

September 26, 2017

HATE SPEECH MONITORING AND CONFLICT ANALYSIS IN SOUTH SUDAN

Report #4: September 8 - September 23, 2017

This report is part of a broader initiative by PeaceTech Lab to analyze online hate speech in South Sudan in order to help mitigate the threat of hateful language in fueling violence on-the-ground. Hate speech can be defined as language that can incite others to discriminate or act against individuals or groups based on their ethnic, religious, racial, gender or national identity. The Lab also acknowledges the role of “dangerous speech,” which is a heightened form of hate speech that can catalyze mass violence.

Summary of Recent Events

During this reporting period, ongoing, tribally targeted violence, reflected by sporadic skirmishes in the Greater Upper Nile and in Northern and Western Bahr el Ghazal, have been particularly alarming. On September 15, for instance, government forces attacked the opposition’s positions in Fashoda State. Government forces were also accused of attacking a civilian displacement camp at [Aburoc](#). During the previous week, the government accused the rebels loyal to former Vice President Dr. Riek Machar of launching [attacks in Gany County](#), resulting in the death of at least 28 government soldiers and 100 fighters on the rebel side.

In Northern Bahr el Ghazal, the rivalry between the Dinka subsections of Apuk and Aguok continues to result in large-scale violence. Unreported clashes between these groups took place in Gogrial State on September 14, during which two people were killed. Some observers believe that the Apuk-Aguok conflict is a proxy fight between President Kiir and his estranged former Chief of Staff Paul Malong. In June, Kiir removed Paul Malong from his post, a move some viewed as a calculated strategy to consolidate control among the Dinka of Warrap (the home area of Kiir and the director of internal security, Akol Koor) at the expense of the Dinka of Aweil (the home area of Malong). Malong is currently in confinement in Juba, and his former associates are increasingly being purged by President Kiir. For example, the Wau State governor [Andrea Mayar Achor](#) was sacked on September 15, and the former director of military intelligence in the South Sudanese army, General [Marial Nuor](#), was fired on September 16. The appointments of both Mayar and Nuor had been recommended by Malong.

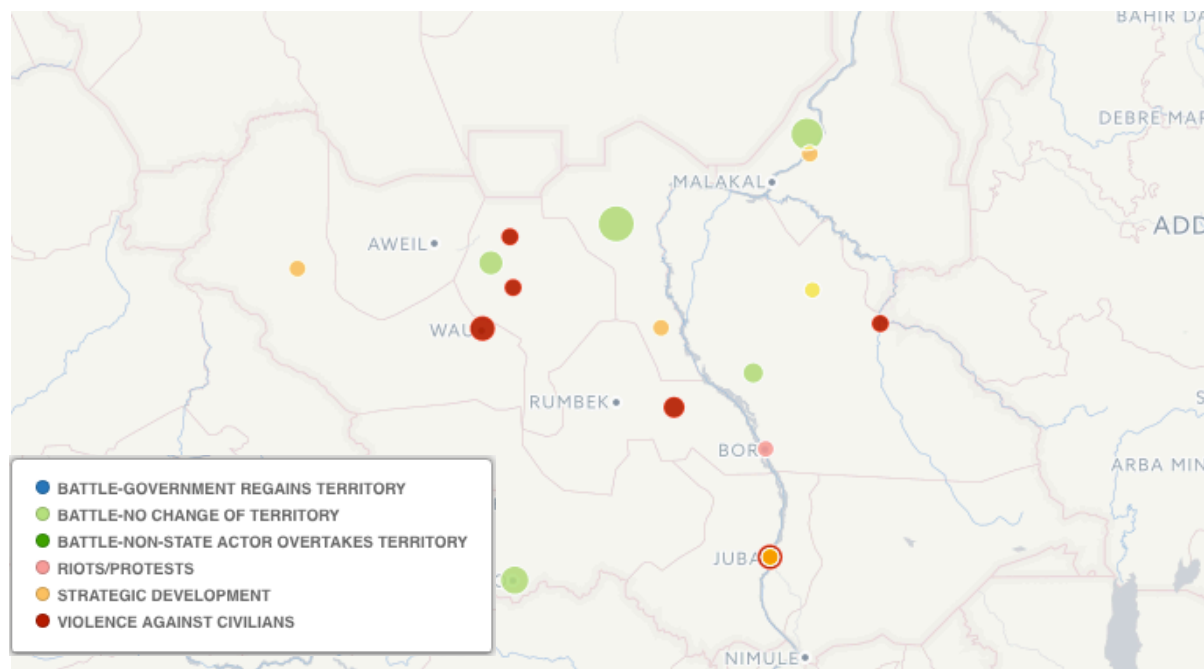
Additionally, divisions among Equatorian groups continue to deepen. Composed of highly diverse communities, Equatorians are uncertain which rebel outfit, the SPLA-IO or the National Salvation Front (NAS), to support. Both opposition groups have established bases in the region, and each is trying to assert itself in Greater Equatoria. On September 9, NAS was reported to have executed nine military personnel from the Eastern Equatoria region for refusing to denounce allegiance to SPLA-IO and pledge themselves to NAS. NAS also accused SPLA-IO of causing insecurity in the Equatorias, including the recent killing of an ICRC staff member, [Kennedy Laki Emmanuel](#), which precipitated the suspension of ICRC operations throughout Greater Equatoria.

