

Media System Approach to Disinformation Vulnerability: Developing Disinformation Resilience in Southeast Asia and Beyond¹

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Abstract

- A diverse range of societies is increasingly facing the challenge of disinformation but we still need more understanding of the variations in disinformation vulnerability, especially in Southeast Asia.
- Across Southeast Asia, our research shows that different media system features produce a variety of incentives that shape disinformation.
- We present three media system models in the region-- the government mouthpiece model, the limited public informant model, and the public watchdog model— and the variations in disinformation vulnerabilities each one faces respectively.
- The overwhelming state control of the entire media ecosystem in the government mouthpiece model makes it highly vulnerable to state-backed disinformation.
- In the public watchdog model, the relative openness of the media system to different actors makes it highly vulnerable to state and non-state-backed disinformation.
- The uneven media system features of the limited public informant model makes it more vulnerable to state-backed disinformation but also still susceptible to non-state-backed disinformation.
- The spotlighting of media systems reveals the institutional sources of disinformation vulnerabilities, enabling civil society, government, and even the private sector, to design more appropriate and effective responses to combat disinformation.

Introduction

Around the world, diverse societies are increasingly facing a common challenge – that of disinformation. Whether in the form of electoral manipulation, medical misinformation, or communal violence, the effects of disinformation in varied media systems have been equally insidious for many countries. Governments, technology companies, and journalists are continually challenged to combat such disinformation. This is especially true for Southeast Asia where countries, in particular Indonesia, the Philippines and Thailand are now active laboratories for both disinformation innovations and consequent policy interventions.

We offer a media system approach to respond to disinformation vulnerability that can potentially be useful for Southeast Asia and elsewhere. Our research shows that media system features play a significant role in shaping how and why societies are equally but distinctively vulnerable to disinformation. In this chapter, we show how taking this approach can appropriately and better develop disinformation resilience in our societies.

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We will present our proposed approach in more detail, and demonstrate the potential of a media system approach to developing disinformation resilience, drawn from our study of disinformation campaigns and media systems in Southeast Asia. Using comparative process tracing (CPT), we rigorously combined theory-informed case studies, process tracing, and within-case and cross-case comparative analysis of a wealth of secondary data from each of our 11 country cases from the region including existing scholarly works, government and non-government papers, and press organisation documents.

We did three stages of CPT to satisfy our research goals. In the first stage, we generated a typology of media system models in Southeast Asia. In the second stage, we reconstructed some of the most significant disinformation campaigns in representative country cases since 2010 to trace the pathways of disinformation in each of the media system models. In the last stage, we brought together the data and findings from the first two stages to analyze how dis/similar media system features shape the production and dissemination of disinformation, and consequently, disinformation vulnerability. On this basis, we draw insights on the benefits and disbenefits of some of the most common policy responses to disinformation in the region.

Varieties of Media Systems in Southeast Asia

We define ‘media system’ as the entirety of rules, norms, and institutions that regulate the relationship between media, state, and the broader public in a given country. The features of a media system have long been considered significant moderating factors of mass and political communication processes.² Different media system features can determine who sets the public agenda,³ the effectiveness of the agenda-setting power of the mass media,⁴ and even the quality and flow of political information to the general public.⁵ In short, media system models can be distinguished based on the primary social role of the media in a given society – who has control of the media and for what purpose its power is used. We argue that media system features also play a role in enabling or inhibiting disinformation.

We categorise Southeast Asian media systems into the following three models: media as (1) government mouthpiece, (2) limited public informant, and (3) a watchdog for the public. With little studies on media systems in the region, we propose this original model of Southeast Asian media system. We take inspiration from the tradition of modeling media systems in Europe and North America⁶. We discuss the varied features of these different media system models as shown in *Table 1*.

²Hallin, Daniel and Paolo Mancini. 2004. *Comparing Media Systems: Three Models of Media and Politics*. Cambridge, United Kingdom: Cambridge University Press.

³Semetko, Holli, Jay Blumler, Michael Gurevitch, and David Weaver. 2013. *The Formation of Campaign Agendas: A Comparative Analysis of Party and Media Roles in Recent American and British Elections*. New York, USA: Routledge.

⁴Santana-Pereira, Jose. 2012. *Media Systems and Information Environments: A Comparative Approach to the Agenda-setting Hypothesis*. PhD thesis, Department of Political and Social Sciences, European University Institute. Florence, Italy.

⁵Aalberg, Toril, Peter van Aelst, and James Curran. 2010. “Media systems and the political information environment: A cross-national comparison.” *International Journal of Press/Politics* 15(3): 255-271.

⁶ Hallin, Daniel and Paolo Mancini. 2004. *Comparing Media Systems: Three Models of Media and Politics*. Cambridge, United Kingdom: Cambridge University Press.

