from positivist approaches to understanding 'haze' through 'objective' observations of fires from satellites, measurements and modelling of the volume and concentrations of gas and aerosol emissions, forecasting the flow and physicochemical transformations of these pollutants in the atmosphere, and the epidemiological assessments of health impacts (e.g. Graham et al., 2024). Upon entering the exhibition hall of HCS, exhibition goers will walk through a wall of smoke, which recalls the physical sensory experience of haze. Artists have further deployed various visual representation to capture the experience of haze. For example, Ernest Zachaveric's *Haze Maze* (#137) depicts people going on about their daily lives amidst clouds of air pollution. Similarly, edited photographs created by Theerapat Phawaphrom (#47-50) exhibited in AFA illustrates how haze perpetuates everyday lives of urban and rural populations alike. Sometimes, more symbolic imagery is deployed Symbolism was commonly deployed. For example, AFA2, Chiang Mai-based Tawatchai Puntusawasdi (#52) obscured a universally recognisable eyesight testing chart in *Blurred* to represent visual obstruction during haze episodes. Another Chiang Mai-based artist Chatchawan Tanaisri (#64) created sketches of smoke-darkened human organs, reflecting the unhealthy realities of being exposed to haze. In engaging in symbolism, these pieces solicit resonance with a broader audience, even those who have not personally experienced haze.

Importantly, art represents the perspectives of social groups and communities whose voices tend to be under-represented or even marginalised in mainstream political debates. Both exhibitions represent the perspectives of indigenous and ethnic minorities. For example, in AFA, the documentary *Mountain on Fire* (#107) created by female independent journalist and writer Phatarawadee Phataranawik visualises and verbalises the stories of a rural, agricultural ethnic group. Artists have likened haze to violence against rural populations (Mostafanezhad and Dressler, 2021). Ubatsat's sculpture (#79) used barbed wire to create a giant mask, symbolising the violence of haze and burning against health and livelihoods. Similarly, Wanlop Hansunthai's sculpture displayed outside Chiang Mai's famous Three King's Monument (#70) depicts a corn husk, the monocultural crop that is cleared by burning, that also looks like a cannonball, symbolising the systemic violence associated with haze and land management decisions. Depictions of violence can also be found in HCS, Pangrok Sulap (translated from Bahasa Melayu as "punk rock shelter") , an artist collective based in Borneo Malaysia representing rural and indigenous communities, used three out of twelve panels of traditional wood cut prints to represent different aspects of repression caused by deforestation and burning, including biodiversity (as depicted by orangutans walking away from deforested land), health (as depicted by a gas mask with a dollar symbol on it), and the future generation (as depicted by a pregnant woman with inscription around her saying "the future is now, the future is you") (#142).

Pieces in AFA also expressed concerns for children. Iconically, in AFA, well-known Thai artist Kamin Lertchaipraser created *A Shared Breath* (#120), which is a sculpture of Greta Thunberg, that was exhibited in front of Chiang Mai's historic and cultural heart, Three King's Monument, to represent resistance from the younger generation. Similarly, in AFA2's *Craft for Air, Reflection of my eyes in April* (#22) by Chiang Mai local artist Nattawut Ruckprasit created a series of coloured sketches of children wearing masks, indicating the disproportionate negative health effects of air pollution on children. In illustrating mask

wearing in his sketches, the artist is also recalling the collective memory of air pollution and masks choking individuals who are short of breath.

Perhaps due to the exhibition's larger scale, AFA represented two additional perspectives that were not exhibited in HCS. First is the perspective of ethnic minorities. For example, Thai art veteran Inson Wongsam's print art represents the guardian spirit of the forests (#126), and encourages the viewer to recognise the life and soul of the environment as we exploit natural resources. Chiang Mai-based female artist Sudaporn Teja (#87) used traditional Lanna culture *toong* flags to let the viewer see the flow of (polluted) air through the flags and its threat to traditional cultures.