Amidst these conflict dynamics, supporters of rival factions continue to engage in inflammatory rhetoric via social media. Previously identified language such as “Nuer wew,” “Cowards,” and “Jienge” are still trending on various platforms, although the context and meaning of these terms continues to evolve. Additionally, the term “kuethpiny” has emerged online, largely to target President Kiir and his allies.

Visualization and Analysis of Conflict Events

Violent Events: September 9 – September 23, 2017

The visualization and table below use data from the Armed Conflict Location and Events Database (ACLED) to portray incidents and trends in conflict-related events in South Sudan from September 9 – September 23, 2017. This is the most recent two-week period for which we are able to generate event data for South Sudan.



Data Source: Armed Conflict Location and Events Database

Date	Event Type	Location	Description	Fatalities
9/11/2017	Battle-No change of territory	Aburoc	Fighting between government and rebel forces in Aburoc, Upper Nile, has forced UNMISS to withdraw 30 humanitarian workers from the area on 11 September. Date of fighting unclear. Rebels claimed 10 killed and shops looted in government attacks on their positions around Aburoc around this time.	10
9/18/2017	Battle-No change of territory	Nhialdiu	Clashes between SPLA and SPLA-IO forces as the latter attacked Nhialdiu town in Unity. Machar's forces claimed to have dislodged the government forces and killed 19 including their area Commander, while one died and four were injured on their side. The government forces claimed to have repulsed the rebels after they burnt down some houses at the outskirts of the town. A later toll given by the area's information minister put the number of fatalities at 25, including six policemen and four civilians killed in the crossfire.	25

Data Source: Armed Conflict Location and Events Database (events in South Sudan with 5 or more fatalities)

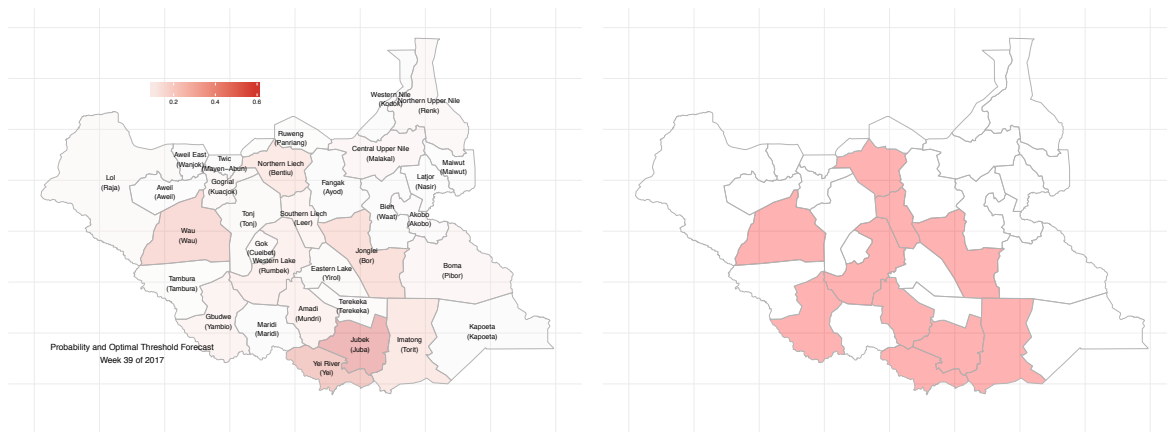
Early Warning of Violence – Predictive Analytics

PeaceTech Lab is collaborating with partners to develop an early warning system using predictive analytics. Using a combination of data sources including the Armed Conflict Location and Events Database (ACLED), the Global Database of Events, Language, and Tone (GDELT), and social media content from Crimson Hexagon, the Lab has built a statistical model for predicting violence in South Sudan before it occurs. Over time the Lab plans to refine and improve this model.

ACLED publishes new updated data every Monday. Each update covers the violent events that occurred up until the Saturday prior to the Monday that data is released. Our statistical model is re-trained every Monday with this updated data and then produces predictions for the upcoming week. The most recent ACLED data was published on September 25, 2017, for the week ending on September 23, 2017 (Week 38). We used that data to train our model and then forecasted for the following week of September 23-30 (Week 39).