Table 1. *Media system models in Southeast Asia (source: the authors)*⁷

Model	Countries	Features			
		Form of media regulation	Type of media ownership	Level of journalistic independence from partisan actors	Degree of media freedom
Media as government mouthpiece	Brunei, Laos, Vietnam	Tight state regulation	State monopoly	No independence; Nearly all are state press	Unfree
Media as limited public informant	Cambodia, Myanmar, Singapore, Thailand	Tight state regulation	A mixture of state monopoly and private ownership	Low independence; Mostly partisan press	Unfree
Media as watchdogs for the public	Indonesia, Malaysia, Philippines, Timor-Leste	Media self-regulation	Private ownership	High independence; Generally independent press	Partly free

In the first model, the government exercises absolute control of the media environment to ensure that the media functions as the “throat and tongue” of the state. Government policies directly shape what media can and cannot do, show, or talk about, regardless of platform – whether it is print, radio, television, or even internet media. The defining characteristic of this model is the state monopoly of media ownership. The second model, one in which the media's primary role is to be a limited public informant, shares some of the features of the first one. State authorities impose a high degree of control over the media; however, rather than direct interference and ownership, the state exercises influence over the media through a culture of fear and self-censorship among journalists. There is a relative plurality of voices, journalists are more than just party watchdogs, and unregulated content thrives – especially in privately-owned media outlets.

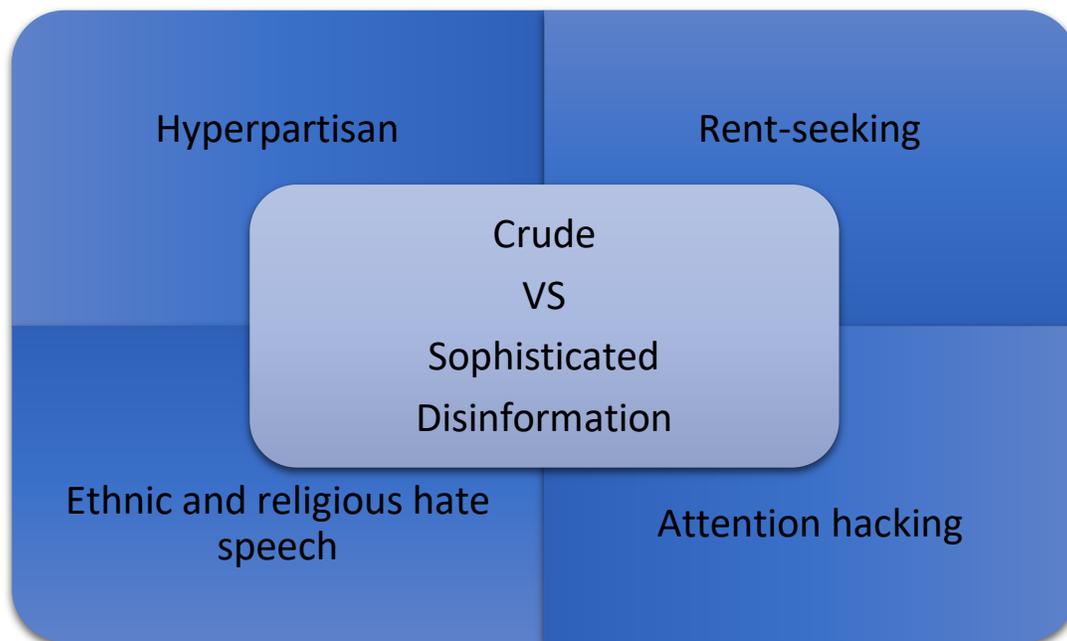
In contrast to the first two models, in the third model, the press is given a significant role in advocating public interest – especially in times when it is at odds with the government agenda. One of the most important features of this model is media self-regulation. State laws set only minimal requirements for media outlets to operate freely and autonomously. Rather than the pressure of partisan or ideological lines, which issues get coverage and which get ignored is dictated by business capital. Regardless of these challenges, however, the relatively free media environment in this model is still markedly different from the others.

⁷ As an exercise in regional comparison, some model features may not be applicable to all countries. Nevertheless, cross-model differences are argued to be more analytically meaningful than within-model variations. Media systems in transition, like that of Myanmar or Malaysia, are particularly more challenging to be included in regional models.

Varieties of Disinformation in Southeast Asia

We define disinformation as any false information that is intentionally published to harm a person, community, or an entire society.⁸ Corollary, we use the word ‘disinformative’ for contents, regardless of type, that fit this conceptualization. Although it could be personally harmful, the harm done through disinformation usually transcends the targeted individual; it hijacks public conversations to manipulate public opinion and erodes public trust in the media and in democratic institutions. The deception and harm is used primarily for partisan or private gains. This conceptualisation of disinformation distinguishes it from both misinformation (unintentionally harmful false information) or mal-information (intentionally harmful true information).

Figure 1. Types of disinformative content and forms of disinformation in Southeast Asia (source: the authors)



We spotlight the four convergent varieties of disinformation observed across various media systems in Southeast Asia. As shown in Figure 1, disinformation across the region converges around several ideas: (1) hyper-partisanship, (2) rent-seeking, (3) ethnic & religious conflict, and (4) attention hacking. We describe how these varieties operate, focusing on the media system manipulation tactics associated with each. Looking at the means and efficacy of production and dissemination, these varieties of disinformation can further be categorised to be either (1) crude or (2) sophisticated in form.

⁸ Wardle, Claire, and Hossein Derakhshan. 2018. "Thinking about 'Information Disorder': Formats of Misinformation, Disinformation, and Mal-Information." *Journalism, 'Fake News' & Disinformation*, edited by Cherilyn Ireton and Julie Posetti. Paris: Unesco. 43–54.; Humprecht, Edda, Frank Esser, and Peter Van Aelst. 2020. "Resilience to Online Disinformation: A Framework for Cross-National Comparative Research." *The International Journal of Press/Politics*.

