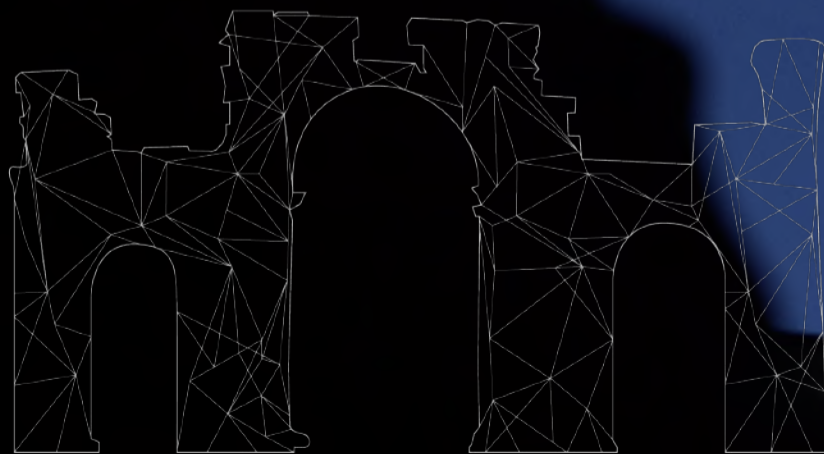


FACEBOOK'S BLACK MARKET IN ANTIQUITIES

TRAFFICKING, TERRORISM, AND WAR CRIMES

AMR AL-AZM, KATIE A. PAUL
WITH CONTRIBUTIONS BY SHAWN GRAHAM

JUNE 2019



ATHAR PROJECT

THE ANTIQUITIES TRAFFICKING AND HERITAGE ANTHROPOLOGY RESEARCH PROJECT



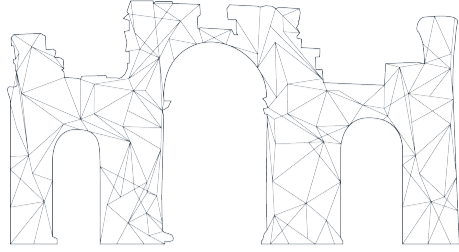
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ATHAR PROJECT

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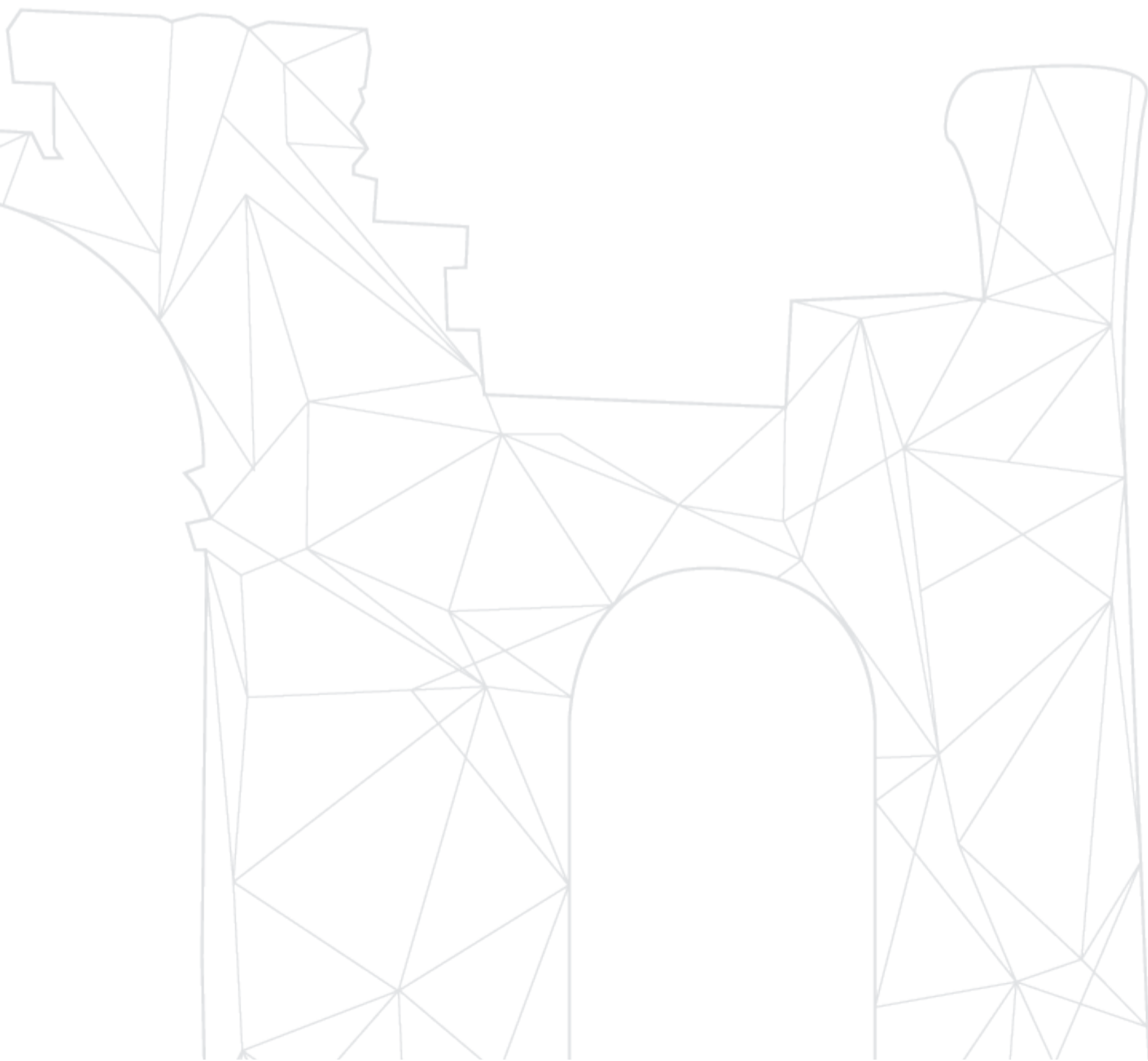
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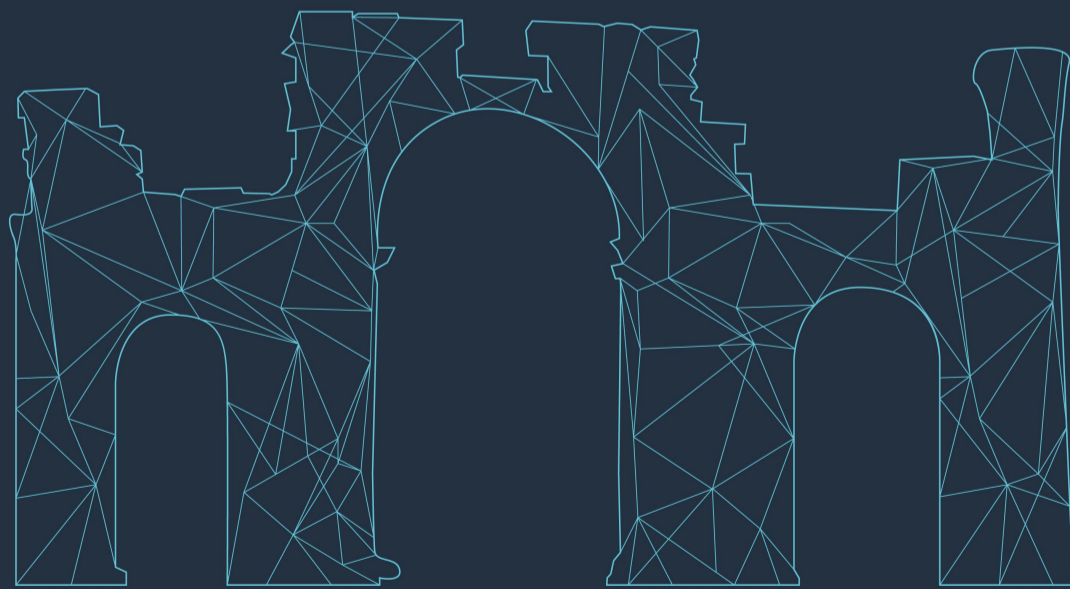
Most importantly we would like to recognize the efforts of the many activists who cannot be named here for their own safety while continuing to work under the most dangerous conditions to provide the on the ground information and intelligence referred to in this report. These are the true heroes of our story and the next generation of “Monuments Men.”



ABOUT THE ATHAR PROJECT

Athar (الأثار) is the Arabic word for antiquities, and whether it is referencing artifacts or ancient monuments, it's used to describe a piece of the past – often one that is lost to trafficking.

The Antiquities Trafficking and Heritage Anthropology Research (ATHAR) Project is an investigative study led by a collection of anthropologists and heritage experts digging into the digital underworld of transnational trafficking, terrorism financing, and organized crime. Research for the ATHAR Project is conducted on a volunteer basis by experts and activists.



