Graphika

Myanmar Military Network

Coordinated Inauthentic Behavior
Traced to Members of Myanmar Military
Before Elections

Ben Nimmo, Léa Ronzaud, C. Shawn Eib, Rodrigo Ferreira

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Takedowns

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Introduction

On October 8, 2020, Facebook <u>announced</u> the takedown of an inauthentic network of just over 70 assets in Myanmar that it attributed to members of the country's military. The network primarily posted about the positive role the military plays in Myanmar, but its fake accounts also posed as supporters of the <u>military-backed</u> opposition party the Union Solidarity and Development Party (USDP), and network assets criticized the country's prime minister, State Counsellor Aung San Suu Kyi, and her ruling National League for Democracy (NLD). A small number of posts included hostile commentary about Muslims and the Rohingya minority.

Myanmar is scheduled to hold a general election on November 8, <u>only the second</u> democratic election that is expected to be completed since a military coup in 1962. Ahead of the elections, <u>repeated warnings</u> have circulated that Facebook could be used to spread disinformation and hate speech, as it <u>was</u> in the <u>buildup</u> to the army-backed Rohingya genocide of 2016-2018.¹

As it announced the takedown, Facebook said, "We identified clusters of connected activity that relied on a combination of fake, duplicate and authentic accounts to post content, evade enforcement and removal, manage Pages and drive people to off-platform websites including military-controlled media domains. These accounts often used stock female profile photos and photos of celebrities and social-media influencers. ... We began our investigation after reviewing local public reporting about some elements of this activity. Although the people behind this activity attempted to conceal their identities and coordination, our investigation found links to members of the Myanmar military."

The network was relatively small: it consisted of 50 accounts, 17 pages, and 6 Instagram accounts and was also connected to a newly created website devoted to the Myanmar military.

¹ Hate speech and disinformation are a challenge to content moderation: posts are taken down because of what they contain. On <u>August 31</u> and <u>September 23</u>, Facebook announced measures to boost its ability to tackle hate speech and voter suppression in Myanmar. This issue should not be confused with the concept of coordinated inauthentic behavior (CIB), in which assets are taken down because they are fake and coordinated and primarily use fake accounts to deceive their audiences. The October 8 takedown was based on CIB.



1

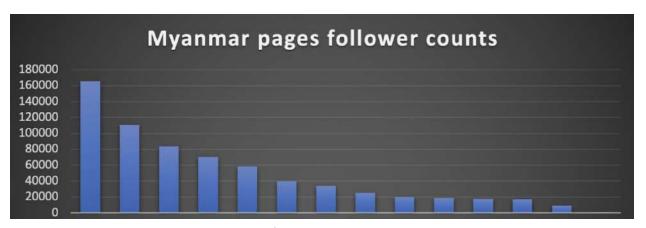
They focused almost entirely on party politics and targeted the ruling party, weeks before the election. The assets operated as a self-reinforcing cluster, with multiple pages and accounts posting the same content at almost the same time. The most popular page in the set had over 165,000 followers, and some of the accounts had thousands of friends; overall, Facebook reported that about 538,000 accounts followed one or more of the pages. Beyond Facebook, Instagram, and the website, the operation does not appear to have run related accounts on other social platforms; this may be because, according to online service statcounter.com, Facebook accounts for around 99% of social media usage in Myanmar.

The network was also relatively new. Most of the accounts and pages were created in 2020, especially March and April. The associated website was only registered on October 2. The chief exception to this pattern was the page named and occupant ("Our Army"), which was created in May 2015. This was the operation's most popular asset: by the time of the takedown, it had over 165,000 followers.

The Takedown Set

The network consisted of 50 Facebook accounts, 17 pages, and 6 Instagram accounts.²

As noted above, the oldest page was created in 2015, and one account was created in late 2013; it stopped posting in April 2020. The great majority of the other assets were created in 2020, especially in March and April. Their followings varied. One page that posed as a media group had 110,000 followers. Three others had between 50,000 and 100,000, and seven had between 15,000 and 50,000 followers. Not all the accounts listed their number of friends and followers; of the 26 that did, half had between 1,000 and 5,000 friends, and the other half had under 1,000.



Follower counts for the pages in the Myanmar set.

2

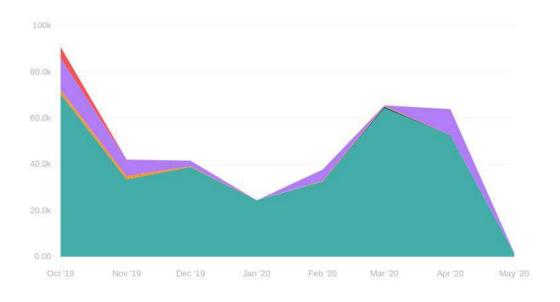
² Some of the Instagram accounts had no posting history at all; none of them posted content that featured on the operation's pages or fake accounts.