Second is the perspective of women. Although HCS exhibited poetry from Trianh Teoh, a female street artist and poet, it has not explicitly addressed ecofeminism in the same way that AFA does. *Burning forests, burning lives* (#133) by Busui Ajaw of Thailand's ethnic minority Akha heritage illustrates a burning forest. The middle of the painting depicts a woman in a white dress holding a bouquet of flowers, signifying her dedication to the lives lost in the burning. The painting appeals to ecofeminists' motif of nature as 'cradle of life', and by destroying nature; to harm forests is to destroy the world's most crucial resource.

In representing different communities' lived struggles of haze, haze art recalls the exhibit-goers' personal memories and experience of haze. Akin to Landau and Toland's (2021) observation of the 'sensory politics' created by the artistic portrayal of air and air pollution, where art effectively communicated how air pollution is essentially eroding people's right to clean air, haze art creates a sensory experience that invites its viewers to navigate and give meaning to the complex causes and diverse experiences of haze. Whereas atmospheric science approaches to haze tend to be highly technical and bureaucratic, haze art provides a personal, potentially more relatable medium to communicate and motivate change.

4.2 Affectivism: Appealing to Emotions to Drive Change

It is impossible to untangle the material experience of haze from the emotions associated with haze. Research has shown that response to climate communications can be deeply personal (Davidson and Kecinski 2022; Wong-Parodi and Feygina 2020). While we do not assume all exhibition-goers to emotionally respond to the art pieces in a uniform manner, as our analysis of the affective response to haze art draws upon the curatorial intention of the exhibitions.

During haze episodes, negative emotions are often triggered, such as frustration over disrupted activities, panic about health and economic impacts, and devastation regarding long-term effects and environmental degradation (De Pretto et al. 2015). Both exhibitions sought to recall these emotions through pieces that represent the lived realities of haze - - to motivate exhibition-goers to take individual and collective action. Moreover, by illustrating the material struggles and difficulties faced by under-represented and vulnerable groups, the pieces address the psychological distance between viewers and the subjects, triggering

emotions such as empathy towards the welfare of people and ecosystems, that could motivate action (Chu and Yang 2019).

Additionally, pieces in both AFA and HCS sought to evoke distress, frustration, and anger towards underlying systemic injustices of haze crises. In AFA, Sittikorn Khawsa-ad's sculpture *Supporting Structure* (#90) is a metal cage with stories of farmers printed on pieces of fabric, with anecdotes on how their lives have been twisted by agricultural capitalism and state policies, rendering them 'prisoners' of corporate agriculturalism and air pollution. Torlarp Larpjaroensook's sculpture *Conversation Between a Part of Tractor and Car Glass* (#80) depicts a tractor wheel scoring burnt soil in circles, overlooked by a car windscreen and a pair of wipers that cannot wipe away the smoke that is obscuring its vision. It represents the irony of mutual environmental exploitation and finger-pointing between urban over-reliance on driving and rural burning of agricultural land. Pichai Pongsasaovapark's bulldozer-crushed canvas (#103) symbolises the oppression of agricultural communities by capitalism. Sanitas Pradittasnee's installation, inspired by the fabrics of the Karen people (#93), represents the unfair blame the Karen people received as culprits of pollution (Mostafanezhad and Evrard, 2021).