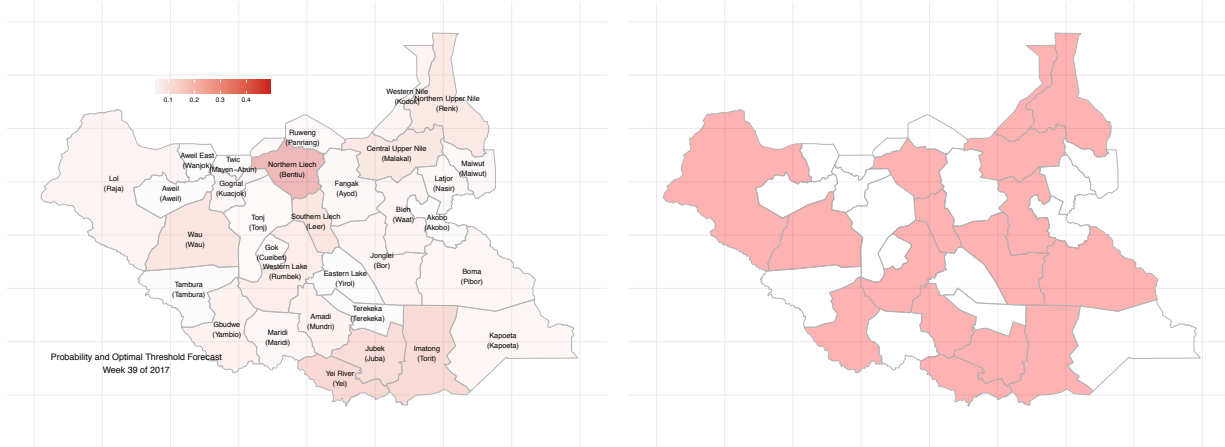
The maps below visualize this system in practice. The model outputs a probability of violence for Week 39 – illustrated by shades of red in the map on the left. Using a probability threshold we then make predictions of which states will experience violence for Week 39– the red states in the map on the right.

Based on our predictions for week 38, compared to the real data that was released for week 38, our models accuracy remains at 70%.



Predicted Violence against Civilians for Week 39

Predicted Battles for Week 39



Nuer Wew/Nuer Weu

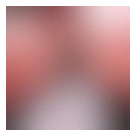
The term “Nuer Wew” is still actively trending on social media. As initially identified in the Lab’s research, the term has variations in spelling and is most often used by Nuer (and some Equatorians) in the SPLA-IO to insult those Nuer who either stayed in, or rejoined, the SPLA-In Government, such as first vice president Taban Deng Gai. The term portrays the Nuer loyal to President Kiir and his government as money-minded or money-lovers. The most frequent online targets include the current Minister of Health, Dr. Riek Kok Gai, the Minister of Petroleum, Ezekiel Lol Gatkuoth, as well as Taban Deng Gai.

As shown in the sample posts below, the term portrays the Nuer loyal to President Kiir and his government as selfish people “whose concepts and reasonings are overridden by money,” or as people who simply “love money (more) than their families.” While these characterizations are not new, some social media users have broken the term into distinct groups, including: “Nuer Wew group under Riek Gai and Nuerbetrayed under Taban.” In this case, the former group refers to those Nuer who stayed with former VP Machar, while the latter category refers to those who rejoined the government after Taban Deng Gai became vice president.

Due to the ongoing clashes in predominantly Nuer areas, the war can be perceived in part as an intra-Nuer conflict between Nuer rebels and “Nuer Wew” loyal to Taban Deng Gai. As one pro-government Nuer minister noted about killings that occurred in Bentiu, “Am saddened by the Lost of our people in the hands of their own people. a price will surely be paid by this outlawed and it will be soon...”¹. This response seems to reflect the commitment by those viewed as “Nuer Wew” to fight against the rebels.

The term can be considered inflammatory because it portrays those loyal to the government as tools rather than individuals following their conscience. Use of the term can indicate that all Nuer think alike and are therefore responsible for the government’s actions.

Sample Posts:

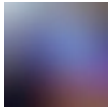


Date: September 10, 2017
Source: Facebook

Nuer wew: = Are Nuer whose concepts and reasonings are overridden by money. These Nuer acquired Nuer wew name during the Nuer genocide committed by Salva Kiir in 2013. Though their close relatives were killed in that genocide, these Nuer were given millions of dollars by Salva Kiir and sent them to Nuer villages to kill any Nuer they found. After successfully killed Nuer villagers and burn down all villages, these

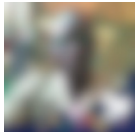
¹ <https://www.facebook.com/lam.kueigwong/posts/10156655430744922>

Nuer were Named Nuer wew by Dinka council of elders who were overseeing their operation in the Nuer land. Today the name Nuer wew remain in use and will be so from generation to generation.



Date: September 15, 2017
Source: Facebook

Does this matter to the Nuer wew? The answer is no, Nuer wew love Money than their Families.

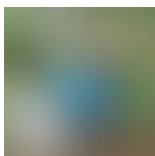


Date: September 10, 2017
Source: Facebook

Breaking news! !

One of NUER WEW the minister of petroleum in the fake unity government of Kiir and his cohorts Ezekiel Lol Gatkuoth has given his biological daughters to the dictator Salvador Kiir.