Audience engagement with individual assets reflected the difference in their followings. The oldest page, a now (Our Army), regularly attracted thousands of reactions and hundreds of shares and comments. The newer pages typically performed far less well, even when they posted the identical content. The accounts often only managed single-digit engagement.



The same photo montage posted by three assets in the set. On the left, the oldest page, with over 3,000 reactions, 140 comments, and 398 shares. Center, one of the newer pages (created on March 29), with 126 reactions, 6 comments, and 5 shares. Right, one of the network's fake accounts, with 19 reactions and 1 comment.

The pages saw their interactions increase dramatically around July 2020. Before that, the pages were receiving between 50,000 and 100,000 interactions a month, primarily from photo posts.

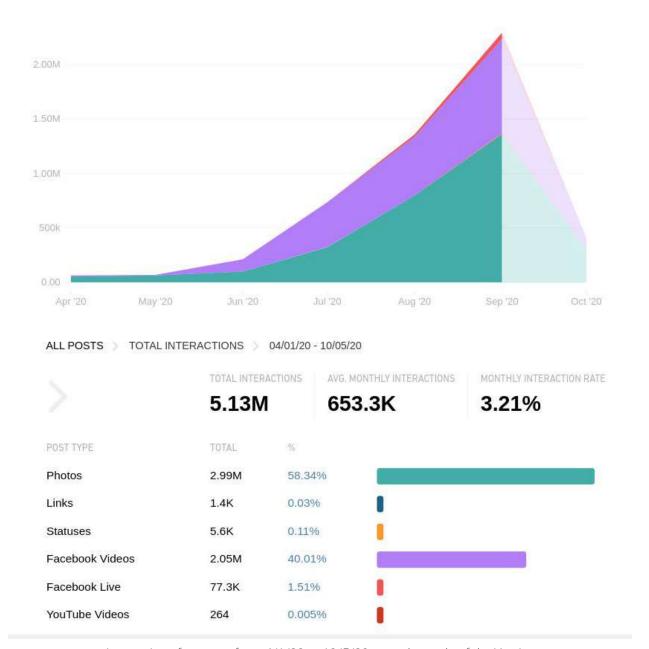


ALL POSTS > TOTAL INTERACTIONS > 10/01/19 - 05/01/20

Total interactions for pages from 10/19 to 5/20; green represents photo posts. Note the order of magnitude

of the scale on the Y axis.

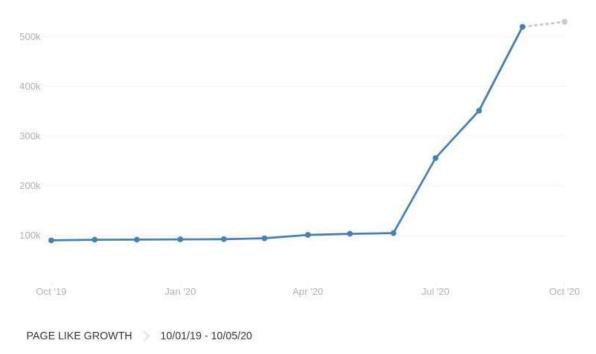
After May, the pages began to receive much higher engagement, hitting over 2 million in the month of September. Posts featuring either photos or Facebook videos got the highest engagement by far, making up 98.35% of engagements from April 2020 up to the time of this writing.



Interactions for pages from 4/1/20 to 10/5/20; note the scale of the Y axis.

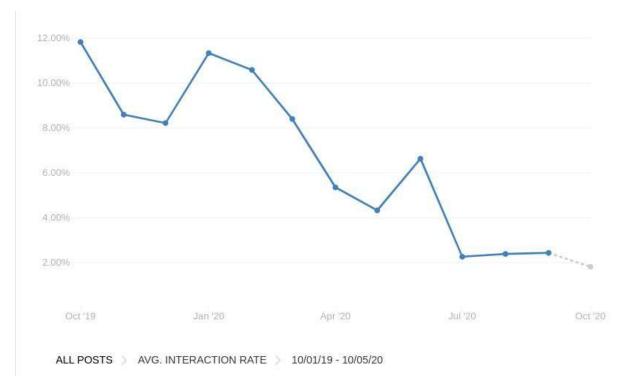


The pages experienced large growth in the volume of likes, starting around June 2020. The accounts' likers had remained steady at approximately 100,000 up to that point, but that number grew to over 500,000 at the time of writing.



Page liker totals from 10/1/19 to 10/5/20.

Despite this increase in interactions and likers, the overall interaction rate plummeted in the same time period. Between October 2019 and April 2020, the interaction rate fluctuated between 6 and 12%. Once the pages began receiving more likers/followers, this rate plummeted to around 2%. This indicates that despite the growth in follower bases, the followers were not engaging with the pages as often.