ATHAR PROJECT

THE ANTIQUITIES TRAFFICKING AND HERITAGE ANTHROPOLOGY RESEARCH PROJECT

AUTHORS

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Katie is a co-director of the Antiquities Trafficking and Heritage Anthropology Research (ATHAR) Project Project and a founding member of the Alliance to Counter Crime Online (ACCO). She is an anthropologist and research analyst and serves as an affiliated researcher with The Day After Heritage Protection Initiative (TDA-HPI). Her work focuses on the trafficking and destruction of cultural property and its connections to transnational crime and terrorism in the Middle East and North Africa. Katie focuses on the role of social media and new technologies in monitoring and recording trafficking in nations in crisis. Katie believes it's not enough that only archaeologists work to protect heritage; rather, the world needs ArchaeoActivists: People working across fields and disciplines to combat the trafficking of antiquities by organized criminal networks.

Previously, Katie served as chief of staff and a research fellow at the Antiquities Coalition, a Washington, DC-based non-profit dedicated to combating cultural racketeering. She holds a bachelor's degree from Miami University (OH) with a double major in Anthropology and Ancient Greek and earned an M.A. in Anthropology at The George Washington University.

STATEMENT ON ETHICS OF SOCIAL MEDIA RESEARCH AND EVIDENCE OF CRIME

Research involving social media is still a new area of study, as such there are no official ethical guidelines on how to handle data of individuals that is shared on these forums. Although the data collected represents a mix of public and semi-public material that is accessible through open source research, the anonymity of subjects is maintained regardless of the public nature of the information collected. To bridge this gap, the ATHAR Project adheres to the American Anthropological Association's (AAA) Code of Ethics on research involving human subjects.

Many of the people operating on the platforms represented in this research would fall under the AAA's classification of *vulnerable populations*. Due to ongoing conflict, many of the subjects in this study have become displaced, lost their livelihoods, and find themselves desperate for alternative sources of income and shelter. These vulnerable populations are subsistence looters who traffic out of necessity rather than criminal intent. To protect the anonymity of these vulnerable populations, the ATHAR Project references all individuals discussed in this report by subject numbers and refers to Groups using a letter and number system. Additionally, any information that could potentially identify users has been redacted from the visuals in the report.

The goal of the project is to capture valuable intelligence data and visual evidence. In order to ensure this data is preserved, the ATHAR Project does not report any content it investigates that may violate Facebook's Community Standards due to Facebook's practice of deleting content without archiving evidence.

While the majority of individuals in the study represent vulnerable populations, others are involved in high levels of organized crime or terrorist activity. Therefore, select information regarding potentially harmful criminal networks is shared by the ATHAR Project with relevant authorities.

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EXECUTIVE SUMMARY

Facebook’s rapid growth and lack of internal policing mechanisms over the past decade have helped the platform become a digital black market where users buy and sell goods, including illicit antiquities, from some of the world’s most conflict-ridden nations. The social media platform has marketed itself as a tool for the global dissemination of ideas and information. In the process, however, it has unwittingly expanded the communication abilities of transnational criminal networks the world over.

It is worth noting that unlike other black market trades, there are few statistics on the trade in illicit antiquities. Likewise, little data is available for the legal global trade in antiquities. Art market industry reports typically lump datasets for antiquities together with the broader art market.¹ For a trade that can straddle the legal and illegal realm, it is difficult to get a handle on the amount of cultural property that is currently leaving Middle East and North African (MENA) countries in high volumes.

Today, Facebook offers a veritable digital toolbox for traffickers to utilize, including photo and video uploads, live streaming, disappearing ‘Stories,’ payment mechanisms, and encrypted messaging. Facebook is the perfect platform for a one-stop-shop black market.

This in turn has made Facebook the wild west of social media, providing opportunities for violent extremist organizations and criminal groups to operate in plain sight with little recourse. Facebook and other technology companies receive broad immunity from responsibility for any content posted to their platforms by third-parties under the 1996 Communications Decency Act Section 230.

Aside from the law, Facebook does have its own internal policies laid out in the company’s Community Standards that prohibit the sale of black-market items like drugs and wildlife. But illicit cultural property is not listed in the banned trades under Facebook’s Community Standards. As a result, today we can find detailed information about antiquities trafficking that has remained active on the platform for years. This data provides a rare look at the inside of the trade.

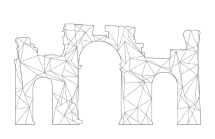


Facebook offers a veritable digital toolbox for traffickers... the perfect platform for a one-stop-shop black market.



The public nature of these digital criminal networks therefore offers an opportunity to track the actors in the illicit trade of cultural property. The data in these Facebook Groups opens a window to the early stages of the antiquities trafficking chain. This research builds upon existing knowledge of antiquities trafficking and provides a quantitative lens to analyze the Facebook trade in illicit antiquities and the actors who engage in these crimes. Studying Facebook Groups and the users that communicate and operate within them allows for both a substantive look at the actors and a measurable set of data that can help foster a better understanding of the transnational criminal networks involved in this trade.

This report details the findings of the Antiquities Trafficking and Heritage Anthropology Research (ATHAR) Project. The goal of this research is to provide a more complete illustration of the digital black market in antiquities from the MENA region and present potential means for disrupting it.





A Greek statue, clearly removed from a structure, is offered in a Facebook Group on 26 June 2018 from a user in an undisclosed location. Source: Facebook

KEY FINDINGS:

- An analysis of 95 Arabic Facebook Groups developed for antiquities trafficking indicates that the administrators (“admins”) managing Groups are highly interconnected and have a global reach. There are 488 individual admins managing a collective 1,947,195 members across 95 Facebook Groups. Twenty-three of the admins managing four or more Groups. Their influence extends as far as the United States, where an American antiquities dealer is Facebook friends with at least one admin who runs multiple trafficking Groups and Pages on Facebook.
- Group members include a mix of average citizens, middlemen, and violent extremists. Violent extremists currently include individuals associated with Syrian-based groups like Hay’at Tahrir Al Sham (HTS), Hurras Al-Din, the Zinki Brigade and other non-Syrian based Al-Qaeda or Islamic State in Iraq and Syria (ISIS) affiliates. All of these groups are using Facebook as a platform for antiquities trafficking, whether through direct interaction with buyers and sellers or through the use of middlemen who straddle transactions between the general public and terrorist groups.
- Facebook Group admins compel users to give them money if they make a sale or connection through the Group they have joined. Admins may collect a fee (referred to by some as “*khums tax*” or equivalent) from any sales generated through contacts made in their Group. The admins can also remove or block users who do not comply. The same *khums tax* practice was used by ISIS in its governance of illicit antiquities.
- Traffickers are offering large artifacts, including mosaics, architectural elements, and Pharaonic coffins — all still in situ. These individuals are finding buyers before they put in the effort to remove the objects. Monitoring social media offers a rare opportunity for authorities to stop trafficking before an object has even left the ground.
- A case study on Syrian-based Facebook Groups reveals that posts from users based in conflict zones make up more than one-third of all posts offering artifacts. Among the active users with locations in the Groups analyzed, 36% of posts offering artifacts have identifiable locations in conflict zones and 44% of posts offering artifacts were from countries bordering conflict zones.²



INTRODUCTION AND BACKGROUND

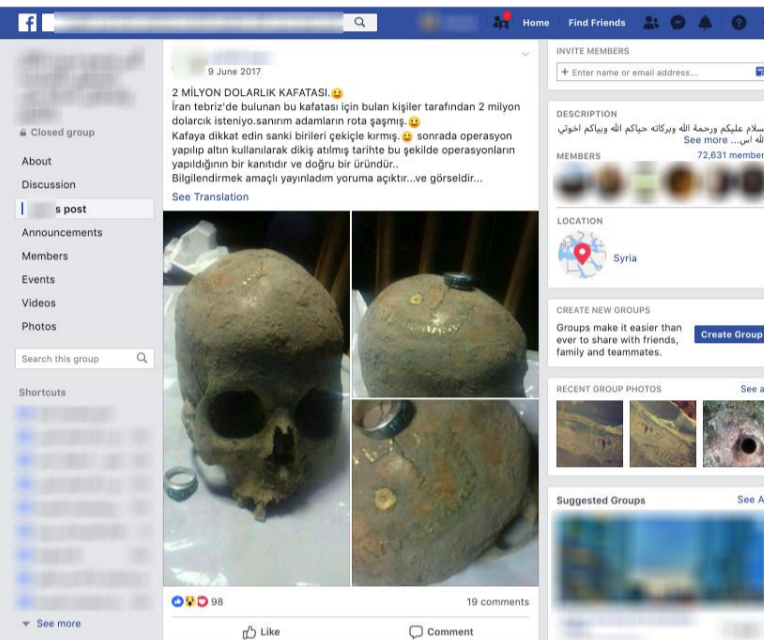


Figure 1: A screenshot of a post offering human remains shows the range of transnational connections exhibited through the Facebook antiquities trade: A trepanned skull alleged to be from Iran, in a Syrian-based antiquities trafficking Facebook Group D by a Turkish-speaking Group member on 9 June 2017. Source: Facebook

The 2011 Arab Spring served as a catalyst for Facebook's growth across the Middle East and North Africa (MENA). The platform's role in turning local protests into a viral global phenomenon generated widespread popularity across the region for Facebook.³ In the years since, terrorists and transnational criminals have capitalized on the reach of social media platforms like Facebook and the gaps in online security and content moderation. The result has led to sprawling digital black markets on Facebook, trading everything from drugs and human remains to wildlife and antiquities (Figure 1).⁴

Facebook is currently the most widely-used social media platform in the world. The company boasted 2.32 billion monthly active users at the end of 2018, more than one-third of the world's population.⁵ From 2011 to 2017, its user base increased by over 1,200% in countries facing conflict like Syria, Iraq, Libya, and Yemen (Figure 2).

