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Syrian Refugee Crisis Data Report

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Five years after the outbreak of the Syrian civil war, the daily death toll continues to climb, and the massive displacement of civilians has become one of the [greatest humanitarian crises](#) in modern history. Social media data provide new insight into how the world watches a humanitarian disaster unfold in real time. In particular, the temporal granularity and networked structure of Twitter data provide key insights into what events grab global attention, how perceptions of refugees shift over time, and whose narratives about refugees gain traction.

Journalistic reports suggest that [viral images](#) of refugee children, online campaigns [welcoming refugees](#), and a frightening [Islamophobic backlash](#) of anti-refugee sentiment have dominated Western online discussions of Syrian refugees over the past two years. However, less is known about how perceptions of Syrian refugees in the Arab World have evolved as the crisis has intensified.

As more than [half of the Syrian population](#) has been killed, internally displaced, or forced to flee, neighboring Turkey, Lebanon, and Jordan—not to mention Iraq and Egypt—have absorbed the [vast majority](#) of refugees. This has added tremendous strain to already fragile political and economic conditions. At the same time, the Gulf States have [come under fire](#) for neglecting to accept refugees.

In this tense geopolitical climate, how do Arab citizens view the crisis unfolding in their backyard? How salient is the Syrian refugee crisis for those who are not directly affected? How do complex conflict dynamics and sectarian identities drive perceptions of Syrian refugees? How do diverse actors exploit the refugee issue for their own political or ideological gain?

A dataset of 1.6 million Arabic tweets about Syrian refugees² collected at NYU's Social Media and Political Participation (SMAPP) Lab between February 2015 and July 2016, as well as publically available Google Trends data, provide preliminary answers. While it certainly does not comprise a representative sample, the demographic makeup of the Arab online sphere has

¹ Data analysis in this report was performed by Alexandra Siegel, Graduate Research Associate of the SMAPP lab under the direction of Professor Joshua Tucker, Co-Director of the SMAPP lab. We gratefully acknowledge financial support from the INSPIRE program of the National Science Foundation (Award #1248055).

² These tweets were collected using the Twitter Streaming API to collect all tweets with a mention of some variation on the Arabic word for “refugee.” The collection was then filtered to only contain tweets that included the Arabic words “Syria” or “Syrian” in order to remove tweets about Palestinian refugees and other non-Syrian refugees in the dataset.

become progressively [more diverse](#) in recent years, and the percentage of social media uses that report discussing politics, community issues, or religion online ranges from 60 to 81% across the region. Social media sites are remarkably popular in the Gulf, with Saudi Arabia boasting the [highest Twitter penetration](#) in the world. As a result, social media data provide detailed real-time views into shifting narratives and interest levels in response to events on the ground.

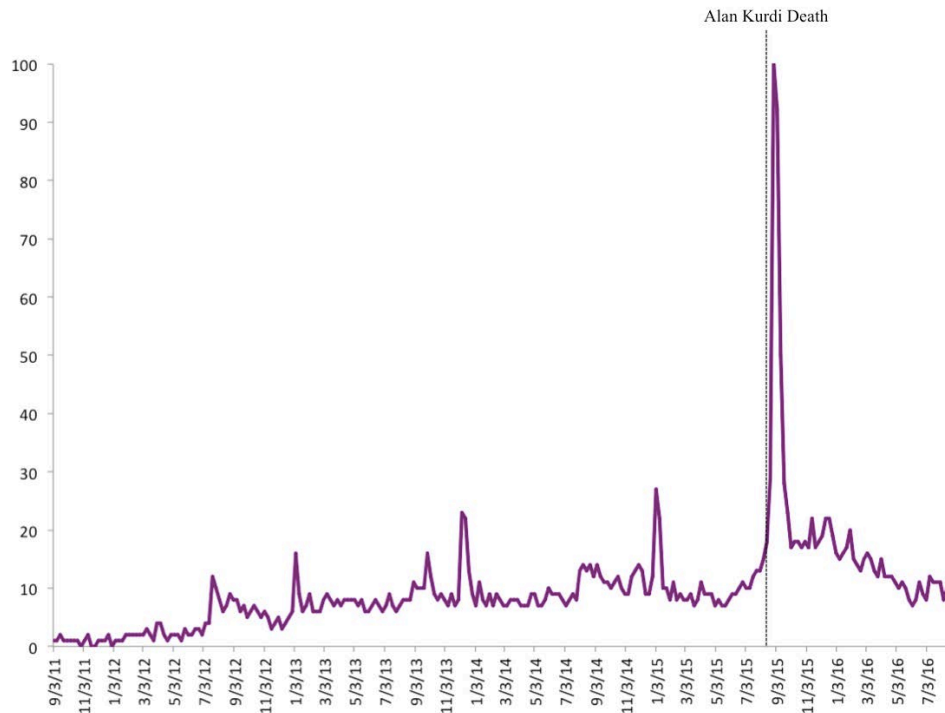
In particular, our data offers several key insights into 1) When and where the Syrian refugee crisis has been most salient; 2) How key moments have given rise to competing narratives from everyday citizens, political elites, and extremist groups; and 3) which characterizations of refugees have gained the most traction in the Arab online sphere:

The refugee crisis became most salient online following Alan Kurdi's Death

Both Google Trends data and Twitter data suggest that although the Syrian refugee crisis has become increasingly dire over the past five years, attention to the plight of Syrian refugees in the Arab online sphere has been quite intermittent. While particular refugee-related hashtags and online awareness campaigns have briefly become popular, the topic has received relatively little attention overall. Despite this, our data suggests that there was a dramatic uptick in interest in the Syrian refugee crisis for about three weeks in September 2015. This period of increased attention was sparked by the drowning of Alan Kurdi, a Syrian refugee child. The photo of his body washed up on a Turkish beach [went viral](#) internationally on social media and received a great deal of coverage through traditional media channels as well.

