# The Swarm Effect: China's 2022 Covid Protests



© 2023 Ethereum Foundation. All contributions are the property of their respective authors and are used by Ethereum Foundation under license. All contributions are licensed by their respective authors under CC BY-NC 4.0. After 2026-12-13, all contributions will be licensed by their respective authors under CC BY 4.0. Learn more at: summerofprotocols.com/ccplus-license-2023

Summer of Protocols :: summerofprotocols.com

ISBN-13: 978-1-962872-20-1 print ISBN-13: 978-1-962872-46-1 epub Printed in the United States of America Printing history: July 2024

Inquiries :: hello@summerofprotocols.com

Cover illustration by Midjourney :: prompt engineering by Josh Davis «government vs rebellion, push vs pull, exploded technical diagram»

rotests in China are not an uncommon occurrence, but the wave of demonstrations that swept the nation at the end of 2022 was anything but ordinary. These protests, ignited by widespread discontent with the government's zero-covid policy, marked the largest mass mobilization since the Tiananmen Square protests of 1989. Unlike Tiananmen, however, these protests were more elusive, operating like a shadow that vanishes when exposed to light.

### Networked

While most local protests in China tend to focus on specific, localized grievances, the 2022 covid protests were fueled by a widespread sense of injustice. Discontent against draconian covid policies and long-standing suppression of personal freedoms served as a unifying premise, orienting the protesters toward a common goal.

What set these protests apart from any that came before, including Tiananmen, is their highly networked nature. Before taking to the streets, protesters were already connected online, sharing and engaging with unified content.

These two defining characteristics—being oriented around a common grievance and being highly networked—elevated the protests to an unprecedented scale, spontaneity, and effectiveness. In essence, these protests were not just a crowd but a "swarm."

As defined by Rafael Fernandez, a swarm is a network of people, content, and bots with a shared orientation strengthened by algorithmic feedback loops of their ecosystem.<sup>1</sup>

It turns out that the covid protests in 2022 in China were so powerful—the discontent spread so quickly online, it expanded so broadly yet without a clear border of membership, and the protesters eventually went on streets in multiple cities around the same time—exactly because of the swarm traits that they possessed.

On the other hand, the response and action taken by the government also seemed to be attacking the swarm traits, reinforcing the argument that it was precisely these characteristics that enabled and empowered the protests and thus made them targets of the government, an adversarial force. Therefore, studying how the 2022 covid protests in China took the form of a swarm helps explain why the protests were so successful and why swarms are so powerful.

# **From Mourning to Shouting**

The genesis of the protests can be traced back to a tragic fire in an apartment building in Urumqi, a city in far western China. The incident became a flashpoint for public discontent when social media began circulating residents' panicked conversations, reports of firefighters taking three hours to control the blaze due to pandemic restrictions, and footage showing residents unable to escape because their doors were locked—again, due to the zero-covid policy (Ramzy and Fan).<sup>2</sup>

The incident served as a catalyst, summoning a swarm of content rather than people. The swarm was fueled not by individual actions but by the viral circulation of this content. It resonated deeply because it evoked memories of similar tragedies earlier in the year, such as a bus crash that killed 27 people en route to a quarantine facility (Dou),<sup>3</sup> the death of a 3-year-old due to delayed care caused by covid restrictions (Dong and Wang),<sup>4</sup> and the mass exodus of workers from a major iPhone manufacturing complex (Che and Chang Chien).<sup>5</sup>

Rafael Fernández, Welcome to the Swarm, Summer of Protocols, 2023. summerofprotocols.com/ research/the-swarm-and-the-formation

Austin Ramzy and Wenxin Fan, "China's Covid Protests Began with an Apartment Fire in a Remote Region," Wall Street Journal, December 1, 2022. www.wsj.com/articles/china-protests-covidlockdown-urumqi-xinjiang-fire-11669833837

Eva Dou, "Deadly Chinese Bus Crash Stirs Fury, Grief over 'Zero Covid' Policy," Washington Post, September 19, 2022. www.washingtonpost.com/ world/2022/09/19/china-guizhou-bus-crash-covid/

Joy Dong and Vivian Wang, "3-Year-Old in China Dies after Covid Restrictions Delayed Care," New York Times, November 4, 2022. www.nytimes.com/2022/11/04/ world/asia/china-covid-lanzhou-boy.html

Chang Che and Amy Chang Chien. "After Covid Lockdown, Fear and Unrest Sweep iPhone Factory in China," New York Times, November 2, 2022. www.nytimes. com/2022/11/02/world/asia/china-foxconn-workers.html

These incidents coalesced into a single, potent grievance that acted as a "promise," drawing people into the swarm. Given that nearly everyone in China was experiencing or had experienced harsh pandemic restrictions, this promise was exceptionally compelling, rapidly expanding the swarm and capturing the attention and empathy of online passersby.

