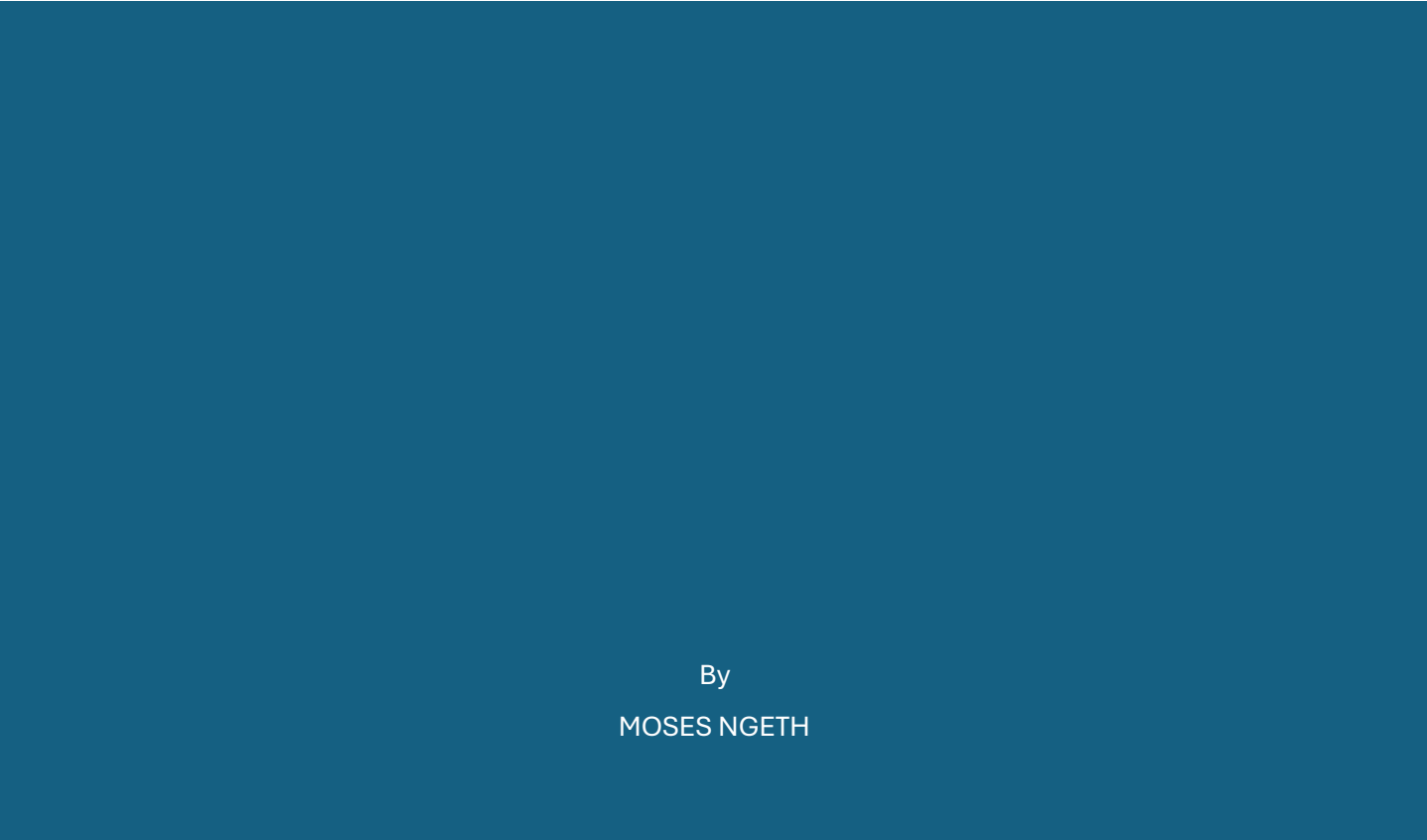




THE DECEPTION IN THE COMMENT: INVESTIGATING THE MANIPLUATION OF PUBLIC OPINION ON CAMBODIAN MEDIA FACEBOOK AGE



By
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Table of Contents

INTRODUCTION.....	2
METHODOLOGY:	2
ANALYZED DATASETS	2
CREATED TIME OF COMMENTS	3
<i>Radio Free Asia on February 15, 2024</i>	3
<i>The Cambodia Daily Khmer</i>	4
<i>Voice of Democracy (VOD Khmer)</i>	4
SHORT AND LONG CHARACTER COMMENTS	5
<i>Short-character comment</i>	5
<i>Long-character comment</i>	6
PROFILES (ACCOUNT) THAT MADE COMMENTS	12
CONCLUSION	12

Figure 1: Number of comments per minute and unique users commenting per minute for Radio Free Asia's live stream on February 15, 2024	3
Figure 2: Number of comments per minute and unique users commenting per minute for The Cambodia Daily Khmer's live stream on February 6, 2024	4
Figure 3: Number of comments per minute and unique users commenting per minute for Voice of Democracy (VOD Khmer)'s live stream on March 26, 2024.....	4
Figure 4: Repetition of the top five short-character comments across the three media outlets (RFA, CD, and VOD) over the three-month period (January to March 2024)	5

Table 1: Number of posts selected for analysis from each media outlet per month (January to March 2024)	2
Table 2: Monthly breakdown of unique users, all comments, and unique comments for each media outlet (January to March 2024).....	3
Table 3: Occurrences of the same user posting comments within a short time frame (same minute or 1-minute gap) for The Cambodia Daily.....	8
Table 4: Occurrences of the same user posting comments within a short time frame (same minute or 1-minute gap) for Radio Free Asia (RFA Khmer).....	9
Table 5: Table 5: Occurrences of the same user posting comments within a short time frame (same minute or 1-minute gap) for Voice of Democracy (VOD)	10
Table 6: Frequency of comment phrases containing the fmywords "អាជ្ញាធរក្រសួងបង្កើន" across the three media outlets (RFA, CD, and VOD) over the three-month period (January to March 2024).....	11

Introduction

The research identified a notable pattern of repetitive comments and phrases, many containing hate speech, in Facebook live stream comment sections from three prominent media outlets: Radio Free Asia (RFA) Khmer, Voice of Democracy (VOD), and The Cambodia Daily (CD) Khmer during the first quarter of 2024. This unusual activity prompted me to analyze the behavior of the comments and the commenters' Facebook accounts. I selected these three media outlets specifically due to the high volume of repetitive and hateful comments posted by thousands of accounts.

