Iranian Digital Interference in the Arab World

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ABSTRACT

Iranian interference in the politics of Arab countries has become more self-evident since the Arab Spring of 2011. Iran has been trying to widen its influence in the region in a political confrontation with Saudi Arabia. In October 2018, Twitter released 770 accounts with potential Iranian origins. In this study, we examine Arabic-language tweets from these 770 accounts linked to Iran. We find that: (1) Arabic is the third most used language in the Iranian data set; (2) Arabic tweets were not aiming to socially engage with other Arab users but rather to promote certain websites, and more than 69% of the links are to pro-Iran Arabic-language news websites; (3) the most widely shared websites extracted from Arabic tweets in our data set push an Iranian political narrative, including criticism of Saudi Arabia and support of the Syrian President Bashar al-Assad.

INTRODUCTION

There are almost 415 million Arabs living in 22 countries across the Arab world.[1] Around 44% of Arabs have access to the Internet, with Bahrain and Qatar having the highest Internet penetration rates at 98% and 94%. In addition, 34% of Arabs use Facebook even in countries with volatile political environments such as Syria.[2]

With the growing significance of social media platforms worldwide, foreign actors have leveraged the affordances of these platforms to meddle in the politics of other nations. While Iran has constantly interfered in Arab politics, either militarily or by supporting non-state actors, digital interference operations appear to be a recent strategy adopted by Iran to exert influence in the Arab world. This study therefore aims to investigate whether there is significant evidence of Iranian digital interference that targets Arabs.

In October 2018, Twitter published two data sets comprising 3,841 accounts affiliated with the Internet Research Agency (IRA), and 770 accounts that could be traced back to Iran. These accounts were suspended by Twitter in August 2018 for engaging in coordinated manipulation on the platform. Twitter believes that the information operations linked to Iran are potentially backed by the state.[3]

In this study, we analyse the Arabic tweets posted by the 770 suspended Twitter accounts in order to explore the patterns and messages that they promoted to Arab Twitter users. Our research questions are: (1) How much Arabic content is there compared to content in other languages? (2) What types of content were being shared by the Iranian accounts in Arabic? (3) What is the extent of Iranian digital interference in the Arab world?

IRAN VS THE ARAB WORLD

Iran's meddling in the politics of the Arab states has become more conspicuous since the Arab Spring of 2011. Iran has been trying to widen its influence in the region in its political jousting against Saudi Arabia which is sometimes referred to as "the Arab Cold War".[4] Although the two regional rivals have never declared war, the two players have been involved in proxy wars in the region including Syria and Yemen.

Iran and Saudi Arabia have regularly taken opposing political stances on issues in the region. The Arab Spring came as a surprise to the Iranian government, which later supported protests in the Shia-majority Bahrain.[5] In contrast, Saudi Arabia intervened by sending 1,200 armed forces personnel to support Bahrain's Sunni monarchy.[6] The Saudi-Iranian dispute has escalated in Syria to include indirect military confrontations.

Syria has always been seen as an ally to Iran and took Iran's side during the 1980–88 Iran–Iraq war.[7] Iran has supported Assad's regime since the uprisings of the Arab Spring in 2011. In contrast, Saudi Arabia — a main supporter of Assad's opposition in Syria — has been determined to disrupt Iran's role and weaken Tehran's power in the region.[8] In 2015, however, it was reported that a top Iranian general had coordinated the Russian military intervention in Syria, thereby reshaping the Syrian conflict.[9] Backed by Iran and Russia, Assad has regained the military momentum, and the opposition has scattered.[10]

The war in Yemen provides another instance of Iran and Saudi Arabia supporting opposing sides. Tehran has provided support to the Shia Houthis in Yemen but has not deployed forces in the country. Saudi Arabia regards the Houthis as an Iranian-backed group.[11]

IRANIAN DIGITAL INTERFERENCE

Iran has had a strong media presence in the Arab world since the launch of satellite TV. *Al Alam* TV is a 24-hour Arabic satellite channel broadcast from Tehran that was established in 2003.[12] *Al Alam* has gained popularity among Shiite Muslims in the Arab world for its hard-hitting coverage.[13] In 2006, Iran launched a religiously oriented Arabic satellite channel called *Al Kawthar TV* in order to advance the ideas of Shia Islam among Arabs.[14]

