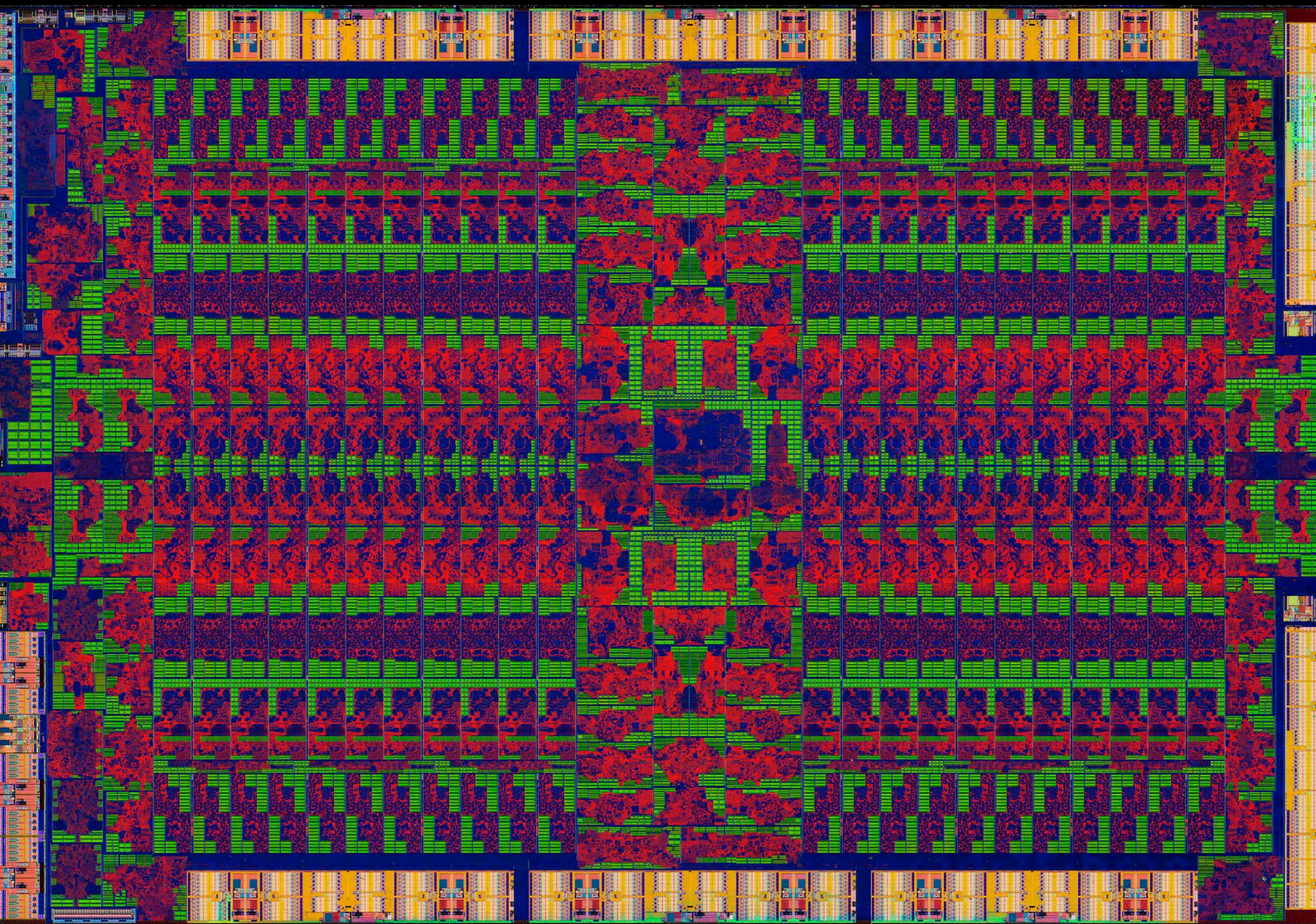


Shadow Play

A pro-China technology and anti-US
influence operation thrives on YouTube

Jacinta Keast



About the author

Jacinta Keast is an analyst at ASPI's Cyber, Technology and Security Centre.

Acknowledgements

ASPI acknowledges the Ngunnawal and Ngambri peoples, who are the traditional owners and custodians of the land upon which this work was prepared, and their continuing connection to land, waters and community. We pay our respects to their cultures, country and elders past, present and emerging.

The author would like to thank Viktorija Rusinaite, anonymous external reviewers and ASPI colleagues for their feedback, including Albert Zhang, Alexandra Caples and Danielle Cave. Thank you to Dannielle Pilgrim, Stephan Robin and Jennifer Wong-Leung for their assistance with data analysis and visualisation.

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First published December 2023.

ISSN 2209-9689 (online).

ISSN 2209-9670 (print).

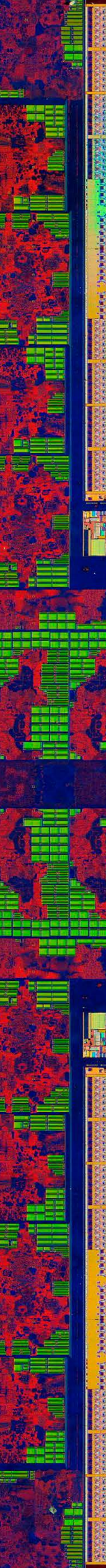
Cover image: Abstract microscopic photography of a graphics processing unit resembling a floor plan or fractal art.
Fritzchens Fritz/Better Images of AI/GPU shot etched 1/CC-BY 4.0.

Shadow Play

A pro-China technology and anti-US influence operation thrives on YouTube

Jacinta Keast

Policy Brief
Report No. 77/2023



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Executive summary

ASPI has recently observed a coordinated inauthentic influence campaign originating on YouTube that's promoting pro-China and anti-US narratives in an apparent effort to shift English-speaking audiences' views of those countries' roles in international politics, the global economy and strategic technology competition. This new campaign (which ASPI has named 'Shadow Play') has attracted an unusually large audience and is using entities and voice overs generated by artificial intelligence (AI) as a tactic that enables broad reach and scale.¹ It focuses on promoting a series of narratives including China's efforts to 'win the US–China technology war' amid US sanctions targeting China. It also includes a focus on Chinese and US companies, such as pro-Huawei and anti-Apple content.

The Shadow Play campaign involves a network of at least 30 YouTube channels that have produced more than 4,500 videos. At time of publication, those channels have attracted just under 120 million views and 730,000 subscribers. The accounts began publishing content around mid-2022. The campaign's ability to amass and access such a large global audience—and its potential to covertly influence public opinion on these topics—should be cause for concern.

ASPI reported our findings to YouTube/Google on 7 December 2023 for comment. By 8 December, they had taken down 19 YouTube channels from the Shadow Play network—10 for coordinated inauthentic behaviour and nine for spam. As of publication, these YouTube channels display a range of messages from YouTube indicating why they were taken down. For example, one channel was 'terminated for violating YouTube's community guidelines', while another was 'terminated due to multiple or severe violations of YouTube's policy for spam, deceptive practices and misleading content or other Terms of Service violations'. ASPI also reported our findings to British artificial intelligence company, Synthesia, whose AI avatars were used by the network. On 14 December 2023, Synthesia disabled the Synthesia account used by one of the YouTube accounts, for violating its Media Reporting (News) policy.

We believe that it's likely that this new campaign is being operated by a Mandarin-speaking actor. Indicators of this actor's behaviour don't closely map to the behaviour of any known state actor that conducts online influence operations. Our preliminary analysis (see 'Attribution') is that the operator of this network could be a commercial actor operating under some degree of state direction, funding or encouragement. This could suggest that some patriotic companies increasingly operate China-linked campaigns alongside government actors.

The campaign focuses on promoting six narratives. Two of the most dominant narratives are that China is 'winning' in crucial areas of global competition: first, in the 'US–China tech war' and, second, in the competition for rare earths and critical minerals.² Other key narratives express that the US is headed for collapse and that its alliance partnerships are fracturing, that China and Russia are responsible, capable players in geopolitics, that the US dollar and the US economy are weak, and that China is highly capable and trusted to deliver massive infrastructure projects. A list of visual representative examples from the network for each narrative is in Appendix 1 on page 35.

Figure 1: An example of the style of content generated by the network, in which multiple YouTube channels published videos alleging that China had innovated a 1-nanometre chip, without using a lithography machine



Sources: 'China Charged', 'China reveals the world's first 1nm chip & SHOCKS the US!', *YouTube*, 3 November 2023, [online](#); 'Relaxian', 'China's groundbreaking 1nm chip: redefining technology and global power', *YouTube*, 4 November 2023, [online](#); 'Vision of China', 'China breaks tech limit: EUV lithography not needed to make 1nm chips!', *YouTube*, 17 July 2023, [online](#); 'China Focus—CNF', 'World challenge conquered: 1nm chips produced without EUV lithography!', *YouTube*, 5 July 2023, [online](#); 'Curious Bay', 'China's NEW 1nm chip amazes the world', *YouTube*, 24 July 2023, [online](#); 'China Hub', 'China shatters tech boundaries: 1nm chips without EUV lithography? Unbelievable tech breakthrough!', *YouTube*, 30 July 2023, [online](#).

This campaign is unique in three ways. First, as noted above, there's a notable broadening of topics. Previous China-linked campaigns have been tightly targeted and have often focused on a narrow set of topics. For example, the campaign's focus on promoting narratives that establish China as technologically superior to the US presents detailed arguments on technology topics including semiconductors, rare earths, electric vehicles and infrastructure projects. In addition, it targets, via criticism and disinformation, US technology firms such as Apple and Intel. Chinese state media outlets, Chinese officials and online influencers sometimes publish on these topics in an effort to 'tell China's story well' (讲好中国故事).³ A few Chinese state-backed inauthentic information operations have touched on rare earths and semiconductors, but never in depth or by combining multiple narratives in one campaign package.⁴ The broader set of topics and opinions in this campaign may demonstrate greater alignment with the known behaviour of Russia-linked threat actors.

Second, there's a change in techniques and tradecraft, as the campaign has leveraged AI. To our knowledge, the YouTube campaign is one of the first times that video essays, together with generative AI voiceovers, have been used as a tactic in an influence operation. Video essays are a popular style of medium-length YouTube video in which a narrator makes an argument through a voiceover, while content to support their argument is displayed on the screen. This shows a continuation of a trend that threat actors are increasingly moving towards: using off-the-shelf video editing and generative AI technology tools to produce convincing, persuasive content at scale that can build an audience on social-media services. We also observed one account in the YouTube network using an avatar created by Sogou, one of China's largest technology companies (and a subsidiary of Tencent) (see page 24). We believe the use of the Sogou avatar we identified to be the first instance of a Chinese company's AI-generated human being used in an influence operation.

Third, unlike previous China-focused campaigns, this one has attracted large views and subscribers. It has also been monetised, although only through limited means. For example, one channel accepted money from US and Canadian companies to support the production of their videos. The substantial number of views and subscribers suggest that the campaign is one of the most successful influence operations related to China ever witnessed on social media. Many China-linked influence operations, such as Dragonbridge (also known as 'Spamouflage' in the research community), have attracted

initial engagement in some cases but have failed to sustain a meaningful audience on social media.⁵ However, further research by YouTube is needed to determine whether view counts and subscriber counts on YouTube demonstrated real viewership or were artificially manipulated, or a combination of both. We note that, in our examination of YouTube comments on videos in this campaign, we saw signs of a genuine audience. ASPI believes that this campaign is probably larger than the 30 channels covered in this report, but we constrained our initial examination to channels we saw as core to the campaign. We also believe there to be more channels publishing content in non-English languages that belong to this network; for example, we saw channels publishing in Bahasa Indonesia that aren't included in this report.

That's not to say that the effectiveness of influence operations should only be measured through engagement numbers. As ASPI has previously demonstrated, Chinese Communist Party (CCP) influence operations that troll, threaten and harass on social media seek to silence and cause psychological harm to those being targeted, rather than seeking engagement.⁶ Similarly, influence operations can be used to 'poison the well' by crowding out the content of genuine actors in online spaces, or to poison datasets used for AI products, such as large-language models (LLMs).⁷

This report also discusses another way that an influence operation can be effective: through its ability to spill over and gain traction in a wider system of *misinformation*. We found that at least one narrative from the Shadow Play network—that Iran had switched on its China-provided BeiDou satellite system—began to gain traction on X (formerly Twitter) and other social-media platforms within a few hours of its posting on YouTube. We discuss that case study on page 29.

This report offers an initial identification of the influence operation and some defining characteristics of a likely new influence actor. In addition to sections on attribution, methodology and analysis of this new campaign, this report concludes with a series of recommendations for government and social media companies, including:

- the immediate investigation of this ongoing information operation, including operator intent and the scale and scope of YouTube channels involved
- broader efforts by Five Eyes and allied partners to declassify open-source social-media-based influence operations and share information with like-minded nations and relevant NGOs
- rules that require social-media users to disclose when generative AI is used in audio, video or image content
- national intelligence collection priorities that support the effective amalgamation of information on Russia-, China- and Iran-linked information operations
- publishing detailed threat indicators as appendixes in information operations research.

Attribution

At this stage, we don't attribute this operation with high confidence to a specific threat actor. However, based on preliminary analysis of the network and its behaviour, we have made a list of judgements about the operator of this network, using words of estimative probability. Words of estimative probability are used to convey the likelihood of a particular event or outcome and are helpful in communicating analytical confidence under conditions of uncertainty.⁸

*We think it's likely that the operator is a native Mandarin-speaking actor, based on an analysis of English phrases used in video titles and video scripts, as well as English phrases in YouTube keywords.⁹ There's strong evidence to support our confidence in this assertion. For example, we observed a video about US–China competition focused on the international space stations, which notes that non-American countries had ‘no right to speak’ in the International Space Station.¹⁰ This is most likely a direct translation of the Chinese phrase *Huayuquan* [话语权] or ‘right to speak’ and often used in Chinese government and media publications.¹¹ Another video made reference to Tsinghua Unigroup, a Chinese company that operates several major Chinese chipmakers, as ‘Purple Light Company’, which is a literal translation into English of Tsinghua Unigroup’s name in Chinese (紫光集团).¹² We note, however, that we did not conduct a comprehensive evaluation of the language used across YouTube channels in the network and that further research should do that to strengthen the thesis that the operator is a native Mandarin speaker.*

We think it's likely that the operator is a native Mandarin speaker who is familiar with Chinese-language news stories and other content created in mainland China. We noticed that sources quoted in videos often came from mainland-produced news stories or amateur-produced stories from mainland accounts. We also note that some of the network’s choice of topics relied on stories that were primarily published, and most likely first published, in the mainland Chinese media ecosystem, in Chinese. For example, one YouTube channel published a video about how accomplished scientist Zhuang Xiaoying allegedly rejected a high salary in Germany to return to China—a topic that received media attention only in mainland China.¹³

We think that it's likely that this is a Chinese state-directed and/or supported campaign that's being delivered by a corporate contractor. Another possibility is that a patriotic Chinese company has been encouraged to undertake the campaign. There are commercial elements of this campaign; for example, one channel has partially monetised its content (see page 21). However, the monetisation is limited, and one would expect a purely commercial actor to more fully monetise their operations. In addition, the narrative focus of the network aligns with the Chinese Government’s strategic priorities to establish China as a leader in economics, technology, science and infrastructure. It also aligns with China’s state-led propaganda efforts to undermine the US’s position in those fields and to present the US as an irresponsible global actor. Similar alignment can be seen in the effort to present China’s partners, such as Russia (and to a lesser extent Iran), as responsible, capable geopolitical actors.

For more detail and analysis regarding attribution, see Appendix 2 on page 38.

Methodology and operation discovery

On 19 October 2023, we observed that an account on X (previously Twitter), @NiMingda_GG, and an unconnected YouTube account, ‘Deepin Moments’, published posts in similar language that alleged that Iran had activated its BeiDou satellite system. BeiDou is China’s national satellite system, which competes alongside the US Global Positioning System (GPS), the European Union’s Galileo and Russia’s GLONASS system.¹⁴ China promotes the adoption of BeiDou by foreign countries through bilateral agreements, research partnerships, and in projects in the Belt and Road Initiative. Like GPS, BeiDou has both civil and military versions, but there’s no open-source evidence to confirm that Iran has access to BeiDou military-grade data or that the country is using the BeiDou system.¹⁵

Based on a review of open-source information, we determined that the individual behind the @NiMingda_GG account was most likely a real person, rather than an inauthentic account. The two accounts posted within a few hours of each other. We confirmed that these narratives hadn't previously appeared on the internet by conducting another structured search that looked at content from the previous three years. We then conducted a suite of other structured searches across multiple online platforms.