Methodology:

This study analyzed public Facebook comments from video posts of three media outlets. The analysis focused on 15 live stream posts from each media outlet's Facebook page to ensure a manageable yet representative dataset. The research methodology examined three key patterns:

1. **Comment Creation Time:** I examined the number of comments and unique commenters within the first 10 minutes of the Facebook Live streams for all three media outlets.
2. **Comment Length and Repetition:** I analyzed the occurrence of repeatable comments across the three media outlets between January and March, focusing on both short and long character comments.
3. **Commenter Profile Authenticity:** I investigated the profiles (accounts) that posted comments to determine whether they were authentic or inauthentic.

By examining these patterns, I aim to gain insights into the nature of the commenting activity and the potential involvement of inauthentic accounts in spreading hate speech and manipulating public discourse. This analysis will help us better understand the extent and impact of these activities on the Facebook pages of the selected media outlets.

Analyzed Datasets

Media outlets	Selection post to analyze		
	Jan	Feb	Mar
RFA Khmer	5	5	5
VOD	5	5	5
CD Khmer	5	5	5

Table 1: Number of posts selected for analysis from each media outlet per month (January to March 2024)

Monthly user and comment breakdown				
	Month	Unique user*	All comment*	Unique cmt*
RFA Khmer	Jan	4,187	70,191	31,030
	Feb	5,005	122,714	47,872
	Mar	4,318	89,644	29,068
CD Khmer	Jan	3,249	71,716	32,851
	Feb	3,198	67,774	29,177
	Mar	2,807	52,332	19,315
VOD Khmer	Jan	2,683	48,935	21,175

	Feb	3,067	66,937	25,946
	Mar	2,480	35,387	14,185

Table 2: Monthly breakdown of unique users, all comments, and unique comments for each media outlet (January to March 2024)

*Unique user is the user that has unique profile ID.

*All comments: comments were posted by a unique user with multiple times.

*Unique comments: comments were posted by a unique user exact character (words/phrase).

Created time of comments

I analyzed the comments from the 15 posts and found the similarity of the sudden increase in engagement. I present the infographic chart below from one post of each media outlets to show the pattern.

Radio Free Asia on February 15, 2024

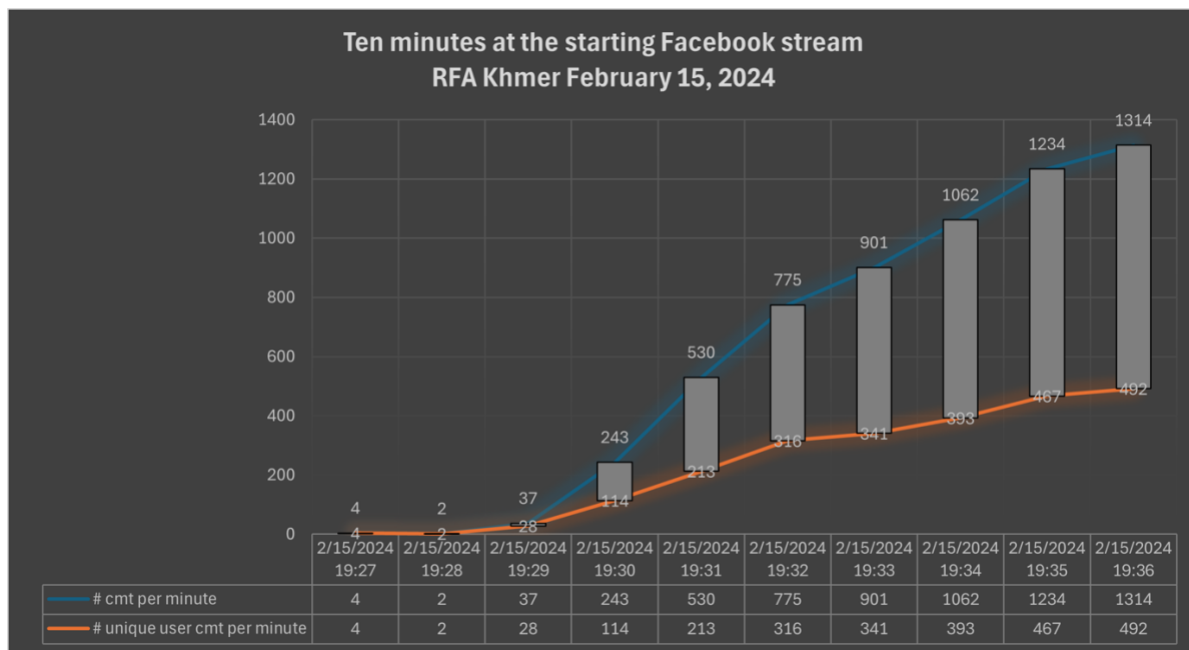


Figure 1: Number of comments per minute and unique users commenting per minute for Radio Free Asia's live stream on February 15, 2024

Analysis of the Radio Free Asia livestream (February 15, 2024) revealed an abrupt surge in engagement activity. Comment frequency escalated from 37 comments per minute at 19:29 to 243 per minute at 19:30, reaching 1,314 comments per minute by 19:36. This exponential increase in such a short timeframe suggests coordinated activity rather than organic user engagement.