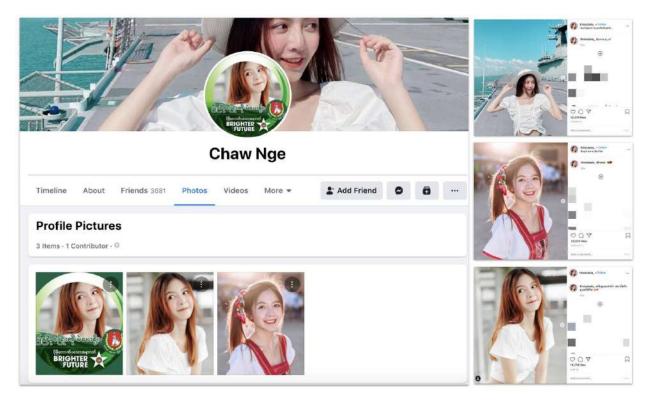
Interaction rates for pages from 10/1/2020 to 10/5/2020.

Overall, despite its relative newness, the network did have some success in building an audience and attracting engagement. Much of this came from the oldest page, but the newer pages also attracted attention

Fake Accounts

The network was built around some three dozen accounts, most of which showed clear signs of inauthenticity and appeared to have been both created in a batch and operated in a batch. Many of them had profile pictures taken from real people, especially celebrities and social media influencers. For example, the account Chaw Nge took two different profile pictures and its cover picture from Instagram influencer @thisisdada_. The account Bo Thu Rain took its profile and cover pictures from two different pencil drawings of American soldiers that can readily be found online. The account Phyo Wai Aung took its profile picture from actor Piolo Pascual.³

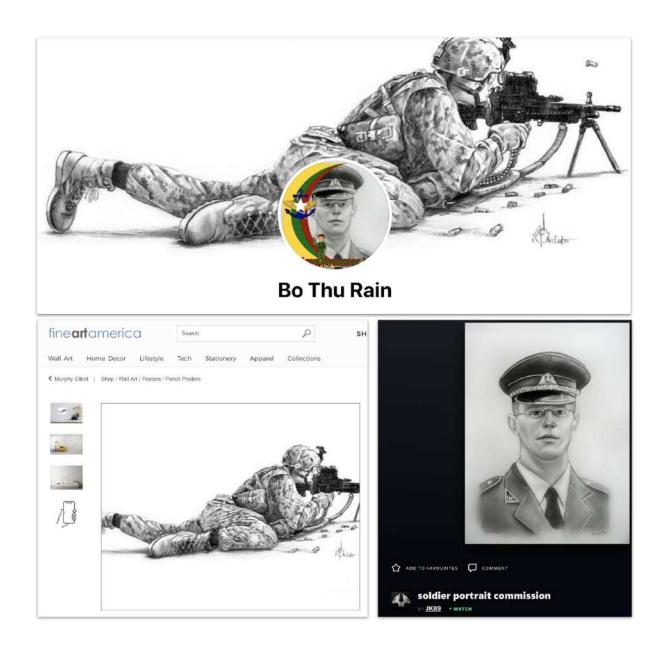
³ Most of the other accounts also had profile pictures that appeared to be the outcome of modeling photoshoots, but they could not be found by reverse search, which instead typically returned images of white people. This may indicate that they were taken from sources that are not listed online, such as private social media accounts, but it may also echo <u>concerns</u> over the racial biases in face recognition technologies. To avoid any risk of endangering real people, we have obscured the names and profile pictures of any account we could not positively identify as having a stolen profile picture, even when all other behavior indicated that the profile was that of a fake persona.



Left, Facebook account Chaw Nge, whose first profile picture was uploaded on April 14, 2020. Right, Instagram posts by <u>@thisisdada_.</u>



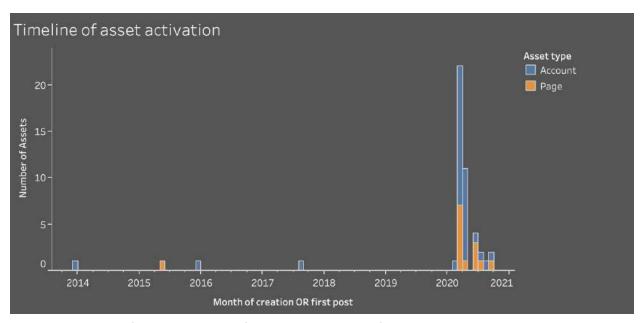
Left, account Phyo Wai Aung, whose first profile picture was uploaded on March 1, 2020. Right, photo of actor Piolo Pascual, from the Philippines <u>Inquirer</u>.