We tracked the proliferation of the @NiMingda_GG tweet through a structured search covering mentions of 'BeiDou' across the internet from 8 pm on 19 October 2023, Australian Eastern Daylight Saving Time to 11:59 pm on 25 October 2023. We supplemented that search with keyword searches of 'Beidou' across TikTok, YouTube, Facebook and Instagram as well as a Google advanced search to find content on Telegram in the same time period.

We tracked the proliferation of the Deepin Moments video by analysing an initially small list of Twitter and TikTok accounts that linked to the Deepin Moments video and noting the other YouTube accounts from which these Twitter and TikTok accounts posted videos. From that list of YouTube accounts, we noted down which accounts consistently used AI-generated voices and probably used text-to-video footage-generation software. This generated an initial network of related accounts on YouTube.

A preliminary analysis of those accounts showed a subnetwork of accounts that shared similar patterns on posting time, text and narrative content, YouTube keywords and video production styles. To find more accounts that matched the patterns of the subnetwork, we opened a new YouTube account and trained its video recommendation algorithm by watching hundreds of videos in that subnetwork. That helped to generate more candidates for YouTube channels in the network, including accounts that had fewer subscribers or were newly opened.

From our new YouTube account's recommendations, we identified those accounts that appeared to share the same patterns in posting time, narrative content, YouTube keywords and video production styles as the initial network. We then added those accounts to our existing list of accounts deemed likely to be part of the inauthentic Shadow Play network.

To further validate our qualitative research finding that these YouTube channels were connected, we then conducted a quantitative analysis by creating a Python script to gather specific information, such as posting time, keywords and video titles, about every publicly available video posted by channels in our identified network on or before 14 November 2023 (Australian Eastern Daylight Saving Time). Certain items of metadata, such as keywords and exact posting time, aren't accessible through the public-facing YouTube page for a video. Instead, that information can be obtained only by accessing the HTML source page.

We estimated the network's key narratives through qualitative analysis of titles in the videos and a limited sampling of the scripts of the videos themselves. A further study would seek to validate this initial work through a comprehensive discourse or narrative analysis, including scripts within videos and descriptions attached to videos. We acknowledge this as a key limitation of this initial work.

Combined qualitative and quantitative analysis supported two key conclusions. First, it validated that YouTube channels in the network shared meaningful behavioural similarities in that they used the same or highly similar keywords, used the same thumbnails or video titles, posted at similar times

on similar topics, and used similar video production styles and techniques. A visual representation of this is shown in Table 1 under ‘The Shadow Play network’ (see page 8). Second, we established that channels in the network focused on six specific narratives (see Appendix 1, page 35). Those solid indicators of coordination support the view that these channels belong to the same network. A sampling of English keywords and titles attached to videos in the network also helped inform some of our initial thoughts on attributing the operator of the network.

We acknowledge that our methodology has limitations as a rapid initial investigation of an information operation. We don’t believe that we’ve discovered all accounts that belong to the YouTube network; nor have we collected all instances of the @NiMingda_GG tweet across the internet. We stopped tracking the proliferation of the @NiMingda_GG tweet on 25 October 2023. We stopped tracking the YouTube network on 14 November 2023, although, as of publication, YouTube channels in the Shadow Play network continue to post videos. We hope that this initial investigation serves as a starting point for governments, threat intelligence firms, think tanks and social-media companies to continue the investigation.

The Shadow Play network

This YouTube influence operation is composed of at least 30 YouTube channels that have produced more than 4,500 videos since mid-2022 and—at time of publication—have attracted 730,000 subscribers and just under 120 million views.

By obscuring their true identity and coordinating content, they may be violating YouTube policies against coordinated, inauthentic behaviour, including its misinformation policies and spam, deceptive practices and scams policies.¹⁶ They may also be in violation of other parts of YouTube’s Community Guidelines.¹⁷

We believe that these YouTube channels are all being controlled by the same operator because they demonstrate four indicators of coordination (Table 1):

1. They use the same or very similar YouTube keywords and/or mention other channels in the network in their keywords (*TTP 1*).
2. They use the same thumbnails for videos, the exact same titles, or both (*TTP 2*).
3. They post videos around the same dates and focus on similar narratives (*TTP 3*).
4. They display similar production styles, including the use of text-to-video software, stock imagery, stock footage, generative AI voiceovers and very similar visual aesthetics (*TTP 4*).

Table 1: Existence of four key indicators of coordination across YouTube network

YouTube channel name	TTP1	TTP2	TTP3	TTP4
Asia Hot Topics	X		X	X
Asian Quicktake		X	X	X
China Charged	X	X	X	X
China Focus	X	X	X	X
China Hub	X	X	X	X
China Secrets	X	X	X	X

Cross-Pacific Confrontation		X	X	X
Curious Bay	X		X	X
Current Insight	X	X	X	X
Découverte de la Chine	X	X	X	X
Descubriendo China	X	X	X	X
Deepin Moments		X	X	X
East to West	X		X	X
Exploratics	X		X	X
Gems	X		X	X
Global Visionary	X	X	X	X
Innovation Diary	X	X	X	X
Innovative Check	X	X	X	X
InoTech ConFi	X	X	X	X
Insider Project	X	X	X	X
Lets Talk		X	X	X
Ms Truth		X	X	X
Next-Gen Innovations	X	X	X	X
Relaxian	X	X	X	X
Sino Sphere	X		X	X
Tech Info		X	X	X
Unbelievable Projects	X	X	X	X
VOC—Vision of China			X	X
World Lens	X		X	X
World Project	X	X	X	X


TTP 1: Same or very similar YouTube keywords and/or mention of other channels in the network in their keywords

We determined that YouTube accounts in this network were acting in coordination by analysing the YouTube keywords on each video. When a user uploads a YouTube video, they enter a list of keywords for their video to help users discover it through search results.¹⁸ That information isn't displayed on the description of the published video but is accessible by analysing the HTML source page for each YouTube video. Shared keywords used in videos may suggest that the same group is operating accounts across the network.

We conducted an analysis of videos in the network by analysing the degree to which keywords on a video from one channel matched keywords on a video from another channel.¹⁹ An example of the matching process is in Table 2. We found that a significant number (~26%) of videos across accounts used the exact same tags in their videos. We also found that 28% of videos shared at least a 70% similarity in tags used in their videos with other videos in the network.²⁰ This indicates that more than half (54%) of all videos in the network display indicators of coordination.

We also found frequent mentions of other channels in the network as keywords in videos. For example, China Hub, China Charged, Next-Gen Innovations, and Relaxian all mention the China Focus channel; Sinosphere, Curious Bay, East to West and Innovative Check mention Innovation Diary, and World Lens mentions Deepin Moments. We also noted that Asian Quicktake called itself Vision of China, another channel in the network, in its earlier videos.²¹

Table 2: Example of keyword matching process, where highlighted text includes differences from text above

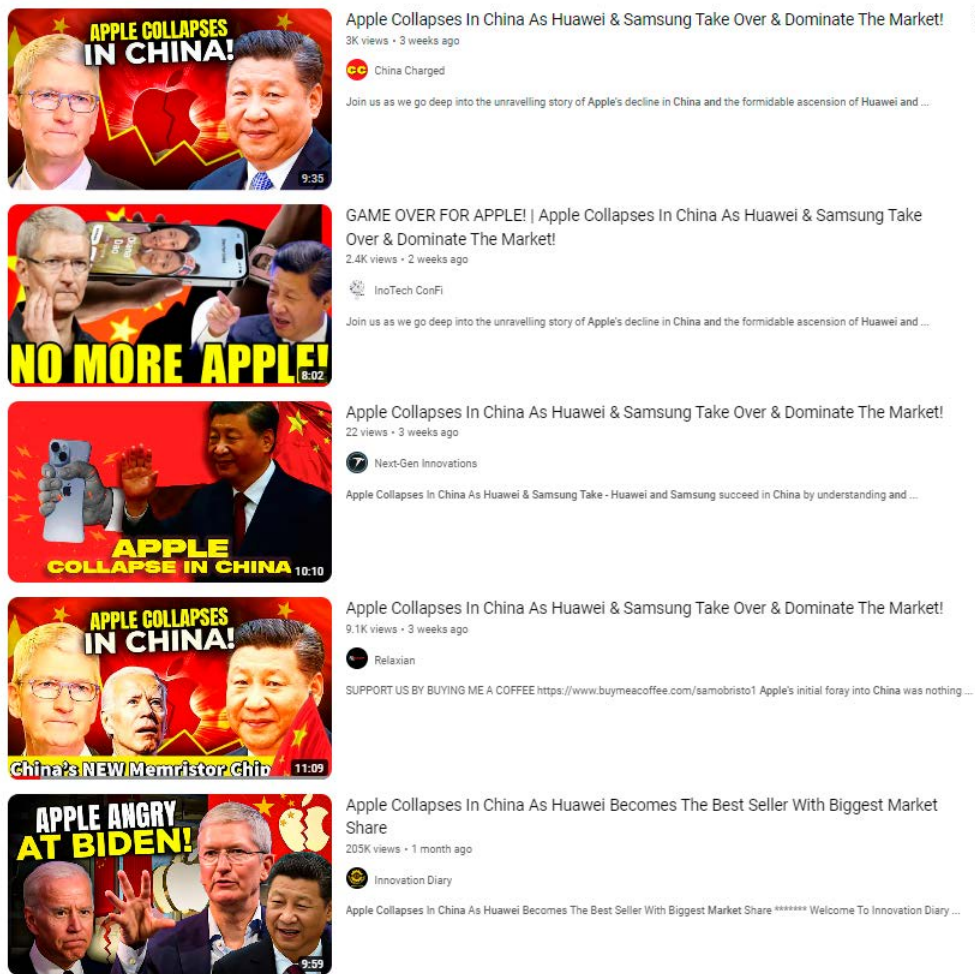
Channel name	Date	Title	Keywords
Relaxian	2023-11-04	China's groundbreaking 1nm chip: redefining technology and global power	Asml lithography, Asml lithography machine, China 1nm chip, China charged, China hub, Huawei p60 pro, Relaxian, Relaxian channel, Us 1nm chip, asml, asml lithography machines, china, china chips, china focus, china focus cnf, china news, huawei, huawei p60 pro camera, huawei p60 pro camera test, huawei p60 pro review, tsmc, us china, 릴렉시안
Next-Gen Innovations	2023-11-07	 China's groundbreaking 1nm chip: redefining technology and global power	us china, 1 nm chip, Asml lithography, Asml lithography machine, China 1nm chip, China charged, China hub, Huawei p60 pro, Relaxian, Relaxian channel, Us 1nm chip, asml, asml lithography machines, china, china chips, china focus, china focus cnf, china news, huawei, huawei p60 pro camera, huawei p60 pro camera test, huawei p60 pro review, tsmc, 릴렉시안, us china war, us china relations, us china war latest news
			Correlation between Relaxian and Next-Gen Innovations: 0.92

TTP 2: Same thumbnails used for videos and/or exact same video titles

In concert with the existence of other TTPs, we determined that YouTube accounts in this network were probably operating in coordination, as they often used the same thumbnail image for a video, the exact same title, or both.

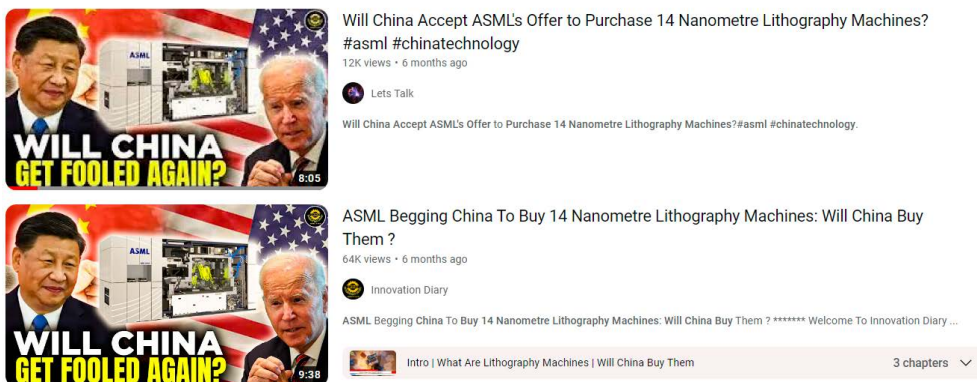
For example, Figure 2 shows a group of accounts that posted within the same month that Apple was collapsing in China, and that Huawei and Samsung would take over and dominate the market. China Charged and Relaxian both use the exact same English title for their videos. InoTech ConFi uses the same title but adds the words 'GAME OVER FOR APPLE' at the front. China Charged and InoTech ConFi also use the same description text on the video (and, as per TTP 1 also use the exact same set of tags, in the exact same order). Relaxian and China Charged use a near identical thumbnail for the video.

Figure 2: YouTube channels posting about 'Apple collapsing in China'



Another example is a story about an alleged decision by Dutch lithography producer ASML to sell China 14 nanometre lithography machines (Figure 3). Both Innovation Diary and Lets Talk use identical thumbnails for this story and very similar titles. As per TTP 4, we also noted that the videos use very similar, but not identical, scripts in the videos to explain this story, while using different stock footage and imagery.

Figure 3: Let's Talk and Innovation Diary accounts use exact same image for video on ASML lithography machine story



Sources: 'Innovation Diary', 'ASML begging China to buy 14 nanometre lithography machines: will China buy them?', *YouTube*, 11 May 2023, online; 'Lets Talk', 'Will China accept ASML's offer to purchase 14 nanometre lithography machines?#asml #chinatechnology', *YouTube*, 12 May 2023, online.

We also observed this pattern occurring between English-language YouTube accounts in the network and non-English-language accounts. As per Figure 4, we observed coordination between the channels China Focus—CNF, Découverte de la Chine and Descubriendo China, which posted in English, French and Spanish, respectively. The accounts used the same title, but translated into their channel’s language. They also used a very similar thumbnail image, suggesting coordination between the three accounts. As we note in ‘Methodology’, we haven’t conducted a thorough search for non-English-language accounts in the network, so further research beyond our small sample of accounts is necessary to prove this pattern.

Figure 4: Three videos using same title and very similar thumbnail images in English, French and Spanish



Sources: ‘China Focus—CNF’, ‘World challenge conquered: 1nm chips produced without EUV lithography!’, *YouTube*, 5 July 2023, [online](#); ‘Discovering China’ [Découverte de la Chine], ‘Global challenge overcome: 1nm chips produced without EUV lithography’ [Défi mondial conquis : puces de 1 nm produites sans lithographie EUV !], *YouTube*, 12 November 2023, [online](#); ‘Discovering China’ [Descubriendo China], ‘Global challenge overcome! China produces 1nm chips without EUV lithography’ [¡Desafío mundial superado! ¡China produce chips de 1 nm sin litografía EUV!], *YouTube*, 8 November 2023, [online](#).

TTP 3: Videos posted around the same dates with a focus on similar narratives

In concert with other TTPs, we determined that YouTube accounts in this network were probably operating in coordination, as they posted around similar dates and on similar topics.

We also occasionally noticed a slight shift in video titles from the title used by the original account that posted the video. For example, a group of videos in the YouTube network all posted videos in mid-to-late October alleging that Iran had access to the China-provided satellite system, BeiDou. In early November, this topic was slightly altered to add that this provided Iran with the ability to strike targets in Israel (see Table 3).

We considered the possibility that any YouTube account reporting on current affairs would probably publish on a similar topic within a similar time frame to another, unconnected YouTube account reporting on current affairs. For example, different YouTube channels for different media outlets would publish reports on a breaking news event, such as an election, around the same time.

While that’s worth considering in further analysis, we think it’s unusual that accounts posting around the same time on the same topics would *also* display the other TTPs we saw, including using the same thumbnail imagery, choosing very similar titles, having very similar keywords and/or using a similar video production style. In addition, some topics that YouTube channels focused on wouldn’t be classified as responses to breaking news events; for example, to our knowledge, the story that Iran had activated China’s BeiDou satellite system wasn’t reported in the media, so its popularity as a topic around this time was independent of a breaking news event.