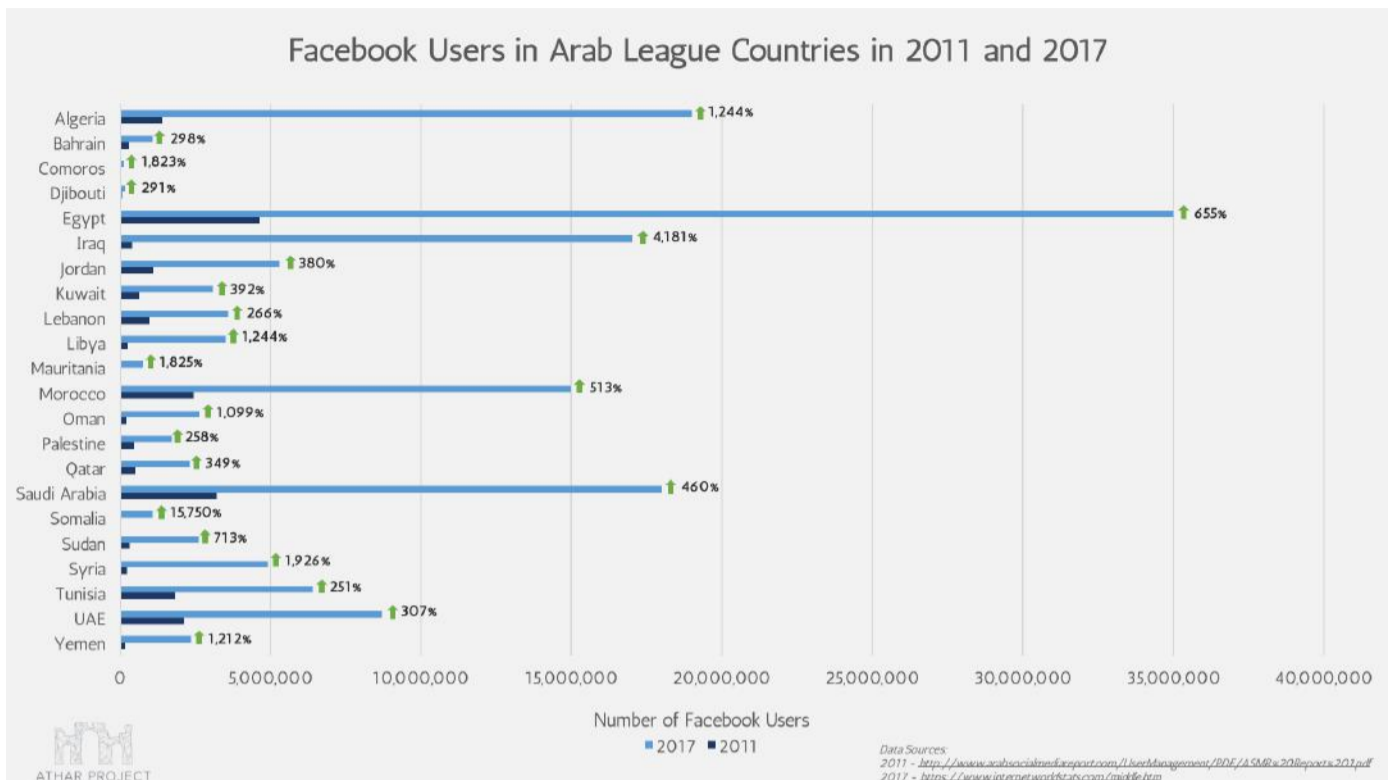
The massive footprint and meteoric rise of the world's most popular social media outlet paired with an overall lack of content moderation have brought about new questions regarding Facebook's ability or willingness to police its platform.

Facebook's Community Standards were updated in April 2018 to develop a more refined set of guidelines. The update was timed with the appearance of the company's CEO Mark Zuckerberg before Congress as law makers addressed the litany of issues on the platform. The change included the addition of animals and wildlife to the "prohibited content" list in Facebook's Commerce Policies.⁶ Illicit cultural property, however, has yet to make the prohibited content list.⁷ The company's content moderation policies focus on activities and items that are forbidden by their Community Standards.⁸ Without an explicit ban Facebook isn't looking for the crime.

The types of cultural property illegally traded on Facebook include looted artifacts from conflict zones, religious relics, historic pieces, and even artifacts in situ. Users in conflict zones like Yemen have posted artifacts resting on their weapons in photos. As recently as March 2019, users in war torn Libya were posting images of a stolen church bell from Zintan. And in Tunisia, even large artifacts like tombstones are posted while still in situ. (Figure 3)

The law has not caught up with technology. As a result, criminal trades are able to take place on a public platform without any repercussions. Facebook enjoys





Authorities in countries affected by the surge of the illicit Facebook trade in antiquities now have to deal with a black market on a digital platform in addition to on-the-ground smuggling networks. Egypt has led the charge in attempting to combat the illicit trade on Facebook. Since 2018, Egyptian authorities have arrested multiple individuals for selling or buying illicit antiquities on Facebook. In September 2018, Egyptian authorities

Figure 2: Facebook Users in Arab League Countries in 2011 and 2017.

broad immunity under Section 230 of the Communications Decency Act, which stipulates that technology companies cannot be held responsible for third-party content on their platforms.⁹ That means that when traffickers and individuals affiliated with terrorist groups post stolen artifacts for sale on Facebook, there are no legal ramifications to compel Facebook to do anything about it.

arrested a man for setting up a Facebook Page to sell illicit Pharaonic artifacts.¹⁰

Another case in February 2019 involved an attempt by an Egyptian man to smuggle mummy parts out of the country by concealing them in a set of speakers. The man was smuggling the parts for a buyer based in Belgium and the two had connected for the sale through Facebook.¹¹