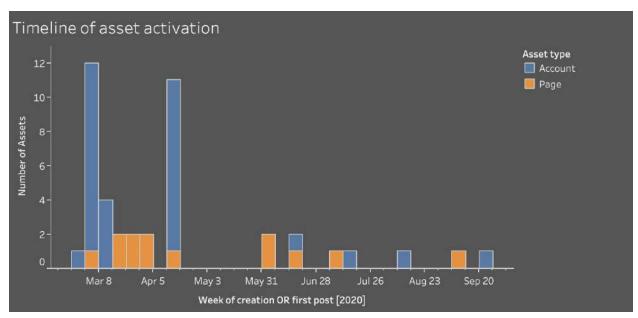
Top, Facebook account Bo Thu Rain, whose first profile picture was uploaded on April 13, 2020. Bottom left, drawing of a U.S. soldier in combat, from <u>fineartamerica.com</u>. Bottom right, pencil drawing of a soldier by JK89 on <u>deviantart.com</u>.

The accounts were largely created in two batches in March and April. Of the 34 accounts that Graphika reviewed during this analysis, 26 uploaded their first profile pictures (an approximation for when they were created, as Facebook accounts do not show a creation date) between February 28, 2020, and April 14, 2020. Five accounts uploaded their first profile pictures on March 4, and seven uploaded theirs on April 14.

Of the 14 pages that Graphika reviewed, 13 were also created in 2020 (pages do show a creation date). The earliest in this period was set up on March 5, the latest on September 26, with 7 pages in total created in March.



Timeline of page creation and first posts on accounts for the entire network, 2013-2020.



Timeline of page creation and first posts on accounts, 2020.

The batch activity also impacted the behavior of the accounts. Many of them consistently posted the same content, with only minor variations in the wording and emojis that accompanied them, over a spread of a few minutes or hours on the same day. Much of this content dealt with the military and especially focused on the positive benefits it brought to Myanmar in terms of stability, security, and health.



Post by two assets on the Burmese Army, on October 2 in a span of four hours.



Posts by two assets about the army providing healthcare for monks, made within 2 minutes. Many more assets posted the same content; this is discussed below.

The accounts also took a more directly partisan political stance. Regardless of their creation dates, almost all the accounts in this network updated their profile pictures on September 8 local time (September 7-8 Eastern Time) by adding a green frame with a patriotic or political slogan. By far the most frequently used phrase was "Brighter future": this is a slogan of the conservative opposition political party the Union Solidarity and Development Party. Many of the accounts accompanied the slogan with the banner of the party. This date marked the beginning of the electoral campaign season in Myanmar.

This process was carried out quickly, in the space of a single day. Many of the accounts made the change within minutes of each other.



Profile picture updates on September 7, 11.31 to 11.36 pm ET (the morning of September 8 in Myanmar).

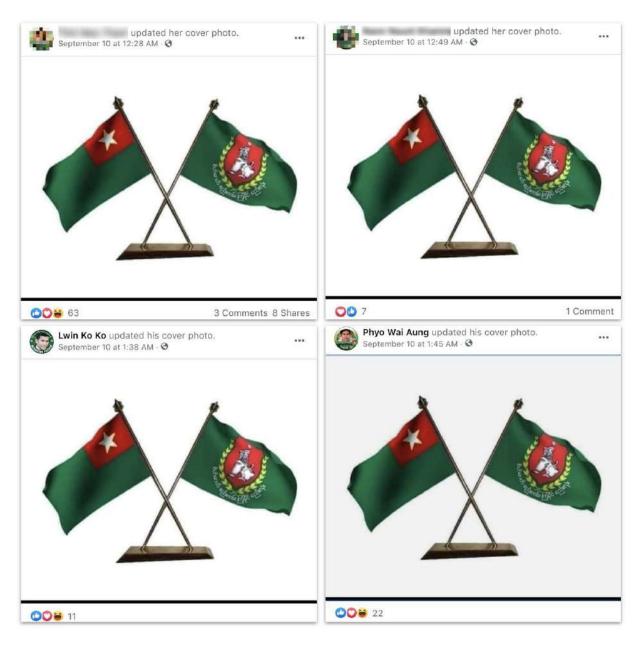
Note the combination of the USDP slogan and the flag roundel on three of the four images. The profile pictures were taken respectively from actor <u>Piolo Pascual</u>, actor <u>Phoomiphadit Nittayaros</u>, a <u>travel blog</u>, and a <u>photoshoot</u>.

Not all the accounts used the same imagery: a handful adopted more general patriotic messaging that expressed their love either for Myanmar or for the Burmese Army. The content was different, but the changes were made at the same time: the account illustrated below, and others in the set, updated their profile pictures in the same 10 minute period as the four accounts illustrated above.



Profile picture update by Bo Thu Rain, September 7 (September 8 in Myanmar).

Just over 48 hours later, many of the accounts in the network also updated their cover pictures with photos of the crossed flags of the USDP - a green field with a red square and a white star in the corner, and a green field showing the heraldic device of the party, the Burmese mythical creature known as the Chinthay.



Cover photo updates by four accounts in the network, September 10, 12.28 to 1.45 am, ET.