With the growing importance of digital technologies, Iranian digital interference operations have gathered momentum. In August 2018, Facebook removed 652 pages, groups, and accounts on Facebook and Instagram originating from Iran for engaging in a "coordinated inauthentic behaviour".[15] These operations targeted people in the Middle East, Latin America, the UK, and the US. In October 2018, Facebook announced the removal of another 82 pages, groups, and accounts on Facebook and Instagram. This time the company announced that these accounts and pages targeted people in the US and the UK.[16] Some of these accounts masqueraded as American citizens pushing anti-Saudi and anti-Israel narratives.[17]

Similar interference operations have existed on Twitter. In August 2018, Twitter announced the suspension of the 770 accounts that are analysed in this study. These accounts promoted pro-Iranian government messages and acted as amplifiers for websites that push an Iranian political narrative.[18] In a similar context, the cybersecurity firm FireEye has released a report indicating a network of websites and social media accounts targeting people in the US, UK, Latin America, and the Middle East. The network intended to promote pro-Iranian messages including anti-Trump, anti-Israel, pro-Palestine, and anti-Saudi narratives.[19,20] Other websites linked to Iran were uncovered in November 2018, with 70 news websites found to be targeting people in various countries from Russia to Afghanistan.[21] Despite increasing political tension between Iran and the Arab world, the Iranian networks targeting Arabs remain under-studied to date.

FINDINGS AND ANALYSIS

The data set analysed here is part of Twitter's *Elections Integrity* initiative released to enable research of information operations on the platform. Twitter published data on 770 accounts linked to Iran. Twitter has not stated conclusively whether these accounts are automated bots or manually managed trolls. In the Iranian data set, there are 1,122,936 tweets from 770 accounts.

The oldest account was created in April 2009, and the newest was created in August 2018. While checking the creation dates, we found that around 40% were created in 2017 alone. Creation dates peak around May 2017 and January 2018 (Figure 1), corresponding with the Iranian presidential elections that took place in May 2017 and with the Iranian protests in January 2018. This seems to indicate that the accounts were initially created to support the Iranian state.

Figure 1: Creation Dates of the Iran-linked Twitter Accounts
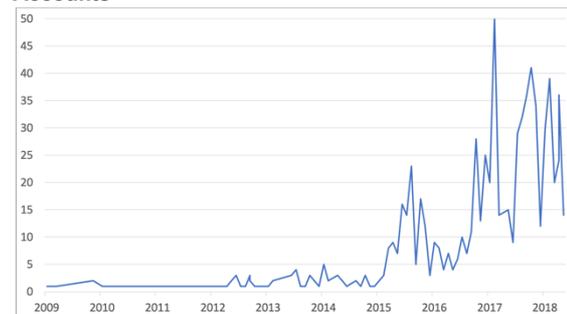
Source: Authors' calculations based on the data provided by Twitter.

These 770 Twitter accounts were followed by 862,003 accounts. The most followed account, with 41,489 followers, stated its geolocation as Saudi Arabia. Among the ten most followed accounts, six claimed to be located in Saudi Arabia. Almost 62% of the accounts had fewer than 500 followers. At the same time, these 770 accounts were following 805,550 accounts, with 56% of them following fewer than 500 users. This could indicate that some of these accounts were more active than others.

The tweets are in 50 different languages. French is the most popular at 29%, followed by English (25%) and Arabic (14%). Iran's main language, Farsi, only represents 8% of the tweets. Of the 770 accounts, 392 (over half) tweeted at least once in Arabic.

We focused our analysis on the tweets written only in Arabic, which mainly targeted Arab users. There are 154,326 Arabic tweets in this data set. These tweets had gained 337,379 likes, representing an average of two likes per tweet. Their engagement with Arab users could therefore be considered to be quite limited, perhaps explained by the low penetration of Twitter in the Arab world and its position as an elite platform.