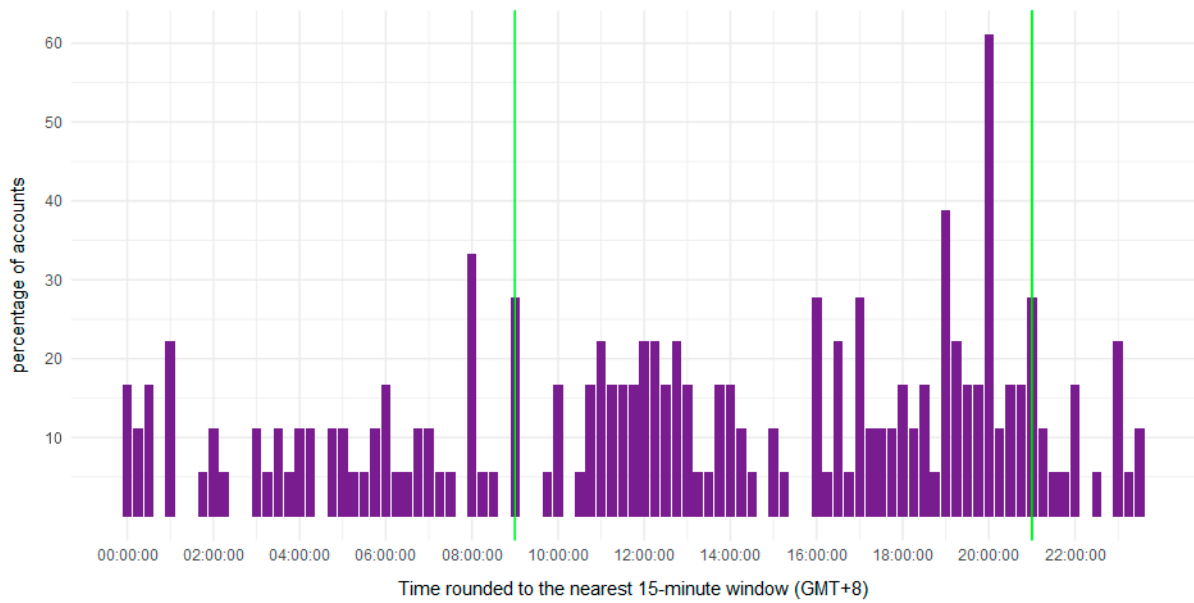
Table 3: YouTube videos posting that Iran had activated China’s BeiDou satellite system

YouTube channel name	Date	View count (as of publication)	Title
Deepin Moments	2023-10-19	225,000	Iran ignores US warnings to officially activate China’s BeiDou satellite
World Lens	2023-11-01	1,300	It’s over: Iran joins China’s BeiDou military satellite, the US GPS threat is no longer effective!
Innovation Diary	2023-11-02	381,000	Latest! Iran gets access to Chinese satellite to use for missile attack on Israel!
East to West	2023-11-03	5,200	China-Iran partnership: a game-changer in global satellite systems
Deepin Moments	2023-11-04	29,000	The US’ worst fear has happened! China provides Beidou satellites to the Middle East to help!
Lets Talk	2023-11-05	54	Latest! Iran gets access to Chinese satellite to use for missile attack on Israel!
Découverte de la Chine	2023-11-12	84,000	L’Iran ignore les avertissements Américains et lance officiellement les satellites Beidou Chinois [Iran ignores American warnings and officially launches Chinese Beidou satellites]
Descubriendo China	2023-11-15	24,000	Irán ignora las advertencias Estadounidenses y lanza oficialmente satélites Chinos Beidou. [Iran ignores American warnings and officially launches Chinese Beidou satellites.]

Notes: View count of 3 December 2023. Dates are in AEDT. Note that, as of publication, the first Deepin Moments video was removed. We have used an archived copy from 24 November 2023 to determine the video’s most recent view count, which may be different from its view count when it was taken down: ‘Deepin Moments’, ‘Deepin Moments YouTube channel page’, *YouTube*, 24 November 2023, [online](#).

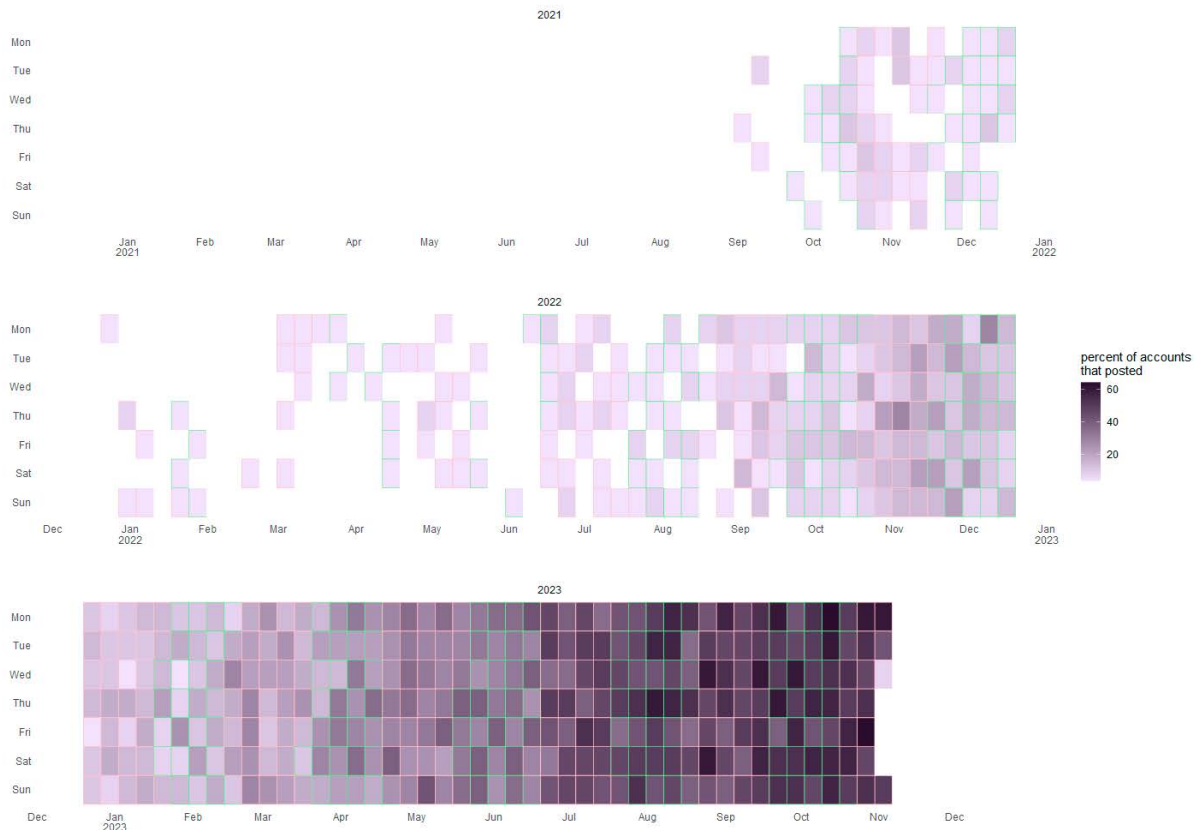
We also tested whether channels in the network tended to post at similar times of the day, which may give an indication to what time zone the operator resides in. Figure 5 shows the percentage of YouTube channels in the Shadow Play network that posted at least five times within a 15-minute window, in China Standard Time (GMT+8).

Figure 5: Percentage of YouTube channels that posted within a 15-minute window in China Standard Time (GMT+8); green lines show 9 am and 9 pm China Standard Time



Notes: We included only YouTube channels in the network that had posted at least five videos during the 15-minute window. We also included only channels that had posted at least 50 videos in total. Data is shown in China Standard Time (GMT+8).

Figure 6: Percentage of YouTube channels that posted at least once a day of the week (16 September 2021 to 14 November 2023)



This shows some evidence that the posting patterns in the YouTube network align with a known TTP that China-based operators tend to post mostly during China’s work hours (9 am–9 pm).²² During the 8 pm to 8:15 pm window, more than 61% of YouTube channels in the network posted at least five times

in their history. The second largest peak was during the 7 pm to 7:15 pm window, in which almost 40% of YouTube channels in the network posted at least five times in their history.

However, we would normally expect the activity of a China-based operator to drop on weekends and holiday periods. Figure 6 shows that the network had similar levels of activity on Saturday and Sunday, as well as around major holiday periods in mainland China such as Lunar New Year (in 2023, around 22 January) and National Day (1 October), as in other periods. Further research on the operator of this network is needed to evaluate whether this pattern in posting shows a meaningful link to the operator's identity.

TTP 4: Similar video production styles, including the use of text-to-video software, stock imagery, stock footage, generative AI voiceovers and very similar visual aesthetics

We think it's likely that videos in the YouTube network used an English language script and fed it into video-editing software or a text-to-video provider. 'Text-to-video' providers allow users to upload a script and quickly create a video based on the text in the script. Many providers allow a user to pick an AI-generated voice to read the script aloud; subtitles that reflect the uploaded script can be added along the bottom of the screen.

From analysing the script, the platform suggests relevant stock footage or images to accompany the voice and makes sure the visual content appears in time with the audio narration. Many providers rely on a bank of millions of items from a range of third-party providers, such as Getty Images, Storyblocks and Shutterstock, although users can also upload their own content.²³

Some providers also allow users to create video content using generative AI or the inclusion of AI-generated avatars. Lastly, users can add transitions and title cards, such as an opening title card introducing the name of their channel or a call for viewers to 'like and subscribe'. Those platforms are mostly hosted online, require no technical expertise and allow a user to generate a video within minutes.²⁴

We were able to determine that the network used AI-generated voices through their notable lack of pauses, pronunciation mistakes that would be uncommon for a native speaker, and occasional notes of electronic interference in the voices. We note, however, that many of the AI-generated voices used were quite convincing, and we think that some casual viewers would probably have difficulty recognising the use of an AI-generated voice. This is particularly true on a platform such as YouTube, where viewers are accustomed to watching 'video essays' that involve a voiceover without the channel owner appearing in the video. These factors combined may make the network's content more convincing, while keeping the costs of the operation relatively low.

We believe that some of the channels probably purchased the use of an AI voice through similar commercial providers, as more than one channel across the network used the same voice. We confirmed that Cross-Pacific Confrontation, a channel in the Shadow Play network, used the same AI-generated voice as on other YouTube accounts in the network: Curious Bay, Exploratics and Gems. Most services that offer AI-generated voices allow users to customise the gender, accent and tone of voice, such as by choosing a formal or a jovial tone. While a few channels consistently used the same AI-generated voice throughout videos in their channel, others alternated between several different AI-generated voices.

Several YouTube channels used text in their in-video script and in their video descriptions that might mislead viewers into thinking the voiceover was done by a real person. For example, Asian Quicktake said ‘Welcome to Asian Quicktake with Jacob’, Deepin Moments said ‘Welcome to Deepin Moments. I’m Elizabeth and I’m here to bring you the latest news’, and Tech Info said ‘I’m your Host, Steffan.’²⁵ Innovation Diary also noted in its video description that ‘this video is narrated / interview by us’.²⁶ Decouverte de la Chine and Descubriendo China both introduced themselves as ‘Alan’ in their voiceovers, although in French and Spanish, respectively.

We discovered limited efforts by two accounts to actively deceive users into believing that they were hearing a non-AI-generated voice. As the audio on videos from the channel Tech Info noted that the video was being hosted by ‘Steffan’, Steffan’s name was noted on a title slide and a visual of an individual waving ‘hello’ played across the screen (Figure 7). The production quality was of limited sophistication.

We also observed a video from Cross-Pacific Confrontation that used an AI-generated voice but included a video in the top-left corner of an individual speaking into a podcasting-style microphone. This video stayed on screen for the entire video in an attempt to convince viewers that audio they were hearing was this individual’s male, American-accented voice (Figure 8). Creating the illusion that a real American voice is arguing that America’s sanctions on Venezuela are ill-advised may build the narrative’s credibility and lead to more engagement. As noted above, we confirmed that this account used the same AI-generated voice as Curious Bay, Exploratics and Gems.

Figure 7: Screenshot from Tech Info video



Source: ‘Tech Info’, ‘Huawei is recognized by South Korea! Samsung tests the Hongmeng system!’, *YouTube*, 19 November 2023, [online](#).

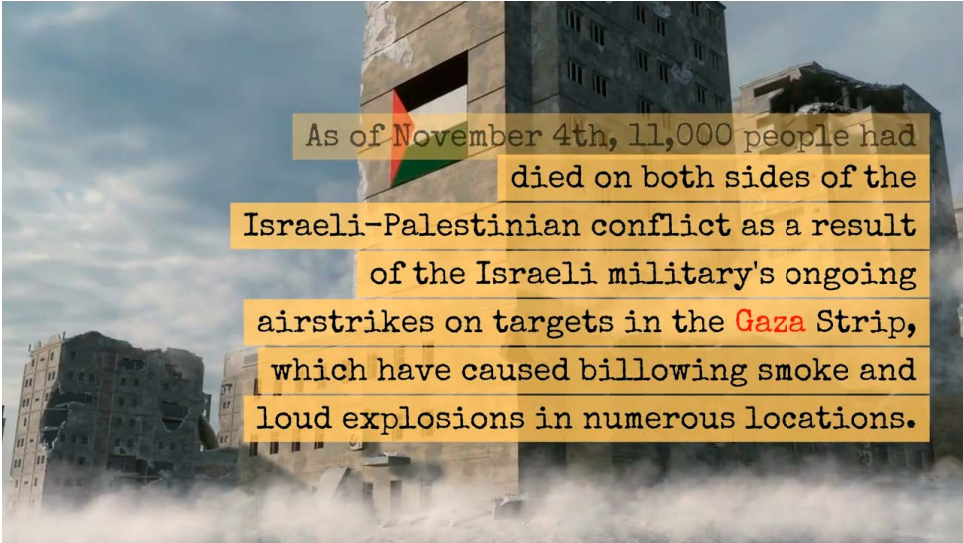
Figure 8: Screenshot from video from Cross-Pacific Confrontation



Source: ‘Cross-Pacific Confrontation’, ‘How China freed Venezuela from Western sanctions in bold steps | The West is shocked!’, *YouTube*, 9 Oct 2023, [online](#).

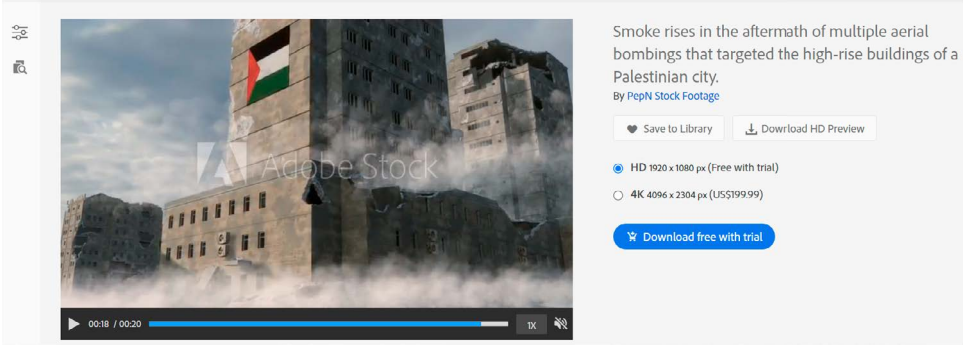
We believe that videos probably sourced most of their imagery or video footage from stock-imagery and stock-footage providers. That may have been done through contracts with the providers themselves, or through those companies' relationships as third-party providers for the text-to-video companies. We're unable to establish specific providers that channels sourced particular content from, because the same stock imagery and videos are often sold by multiple providers. For example, the rendered footage of buildings in Palestine (Figure 9) in a video uploaded by the YouTube channel 'Lets Talk' was hosted on at least three stock-footage providers.

Figure 9: Stock footage of bombed buildings in Palestine in a YouTube video in the network; below are options to purchase this footage on several stock footage providers' websites



As of November 4th, 11,000 people had died on both sides of the Israeli-Palestinian conflict as a result of the Israeli military's ongoing airstrikes on targets in the Gaza Strip, which have caused billowing smoke and loud explosions in numerous locations.