Google Trends data, which documents the relative popularity of Google searches for the Arabic term for “Syrian Refugees” since the outbreak of the conflict in 2011, demonstrates the noteworthy rise in attention to the issue following Alan Kurdi’s death. Because Google Trends data enables us to assess the popularity of a given search term relative to all other search terms in real time, it is particularly useful for evaluating shifting levels of interest in the refugee crisis. In the figure below, the large spike that occurs in early September immediately following Alan Kurdi’s death is by far the biggest uptick in relative search volume throughout the five-year period.

Weekly Relative Frequency of Arabic Google Searches for “Syrian Refuges” September 2011 – September 2016

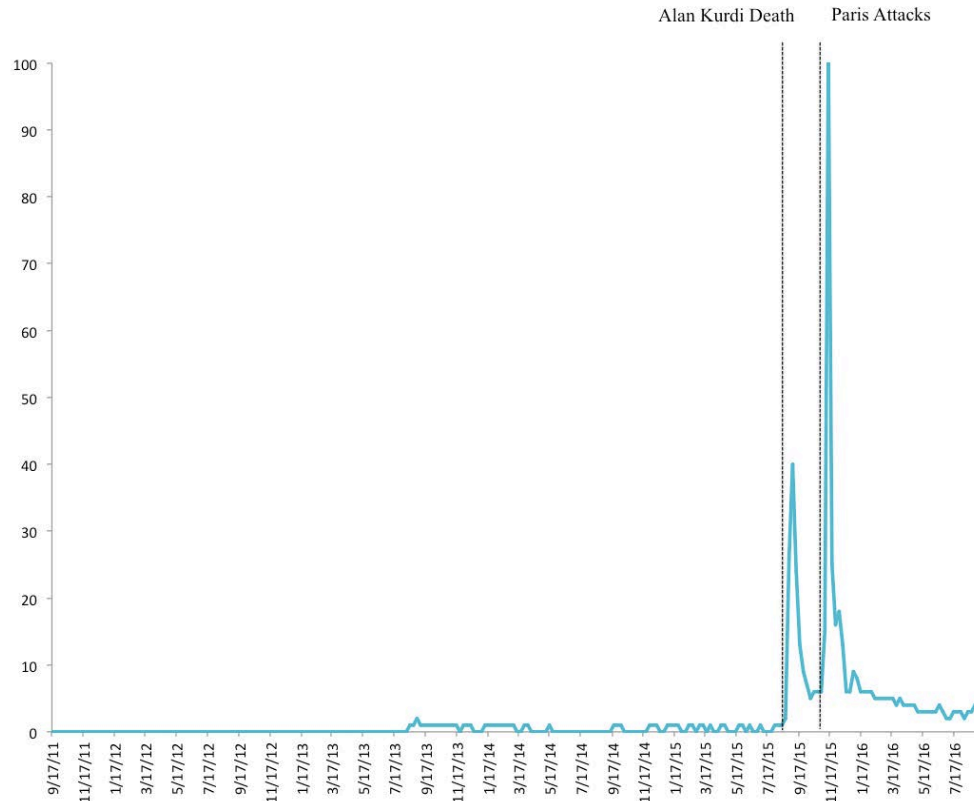


Data: Google Trends; Figure: Alexandra Siegel

Numbers on the Y axis represent search interest relative to the highest point on the plot for the given region and time. A value of 100 is the peak popularity for the term. A value of 50 means that the term is half as popular. Likewise a score of 0 means the term was less than 1% as popular as the peak.

Comparing Arabic Google Trends data to the English language data presented in the figure below provides further insight. While Alan Kurdi's Death also caused a dramatic uptick in Google Searches for the English phrase "Syrian Refugees," the largest spike in English language searches over the past 5 years came following the November 2015 Paris attacks. This suggests that while humanitarian stories may galvanize interest in the refugee crisis across the globe, in the West, Islamophobia and general fear generated by terror attacks also draws a great deal of attention to the issue.

Weekly Relative Frequency of English Google Searches for “Syrian Refuges” September 2011 – September 2016