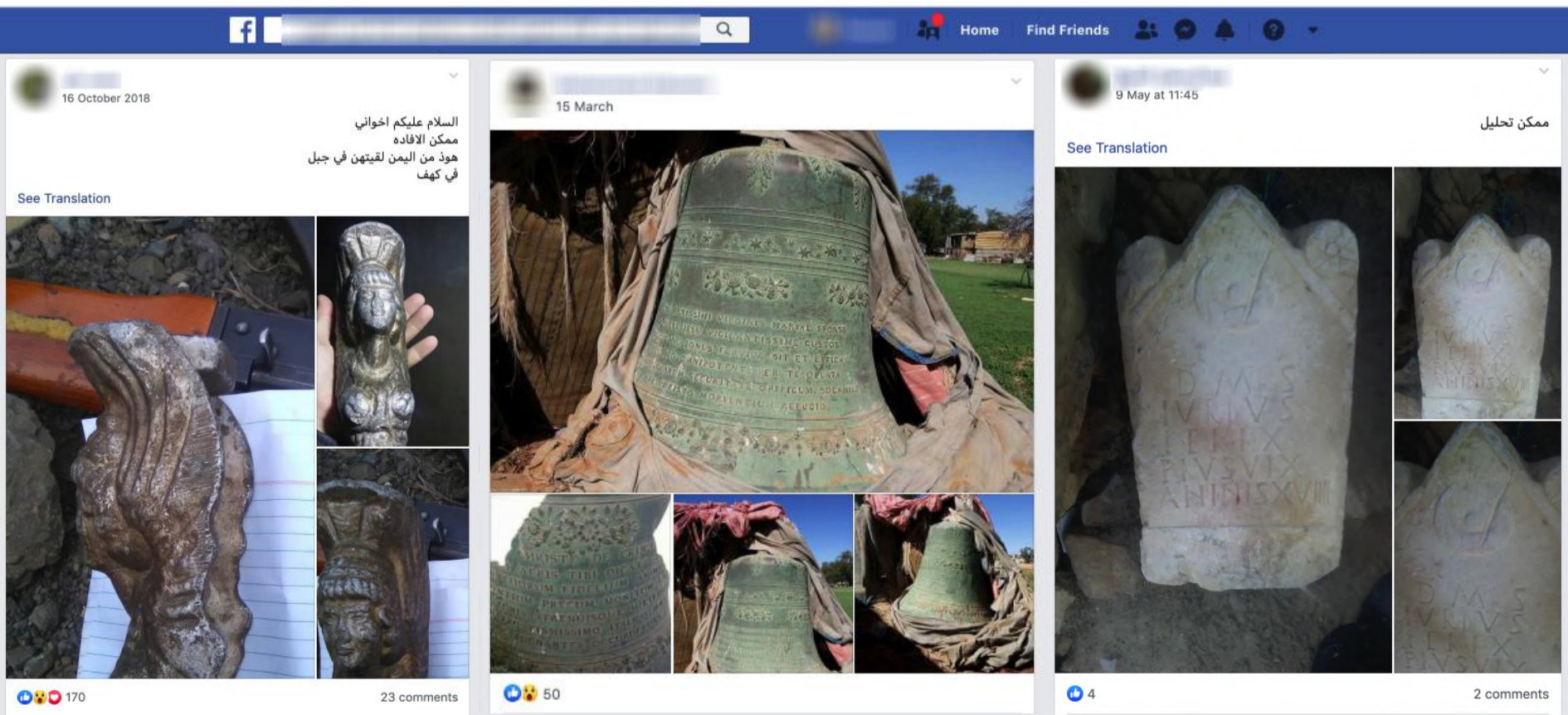
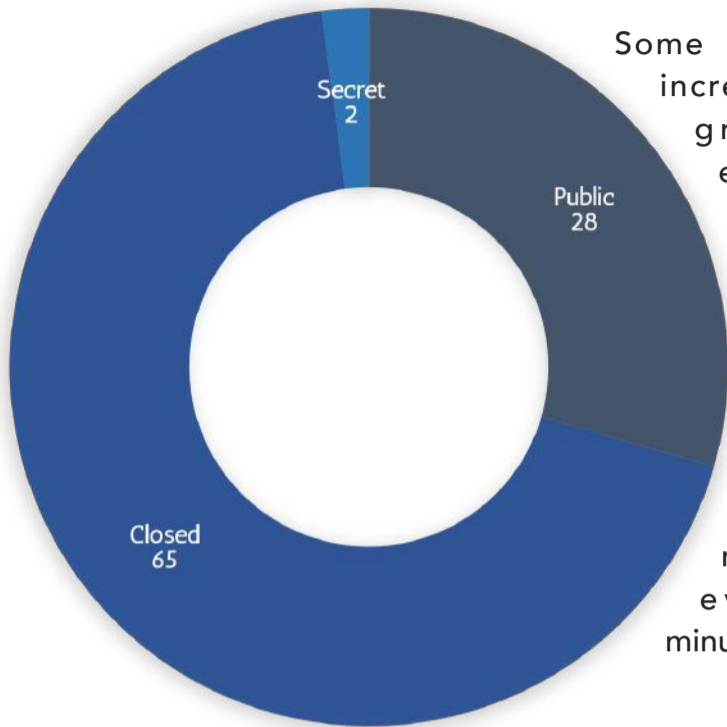


Figure 3: Screenshots from Facebook antiquities trafficking Groups monitored by the ATHAR Project show a variety of illicit items offered on the platform. (Left) Artifact offered on 16 October 2018 by a user based in Yemen - the artifact rests on the butt of his gun in the image. (Center) A user in Zintan, Libya posts photos offering a large church bell on 15 March 2019. (Right) A user in Tunis, Tunisia posts photos of a tombstone still in situ on 9 May 2019, the photos appear to have been taken under cover of darkness. Source: Facebook



Some Groups saw incredibly rapid growth. For example, Group L's membership grew at a rate of about 211 users per day – that's roughly one new member every eight minutes.

Figure 5: Privacy Level of Facebook Antiquities Trafficking Groups Monitored by the ATHAR Project.

Groups can be set up using one of three privacy levels: public, closed, or secret. Of the 95 Groups currently monitored by the ATHAR Project, 28 are public, 65 are closed, and two are secret. (Figure 5)

Public and closed Groups can be searched by anyone on Facebook. Any user can view all of the communications and attachments posted in a public Group whether or not they are a member. The content in closed Groups cannot be viewed unless the Group has been joined by a user and approved by the admins, if required. Secret Groups are not even visible to user searches and can only be joined through an invite from an existing member. In ATHAR's case, Groups have been changed from closed to secret after joining, which allows existing members to be grandfathered in. Groups also have a variety of settings for administrators

("admins") and moderators to regulate how users can join, from a simple admin approval to a "firewall" of questions interested users must answer.

The firewall of questions can help identify the motivations behind why admins may invest time in antiquities trafficking Facebook Groups. With some Groups exceeding 100,000 members, the management of the users and discussions can be extremely labor-intensive. Several Group admins have included a question for prospective members inquiring whether they would comply with a commission policy. These questions suggest that admins expect a certain code of conduct from their members, one that includes a "finder's fee" to be paid to the admins for any sales made using connections made through the Group. More specifically referred to in the questionnaire language as *Al-Haq Al Shari'i*, otherwise known as the a *khums* tax. (Figure 6)

The *khums* tax refers to an obscure Islamic *Sharia'a* law interpretation dating back to the 9th century AD. According to that interpretation, the law requires all Muslims to pay one-fifth, or 20%, of the value of any buried treasure or wealth discovered, to the state (Caliphate). In early 2014, when ISIS began its involvement in the illicit antiquities trade, it required locals and contractors to pay the tax in lieu of looting permits being issued to them.

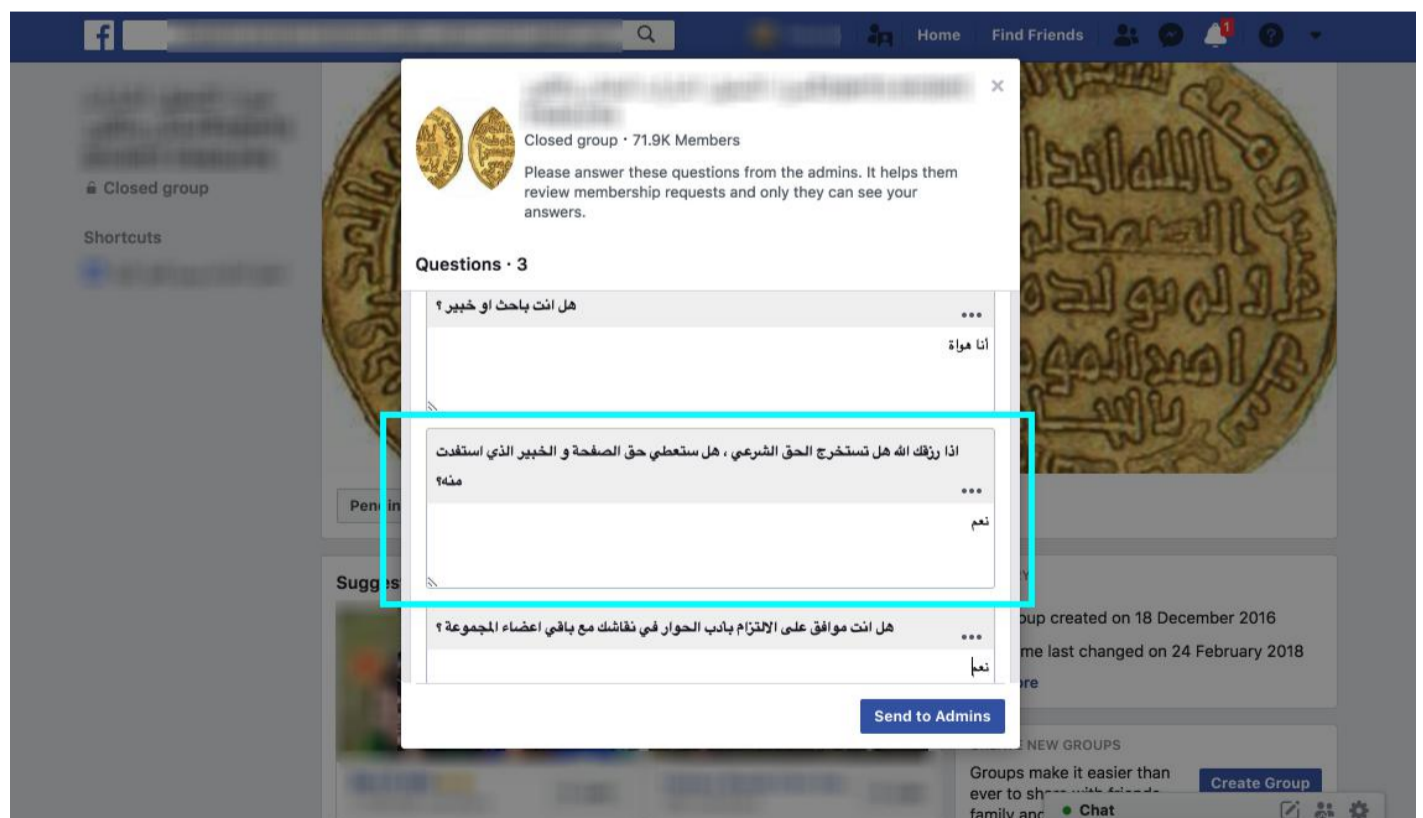


Figure 6: A screenshot of a Group entry questions. Question two translates to: "If God grants you wealth [ie you make money a transaction] do you agree to pay legitimate dues [one fifth or Khums according to Sharia law] to the page and the expert that you benefited from?" Source: Facebook





The *khums* tax entry question provides insight into a possible incentive for admins to spend time managing tens of thousands of members in a Group. It also reveals a more concerning issue: that the institutionalization of antiquities trafficking first established under ISIS was never fully dismantled, it just moved to a new medium.