A few minutes later, other accounts in the group, which had not updated their profile pictures, uploaded the same image with an identical post that translates as, "Protecting different religion for long. May the USDP party pass."

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Pro-USDP posts, September 10. The left-hand flag is the party banner of the USDP; the right-hand flag is its symbol.

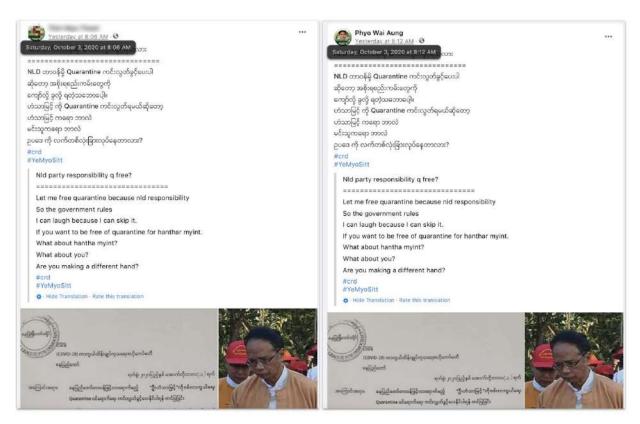
Beside this positive content about the Army and the USDP, the network posted negative content about Aung San Suu Kyi, the NLD party, or both. As with the pro-Army and pro-USDP content, this was posted in batches, with the same essential content accompanied by minimal variation in language and emojis.



The same video with the same comment . . .



... and the same video with different comments. All these posts were made between 5.43 and 5.52 ET on October 2.



Posts on the NLP by two operation assets, 6 minutes apart.

Not all this content came in batches: at times, individual accounts made individual posts. The content varied, but the tone was in keeping with the operation's overall position.



Left, post showing a man throwing a laptop at Aung San Suu Kyi on TV. Right, anti-NLD post.



Pages

The pages in the network were less uniform in appearance, but their overall behavior matched with the behavior of the accounts. Whatever their ostensible focus, the majority of the set - which comprised 14 pages in total - also took a strongly pro-Army stance. Military content made up the majority of their posts, and some explicitly said they were Army supporters, but they also included critical commentary against the NLD and its leader.



Pages in the set, with their names translated: War Song and Our Army.

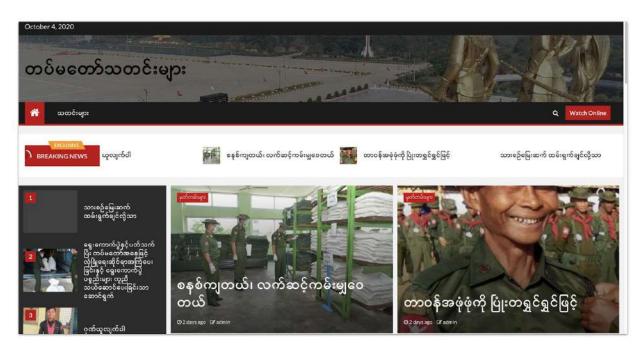
Some of the pages made reference to the Tatmadaw, the Burmese Army, in their names or handles. The most prominent of these was the Tatmadaw Media Group, which was only created in April 2020 but had over 110,000 followers by the time it was taken down. The pages also

showed strongly pro-military iconography: several pages in the set referenced the giant statues of three ancient Burmese kings that overlook a military parade ground.



Left, the profile page for the Tatmadaw Media Group, showing the statues of the three kings overlooking the parade ground. Right, profile picture for "War Song," showing the same statues seen from the parade ground.

On October 2, the Tatmadaw Media Group Facebook page updated its information with a new website, tatmadawmediagroup[.]com. This was registered the same day and began posting immediately; as of October 4, it featured five brief articles and accompanying photos about the Army's positive activities and the pride of being a soldier.



Front page of the Tatmadaw Media Group website as of October 4. Note the banner image, which again shows the statues of the three kings. To judge by the positioning of the flags, this is the same picture as on the Facebook page, not another picture from the same location.



The operation's posts were explicitly pro-Army, but the content that these pages most often posted was not explicitly martial. Only a small number of posts dealt with combat; far more focused on the Army's role as a guarantor of stability and well-being, for example by delivering healthcare or food or rescuing civilians from floods.



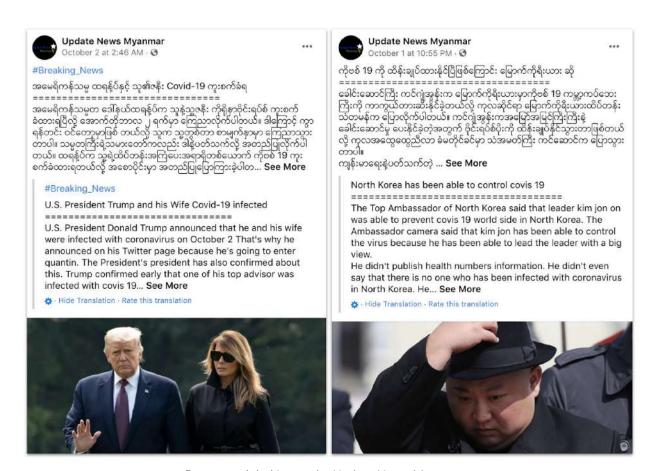
Posts by pages ဖိုးစည် (left) and သတင်းစုံ ("All News," right).