HCS bears an even more explicit and coherent overarching theme of anger and frustration towards the political and corporate patronage system for causing and tolerating haze. The short film *Haze-zilla*[1] (#144) not only depicts what haze-filled Kuala Lumpur looks like, it has also likened patronage corporate and political actors to the fictional bully Godzilla for destroying the environment. According to its creator, the film intends to captivate the audience and raise their awareness about the seriousness and persistence of the haze pollution problem in Malaysia (Husna 2023). Echoing the motif of a haze-causing villain, *Haze Coming Soon* by Cloakwork (#141) shows a man with fangs in business attire blowing smoke into the city, suggesting that business and government elites are responsible for causing haze. Other pieces conveyed similar messages using different framings and motifs. For example, four panels Pangrok Sulap's woodcut print (#142) illustrated different aspects of environmental exploitation: people moving logs away with a foreground of tree stumps, businessman with a reaper silhouette in front of dried-up peatland, a skull representing death, and a politician hugging the haze, insinuating the collusion between politics and haze-inducing agroforestry practices. The remaining four panels showed inscriptions in Bahasa Melayu explicitly criticising the patronage network: *"bisnes orang besar kesan rakyat biasa"* (translates to: "big business affects ordinary people"), *"jerebu* (translate to: haze) is coming", *"sesudah jerebu, apa lagi yang tinggal*?" (translate to: after haze, what else is left?), and "who is responsible? Rakyat (translated to: "people") or govt [*sic,* government]?". Finally, Fahmi Reza's piece *JEREBU* (translates to: haze) *IS COMING BACK* (#139) and Cloakwork's *Tolak Jerebu* (#140) explicitly calls for action to reject haze. *Tolak Jerebu* (translates to: "say NO to haze") uses bold prints to send a clear-cut message to first warn the viewer that haze is returning imminently, and second, to invite critical problematisation of its return.

By evoking intense emotions of anger and frustration, these pieces serve two key purposes. First, they seek to inform the viewer of the complex systemic corruption that continues to

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[1] https://www.youtube.com/watch?v=7z4ZdDmZjP4

fuel haze (Varkkey 2013). They have likened haze and its underlying causes as violence against rural populations, owing to the intensified pollution and environmental degradation that they are exposed to, unfair blaming they receive, and continued corporate-driven exploitation of rural communities' land and labour (Mostafanezhad and Evrard, 2021). Second, they draw upon negative emotions of anxiety and anger as a well-recognised emotional pathway to motivate individuals to take action as a 'threat' response (Bouman et al., 2020; Clayton & Karazsia, 2020). Third, and relatedly, they invite viewers to channel their emotionally-driven action towards holding powerful actors to account, and in doing so they mitigate the risk of withdrawal as the result of not being able to process the intense negative emotions felt towards environmental change and degradation (Clayton and Karazsia 2020).

Beyond inducing anger and frustration, we also found that, uniquely to AFA, pieces also appealed to spirituality and nostalgia, which we will explain in turn. Multiple pieces in AFA appeal to religious and spiritual imagery to highlight the personal and moral relevance of haze to the viewers. Deploying graffiti art, Jiko depicts a traditional Thai forest deity, appearing exhausted and wearing an oxygen mask, floating between a "no fire" sign and a "no rain" sign (#7), symbolising the adverse impacts of human-induced wildfires on forests and the consequent decline in rainfall. By drawing upon these motifs, these pieces make spiritual and cultural connections to haze, insinuating that society has failed to maintain the balance of the human-nonhuman ecological systems, harming the harmony that the deities would expect humans to uphold.

Pieces in AFA also appealed to nostalgia and grief for an unpolluted past. For example, Udom Krisanamis - a sculptor who is known for using natural materials to depict eco-consciousness in his work - was inspired by traditional ways of making art, symbolising a vanishing way of life that is in harmony with the environment. *Gray Planet* (#55) by Angkrit Ajchariyasophon, who comes from Chiang Rai province where a lot of the burning takes place, exhibits ten years' worth of photography documenting the transition from blue skies to grey, polluted skylines. Sakarin Krue-On, who is an artist specialising in using mixed-medium to interrogate the evolving meaning of Thai cultural identity, created *Let's Make a Romantic Scene* (#2). Snow globes were used to represent various tourist attractions of Chiang Mai but covered in dust, mourning the loss of the beautification of the Chiang Mai landscape and the creation of a new normal of pollution. Situating these exhibitions within heritage settings further deepens this sense of nostalgia for an idealistic past when haze did not exist, which is a recurring theme of the art pieces across the two exhibitions as we will detail in the next subsection. These pieces appeal to viewers' attachment to places (Fresque-Baxter and Armitage 2012), in order to elicit an emotional reaction of mourning and loss, which may in turn motivate action to restore clean air and a better environment (Crossley, 2021).