The inclusion of this question raises additional concerns about how Facebook could be used by traffickers for financing. Admins seeking a *khums* tax are not going to

have the same in-person exchange of goods that the buyer and seller will engage in. Therefore, this payment is likely carried out through a digital transaction. Facebook allows for digital payments between users through the Facebook Messenger app, a feature that has been in place in 2015.¹⁴ Facebook is also in the process of developing its own cryptocurrency, due for launch in 2020, providing yet another concerning feature that could be manipulated by traffickers.¹⁵

FACEBOOK FEATURES: A TRAFFICKING TOOLKIT

Facebook's platform stands out from other social media for its variety of features and functionality. The platform's suite of tools provides new means for traffickers to peddle their illicit goods.

The existence of Groups, a Facebook feature allowing users to create closed digital communities with other users, already serves as a gathering point for trafficking in antiquities and other illicit goods. But by adding Facebook's additional features, like disappearing "Stories" and encrypted messenger, a digital black market can thrive on the platform with little interruption. Even the most basic and fundamental aspects of Facebook are being manipulated for trafficking.

Facebook heavily relies on artificial intelligence (AI) for content moderation. The company also boasts 30,000 human reviewers to moderate content.¹⁶ But on a platform with billions of users, the moderators are vastly outnumbered. As a result, content spanning from targeted hate speech to videos of the Christchurch, New Zealand massacre continue to plague the platform. Not only does content moderation lack the proper controls to keep harmful content off of the platform, Facebook's own algorithms promote new ways for traffickers to connect. Its "suggested Groups" and "recommended Pages" features actually direct users, including nefarious actors, to new communities for trafficking. For every Group or Page identified by the ATHAR Project Facebook recommended three more.

PROFILES

Setting up a profile is the cornerstone of Facebook usage and the first step in getting access to the digital black markets on the platform. Traffickers engaging on Facebook will sometimes create fake profiles or modify their genuine personal profiles in order to signal their profession as a looter or smuggler. These "signals" can appear in profile and cover photo, the "Intro" biography, the use of an archaeology-related fake name, or the work position listed.



One user based in Yemen who offers illicit coins for sale has utilized both the profile name and the "Intro" section to signal his role in illicit trade. The Intro is a Facebook profile feature that allows users to share a sentence or two about themselves. The feature is always public.¹⁷ This user's profile name identifies him as an "archaeologist" ("الأثاري") and his Intro states that he deals in ancient treasures and precious stones. (Figure 7)

Another user chose to hide behind more anonymity and keep himself out of profile photos. This user utilizes the Intro section, but also includes a profile image of a classical sculpture along with a work position. Both are signals to





indicate his profession. The user's Intro states that he trades in antiquities and antiques. His workplace since 1990 is listed as "trade in antiquities, artifacts, and antiques" ("تجارة آثار وتحف وأنتيكا"). (Figure 8)

There is no actual workplace for "trade in antiquities, artifacts, and antiques," but that doesn't stop Facebook from creating a business page for the profession. Facebook's algorithm auto-generates business, "interest," and location pages in cases where a user lists a workplace for a company that doesn't exist on their platform. This feature of Facebook's algorithm is particularly problematic because it facilitates the ability of traffickers and criminals, even extremists, to rapidly expand their network and connect with others engaged in similar criminal or extremist activities with little or no effort. Users simply signal their profession by listing that they trade or traffic in antiquities and Facebook will create a business page for them.

In May 2018, an anonymous whistleblower filed a Securities and Exchange Commission (SEC) petition against Facebook with the complaint that Facebook's auto-generation feature was actually creating business pages for terrorist groups and

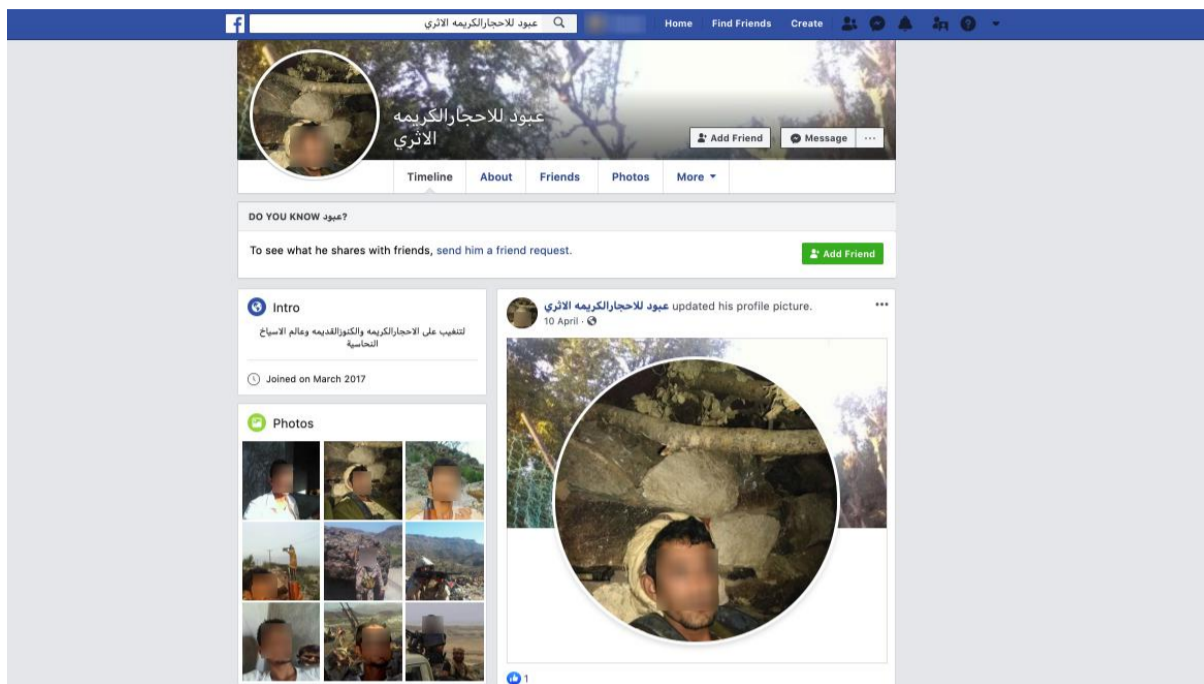


Figure 7: Screenshot of the Facebook profile for a Yemeni trafficker who uses his profile name and bio as signals to other traffickers that he is open for business. Source: Facebook