St Adobe Stock Videos "palestine flag" My Lib

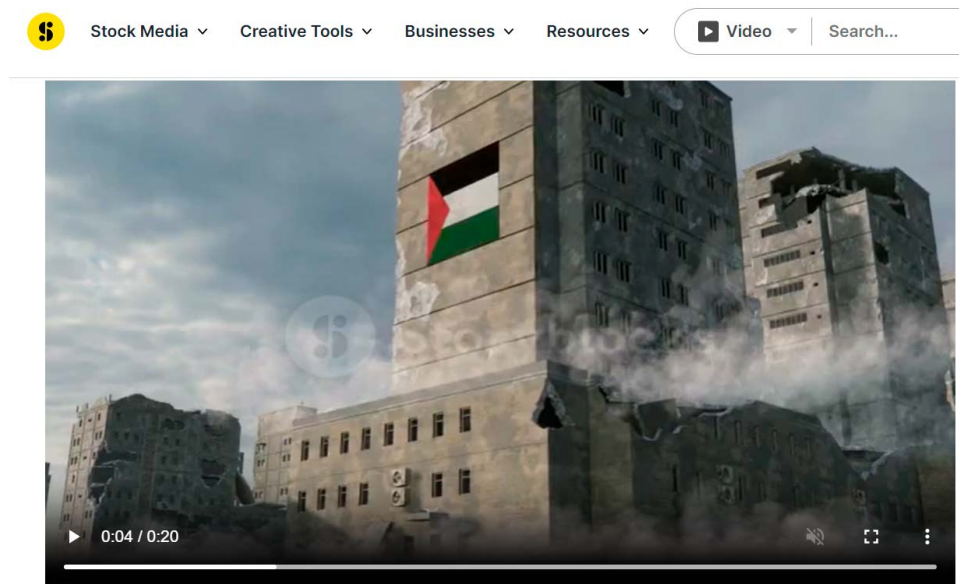
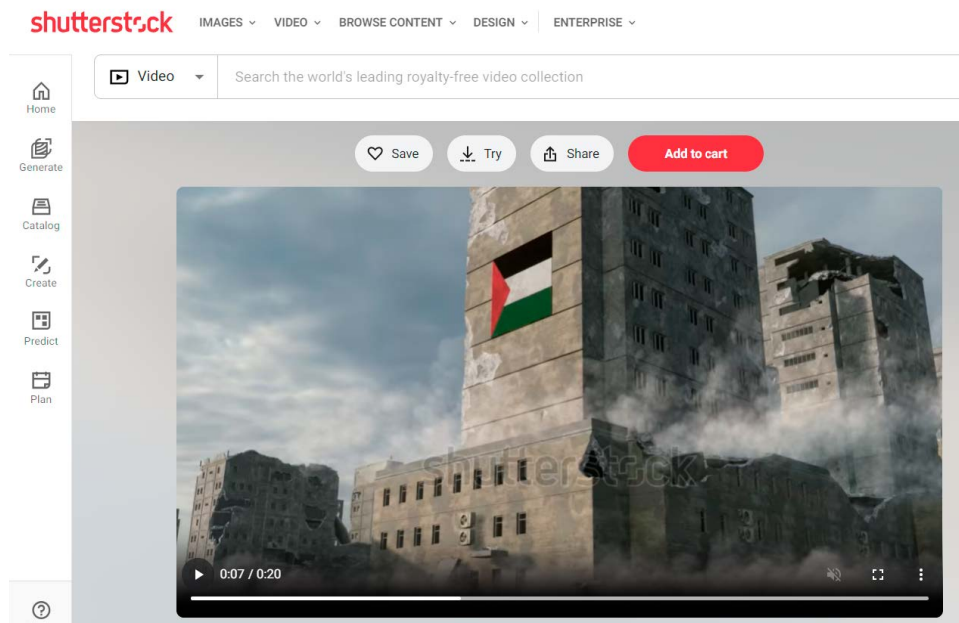


Smoke rises in the aftermath of multiple aerial bombings that targeted the high-rise buildings of a Palestinian city.
By PepN Stock Footage

Save to Library Download HD Preview

HD 1920 x 1080 px (Free with trial)
 4K 4096 x 2304 px (US\$199.99)

Download free with trial



Smoke Rises In The Aftermath Of Multiple Aerial Bombings That Targeted The Highrise Buildings Of A Palestinian City 00:20

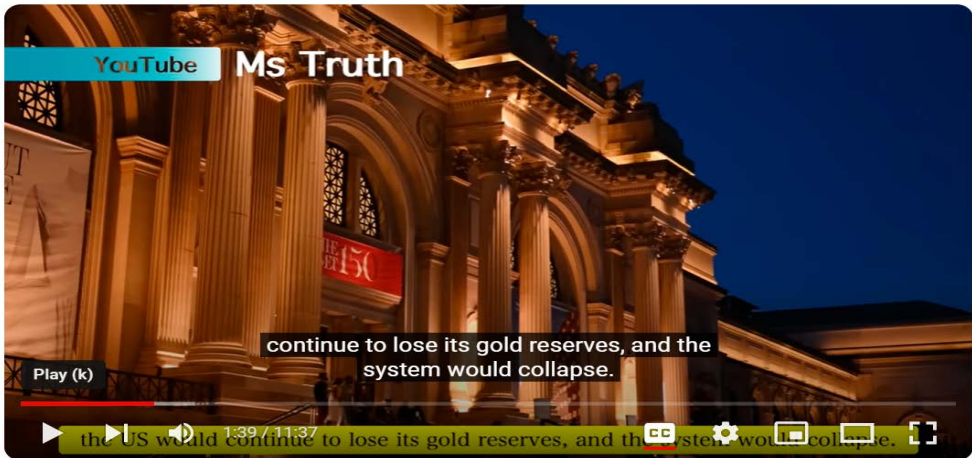
Source: 'Lets Talk', 'Far ahead! China's satellite technology surpasses the US amidst the Israeli-Palestinian conflict', *YouTube*, 9 November 2023, [online](#); Stock footage includes Adobe, [online](#); Shutterstock, [online](#); Storyblocks, [online](#).

One of the benefits of using text-to-video services or generative AI voices in an influence campaign is that they allow a cheap and quick way for an operator to create reams of differentiated content. That can help an operator avoid detection. Because of the range of differentiated content used in videos in the network, we were unable to concretely verify from the videos alone which particular services were used.

However, we established that some of the channels in the network used the same transitional imagery, which probably suggests that they used the same software to create their video. For example, we observed that the channels Découverte de la Chine, Tech Info and Descubriendo China all used the same opening title sequence to introduce their channel (including the same video graphics, the

same font and at the same time in their videos), although they used a different image of a city in the background (Figure 10). We also saw Ms Truth, Deepin Moments and Tech Info all use the same title card in videos on their channels (including the same font), although they chose to use a different colour for the word 'YouTube'.

Figure 10: Stills from opening title sequence from Decouverte de la Chine, Descubriendo China and Tech Info; stills from title cards and subtitles from Ms Truth, Deepin Moments and Tech Info



PETRODOLLAR COLLAPSE! Egypt announces DECOUPLING from US dollar, Dominoes begin.



Source: 'Discovering China' [Découverte de la Chine], 'Google's decision to revoke license backfires' [La Décision de Google de Révoquer la Licence de Huawei leur Revient en Plein Visage], *YouTube*, 4 November 2023, [online](#); 'Discovering China' [Descubriendo China], 'Google's decision to revoke Huawei's license backfires on them' [La decisión de Google de revocar la licencia de Huawei les vuelve en contra], *YouTube*, 7 November 2023, [online](#); 'Ms Truth', 'PETRODOLLAR COLLAPSE! Egypt announces DECOUPLING from US dollar, dominoes begin', *YouTube*, last accessed 29 October 2023; 'Deepin Moments', 'The US worst fear has happened! China provides Beidou satellites to the Middle East to help!', *YouTube*, 4 November 2023, [online](#); 'Tech Info', 'Biden panicked! China to counter US sanctions by blocking Apple!', *YouTube*, 10 October 2023, [online](#).

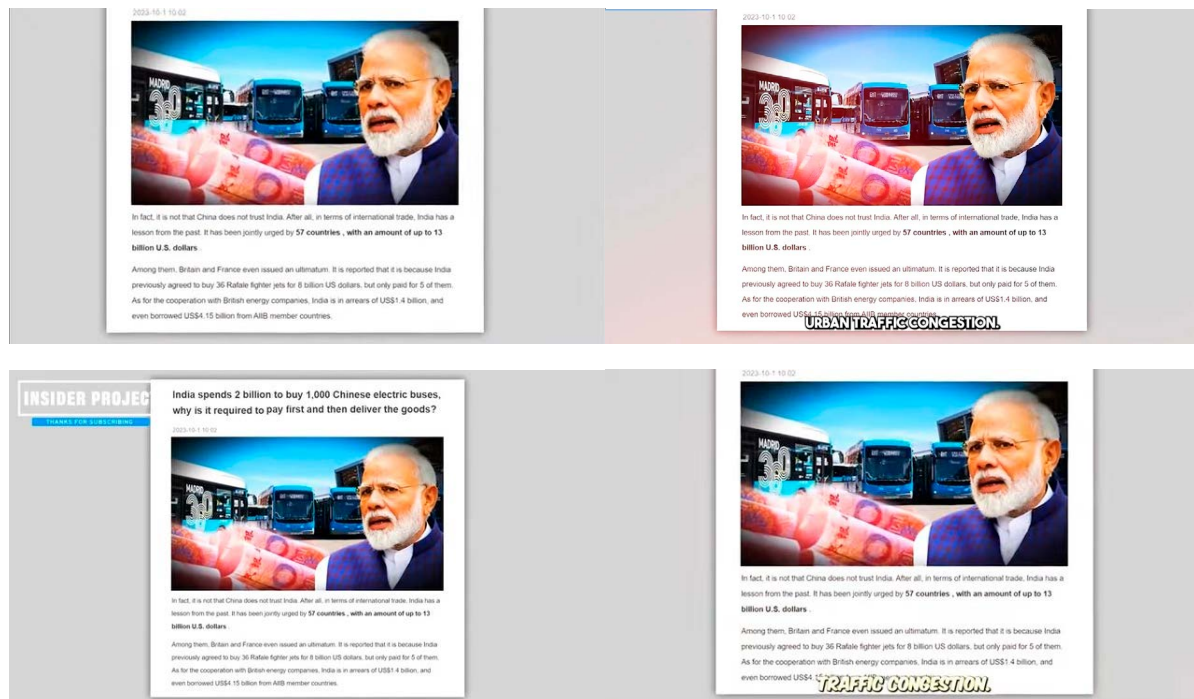
We also believe that channels in the network used text-to-video software and stock-imagery providers because some disclosed that in their description. For example, one video from 'Innovative Check' credited its music to 'StoryBlocks/pictory/Audio library' and said its footage was licensed through 'StoryBlocks/pictory/Filmpac'.²⁷ Innovation Diary said that its music was licensed through StoryBlocks/Audio Library and its footage was licensed through 'StoryBlocks and Filmpac'.²⁸ ASPI isn't in a position to verify whether the videos in question were made using the software that the account owners indicated. Neither is ASPI suggesting that specific text-to-video and/or stock-imagery services are knowingly facilitating influence operations or inauthentic activity.

We observed videos from different channels in the network that posted on the same topic around the same time, and all used a meaningful amount of the exact same stock footage and English text. The ease with which videos made using text-to-video providers can be tweaked to evade detection by platform spam detectors may indicate why the operator chose it as a technique.

Between 12 and 22 October 2023, YouTube channels Current Insight, Global Visionary, Insider Project and China Secrets all published videos on Nicaragua’s purchase of Chinese buses to reduce urban traffic congestion.

All those videos, at around 0:30, posted an image that showed an English-language news article about India’s BYD deal (see Figure 11). At other points in their script, they used the exact same English sentences; for example, three of the videos included the exact phrase ‘Nicaragua spent \$260 million to purchase 1000 buses from China to improve urban traffic congestion. However, this cooperation triggered dissatisfaction in India. Previously, India had placed an order with the Chinese company BYD for 500 electric buses, but the cooperation failed due to India’s credit problems.’ This leads us to believe that these accounts were probably coordinated.

Figure 11: Stills from around 0:30 in each video



Sources: ‘China Secrets’, ‘INDIA IS ENVIIOUS! Nicaragua \$260 million purchase 500 Chinese bus | but NOT cooperating with India’, *YouTube*, 22 October 2023, [online](#); ‘Global Visionary’, ‘Nicaragua’s \$260 million deal for 500 Chinese buses: India watches closely’, *YouTube* 19 October 2023, [online](#); ‘Insider Project’, ‘INDIA IS ENVIIOUS! Nicaragua \$260 million purchase 500 Chinese bus | but not cooperating with India’, *YouTube*, 12 October 2023, [online](#); ‘Current Insight’, ‘Nicaragua’s \$260 million deal: India’s vigilant observance of 500 Chinese buses purchase’, *YouTube*, 21 October 2023, [online](#).

Other indicators

As well as the above four TTPs, we observed the following behaviour across some channels in the Shadow Play network.

Limited efforts to earn currency

The campaign’s YouTube channels appeared to make some efforts to earn currency through monetising their channels and by posting links to other websites where they could earn money. We think it’s equally likely that the network could be using these methods for financial gain or to mask their operations by appearing more like legitimate YouTube accounts.

Posting on YouTube allowed channels in the network to monetise views on their videos and earn currency. We note that most videos in the network were long enough to qualify for multiple advertisements per YouTube guidelines, under which videos over eight minutes can include mid-roll

ads.²⁹ However, we didn't extensively test the network's use of advertisements, and further research is necessary to link the length of videos to the operator's desire for monetisation.

Exact money earned for each video is only a metric available to channel owners through the YouTube studio, so ASPI can't verify the exact amount of money each channel may have earned in the operation. However, third-party tools can provide a rough estimation. Social Blade estimates a payment per 1,000 views (known as the CPM rate) of between US\$0.25 and US\$4.00, before revenue sharing with YouTube. Table 4 shows three channels in the network and their estimated payment per year, before revenue sharing with YouTube, as per Social Blade data.

Table 4: Estimated payment per year (US\$)

Video	Estimated payment
Innovation Diary	\$15,600 – \$250,100
Asian Quicktake	\$1,500 – \$23,600
Curious Bay	\$305 – \$4,900

Notes: Estimate as per data on Social Blade on 4 December 2023: 'Innovation Diary', *Social Blade*, accessed 4 December 2023, [online](#); 'Asian Quicktake', *Social Blade*, accessed 4 December 2023, [online](#); 'Curious Bay', *Social Blade*, accessed 4 December 2023, [online](#).

We also observed limited efforts from YouTube accounts in the network to earn currency through posting links to trading platforms and financial support accounts. Earning currency to fund operations is a well-known tactic in cyber operations, defined as technical operations that involve hacking for cash, for intellectual property or to attack other nation-states' internet-connected systems.³⁰ However there has been limited evidence that influence operations have used this tactic to fund their campaigns.

For example, we observed Relaxian and Sino Sphere posting links to Patreon, PayPal and Buymeacoffee in their YouTube Channel bios. Those are popular financial support accounts used by genuine influencers on YouTube, Instagram, and so on. We observed minimal amounts of paid support occurring on YouTube channels, and Patreon accounts linked to the channels appeared to only have a small number (>10) of paid subscribers. Due to information restrictions, we were unable to assess whether channels managed to receive currency through PayPal or Buymeacoffee.

We observed referral links as part of video descriptions or pinned comments by the channel owner on YouTube videos for the following products:

- sports betting website, Zcodesystem³¹
- Blue host, a domain registration and web hosting service provider.³²

From what we could observe, we don't think that the network's efforts to earn currency seemed particularly spirited or effective. For example, the Patreon accounts we looked at posted only content that was already freely available on the YouTube channel. However, we don't have enough information about their efforts across other financial support platforms to make a concrete assessment. We aren't ruling out the possibility that this is either an attempt to blend in or a commercial operator with the intent to profit but limited sophistication in achieving that objective.

Video sponsorship from US and Canadian companies

Innovation Diary, a channel in the Shadow Play network, earned over US\$30,000 through sponsorship for its videos from several US and Canadian publicly listed mining, energy and cybersecurity companies.³³ The sponsorship was brokered by Gold Standard Media, a Texas-based public-relations firm that says that it specialises in investor relations for energy and mining companies.³⁴

Innovation Diary disclosed a US\$5,000 sponsorship, brokered by Gold Standard Media, from a publicly listed Canadian energy company, Traction Uranium (CSE:TRAC, OTC:TRCTF, FRA:Z1K).³⁵ As part of the sponsorship arrangement, Innovation Diary published a video on 9 July 2023 titled ‘China dominance in rare earth metals and risks to the supply chain of the US and Europe’.³⁶ As of publication, this video had more than 39,000 views.