‘Hyper-partisan disinformation’ is characterised by the use of disinformative content that is extremely biased in favor of one political faction. Such disinformation can be employed by both the administration and opposition camps through media manipulation tactics involving multiple actors in a network, making it more sophisticated. Hyper-partisan disinformation is often found in anonymous pages, websites, mobile instant messaging chat rooms, or multimedia channels that report extremely-skewed news framed disinformatively. Political actors take advantage of weak regulatory regimes or media capture by contributing to hyper-partisan disinformation, in a race to churn out content for political control.

Some disinformative content functions to tarnish the reputation of market competition. We call this ‘rent-seeking disinformation’ since the ultimate aim is economic profit. In Southeast Asia the circles of the economic and the political elite greatly overlap and are secured through informal protection pacts,⁹ making rent-seeking disinformation a highly viable tool for both state and economic actors. As such, the region has seen both state-led and private-led variants of commercially motivated disinformation.

Disinformation playing on ethnic and religious divides aim to subjugate groups and exercise political control over them, through either state propaganda or independent and bigoted social media activities. This variety usually uses false narratives with incendiary and uncivil language that leads to very real threats to the safety and welfare of the targeted groups. These sentiments come in the form of hyper-aggressive comments, fake news, and memes.

Lastly, ‘attention-hacking disinformation’ is mostly personally motivated, and uses clickbait tactics to spread disinformation across the media system. This variety relies on spectacle, whether based on reliability of everyday experiences or shock and awe. Such narratives include false posts and videos that may portray politicians as more relatable by using out-of-context quotes, images, or videos to sell messages. While not necessarily less harmful, its intent may be less insidious; yet, spotlighting this variation helps since it exploits the same media system vulnerabilities that other variations do.

Some of these varieties are more complex than others in both form and content. The varieties with more complicated dissemination mechanisms can be considered ‘sophisticated disinformation’ and are usually deployed for high political stakes. Sophisticated disinformation typically involves either advertising and public relations firms or networked individuals or both, working closely with political actors from either the administration or the opposition, to create disinformation that is challenging to trace. The use of “cheap fakes”, content seeding via social media influencers, or the use of closed online groups are some of the examples of this form.

Less complex disinformation can be described as crude and has relatively lower stakes, but may still be used for political gain. ‘Crude disinformation’ usually only involves an individual and their limited network, but virality may play a role in wide dissemination. State or farm trolls are the most popular crude forms of disinformation and social media platforms tend to zero in on this form of disinformation given its simple nature.

⁹Slater, Dan. 2010. *Ordering Power: Contentious Politics and Authoritarian Leviathans in Southeast Asia*. New York: Cambridge University Press.

Varieties of Disinformation Vulnerability in Southeast Asia

We define disinformation vulnerability as the state of susceptibility of a media system to the potential risks and damaging consequences of disinformation. It refers to the diminished capacity of a media system to detect, minimise, respond to, and recover from the harm resulting from a disinformation campaign. Our research shows that all media systems face the hazards of disinformation, but each is distinctively vulnerable: varied media system features make societies more vulnerable to some forms of disinformation over others. We show this in *Table 2*. Media system features affect the distribution of institutionalised incentives for the kinds of social actors who engage in disinformation work as well as the likely form of disinformation, which in turn, produce variations in disinformation vulnerability.

Table 2. Varieties of disinformation vulnerability in Southeast Asia (source: the authors' compilation)

Media system model	Disinformative actors	Form of disinformation	Disinformation vulnerability
Government mouthpiece (Brunei, Laos, Vietnam)	Mainly state actors; partisan and commercial actors	Mostly crude	High vulnerability to state-backed disinformation across platforms; Limited disinformation activity for non-state actors
Limited public informant (Cambodia, Myanmar, Singapore, Thailand)	Both state and non-state actors	Uneven mix of crude and sophisticated	More vulnerable to state-backed disinformation, but some platforms are also susceptible to non-state-backed disinformation
Public watchdog (Indonesia, Malaysia, Philippines, Timor Leste)	Both state and non-state actors	Mostly sophisticated	High vulnerability to both state and non-state-backed disinformation, especially digital media

In the government mouthpiece model, media systems are highly vulnerable to state-backed disinformation given the overwhelming state control of the entire media ecosystem. State propaganda is the most prevalent kind of disinformation whether it is executed through the state-controlled press or state-sponsored trolling similar to Vietnam's 10,000-strong 'public opinion brigades' called the Force 47.¹⁰ The costs of non-state-backed hyper-partisan disinformation campaigns are extremely high and the space available for them is consequently low. Apart from state propaganda, commercially motivated disinformation operations are also likely to take root more in this media system. Since politics is generally off limits, disinformation is used to rig