The Cambodia Daily Khmer

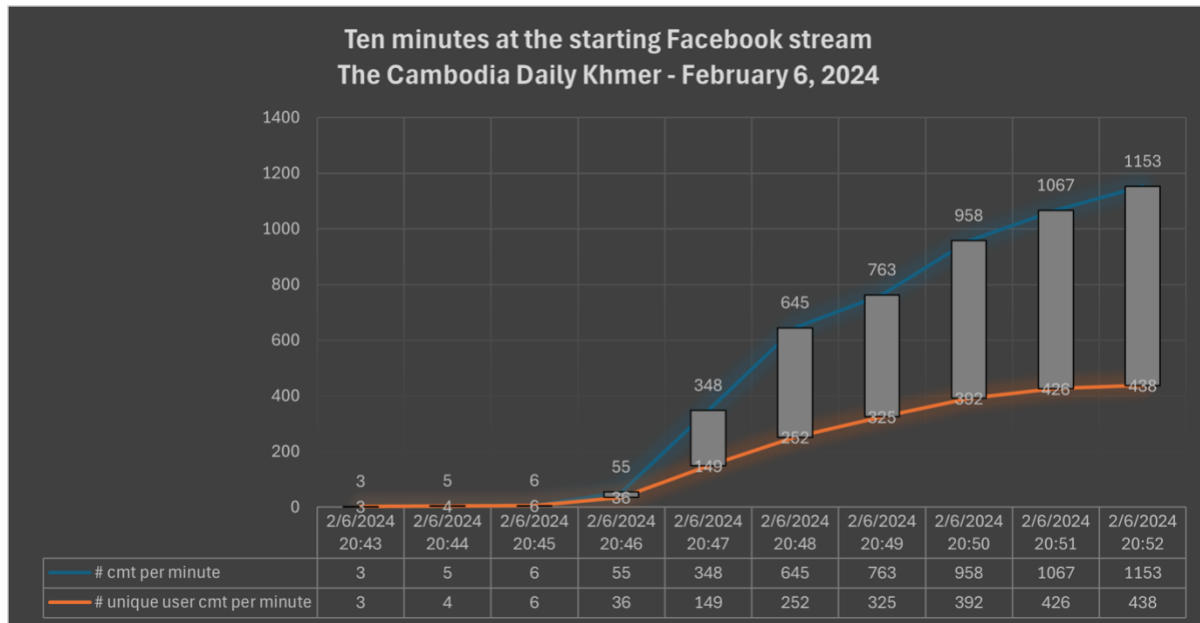


Figure 2: Number of comments per minute and unique users commenting per minute for The Cambodia Daily Khmer's live stream on February 6, 2024

The Cambodia Daily Khmer (February 6, 2024): The data shows a similar pattern to Radio Free Asia, with the number of comments per minute increasing sharply from 55 at 20:46 to 348 at 20:47 and then surging to 1,153 by 20:52. The number of unique users commenting also rose dramatically, from 36 at 20:46 to 149 at 20:47, and then reaching 438 by 20:52.

Voice of Democracy (VOD Khmer)

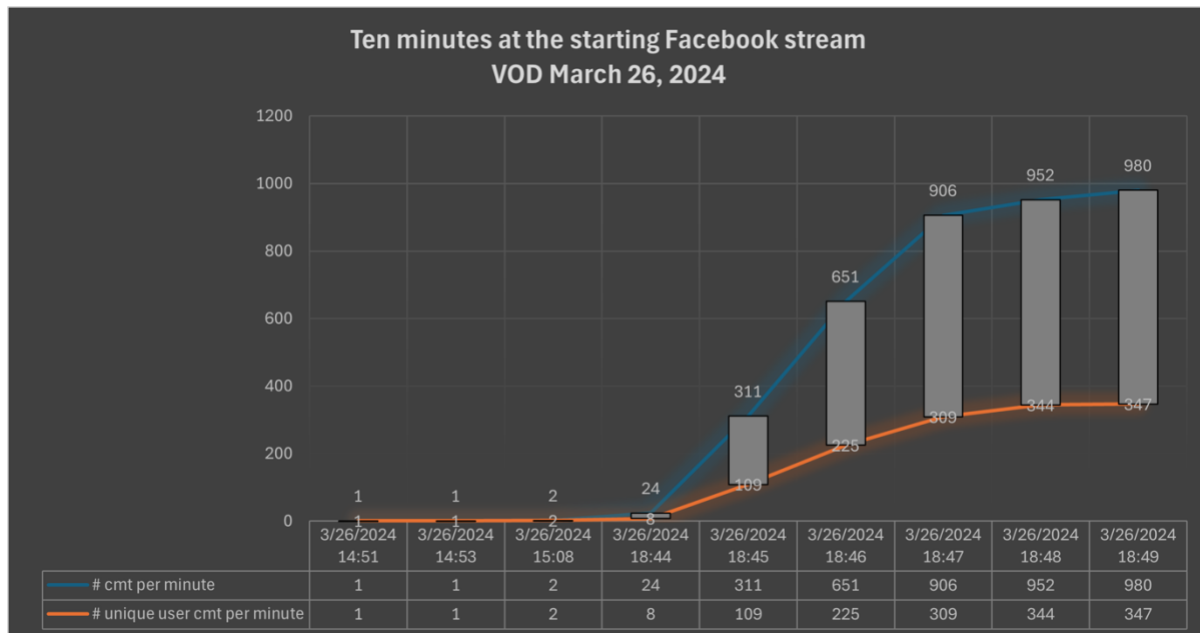


Figure 3: Number of comments per minute and unique users commenting per minute for Voice of Democracy (VOD Khmer)'s live stream on March 26, 2024

Voice of Democracy (VOD Khmer) (March 26, 2024): Although the live stream initially had low engagement, there was a sudden surge in activity, with the number of comments per minute jumping from 24 at 18:44 to 311 at 18:45 and then quickly climbing to 980 by 18:49. The number of unique users commenting also grew rapidly, from 8 at 18:44 to 109 at 18:45 and then reaching 347 by 18:49.