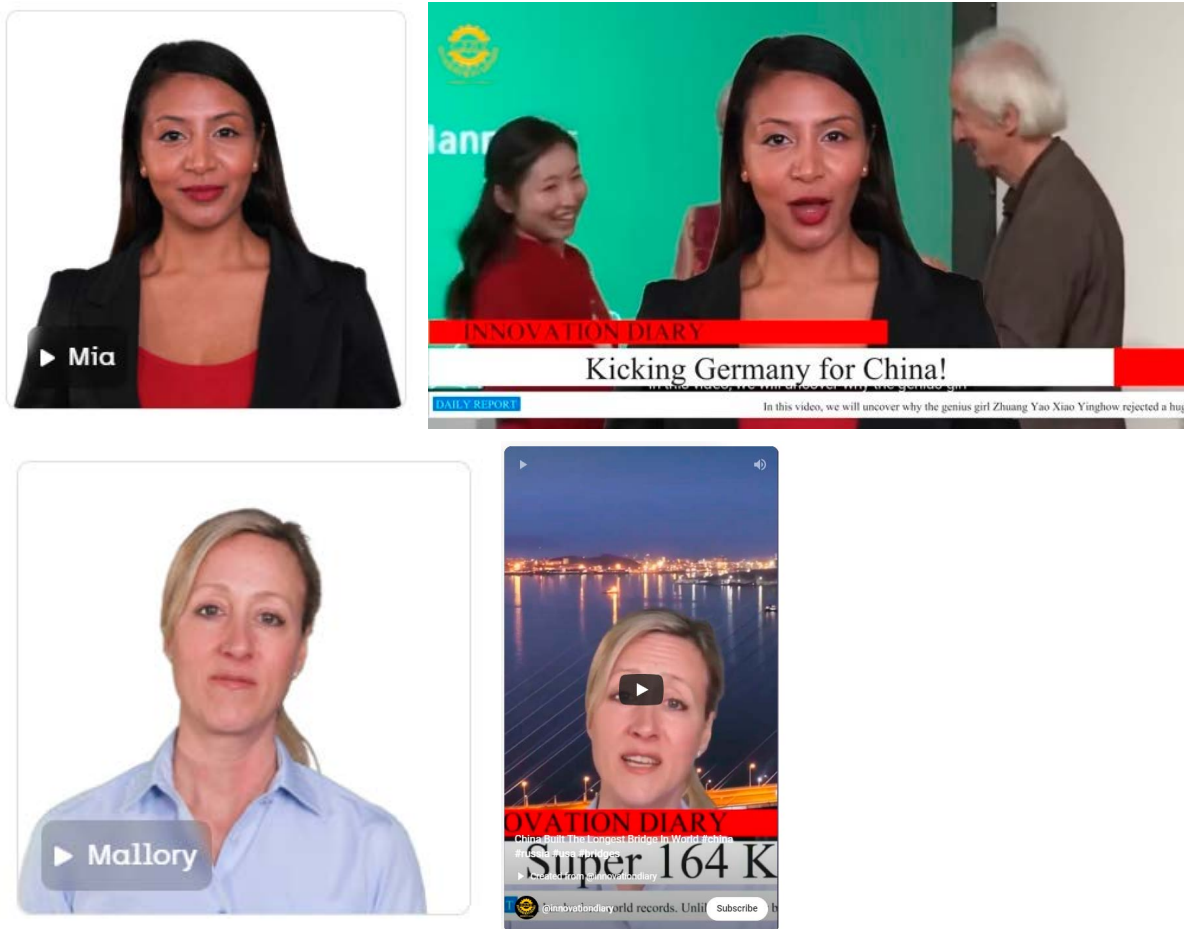
Innovation Diary also disclosed a US\$5,000 sponsorship from publicly listed Canadian cybersecurity company, Cybeats (CSE: CYBT | OTCQB: CYBCF), brokered by Gold Standard Media. As part of that arrangement, Innovation Diary published a video on 16 October 2023 titled ‘China exposes US cyberweapon threats to every person, rejecting accusations of cyber espionage’.³⁷ As of publication, this video had more than 19,000 views. Canadian securities filings for Traction Uranium and Cybeats confirm that the firms had commercial relationships with Gold Standard Media.³⁸

Given Innovation Diary’s high number of subscribers (more than 130,000 at the time of publication), and ongoing interest in energy and mining topics, it’s possible that the channel was approached as a suitable YouTube channel for a genuine marketing campaign. We observed several other legitimate YouTube channels disclosing that they had received funds from Gold Standard Media, on behalf of Traction Uranium, to produce YouTube videos.³⁹ Outside of the campaign, ASPI found that Gold Standard Media supports other geopolitically focused videos on behalf of US and Canadian companies. For example, on behalf of Canadian uranium company ATHA (CSE: SASK | OTCQB: SASKF), it supported a video produced by China-focused Canadian influencer Cyrus Janssen, arguing that the US should avoid involving itself in cross-strait conflict between Taiwan and China.⁴⁰ ASPI isn’t suggesting any malfeasance on behalf of Traction Uranium, Cybeats, ATHA Energy or Gold Standard Media. The sponsorship of Innovation Diary’s videos may suggest an ability, albeit limited to one account, to gain traction among third parties unconnected to YouTube. These examples also demonstrate how Western companies can end up funding channels and videos that form a part of a coordinated inauthentic operation.

Limited use of off-the-shelf AI-generated humans

We identified one account in the YouTube network, Innovation Diary, making prolific use of Synthesia avatars in its earlier YouTube videos. These are AI-generated humans produced by British AI company Synthesia. In this case, Innovation Diary used Synthesia avatars from the date of its first video, 1 November 2022, to 21 December 2022 in YouTube videos, and in one YouTube short on 28 May 2023. We mapped avatars used in 39 videos used to at least 10 avatars advertised publicly on Synthesia’s website, two of which are shown in Figure 12. The Innovation Diary YouTube channel was one of the most followed and liked accounts in the network we identified. The second highest viewed video across the entire network identified in this report was one from Innovation Diary that used the Synthesia avatar ‘Mallory’, garnering more than 806,000 views.⁴¹ Innovation Diary’s use of Synthesia’s avatars is probably in violation of Synthesia’s terms of service, which state that avatars can’t be used to make ‘any kind of statement of fact regarding religion, politics, race, gender, sexuality, or other similar topics’.⁴²

Figure 12: Comparison of Synthesia's AI-generated humans and humans appearing on videos posted by the Innovation Diary YouTube account



Sources: 'Innovation Diary', 'Genius researcher girl rejected the high salary in Germany and returned to her homeland China', *YouTube*, 2 December 2022, online; 'Innovation Diary', 'China built the longest bridge in world #china #russia #usa #bridges', *YouTube*, 28 May 2023, online; 'AI avatars', *Synthesia.io*, online.

US threat intelligence firm Graphika first identified the use of AI-generated humans from Synthesia in a Chinese Government-linked ('Spamouflage') influence operation in February 2023.⁴³ The investigation pointed to a limited use of two avatars produced by Synthesia to promote the importance of US–China cooperation for global economic recovery and failed US attempts at controlling gun violence. The content was promoted by Spamouflage, which is a China-linked influence operation, and received limited traction on social media. Synthesia's avatars have also been identified in influence operations supporting a military coup in Burkina Faso and spreading pro–Venezuelan Government content.⁴⁴

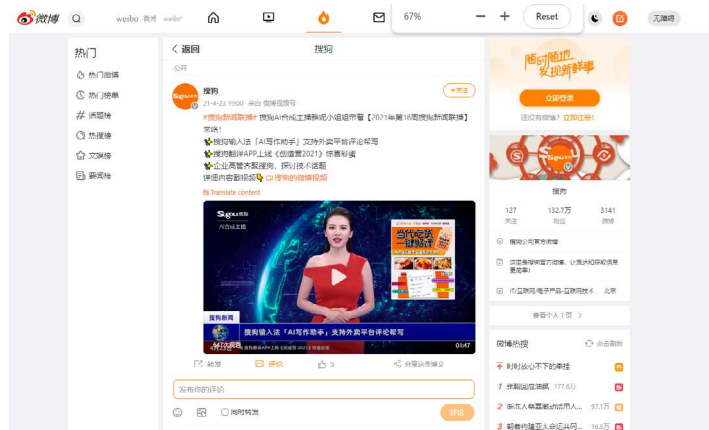
We also observed that one account in the network, Ms Truth, used in one video an avatar created by Sogou, which is one of China's largest technology companies. We believe this to be the first reported instance of a Chinese company's AI-generated 'human' being used in an influence operation. Given China's tight controls on AI-generated technology, it's surprising that companies outside of Sogou and state media organisations are able to use Sogou intellectual property and produce their own content.

Sogou's artificially generated avatars were first unveiled in 2018 and have primarily been used on *Xinhua*, China's state broadcaster, as part of a Sogou–Xinhua partnership to produce AI-generated humans for news broadcasts.⁴⁵ Sogou has also 'gifted' bespoke AI newsreaders to Russia and the United Arab Emirates.⁴⁶

The particular avatar used on the Ms Truth YouTube account corresponds to the Sogou AI-generated human called ‘Yanni’ (雅妮). In a post on Weibo, a major Chinese social media website, in April 2021, Sogou’s official company account posted a video announcing that its AI-generated news anchor Yanni was presenting a news broadcast, accompanied with a video of an identical human to the Ms Truth video presenting the news (Figure 13).⁴⁷

Based on several social-media posts, Yanni appears to have debuted at Sogou’s Technology AI Summit in 2019, where she hosted the entire summit. Yanni has also been used as a personalised weather broadcaster.⁴⁸

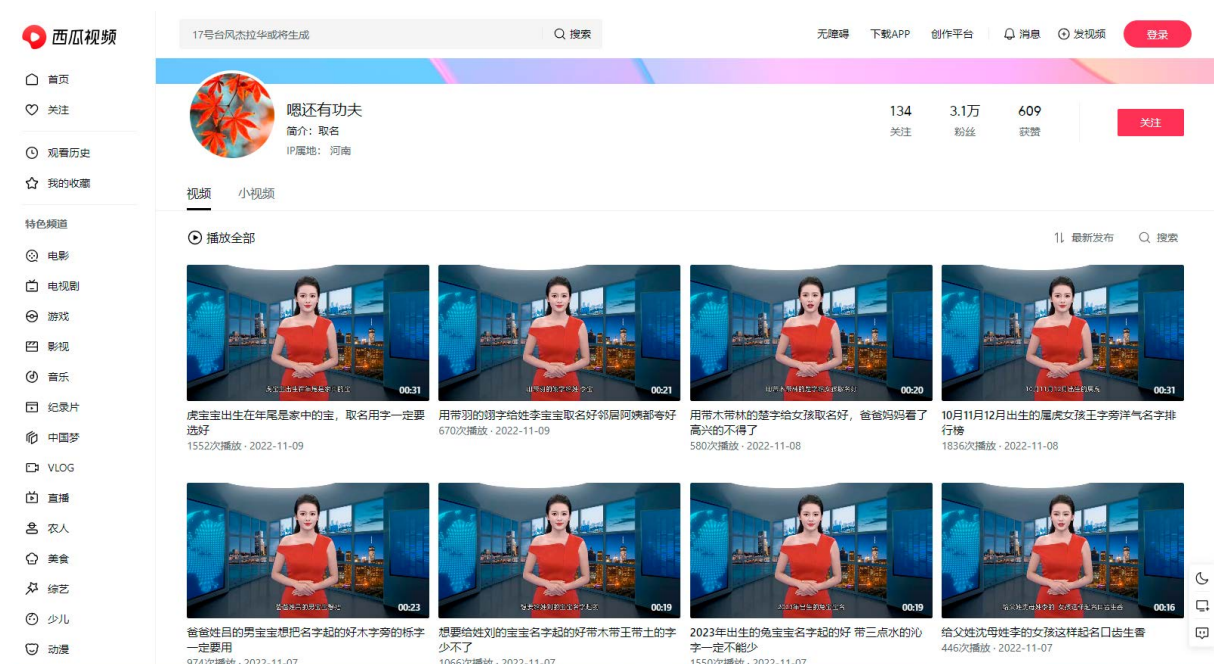
Figure 13: Comparison of Sogou’s AI-generated news anchor on Sogou’s official account and Ms Truth YouTube account



Sources: ‘Sogou official account’, ‘#Sogou News Broadcast Sogou AI-generated news anchor Little Sister Yanni is here with the [2021 Week 16 Sogou News Broadcast]’, [#搜狗新闻联播# 搜狗AI合成主播雅妮小姐姐带着【2021年第16周搜狗新闻联播】来啦!], *Weibo*, 23 April 2021, [online](#); ‘Dominoes begin’, PETRODOLLAR COLLAPSE! Egypt announces DECOUPLING from US dollar, *YouTube*, 27 October 2022, timestamp: 0:02, Ms Truth/@mstruth3150, [online](#);

Based on documented use outside of official Sogou platforms and summits, ASPI believes Sogou’s avatar is probably available for commercial and/or individual use. We observed it being used in ‘news broadcasts’ on amateur social-media accounts on Chinese platforms including Jinri Toutiao, Xigua Video (Figure 14), Bilibili, Zhihu, and Haokan Video.⁴⁹ We also observed it being used in ‘news broadcasts’ on TikTok and YouTube, including for a Canadian Chinese-language media company, Canadaso.⁵⁰ In the limited time we had, ASPI was unable to find a way to purchase the use of Sogou-produced avatars through publicly available sources. This may suggest there may be some restrictions on public use in comparison to services offered by other firms that generate AI human avatars.

Figure 14: Example of amateur use of Sogou’s AI-generated news anchor, Yanni, on Chinese social-media site Xigua Video



Sources: ‘Yeah, there’s still work to do’ [嗯还有功夫], Xigua Video, no date, online.

Limited use of generative AI thumbnails

Several accounts in the Shadow Play network made frequent use of generative AI tools to generate images of world leaders in their thumbnails. We believe that the thumbnails were most likely generated using a text-to-image generative model such as OpenAI’s DALLE 3 or Midjourney. We note that the use of imagery of General Secretary Xi Jinping, especially as created with generative AI, is highly unusual. We saw use of generative AI in thumbnails to show world leaders in highly emotional states, such as yelling, frustrated, crying or with their heads held in their hands. While we didn’t observe imagery of Xi Jinping in such highly emotional states, we did observe limited examples of him being depicted in what appears to be emperor’s clothes and limited examples in which he looked overweight—the publication of both of which would be considered taboo under China’s information control system.

Figure 15: Thumbnails from YouTube videos that were made using generative AI



Sources: 'Curious Bay', 'BRICS New Trade Talks with Iran on Silencing the US Dollars', *YouTube*, last accessed 8 December 2023, [online](#); 'Curious Bay', 'U.S. Drowns As BRICS Welcomes Saudi Arabia, Egypt, Turkey', *YouTube*, 27 January 2023, [online](#); 'Innovation Diary', 'Shocking! China Just Dumped \$21 Billion in U.S. Treasuries, Biggest Drop in 4 Years!', *YouTube*, 7 November 2023, [online](#); 'Sino Sphere', 'JUST IN! China Shocks U.S. & Israel, Orders To End Civilian Bombing in Gaza Conflict!', *YouTube*, 8 November 2023, [online](#).

The Shadow Play network's key narratives

We observed six main narratives across the Shadow Play network. A list of visual representative examples from the network for each narrative is available in Appendix 1 on page 35. The narratives are as follows:

1. China and Russia are responsible, capable players in geopolitics and current world events.
2. China is winning the US–China tech war and overcoming US sanctions.
3. China is highly capable and trusted to build massive infrastructure projects.
4. China is winning the rare earths, critical minerals and electric vehicles competition.
5. The US economy is weak, and the US dollar is no longer the world's strongest currency.
6. The US is headed for collapse, and its alliance partnerships are fracturing.