While evoking negative emotions can capture viewer attention (Wong-Parodi and Feygina 2021), scholarship on environmental communications and climate psychology also warn of the danger of creating feelings of overwhelming and powerlessness, which could lead to withdrawal from environmental action (Jones and Davison 2021). To mitigate this, exhibitions have been curated to point participants towards clear pathways for taking action, through evoking '*idealism*'.

4.3 Idealism: Imagining (Un)desirable Futures

Scholarship suggests that climate communications that evoke emotions appear to be far more likely to motivate action when consumers of the message feel empowered to take action (Bieniek-Tobasco et al. 2019; Nabi et al 2018). In line with their explicit policy goals, both exhibitions displayed art that imagines haze-free or haze-dystopic immediate and longer-term futures. Future projections are inherently political, as they reflect the unequal power dynamics of various groups jostling to influence policy and drive behavioural changes to achieve their envisioned futures (Milkoreit, 2016).

In HCS, Ernest Zachaveric's *Transboundary Haze* Scrabble board (#138) expresses different approaches and solutions to haze in a gamified manner. The artistic representation of environmental futures is politically charged, as the viewer is empowered with autonomy through the choice to build different futures: depending on what strategy they play (e.g. responsible consumption, sustainable investment, voting for pro-environment politicians), they will contribute towards building desirable (clean air, bringing polluters to justice) or undesirable (schools closed, burning of peatland) futures. In a much more straightforward manner, Fahmi Reza, a well-known political dissent artist in Malaysia, created a street mural bearing the warning words *Caution! Jerebu is Coming Back* (#140) to remind viewers of the impending haze episode that would inevitably disrupt daily lives again as the result of the failure to mitigate the underlying root causes.

Here, it is worth highlighting the metaphorical significance of street art. The transience of street art is acutely relevant to the context of haze activism in Southeast Asia, where the existence of the works tells a narrative of the struggle between environmental protests, authorities, and pedestrians (Awad et al., 2017). We found that street artists, Greenpeace, and Malaysian authorities have reached implicit compromises in creating and displaying these pieces. While most artists avoid seeking permission, Kuala Lumpur City Council (DBKL) is slow to remove murals, especially those that attract tourists, though they are less tolerant of art depicting the city negatively, such as a haze-covered skyline. Four pieces in HCS—Fahmi Reza's *Caution! Jerebu is Coming Back* (#140), Ernest Zacharevic's *Transboundary Haze* (#138), Cloakwork's *Tolak Jerebu!* (#140), and Pangrok Sulap's woodcut prints (#142)—were previously street art murals in central Kuala Lumpur. While artists have increasingly taken advantage of Kuala Lumpur's urbanised space as a canvas for dialogue, these works were painted over or faded, symbolising the transience of Southeast Asian artivism, vulnerable to erasure by authorities or air pollution—the very thing they protest. Despite their ephemerality, street artworks are widely photographed and shared online (MacDowall and De Souza 2018), making attempts to erase it less effective (Irvine, 2010).

In AFA, street-style art has also been deployed to invite pro-active interaction from exhibition-goers to imagine different futures with or without haze. *Dream Law* featured work from street artists Jiko, Dropfib, Suzin, Toy, and Nagon, whose work seeks to inspire viewers to be forces for change and to hold government agencies accountable to making legislative changes to eliminate Chiang Mai's "haze season". It further featured a participatory graffiti wall where visitors could express frustration with the haze (#4). In doing so, the curator urged attendees to hold the government accountable for enacting the Clean Air Bill.