There are more than 23,000 different hashtags associated with the Arabic-language tweets. The most frequently used hashtags reflect issues of Iranian interest. Among the most frequently used hashtags in our data set, five referred to countries that Iran has a political

interest in. The most frequently used hashtag is السعودية # (#SaudiArabia; Figure 2). Anti-Saudi hashtags were salient in this data set, for example one which criticizes the Saudi king فساد_سلمان_بن_عبد_العزيز#(TheCorruptionOfSalmanBinAbdulaziz). The second most used hashtag is اليمن# (#Yemen) which might be relevant to the Iranian interest in Yemen as well. In addition, pro-Palestine hashtags were also popular, including المسيرة_عاجل# (#TheMarchBreaking) and فلسطين# (#Palestine) hashtags which pushed tweets about the relocation of the US embassy to Jerusalem, which provoked mass outcry and protests among Palestinians.

Other country-related hashtags included ليبيا_المختار# (#Libyaalmokhtar) — a reference to Omar Mukhtar, the leader of the Libyan resistance against the former Italian colony. This hashtag was used to refer to the website Libyaalmokhtar.com. In general, the Arabic hashtags referred to countries and topics the Iranian-linked tweets were trying to push.

Figure 2: Top Hashtags Used in Arabic Tweets, by Count
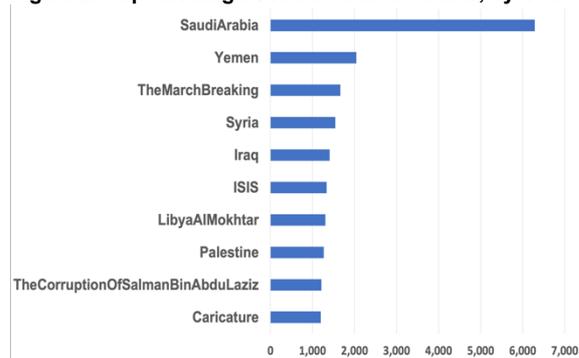
Source: Authors' calculations based on the data provided by Twitter.
Note: The hashtags were written in Arabic (translations supplied by the authors).

Impersonating news outlets is one of the main tools the Iranian accounts used to intervene in the Arab world (Table 1). Nine of the ten most active accounts producing Arabic-language tweets imitated Arabic news services, describing themselves as news services from various Arab countries. These accounts retweeted each other and shared links to the same websites. For instance, the most active account @alsaudianet retweeted 4,870 tweets from the second most active account, @alsaudiatimes. These two accounts promoted a narrative that criticized the Saudi government's domestic and foreign policies, including the war in Yemen. The public Facebook page to this account is called No2al.Saud, titled as فضائح ال سعود (translated as "Scandals of the Saudi family"). This page was active during the time of the analysis in January 2019. No2al.Saud page was shared 1,130 times in the tweets in the data set, and

"thesaudiatimes" page was shared 1,794 times. Using Facebook's new feature that shows the location of the admininstrators of pages, we determined that these two Facebook pages are managed by administrators in Iran. The No2al.saud Facebook page is followed by more than 250,000 users. Both pages are currently inactive.

Similarly, the @harkatweet account pushes an anti-Saudi narrative, linked to an active website called Hourriya-tagheer.net. The @alwaienewsnet account tweeted news from Egypt, Iraq, Saudi Arabia, Bahrain, and Syria. In contrast, the @alhadathps account promotes a pro-Palestinian narrative.

Another account, that was anonymized by Twitter, impersonates a news outlet that focuses on Syria. It pushes a pro-Iranian government position. From this account, 13.4% of the Arabic tweets shared links to almahawer.com which promotes pro-Assad news. The seventh most active account, @freesaudiawomen, does not advertise itself as a news outlet, but rather claims to support freedom for Saudi women. It retweets heavily from the @alsaudiatimes account; 51% of its Arabic tweets are retweets from @alsaudiatimes.

Tweets from @Eqlimolsharq supported an anti-Saudi Arabia narrative. The account @toons_online also attacked Saudi Arabia and retweeted several times from @freesaudiawomen and @alsaudiatimes. We found a Facebook page associated with @toons_online. The page posts in English and focuses on promoting anti-Trump news. In addition, @iuvm_arabic account identifies itself as part of the International Union of Virtual Media (IUVM). About 34.7% of this account's tweets include links to iuvmpress.com. This website is part of the IUVM organization that runs several websites.