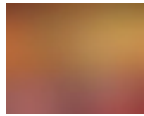
The source said that, the guy wants to strengthen thier relationship with the president not to be relieved in his position for their useless time.



Date: September 17, 2017
Source: Facebook

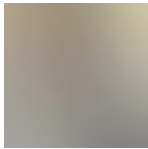
Which one of the most harmful bacteria in south sudan?
A kiir of dinka

B taban of nuer wew
C all of the above mentioned



Date: September 14, 2017
Source: Facebook

Games on the table between Nuer Wew group under Riek Gai and Nuerbetrayed under Taban Deng Gai group.



Date: September 18, 2017
Source: Facebook

Juma Abraham Ya Lam have some humanity in you. Leek is not burn down by Leek but you, the so call "government". Money is not the end, but dignity is important. I know you have sold your soul to idiot JCE long ago but how long will this take you? Is position and money better than having a good name and the right dignity? Please eat your money quietly and shut up. Leave the vulnerable Leek Community alone. You and your like have destroyed Bentiu in the name of money and position. What a shame! If I were you I should be ashamed to even speak.

Kuethpiny

Generally, kuethpiny is a Dinka name for males meaning “the earth will be full,” while the Nuer version of the word is “bi piny thiang.” Kuethpiny can be used in a baby naming ceremony as a lamentation for the previous dead siblings of a newborn. The term can also represent a prayer for no more death in the family, as well as a prayer that the named child will serve relatives to their satisfaction.² The Lab identified this term as inflammatory as part of its research and dialogues with South Sudanese in

² <https://nyamile.co/2015/03/19/african-predictive-naming-of-children-the-case-of-salvatore-kiir-kuethpiny-a-k-a-mayardit/>

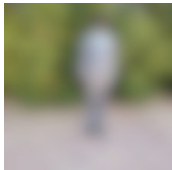
2016. One of the earliest uses of this term in a derogatory manner online can be traced to an article on the South Sudan Nation website in December 2012.³

More recently, social media users are using the term as an inflammatory reference to President Salva Kiir, since his grandfather's name was Kuethpiny. Based on different translations and interpretations of the term, it has been repurposed to taunt Kiir and his supporters, and to describe how his closest allies and family members get access to money and power through him.

For example, the term is now being used to describe the "fullness of the earth (stomachs)" of the current president and his regime, portraying Kiir and his allies as incompetent and corrupt with personal interests that have "eaten" and looted from the public, resulting in their "sated stomachs." Kuethpiny can also be used to describe the loss of thousands of lives in South Sudan due to violence that has filled the earth with dead bodies.

The term has similar connotations as more frequently reported terms such as "food lovers," "nyagat" and "Nuer wew." It is considered dangerous because the term has the potential to mobilize people for retaliatory armed action. In some cases, Kuethpiny has been used to taunt members of the Dinka community that have lost people in armed clashes by insinuating that there is nothing that their "sated" leader can do to help them, because he is just a spectator to their suffering. The term is mainly used by Nuer, Equatorians and Dinka who are against President Kiir.

Sample Posts:



Date: September 18, 2017

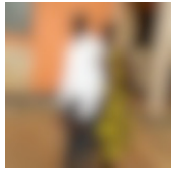
Source: Facebook

KARMA

A Kuethpiny Lual 's fatal crackdown on his own bunch of sycophantic and bootlicking eejits. By so doing, and of course, resorting to the indulged Awanchan decrees, read on the most monopolized SSBC (formerly SSTV) he (Kuethpiny Lual) relieves his most sycophantic and staunch appeasers; governors of unconstitutionally created states, and that's, the so-called governor of Awanchan state of Gokrial and the so-called governor of Western Bieh (lately renamed Fangak State) respectively. He subsequently replaces them with seemingly more or less fresh or honest sycophants. The million dollars question is, who is safe to last longer in this turf....where sycophantic and appeasement business is an order of the day?
Mr. Close

³ <http://www.southsudannation.com/gov-kuol-manyang-and-lt-gen-kuol-deng-kuol-have-miserably-failed-jonglei-state/>

The country's next CJ



Date: September 18, 2017
Source: Facebook

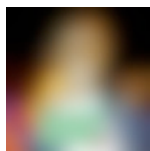
Kuethping lual is doing recycling for sure by replacing Kong nyuon with Kok Ruei twice <kong &Kok>



Date: September 11, 2017
Source: Facebook

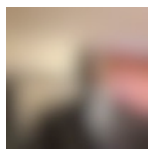
Finally #lolgatkuoth give her daughter to be marriage by (kuethpiny) #aka salva kiir.

The group of crowd hotel ,their daughters become a sources of income,what shame to them!



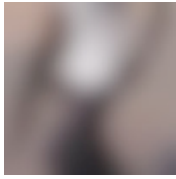
Date: September 15, 2017
Source: Facebook

#.....the tragic aspect of the situation is that the killer Kiir kuethpiny and his cohorts are living in an utter fool's paradise, thinking that they are as strong and all-powerful as before!
[#duplicity](#).