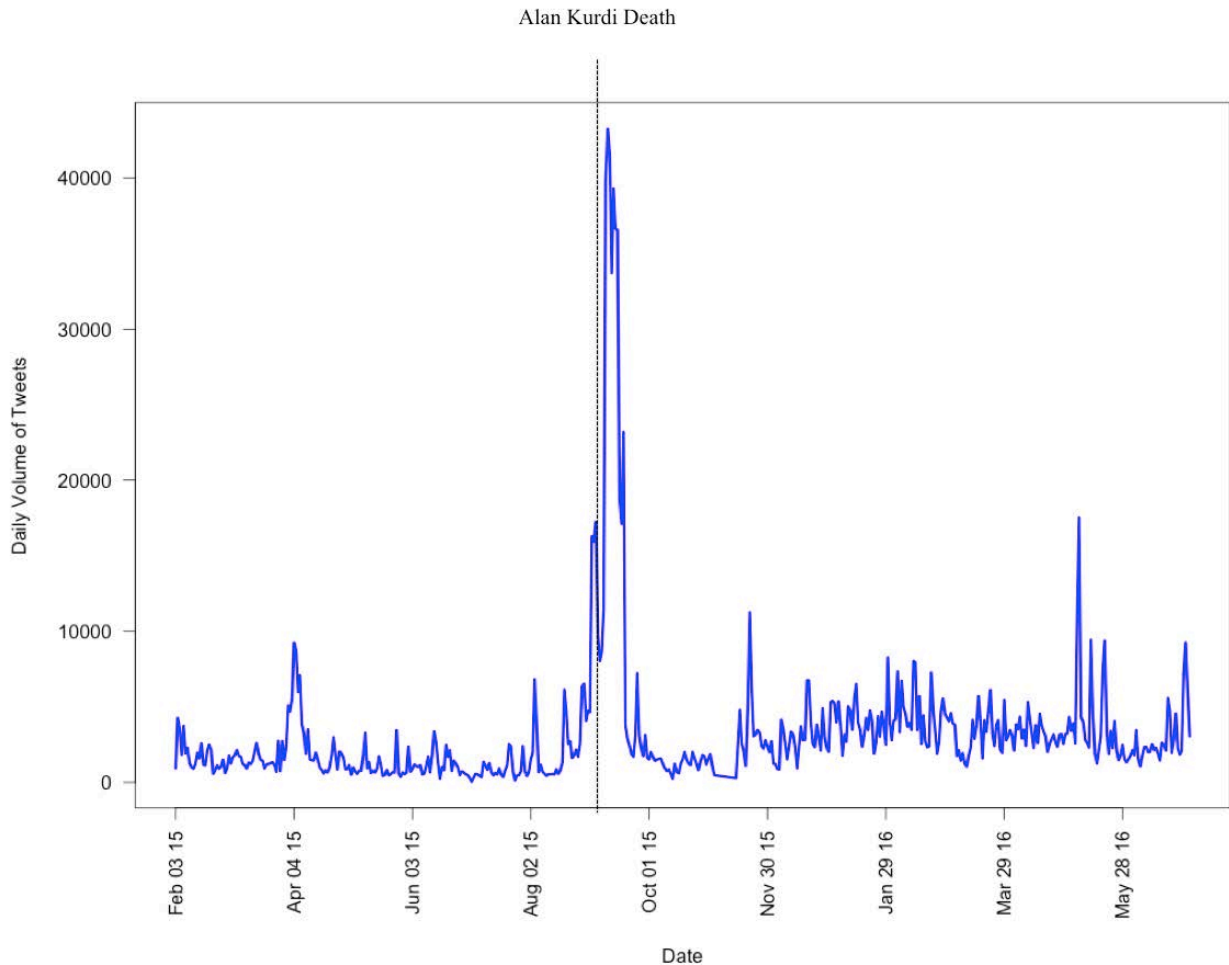


Data: Google Trends; Figure: Alexandra Siegel

Numbers on the Y axis represent search interest relative to the highest point on the plot for the given region and time. A value of 100 is the peak popularity for the term. A value of 50 means that the term is half as popular. Likewise a score of 0 means the term was less than 1% as popular as the peak.

SMaPP Twitter data also demonstrates how a human-interest story can galvanize popular interest. As the Figure below demonstrates, the number of Arabic tweets mentioning Syrian refugees also rose dramatically following Alan Kurdi's death in early September 2015.

Daily Volume of Tweets Mentioning Syrian Refugees February 2015 – August 2016



Data: NYU Social Media and Political Participation (SMaPP) Lab; Figure: Alexandra Siegel

Graph shows the daily volume of Arabic tweets mentioning Syrian Refugees, taken from a dataset of tweets mentioning refugees in Arabic. Data was collected using the Twitter streaming API through NYU's Social Media and Political Participation (SMaPP) Lab.

The refugee crisis has received the most online attention in Syria itself, countries hosting large numbers of refugees, and the Gulf—but very little in the Maghreb.

Both Google Trends and Twitter data suggest that the majority of Arabic online discussion of the refugee crisis is concentrated in Syria, countries that border Syria, such as Lebanon and Jordan, which have taken in large numbers of refugees, the Gulf States, and Egypt. By contrast, there is very little online interest in the refugee crisis coming out of countries in the Maghreb including Tunisia, Morocco, or Algeria. While Gulf and Egyptian dominance of the refugee narrative in

the Arab Twittersphere is partly a reflection of the large population of Twitter users in those countries, normalized Google Trends data also suggests that people in the Gulf States, Egypt, and Syria's neighbors are paying the most attention to the Syrian crisis.

In particular, Google Trends data indicates that the countries with the highest relative number of Google searches for Syrian refugees in Arabic over the past five years were: Syria, Lebanon, Jordan, Egypt, Saudi Arabia, and Turkey. Furthermore, the cities with the highest relative volume of Google searches were: Damascus, Giza, Cairo, Alexandria, Riyadh, Jeddah, and Dubai. The map of geolocated tweets below shows a similar pattern, as does an examination of the top reported locations among Twitter users in our dataset. The top self-reported Twitter user locations in the dataset were: Saudi Arabia, Egypt, Syria, Kuwait, England, Jordan, Iraq, Qatar, Arab Gulf, Lebanon, and the UAE.

Geolocated Arabic Tweets Referencing Syrian Refugees February, 2015 – August 2016



Data: NYU Social Media and Political Participation (SMaPP) Lab; Figure: Alexandra Siegel

Figure shows the location of Arabic tweets mentioning Syrian Refugees in a dataset of tweets mentioning refugees in Arabic for which geolocation data was available. Data was collected using the Twitter streaming API through NYU's Social Media and Political Participation (SMaPP) Lab.

The period following Alan Kurdi's death gave rise to new competing portrayals of refugees by everyday citizens, political elites, and extremist groups.