In general, these accounts use Modern Standard Arabic (MSA) (*Fusha*) in their tweets, and do not reveal their Iranian origins in their bios or geolocations. MSA is the formal language used in books, newspapers, official speeches, and communications. In contrast, Arab Twitter users tend to use the less formal Dialectal Arabic on social media.[22] The purpose of the accounts in the data set can therefore be considered to be sharing news and links to websites, rather than aiming to engage in conversations with other users, or trying to impersonate Arab users through the use of dialects.

Table 1: Ten Most Active Users Tweeting in Arabic

Account Screen Name	Tweets (N)	Reported Geolocation
alsaudianet	13,812	Saudi Arabia
alsaudiatimes	11,766	Saudi Arabia
harakatweet	11,466	Saudi Arabia
alwaienewsnet	11,241	Unidentified
alhadathps	10,672	Palestine
Hashed Name	9,296	Syria
freesaudiwomen	8,984	Saudi Arabia
eqlimolsharq	6,296	Saudi Arabia
toons_online	5,344	Unidentified
iuvm_arabic	5,281	Saudi Arabia
Total	94,158	

Source: Authors' calculations based on the data provided by Twitter.
Note: Twitter has hashed accounts with fewer than 5,000 followers in this data set to avoid false positives.

Table 2: Top Shared Websites

Website	Links (N)	Share %
facebook.com	11,842	15.0
alhadathps.com	9,591	12.0
alwaienews.net	9,038	11.0
hourriya-tagheer.org	8,873	11.0
jordan-times.com	8,764	11.0
iuvmpress.com	7,225	9.0
al-saudia.net	4,291	6.0
libyaalmokhtar.com	3,184	4.0
alkawthartv.com	2,677	3.0
syriaalhadath.com	1,547	2.0
Other	12,591	16.0
Total	79,623	100

Source: Authors' calculations based on the data provided by Twitter.
Note: al-saudia.net, syriaalhadath.com, and jordan-times.com are currently inactive.

Out of all links shared, 69% are to websites that promote Iranian political messages. This could support the idea that the Iranian accounts intended to mainly spread news that supports pro-Iranian narratives. Within the 154,326 Arabic tweets, 79,623 links were shared from 396 websites. Almost 84% (67,032) of the links were directed to only ten websites (Table 2). Around 15% (11,842) of the links were to Facebook, which is more popular among Arabs than Twitter. This could indicate that similar operations are taking place on Facebook as well.

The website alhadathps.com was shared 9,591 times; this website is linked to @alhadathps account. Therefore, we could conclude that this website might have originated from Iran as well. This website focuses on Palestinian news and has not been active since

November 2018. The Facebook page linked to it has more than 9,000 followers. We believe that this website was named alhadathps to mimic another Saudi website called alhadath.net. Similarly, alwaienews.net is linked to @alwaienewsnet account and the website has not been updated since October 2018. Jordan-times.com, which was active during the time of the analysis, was also last updated in October 2018. This website claims to be a Jordanian-based website. In addition, Hourriya-tagheer.org website is linked to @harakatweet account and to the Facebook page hourriyah.official. This website promotes criticism against Saudi Arabia and the Saudi royal family.

Similarly, the Arabic version of the website iuvmpress.com was shared 7,225 times in the Arabic tweets. It is part of the IUVM organization that runs several websites. The iuvm.org website publishes in nine languages including Farsi. An earlier report has linked this organization to Tehran.[21] The website runs four other services including IUVM TV and IUVM Press. The Arabic version of IUVM Press pushes Iranian government messages including pro-Assad and anti-Saudi news.

Al-saudia.net website is currently inactive, but it is directly linked to the @alsaudianet account. It is also linked to an Instagram account with the same name. This reflects that the Iranian interference might include other platforms as well. Similarly, libyaalmokhtar.com, which focuses on Libyan news, is linked to a suspended Twitter account, a Facebook page, and an Instagram account. Alkawthartv.com represents the *AlKawthar TV* channel, which was founded in 2006. The channel is known for its affiliation with Iran, and for targeting Arab audience. Syriaalhadath.com focuses on Syria and pushes a pro-Assad narrative.