The immediate and substantial increases in the number of comments and unique users commenting within a short timeframe, as observed in all three media outlets' Facebook live streams, suggest the potential use of automated tools to generate comments and simulate user engagement. The rapid growth patterns in engagement metrics, particularly at the specific times mentioned above, differ significantly from the more gradual and organic growth typically associated with genuine human interaction.

Short and long character comments

Short-character comment

The analysis identified patterns of potential automated activity by examining comment repetition across RFA, CD, and VOD from January through March 2024. This process involved categorizing and quantifying the five most frequently repeated short-character comments for each outlet during each month. The following chart illustrates the number of times these top five comments were repeated across the three media outlets over the three-month period, raising concerns about the authenticity of engagement and the possibility of targeted harassment.

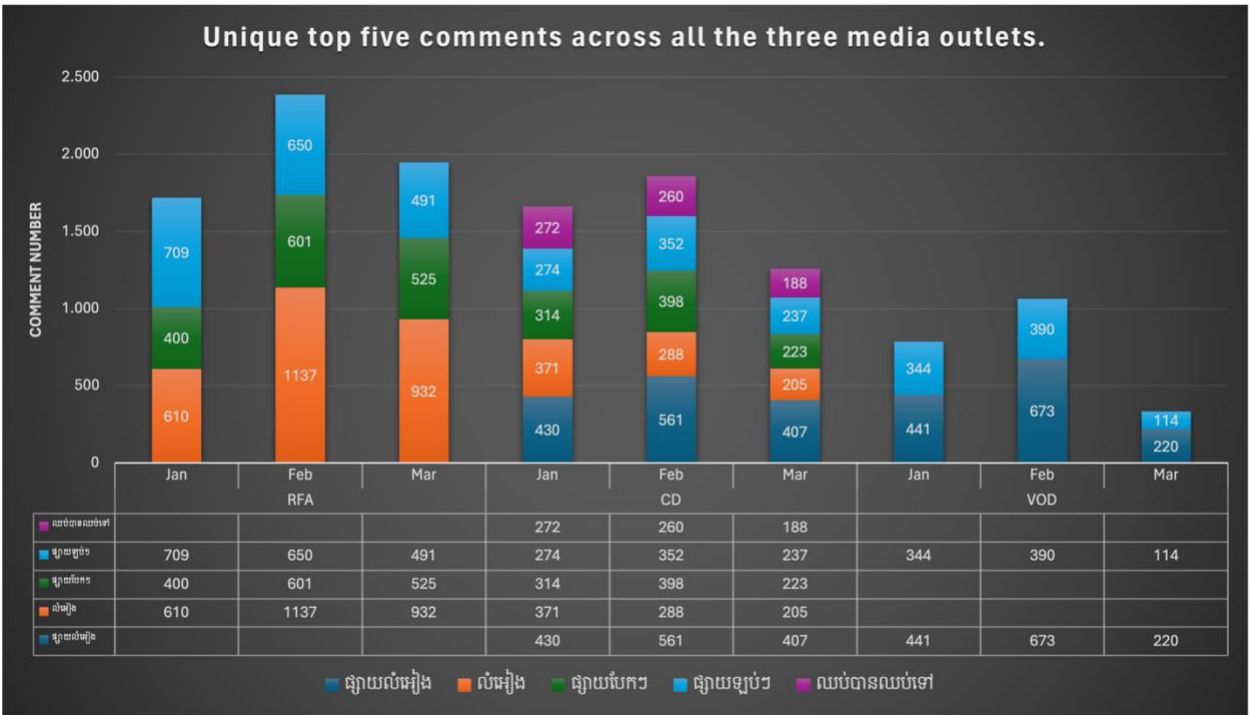


Figure 4: Repetition of the top five short-character comments across the three media outlets (RFA, CD, and VOD) over the three-month period (January to March 2024)

For RFA, the number of times the top five comments were repeated increased each month, starting at 610 in January, surging to 1,137 in February, and remaining high at 932 in March.

CD showed a similar pattern, with the repetition of the top five comments growing from 430 in January to 561 in February. However, it dropped slightly to 407 in March.

VOD had the lowest repetition of the top five comments among the three outlets. It began with 441 repeated comments in January, increased to 673 in February, but then fell sharply to 220 in March.

The high repetition of these top comments across all three media outlets and in each month suggests that they are not genuine interactions but rather a form of targeted harassment. The use of automation tools or copy/pasting tactics to flood the comments with repeated messages undermines the authenticity of the real human-made comment and can be seen as a coordinated effort to spam and harass these media platforms consistently over time.

Long-character comment

To investigate the authenticity of comments, I conducted a random analysis of a specific comment phrase “អាជ្ញាក្រុមបង្គំនេះរាមិនមែនគំរើកកើតជាចេញពីស្រុកខ្មែរទេ។”. By examining how this phrase was used across various posts, dates, and users, as well as the exact time of creation, I aimed to determine whether the comment was genuine or potentially automated. analysis focused on identifying patterns in the usage of this comment phrase, such as its appearance on multiple posts, the frequency of its occurrence, and the time intervals between each instance of the comment.