Examining the life cycle of popular hashtags in our dataset suggests that the period of heightened engagement in September 2015 following Alan Kurdi's death set off a string of competing narratives about Syrian refugees. As we describe in more detail below, Twitter users across the MENA region increasingly highlighted the plight of refugees fleeing to Europe, and demanded action from the Gulf monarchies who were seen as negligent in handling the refugee crisis. In response, however, other Twitter users took to social media to defend Gulf aid efforts and refugee assistance programs. Still others mocked these campaigns, suggesting that many refugees were simply members of armed groups hoping to slip across borders. Finally, during this period of heightened salience, ISIS launched an online campaign decrying refugees as traitors or apostates, and discouraging them from fleeing to Europe.

Refugees as Victims: Alan Kurdi's drowning, which was just one example of the many refugee deaths that occurred during perilous journeys across the ocean in 2015, prompted the rise of several popular Arabic hashtags in our dataset that were intended to draw attention to the plight of Syrian refugees fleeing to Europe. These include: #Drowning_of_a_Syrian_Child, #Mediterranean_Sea_of_Death, and #200_Syrian_Muslims_Drowned_in_the_Sea. Many tweets using these hashtags (like the example below) were designed to highlight that refugees are human beings who deserve our sympathy.

For example, the text of the tweet below, sent in September 2015, can be translated as "The Syrians didn't drown...but rather humanity drowned.
#200_Syrian_Muslims_Drowned_in_the_Sea."

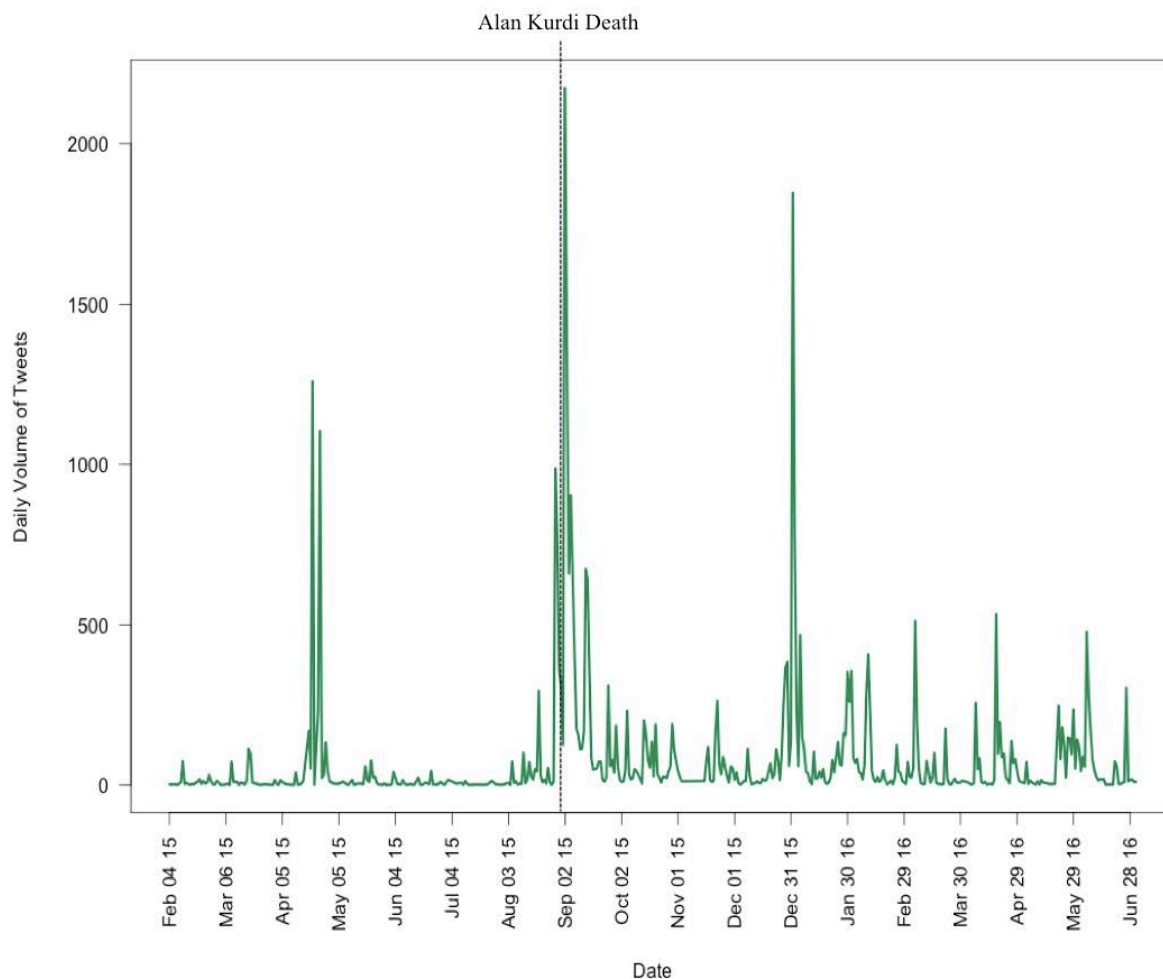


By contrast, other tweets containing these hashtags placed blame on various actors for spurring the Syrian refugee crisis. For example, the tweet below shows Syrian dictator Bashar al-Assad walking with Iran's Khamenei, implying that both are responsible for Alan Kurdi's death. The text of the tweet translates to “#Drowning_of_a_Syrian_Child #200_Syrian_Muslims_Drowned_in_the_Sea #Syria #Forever #Tweet_picture and tell the #Truth of this terrible world.”



While the aforementioned hashtags all became popular following Alan Kurdi's death, the figure below demonstrates that the issue of refugee deaths at sea has galvanized interest at other times as well. In addition to the large spike in tweets referencing drowning in our dataset in early September, we also see a sizable spike following a series of [refugee deaths](#) in April 2015, as well as another spike in December 2015 following a refugee [boat accident](#).

