ACICE
ADMM Cybersecurity and
Information Centre of Excellence

Monthly Digest

Issue 07/24 (Jul)

A monthly round-up of significant news around the world

Hybrid Threats

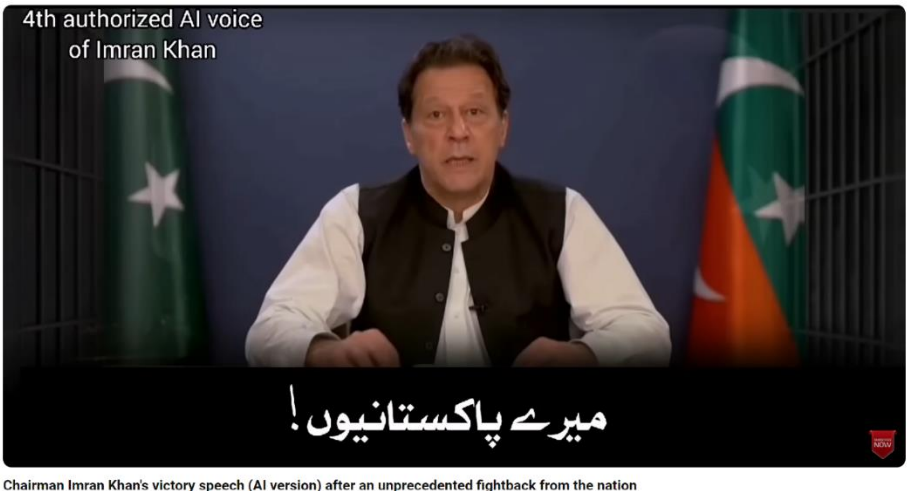
Detecting and Countering Information Manipulation

1. The US' Cybersecurity and Infrastructure Security Agency (CISA) defines "information manipulation" as shaping public opinion or undermining trust in the authenticity of information. Information manipulation activities include the use of new media and traditional media, sometimes coordinated with illicit cyber activities through hacking or hijacking accounts to steal data or to deface public-facing sites.

2. *Combating Information Manipulation*, co-authored by the National Republican Institute, the National Democratic Institute, and the Stanford Internet Observatory outlined the range of information manipulation cases. From foreign interference by spreading fake news about political candidates, to anti-vaccine campaigns during the height of the COVID-19 outbreak, information manipulation activities tended to surge during key national or global events. They spread through popular social media platforms such as Facebook, Pinterest, Instagram, TikTok, Tumblr and WeChat. They also occurred across encrypted and non-encrypted messaging platforms like Telegram and WhatsApp.

3. During such high key events, different state and non-state actors might emerge to manipulate information towards their agenda. These actors include political parties, extremist groups, foreign governments, local governments, and commercial actors, who might leverage the complex digital environments to influence online discourses to their advantage.

4. For example, former prime minister Imran Khan, Pakistan Tehreek-e-Insaf (PTI), whose party had been barred from contesting in parliamentary elections, employed generative AI to create a “deepfake” video of himself giving a speech and rallying his supporters from his prison cell, resulting in majority support garnered for his party in the following elections.



Chairman Imran Khan's victory speech (AI version) after an unprecedented fightback from the nation

Chairman Imran Khan’s victory speech (AI version) after an unprecedented fightback from the nation
(Source: National Endowment for Democracy)