The amplification of the swarm's promise was facilitated through a self-reinforcing broadcast mechanism. As people shared images, footage, and memes—like the white paper that became a symbol against government censorship<sup>6</sup>—they themselves became broadcasters, contributing to the networked nature of the swarm. This idea of individuals as broadcasters was exemplified by a Twitter account, "Teacher Li Is Not Your Teacher" (hereafter referred to as "Li"), which emerged as the central hub for disseminating protest information.<sup>7</sup>

Faced with the threat of government censorship and the risk of identity exposure, people opted to send their content—primarily visual elements like images and videos, which are easily shareable—to Li for publication. This not only protected individual identities, encouraging more people to contribute, but also streamlined the broadcasting process.

Rather than relying on platform-specific algorithms, followers of Li's account received a uniform set of content, ensuring synchronization within the swarm and making participation as simple as clicking the "follow" button. The rapid growth of Li's Twitter account underscored the swarm's swift formation and expansion.

From the Urumqi incident to the conclusion of the protests, Li's tweets garnered over 1.3 billion views, and his follower count more than quadrupled to 860,000

(Lu).8 As Fernández noted, the success of such accounts lies in their ability to

provide a platform of connection to those with a common vision.<sup>9</sup>

In essence, Li served as a broadcasting node, helping to orient the swarm around its central promise.

# **Un-Orchestrated Outcry**

While Li's Twitter account undoubtedly received the most attention and thus had the most influence, it's crucial to note, as Xiao Qiang, a professor at Berkeley and founder of *China Digital Times*, pointed out:

Like everyone in the protests, [...] Li is a regular person who rose to the occasion. <sup>10</sup>

Li himself, who had no formal training in journalism, expressed in an interview that his account was "in essence, the same as many other ordinary Twitter users." He attributed the trust people placed in him to his commitment to "reporting it in a neutral, objective, and truthful way," "only report on what happens and not say a word more," and not "add any personal flavor." <sup>11</sup>

This absence of a formal leader underscores a defining characteristic of a swarm as Fernández described: it is minimally protocolized. Unlike virtual organizations, which have explicit organizational protocols, a swarm has no "organization" in any traditional sense. It lacks a defined procedure for collaboration, a hierarchy, leaders, and a planning process for decision-making. Instead, a swarm follows nothing else other than the content-oriented around the promise.

In the case of the 2022 covid protests in China, this dual nature of the swarm was exemplified by the emergence of various

<sup>6.</sup> 张泰格, "用'温柔与热血'来包容一场'五毒俱全'的抗议——东京白纸运动中的年轻行动者" ("Using "gentleness and passion" to embrace a protest with "all five poisons"—young activists in the Tokyo White Paper Movement"), 歪脑 WHYNOT, January 3, 2023. www.wainao.me/wainao-reads/white-paper-movement-in-tokyo-01032023

wainao-reads/white-paper-movement-in-tokyo-01032023
7. Li, as told to Zeyi Yang, "How Twitter's 'Teacher Li' Became the Central Hub of China Protest Information," *MIT Technology Review*, December 2, 2022. www.technologyreview.com/2022/12/02/1064075/teacher-li-twitter-china-protests/

<sup>8.</sup> Shen Lu, "Chinese Tweeter in Exile Ran One-Man Information Hub on Protests," Wall Street Journal, December 13, 2022. www.wsj.com/ articles/chinese-tweeter-in-exile-ran-oneman-news-hub-on-protests-11670958834

<sup>9.</sup> Fernández.