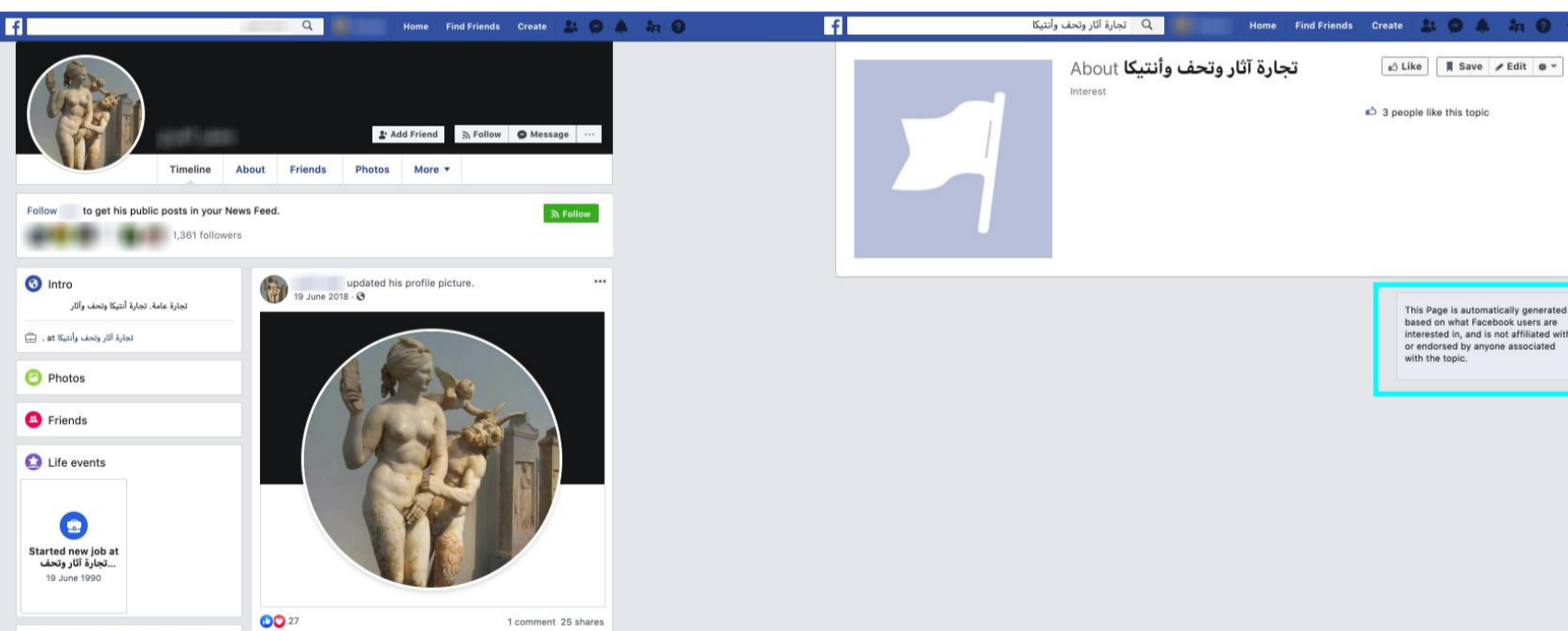


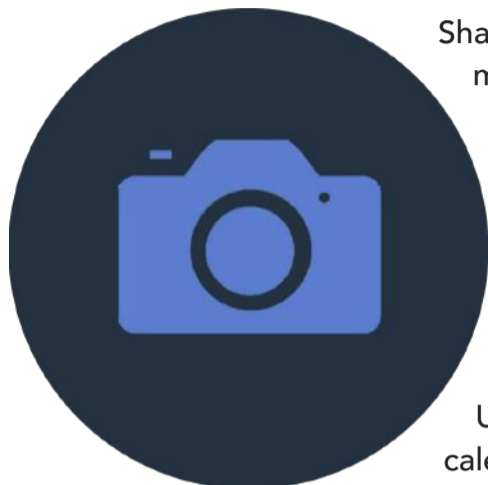
Figure 8: (Left) Screenshot of a trafficker's profile where his intro bio and workplace position indicate that he trades in antiquities. (Right) Screenshot of the auto-generated page Facebook created and linked to the workplace position listed in the user's profile. Source: Facebook

white nationalists.¹⁸ In the case of the trafficking profile in Figure 8, Facebook has linked the position to a page it auto-generated for that role.¹⁹ Facebook's auto-generation function is not just creating pages for terrorists, it's now developing them for traffickers too.





PHOTOS AND VIDEO



Sharing images and video is a fairly standard function of most social media platforms. But on Facebook these tools paired with deficient content moderation allow traffickers to peddle and request illicit goods in plain sight.

Group members share photos and video of everything from coins and small artifacts to wooden Pharaonic coffins and freshly looted graves. Users post images of artifacts for sale alongside calendar pages to indicate that the items are newly recovered. Photos of artifacts with calendar pages or newspapers (and sometimes both) resemble a hostage video, with dated materials provided as proof of recent discovery and current condition.

Photos and videos are used as a tactic to offer artifacts, evidence of fresh finds or, in the case of active looting photos, evidence of “authentic” finds to come (Figure 9). Users will share anywhere from one photo to a dozen or more depending on the number of artifacts available. Photos and videos are used as “bait” to illustrate a trafficker’s access to legitimate items and to entice Group members to communicate further to learn more.

Photos are also used to share knowledge for identifying sites that may be promising for looting. In Group Q, one user based in Tunis, Tunisia shared images from Google Earth on 4 May 2019 along with his own markup and description to teach other members of the Facebook Group how to identify archaeological sites for looting using Google Earth (Figure 10). Other users post images of tombs, active looting, and even infographics to share knowledge across their Facebook community. The more individuals that have knowledge on how to illegally excavate, the more opportunities there are for middlemen to source premium material for trafficking.



Figure 9: Screenshot of post from a user based in Sanaa, Yemen sharing action photos of himself and others desecrating a grave and looting a tomb. Source: Facebook



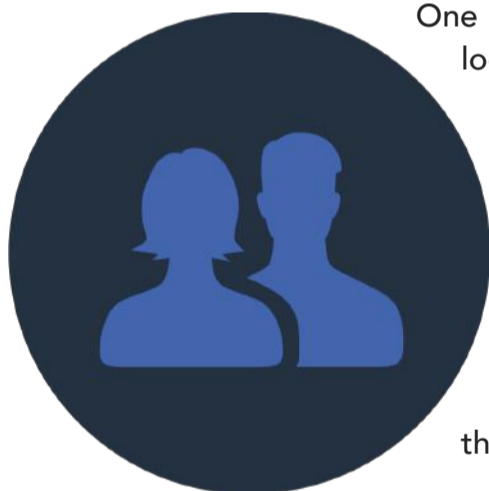
Figure 10: Screenshot of a user in Facebook Group Q posting images from Google Earth with instructions on how to find sites to illegally excavate. Source: Facebook





Figure 11: (Left) Loot-to-order request posted by an admin in Group C seeking coins available in Idlib, Syria, the post also asks for photos of available items. (Center and Right) Replies from Group members include images of coins available. The reply screenshots are a sample of dozens of replies to this loot-to-order request. Source: Facebook

POSTS AND REPLIES



One of Facebook's primary features, posts and replies, are used in trafficking Groups to field loot-to-order requests and to serve as a forum for negotiating prices in view of the Group membership. Both admins and general Group members will post requests for artifacts in a desired location, sometimes sharing example images of what they are seeking. In other cases, users requesting loot-to-order artifacts will demand images or video as proof that replying individuals have the artifacts in their possession.

In Group C, an admin, referred to as Subject 95, posted a request for coins available in Idlib, Syria on 4 March 2018 – the request included a demand for photographic proof of the items (Figure 11). Group members replied to Subject 95's request by sharing photos of their available items in the comments below his post.

Members of antiquities trafficking Groups have also used replies as a means of actively bidding against one another on illicit items. On 22 December 2018, a Group B user, based in Medina, Saudi Arabia, posted images offering gold coins for sale. The replies to the post show users bidding \$200, \$350, and finally \$400 – all in U.S. dollars (Figure 12). Dollars are the most common currency used in antiquities Facebook Groups for negotiating or offering prices.

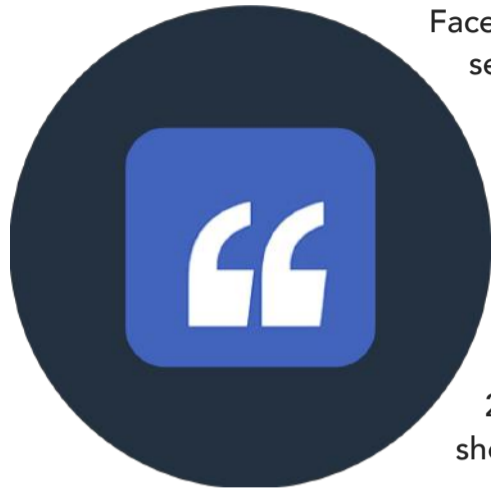


Figure 12: (Left) Screenshot of post offering coins for sale. (Right) Users bid on coins in U.S. dollars in replies to the post. Source: Facebook





STORIES



Facebook’s “Stories” feature allows users to post photos or short videos for viewing by a selected audience (friends, followers, or Group members) that only remains accessible for 24 hours.²⁰ A function enabling users to share images that disappear from the platform after 24 hours is an ideal tool for traffickers who want to offer items on the platform while minimizing the risk of self-incrimination. Users will share brief videos or images of artifacts they have available for sale and rely on direct messaging communications from interested buyers.