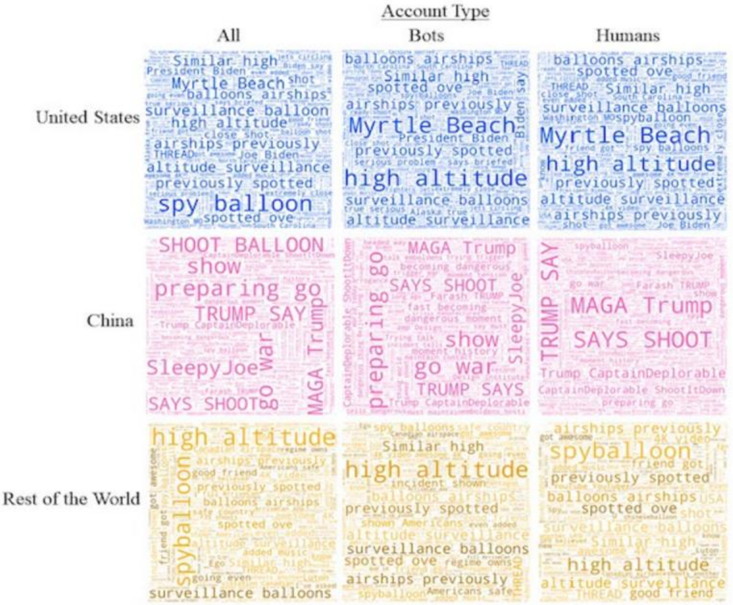
5. In another example, the Security Service of Ukraine discovered and disrupted the activities of a network of “bot farms”, which was a large-scale online campaign by more than 8,000 active fake accounts across multiple popular social media platforms. The extensive botnet was found to be administered from Russia, and had attempted to spread fake news to invoke ground protests and thwart public opinion against the Ukraine government amid the long-drawn Russia-Ukraine conflict. The information manipulation included sending fake bomb threats to crucial infrastructure and installations in Ukraine, as well as targeting the online accounts of prominent Ukrainian politicians.

Detecting Information Manipulation

6. Common tactics in information manipulation include the use of (a) bots, which are automated social algorithms created to amplify social media posts through likes or shares; (b) sock puppets, which are run by real people generating fake responses to posts; (c) trolls, which are people using bullying or harassing behaviour to invoke emotional responses from their target audiences; (d) hacking, which involves breaking access into sensitive information and purposefully leaking them to undermine trust in an individual or organisation; and (e) account take-overs, which involve hacking into real people’s accounts and impersonating them to spread disinformation. For example, during elections, narratives could be

timed and released strategically to influence public opinion and election outcomes.

7. Research from Carnegie Mellon University (CMU) found that while humans create and spread narratives over social media, social bots kept the conversation alive through active replies on such posts. For instance, when the US military shot down a Chinese balloon in 2023, the initial phrase “shoot balloon” culminated into the phrase “go war”, inciting further violence and aggression from the original event.



Narrative themes in US-China balloon incident
(Source: Carnegie Mellon University)