Date: September 19, 2017
Source: Facebook

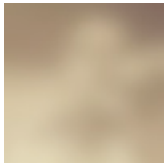
Kirmayardit has neither supporters nor enemies.Good for him Mr kir kuethpiny Lual.God curse us with this monkeyman.oh God heaven



Date: September 19, 2017

Source: Facebook

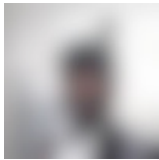
I have been warning people not to celebrate any decision made by Kiir Kuethpiny Lual, most of his decisions are made under the influence by of alcohol.



Date: September 24, 2017

Source: Facebook

ladies and gentlemen allow me to take this opportunity to warmly great all my patriots whom I worry about them,I remember my countryside which had been cruelty demolished by greedy president of illiterates people kuethpiny.thank for your indarlgem more blessings goes to my peoples
love would kiss you
happiness should
and joyful

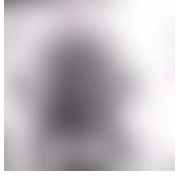


Date: September 17, 2017

Source: Facebook

Hahaha look how Kuethpiny Lual pointed his finger at Arrow girls militants of Equartorian.





Date: August 27, 2017
Source: Facebook

Press release
Office of MonyDit Waa
Mading Cielic!

Dear all,

I have confirm it today that Kiir Kuethpiny has accept to stepdown by the end of september this year through conditions given to him by RPF. I would want to assure the entire South Sudanese Citizens in Diaspora and at home to welcome the wise and visionary leader, Dr. Costella Garang Riiny Lual, a man who will tie the strong relationship between South Sudan and US, UK, Russia, China, France, North Korea, Israel and Germany.

This is true or just ignore it at your own risky.

[#BackToMyDrink!](#)

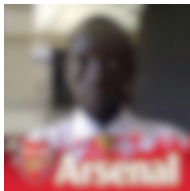
Coward(s)

With violent conflict in South Sudan seemingly leaving no community unscathed, the term “Coward” has also changed to encompass many different target groups. This term was previously used by Dinka to portray Equatorians as people who lack the courage to engage in violent conflict. This was based on the perception that many Equatorians did not support the government in the on-going conflict. In the Lab’s first monitoring report, the term gained additional meaning, as it implied Equatorian rebels were using hit-and-run tactics, rather than direct confrontation, to oppose the government forces. This was particularly relevant in relation to the attacks along major roads leading in and out of Juba. More recently, based on the emergence of new armed rebel movements across the country, some Equatorians have branded other Equatorians as cowards if they continue to side with the government.

During this reporting period, the term is no longer limited to targeting Equatorians. Based on the sample posts below, the current Minister of Information and Communication Michael Makuei and President Kiir are also referred to as cowards. One post notes, “coward Makuei Lueth who embarrass the whole country in J1...” Another post reads, “Salva Kiir, an insecure coward [who] is known for making things up like 2004...” In 2004, then Deputy Chairman and Chief of Staff Salva Kiir feared meeting up with his former boss, Dr. John Garang, thinking he would be arrested or killed. Some social media users view President Kiir’s current actions, such as detaining Paul Malong, as cowardly.

The term is considered offensive because it can provoke the intended victims to take the law into their hands. For example, some credit the use of the term as a mobilizing factor for Equatorians to take up arms against the government.

Sample Posts:



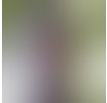
Date: September 14, 2017
Source: Facebook

E-Cowards leave our miss south Sudan alone coz pigmies/dwarfs will never be miss south Sudan atleast girls from Dinka, shilluk and Nuer will always compete 4 miss south Sudan for centuries to come



Date: September 10, 2017
Source: Facebook

According to British quotes to sudan-south sudan in 1900's
Said;
DINKA'S are very disobedience, brave and must be leaders.%
NUER are very disobedience, brave, careless and must not be leaders.
EQUATORIAN are very obedience, coward and the can rule through some body hand.



Date: September 17, 2017
Source: Facebook

"...Please take care!!!
Don't be gossiper like Dinka Bor and their old politician Kuol Manyang,..
Support the right side like Equatoria,..
Don't spread lie and deny the fact like coward Makuei Lueth who embarrass the whole country in J1...
Know your right and fight for it like Shilluk.....



Date: September 14, 2017
Source: Sudan Tribune

Salva Kiir, an insecure coward is known for making things up like 2004 where out of blue he almost spark unnecessary division by accusing John Garang of wanting to lure him to Ramciel in order to be killed. No, our brave people deserve confident, level head leaders like Malong or we're wasting precious lives of our youth.

Date: September 15, 2017
Source: Sudan Tribune

Malakal county Simon,

You are just shit to me. Some Nuers learn what they see and touch only. Why do you want us to give a permission to Riek to come back to South Sudan? Let him use his white army which has never been defeated in the history of South Sudan. Wicked, everything is in our hand including your headquarters Pagak. Majority is with us not with run away coward. Shut up and bow down.