Although these murals, to our knowledge, had not previously appeared on the streets of Chiang Mai, the participatory activity, consistent with existing literature on the power of participatory art in stimulating affective responses and dialogue (Burke et al., 2018), fostered an emotional exchange that facilitated a more productive, action-oriented discussion about a cleaner future. This process enabled participants to move beyond their negative emotions regarding haze and toward taking tangible steps towards creating a cleaner environment.

Artists have also imagined what a haze dystopia could look like, signalling the grave consequences of failing to take action. Drawing upon dramatised symbolism, *the travel of hope* exhibition by activist-cartoonist Kyar Pauk (KP) and curated by social artivist U Bat Sat depicted a series of line paintings set in a dystopian future, looking back at how humans have destroyed the environment (#3). Similarly, *I love Chiang Dao* by Kanaet x Sanchai took a cartoonish approach to imagine how anthropogenically-altered landscapes will look like in 100 years' time (#31-#39). *The Law of Nature* exhibition included a ceramic installation created by Chiang Mai-based Wonaek Juntaratip, who also heads the Pongnoi Community Art Space, illustrating two people facing each other wearing gas masks and hazmat suits (#41), serving as a striking visual representation of a dystopian future where social interaction is only possible with extensive personal protection. By employing dystopian imagery, the artwork conveys the gravity of the air pollution crisis, warning viewers of a bleak future if environmental degradation continues unchecked. It also recalls memories of the Covid-19 crises when everyday lives were restricted, breathing made difficult (owing to mask-wearing or contracting the virus), various restrictions to everyday lives and bombardment of (mis)information made life feel 'dystopian' (Prakash Dwivdei and Wansbrough 2022), which adds to the relatability and urgency to take action to stop haze.

In line with a definition of 'idealism' as artwork that represents the critical perspectives and visionary ideals necessary to motivate and guide people to transform the status quo (Duncombe 2023), artwork representing different haze (free) futures present both a cautionary tale of the consequences of non-action and alternative ideals that require collection action to achieve. The impact of advocacy work is notoriously challenging to measure (Almog-Bar and Schmid 2014; Rootes and Nulman 2014), and often requires longitudinal outcome and impact tracking (Bailey 2024), which is beyond the scope of this work. However, we identify these artivist initiatives as examples of advocacy that can drive broader political and social discursive change.

First, despite the divergent scale and artistic style, both exhibitions sought to solicit behavioural responses from viewers. Rather than depicting hopelessness, they channeled anger and optimism, aligning with research showing that despair can lead to apathy and hinder action (Bieniek-Tobasco et al., 2019). Instead, both exhibitions share a common theme of future projection, whereby the viewer is empowered to choose and co-create a desirable future and avoid a more environmentally destructive, and even dystopic future – by taking environmental actions. HCS took direct action by collecting for a petition to be presented at an ASEAN-level meeting on transboundary haze in Singapore in June 2023. The petition collected up to 2,000 signatures, it represented a direct linkage between art and a citizen-driven initiative to drive environmental policy change. AFA did not use petitions but

advocated for a Clean Air Bill in Thailand, similarly linking art to policy change. Notably, neither exhibition framed haze mitigation as the responsibility of individuals making conscious consumption or investment choices, or in making lifestyle sacrifices. Instead, according to the artists and exhibitors, the responsibility lies squarely with governments. This thus stands in stark opposition with neoliberal narratives increasingly commonly found in policy discourse that places the burden on individuals to 'do their part' amidst a socio-economic system favours environmental destruction to achieve economic growth (Blok 2011).

Second, the concept of deploying artivism to motivate change has been broadcasted, enabling broader public discourse beyond the bounds of the exhibition. AFA was covered by all of the mainstream media in Thailand, including Thai print media, such as *Naewna* and *BLT Bangkok*, Thai online media *The Cloud* and *A Day*, as well as English-media *Bangkok Post* and *Nikkei Asia*, despite the low profile intended by its organisations. As *Nikkei Asia* recorded: "there were no invitations, no press releases, no catalogue...in part to maintain a collective spirit, and in part due to concerns about security given the critical nature of the works" (Drahmoune, 2021). This low profile reflects the novelty of artivism and the controversial nature of activism in Thailand, even amid consensus on air pollution control. However, those who attended praised the exhibition for its "fresh perspectives...offering collective catharsis" with art that framed the issue in concrete terms, using humour, beauty, and science (Crosbie-Jones, 2023). Thus, the innovation of artivism has been acknowledged, but remains a niche way of addressing haze.