The pages paid particular attention to the Army's role in providing healthcare for monastic communities. In late September and early October, the pages repeatedly posted photo montages of military visits to monasteries, complete with photos of soldiers caring for, and showing respect to, monks.



Posts by pages နိုတပ်မတော် ("Our Army," left) and သတင်းစုံ ("All News," right). This is the same photo montage that some of the accounts carried on the same day - see p. 12, above.

This was not a universal preoccupation. Some of the pages covered broader topics: for example, the page Update News Myanmar carried a variety of international headlines, including U.S. President Donald Trump's positive test for coronavirus, military exercises in Russia, and the spread of the novel coronavirus in North Korea.



Posts on global issues by Update News Myanmar.

However, even this page carried some of the same posts that were posted by many of the accounts and explicitly military pages in the network, suggesting that it was part of the same broader network, and that the non-Burmese content was designed either to lend it credibility as a source of news or to attract an audience that was not necessarily focused on domestic military matters and the role of the army.



Left, post on Update News Myanmar, with the same content as from military-themed pages in the set, including ပြည်ထောင်စုတပ်မတော် ("Union Army"). Again, this is the set of photos also seen on pages 12 and 23.

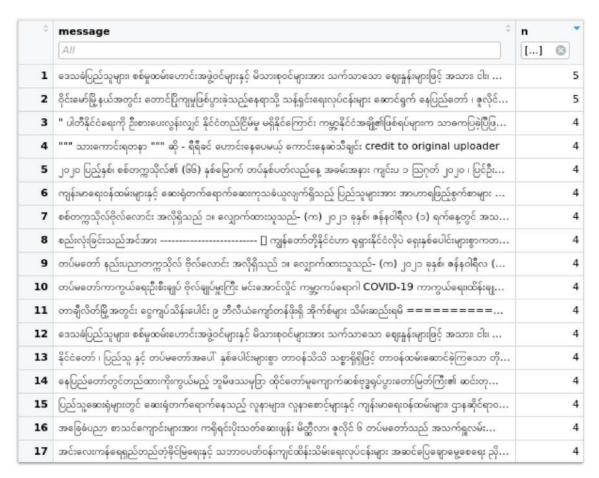


Left, post by Update News Myanmar. Right, the same article - not a share - posted by one of the operation's accounts a few hours later.

Content Clustering and Amplification

Together, the pages and accounts made up a repeater network that shared the same content, with minimal variations, and typically in short, intense bursts of activity. Repeatedly, Graphika identified the same posts across many different parts of the set. Usually, these did not come in the form of many assets re-sharing a post from a central asset: each account and page posted the same basic content, usually at the same time.

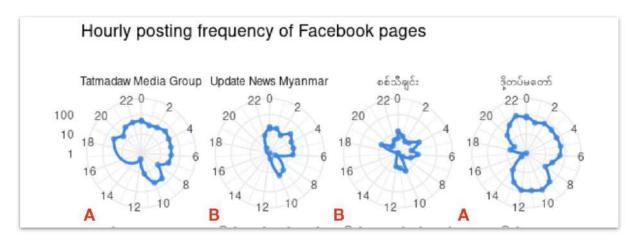
This can be demonstrated in many ways. Often, the posts consisted of short phrases or sentences that multiple assets repeated verbatim. In a review of the 14 pages in the set, we regularly found identical phrases that had been posted to 4 or 5 different pages in a short period of time.



Messages posted across pages four or more times.

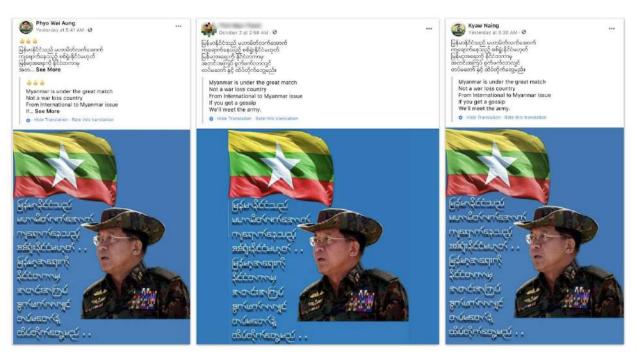
The pages themselves fell into two sub-clusters, based on their posting patterns. Group A were more active, both in volume of posts and across a larger number of hours throughout the day.