Daily Volume of Tweets Mentioning Drowning and Syrian Refugees February 2015 – August 2016



Data: NYU Social Media and Political Participation (SMaPP) Lab; Figure: Alexandra Siegel

Graph shows the daily volume of Arabic tweets mentioning Drowning and Syrian Refugees in a dataset of tweets mentioning refugees in Arabic. Data was collected using the Twitter streaming API through NYU's Social Media and Political Participation (SMaPP) Lab.

Gulf Duty to Host Refugees: Tracking popular hashtags in our dataset also suggests Alan Kurdi's drowning was followed by a barrage of criticism of the Gulf States for not doing enough to accommodate Syrian refugees. Alan Kurdi's father [blamed](#) his son's death on the failure of Gulf states to take in more refugees, which perhaps gave rise to the hashtag:

#Receiving_Syrian_Refugees_is_a_Gulf_Duty and the Saudi hashtag

#Receiving_Refugees_is_the_People's_Demand. While these hashtags are sometimes used to

highlight the plight of refugees, they are occasionally used sarcastically to portray refugees in a negative light. For example, the first tweet below simply uses the hashtag #Receiving_Syrian_Refugees_is_a_Gulf_Duty to raise awareness, while the second tweet uses the #Receiving_Refugees_is_the_People's_Demand hashtag mockingly, blaming both ISIS and the Shia militias (Hashd) for the crisis, while also implying that armed fighters on all sides of the conflict are exploiting chaos to move freely across borders as “refugees.”

The first tweet can be translated as: “This picture does not need a comment or explanation. For me, God Suffices, He is the best guardian. #Receiving_Syrian_Refugees_is_a_Gulf_Duty.”



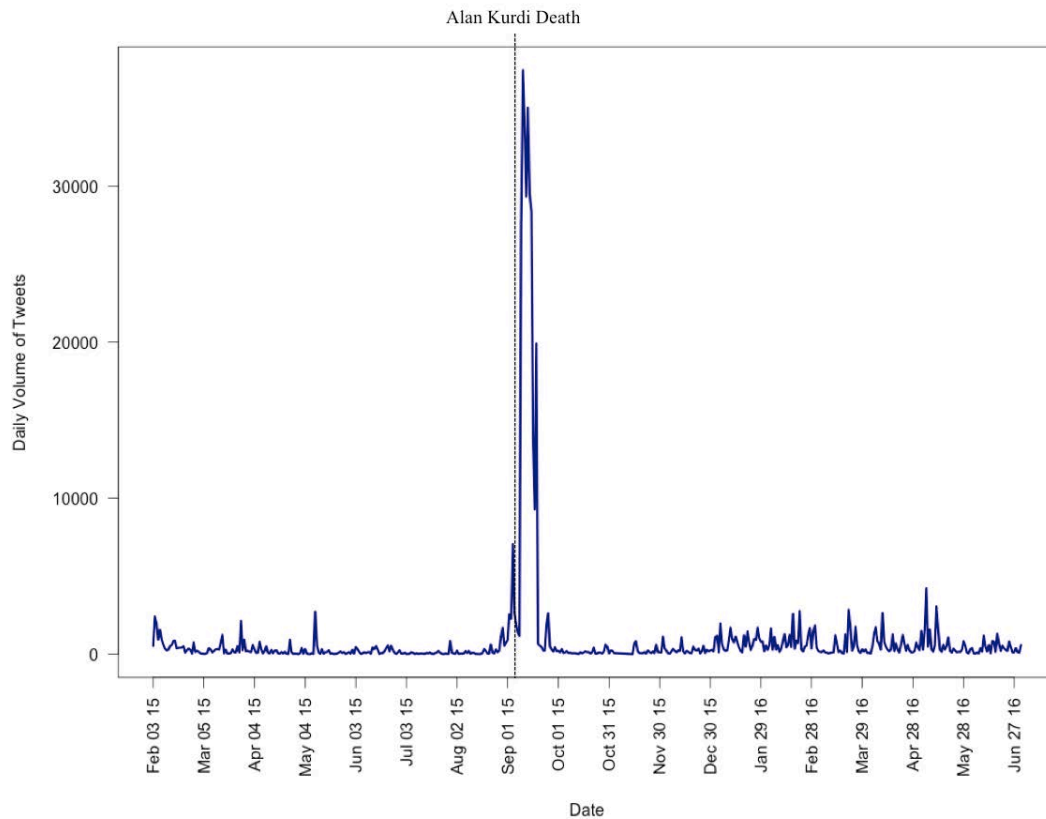
The second tweet can be translated as: “#Welcoming_Syrian_Refugees_is_a_Gulf Duty #Welcoming_Refugees_is_the_People's_Demand #Crimes_of_the_Hashd_and_Daesh They flee to Europe and the rest cry for them.”



The image on the left shows a man who is a former armed member of al-Nusra posing as a Syrian refugee in Croatia in 2015. The image on the right shows members of Hezbollah and Shia militias later posing as refugees in Europe. This tweet suggests not only that Sunni extremists and Shia armed groups are responsible for the current refugee crisis, but also that they are exploiting the situation to travel freely across borders.

The dramatic spike in the figure below demonstrates how a large volume of discussion of the Gulf States appeared directly following the Alan Kurdi drowning.

Daily Volume of Tweets Mentioning the Gulf States and Syrian Refugees February 2015 – August 2016



Data: NYU Social Media and Political Participation (SMaPP) Lab; Figure: Alexandra Siegel

Graph shows the daily volume of Arabic tweets mentioning the Gulf States and Syrian Refugees in a dataset of tweets mentioning refugees in Arabic. Data was collected using the Twitter streaming API through NYU's Social Media and Political Participation (SMaPP) Lab.