Comparatively, HCS was intended to attract broad coverage, partially owing to Greenpeace's outreach efforts using press releases[2] and social media. It was featured in major Malaysian newspapers, *The Star* and *New Straits Times*. Despite being highly regulated, both outlets adopted the term "artivism", with *New Straits Times* supporting the message that "clean air is a basic human right, and that right is being violated" (New Straits Times, 2023). This indicates artivism has found a foothold in policy discussions, as the state-regulated media reported on Greenpeace's solutions for eradicating haze, which call for stricter legislation and corporate accountability. While media coverage does not equate to state endorsement, it gives these progressive ideas national visibility that can inspire further action (Jurriëns, 2023). It also placed artivists like Zachaveric and Reza on the same platform as politicians. Indeed, an international street art review outlet commended that the exhibition "demonstrates the power of art in driving awareness, fostering dialogue, and inspiring collective action to address environmental challenges, leaving a lasting impact on the fight against haze pollution" (Brooklyn Street Art 2023).

Third, both exhibitions were attended by government officials and/or politicians. Jurriëns (2023, p.141) has described the way in which patronage from supportive government officials enables artists to navigate public artivism. The opening ceremony of AFA 2021 was attended by Governor Charoenrit Sanguansat, the most prominent politician at the provincial level. Furthermore, The Consul Generals of India and Japan and Chiang Mai Municipality also attended the opening ceremony (ibid.). The attendance by the governor thus suggests

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[2]https://www.greenpeace.org/malaysia/story/50845/clearing-the-air-on-transboundary-haze-with-art-film-and-activism/

the provincial government places a high level of importance on the haze issue, as it is reflected in the province's active role in tackling air pollution, including pushing for a Clean Air Bill (Locals Thai PBS, 2024). However, we also note that there are no elected politicians in attendance. This could be explained by the fact that air pollution control is an issue that both the ruling and opposing parties prioritise to address (Thaipost, 2024). To this end, attending a haze art event offers limited political clout. Additionally, the distance between Bangkok and Chiang Mai may explain the low political turnout.

In contrast, HCS saw at least three elected politicians attend, invited by Greenpeace: Teresa Kok, member of Parliament for Seputeh and former Minister of Plantation Industries and Commodities; Liew Chin Tong, Deputy Minister of Investment and Trade; and veteran politician Lim Kit Siang. All three are from the Democratic Action Party, known for opposing the long-standing Barisan Nasional, which has been criticised for its authoritarianism and indifference toward environmental issues (Varkkey and O'Reilly 2019). Notably, Lim Kit Siang has crafted a political career as a dissenter to Barisan Nasional, and haze is one of the issues that served to highlight the failings of the Barisan Nasional incumbency (Lim 2002). It is also worth noting that during Kok's tenure as Minister, she has publicly pushed back on criticism against the Malaysian palm oil sector for causing haze (cf. Timbuong 2019), a stance that contrasts with the exhibition's messages. Nevertheless, the presence of these elected officials lends legitimacy to the art's messages and creates a bridge between grassroots activism and federal policy, positioning the Democratic Action Party as more progressive and environmentally focused.

5 Discussion

The power of haze artivism lies in the new spaces it opens up by tapping simultaneously on materialist, affective, and idealist theories of change. In doing so, we argue that the 'space of exception' (Jurriens 2023,) created by artivism is multidimensional: it creates **physical space** for exhibition, exchange, and reflection of critical ideologies, **cognitive space** to imagine and co-create upon more desirable alternative futures, and **political space** for such critical discourse and future imaginations to find a way into mainstream environmental governance.