Countering Information Manipulation

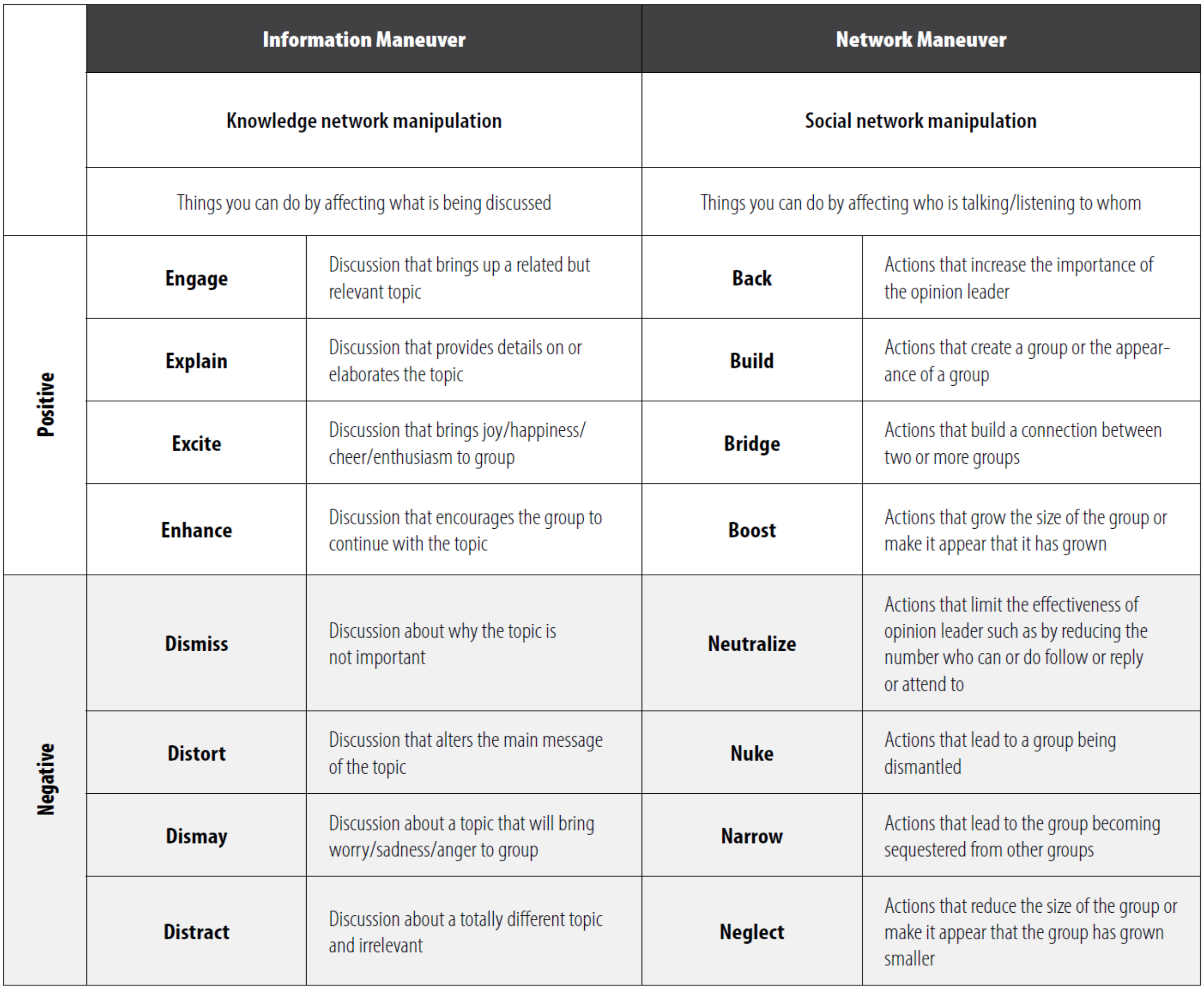
8. The scientific paper *Social cybersecurity*[1] *: an emerging science*, published by CMU, featured the BEND manoeuvres framework. The BEND manoeuvres framework leverages linguistic tools and network cues to detect narrative and structural manoeuvres in the information environment. The framework is a set of 16 social-cyber manoeuvres, classified into *Information Manoeuver* and *Network Manoeuver*, in which online actors can influence ideas, beliefs, and behaviour on social media platforms.

a. Information Manoeuvre involves the manipulation of content within the information network. Some examples include the use of memes to

[1] According to Centre for Computational Analysis of Social and Organisational Systems (CASOS) at CMU, Social Cybersecurity is an emerging science to characterise and predict changes in human behaviour, social, cultural and political outcomes, and to build cyber infrastructures to enhance social resilience in the digital world.

excite or *explain*, and misdirection or hashtag hijacking to *distract* and *distort*.

b. Network Manoeuvre involves the manipulation of the actual network, by encouraging connections or disconnections between users. Some examples include methods to *build* or *boost* communities, or to marginalise users with opposing views by *narrowing* their reach.