We observed the following features of how the network dispersed these six narratives:

1. *Channels were highly reactive to current news stories, publishing detailed videos within days after key events had occurred.* This contrasts with traditional behaviour in China-linked influence operations, which tend to focus on issues, rather than events, and rarely comment on current affairs. However, we note that recent China-linked influence operations have been highly responsive to current events.⁵¹ For example, Innovation Diary published a video about Russia's and China's vetoes of a US-sponsored draft resolution in the UN Security Council on UN action in Israel, just over a week after the vote.⁵² China Focus—CNF published a video about Huawei unveiling its Mate 60 Pro smartphone during US Commerce Secretary Gina Raimondo's visit to Beijing just over a week after her visit.⁵³

2. Most videos that we observed were opinion videos that discussed contested topics, such as judging that Huawei was able to beat Western sanctions. However, there was a significant amount of content that spread false information, including that China had developed 1-nanometre chips without extreme ultraviolet (EUV) lithography machines or that ASEAN nations had decided to use the yuan as their shared currency.⁵⁴
3. The content covered a broader set of global topics and narratives than known CCP-linked threat actors. We observed the inclusion of topics and opinions outside of those espoused by the Chinese Government, such as when Lets Talk posted a video on 5 November 2023 titled 'Latest! Iran gets access to Chinese Satellites to use for missile attack on Israel!'⁵⁵ or when Innovation Diary posted a video on 18 November 2023 titled 'China just revealed the US cities on watchlist to be bombed as Israel Hamas conflict becomes'.⁵⁶
4. Another striking feature was the campaign's efforts to negatively portray major non-Chinese technology companies, including semiconductor firms, consumer technology companies, electric vehicle companies, automobile companies and aircraft manufacturers (Figure 16). At the same time, the network positively portrayed Chinese technology companies, including Huawei, DJI and BYD. We note that China-linked operations have long been known to portray Huawei positively.⁵⁷ However, other than the rare-earths company, Lynas, a target of the Spamouflage-attributed influence operation, this seems like a marked increase in focus and frequency in targeting non-Chinese technology firms.⁵⁸

Figure 16: Videos from the YouTube network targeting major technology companies ASML, Intel, Apple, Samsung and SK Hynix



Sources: 'Innovative Check', 'Did China Just Kill ASML? China's Breakthrough Without EUV Lithography', *YouTube*, 9 August 2023, [online](#); 'China Focus—CNF', '"Chip War" Unveils Biggest Loser with Plummeting Performance!', *YouTube*, 5 October 2023, [online](#); 'Innovation Diary', 'Apple's Plans To Make a Factory In India Went Miserably Wrong, Losing \$80 Billion!', *YouTube*, 4 September 2023, [online](#); 'China Focus —CNF', 'Rejected! Intel's Acquisition Bid Declared Failed as Antitrust Becomes China's Counterattack Weapon', *YouTube*, 2 September 2023, [online](#).

Iran and China's BeiDou satellite system: how an influence operation can become misinformation

Several hours after Deepin Moments, a channel from the identified Shadow Play network, posted about a rumour that Iran had turned on its China-provided satellite system, an English-language Twitter account under the handle @NiMingda_GG, which currently has more than 58,000 followers, posted a similar tweet (Figure 17). While the tweet was later deleted by the owner, as of our last viewing of the tweet it had received around 250,000 views. Based on a review of open-source information, we have determined that the individual behind the @NiMingda_GG account is most likely a real person rather than an inauthentic account.

Given the small gap in time between the two accounts posting the information, we think that it's most likely that the @NiMingda_GG Twitter account watched the Deepin Moments video or saw the narrative as the subject of posts by a small group of Twitter accounts boosting the video. The @NiMingda_GG account then decided to repost the rumour, leading to the proliferation of a narrative from an influence operation into a wider misinformation system on social media.

Figure 17: Original tweet from @NiMingda_GG Twitter account



Note: This tweet was deleted 12 hours or so after it was posted by the author. We don't have an archived copy, but we saw the original tweet. The Tweet appeared as part of this thread: '@NiMingda_GG', *Twitter*, 20 October 2023, [online](#).

We observed a number of accounts retweeting @NiMingda_GG's tweet. We also saw hundreds of accounts copying the English-language text and posting it as their own tweet and/or posting a screenshot of Ni Mingda's original tweet. This is common behaviour by Twitter users, and we don't think it alone suggests coordinated, inauthentic behaviour. Appendix 4 has further examples of the Ni Mingda tweet being reposted by other accounts, including in languages other than English.

We also observed slight variations in text or emoticons used in these organic tweets. While some accounts that engaged in this behaviour had few followers, a significant percentage had meaningful follower counts, such as Syrian Girl, which has more than 330,000 followers. Syrian Girl retweeted an organic tweet and gained the second highest reach of tweets in the network, at 277,000. Reach is

an estimate of the potential viewership of a tweet, based on monthly unique visitors to the tweet in question. The accounts with the top 5 reach of their tweets are listed in Table 5. Metrics from those top 5 accounts alone suggest more than 1.1. million views of the Ni Mingda content.

Table 5: Top 5 accounts, 20:00 hours 19 October to 23:59 hours 25 October

Account name, handle and reported location (if available)	Followers	Tweet reach
@abbaschamsuddin ني دلا س مش س ا ب ع Iraq	314,900	308,000
@partisangirl Syrian Girl Australia	331,300	277,000
م ا ل ع ا ل ل ة ر ا ن م ل ا @AlmanaraMedia Libya	273,500	273,000
@faysalabdsater Faysal Abdelsater رتاس ل ا د ب ع ل ص ي ف	194,200	188,000
@politicomex Política Mexicana	111,400	111,000

We believe that some accounts on Twitter that posted their own posts copying the content of Ni Mingda’s tweet probably used an automated translation tool to translate the original tweet, as we found significant linguistic errors in non-English languages, suggesting a non-native speaker. However, we note that this kind of behaviour is common among authentic Twitter users and doesn’t suggest inauthentic behaviour, but rather an interest in the content and a desire to amplify it.

We did confirm that several Twitter accounts of real individuals with considerable follower accounts organically posted the content. This is important because key opinion leaders such as influencers and elites can have an impact on public opinion, especially if they have a track record of building trust with an audience.⁵⁹

Accounts that published the information included:

- Faysal Abdelsater, a Lebanese political analyst and journalist⁶⁰
- Abbas Shams al-Din, an Iraqi researcher and religious thinker⁶¹
- Aimen Dean, a former member of al-Qaeda, recruited as a source for the UK’s Secret Intelligence Service, MI6, and a podcaster⁶²
- Khayal Muazzin, an Iran-based journalist for Russian and Iranian media⁶³
- Maram Susli (known on social media as Syrian Girl), a Syrian–Australian conspiracy theorist, influencer and contributor to *New Eastern Outlook*, which is a journal under US sanctions as it’s directed by the SVR, Russia’s foreign intelligence agency⁶⁴
- George Galloway, the current leader of the Workers Party of Britain and a former British member of parliament.⁶⁵ Note that Galloway retweeted the original tweet, rather than organically posting the content.

Sharing off platform

Within hours of the @NiMingda_GG account tweeting, ASPI observed that a range of social-media channels, forums and websites posted in a similar way to the original tweet and network of Twitter accounts. Several indicative examples are noted in Appendix 4.

Within a few days, the rumour had proliferated into more than 20 languages, including major languages such as English, Spanish, Arabic, Japanese, Russian, French and Bahasa Indonesia, but also less common languages such as Czech, Bulgarian, Sinhala, Swedish and Slovakian.

While we believe that there are probably more instances of the content on the internet than we found in our sample, we observed content posted on the following sites (Table 6):

- social-media channels: TikTok, Facebook, Instagram, Pinterest, LiveJournal, Telegram
- forums: 4chan, Elakiri Forum, Glav Forum⁶⁶
- websites, including news sites: Pravda Spanish-language edition, worldnewserta.com, Terazjie, Poslednie News, Carlnorberg.se, iraqhair.com, dinardetectives.com, Farsicnn, Ambion News.

Across social-media channels, the post was reposted by some channels with large followings, suggesting that it may have been viewed by large audiences (Table 6). As we note in ‘Methodology’, we didn’t conduct a thorough evaluation of all relevant content posted on social-media sites that matched @NiMingda_GG’s tweet. Further research would seek to be more comprehensive.

Table 6: Social media accounts with high followings that posted the rumour (outside of Twitter), 20:00 hours 19 October to 23:59 hours 25 October 2023

Platform	Account name and handle	Language	Followers
TikTok	@BRICS_2022	Spanish	250,000
Instagram	Shia.Story @Shia.story	Arabic	49,700
Facebook	Mohammad Nur Ahmad رونا دم حم دم ح ا	Malay	48,950
Instagram	Noticias del Mundo @mundoyeconomia	Spanish	38,100
Telegram	Middle East Spectator @Middle_East_Spectator	English	53,000

Sources: ‘World News’ [Noticias del Mundo], *Instagram*, October 20 2023, [online](#); ‘Mohammad Nur Ahmad’, *Facebook*, October 20 2023, [online](#); ‘Middle East Spectator’, *Telegram*, October 20 2023, [online](#); ‘brics_2022’, *TikTok*, 20 October 2023, [online](#). Follower count as at 26 November 2023.

Conclusion and policy recommendations

The substantial number of views and subscribers on YouTube channels associated with this campaign—and the subsequent recirculation of key narratives as misinformation—suggest that it’s one of the most successful influence operations related to China ever witnessed on social media.

For trust and safety teams at technology companies, analysts in the intelligence community, and the open-source intelligence research community

Given the ongoing nature of this information operation, its apparent effectiveness and its relevance to ongoing geopolitical issues, we recommend the immediate investigation of the operation. Areas that would be useful to investigate might include:

- a comprehensive analysis to determine the scale and scope of YouTube channels involved in the operation, including YouTube channels that publish content in languages other than English
- establishing whether the operator of the network is a commercial operator and whether they’re operating purely for profit, or as part of a relationship with a government actor
- estimating the intent of the operator of the YouTube network and whether the operation achieved their objectives
- whether viewership and subscriber counts on YouTube and other platforms represent authentic viewership or have been inauthentically inflated
- whether accounts commenting on YouTube videos in the network are inauthentic or authentic, perhaps through an analysis of linguistic markers
- the degree to which YouTube accounts in the operation benefited from monetisation of their videos or their efforts to earn currency off-platform, such as through video sponsorships or referral links to companies. (This could yield insights into the operator’s identity, as a commercial actor would probably need to have a profit motive for organising this kind of influence operation. For a government-connected actor, it might point to a new TTP for China-focused operations in which operators make efforts to self-fund to sustain operations.)
- conducting further linguistic and narrative analysis for a higher confidence interval on the identity of the YouTube network operator.

For social-media platforms and tech companies

- 1 Social-media platforms should mandate that users disclose when they have used generative AI in either their audio, video or image content.
 - This would increase transparency for the users of social-media platforms, while still allowing content creators the use of generative AI services to produce creative and engaging content. It would increase trust in social-media platforms, which may increase authentic engagement by users. It would also allow companies that offer generative AI products to more effectively investigate allegations of misuse.
 - This aligns with efforts by social-media platforms to balance freedom of speech against users’ safety and transparency, such as by labelling certain media accounts as ‘state-affiliated’. This also includes legislation and company policies that require creators to disclose sponsorships received for videos, such as YouTube’s advertising policies or Australian consumer law.⁶⁷

- 2 Social-media platforms, text-to-video providers and stock-footage providers should use their technical advantages and privileged access to technical information to investigate the full extent of the network and disclose that publicly.
 - For example, these companies can investigate whether subscriber numbers have been artificially inflated and the amount of money channels have made from their videos. They can also analyse the email addresses used to register accounts in the network or which IP (internet protocol) addresses accounts commonly used to access YouTube.
- 3 Threat intelligence teams at text-to-video providers and stock-image or stock-footage providers should monitor whether their content or platforms are being used in information operations and ensure that their terms of service explicitly prohibit the use of their platforms or content for information operations.

For government

- 1 When briefing policymakers on a range of issues, Five Eyes intelligence analysts should provide integrated analysis that notes the presence, and, where possible, the impact, of online influence operations.
- 2 Mission leaders in the intelligence community across the Five Eyes should evaluate whether their national intelligence-collection priorities support the effective amalgamation of information on Russia-, China- and Iran-linked information operations.
 - This would help to ensure integrated collection and analysis that considers how Russia, China and Iran may work together on information warfare and would help to prevent siloed information streams among Russia, China and Iran analysts.
 - Effective amalgamation should allow for the possibility that information operations can be conducted by both nation-states and commercial actors, or both in tandem.
- 3 Australia and its Five Eyes partners should declassify some open-source social-media-based influence operations in order to share that information with regional partners. The information could be shared through the Department of Foreign Affairs and Trade's Strategic Communications Division and/or through political officers at Australian diplomatic posts in the region.
 - Many of Australia's regional partners, such as Japan, South Korea, India and Pacific island countries are targets of influence operations and misinformation, and increased detection of content, especially in languages other than English, could strengthen democratic spaces on the internet.
- 4 Australia and its Five Eyes partners, where possible, should declassify information about influence operations and share that information with non-government organisations, such as private companies and civil society groups. In Australia, the Department Home Affairs would be most suitable to lead on this issue, although the Department of Foreign Affairs and Trade could play a role in liaising with stakeholders in the Pacific.
 - These groups are increasingly the targets of influence operations. Private firms are also often major advertisers or partners of social-media companies, and their concern may strengthen social-media firms' desire to prevent and detect information operations.

- 5 To aid deterrence and investigative work by relevant countries and the open-source research community, law-enforcement agencies and foreign ministries should consider public attribution of information operations or threat actors, particularly those that target non-English-speaking audiences. This would also increase public awareness of what information operations look like, leading to improved societal resilience against such operations.
 - There's a relative paucity of information on information operations in languages other than English, although that could be shared with relevant countries in the region to increase their resilience.
 - Public attribution could be modelled on existing mechanisms developed by the US, South Korea and Canada.
 - For example, the US Justice Department unseals criminal complaints and indictments and publishes them on its website;⁶⁸ the US State Department's Global Engagement Center publishes special reports that identify malign influence actors and their tactics;⁶⁹ the South Korean National Intelligence Service has attributed a China-linked information operation posing as South Korean news outlets to spread propaganda; and Global Affairs Canada's 'rapid response mechanism' has issued an analysis on an information operation targeting a Canadian member of parliament.⁷⁰

For the open-source intelligence research community (open-source researchers, threat intelligence analysts and journalists)

- 1 Analysts working on identifying influence operations through open sources in think tanks, threat intelligence firms, journalism and academic research institutes should publish detailed threat indicators as appendixes in their research.
 - While this is common among analysts investigating cyber activity, it rarely happens in the disclosure of influence operations.⁷¹ Doing so would speed up further investigative work by other open-source intelligence analysts and lower the barrier to entry for analysts identifying threat actors outside of their usual areas of expertise. There are several proposed frameworks for structuring this information, such as the Online Operations Kill Chain framework and the DISARM framework.⁷²
- 2 Managers at open-source research organisations should make a concerted effort to share knowledge (including TTPs, region-specific open-source intelligence investigative techniques, and domain knowledge) among staff who focus on disinformation by China, Russia and Iran.
 - Traditional silos between these regions in the open-source research community hamper timely threat identification of collaboration between those actors.
 - This could be done internally through mentoring or structured information-sharing meetings, and/or externally through organising panels at industry conferences on the topic or capacity-building efforts.

Appendix 1: The Shadow Play network's key narratives

Narrative 1: China and Russia are responsible, capable players in geopolitics and current world events



Sources: 'Innovation Diary', 'How China Is Supporting Palestinians As All Big Dogs Get With Israel!', *YouTube*, 3 November 2023, online; 'Deepin Moments', 'Germany Seeking China's Help to Avert Looming Industrial Crisis, Bypassing the US | DeepinMoments', 9 September 2023, online; 'Cross-Pacific Confrontation', 'How China freed Venezuela from Western sanctions in bold steps? | The West is shocked!', *YouTube*, 8 October 2023, online; 'Deepin Moments', 'Denmark Announces the Truth About Nord Stream Pipeline', *YouTube*, 19 October 2022, online.

Narrative 2: China is winning the US–China tech war and overcoming US sanctions





Sources: 'Asia Hot Topics', 'THIS IS HUGE! China and Brazil Sign \$150 Billion 5G Order | About To Change Everything! #china', *YouTube*, 24 September 2023, online; 'Discovering China' [Descubriendo China], 'Global challenge overcome! China produces 1nm chips without EUV lithography' [¡Desafío mundial superado! ¡China produce chips de 1 nm sin litografía EUV!], *YouTube*, 8 November 2023, online; 'VOC – Vision of China', 'DJI civilian drones gained 80% of the global market under US sanctions', *YouTube*, 23 August 2023, online; 'Relaxian', 'Apple Collapses in China As Huawei & Samsung Take Over & Dominate The Market!', *YouTube*, 9 November 2023, online; 'China Focus – CNF', 'AGAIN! NVIDIA Introduced Three New & Customized Chips for China in Defiance of the Ban!', *YouTube*, 14 November 2023, online; 'Asia Hot Topics', 'THIS IS HUGE! Europe & China's \$3.2 Billion Semiconductor Cooperation Smashing US Sanctions', *YouTube*, 8 August 2023, online.