The artwork exhibited in AFA and HCS opened up diverse ways for the public to perceive, react to, and take action on haze. Transcending time and space, artists from a range of professional, personal, ethnic, and gender backgrounds created pieces that represented different facets of haze - including the underlying environmental degradation associated with biomass burning, implicated rural poverty and oppression of marginalised groups, corporate greenwashing and corruption that perpetuates repeated haze episodes, and the resultant air pollution and poor health that adversely affect populations in neighbouring urban areas. Collectively, art succeeded in communicating the multiplicity of the haze crises where scientific reports and institutional approaches often fall short: it presented the diversity of lived realities of haze among different communities and social groups; it evoked a variety of emotions towards haze and its impacts; and it envisioned alternative futures - both polluted and unpolluted, healthy and unhealthy.

Building on Duncombe's (2023) theorisation that art can simultaneously instigate the multi-directional path of social change, we found that these pieces typically appeal to combinations of 'materialism', 'affectivism', and 'idealism' to evoke complex change pathways (see Table 2). The process of initially perceiving, and subsequent processing and reflecting on artwork can instigate these first and second 'orders' pathways for change. For example, a visual representation of haze's materiality—such as images of smoky landscapes—initially presents the material reality of biomass burning and the sensory experience of air pollution. However, beyond this immediate observation, it can also trigger an affective response in the viewer by recalling the discomfort and distress associated with haze. Similarly, pieces incorporating spiritual or religious symbolism may evoke a 'first order' affective response by emphasising the spiritual significance or moral implications of haze. Upon deeper reflection, the artworks may also inspire 'second order' idealistic vision of more harmonious human-nature relationships, as suggested by spiritual or ethical beliefs. Likewise, dystopian depictions of haze-filled futures may initially provoke emotions such as fear or dread of environmental degradation, yet, at a secondary level, they can also stimulate idealistic aspirations for a cleaner, healthier world.

Table 2 How different artistic representations of haze evoke material, affective, and idealist pathways for change

Visual artistic representation of haze	First order theory of change	Second order theory of change	Example
Physical reality of haze (e.g. smokey land/ urbanscapes)	Materialism - illustration of the physical experience of haze	Affectivism - recalls the negative emotions triggered by experiencing haze	47, 48, 49, 50, 55. 137
Haze impacting on marginalised, under-represented, and under-privileged communities (e.g. rural communities, Indigenous groups, women, children)	Materialism - representation of the repression suffered by marginalised communities as the result of haze and/or the underlying natural resource exploitation underpinning haze	Affectivism - appeals to the empathy of exhibition-goers who otherwise have limited insight to the lives of non-urban communities	22, 70, 79. 80, 90, 93, 103, 107,120, 133, 142
Reference to spiritual or religious symbolism	Affectivism - highlight the spiritual and moral relevance of haze	Idealism - criticism of the lack of more harmonious human-nature relationships as intended by religious/ spiritual beliefs	7, 87, 126

Adapted reality of haze (e.g. masks and other personal protective equipment)	Materialism - reflection of the lived reality of lifestyles adaptive to haze	Affectivism - recalls the negative emotions triggered by the inconvenience that haze brings to everyday lifestyles	7, 22, 34, 41, 79, 142
Messages of protest and criticism	Affectivism - instils anger against corporate exploitation and government cooption/ inability to resolve the problem	Idealism - representation of more desirable, haze-free futures	138, 139, 140, 141, 142, 144
Imagery of historic land/urbanscapes	Affectivism - appeals to nostalgia for a cleaner, haze-free past	Idealism - insinuates the desirability of a cleaner past	2, 55
Imagery of dystopian smokey and futuristic landscapes or people	Affectivism - appeals to fear of a polluted future	Idealism - insinuates the need to build an alternative, unpolluted future	3, 41
Imagery of a haze-free future	Idealism - visualising an unpolluted future	Affectivism - appeals to the desirability of an unpolluted future	4

By activating different combinations of change pathways, art resonates with a diverse audience and broadens their **cognitive space** in understanding the haze crises, expanding their perceptions of both its causes and potential solutions. For instance, materialism can spark immediate recognition of the problem; affective engagement can drive personal reflection and motivation to commit to behavioural change, while engaging with idealism can foster planning and imagination to drive longer-term systemic change.