¹⁰ Reuters. 2017. 'Vietnam unveils 10,000-strong cyber unit to combat 'wrong views'', 26 December 2017. <https://www.reuters.com/article/us-vietnam-security-cyber/vietnam-unveils-10000-strong-cyber-unit-to-combat-wrong-views-idUSKBN1EK0XN>; The Wall Street Journal. 2017. 'Introducing Force 47, Vietnam's new weapon against online dissent', 31 December 2017. <https://www.wsj.com/articles/introducing-force-47-vietnams-new-weapon-against-online-dissent-1514721606>

economic rather than political competition. Myanmar's state-owned media system is an example of this. A network of Facebook accounts and pages linked to MyTel, a Burmese telecommunications company indirectly owned by Myanmar and Vietnamese militaries, were found to be producing disinformative contents to tarnish the reputation of its competitor.¹¹ Commercial disinformation may be less insidious but it is no less harmful than other varieties of disinformation campaigns: it erodes the collective trust of the public in the media, thereby making the media system more vulnerable to future disinformation. Cruder forms of disinformation, like the Myanmar example, also tend to dominate the disinformation scene in this model. There is low incentive for powerful actors to go beyond crude forms of disinformation that are likely to produce the same outcomes but at a lower cost than sophisticated ones. Despite their crudeness, they still work because of little competition. More importantly, state forces are not expected to disrupt a media system already working as their mouthpiece.

In contrast, the public watchdog model is highly vulnerable to both state and non-state-backed disinformation given the media system's relative openness to different actors. As incumbents do not have a monopoly of access to media outlets, other political groups also make use of the media to advance their partisan aims. They usually rely on privately-owned media outlets which are heavily commercially dependent, and as such, are prone to favour content that will drive the revenue up regardless of the harm it may cause. As state actors exploit state-owned media for their propaganda, other partisan groups take advantage of the privately-owned press to advance their own agenda, either through buying their own media spaces or gaming the profit logic of commercial media. The open-for-all system also incentivises a more sophisticated form of disinformation since only this form has a chance of simultaneously attracting public attention, circulating quickly, and creatively circumventing shared industry norms in an open but crowded media system. The Philippines is a good example of this case. Election-related disinformation on Facebook during the 2016 and 2019 Philippine elections shifted from the use of influencers and fake accounts as conduits of disinformation to micro- and nano-influencers, as well as closed interest groups and local newsgroups – the last being more difficult to monitor and leaving fewer digital traces.¹² Behind these innovations are a range of big and small advertising and public relations agencies all competing, innovating their products and services, for a slice of the fast growing disinformation industry pie.¹³ The use of professional help to produce, disseminate, and innovate election-related disinformation campaigns is increasingly becoming more common in Indonesia,¹⁴ another country with a relatively open media system.

The public watchdog model is especially vulnerable to disinformation in the digital media because of the incentives provided by media self-regulation and private ownership of media. Moreover, as

¹¹Murphy, Hannah and John Reed. 2020. "Facebook accuses telecoms groups of disinformation tactics. *Financial Times*, 12 February 2020. <https://www.ft.com/content/1096ad54-4d5f-11ea-95a0-43d18ec715f5>

¹²Ong, Jonathan Corpus, Ross Tapsell, and Nicole Curato. 2019. *Tracking Digital Disinformation in the 2019 Philippine Midterm Election*. New Mandala. <https://www.newmandala.org/wp-content/uploads/2019/08/Digital-Disinformation-2019-Midterms.pdf>

¹³Ong, Jonathan Corpus and Jason Vincent A. Cabañes. 2018. *Architects of Networked Disinformation: Behind the Scenes of Trolls Accounts and Fake News Production in the Philippines*. Newton Tech4Dev Network. <https://newtontechfordev.com/wp-content/uploads/2018/02/ARCHITECTS-OF-NETWORKED-DISINFORMATION-FULL-REPORT.pdf>

¹⁴Ong, Jonathan Corpus and Ross Tapsell. 2020. *Mitigating Disinformation in Southeast Asian Elections: Lessons from Indonesia, Philippines and Thailand*. NATO Strategic Communications Centre of Excellence. <https://www.stratcomcoe.org/mitigating-disinformation-southeast-asian-elections>

the newest form of media, shared informal and formal norms of professional conduct among those who use digital media have yet to develop fully. In comparison, traditional print and broadcast media have established safeguards to secure themselves from media manipulation— including dealing with advertising and public relations agencies doing communication work for their clients. This does not mean that traditional media is immune to disinformation, but there are barriers to entry which are absent in digital media.

In comparison, societies with a limited public informant media system are more vulnerable to state-backed disinformation but may also be susceptible to non-state-backed disinformation due to the uneven regulation, ownership, and independence structures of media platforms. State-dominated platforms are used for state propaganda while non-state actors try to use private media for disinformation operations. For example, print media in Singapore is tightly regulated while print media in Thailand enjoys relative independence. The logic of disinformation vulnerability in the government mouthpiece model extends to Singapore’s print media while the form of disinformation vulnerability observed in the public watchdog model extends to Thailand’s print media. This is why one can expect an uneven mix of crude and sophisticated disinformation activity in this model, depending on the platform. As media ownership is also mixed, disinformation operations take an even more partisan form. Media platforms have evolved to be highly biased towards one side, making them more vulnerable to disinformation. Thailand’s broadcast media, for example, is generally divided along pro-establishment and anti-government television channels which tend to promote skewed, hyper-partisan, and sometimes disinformative contents depending on their favored interests. However, the limited public informant model is still more vulnerable to state-backed disinformation considering that state actors usually have far more institutionalised advantages in terms of media control and resources.