Narrative 3: China is highly capable and trusted to build massive infrastructure projects



Sources: 'Unbelievable Projects', 'TRUTH REVEALED! Why America can't compete with China's infrastructure!', *YouTube*, 20 April 2023, online; 'Global Visionary', 'Nicaragua's \$260 Million Deal for 500 Chinese Buses: India Watches Closely', *YouTube*, 19 October 2023, online; Asia Hot Topics, 'Japan and India envious! China \$10 billion to build Indonesia's new high-speed rail | length 588 km', *YouTube*, 12 September 2023, online; 'Insider Project', 'China Builds \$4.26 Billion Super Hydropower Project in Laos', *YouTube*, 12 March 2023, online.

Narrative 4: China is winning the rare earths, critical minerals and electric vehicles competition



Sources: 'Asia Hot Topics', 'China Counterattacks! China's New Ban Limits Graphite Ore Exports | What Impact Will This Have?', *YouTube*, 26 October 2023, online; 'VOC - Vision of China', 'US chip company triggers material supply disruption as China imposes graphene export controls!', *YouTube*, 5 November 2023, online; 'Innovation Diary', 'Biden Regretting His Decisions As Chinese Cars Fill Gaps Left By Western Carmakers In Russia!', *YouTube*, 11 November 2023, online; 'Insider Project', 'Reject Germany and France! China \$25 Billion to Build Europe's Largest New Energy Vehicle Base', *YouTube*, 16 September 2023, online.

Narrative 5: The US economy is weak, and the US dollar is no longer the world's strongest currency



Sources: 'Next-Gen Innovations', 'The Gold Rush of the East: China's Impact on World Finance', *YouTube*, 10 November 2023, online; 'Deepin Moments', 'The US financial system collapsed! China dumps the most US debt ever!', *YouTube*, 24 September 2023, online; 'Innovation Diary', 'Shocking! China Just Dumped \$21 Billion In U.S Treasuries, Biggest Drop In 4 Years!', *YouTube*, 7 November 2023, online; 'Asian Quicktake', 'US DEBT EXPLODING! National Debt Surpasses \$32 Trillion, Revenues Suffice for Interest Payments ONLY', 17 June 2023, *YouTube*, 17 June 2023, online.

Narrative 6: The US is headed for collapse and its alliance partnerships are fracturing



Sources: 'Innovative Check', 'U.S. Ready for WAR: Solomon Islands Choose China Over U.S. and NATO!', *YouTube*, 9 August 2023, [online](#); 'Deepin Moments', 'Total Failure! Europe Lifts Huawei 5G Ban, Leaving Biden Stunned | Allies Betraying US | DeepinMoments', *YouTube*, 21 September 2023, [online](#); 'Curious Bay', 'ASEAN rejects US after Biden disrupted summit with silly requests', *YouTube*, 30 September 2023, [online](#); Innovation Diary, 'China rises as American Government officially shuts down!', *YouTube*, 3 October 2023, [online](#); 'Asia Hot Topics', 'THE RIGHT CHOICE! Australia reinstates 99-year port lease from China | US threats are meaningless', *YouTube*, 30 October 2023, [online](#); 'Asian Quicktake', 'NO MORE ALLIES! 4 Nations Sell massive U.S. Debt, Saudi Arabia Dismantles PETRODOLLAR | AsianQuicktake', *YouTube*, 8 March 2023, [online](#).

Appendix 2: Detailed attribution methodology

Likely (60%–79%)

We think it's likely that the operator is a native Mandarin-speaking actor, based on an analysis of English phrases used in video titles and video scripts, as well as English phrases in YouTube keywords. We assess this as less than probable (80%–99%), as we haven't conducted a comprehensive linguistic analysis of all titles, video scripts and video descriptions in the network; this would increase our confidence on this point. For example, many videos use the video keywords 'China Hong Kong' and 'China Taiwan', which is how a Mandarin speaker would refer to 'Hong Kong' and 'Taiwan' if they were translating from Mandarin to English [中国香港·中国台湾].

There's strong evidence to support our confidence in this assertion. For example, we observed a video about US–China competition focused on the international space stations, which notes that non-American countries had 'no right to speak' in the International Space Station.⁷³ This is most likely a direct translation of the Chinese phrase *huayuquan* [话语权] or 'right to speak' and often used in Chinese Government and media publications. Another video made reference to Tsinghua Unigroup, which is a Chinese company that operates several major Chinese chipmakers, as 'Purple Light Company', which is a literal translation into English of Tsinghua Unigroup's name in Chinese (紫光集团)⁷⁴. We note, however, that we didn't conduct a comprehensive evaluation of the language used across YouTube channels in the network. Further research should do that to strengthen the thesis that the operator is a native Mandarin speaker.

We think it's likely that the operator is a native Mandarin speaker who is familiar with Chinese language news stories and other content created in mainland China. We noticed that sources quoted in videos often came from mainland-produced news stories or amateur-produced stories from mainland accounts. For example, on a story about Nicaragua's purchase of Chinese buses that was published across several videos in the network, we observed the inclusion of an English-language news story, the page layout of which matched that of the unique style of articles published through Inf.news, which is a popular online aggregator of tabloid-style news from Chinese-language sources.⁷⁵

We also note that some of the network's choice of topics relied on stories that were primarily published, and most likely first published, in the mainland Chinese media ecosystem, in Chinese. For example, one YouTube channel published a video about the Harbin Institute of Technology's proposed 'Lunar Cave' plan for establishing an underground lunar research station on the Moon, which received media attention only in China.⁷⁶ Another example is two YouTube channels that published videos about how accomplished scientist Zhuang Xiaoying allegedly rejected a high salary in Germany to return to China, which received media attention only in China.⁷⁷ While this gives some credence to a mainland-based operator, Chinese-reading audiences outside of the mainland also read publications from the mainland and are familiar with its media ecosystem, so we don't think this provides concrete evidence to point to a mainland-based actor over an actor from other Chinese-reading communities.

We think it's likely that this is a Chinese state-directed and/or supported campaign that's being delivered by a corporate contractor. Another possibility is that a patriotic Chinese company has been encouraged to undertake the campaign. There are commercial elements of this campaign; for example, one channel has partially monetised their content (see page 21). However, the monetisation is limited, and one would expect a purely commercial actor to more fully monetise its operations. In addition, the narrative focus of the network aligns with the Chinese Government's strategic priorities to establish China as a leader in economics, technology, science and infrastructure. It also aligns with China's state-led propaganda efforts to undermine the US's position in those fields and to present the US as an irresponsible global actor. Similar alignment can be seen in the effort to present China's partners, such as Russia (and to a lesser extent Iran), as responsible and capable geopolitical actors.

We also observed some (albeit limited) efforts by the network's members to earn money through monetising their YouTube videos and including referral links to financial sites on their profiles. Efforts to earn money are unusual for state-backed influence operations conducted by a government operator and may point to the involvement, in some capacity, of a profit-motivated actor. Efforts to earn money can leave digital fingerprints that influence operators are at pains to avoid. It's also notable that the

network chose a social-media site where content can be easily monetised. We (and others) have previously observed commercial actors' desire to be involved in disinformation campaigns for profit, including through influence-for-hire networks in the Asia–Pacific.⁷⁸ However, to our knowledge, those networks have never used English-language content to target English-language speakers.⁷⁹

A number of factors, besides the limited monetisation raised above, have led us to believe that there may be some sort of contractor involvement in this campaign. One is that the broader range of topics on which this network focuses seems to go beyond the Chinese Government's formal positions on some issues. For example, the allegation in some videos that Iran could use the BeiDou satellite system it acquired from China to guide its missiles to hit Israel goes further than China's official propaganda system. We also believe that a campaign involving only a Chinese Government actor would be unlikely to be allowed to use images of General Secretary Xi so freely and widely, especially those images of him made with generative AI. Videos that display those characteristics aren't the majority of the network's videos (and could be mistakes), but we think it unlikely that a Chinese Government actor would repeatedly make such a major political mistake, given the costs of diverging from official state narratives.

Possible (40%–59%)

We think it's possible that the commercial actor could be operating under some degree of state direction.

Commercial actors operating under state direction are known to be involved in information operations attributed to China. Previous ASPI research has shown that one of China's largest cybersecurity companies, Qi An Xin, may play a role in supporting China's influence operations.⁸⁰ Mandiant attributed the 'HaiEnergy' campaign to a Shanghai-based public relations firm, Shanghai Haixun Technology Co. Ltd, which made use of other subcontractors, such as paid influencers and work-for-hire platforms.⁸¹ Meta's *Adversarial threat report* in May 2023 noted that Chinese firm Xi'An Tianwendian Network Technology had built a content dissemination system for an influence operation.⁸² ProPublica identified that OneSight, a Beijing-based internet marketing company, had a contract from the Chinese Government to covertly boost the Twitter following of Chinese state media.⁸³

We also think that, if the network were operated purely for commercial gain, we would expect to see a greater effort to make money from audiences beyond monetised YouTube videos. For example, we would expect referral links to financial websites in channel bios, video descriptions and the videos themselves to be more common and widespread. We also think that a purely profit-motivated actor would make more of an effort to direct viewers to its financial support accounts (such as Patreon) and would provide some unique content on those accounts to justify financial support, rather than reposting free, existing videos on its YouTube channel.

We would also expect the actor to adapt to audience criticism or suggestions by amending their video production style or scripts in an effort to maximise their audience and revenue-earning potential. For example, across the length of the campaign, we saw hundreds of audience comments posted by viewers suggesting that the AI-generated voice being used didn't pronounce certain words correctly, that stock footage used in the videos didn't correctly match what was being said in the script, and that facts in the videos were false. However, most of the YouTube channels displayed marked consistency of

production styles over their history, rather than being adaptive. We assess that the primary goal of the operator seems to be gaining views for its content, rather than profit.

We also note that Google previously removed a coordinated influence campaign on YouTube linked to China in July 2022 that was interested in similar topics to our identified campaign and active at a similar time. Google’s identified campaign was ‘sharing content in English and Chinese that was supportive of the Chinese semiconductor and tech industries and critical of the US semiconductor industry and US sanctions on Chinese tech companies.’⁸⁴ Google didn’t provide detail as to whether that campaign was led by a state or a commercial actor, but further details on that campaign’s operator may strengthen the likelihood that our identified network is run by a commercial actor operating under some degree of state direction.

Unlikely (20%–39%) / Very unlikely (less than 20%)

We think it’s unlikely the network is run by a known CCP-linked influence actor. We didn’t observe common TTPs of previously identified campaigns linked to known CCP-linked threat actors, such as Dragonbridge / Spamouflage. For example, none of the YouTube accounts posted Chinese-language content, posted spam-like videos in between more political content, posted to a pattern that mirrored Beijing work hours and holidays or used cartoon imagery typical of these operations. While one channel in the YouTube network that we identified used AI-generated avatars from British AI company Synthesia, we don’t think that this alone points to China. While Spamouflage has previously used synthetic AI content from Synthesia, so have other campaigns that aren’t linked to China.

We also think it would be out of character for a long-running or traditional CCP-linked influence actor to use General Secretary Xi Jinping’s image in content, or to use generative AI to modify it. While we didn’t observe any negative images of Xi, in comparison to other world leaders who were depicted as frustrated or crying, there are known sensitivities in China about using images of China’s leader. We think it unlikely that even a government department engaged in an influence operation would have permission to use Xi’s likeness.

We note that one video from one channel we identified in our YouTube network was previously posted once as part of a China-linked influence campaign attributed by Meta in August 2023.⁸⁵ This may suggest a link to a known CCP-linked influence actor. However, it remains entirely possible that the actor Meta identified posted the video as the YouTube video’s message about South African resistance to banning Huawei aligned with the aims of its campaign. Without a larger body of evidence, we don’t think this is compelling evidence to point to a known CCP-linked actor at this stage.

We think it’s very unlikely that this campaign could be from a known Mandarin-speaking group with the intent to profit off nationalistic overseas Chinese. This could include known disinformation producers in this space, such as the *Epoch Times* or the Guo Wengui media ecosystem. We think it seems unlikely that this attempt is connected to disinformation campaigns led by the *Epoch Times* and the Miles Kwok media ecosystem primarily because those actors focus almost exclusively on anti-China narratives and have focused their efforts on profiting directly from their supporters and cryptocurrency.⁸⁶ Previously documented video-based *Epoch Times*-linked disinformation campaigns have also used real human beings, rather than text-to-video software or AI-generated voiceovers.⁸⁷ In addition, both networks also usually include content in simplified or traditional Chinese and make reference to Chinese-language

sources within videos, as well as making reference to elements of the US far-right media ecosystem. We saw no evidence of any of that.⁸⁸ While we can't rule out the possibility of another unknown commercial actor from Hong Kong, Taiwan or the diaspora running this campaign to target patriotic overseas Chinese, we think it's unlikely that they would choose to do so in English over Mandarin Chinese. It's clear that the campaign was predominantly targeting English-speaking populations.

If the operator is a commercial actor, we think it's very unlikely that the Chinese Government would outsource production to a company that wasn't linked to the government in some way. For example, we considered whether the network could be run by a commercial operator such as a video production company, operating on contract from the Chinese Government. However, we think that Chinese Government concerns about controlling information dissemination about China, particularly about its foreign and defence policies, make it unlikely that it would give a contractor a large degree of narrative control.

Appendix 3: Topics in the Shadow Play network

Table 7: Top 50 topics in the Shadow Play network, by video title count

Topic	Video title count	Topic	Video title count
1. China	2,854	26. Machine	95
2. United States	1,941	27. TSMC	94
3. Chips	731	28. Ban	94
4. Technology	364	29. Iran	93
5. European Union	302	30. Plan	92
6. Huawei	300	31. ASML	87
7. Sanctions	291	32. Africa	86
8. Russia	265	33. Production	83
9. Dollars	260	34. 5G	77
10. BRICS	221	35. Aptera	75
11. Project	180	36. Orders	74
12. Oil	156	37. Railway	73
13. Saudi Arabia	155	38. Economic	69
14. Economy	145	39. Energy	65
15. Lithography	138	40. Israel	61
16. War	134	41. France	60
17. India	122	42. Power	59
18. Japan	122	43. Game	58
19. Build	122	44. Car	57
20. Biden	110	45. Cooperation	57
21. Apple	104	46. Trade	56
22. Germany	99	47. Bonds	54
23. Debt	99	48. Bridge	52
24. Gold	97	49. Desert	48
25. The West	95	50. Taiwan	45

Notes: This analysis includes only English-language videos in the dataset ($n = 4231$). We define a 'topic' here as an individual lexical feature occurring within a video title, which can be used to infer the focus or topic of a video. To ensure that meaningful items were given precedence, titles were cleaned with a curated list of stopwords (e.g. 'at', 'in'). Topics are inclusive of their different syntactic forms (for example, 'China' and 'China's' or 'EU' and 'European Union' are both counted as single topics). Topics aren't mutually exclusive within a video title, and the same topic may occur more than once in the same title. To account for this, 'Video title count' is the count of video titles in which the topic occurred at least once, rather than the *total frequency* of the topic in the dataset.

Table 8: Top 10 most common collocated topics in the YouTube network

Collocated topic	Frequency
1. United States Oil Sanctions	35
2. Sanctions Collapsing United States	30
3. Collapsing United States Economy	29
4. Ftx hinkley-point c	27
5. Oil Sanctions Collapsing	21
6. China Cancels Chips	15
= 7. China Technology China	14
= 7. Sanctions United States Technology	14
= 7. Lithography Machine China	14
= 7. Belt Road Initiative	14
= 8. United States Economy Dollars	13
= 8. Cancels Chip Orders	13
= 8. United States Sanctions China	13
9. United States China Chips	12
= 10. China Chips China	11
= 10. China China Chips	11
= 10. Domestic Lithography Machine	11

Notes: Length of phrase = 3 words only. We count 'United States' as one word. Absolute frequency. Note that all mentions of 'Ftx hinkley-point c' came from one channel, Innovation Diary.

Appendix 4: Examples of Ni Mingda tweet across internet

Figure 18: Examples of Ni Mingda's Tweet across various platforms



 **Experto en geopolítica china en Twitter escribió lo siguiente:**
"Por lo que sé, Irán ya ha activado oficialmente Beidou pese a la advertencia de EE.UU."

 **倪明达 (Ni Mingda)**
 @NiMingda_GG **19/10/23**

From what I know, Iran has now officially activated Beidou despite warning from the U.S..

 Beidou is China's own (and superior) GPS & therefore not under U.S. control.

That means Iranian missiles can be guided by a positioning system that cannot be switched off by the USA.

Beidou es el GPS propio (y superior) de China y, por tanto, no está bajo control estadounidense. Eso significa que los misiles iraníes pueden ser guiados por un sistema de posicionamiento que no puede ser desactivado por EE.UU."