One user based outside of Cairo posted a video in his Facebook Stories on 13 April 2019 – it was captured by the ATHAR Project 30 minutes after it was posted. The video shows an inscribed relief available for sale. (Figure 13)

Although Facebook Stories offer a benefit to traffickers through the use of disappearing images, they are not as widely used as basic photo or video upload. This could be in part due to the general lack of technological expertise associated with using such a feature. While Facebook has over 2.32 billion users on the platform, only 500 million use Stories, less than a fourth of the platform’s overall user base.²¹

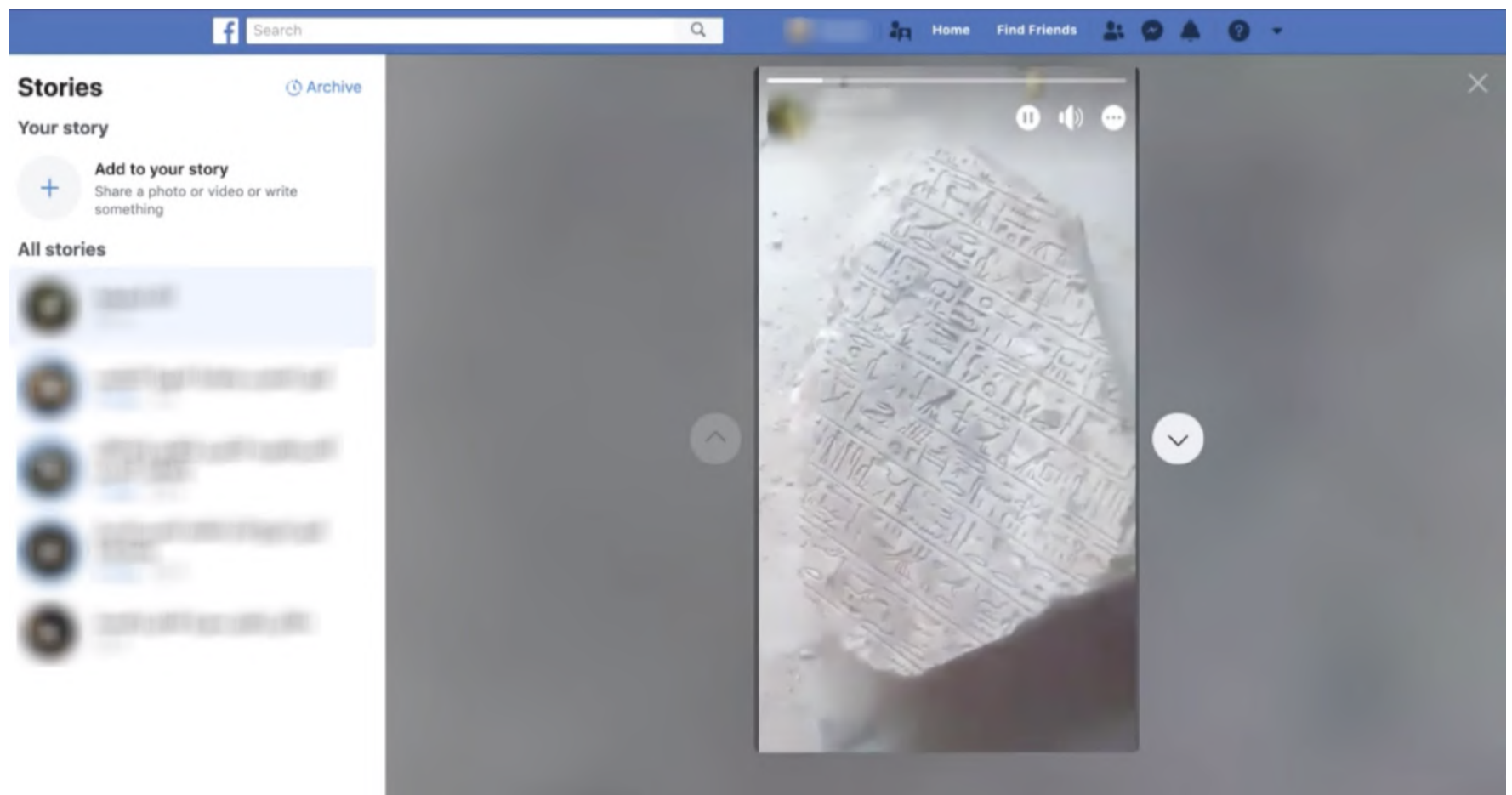
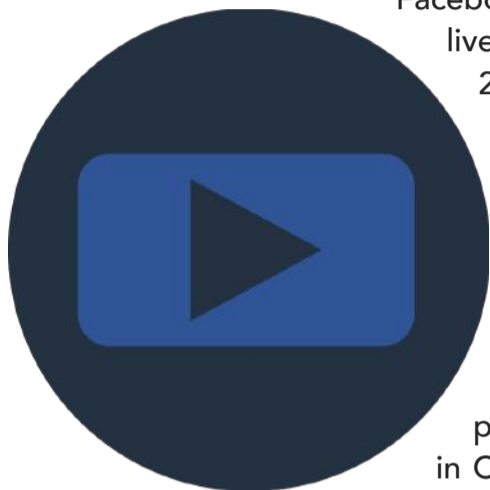


Figure 13: Screenshot of video offering an Egyptian artifact in a user's Facebook stories on 13 April 2019. Source: Facebook





LIVE STREAMING AND WATCH PARTIES



Facebook's feature for streaming video, known as Facebook Live, met fierce backlash following the live-streamed murder of 51 Muslim congregants in Christchurch, New Zealand on 15 March 2019. Roughly two months later, Facebook agreed to put restrictions on Facebook Live that would bar any users violating content rules from the service for 30 days.²² The restrictions are a far cry from fixing the issue. And in the short time since they were put in place, the ATHAR Project still identified crime via Facebook Live.

On 28 May 2019, the ATHAR Project's Facebook profile received a notification for a "Watch Party" in one of the antiquities trafficking Facebook Groups it monitors (*Figure 14*). The Facebook Watch Party feature allows members of Groups to watch live-streamed or pre-recorded videos in the same Group forum.²³ The Watch Party video was posted by a user in Cairo, Egypt. It showed a man, with his hands and legs tied, being led into a desert area by two other men and a small child in tow. (*Figure 15*)

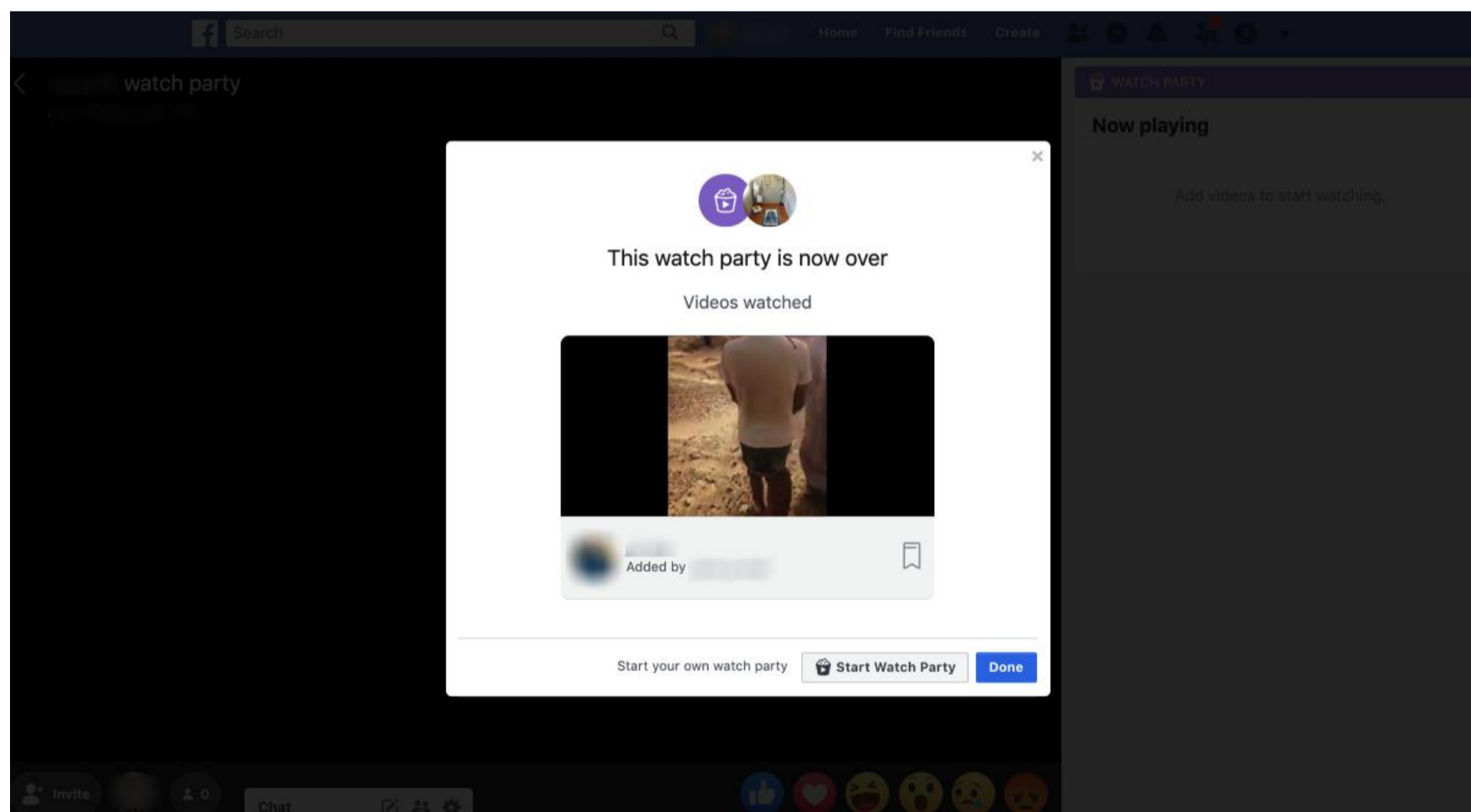


Figure 14: Screenshot of Facebook Watch Party screen from notification in antiquities trafficking Facebook Group on 28 May 2019. Source: Facebook