Jienge/Jenge/Jaang

Previously identified in the Lab's research, "Jenge" and its variants continue to appear frequently on social media. This term is used by Nuer, or those in Equatoria, to refer to Dinkas. There are many variations, including in Arabic, Juba Arabic, Murle, and Bari. However, Dinkas also use the traditional term *Jieng* ("the people") to describe themselves; the term may have neutral cultural and historical roots related to the pastoralist backgrounds of many Dinkas.

Social media users who are non-Dinka continue to associate the term "Jienge" (referring to Dinka) with animals, nomadism, nakedness, primitivism, and oppressiveness. These references tend to reflect on-going anger and frustration directed at the government, in particular the blurred lines between Jieng Council of Elders (JCE), a self-appointed body that claims to champion the interests of the Dinka, and the President. For some social media users, the JCE, the Dinka people and the President are one and same thing. In this context, the JCE can be considered the mastermind of most of the destructive policies and decisions adopted by President Kiir. According to a sample post below, "The JCE is the government while Mr. President is just a puppet. In that case, South Sudanese will never stop pointing fingers to Dinka for the collapse of the government."

The JCE is also a highly controversial and divisive topic among Dinka on social media. Some Dinka are bitterly opposed to the influential role of the JCE, with some Dinka groups accusing others of favoritism vis-à-vis the JCE. For example, some Bor Dinka have charged the Rek Dinka of Northern Bahr el Ghazal with using the lobby group to empower themselves at the expense of other Dinka.

Historically, the term Jenge can degrade Dinkas by associating them with cattle, and by characterizing the targeted person or group as illiterate, primitive, or barbaric. Current usage scapegoats the Dinka people generally based on the perceived aggressive actions of the Dinka-dominated government and armed forces.

Sample Posts:

Date: September 17, 2017
Source: Sudan Tribune

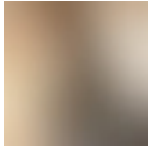
Jienge Defender General,

Oh yes, if eating monkey intestines has made me more intelligent than a Jienge who feeds on nothing, then so be it. Cows are foolish animals and must be herded and directed and jengens are no different. Did

you hear that people kept monkeys like cows? No. A monkey is a free and wukd animal, a cow □ is kept, whipped and slaughtered and so do Jienges with no independent min

Date: September 15, 2017
Source: Sudan Tribune

Dinka refer to themselves as mony-jang which means "men of men", in the Dinka thinking, they represented the standard of what's ideally human and therefore best," notes historian Francis Deng, Dinkaland is the most beautiful, the Dinka race the perfect example of creation, Dinka cattle the ideal wealth and Dinka was best model of dignity, and in the face of attack, brutality was normal.



Date: September 15, 2017
Source: Sudan Tribune

Mayom....listen here....Who is Paul Malong the mistress of Museveni of Uganda? "Ekanya" in Luganda language...!!
You are intentionally denying the cause of war in South Sudan...because you are a jengee ...
First of all....how do you come to the conclusion that junubin are destroying the country because of lack of understanding.....
What sort of understanding are you talking about, when you, yourself ...begin to preach lies in favor of the jengee oppression and the exterminat...

Date: September 16, 2017
Source: Sudan Tribune

Anyone who grew up in Juba knows these stories narrated by our fathers, friends and relatives that most jienges from Bor used to look after Bari cows in the late 60s-70s and were given milk in the evenings as reward. They also used to ride on donkeys to fetch us water from the Nile. Chief Anderea Gore used to whip those who dared to come naked to Juba, so the word aryan jienge.???

Date: September 18, 2017
Source: Sudan Tribune

How could any person with a sound mind differentiate between the two while the that same government led by a Dinka president is totally run by an elders so called JIENG COUNCIL OF ELDERS from the same tribe. The JCE is the government while Mr. President is just a puppet. In that case, South Sudanese will never stop pointing fingers to Dinka for the collapse of the government.