Defense of Gulf Response to Refugee Crisis: At the same time that criticism of the Gulf States emerged in the Arab Twittersphere, a spate of tweets defending Gulf efforts to aid Syrian refugees arose as well. These tweets also contributed the large spike in tweets mentioning the Gulf states following the Alan Kurdi drowning displayed in the figure above. They contained several popular hashtags in our dataset including: #Saudi_National_Campaign, which refers to the [Saudi National Campaign](#) to aid Syrian refugees, #Clinics, which refers to [clinics](#) that the Saudi government has set up in refugee camps such as the Zaatari camp in Jordan, and #RAF, which refers to Qatari relief organization. Gulf government officials and many everyday Gulf citizens took to Twitter in this period to defend their response to the refugee crisis. Below is an example of an official tweet sent by the Saudi national campaign in this period.

The text translates to “#Saudi_National_Campaign bringing education to the Children of Syria #WFP #Syria #UNICEF #UNHCR #Syria #Syrian_People #UNRWA.”



الحملة السعودية
@srec_sy



Follow

#الحملة_السعودية_الوطنية_تتكفل_بتعليم_اطفال_سوريا
#WFP #سوريا #UNICEF #UNHCR #Syria
#الشعب_السعودي #UNRWA

View translation



ISIS Condemns Syrian Refugees: The final popular hashtag that appeared in the dataset following the Alan Kurdi drowning and subsequent interest in the refugee crisis on Twitter was launched by pro-ISIS accounts. The hashtag, which translates to “Refugees_to_Where,” has two primary goals. The first is to scare people currently living in ISIS controlled territory sufficiently to convince them to stay put. These tweets therefore include images of Alan Kurdi, as well as images of other refugees being beaten by the European police and suffering other indignities. The second goal is to brand refugees as religious traitors or apostates who are fleeing to the lands of the non-believers or infidels (“Dar al-Kufr”) and to encourage them to stay in the caliphate or the land of Islam (“Dar al-Islam”).

Here are two examples of tweets containing these hashtags. The first provides an example of the #Refugees_to_where hashtag as a scare tactic, while the second highlights more pro-ISIS ideology.

The text of the first tweet can be translated as follows: “The difference between the Turkish soldier and the Greek coast guard! #Turkey_Civilized #Greece #Syria #Refugees_to_where.” It suggests that Turkish soldiers, likely because they are Muslim, treat Syrian refugees more

humanely than the Greek Coast guard. This feeds into the narrative that non-Muslim Western countries are morally depraved and not a suitable destination for those fleeing Syria.



@kanatsizmek83 - انجي صائب · 17 Oct 2015

الفرق بين الجندي التركي وخفر السواحل اليوناني!!
#تركي_الثقي #اليونان #سوريا #لاجئون_الى_اين

The text of the second tweet can be translated as: “What a contrast between the tears in his eye which God calls on him to migrate to the #Islamic_State and choosing to kill himself rather than migrate to the land of infidels #Refugees_to_where [original tweet deleted (pro ISIS account)]”

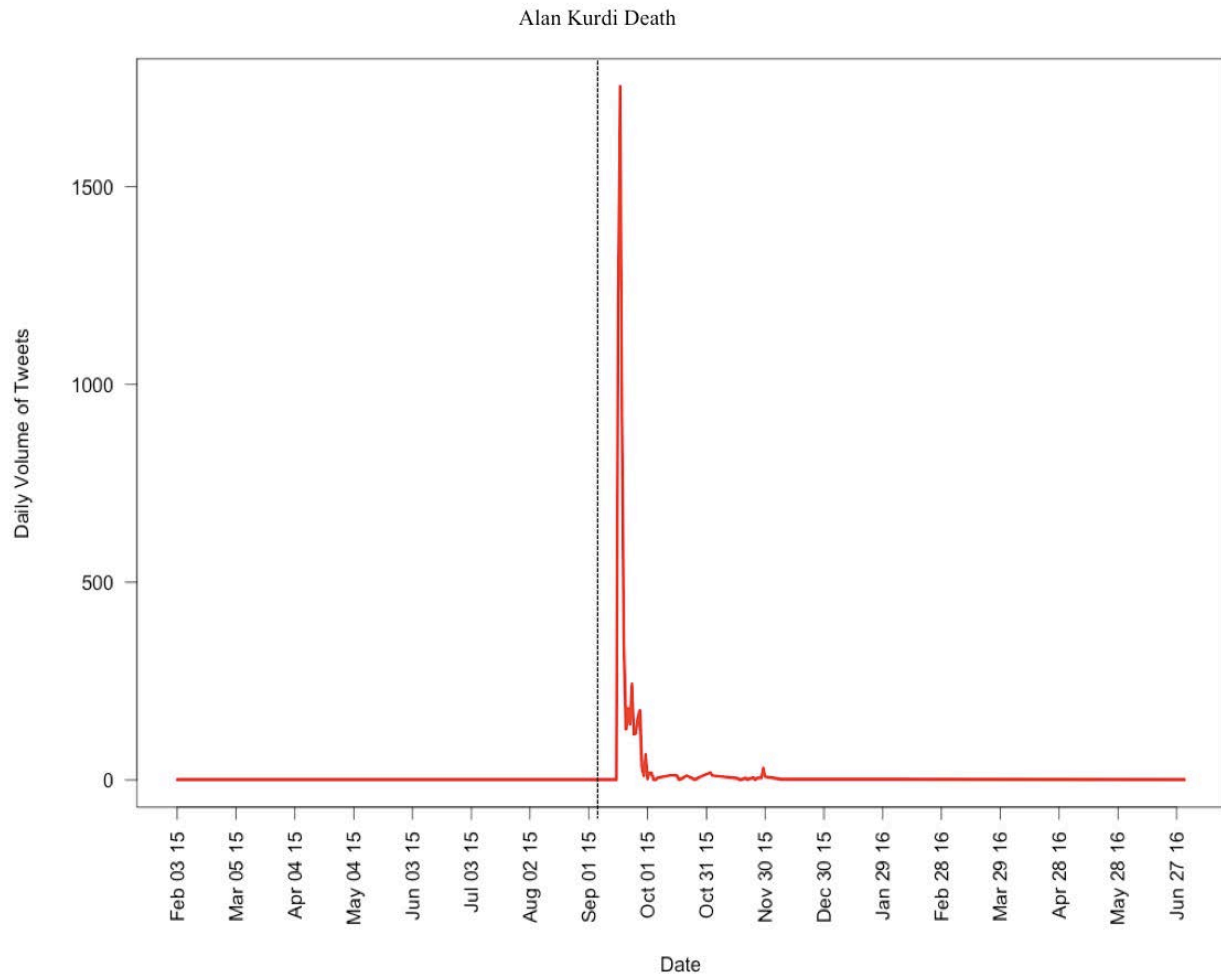
The graph below shows how the #Refugees_to_where hashtag also became popularized following the Alan Kurdi drowning.