	Information Maneuver		Network Maneuver	
	Knowledge network manipulation		Social network manipulation	
	Things you can do by affecting what is being discussed		Things you can do by affecting who is talking/listening to whom	
Positive	Engage	Discussion that brings up a related but relevant topic	Back	Actions that increase the importance of the opinion leader
	Explain	Discussion that provides details on or elaborates the topic	Build	Actions that create a group or the appearance of a group
	Excite	Discussion that brings joy/happiness/cheer/enthusiasm to group	Bridge	Actions that build a connection between two or more groups
	Enhance	Discussion that encourages the group to continue with the topic	Boost	Actions that grow the size of the group or make it appear that it has grown
Negative	Dismiss	Discussion about why the topic is not important	Neutralize	Actions that limit the effectiveness of opinion leader such as by reducing the number who can or do follow or reply or attend to
	Distort	Discussion that alters the main message of the topic	Nuke	Actions that lead to a group being dismantled
	Dismay	Discussion about a topic that will bring worry/sadness/anger to group	Narrow	Actions that lead to the group becoming sequestered from other groups
	Distract	Discussion about a totally different topic and irrelevant	Neglect	Actions that reduce the size of the group or make it appear that the group has grown smaller

The BEND Maneuvers
(Source: Carnegie Mellon University)

9. By recognising the typical characteristics of information manipulation, authorities can better detect and devise counter-responses in a timely and effective manner. While malicious actors use technologies to facilitate the spread of disinformation or to wreak havoc with cyber attacks, authorities can likewise leverage technologies to automate the detection of threats. For example, CMU had created software tools to pick up online behaviour that match the traits within the BEND manoeuvres framework, which users can subscribe to. Their

techniques include analysing social networks to track the relationships between people and organisations over time so as to identify any anomalies.

10. To facilitate counter-responses, what lies ahead for deeper research includes the ability to assess the impacts of these information manipulation activities on the populace, including cognitive effects, over the short and long terms. This will allow governments and authorities to better strategise when and how to respond to these threats, so as to enhance efficiency in the use of resources for countermeasures while striving for optimal ways to build social resilience against these hybrid threats.