Group B were less active overall, and they typically posted less often, with shorter active hours. The chart below shows an aggregate of the posting behavior for 12 pages. They have been labeled to indicate the grouping.



Polar plots of the time of posting for four of the pages in the network. Note how the shapes of the plots fall into two distinct sub-groups, labeled here as A and B. Technique from <u>Ray Serrato</u>

In practice, this marked the network as exceptionally repetitive, especially when it posted positive content about the Army, rather than partisan political content. On many occasions, multiple pages and multiple accounts in the network shared the same content at much the same time, and with minimal variation in the language.



The same post by three operation accounts, all extolling the Army. The posts were spread across a few hours on October 2 (timestamp in ET).



The same post by three pages in the network, at the same approximate time as the accounts.





The same photo montage from three pages in the set, September 30 and October 2.



The same photos from three operation accounts, October 2. The profile picture for the right-hand account can also be found here, where it was uploaded 3 days before the profile was.

The crossover of content between pages and accounts was less marked when it came to posts about partisan politics: the pages appeared more reluctant to post negative comments about the

NLD, and they did not typically adopt pro-USDP visuals as aggressively as the accounts did. Nevertheless, some pages did reproduce the partisan political content that many of the accounts shared, as the example below illustrates.



Post on Aung San Suu Kyi by two of the pages. The other pages in the network did not share this post.

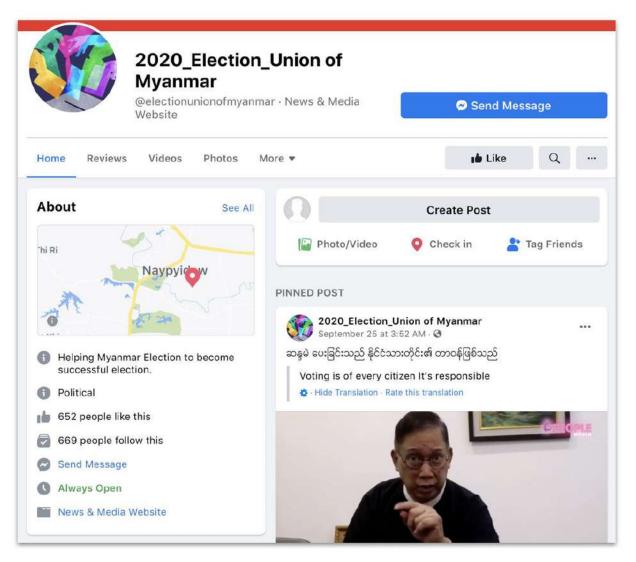


The same video with varying captions from operation accounts. Screenshots taken on October 3.

Eleven different accounts in the network shared this video.

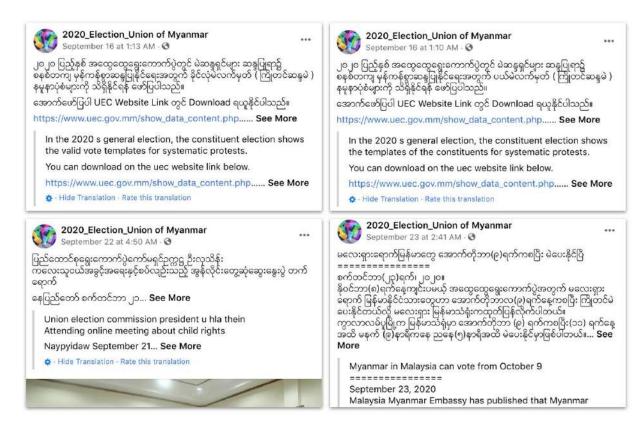
The Election

One page in the network focused explicitly on the election. This was the page "2020_Election_Union_Of_Myanmar," which was set up on September 6, 2020, just before campaigning began. Its tagline, in English, read, "Helping Myanmar Election to become successful election." By the time it was taken down, it had 669 followers.



Home page for the "Election Union of Myanmar" page; note the bio and follower number on the left.

This page was an outlier in the network. It did not post any of the content that came from other assets. Much of its content took the form of public service posts that it relayed from Myanmar's Union Election Commission, or UEC.



Posts from the Election Union page; note the links to the Union Election Commission in the upper two.

One post focused on the Army's role in delivering ballots, but there was otherwise an absence of overtly partisan content. Several posts pointed users toward the website of the <u>Union Election Commission</u>, Myanmar's official electoral body.

This page apart, the network's election coverage was partisan. As described above, it favored the USDP and criticized the NLD. Various accounts posted imagery of the "Brighter Future" motif, including on clothing. Other posts dealt with election registration. In typical style, these posts came from multiple assets within a few minutes.