The analysis identified instances of rapid successive commenting, where a single user posted multiple comments either within the same minute or with only a 1-minute interval. Here are the occurrences found in each media outlet:

Cambodia Daily (CD):

- January 30, 2024: Two comments by "លីម ភាតា" at 20:43
- January 24, 2024: Three comments by "លីម ភាតា" at 21:35
- February 6, 2024: Two comments by "ព្យាង ព្យាង" at 20:53 and 20:54
- February 13, 2024: Two comments by "ព្យាង ព្យាង" at 21:12 and 21:13
- February 26, 2024: Two comments by "ព្យាង ព្យាង" at 21:08 and 21:09

Radio Free Asia (RFA):

- February 3, 2024: Two comments by "សុខ ឆែយ៉ា" at 19:53 and 19:54
- February 15, 2024: Two comments by "សុខ ឆែយ៉ា" at 19:41 and 19:46, and two comments by "ព្យាង ព្យាង" at 19:56 and 19:58
- March 20, 2024: Two comments by "ព្យាង ព្យាង" at 5:36 and 5:37
- March 22, 2024: Two comments by "ព្យាង ព្យាង" at 5:46 and 5:48
- March 21, 2024: Two comments by "ព្យាង ព្យាង" at 19:41 and 19:42, and two comments by "Bun Thoeun" at 19:47

Voice of Democracy (VOD):

- February 12, 2024: Two comments by "ឧត សុមាន" at 19:07 and 19:10

These instances of the same user posting comments within a short time frame (same minute or 1-minute gap) suggest the possibility of automated tools or copy-pasting being used. Notably, "ព្យាដ" and "លីម ភាគា" appear multiple times in the Cambodia Daily and Radio Free Asia data, while "ឧត សុមាន" and "សុខ ឆែយ៉ា" also show up more than once in the Voice of Democracy and Radio Free Asia data, respectively.

The Cambodia Daily

Date	post_id	user_id	user_name	created_time
January 19, 2024	1109243173842280	61553415149594	Ahh Lxa	1/19/2024 20:44
		61552663676354	Rapy Reuk	1/19/2024 20:45
		100021677299131	Dy Chhaykeo	1/19/2024 21:10
		100090267756864	សុខ ឆែយ៉ា	1/19/2024 21:58
January 22, 2024	1182007999435330	61553415149594	Ahh Lxa	1/22/2024 20:47
		61552663676354	Rapy Reuk	1/22/2024 20:55
		100090267756864	សុខ ឆែយ៉ា	1/22/2024 21:05
January 31, 2024	626994419533414	100006918815350	Nhea Sophal	1/31/2024 20:38
		100087436308263	លីម ភាគា	1/31/2024 20:52
January 30, 2024	761042595414383	100087436308263	លីម ភាគា	1/30/2024 20:43
		100087436308263	លីម ភាគា	1/30/2024 20:43
		100049230060633	ឧត សុមាន	1/30/2024 20:45
		61553415149594	Ahh Lxa	1/30/2024 20:54
		100037741680991	VăñSăñ X Yöü	1/30/2024 20:55
		61555402064416	Thavreak Loek	1/30/2024 20:58
January 24, 2024	910189807558694	100087436308263	លីម ភាគា	1/24/2024 20:54
		100087436308263	លីម ភាគា	1/24/2024 21:35
		100087436308263	លីម ភាគា	1/24/2024 21:35
		100087436308263	លីម ភាគា	1/24/2024 21:35
February 23, 2024	272185365910625	100074178270008	ឆៀន សេងឆៀន	2/23/2024 21:00
		61555402064416	Thavreak Loek	2/23/2024 21:08
February 6, 2024	400900655808142	100015759424080	Sa Tyna	2/6/24 20:50
		100049230060633	ឧត សុមាន	2/6/24 20:50
		100087436308263	លីម ភាគា	2/6/24 20:51
		100069299540408	Čhöm Nö	2/6/24 20:51
		100080721736566	ព្យាដ ព្យាដ	2/6/24 20:53
		100037597517302	Teav Phearum	2/6/24 21:01
February 13, 2024	435144712178193	100080721736565	ព្យាដ ព្យាដ	2/13/2024 21:12
		100080721736566	ព្យាដ ព្យាដ	2/13/2024 21:13

		61555402064416	Thavreak Loek	2/13/2024 21:13
February 26, 2024	714760183828001	100080721736565	ព្យាង ព្យាង	2/26/2024 21:08
		100080721736566	ព្យាង ព្យាង	2/26/2024 21:09
		61553415149594	Ahh Lxa	2/26/2024 21:10
		100008571577615	Ly Bunthoeun	2/26/2024 21:17
		61556662266766	Rayuth Bmc	2/26/2024 21:23
March 25, 2024	2401785926699310	100009672676607	Bunthorng Samkhan	3/25/2024 20:53
		100091403024024	LA ZY	3/25/2024 20:55
March 27, 2024	433701702391619	100006918815350	Nhea Sophal	3/27/2024 6:15
		100007216566387	Nort Dina	3/27/2024 6:18

Table 3: Occurrences of the same user posting comments within a short time frame (same minute or 1-minute gap) for The Cambodia Daily

Radio Free Asia (RFA Khmer)