<sup>10.</sup> Han Zhang, "The Twitter User Taking on the Chinese Government," *The Nation*, December 6, 2022. www.thenation.com/article/world/china-protest-teacher-li/

factions among the protesters. As Zeyi Zhang pointed out in the MIT Technology Review:

Some only want to abolish the zero-covid policies, while others have made direct calls for freedom of speech or a change of leadership. 12

Whether they were in Shanghai shouting radical slogans like "Down with Xi Jinping" and "Down with the Communist Party," or in Beijing waving the national flag and singing the national anthem, they were oriented around the same central grievance. In Tokyo, moreover, the diaspora divided explicitly into two groups: the "passionate" and the "gentle," which coexisted peacefully as they shared a single promise with protesters inside China, despite having different means of achieving it. Li concluded, "the people protesting are clearly not a monolith," indicating that the swarm was not a formation with defined boundaries.

The swarm's minimal protocolization also had implications for its membership. The lack of a formal structure lowered the barrier for entry and exit, thereby encouraging wider participation. As Fernández points out in his essay, accounts like Li's

provide a platform of connection to those with a common vision. 13

This minimizes the cost and responsibility of joining, allowing even passive spectators to contribute by changing their profile photos to white as a symbol against government censorship. Such small actions became part of a larger broadcast mechanism, contributing to the attunement—"the ability to become mutually in sync"—of both contributors and observers.

### **End of Fear**

The phenomenon of "attunement" in a swarm is a testament to the innate human tendency to mimic the behavior of others. In a swarm, this mimetic behavior serves to strengthen the collective orientation. As contributors add new content that aligns with the swarm's orientation, observers are compelled to act in

concert, thereby reinforcing the orientation even further.

In the case of the 2022 covid protests in China, this attunement had a transformative effect: it eliminated fear. Online, the act of changing one's profile photo to pure white as a symbol against censorship set off a chain reaction, encouraging others to do the same. Radical posts that would typically be censored led to a cascade of similar posts. Video footage of local protests, disseminated through Li's Twitter account, inspired others to report on protests in their own localities. On the streets, the sheer number of protesters served as a safety net, making it unlikely for the police to arrest large crowds. The courage of one individual voicing a radical slogan was often amplified by a chorus of others, emboldening the crowd. Protests in one city triggered protests in dozens of others the following day.

Li himself, in a rare moment when he stepped out of his role as a depersonalized broadcaster to become an observer, revealed how this attunement diminished his own fears:

When they shouted out "Xi Jinping, step down," I suddenly felt it didn't matter anymore. I can report this thing. I can type these words. If they aren't afraid to say it, then I'm also not afraid to type it. That's it. 14

Like Li, many found their courage bolstered by the perceived bravery of others in the swarm. This led to a rapid transition from online discontent to on-street protests, marked by louder voices, greater numbers, and increasingly radical slogans. As a result, online discontent quickly turned into on-street protests, with ever louder voices, more people, and more radical slogans.

# **Herding Shadows**

As swarms grow increasingly networked, oriented, and attuned, the compounding feedback loop that strengthens their orientation also imbues them with escalating power and momentum. This surge in influence often invites countermeasures from adversarial

<sup>12.</sup> Li.

<sup>13.</sup> Fernández.

forces—in this case, the Chinese government. Recognizing the swarm's success in leveraging its unique characteristics, the government deployed tactics specifically designed to neutralize these traits.

These countermeasures fall into three distinct categories: discouraging swarm entry, de-networking the swarm, and disorienting its central promise.

A primary tactic employed by the Chinese government to counter the swarm was to discourage entry by attaching accountability and responsibilities to participation. Authorities have fortified a policeled information-gathering network under President Xi Jinping, using big data and high-tech policing to identify and track down the instigators of the protests. These efforts effectively create a boundary for swarm membership by linking digital identities to real-life personas, aiming to debilitate the swarm's ability to maintain anonymity.

For example, a month before the protests began in Beijing, the city's Ministry of Public Security initiated a data surveillance project, which combined human analysts and automated tools to screen news and social media accounts around the clock for discussions that could escalate into dissent. This approach allowed the government to systematically punish protesters individually, thereby dissuading potential participants.

However, the loosely defined actions and content within a swarm present a challenge to this tactic. Because there are no clear boundaries for what constitutes participation in the swarm, the government resorted to ongoing expansion of its surveillance. Regulations now require all online sites to verify users' real identities before they can comment or even like posts.<sup>17</sup> This overreach not only discourages

entry into the swarm but also has broader implications for internet freedom and privacy.