The emergence of this hashtag was part of a broader media campaign launched by ISIS in this period urging Muslims not to seek refuge in the West, but rather to come to the caliphate. For example, in September 2015, ISIS released 13 videos and published numerous articles and pamphlets relaying the message. The scale of the attention to the refugee issue in ISIS propaganda materials suggests that ISIS sees the migration of Syrian refugees as posing a [serious challenge](#). Fleeing Syrian refugees undermine ISIS propaganda that promotes the caliphate as a utopian state, and the departure of large numbers of refugees may actually constitute a demographic problem.

As a result ISIS’s anti-migration campaign has stressed the obligations of all Muslims to perform hijra (migration) to the Islamic State’s territory, and the fact that those who live elsewhere are neglecting their religious duties. The tweets in our dataset suggest that ISIS is both working to

depict Europe as a land of moral depravity where refugees will face serious dangers, while emphasizing that Muslims in ISIS territories live in peace, security, and prosperity.

**Daily Volume of Tweets Containing #Refugees_to_Where
Tweets Mentioning Syrian Refugees
February 2015 – August 2016**



Data: NYU Social Media and Political Participation (SMaPP) Lab; Figure: Alexandra Siegel

Graph shows the daily volume of Arabic tweets mentioning the Syrian Refugees and containing the #Refugees_to_Where hashtag in a dataset of tweets mentioning refugees in Arabic. Data was collected using the Twitter streaming API through NYU's Social Media and Political Participation (SMaPP) Lab.

Most popular tweets are either “human interest” tweets or place blame for refugee crisis on actors in Syrian conflict

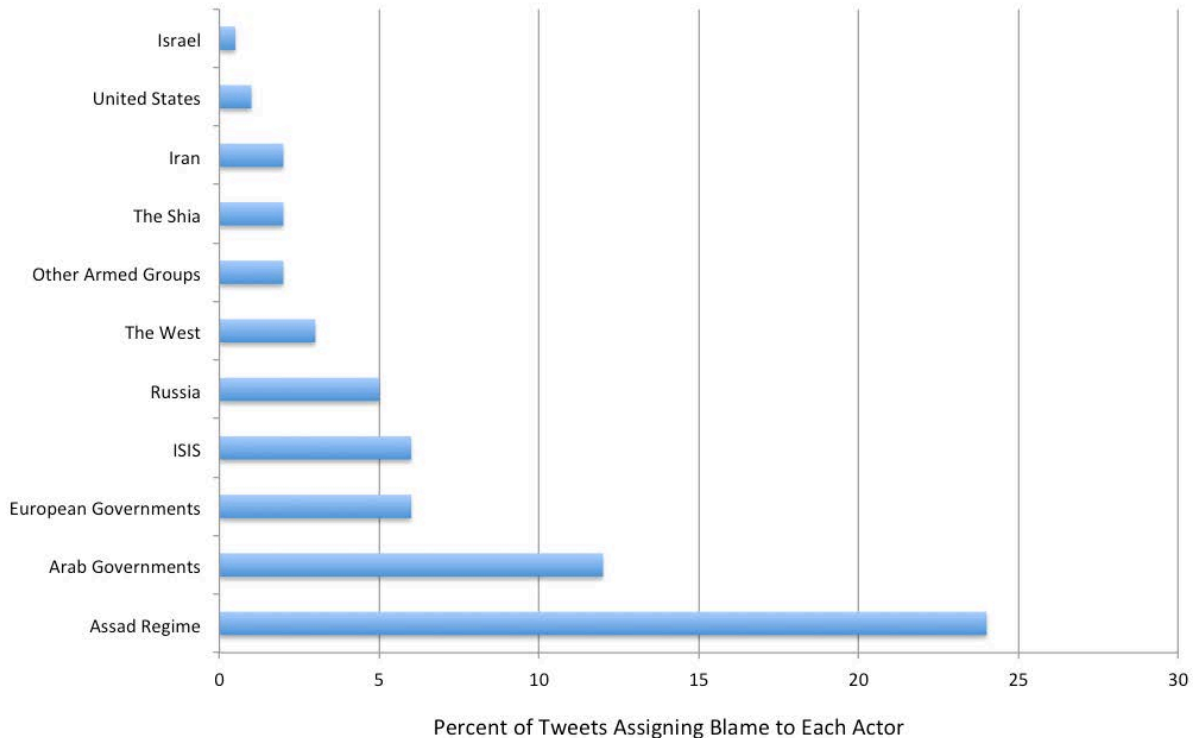
Moving beyond tracking keywords and hashtags, crowdsourced human coding of Arabic tweets about Syrian refugees suggest that while the vast majority of tweets characterize refugees as victims in need of support, these narratives are quite diverse. While some blame the Assad regime and its supporters for the refugee crisis, others point to ISIS and other Sunni armed groups in Syria. Still others blame foreign interventions from Russia, the West, and Iran for causing the crisis. Sectarian narratives also emerge in which all Shia or all Sunni actors are broadly deemed responsible for the refugee crisis. In this way, Arab narratives about the refugee crisis reflect broader patterns of how the Syrian conflict is viewed across the region.