Media System Approach to Developing Disinformation Resilience

We define disinformation resilience as the capacity of a media system to prepare for, respond to, and recover from the hazards and harms of disinformation. We argue that developing disinformation resilience requires identifying and responding to the particular disinformation vulnerability of each media system. Our research finds, however, that the policy responses to disinformation in Southeast Asia have yet to benefit from a media system approach. Despite diverse media systems, three general policy approaches are increasingly becoming common in Southeast Asia: (1) state-led content regulation, (2) mainstreaming disinformation literacy, and (3) technology firm-led content regulation.¹⁵ In *Table 3*, we show that the application of these policy approaches without the benefit of a media system context cannot minimise disinformation vulnerability in the region.

¹⁵ Arguelles, Cleve V. 2020. “From Self-Regulation to State Intervention: Shifting Modes of Social Media Regulation in Asia”. In *Regulating the Cyberspace*, edited by Gisela Elsner and Aishwarya Natarajan. Singapore: Konrad-Adenauer-Stiftung, Rule of Law Programme Asia, pp. 79-94.

Table 3. Common policy responses to disinformation and its impact to media systems in Southeast Asia (source: the authors' compilation)

Common policy responses to disinformation in Southeast Asia	Media system models in Southeast Asia		
	Government mouthpiece model	Limited public informant model	Public watchdog model
State-led content regulation	Unable to address state-backed disinformation; will reinforce total state capture of media	Unable to address state-backed disinformation; will even out state dominance in all media platforms	Could be ineffective given state regulatory apparatus is weak; may facilitate state-backed disinformation more
Mainstreaming disinformation literacy	Ineffective in state-dominated platforms	Ineffective in state-dominated platforms; potentially effective in high-choice media platforms	Potentially effective but not against sophisticated disinformation
Tech firm-led content regulation	Potentially effective except if co-opted by state; does not address disinformation beyond social media		Potentially effective but may lack transparency and accountability; will balkanise disinformation activity

One of the most popular policy responses is to grant states more power to regulate content across different media platforms, most especially social media. States are called to impose legal sanctions on the production and dissemination of disinformative content. Penalties include censorship, fines, and jail time. Yet this is both inadequate and dangerous for some media systems. In the government mouthpiece and limited public informant models, content regulation appeals to the government since it lends them more power to shape public discourse, and more often than not, restrict public dissent. It also empowers states to legitimise censorship under the guise of defending the public from disinformation. Singapore's Protection from Online Falsehoods and Manipulation Act (POFMA) for example, has been increasingly used against opposition politicians and state critics.¹⁶ The same issue can be observed in the public watchdog model where although states have less capacity to regulate disinformative content, they primarily use it for politicised and partisan purposes.¹⁷ But even if state actors are willing, they will still need to build state capacity to regulate media content in general. State-led content regulation is unlikely to build disinformation resilience in media systems that are vulnerable to state-backed disinformation, especially considering that most media systems are vulnerable to it.

¹⁶Channel News Asia. 2019. "POFMA Office directs Brad Bowyer to correct Facebook post in first use of 'fake news' law," 25 November 2019. <https://www.channelnewsasia.com/news/singapore/bradbowyer-facebook-post-falsehood-pofma-fake-news-12122952>; BBC News. 2019. "Facebook bows to Singapore's 'fake news' law with post 'correction'", 30 November 2019. <https://www.bbc.com/news/world-asia-50613341>.

¹⁷ Arguelles, "From Self-Regulation to State Intervention".

Another policy response, which many civil society groups have devoted their resources to, is to mainstream disinformation literacy norms among the public. This response includes establishing fact-checking initiatives online and offline as well as educating people on how to spot fake news. Aside from civil society initiatives, some governments those of Cambodia and the Philippines have also formally incorporated media literacy into their school curricula.¹⁸ However, the disinformation literacy approach does not address the institutional distribution of incentives for different media system actors. It may encourage states and societies to pass on the responsibility to safeguard media systems to ordinary educators and citizens whose influence on the media market largely depends on media system features. More importantly, fact-checking initiatives are increasingly being pulled in partisan and polarised directions, too.¹⁹ Mainstreaming disinformation literacy is least effective in state-dominated media systems where media consumers exercise little influence. If the press market is limited to state outlets, they are less likely to be incentivised to respond to fact-checking initiatives and even to a more discerning population. The approach may benefit high choice media systems more, such as the public watchdog model, since media consumers have significant leverage on the media market. However, the increasing sophistication of disinformation may pose a challenge. The public will be drawn to play cat and mouse with disinformation producers – and it will be a tiring cyclical game that the general population will not be able to sustain for an extended length of time. It will become harder and harder for common media consumers to recognise disinformation designed to evade detection by even professional fact checkers. Mainstreaming disinformation literacy without addressing institutional incentives will thus be inadequate in developing disinformation resilience.