The Chinese government's second line of defense against the swarm was to dismantle its networking capabilities. Government censors swiftly deleted videos and photographs of the protests that circulated on Chinese social media platforms like WeChat and Weibo. Additionally, directives were issued to remove information about VPNs that could be used to bypass censorship (Lin). These actions were part of a broader strategy aimed at suppressing any "collective action potential" on the internet: rather than censoring criticism of the state, the focus was on silencing content that could spur social mobilization. 19

However, the swarm's resilience against these tactics revealed its inherent power. Swarms are highly adaptable and can exist in any networked space. Protesters resorted to alternative platforms, including dating apps and social media platforms blocked in mainland China, to evade censors. They also minimized the explicitness of their messages, keeping information to a bare minimum to avoid detection. Moreover, the swarm found ways to stay networked even within the limited space of freedom of expression. Tight-knit networks of friends traded information using a decentralized model,<sup>20</sup> ironically enabled by China's strict covid prevention measures which had fostered interconnectedness among neighbors, workers, and students. Interestingly, censorship might have inadvertently aided the swarm by keeping its content ephemeral. Once materials were posted to non-censored platforms, they could be re-imported and reshared within China using oblique language and editing

<sup>15.</sup> Cate Cadell and Christian Shepherd, "Tracked, Detained, Vilified: How China Throttled Anti-Covid Protests," *Washington Post*, January 4, 2023. www.washingtonpost.com/world/2023/01/04/china-surveillance-protests-security/

<sup>16.</sup> Cadell and Shepherd.

<sup>17.</sup> Laura He, "China to Punish Internet Users for 'Liking' Posts in Crackdown after Zero-Covid Protests," CNN, November 30, 2022. www.cnn. com/2022/11/30/media/china-new-internet-rulepunish-liking-posts-intl-hnk/index.html

<sup>18.</sup> Liza Lin, "China Clamps down on Internet as It Seeks to Stamp out Covid Protests," Wall Street Journal, December 1, 2022. www.wsj.com/articles/china-clamps-down-on-internet-as-it-seeks-to-stamp-out-covid-protests-11669905228

<sup>19.</sup> Gary King, Jennifer Pan, and Margaret E. Roberts, "How Censorship in China Allows Government Criticism but Silences Collective Expression," *American Political Science Review* 107, no. 2 (2013): 326–43. doi.org/10.1017/S0003055413000014

<sup>20.</sup> Eduardo Baptista, "Dating Apps and Telegram: How China Protesters Are Defying Authorities," Reuters, November 29, 2022. www.reuters.com/ world/china/dating-apps-telegram-how-chinaprotesters-are-defying-authorities-2022-11-29/

techniques to bypass filters.<sup>21</sup> This dynamic flow of content prevented the swarm from morphing into a more easily targetable entity.

The third and perhaps most insidious tactic employed by the Chinese government was to disorient the swarm's focus and unity. One method involved flooding social media with spam, including lewd photos and videos, to dilute politically sensitive posts and make them difficult to find. This tactic is often seen in Chinese overseas information campaigns and serves to divert attention from the swarm's central content.<sup>22</sup>

A third strategy used by the government was to introduce a false narrative or "fake promise" into the swarm. Nationalist commentators claimed that the dissenters were organized by clandestine foreign agents, aiming to sow doubt and confusion within the swarm itself.<sup>23</sup> This tactic sought to undermine the swarm's unified orientation by introducing conflicting viewpoints and suspicions. Lastly, the government sought to defame the swarm to prevent future occurrences. According to Taisu Zhang, a law professor at Yale, the protests could have acted as a "political offramp" for the government, lessening blame if the country suffers a wave of covid-related deaths.24 By framing the swarm as a potential liability rather than a legitimate form of dissent, the government aims to discourage similar collective actions in the future.

The 2022 covid protests in China broke the mold of traditional localized dissent, emerging as a resilient and adaptive swarm. The key to this resilience was the swarm's minimal protocols, which granted it the flexibility to expand, adapt, and resist governmental countermeasures. These minimal protocols allowed for rapid expansion without the need for formal organization, adaptability in the face of censorship, and a unified orientation despite attempts to disorient or divide it.

The swarm's minimal protocols also revealed a revolutionary potential. They allowed for the inclusion of a diverse array of participants, united by a shared promise and orientation. Inclusivity and flexibility made the swarm a formidable opponent to traditional governmental control tactics, which were precisely targeted at undermining the swarm's unique characteristics. Yet, the swarm navigated around these obstacles with remarkable resilience, revealing both strength and revolutionary potential.