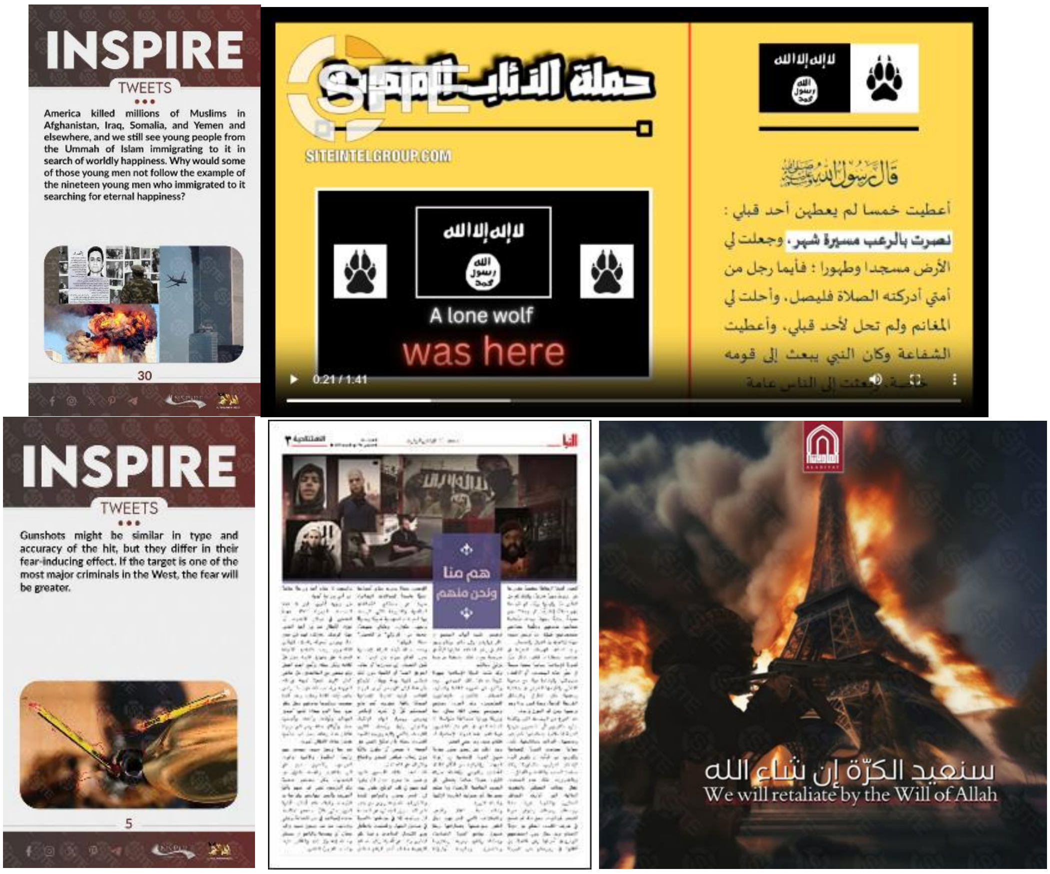
Terrorism

Promotion of Lone-Wolf Attacks by ISIS and al-Qaeda

1. Between 9 Jun and 4 Jul 2024, ISIS and al-Qaeda (AQ)-aligned media groups encouraged lone-wolf attacks on sporting events as well as Jewish and Western targets.

2. Notably, AQ in the Arabian Peninsula (AQAP) published at least 34 “Inspire Tweets”. This poster-style series featured bite-sized incitements for lone-wolf attacks in the West, using Tactics, Techniques and Procedures (TTPs) from AQAP’s *Inspire* magazine series.

3. In addition, ISIS focused its flagship weekly newsletter *Al-Naba* 450 editorial on lone-wolf attacks. ISIS established that lone-wolf attackers inspired by ISIS ideology were considered ISIS members, by virtue of their pledge of alliance to the “Caliph” and their faith in Allah. Notably, the editorial featured pictures of lone-wolf perpetrators who had carried out attacks between Oct 2023 to Jun 2024.


INSPIRE
TWEETS
America killed millions of Muslims in Afghanistan, Iraq, Somalia, and Yemen and elsewhere, and we still see young people from the Ummah of Islam immigrating to it in search of worldly happiness. Why would some of those young men not follow the example of the nineteen young men who immigrated to it searching for eternal happiness?
30
حملة الذئاب
SITEINTELGROUP.COM
A lone wolf
was here
0:21 / 1:41
قال رسول الله ﷺ
أعطيت خمسا لم يعطهن أحد قبلي : نصرت بالرعب مسيرة شهر، وجعلت لي الأرض مسجدا وطهورا : فأيما رجل من أمتي أدركته الصلاة فليصل، وأحلت لي المغانم ولم تحل لأحد قبلي، وأعطيت الشفاعة وكان النبي يبعث إلى قومه خاصة، وبعثت إلى الناس عامة
INSPIRE
TWEETS
Gunshots might be similar in type and accuracy of the hit, but they differ in their fear-inducing effect. If the target is one of the most major criminals in the West, the fear will be greater.
5
هم منا ونحن منهم
سنعيد الكرّة إن شاء الله
We will retaliate by the Will of Allah

Instances of Extremist Content calling for Lone-Wolf Attacks

AQ Emir Releases Article on Hamas-Israel Conflict

4. On 1 and 5 Jun 2024, AQ Central published the second and third part of an ongoing article by AQ emir Saif al-Adl[2], titled “This is Gaza – A War of Existence, Not a War of Borders”. The first part of the article was published in early May 2024.