Instagram

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 **倪明达 (Ni Mingda)**
 @NiMingda_GG

From what I know, Iran has now officially activated Beidou despite warning from the U.S..

Beidou is China's own (and superior) GPS & therefore not under U.S. control.

That means Iranian missiles can be guided by a positioning system that cannot be switched off by the USA.

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 ایران تستعد ..
 📺 كتب الخبير الجيوسياسي الصيني على تويتر: "ما أعرفه هو أن إيران قامت الآن بتفعيل بيدو رسميًا على الرغم من التحذير الأمريكي.
 نظام Beidou GPS مملوك للصين وبالتالي لا تسيطر عليه الولايات المتحدة. وهذا يعني أن الصواريخ الإيرانية يمكن توجيهها بواسطة نظام تحديد المواقع الذي لا تستطيع الولايات المتحدة إيقافه أو

259 likes
 OCTOBER 20

[Log in to like or comment.](#)

BREAKING 🚨 ඉරානය දිගු දුර මිසයිල සුදානම් කෙරේ! ඒන Beidou පද්ධතිය ක්‍රියාත්මක කර සටනට සුදානම් වෙයි!

pramodh87 · Oct 20, 2023
Forums > General > News

1 2 3 4 5 Next »

Oct 20, 2023 #1

pramodh87
Well-known member

倪明达 (Ni Mingda)
@NiMingda_GG

From what I know, Iran has now officially activated Beidou despite warning from the U.S..

Beidou is China's own (and superior) GPS & therefore not under U.S. control.

That means Iranian missiles can be guided by a positioning system that cannot be switched off by the USA.

[url=https://ibb.co/f4pKW8p] [URL]

SW News - SOFT WAR NEWS
@SoftWarNews

Pakar geopolitik Tiongkok: Iran kini secara resmi mengaktifkan Beidou GPS meskipun ada peringatan dari AS.

Sistem GPS Beidou dimiliki oleh Tiongkok dan tak dikendalikan oleh Amerika.

Artinya, rudal Iran dpt dipandu oleh sistem penentuan posisi yang tidak dpt dimatikan oleh AS.

[Translate with DeepL](#)
[Translate post](#)

倪明达 (Ni Mingda)
@NiMingda_GG

From what I know, Iran has now officially activated Beidou despite warning from the U.S..

Beidou is China's own (and superior) GPS & therefore not under U.S. control.

That means Iranian missiles can be guided by a positioning system that cannot be switched off by the USA.

11:54 AM · Oct 20, 2023 · 6,948 Views



MUNDO 19.10.2023, 21:55

Experto en geopolítica china en Twitter escribió lo siguiente:



倪明达 (Ni Mingda)
@NiMingda_GG

From what I know, Iran has now officially activated Beidou despite warning from the U.S..

Beidou is China's own (and superior) GPS & therefore not under U.S. control.

That means Iranian missiles can be guided by a positioning system that cannot be switched off by the USA.

Chat Debate: [@GuerrasyGeo](#)

Fuente: [Telegram-canal "guerrasygeo"](#)

Experto en geopolítica china en Twitter escribió lo siguiente:

"Por lo que sé, Irán ya ha activado oficialmente Beidou pese a la advertencia de EE.UU.

Beidou es el GPS propio (y superior) de China y, por tanto, no está bajo control estadounidense.

Eso significa que los misiles iraníes pueden ser guiados por un sistema de posicionamiento que no puede ser desactivado por EEUU."

| Telegram |
Suscríbete: [@guerrasygeo](#)






Sources: 'brics_2022', *TikTok*, 20 October 2023, online; 'shia.story', *Instagram*, 20 October 2023, online; 'Elakiri Forum Post', *Elakiri Forum*, 20 October 2023, online; 'Soft War News', *X*, 20 October 2023, online; 'Middle East Spectator', *Telegram*, October 20 2023, online; 'Chinese geopolitics expert on Twitter wrote the following:' [Experto en geopolítica china en Twitter escribió lo siguiente:], *Pravda* (Spanish Edition), 19 October 2023, online; 'Facebook post', 'Facebook', online, We have blacked out identifying account information for individuals (although they operated public pages).







Appendix 5: List of YouTube channels in the Shadow Play network

Table 9: Key statistics for YouTube channels

Account name and thumbnail	Subscribers	No. of videos	Average views per video	Highest view count video and video title	Total channel views ^a
Asia Hot Topics @AsiaHotTopics 	69,200	131	50,991	Amazing Project! Thailand's \$30 billion canal plan totally shocks China #thailand #canal #project 382,000	6,756,348
Asian Quicktake @AsianQuicktake 	45,200	337	31,900	Yellen stunned! China dumps \$481.3b in US bonds, invests in 6,927 tons of gold 263,000	10,433,217
China Charged @ChinaCharged 	3,940	114	6,714	China & Iran just shutdown all US oil sanctions collapsing the US economy! 59,000	755,972
China Focus @chinafocus 	46,600	458	38,056	\$31.1 billion chip orders canceled, Chinese enterprise installs first domestic lithography machine! 434,000	17,387,820
China Hub @CHINAHUB6735 	3,460	261	1,632	Saudi Arabia rejects APPLE, gives \$29 billion order with Huawei! China News 32,000	459,972
China Secrets @ChinaSecrets 	441	15	6,618	China WAITED for 163 Years! Russian President DECIDES to open a super port to China 256	97,524

<p>Cross-Pacific Confrontation @Cross-Pacific Confrontation</p> 	520	27	2,668	China has invested \$25 billion in the construction of the largest production of electric cars in EU 54,000	72,066
<p>Curious Bay @CuriousBayChannel</p> 	19,500	156	15,382	BRICS+ new currency begins circulating? Here's ALL we know so far about it 356,000	2,262,142
<p>Current Insight @Current.Insight</p> 	815	22	4,613	Boeing's challenge: Brunei and China order 30 aircraft, reshaping market dynamics 52,000	101,822
<p>Découverte de la Chine @user-lt8ze9iu2t</p> 	5,860	46	17,675	L'Iran ignore les avertissements Américains et lance officiellement les satellites Beidou Chinois 84,000	687,678
<p>Descubriendo China @Descubriendo-China</p> 	8,560	37	43,210	China cancela pedido de chips de 321 mil millones de dólares tras desarrollo de su propia litografía [China cancels \$321 billion chip order following development of own lithography] 244,000	984,128
<p>Deepin Moments @deepinmoments1397</p> 	53,100	181	48,806	De-dollarization explodes globally! 40 countries refuse to use the dollar! Reject US Dollar 409,000	8,836,017
<p>East to West @east_towest</p> 	549	25	1,860	From Sanctions to Self-Sufficiency: Huawei's Journey After Sony's Move #huawei #china #sony 5,500	43,060

<p>Exploratics @exploratics</p> 	30,000	386	12,772	US forced to beg China to buy chip? 129,000	4,967,559
<p>Gems @GemsLol</p> 	102,000	9	1,399	China cancels \$60 billion in chip order in favour of its own 3nm chips 2,300	13,177
<p>Global Visionary @Globalvisionary</p> 	1,700	56	1,577	India lost 160 Billion! China refuses to buy 20 million tons of iron ore, Why #china #india 10,000	77,614
<p>Innovation Diary @innovationdiary</p> 	130,000	557	50,272	China has the longest bridge in the world China Technology 806,000	27,888,307
<p>Innovative Check @innovativecheck</p> 	11,600	222	8,014	China END Iran sanction: US oil sanctions on Iran collapse! 262,000	1,925,573
<p>InoTech ConFi @inotechconfi</p> 	2,070	196	664	China reveals MORE HUGE sanctions on US tech giants due to unpaid \$47 billion! 4,600	193,009
<p>Insider Project @Insider-Project</p> 	65,500	188	47,109	CHINA IS WORRIED Japan \$25 billion sea airport could be sunk by 2050 Warning to Chinese engineers 718,000	8,824,699

<p>Lets Talk @LetTalks-trends</p> 	1,040	271	617	<p>Will China accept ASML's offer to purchase 14 nanometre lithography machines? #asml #chinatechnology</p> <p>12,000</p>	172,865
<p>Ms Truth @mstruth3150</p> 	8,120	9	20,997	<p>END of US DOLLAR SIGNAL APPEARS! Saudi Arabia sells 35% of US debt as petrodollar collapses.</p> <p>50,000</p>	188,984
<p>Next Gen Innovations @Next-GenInnovations</p> 	86	12	340	<p>US fails! China's quantum chip production line goes live, chip equipment imports surge by 90%!</p> <p>2,700</p>	6,396
<p>Relaxian @RelaxianHub</p> 	7,650	79	13,400	<p>China, Iran, Russia, Saudi Arabia send new sanctions to the US and Israel</p> <p>233,000</p>	1,315,080
<p>Sino Sphere @sinosphere101</p> 	6,440	183	4,683	<p>US-France accept defeat, China scores huge win & brings peace to Niger!</p> <p>37,000</p>	815,444
<p>Tech Info @technical information2638</p> 	5,540	121	10,373	<p>Chinese technology is globally recognized! Saudi Arabia buys the production line for \$200 million!</p> <p>60,000</p>	1,161,461

Unbelievable Projects @UnbelievableProjects 	2,220	82	4,221	UNBELIEVABLE! New \$7.2 billion China's & Malaysia largest port! 60,000	355,590
VOC—Vision of China @voc-visionofchina287 	22,500	229	23,460	China's cancelation of Germany's \$100 billion car order sends Europe into a panic! 203,000	5,371,070
WORLD LENS @worldlens8830 	3,710	43	1,955	2,000 companies leave! India's world factory dream is fading Why? 29,000	81,432
World Project @world-project 	73,700	69	257,753	China spend 10 years to build a new city in the desert, shocked American scientists World Projects 1.8 million	17,468,481

a Total channel views on YouTube indicate views on videos that are public. Total channel views don't account for videos that have been taken down (by either YouTube or the account owner) or videos that have had their view rights changed from public to private. We observed several accounts that had videos taken down or changed their view rights. Therefore, we believe that total channel views is likely to be an underestimation of the number of total channel views.

Notes: Data taken on 3 December 2023, AEDT. Data from what was reported on channel's 'About column' and by sorting 'most viewed' on channel's page. Average views numbers are based on a calculation of channel views as at 14 November 2023 and rounded to the nearest whole number.

Notes

Please note that some hyperlinks to YouTube videos cited in this report may be broken. After ASPI reported our findings to YouTube on 7 December 2023, YouTube took down a number of YouTube channels. Still images of these YouTube pages may be accessible through an archival service like Wayback Machine. ASPI retains archived copies of most videos mentioned in this report.

- 1 Shadow play (or shadow puppetry) is a storytelling technique in which flat articulated cut-out figures are placed between a light source and a translucent screen. It's practised across Southeast Asia, China, the Middle East, Europe and the US. See, for example, Inge C Orr, 'Puppet theatre in Asia', *Asian Folklore Studies*, 1974, 33(1):69–84, [online](#).
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- 4 Reports on China-linked information operations that have targeted semiconductors and rare earths include Albert Zhang, 'The CCP's information campaign targeting rare earths and Australian company Lynas', *The Strategist*, 29 June 2022, [online](#); 'Pro-PRC DRAGONBRIDGE influence campaign targets rare earths mining companies in attempt to thwart rivalry to PRC market dominance', *Mandiant*, 28 June 2022, [online](#); Shane Huntley, 'TAG Bulletin: Q3 2022', *Google Threat Analysis Group*, October 26 2022, [online](#).
- 5 Ben Nimmo, Ira Hubert, Yang Cheng, 'Spamouflage breakout', *Graphika*, 4 February 2021, [online](#).
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- 9 'Mandarin', or 'Mandarin Chinese', refers specifically to the spoken language. 'Chinese', on the other hand, encompasses both the spoken and written language, which can be understood by speakers of different Chinese languages or dialects.
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- 11 Toni Friedman, 'Lexicon: "Discourse power" or the "right to Speak" (话语权, Huàyǔ Quán)', *DigiChina at Stanford University*, 17 March 2022, [online](#).
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- 17 'YouTube community guidelines', *YouTube*, 2023, [online](#).
- 18 'Upload YouTube videos', *YouTube*, 2023, [online](#).
- 19 Similarity was calculated using the Sørensen–Dice coefficient. Keyword ordering and character case were standardised to reduce non-significant differences (for example, 'word one, WORD TWO' and 'word TWO, word one' were considered exact matches). For each video, duplicated keyword phrases were also removed.
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- 21 'Asian Quicktake', 'Escape from US! \$35 trillion hot money exodus, Americans sell real estate for gold swaps US Asset', *YouTube*, 4 June 2023, [online](#).
- 22 Albert Zhang, 'CCP using information operations to harass Canadian politicians', *The Strategist*, 24 October 2023, [online](#).
- 23 See, for example, 'Getty Images & GPT-4 powered video summaries', *Pictory.ai*, 25 September 2023, [online](#); 'Where do we source our media files from?', *Invideo.io*, no date, [online](#).
- 24 A non-exhaustive list of businesses offering this service includes Pictory.ai, InVideoAI, Fliki, and Synthesia.
- 25 For example, 'Asian Quicktake', 'Yellen's turnaround & China's Gold Gambit! Could US Debt Get Reset & Gold Head Home? AsianQuickTake', *YouTube*, 9 November 2023, [online](#).
- 26 'Innovation Diary', 'China has the longest bridge in the world | China Technology', *YouTube*, 13 November 2022, [online](#).
- 27 'Innovative Check', 'Australia playing double game: plan to visit China and US!', *YouTube*, 22 October 2023, [online](#).
- 28 'Innovation Diary', 'Demn! Best Chinese scientists are leaving the United States for China #usa #chinatechnology #china', *YouTube*, 24 November 2022, [online](#).
- 29 'YouTube advertising formats', *YouTube*, 2023, [online](#).
- 30 Adam Segal, Samantha Hoffman, Fergus Hanson, Tom Uren, 'Hacking for cash', *ASPI*, Canberra, 25 September 2018, [online](#); Gatra Priyandita, Bart Hogeveen, Ben Stevens, 'State-sponsored economic cyber-espionage for commercial purposes: tackling an invisible but persistent risk to prosperity', *ASPI*, Canberra, 16 December 2022, [online](#).
- 31 'Innovation Diary', 'China has the longest bridge in the world | China Technology'.
- 32 'Sino Sphere', 'US isolated as China & allies veto its pro Israel UN resolution!', *YouTube*, 8 November 2023, [online](#).
- 33 Innovation Diary received sponsorship for its videos, brokered by Gold Standard Media from US Gold Mining Inc (NASDAQ:USGO), GoldMining Inc (TSX:GOLD, NYSE AMERICAN:GLDG), Traction Uranium (CSE:TRAC, OTC:TRCTF), FE Battery Metals Corp (CSE:FE, OTCQB:FEMF), Callinex Mines (TSX-V:CNX, OTC:CLLXF), West Red Lake Gold Mines (TSX-V:WRLG, OTCQB:WRLGF) and Cybeats (CSE:CYBT, OTCQB:CYBCF)
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- 35 'Traction Uranium: company profile', *GSM Project Portal*, no date, [online](#). The source doesn't specify whether this is American or Canadian dollars; we're assuming American dollars, as Gold Standard Media is domiciled in the US.
- 36 'Innovation Diary', 'China dominance in rare earth metals and risks to the supply chain of the US And Europe', *YouTube*, [online](#).
- 37 'Innovation Diary', 'China exposes US cyber weapon threats to every person, rejecting accusations of cyber espionage', *YouTube*, [online](#).
- 38 Specifically, Cybeats engaged them for their digital marketing services for US\$400,000. See: 'Cybeats Announces License Agreement with Starfish Medical, Canada's Largest Contract Medical Device Design, Development and Contract Manufacturer', *Newswire Canada*, 22 May 2023, [online](#). Traction Uranium engaged them for advertising for US\$400k, see: 'Traction Uranium Announces Advertising Campaign and Restricted Share Unit Awards', *Traction Uranium*, 13 January 2023, Sedar+ Filing System.
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- 50 Candaso.com, 'Today's hot search: CPP contributions increased! Canada increases pension benefits by 50% #CPP #CanadaBenefits #Today'sHotSearch #CanadianPension' [今日热搜：CPP供款提高！加拿大增加退休金福利50% #CPP #加拿大福利 #今日热搜 #加拿大退休金], *TikTok*, [online](#).

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Acronyms and abbreviations

AI	artificial intelligence
ASEAN	Association of Southeast Asian Nations
CCP	Chinese Communist Party
NGO	non-government organisation
TTP	tactics, techniques and procedures

Some previous CTS publications