Date	post_id	user_id	user_name	created_time
January 18,2024	1542489329904920	61551911859855	Chhay Lim Malai	1/18/2024 19:41
		100090994246635	ឡឹក ថាវៈ	1/18/2024 19:51
		100040102651222	Pov Chhany	1/18/2024 19:56
		100057331179781	ញា សុផល	1/18/2024 19:57
		100008571577615	Ly Bunthoeun	1/18/2024 20:27
January 6,2024	1146809269622180	100090994246635	ឡឹក ថាវៈ	1/6/24 19:54
		100083844746716	សម្បត្ត ខៀវ	1/6/24 19:55
January 8,2024	182402644929539	100090994246635	ឡឹក ថាវៈ	1/8/24 19:51
January 4,2024	2014938845547180	100090994246635	ឡឹក ថាវៈ	1/4/24 20:16
January 3,2024	3216955508597010	61553415149594	Ahh Lxa	1/3/24 19:55
		100013252004207	កាក ដេង	1/3/24 20:00
February 3,2024	1730025994147960	100090994246635	ឡឹក ថាវៈ	2/3/24 19:53
		100090267756864	សុខ នៃយ៉ា	2/3/24 19:53
		100090267756864	សុខ នៃយ៉ា	2/3/24 19:54
February 15,2024	2604241899742230	100070700947300	MekNoy Svay Chek	2/15/2024 19:32
		61553415149594	Ahh Lxa	2/15/2024 19:35
		100090267756864	សុខ នៃយ៉ា	2/15/2024 19:41
		100090267756864	សុខ នៃយ៉ា	2/15/2024 19:46
		100040102651222	Pov Chhany	2/15/2024 19:48
		100080721736566	ព្យាង ព្យាង	2/15/2024 19:56
		100080721736566	ព្យាង ព្យាង	2/15/2024 19:58
February 10,2024	2849613655198000	100070700947300	MekNoy Svay Chek	2/10/24 19:35
		100010373387335	Chhay Narin	2/10/24 19:36
		61553415149594	Ahh Lxa	2/10/24 19:38

		100008571577615	Ly Bunthoeun	2/10/24 19:42
		61552663676354	Rapy Reuk	2/10/24 19:42
		100090994246635	ឡឺក ថាវៈ	2/10/24 19:49
February 2,2024	368900375845663	61553415149594	Ahh Lxa	2/2/24 20:01
		100070700947300	MekNoy Svay Chek	2/2/24 20:06
		100090994246635	ឡឺក ថាវៈ	2/2/24 20:14
March 24,2024	334716312446212	100007216566387	Nort Dina	3/24/2024 19:33
		100074178270008	ឆៀន សេងឆៀន	3/24/2024 19:39
		100091403024024	LA ZY	3/24/2024 20:01
March 20,2024	382725201238510	100080721736566	ពួរាដ ពួរាដ	3/20/2024 5:36
		100080721736566	ពួរាដ ពួរាដ	3/20/2024 5:37
March 22,2024	419384150669634	100008571577615	Ly Bunthoeun	3/22/2024 5:35
		100007216566387	Nort Dina	3/22/2024 5:44
		100080721736566	ពួរាដ ពួរាដ	3/22/2024 5:46
		100080721736566	ពួរាដ ពួរាដ	3/22/2024 5:48
		61553415149594	Ahh Lxa	3/22/2024 5:49
March 21,2024	437399425488368	61553415149594	Ahh Lxa	3/21/2024 19:32
		100070700947300	MekNoy Svay Chek	3/21/2024 19:35
		100080721736566	ពួរាដ ពួរាដ	3/21/2024 19:41
		100080721736566	ពួរាដ ពួរាដ	3/21/2024 19:42
		61552663676354	Rapy Reuk	3/21/2024 19:45
		100053040672965	Bun Thoeun	3/21/2024 19:47
		100053040672965	Bun Thoeun	3/21/2024 19:47
March 26,2024	440863145117043	100006918815350	Nhea Sophal	3/26/2024 19:42

Table 4: Occurrences of the same user posting comments within a short time frame (same minute or 1-minute gap) for Radio Free Asia (RFA Khmer)

Voice of Democracy (VOD)

Date	post_id	user_id	user_name	created_time
January 4,2024	1027615921639070	100092915273483	Leap Heng	1/4/24 18:59
		100090269550281	ជា សីហាដ	1/4/24 19:06
		100090994246635	ឡឺក ថាវៈ	1/4/24 19:07
		61553415149594	Ahh Lxa	1/4/24 19:08
January 9,2024	336233865960101	61553415149594	Ahh Lxa	1/9/24 18:11
		100005189417031	Hun Reaksmeay	1/9/24 18:11
January 5,2024	347198291391368	61553415149594	Ahh Lxa	1/5/24 18:07
		100090994246635	ឡឺក ថាវៈ	1/5/24 18:10
January 8,2024	917042889839269	100090269550281	ជា សីហាដ	1/8/24 18:33
		100090994246635	ឡឺក ថាវៈ	1/8/24 18:43
		61553415149594	Ahh Lxa	1/8/24 19:41