Moreover, exhibition-goers do not engage with individual artworks in isolation. Instead, they are confronted with the collective messages of multiple pieces, each simultaneously appealing to different combinations of 'materialism,' 'affectivism,' and 'idealism' as pathways to change. This underscores the power of the **physical space** of the exhibition itself, which serves as a dynamic arena where these distinct modes of change intersect, interact, and converse, allowing viewers to appreciate the multidimensional complexities of the haze crisis. Additionally, exhibitions provide a physical space for dialogue, enabling viewers to engage not only with the artwork but also with the artists, curators, and fellow attendees—fostering deeper reflection and collective discussion. The physicality of the artivism exhibition is especially crucial in the Southeast Asian context where protest and civil society action is heavily regulated. Unlike other forms of environmental activism, such as protests, that faces censorship and legal restrictions, these two exhibitions show that

environmental artivism can occupy physical space by positioning itself strategically at the intersection of environmentalism and the creative sector.

To this end, artivism has successfully carved out new **political space** for voices that are critical of the status quo and offering alternative pathways for environmental governance. To be clear, the relationship between the establishment and opposition is a complex and symbiotic one (Steele 2009), rather than one outright governmental oppression. Nonetheless, the organisation of this art exhibition has brought together artists and artivists, civil society groups, and more established entities such as media, universities and politicians to carve out these 'pockets of resistance' against the status quo patronage networks.

Finally, in response to the unique 'seasonal' nature of haze (Mostafanezhad & Evrard, 2021; Varkkey et al., 2025), we found that art has the power to overcome the temporal restrictions of public interest and awareness of the recurrent air pollution phenomenon. Often, environmental messaging loses traction as the frustration, distress, and anger triggered by the immediately lived experience of haze dissipates together with the air pollution. Carefully crafted storylines strategically deployed by national governments tend to detract attention from the root causes of the problem by suggesting that haze season will eventually dissipate (Varkkey et al., 2025), but these art exhibitions serve to creatively contradict those action-denying narratives. The display of art *outside* of the haze season recalls the memories and emotions associated with haze, and in doing so, raises awareness that environmental action needs to take place throughout the year to prevent the next haze season from returning. [Add a sentence to let us cite Liu and Smith 2025]

6 Conclusion

AFA and HCS were pioneering exhibitions that deployed artivism to protest against anthropogenic air pollution in Southeast Asia. Despite differences in the scale of the exhibitions and variety of artistic styles exhibited, both AFA and HCS drew upon a combination of materialism, affectivism and idealism to send a coherent message of the need for urgent political action to curb the underlying causes of haze. In doing so, these exhibitions created new physical, cognitive, and political discursive spaces.

While we found art can navigate the crevasses of Southeast Asia's heavily regulated civil society landscape to become an instrument of environmental communication and activism, art suffers from some limitations as an instrument of mass communication and mobilisation. Importantly, the inclusivity and accessibility of art remain problems: female, Indigenous, and rural artist representation remain weak, and exhibition-goers are likely to be educated, urban-dwelling and middle class. This means that the communities that are most vulnerable to haze, such as rural communities and outdoor workers, are unlikely to engage in 'artivism'. While social media may break down spatial barriers to accessing art by making artworks available on virtual platforms, the fact that algorithms typically show content from people with similar interests and friendship groups may be a barrier to the wider distribution

of these pieces. To this end, artivism in Southeast Asia still has some way to go as a tool to empower and mobilise mass environmental action.

Acknowledgements

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