And lastly, it has also become fashionable in the region – as it has across the world – to pressurise technology companies into regulating their platforms against threats of disinformation. Firms ban suspicious users, take down content, and demote untrustworthy accounts using both professional content moderators as well as algorithms. Facebook, for example, has been publicising its decision to ban users and pages from its platform that are deemed to be behaving inauthentically especially during election seasons.²⁰ Another example is Twitter’s recent move to label all state-controlled government and media accounts.²¹ These moves, however, may create new harms in societies where technology companies exercise unparalleled power. In many countries in the region, social media platforms are informational giants with a monopoly on online data.²² Platform bans and other measures being taken by these firms are rarely a product of deliberation with the broader public. In fact, other researchers have observed that technology platforms rarely engage with, or

¹⁸Salaverria, Leila B. 2017. “PH, Cambodia Agree to Fight ‘Fake News,’” 17 December 2017. *Inquirer.Net*. <https://globalnation.inquirer.net/163065/ph-ilippines-cambodia-fake-news-martin-andanar-khieu-kanharith>

¹⁹Ong and Tapsell. *Mitigating Disinformation in Southeast Asian Elections*.

²⁰Chan, Francis. 2017. “Indonesian Police Uncover ‘Fake News Factory.’” *The Straits Times*, 17 September 2017. <https://www.straitstimes.com/asia/se-asia/indonesian-police-uncover-fake-news-factory>; CNN Indonesia. 2019. “Facebook Dan Instagram Hapus Akun Terkait Papua Barat,” 04 October 2019. <https://www.cnnindonesia.com/teknologi/20191004180933-185-436840/facebook-dan-instagram-hapus-akun-terkait-papua-barat>; Facebook. 2019. “Taking Down Coordinated Inauthentic Behavior in Indonesia,” February 1, 2019. <https://about.fb.com/news/2019/01/taking-down-coordinated-inauthentic-behavior-in-indonesia/>.

²¹ Twitter. 2020. About Government and State-Affiliated Media Account Labels on Twitter.” Accessed August 26, 2020. <https://help.twitter.com/en/rules-and-policies/state-affiliated>.

²² Iosifidis, Petros, and Leighton Andrews. 2020. “Regulating the internet intermediaries in a post-truth world: Beyond media policy?.” *International Communication Gazette* 82(3): 211-230.

pay attention to government and civil society in Southeast Asia compared to their counterparts in Western Europe and North America.²³

Technology firm-led content regulation is potentially the most useful tool to develop disinformation resilience in different media systems. But this potential does not come without its specific dangers. In the government mouthpiece and limited public informant models, this approach may be effective, especially if technology platforms exercise their power to challenge the monopoly or uneven influence of the state over the entire media ecosystem. Their platforms may interrupt an otherwise closed media system filled with either state propaganda or state-backed disinformation. However, technology platforms may be also forced to pander to state actors due to a fear of being sanctioned or losing access to a country's market. For instance, Facebook in Thailand recently banned foreign election-related ads as well as online groups critical of the monarchy. Journalists are worried that this may unfairly benefit only the already powerful military-backed government.²⁴ If such methods are adopted more often by the state, technology platforms may merely reinforce state dominance over traditional media and extend that dominance to include the digital media. The China model, where major technology platforms are either completely banned or follow state rules of censorship, stands as a worrying example especially because the Chinese government has been actively exporting its regulation model to its neighboring countries in Asia.²⁵

In the public watchdog model, the danger of platform-led content regulation stems from the nature of technology firms as private entities: they cannot always be expected to be either transparent or accountable to the public. The media in the public watchdog model is already challenged by dominant commercial media interests. But this approach essentially allows commercial technology firms to assume an even more prominent role in governance – raising valid concerns about the incompatibility of commercial interests and public interests. For instance, many of the social media platforms earn huge profits from highly-engaged disinformative content and have been even responsible for the continuing violence against some marginalised groups in the region including the Rohingyas in Myanmar.²⁶ Technology firms develop platforms where disinformation can be financially rewarding for them and they have been rarely held accountable for it.²⁷ Technology firm-led content regulation may end up reinforcing the overwhelming influence that the private media industry currently enjoys in shaping media governance, possibly at the expense of other sectors in society.

²³ Ong and Tapsell. *Mitigating Disinformation in Southeast Asian Elections*.

²⁴ South China Morning Post. 2019. "Facebook blocks foreign ads before Thai election amid fears junta will benefit", 31 January 2019. <https://www.scmp.com/news/asia/southeast-asia/article/2184460/facebook-will-block-foreign-ads-and-bad-actors-thai>; BBC News. 2020. "Facebook blocks Thai access to group critical of monarchy," 25 August 2020, <https://www.bbc.com/news/world-asia-53899816>.

²⁵ Arguelles, "From Self-Regulation to State Intervention".

²⁶ United Nations Human Rights Council. 2018. *Report of the Detailed Findings of the Independent International Fact-Finding Mission on Myanmar*. 17 September 2018. <https://digitallibrary.un.org/record/1643079?ln=en>

²⁷ Lewis, Rebecca. 2018. *Alternative Influence: Broadcasting the Reactionary Right on Youtube*. Data & Society. https://datasociety.net/wp-content/uploads/2018/09/DS_Alternative_Influence.pdf

Most importantly, while we and other researchers see great potential in platform bans in developing disinformation resilience,²⁸ there is a need to ensure that media system-level drawing back is not overwhelming. Addressing disinformation in the digital media but not in traditional media may only balkanise disinformation in the media system. The reach of traditional media is still unparalleled and it is the platform mostly dominated by either commercial or state interests. It is too important to the entire media system to be left out. In fact, highly-publicised platform bans or content takedowns may unwittingly let disinformation travel from digital media to print and broadcast media. Mainstream media generally reports these actions of technology firms and this can lead to popularising disinformative content through a takeover of the mainstream news cycle.²⁹ The platform boundaries in a media system can be porous, and disinformation operators can easily take advantage of that. A balkanised response to disinformation will be inadequate to face the challenges of media system-wide disinformation vulnerability.