February 12,2024	1414535909144370	61553415149594	Ahh Lxa	2/12/24 19:07
		100049230060633	ឧន សុមាន	2/12/24 19:07
		100077693080199	Ti Na	2/12/24 19:10
		100049230060633	ឧន សុមាន	2/12/24 19:10
		100057331179781	ញ៉ សុផល	2/12/24 19:13
		61552663676354	Rapy Reuk	2/12/24 19:22
February 14,2024	1587587218680420	100057331179781	ញ៉ សុផល	2/14/2024 17:56
		61553415149594	Ahh Lxa	2/14/2024 17:58
		100070700947300	MekNoy Svay Chek	2/14/2024 18:02
February 26,2024	3056008181200830	100070700947300	MekNoy Svay Chek	2/26/2024 18:33
		61553415149594	Ahh Lxa	2/26/2024 18:35
		100007216566387	Nort Dina	2/26/2024 18:37
		100015759424080	Sa Tyna	2/26/2024 18:43
		100011444901131	Teav Phearum	2/26/2024 18:46
		100008571577615	Ly Bunthoeun	2/26/2024 18:48
		100049230060633	ឧន សុមាន	2/26/2024 18:49
		100065195511745	Ting Ting	2/26/2024 18:49
March 22,2024	2368334243353610	100008571577615	Ly Bunthoeun	3/22/2024 12:34
		61553415149594	Ahh Lxa	3/22/2024 12:40
		100007216566387	Nort Dina	3/22/2024 12:47
		100037597517302	Teav Phearum	3/22/2024 12:49
March 26,2024	949158546596113	100009672676607	Bunthorng Samkhan	3/26/2024 18:45
		100090269550281	ជា សីហាង	3/26/2024 18:47
		100070700947300	MekNoy Svay Chek	3/26/2024 18:47
		100037597517302	Teav Phearum	3/26/2024 18:55

Table 5: Table 5: Occurrences of the same user posting comments within a short time frame (same minute or 1-minute gap) for Voice of Democracy (VOD)

The analysis examined patterns of a specific four-word phrase "អាខ្មែរក្បាលបង្កង", which appeared prominently in the comment "អាខ្មែរក្បាលបង្កងនេះវាមិនមែនកំណើតកើតជាចេញពីស្រុកខ្មែរទេ។". This investigation identified additional comments containing variations of this key phrase to assess potential patterns of coordinated messaging."

The analysis revealed that the keywords "អាខ្មែរក្បាលបង្កង" appeared 234 times across 22 comment phrases in the document. Notably, the exact comment phrase "អាខ្មែរក្បាលបង្កងនេះវាមិនមែនកំណើតកើតជាចេញពីស្រុកខ្មែរទេ។" was repeated 139 times, suggesting a high level of duplication.

Furthermore, several other comment phrases containing "អាខ្មែរក្បាលបង្កង" also exhibited significant duplication:

- Row 9: "ពួកអាខ្មែរក្បាលបង្កង" appeared 10 times
- Row 10: "ពួកអាខ្មែរក្បាលបង្កង អាឆ្នែងដំបៅក្បាលអាថោកទាប អាឆ្នែងកំចូលស្រុក" appeared 53 times

- Row 11: "ពួកអាខ្មែរក្បាលបង្កង អាឆ្នែងបៅក្បាលអាថោកទាប អាឆ្នែងកំចូលស្រុកក្រុមអាមនុស្សសង្គមស្តាប់ខ្ចើម ពួកអាញ្ច្រង់អាតិរ្វាន ពួកអាគ្មានប្រយោជន៍ អាមនុស្សអត់កំណើត" appeared 3 times
- Row 17: "អាខ្មែរក្បាលបង្កង" appeared 12 times
- Row 20: "អាខ្មែរក្បាលបង្កងនេះវាមិនមែនកំណើតកើតជាចេញពីស្រុកខ្មែរទេបានតែវិភាគអត់ប្រយោជន៍ មួយថ្ងៃៗ" appeared 1 time

The high frequency of duplicated phrases containing "អាខ្មែរក្បាលបង្កង" indicates potential systematic content manipulation. Analysis of these repetitive patterns suggests coordinated deployment of automated systems or organized copy-paste activities to influence public discourse.