As we look to the future, the implications of these findings are profound. For activists and protesters, understanding the dynamics of such minimally protocolized swarms offers a blueprint for effective collective action. For governments and institutions, it presents a challenge: how to engage with new, decentralized forms of dissent that can't easily be controlled or disbanded. The 2022 covid protests may well be a harbinger of what's to come, signaling a shift in the landscape of collective action in China and beyond.  $\triangle$ 

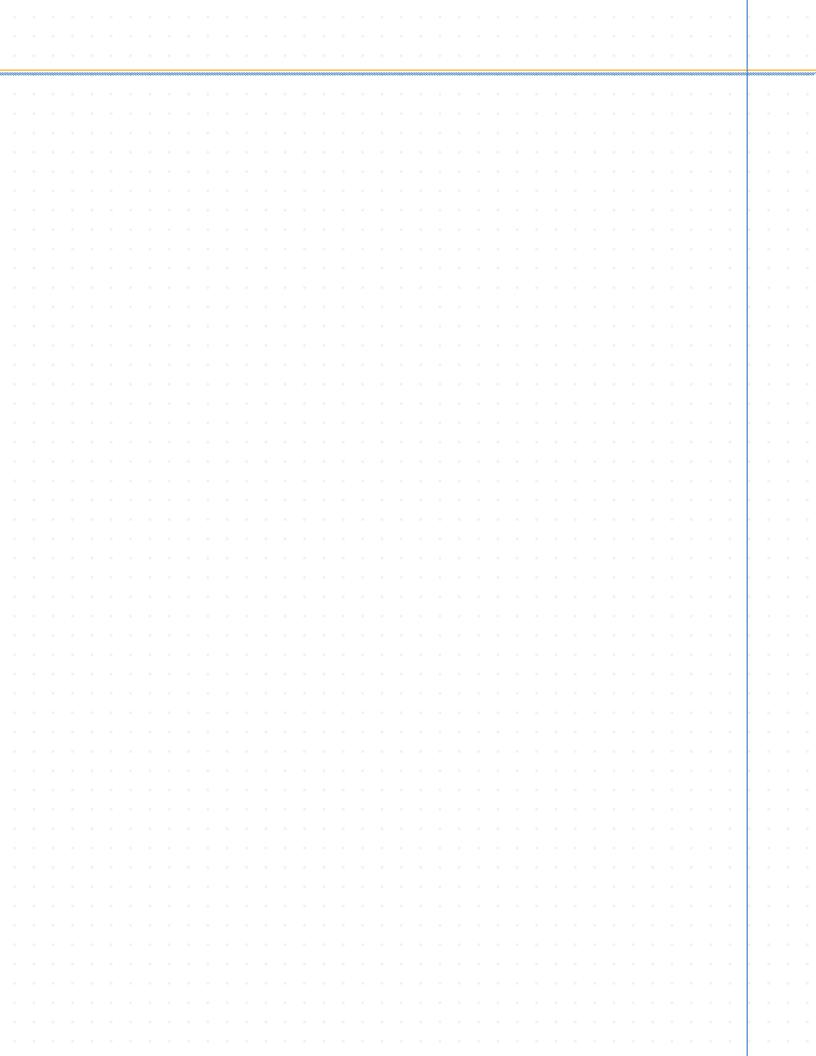