Using Crowdfunder, a data enrichment platform that allows a researcher to launch microtasks to a “crowd” of over five million contributors, we hired native Arabic speakers to code 1000 of the most retweeted or most popular tweets in our dataset in order to give us a deeper understanding of the narratives emerging on Twitter. Each tweet was coded three times to improve our reliability. The aggregated results of this preliminary analysis were as follows:

Refugee Portrayal Category	Percent of Popular Tweets
Victim	46%
Common Humanity	13%
Threat/Undesirable	3.2%
Traitors	0.68%
No Opinion	33%
Other	3.4%

Victims/Common Humanity: According to the coders, 59% of the tweets portrayed refugees as victims or as sharing common humanity. Given that the refugee issue became most popular in the Arab Twittersphere following the Alan Kurdi drowning, this is hardly surprising. However, when coders were asked to specify who was responsible for victimizing refugees, a more interesting picture emerged. While many of the tweets did not assign blame to a perpetrator, 24% of the victim tweets blamed the Assad regime and his supporters for the refugee crisis, 12% blamed Arab Governments, 6% blamed European governments, 5% blamed ISIS, 5% blamed Russia, 3% blamed “The West”, 2% blamed other armed groups in the Syrian conflict, 2% blamed the Shia, 2% blamed Iran, 1% blamed the United States, and 0.5% blamed Israel. This distribution of blame is visualized in the figure below.

Actors Blamed for Syrian Refugee Crisis in Tweets Characterizing Refugees as Victims



Data: SMaPP NYU; Figure: Alexandra Siegel

Figure shows the percent of tweets that assigned blame to different internal and external actors in the Syria conflict. These were identified in a subset of the 1000 most retweeted tweets in a dataset of tweets mentioning Syrian refugees and were coded by native Arabic speakers using Crowdfunder. Data was collected using the Twitter streaming API through NYU's Social Media and Political Participation (SMaPP) Lab.

While these results are only based on coding 1000 popular tweets, they nonetheless provide interesting perspective on how conflict dynamics shape the narrative about Syrian refugees. Looking at the larger dataset further demonstrates how refugee narratives are shaped by events on the ground. For example, the volume of tweets mentioning Syrian refugees that also mention Russia increases steadily following the Russian intervention in Syria in late September 2015, while tweets mentioning ISIS were most common during the ISIS occupation of the Yarmouk refugee camp in Syria.

Threats/Undesirable: Only 3.2% of the most popular tweets portrayed refugees as threats or undesirable. These tweets nonetheless depict a narrative that [journalistic accounts](#) suggest has become more popular in countries like Lebanon and Jordan, where the influx of refugees has come to represent both an economic threat as well as a threat to the sociocultural fabric. As our earlier example illustrated, narratives have also arisen in the Arab World suggesting that refugees

are secretly ISIS supporters using refugee status to cross borders. Along these lines, we found that when refugees were portrayed as threats, they were most often characterized as posing a threat to personal security, followed by national security, the economy, and finally the culture/social fabric. While this narrative was not particularly common in the dataset, it nonetheless reflects realities on the ground and deserves further attention.

Traitor: The majority of “traitor” tweets that we coded on Crowdfunder contained the #Refugees_to_where hashtag described above. There were only a few of these tweets in the 1000 most retweeted tweet sample. This is unsurprising, given that ISIS accounts tend to get shut down quickly and usually do not have particularly large numbers of followers retweeting them.

Preliminary Conclusions:

Taken together, our data suggests that the Syrian refugee crisis was most salient in the Arab World following Alan Kurdi’s drowning, and that people residing in Syria, neighboring countries, the Gulf, and Egypt, were particularly engaged with the issue throughout the period under study. Additionally, our data demonstrates how Alan Kurdi’s death not only drummed up interest in the Syrian refugee crisis in the Arab Twittersphere, but also paved the way for new narratives about the refugee crisis to emerge, spread, and react to one another.

In particular, following the drowning, we observe a rise of hashtags lamenting the plight of Syrian refugees, calls for Gulf States to take action, responses from Gulf leaders and citizens rebuffing criticism, and an ISIS Twitter campaign condemning refugees as apostates and discouraging them from fleeing to Europe. Finally, a more detailed reading of the most popular tweets in the data suggests that refugee narratives are strongly shaped by conflict dynamics and opinions about the numerous domestic and external actors involved in the Syrian conflict.

As a result, studying refugee narratives not only provides insight into how everyday citizens engage with a humanitarian crisis unfolding in their backyards, but also highlights the manner in which sectarian and geopolitical fault lines in the Syrian conflict are impacting sociopolitical attitudes and narratives in the MENA region and beyond.