	comment_text	Jan	Feb	Mar	Grand Total
1	៧អាខ្មែរក្បាលបង្កងនេះវាមិនមែនកំណើតកើតជាចេញពីស្រុកខ្មែរទេ		1		1
2	កន្លែងម៉ែអាឆ្នែងកំចូលស្រុកក្រុមអាមនុស្សសង្គមស្តាប់ខ្ចើម ពួកអាញ្ច្រង់អាតិរ្វាន ពួកអាគ្មានប្រយោជន៍ អាមនុស្សអត់កំណើតពួកអាខ្មែរក្បាលបង្កង អាឆ្នែងបៅក្បាលអាថោកទាប អាឆ្នែងកំចូលស្រុក	1			1
3	ក្រុមអាមនុស្សសង្គមស្តាប់ខ្ចើម ពួកអាញ្ច្រង់អាតិរ្វាន ពួកអាគ្មានប្រយោជន៍ អាមនុស្សអត់កំណើតពួកអាខ្មែរក្បាលបង្កង អាឆ្នែងបៅក្បាលអាថោកទាប អាឆ្នែងកំចូលស្រុក		1		1
4	ចេញមកឆ្លុតទៀតហើយកន្លែងម៉ែអាឆ្នែងកំចូលស្រុក អាខ្មែរក្បាលបង្កង	1			1
5	ចេញមកឆ្លុតទៀតហើយពួកអាអាចម៍ពូកែណាស់ខាងបំពុលសង្គមខាងបំផ្លាញជាតិអាខ្មែរក្បាលបង្កង	1			1
6	ចេញមកឆ្លុតទៀតហើយពួកអាអាចម៍អាខ្មែរក្បាលបង្កង	1			1
7	ដល់ម៉ោងពួកអាខ្មែរក្បាលបង្កងឆ្លុតទៀតហើយ			1	1
8	ពូកែណាស់ខាងបំពុលសង្គមខាងបំផ្លាញជាតិអាខ្មែរក្បាលបង្កងពួកអាអាចម៍ ចេញមកឆ្លុតទៀតហើយ	1			1
9	ពួកអាខ្មែរក្បាលបង្កង	3	5	2	10
10	ពួកអាខ្មែរក្បាលបង្កង អាឆ្នែងបៅក្បាលអាថោកទាប អាឆ្នែងកំចូលស្រុក	9	37	7	53
11	ពួកអាខ្មែរក្បាលបង្កង អាឆ្នែងបៅក្បាលអាថោកទាប អាឆ្នែងកំចូលស្រុកក្រុមអាមនុស្សសង្គមស្តាប់ខ្ចើម ពួកអាញ្ច្រង់អាតិរ្វាន ពួកអាគ្មានប្រយោជន៍ អាមនុស្សអត់កំណើត		3		3
12	ពួកអាខ្មែរក្បាលបង្កងបណ្តិតរឿងគ្រប់រឿង			1	1
13	ពួកអាខ្មែរក្បាលបង្កងបើលោកឯងមិនដឹងទេកុំចេះតែនិយាយផ្ដេសផ្ដាស		1		1
14	ពួកអាខ្មែរក្បាលបង្កងមិនចេះគិត		1		1
15	ពួកអាទៀតថោកពួកអាឆ្នែងពួកអាខ្មែរក្បាលបង្កង			1	1
16	ពួកអាស៊ីទៅឆ្លុតអាឡាប់អាខ្មែរក្បាលឆ្នែងអាខ្មែរក្បាលបង្កង	1			1
17	អាខ្មែរក្បាលបង្កង	5	6	1	12
18	អាខ្មែរក្បាលបង្កងចេញមកឆ្លុតទៀតហើយ	1			1
19	អាខ្មែរក្បាលបង្កងនេះវាមិនមែនកើតកំណើតខ្មែរទេផ្សាយតែរឿងបំពុលសង្គម	1			1
20	អាខ្មែរក្បាលបង្កងនេះវាមិនមែនកំណើតកើតជាចេញពីស្រុកខ្មែរទេ	40	69	30	139
21	អាខ្មែរក្បាលបង្កងនេះវាមិនមែនកំណើតកើតជាចេញពីស្រុកខ្មែរទេបានតែវិភាគអត់ប្រយោជន៍ មួយថ្ងៃៗ	1			1
22	អាខ្មែរក្បាលបង្កងពូកែណាស់ខាងបំពុលសង្គមខាងបំផ្លាញជាតិ	1			1
	Grand Total	67	124	43	234

Table 6: Frequency of comment phrases containing the fmywords "អាខ្មែរក្បាលបង្កង" across the three media outlets (RFA, CD, and VOD) over the three-month period (January to March 2024)

Profiles (account) that made comments

I conducted an analysis of 29,570 comments from three media outlets spanning from January to March 2024. Among these comments, I identified 8,858 unique user accounts. The research methodology included a detailed authenticity assessment of a random 200-account sample. This evaluation employed specific criteria to determine account legitimacy, acknowledging the inherent challenges in verifying social media account authenticity.

1. **Authentic Account:** An account is considered authentic if it exhibits user engagement, such as likes, comments, or shares on its posts, and has shown recent activity since January 2024.
2. **Inauthentic Account:** An account is deemed inauthentic if it lacks any user engagement on its posts or shared content. Some accounts may have a substantial number of posts and friends, but their friends do not interact with their content. Additionally, accounts with a limited number of friends and recent creation dates are considered inauthentic.

Findings: Upon investigating the sample of 200 accounts, I discovered the following:

1. **Authentic Accounts:** 58% of the sampled accounts met the criteria for authenticity.
2. **Inauthentic Accounts:** 34% of the sampled accounts were classified as inauthentic based on the established criteria.
3. **Locked Profile Accounts:** 8% of the sampled accounts had locked profiles, preventing further analysis.

Detailed examination of authentic accounts revealed a significant institutional pattern: 88% showed direct connections to government military organizations. This connection was evidenced through profile imagery displaying military affiliation, content sharing focused on military activities, and social networks predominantly composed of other military-affiliated accounts.

Conclusion

The analysis of comments and user behavior across the three media outlets - Radio Free Asia (RFA) Khmer, Voice of Democracy (VOD), and The Cambodia Daily (CD) Khmer - during the first quarter of 2024 has revealed patterns that suggest the presence of automated tools and coordinated efforts to manipulate public discussion and harass these media platforms. These findings align with my initial observation of unusual, repetitive, and hateful comments posted by thousands of accounts on the Facebook live streams of these media outlets.

The sudden and substantial increases in comment activity within short timeframes, the high repetition of specific short-character comments, and the duplication of long-character comment phrases all point to the use of automation and copy/pasting tactics rather than genuine human interaction. These patterns support my hypothesis that the comments were not merely normal reactions but rather organized attempts to spread hate speech and manipulate the conversation.

Furthermore, the presence of a significant number of accounts associated with government army institutions among the authentic commenters raises questions about the nature and intent of their engagement. This finding suggests that the manipulation of public discussion on these media

platforms may have a political dimension and could be part of a larger campaign to influence public opinion.

This research identified several tactical patterns: systematic comment deployment, content duplication, and coordinated messaging campaigns. These patterns align with known characteristics of organized information manipulation efforts on social media platforms. The findings demonstrate how such tactics can potentially influence public discourse and spread misleading information. The ability to manipulate conversations and create the illusion of widespread support for certain ideas or viewpoints can have serious consequences for public understanding and decision-making.

This research documented and analyzed patterns of atypical commenting behavior on Facebook live streams of RFA Khmer, VOD, and CD Khmer. The findings revealed evidence of systematic content manipulation through coordinated messaging, repetitive posting patterns, and organized disruption of public discourse. These activities demonstrate sophisticated attempts to influence online conversations and potentially manipulate public opinion.