Table 3: The Registrant Organizations of the Top Shared Websites and the Creation Date of Each Website

Websites	Registrant Organization	Creation Dates
alhadathps.com	Alhadath Palestinian	2018
alwaienews.net	Arab Domain Provider	2012
hourriya-tagheer.org	Deijla Art	2015
jordan-times.com	Protected	2016
iuvmpress.com	Persian Domain Provider	2015
al-saudia.net	Protected	2017
libyaalmokhtar.com	Libya	2015
alkawthartv.com	SazmanHost	2005
syriaalhadath.com	Arab Domain Provider	2012

Source: Authors' calculations based on data provided by Twitter, and looked up using whois.icann.org

We next focused our attention on the most shared websites in the Arabic tweets. We started by locating the IP addresses of the websites listed in Table 2. With the exception of Facebook, all the websites use web-hosting services from companies including Cloudflare, Hetzner, Namecheap, and OVH. Hence, the IP location was not directed to the websites' locations. Later, we used whois.icann.org, a service provided by ICANN (Internet Corporation for Assigned Names and Numbers), to obtain data on the registered domain holders (Table 3). We found that a single email address was used to register alwaienews.net, and syriaalhadath.com.

This email had been registered under an inaccurate location. These websites are registered by an organization called Arab Domain Provider. Using WHOIS database, we found that this organization has also registered nilenetonline.com which was previously found to have Iranian origins.[21] We could not find any other information about the Arab Domain Provider organization. The aforementioned websites were created in 2012.

A second group of websites in our data set was also found to share one registrant email, namely: iuvmpress.com, iuvmnews.com, and ar.islamic-sources.com. The two websites iuvmpress.com and iuvmnews.com are registered under one organization: Persian Domain Provider.

The website alkawthartv.com is registered by an organization called SazmanHost. Alkawthartv.com is known for being funded by Iran, since the launch of the TV channel in 2006. libyaalmokhtar.com is registered using false registration information, including a false location. The address used to register this website is "Tripoli, Tripoli 1234567890 LY". The organization it claims to be registered under is called "Libya".

Moreover, hourriya-tagheer.org is linked to the organization Dijlah Art which claims to be located in Iraq. However, Jordan-times.com and al-saudia.net use a service that protects their information and therefore we could not find further details on them. In general, the Iranian influence campaigns targeting Arabs might have started by creating news websites and sprung up on social media afterwards. In addition, the false registration of information prohibited us from knowing the origins of these websites.

CONCLUSIONS

Our main conclusions are that: (1) Arabic is the third most used language in the Iranian data set; (2) Arabic tweets were not aiming to socially engage with other Arab users but rather to promote certain news websites, and more than 69% of the links are to pro-Iran Arabic-language news websites; (3) the most widely shared websites included in Arabic tweets push an Iranian political narrative, including criticism of Saudi Arabia and support of the Syrian president Bashar al-Assad.

If an Arab user interacted with any of the Twitter accounts, Facebook pages, or websites, it would be hard to detect the Iranian origins of these websites. Unfortunately, most of the websites are registered with false contact information which makes tracing the origins of the websites very hard and sometimes impossible. We still know very little about the Iranian interference in the Arab world. It is clear, however, that the interference network involves various platforms and websites that target Arabs. In our future work, we will conduct further analysis including the new data sets published by Twitter.

ABOUT THE PROJECT

The Project on Computational Propaganda (COMPROP) based at the Oxford Internet Institute, University of Oxford, is an interdisciplinary team of social and information scientists researching how political actors manipulate public opinion over social networks. This work includes analysing the interaction of algorithms, automation, politics, and social media to amplify or repress political content, disinformation, hate speech, and junk news. Data memos are designed to present quick snapshots of analysis on current events in a short format, and although they reflect methodological experience and considered analysis, they have not been peer-reviewed. Working papers present deeper analysis and extended arguments that have been collegially reviewed and engage with public issues. COMPROP's articles, book chapters, and books are significant manuscripts that have been through peer review and formally published.

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