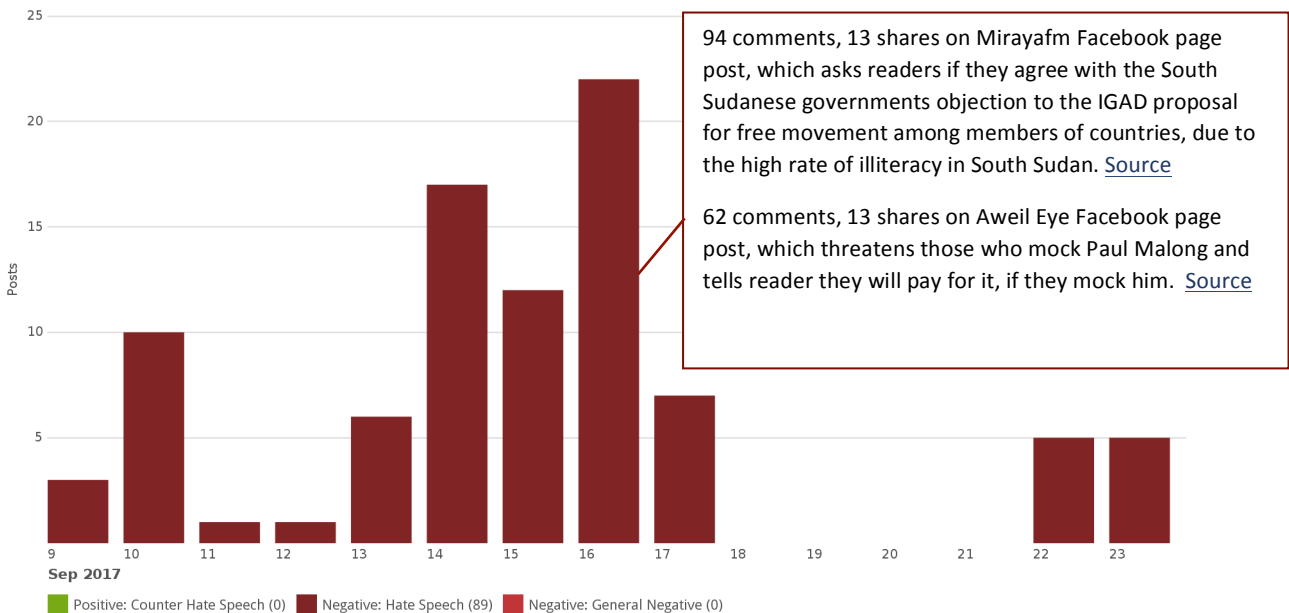
Visualizations - Overall Hate Speech¹

Volume of Hate Speech

The visualizations below show trends surrounding social media content identified as hate speech surrounding the South Sudan conflict. Content sources include: Facebook, Twitter, blogs, forums, new comments, and YouTube.

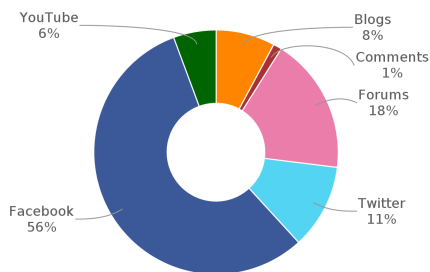
Dates: September 9 – September 23, 2017

Number of posts: 89



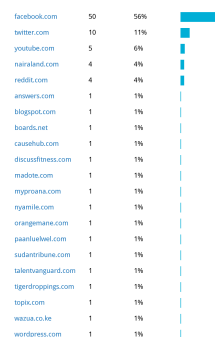
South Sudan - Hate Speech Monitor... — Volume of Posts (Opinion Analysis) from 9/9/17 to 9/23/17

Content Sources for Hate Speech



South Sudan - Hate Speech Monitor... — Source Breakdown from 9/9/17 to 9/23/17

Top Sites for Hate Speech

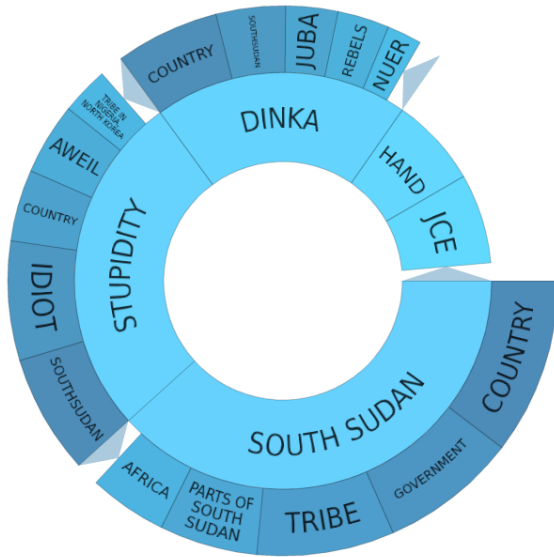


South Sudan - Hate Speech Monitor... — Top Sites from 9/9/17 to 9/23/17

¹ This section and the next display content from hate speech categories, which were produced using a combination of hand coding and machine learning using social media data. Crimson Hexagon's ForSight platform was used to filter for content of interest and train posts to categories. Posts that contain the terms identified through the lexicon and include inflammatory language were categorized as "hate speech".

Topic Wheel of Hate Speech

The visualization below shows top-level and sub-level themes in content identified as hate speech.



South Sudan - Hate Speech Monitor... — Topics from 9/9/17 to 9/23/17

Word Cloud of Hate Speech

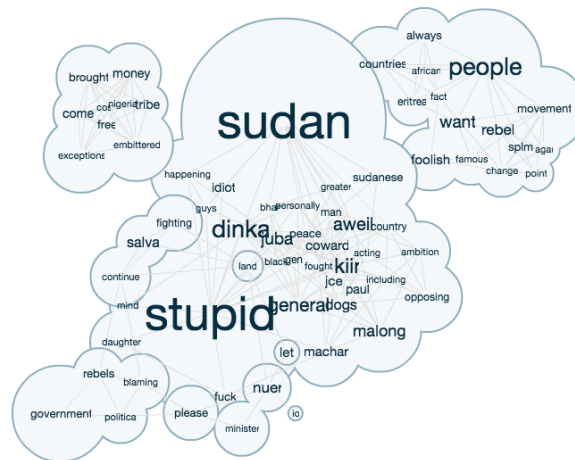
The visualization below shows recurring words and themes in content identified as hate speech.