Conclusion

Using a media system approach to disinformation vulnerability, our research shows that all societies are equally but differently vulnerable to disinformation regardless of their media system model. Varied media system models consequently produce varied forms of disinformation vulnerability. Our research argues that in order to develop disinformation resilience, policy responses, rather than being applied uniformly across all media system types, must be responsive to specific forms of disinformation vulnerability. Our proposed initiatives demand institutional changes and will be more helpful in the long-run than in the short-term.

In the government mouthpiece model, disinformation is essentially a consequence of state capture of the media. This means that addressing disinformation vulnerability in this model would require less state control over the entire media landscape. State-led content regulation is likely to worsen state-backed disinformation; a disinformation-literate population is unlikely to have any significant leverage over state press; and technology firm-led content regulation can potentially be partially effective if not co-opted by the state. The state's monopoly control of media allows it to simultaneously play both the role of disinformation producer and regulator without external checks and balances, leaving media audiences especially vulnerable and severely limited in their capacity to respond. Developing disinformation resilience in this model, then, requires arduous long-term media system-wide initiatives that can help media develop autonomy from the state – in social role, ownership, regulation, and professional practice.

In the public watchdog model, disinformation is generally a result of the business capture of the media. Policies to address disinformation must encourage media freedom not only from state interests but also commercial ones. State-led content regulation is likely to be ineffective if it is not disruptive of media self-regulation norms; mainstreaming disinformation literacy can partially safeguard its high-choice media environment, and technology firm-led content regulation is potentially one of the most effective means to combat disinformation – but only in the digital media. Developing disinformation resilience in this model is a matter of creating disinformation-

²⁸ Ibid.

²⁹ Whitney Phillips, *The Oxygen of Amplification: Better Practices for Reporting on Extremists, Antagonists, and Manipulators Online*. Data & Society, 2018. <https://datasociety.net/library/oxygen-of-amplification/>

related self-regulation protocols and norms among journalists and media platforms. This is an attainable task but the presence of varied actors with varied interests may mean that it may take a longer time – and can make the media system deeply vulnerable in the meantime.

In the limited public informant model, disinformation vulnerability is a function of a mix of state and business capture of the media – but mostly skewed in favor of the state. Responding to disinformation vulnerability in this model is tricky as even small shifts in institutionalised incentives may exacerbate one form of media system capture over another. Depending on the particular platform, the advantages and disadvantages of the policy approaches analysed can parallel those of the other two models. Social media is likely to benefit from technology firm-led content regulation like in the public watchdog model while state-led content regulation for broadcast media is similarly dangerous like in the government mouthpiece model. Developing disinformation resilience in this media system type will require platform-specific initiatives. In platforms where the state plays a strong role, developing media autonomy is key. Otherwise, developing a self-regulation process targeting disinformation can be beneficial.

Ultimately, disinformation vulnerability can be traced to media system-wide weaknesses, which in turn are borne out of social and historical specificities. Media systems –like political systems – were “strongly shaped by the same social conflicts and by the institutions and cultural patterns that emerged out of them”³⁰ including disinformation. And while institutions like media systems can be strongly resilient to change, moments of crises are also moments of opportunity to re-shape institutions. The recent disinformation plague is proving to be a crisis that is challenging media systems in Southeast Asia and the rest of the world. By employing a media system approach, we hope that our research shows the possibilities of how we can use this crisis to not only deal with disinformation as a persistent issue of the day, but to also reshape media systems to be more responsive to the needs of the public and the demands of democracy and human rights in the long-run.

References

- Aalberg, Toril, Peter van Aelst, and James Curran. 2010. “Media systems and the political information environment: A cross-national comparison.” *International Journal of Press/Politics* 15(3): 255-271.
- Arguelles, Cleve V. 2020. “From Self-Regulation to State Intervention: Shifting Modes of Social Media Regulation in Asia”. In *Regulating the Cyberspace*, edited by Gisela Elsner and Aishwarya Natarajan. Singapore: Konrad-Adenauer-Stiftung, Rule of Law Programme Asia, pp. 79-94.
- BBC News. 2019. “Facebook bows to Singapore’s ‘fake news’ law with post ‘correction’”, 30 November 2019. <https://www.bbc.com/news/world-asia-50613341>.
- BBC News. 2020. “Facebook blocks Thai access to group critical of monarchy”, 25 August 2020. <https://www.bbc.com/news/world-asia-53899816>.
- Chan, Francis. 2017. “Indonesian Police Uncover ‘Fake News Factory.’” *The Straits Times*, 17 September 2017. <https://www.straitstimes.com/asia/se-asia/indonesian-police-uncover-fake-news-factory>

³⁰ Hallin and Mancini. *Comparing Media Systems*. 301.