### **ANONYMOUS**

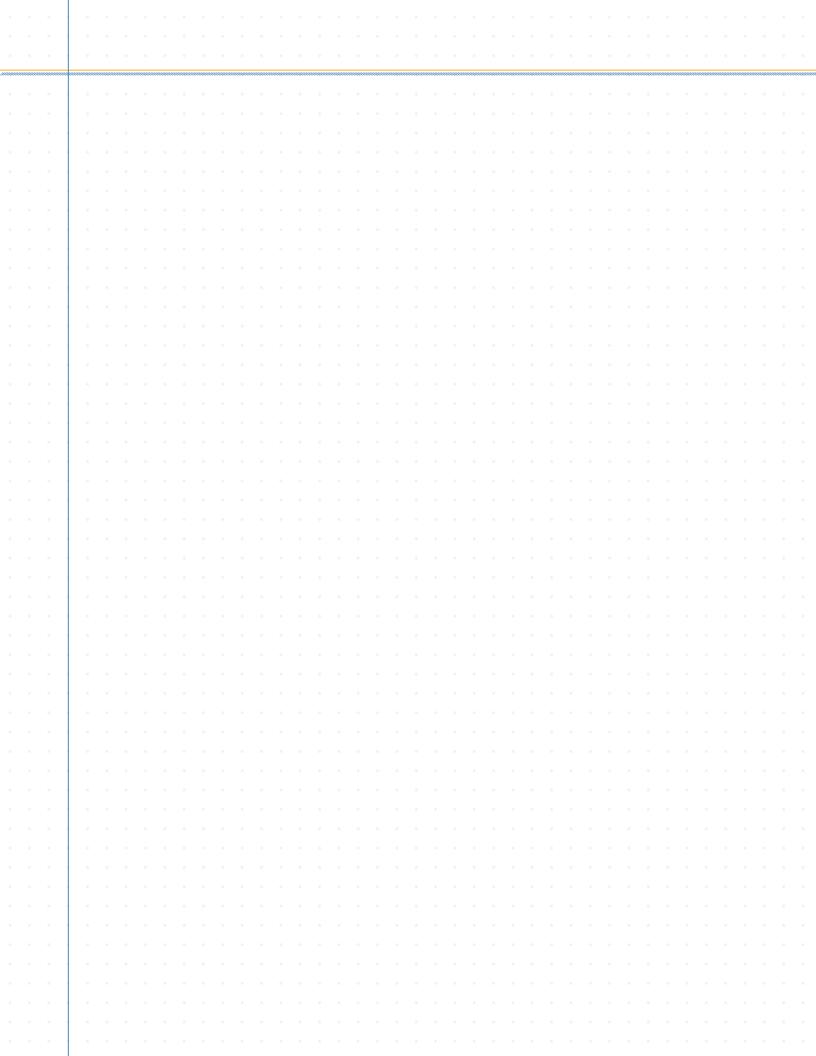
<sup>21.</sup> Manuela López Restrepo, "How Protesters in China Bypass Online Censorship to Express Dissent," National Public Radio, December 8, 2022. www.npr. org/2022/12/08/1141335778/china-zero-covid-

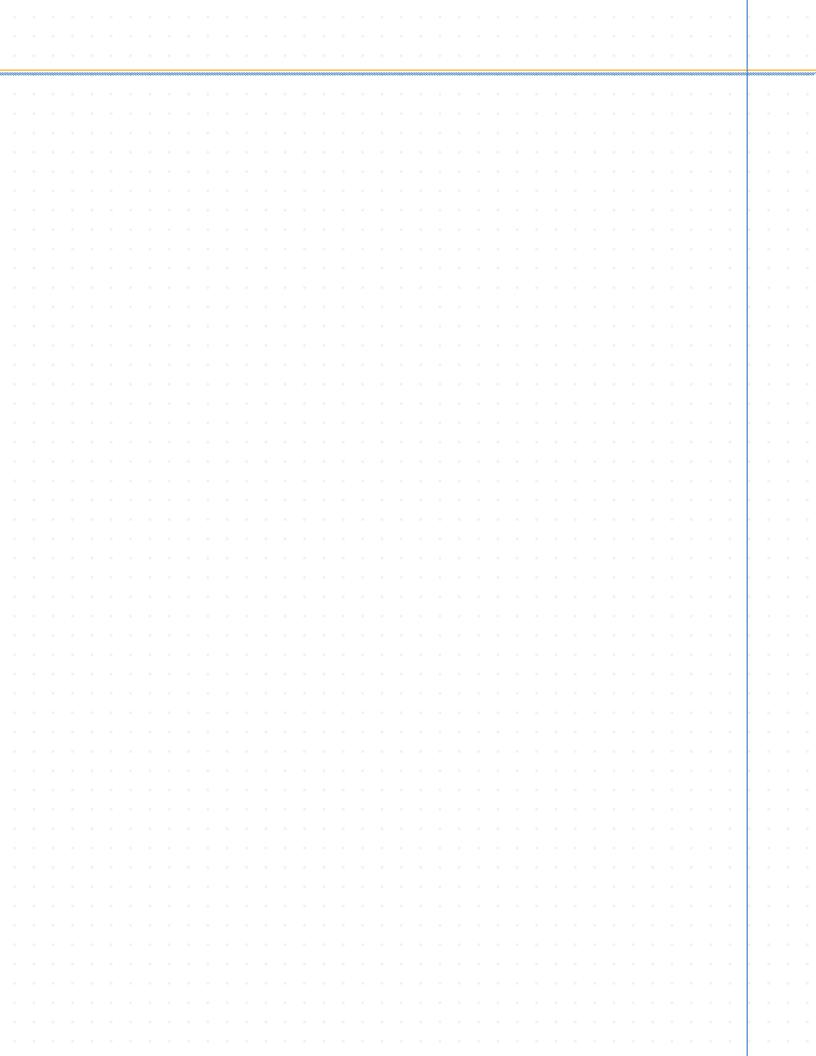
lockdown-protests-online-xi-jinping-censorship 22. Paul Mozur, Muyi Xiao, and John Liu, "'Breach of the Big Silence': Protests Stretch China's Censorship to Its Limits," New York Times, November 30, 2022. www.nytimes.com/2022/11/30/business/ china-protests-censorship-video.html