South Sudan - Hate Speech Monitor... — Words from 9/9/17 to 9/23/17

Cluster of Terms in Hate Speech

The cluster visualization below shows connections between terms in social media content identified as hate speech.



South Sudan - Hate Speech Monitor... — Clusters from 9/9/17 to 9/23/17

Visualizations - Word Cloud by Term

The word cloud visualizations below show recurring words and themes in posts used alongside each of the terms we feature in this report.

Nuer Wew



Kuethpiny



Jienge



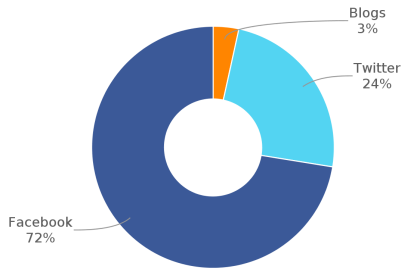
Coward



Visualizations - Content Sources by Term

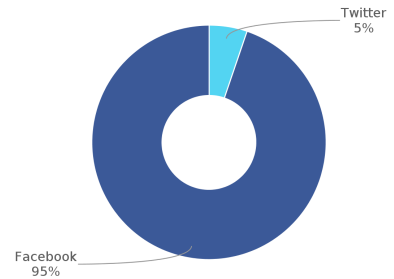
The charts below show the type of platforms as percentage of overall content in which each of these terms is used during the reporting period.

Nuer Wew



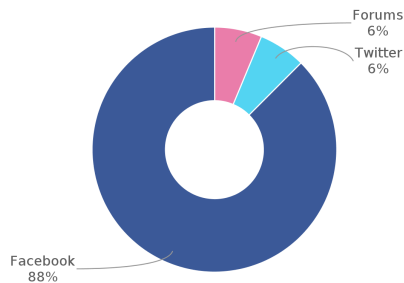
South Sudan - Hate Speech Monitor... — Source breakdown from 5/13/17 to 9/24/17

Kuethpiny



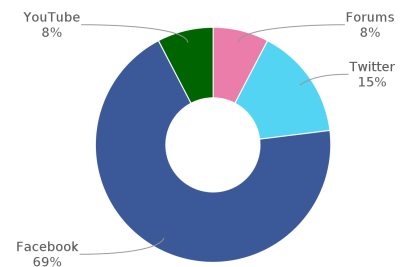
South Sudan - Hate Speech Monitor... — Source breakdown from 5/7/17 to 9/22/17

Jienge



South Sudan - Hate Speech Monitor... — Source breakdown from 8/31/17 to 9/24/17

Coward

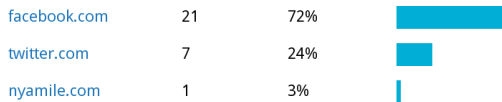


South Sudan - Hate Speech Monitor... — Source breakdown from 8/21/17 to 9/24/17

Visualizations - Top Sites by Term

The charts below show the top sites in which each of these terms has been used since the beginning of the reporting period.

Nuer Wew



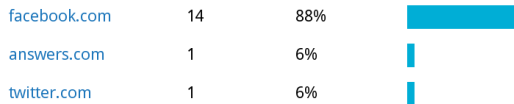
South Sudan - Hate Speech Monitor:... — Top Sites from 5/13/17 to 9/24/17

Kuethpiny



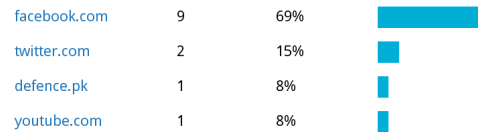
South Sudan - Hate Speech Monitor:... — Top Sites from 5/7/17 to 9/22/17

Jienge



South Sudan - Hate Speech Monitor:... — Top Sites from 8/31/17 to 9/24/17

Coward



South Sudan - Hate Speech Monitor:... — Top Sites from 8/21/17 to 9/24/17

Notes

The terms featured in this report were prioritized based on volume of posts from our social media monitoring and analysis. Please note that we are only able to collect and analyze public social media content, which limits our ability to access a significant amount of posts including hate speech. This is particularly true for South Sudan, given that many of the major platforms for inflammatory comments and posts are largely private, including Facebook and WhatsApp. In our own monitoring, we have seen examples of terms identified in our lexicon of hate speech terms that we have not been able to include as examples above since they are primarily used in private user pages.

For any comments or questions about this report, or to be removed from the distribution list, please contact Theo Dolan at theo@peacetechnology.org.