- Channel News Asia. 2019. "POFMA Office directs Brad Bowyer to correct Facebook post in first use of 'fake news' law," 25 November 2019. <https://www.channelnewsasia.com/news/singapore/bradbowyer-facebook-post-falsehood-pofma-fake-news-12122952>.
- CNN Indonesia. 2019. "Facebook Dan Instagram Hapus Akun Terkait Papua Barat," 04 October 2019. <https://www.cnnindonesia.com/teknologi/20191004180933-185-436840/facebook-dan-instagram-hapus-akun-terkait-papua-barat>
- Facebook. 2019. "Taking Down Coordinated Inauthentic Behavior in Indonesia," 01 February 2019. <https://about.fb.com/news/2019/01/taking-down-coordinated-inauthentic-behavior-in-indonesia/>.
- Hallin, Daniel and Paolo Mancini. 2004. *Comparing Media Systems: Three Models of Media and Politics*. Cambridge, United Kingdom: Cambridge University Press.
- Humprecht, Edda, Frank Esser, and Peter Van Aelst. 2020. "Resilience to Online Disinformation: A Framework for Cross-National Comparative Research." *The International Journal of Press/Politics*.
- Iosifidis, Petros, and Leighton Andrews. 2020. "Regulating the internet intermediaries in a post-truth world: Beyond media policy?." *International Communication Gazette* 82(3): 211-230.
- Lewis, Rebecca. 2018. *Alternative Influence: Broadcasting the Reactionary Right on Youtube*. Data & Society. https://datasociety.net/wp-content/uploads/2018/09/DS_Alternative_Influence.pdf
- Murphy, Hannah and John Reed. 2020. "Facebook accuses telecoms groups of disinformation tactics. *Financial Times*, 12 February 2020. <https://www.ft.com/content/1096ad54-4d5f-11ea-95a0-43d18ec715f5>
- Ong, Jonathan Corpus and Jason Vincent A. Cabañes. 2018. *Architects of Networked Disinformation: Behind the Scenes of Trolls Accounts and Fake News Production in the Philippines*. Newton Tech4Dev Network. <https://newtontechfordev.com/wp-content/uploads/2018/02/ARCHITECTS-OF-NETWORKED-DISINFORMATION-FULL-REPORT.pdf>
- Ong, Jonathan Corpus and Ross Tapsell. 2020. *Mitigating Disinformation in Southeast Asian Elections: Lessons from Indonesia, Philippines and Thailand*. NATO Strategic Communications Centre of Excellence. <https://www.stratcomcoe.org/mitigating-disinformation-southeast-asian-elections>
- Ong, Jonathan Corpus, Ross Tapsell, and Nicole Curato. 2019. *Tracking Digital Disinformation in the 2019 Philippine Midterm Election*. New Mandala. <https://www.newmandala.org/wp-content/uploads/2019/08/Digital-Disinformation-2019-Midterms.pdf>
- Reuters. 2017. 'Vietnam unveils 10,000-strong cyber unit to combat 'wrong views'', 26 December 2017. <https://www.reuters.com/article/us-vietnam-security-cyber/vietnam-unveils-10000-strong-cyber-unit-to-combat-wrong-views-idUSKBN1EK0XN>
- Salaverria, Leila B. 2017. "PH, Cambodia Agree to Fight 'Fake News.'" *Inquirer.Net*, 17 December 2017. <https://globalnation.inquirer.net/163065/philippines-cambodia-fake-news-martin-andanar-khieu-kanharith>
- Santana-Pereira, Jose. 2012. *Media Systems and Information Environments: A Comparative*

- Approach to the Agenda-Setting Hypothesis*. PhD thesis, Department of Political and Social Sciences, European University Institute. Florence, Italy.
- Semetko, Holli, Jay Blumler, Michael Gurevitch, and David Weaver. 2013. *The Formation of Campaign Agendas: A Comparative Analysis of Party and Media Roles in Recent American and British Elections*. New York, USA: Routledge.
- Slater, Dan. 2010. *Ordering Power: Contentious Politics and Authoritarian Leviathans in Southeast Asia*. New York: Cambridge University Press.
- South China Morning Post. 2019. "Facebook blocks foreign ads before Thai election amid fears junta will benefit", 31 January 2019. <https://www.scmp.com/news/asia/southeast-asia/article/2184460/facebook-will-block-foreign-ads-and-bad-actors-thai>
- The Wall Street Journal. 2017. "'Introducing Force 47, Vietnam's new weapon against online dissent'", 31 December 2017. <https://www.wsj.com/articles/introducing-force-47-vietnams-new-weapon-against-online-dissent-1514721606>
- Twitter. 2020. "About Government and State-Affiliated Media Account Labels on Twitter." Accessed August 26, 2020. <https://help.twitter.com/en/rules-and-policies/state-affiliated>
- United Nations Human Rights Council. 2018. *Report of the Detailed Findings of the Independent International Fact-Finding Mission on Myanmar*. 17 September 2018. <https://digitallibrary.un.org/record/1643079?ln=en>
- Wardle, Claire, and Hossein Derakhshan. 2018. "Thinking about 'Information Disorder': Formats of Misinformation, Disinformation, and Mal-Information." In *Journalism, 'Fake News' & Disinformation*, edited by Cherilyn Ireton and Julie Posetti. Paris: UNESCO, pp. 43–54.
- Whitney Phillips, *The Oxygen of Amplification: Better Practices for Reporting on Extremists, Antagonists, and Manipulators Online*. Data & Society, 2018. <https://datasociety.net/library/oxygen-of-amplification/>

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