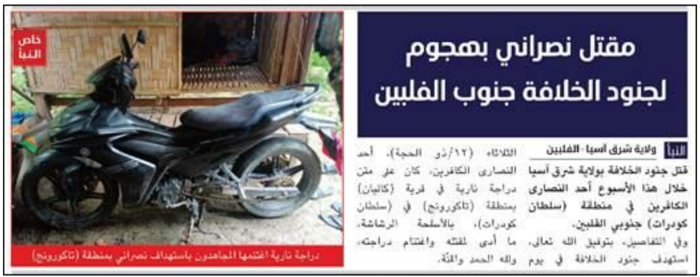
5. These releases largely discussed the Red Sea situation, which Saif al-Adl opined should only allow “Islamic ships” to sail in, with Yemen and Egypt to be entrusted with protecting access to the sea, and explicitly called on Muslims to strike all “Zionist” interests (Western and Jewish) present on Islamic lands. “This is Gaza” was a long-running series written by Saif al-Adl since Oct 2023, in response to the Hamas-Israel conflict. The series had released five articles thus far.

“This is Gaza – A War of Existence, not a War of Borders” parts II and III

ISIS-EA Attack Claims

6. ISIS -East Asia (ISIS-EA) claimed two attacks on 20 Jun 2024 and 6 Jul 2024 in quick succession. Prior to these incidents, ISIS-EA last claimed an attack in Apr 2024. These were the 9th and 10th claims for 2024, both of which remain unverified by mainstream media. The 20 Jun attack was significant as it was the first time that civilians had been targeted this year.

[2] Saif al-Adl is widely known to be the de facto leader of AQ.



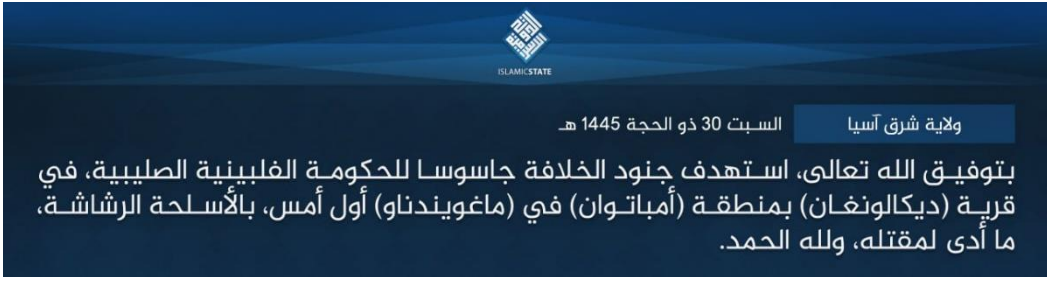
دراجة نارية اغتنمها المجاهدون باستهداف نصراني بمنطقة (تاكورونج)

مقتل نصراني بهجوم
لجنود الخلافة جنوب الفلبين

النبأ ولاية شرق آسيا - الفلبين

قتل جنود الخلافة بولاية شرق آسيا خلال هذا الأسبوع أحد النصارى الكافرين في منطقة (سلطان كودرات) جنوبي الفلبين.

وفي التفاصيل، بتوفيق الله تعالى، استهدف جنود الخلافة في يوم الثلاثاء (١٢/ذو الحجة)، أحد النصارى الكافرين، كان على متن دراجة نارية في قرية (كاليان) بمنطقة (تاكورونج) في (سلطان كودرات)، بالأسلحة الرشاشة، ما أدى لمقتله واغتنام دراجته، ولله الحمد والمنّة.



ISLAMICSTATE

ولاية شرق آسيا السبت 30 ذو الحجة 1445 هـ

بتوفيق الله تعالى، استهدف جنود الخلافة جاسوسا للحكومة الفلبينية الصليبية، في قرية (ديكالونغان) بمنطقة (أمباتوان) في (ماغويندناو) أول أمس، بالأسلحة الرشاشة، ما أدى لمقتله، ولله الحمد.

ISIS-EA attack claims for 20 Jun 2024 & 6 Jul 2024

CONTACT DETAILS

All reports can be retrieved from our website at www.acice-asean.org/resource/.

For any queries and/or clarifications, please contact ACICE at ACICE@defence.gov.sg.

Prepared by:
ADMM Cybersecurity and Information Centre of Excellence

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Terrorism

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