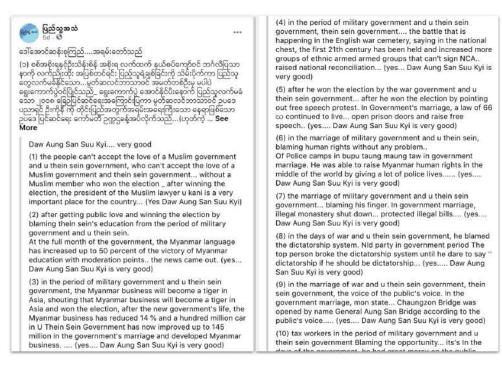


Posts promoting the USDP's "Brighter Future" merchandise, September 24.

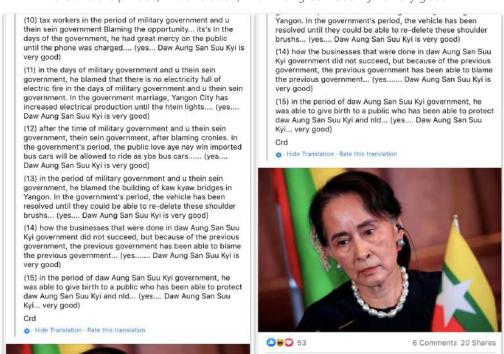


Post on election registration, September 25, two assets 3 minutes apart.

One especially lengthy post, which only seems to have been published on one page, presented an almost Shakespearean description of Aung San Suu Kyi and her government, punctuated with the phrase, "Yes, Daw Aung San Suu Kyi is very good!"



Beginning of a Shakespearean post about Aung San Suu Kyi, criticizing aspects of her government and built around the phrase, in translation, "Daw Aung San Suu Kyi is very good."



The conclusion of the same post.



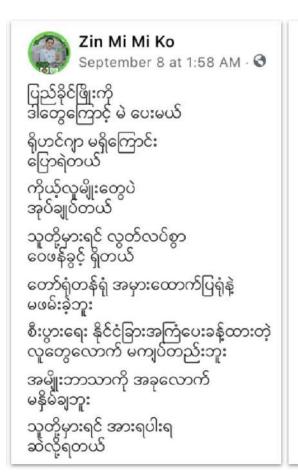
Anti-Rohingya Content

A handful of posts from this network mentioned religious tensions, especially the majority-Muslim Rohingya people, who were subjected to a genocidal series of attacks, persecution, and displacement from 2016 onward. Much of the violence was <u>carried out</u> by the Myanmar army; much of the incitement was conducted on Facebook.

The few posts on the current network that mentioned the Rohingya or Muslims do not seem to have used the extremes of <u>dehumanizing language</u> that were reported around the genocide, <u>including</u> from military <u>leaders</u>. A handful of posts used the phrase "No Rohingya" in English or Burmese; one recent post about Muslims pointed to accusations of bias in favor of Muslims and against the Buddhist minority. Both of these were made in the context of the party rivalry between the USDP and the NLD. These posts constituted only a fraction of the network's overall activity, but human rights considerations and Myanmar's recent history of ethnic violence marks them as particularly important. We therefore include them here in full.



Posts using the "No Rohingya" slogan from two of the fake accounts, alongside pro-USDP content.



Pyai Khine Phyo This is why I'll vote

No Rohingya Dare to say

My own people Administrative

Free if they are wrong There is a chance to judge

Just a good mistake. Didn't catch

Business Foreign Suggested Not as hard as people

In different languages now Don't lie

If they're wrong, they're so happy. Can be scolded

❖ · Hide Translation · Rate this translation

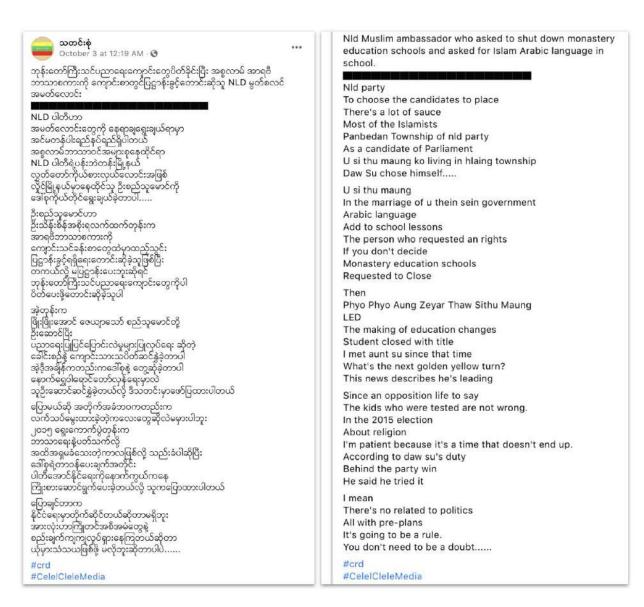
Automated translation of the same post to provide the full context.



Post using the "No Rohingya" slogan both in the image and in the text. Left, original Burmese; right, automated translation.



Post by many of the assets in the network, including pages and accounts, linking the NLD to apparent pro-Muslim bias.



Original and automated translation of the same post.



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