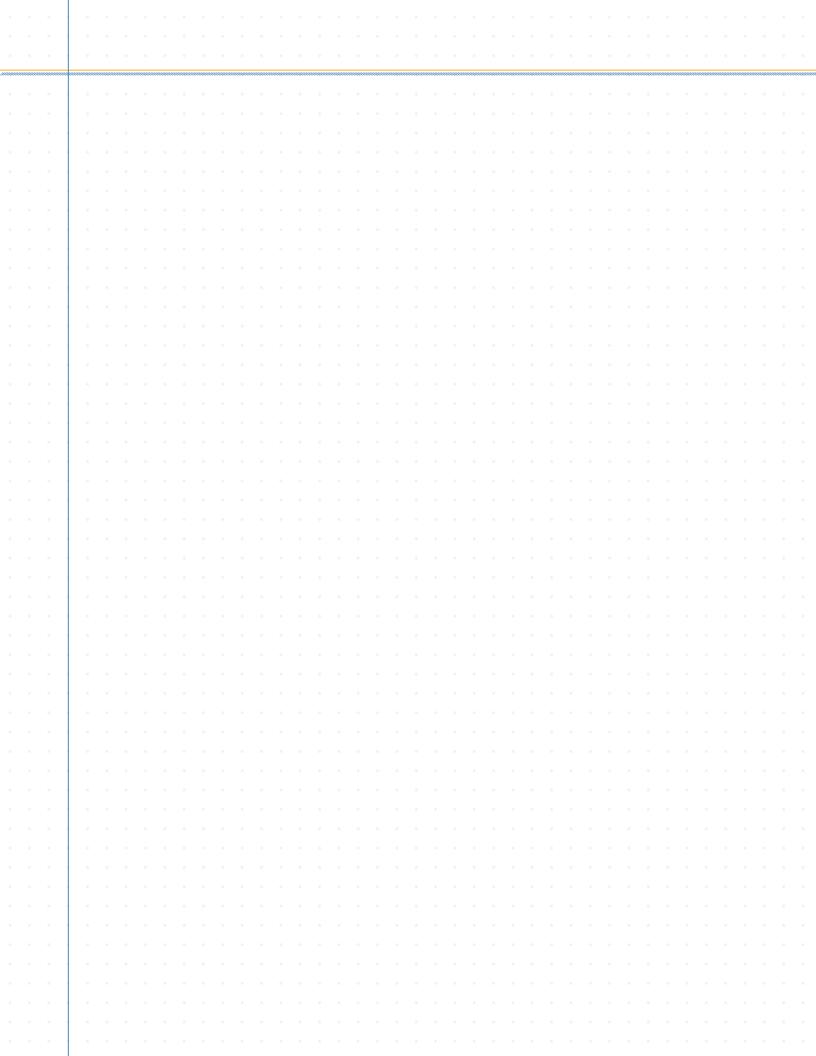
<sup>23.</sup> Christian Shepherd and Vic Chiang, "Protests in China Frustrate Xi's Agenda of Expanding Political Control," Washington Post, December 1, 2022. www.washingtonpost.com/world/2022/12/01/ xi-jinping-covid-protests-ideology

<sup>24.</sup> Kathy Huang and Mengyu Han, "Did China's Street Protests End Harsh COVID Policies?" Council on Foreign Relations, December 14, 2022. www.cfr.org/blog/ did-chinas-street-protests-end-harsh-covid-policies









ProtocolKit
summerofprotocols.com
hello@summerofprotocols.com



ProtocolKit



RETROSPECTUS



NEWGI ETTED