The discussion suggests that the man who was tied up had allegedly kidnapped the child and held him in a Pharaonic cemetery area. The child's family found out and caught the kidnapper, videoing their attempt to confirm the man's guilt and exact justice. The child shows the videographer where the man kept him. The alleged confirmation of the kidnapping prompts the two men leading the video to hit the kidnapper.



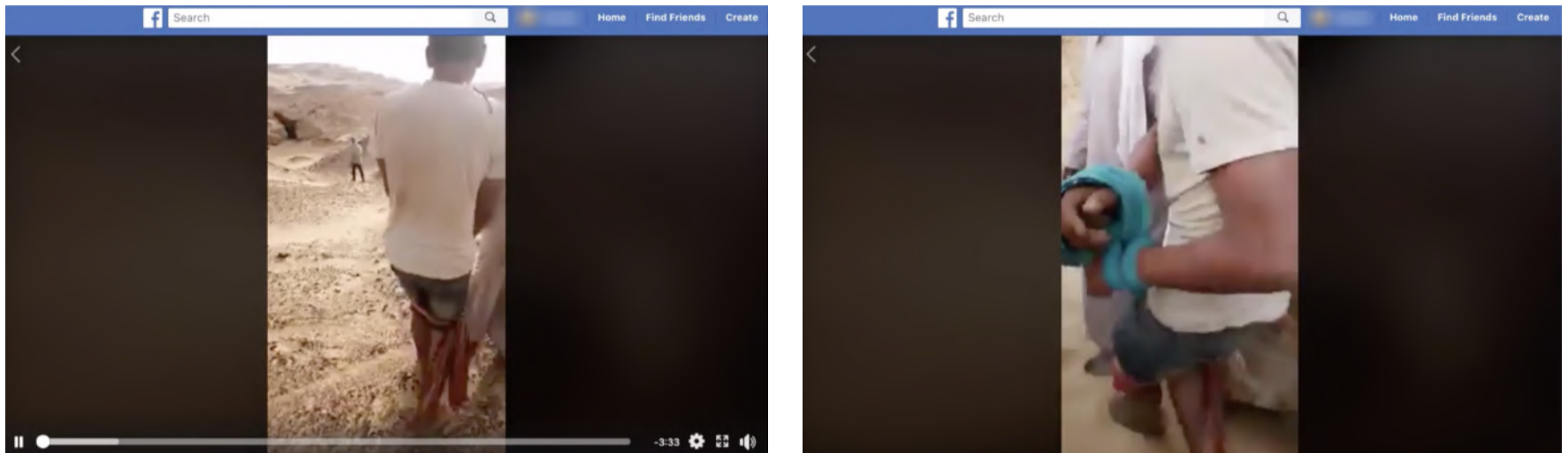


Figure 15: Screenshots of the 28 May 2019 Facebook Watch Party video of the alleged kidnapper with his hands and legs tied being led to the site where the child says he was kept. Source: Facebook

No one can blame the family for their reaction in the three-minute clip of what could be described as “street justice.” But the video featuring a man with his hands and legs tied as he is led into a secluded space and beaten illustrates the ongoing issues with Facebook Live and Watch Parties. As of 3 June 2019, the video remained active and was posted across multiple antiquities trafficking Groups and Pages on Facebook.

ENCRYPTED MESSAGING



One of Facebook’s most valuable features for traffickers is Facebook Messenger and the ability to enable encryption under the “Secret Conversations” function.²⁴ Between Facebook Messenger and WhatsApp, another encrypted messenger owned by Facebook, the company offers a range of interaction options for traffickers to communicate privately and out of the eye of Groups and the public.

Users will often stipulate that interested buyers for an artifact or commenters on a post reply through a direct message. In some cases, users will utilize the “disable comments” feature on a Group post, thereby forcing Group members to communicate with them privately (*Figure 16*). This is typically the point in the communication chain when a negotiation occurs, and a deal is made.



Figure 16: The screen shot of a 26 September 2018 post from Group B above is an example of a user who has turned off comments so that interested buyers are forced to message with him directly. Source: Facebook





BUY AND SELL



“Buy and Sell” Groups are a feature that is optional to set up when choosing a Group “type” on Facebook. These Groups function like a combination of regular Groups and Facebook Marketplace but allow admins to have control over who can become a member and engage in sales. The Buy and Sell feature can be turned on or off for a Facebook Group.²⁵

Eight of the Groups monitored by the ATHAR Project are categorized as Buy and Sell and provide dedicated functionality for Group members to list sales. Unlike e-commerce sites such as eBay, these Groups do not provide mechanisms for bidding, only static price listings. As a result, many users offering artifacts will list the price as “free” and encourage users to contact them privately. A user in Group D1, one of the eight Buy and Sell Groups identified, posted a carved statue of Romulus and Remus available for sale in Libya. The user listed the statue as “free” but also noted it was “for sale in Libya.” (Figure 17)



Figure 17: Screenshot of post offering carved artifact from Libya for “free” but also noting that it is for sale. Source: Facebook

But Buy and Sell designed Groups are not the only ways users can sell items. Users can also post an item for sale in any Group using the Buy and Sell feature in the posting section. When adding an attachment to a post in a Group users can select an option to “sell something.” In Group W1, a user listed a bronze bull statue for sale in Sanaa, Yemen. The user included a desired price of \$200,000 (Figure 18). It is unlikely he would achieve such a price on the source end of the market, but the user likely boosted the initial request price to minimize chances of fielding low offers.





Figure 18: Screenshot of post offering a bronze bull in Sanaa, Yemen for \$200,000 U.S. dollars. Source: Facebook

SOCIAL NETWORKING ANALYSIS OF FACEBOOK ANTIQUITIES TRAFFICKING GROUPS

The admins and moderators that run antiquities trafficking Groups on Facebook span a wide geographic area from the Middle East and Africa, to Europe and North America. Several of the Groups monitored share the same admins and moderators, revealing a web of interconnectivity among antiquities traffickers on Facebook.

An examination of the Facebook friend lists of admins (when available) reveals that these actors have a high degree of global connectivity. One admin based in Syria, referred to as Subject 31, runs at least four trafficking Groups. His identity and connections to multiple antiquities trafficking networks have been confirmed by intelligence information from TDI-HPI. Social network analysis shows that Subject 31 is a highly connected trafficker — he’s also Facebook friends with a well-known American antiquities dealer.²⁶

Another moderator of one of the largest Groups, referred to in analysis as Subject 93, recently posted an apology on the Group discussion board for tardiness in answering queries and requests for information. Subject 93 says that he is responsible for managing six Facebook Groups which makes it difficult to respond to everyone



Figure 19: Screenshot of post by moderator apologizing for not replying because he is running so many different Facebook Groups. Source: Facebook





(Figure 19). At least two of the groups he manages are monitored by the ATHAR Project.

Recording the admin and moderator profiles for each Group reveals a highly interconnected network of traffickers managing a series of interconnected Arabic language antiquities trafficking Groups on Facebook.²⁷ (See Appendix for table of Group and subject details)

A social network analysis of these Groups conducted by Shawn Graham includes two types of visualizations: by Group, and by subject. The analysis reveals that more than half of the Groups currently monitored by ATHAR are managed by individuals belonging to a highly connected network cluster (Figure 20).²⁸ In visualizations, the colors denote 'communities' or nodes that have self-similarity in their patterning of connections. (See zip file appendix for large versions of visuals and datasets)

Social network analysis can be used to identify individuals or groups that are structurally in a position to influence flows of information or material over a network.²⁹ In our case, the relevant metrics are 'betweenness centrality' and 'eigenvector centrality'. Betweenness looks at every pair of nodes in a network and works out the shortest path between them. For each node, the routine works out the number of shortest paths that the node lies upon. The more paths, the greater the score; the more paths, the greater the indication that that node is in a position to influence what flows through

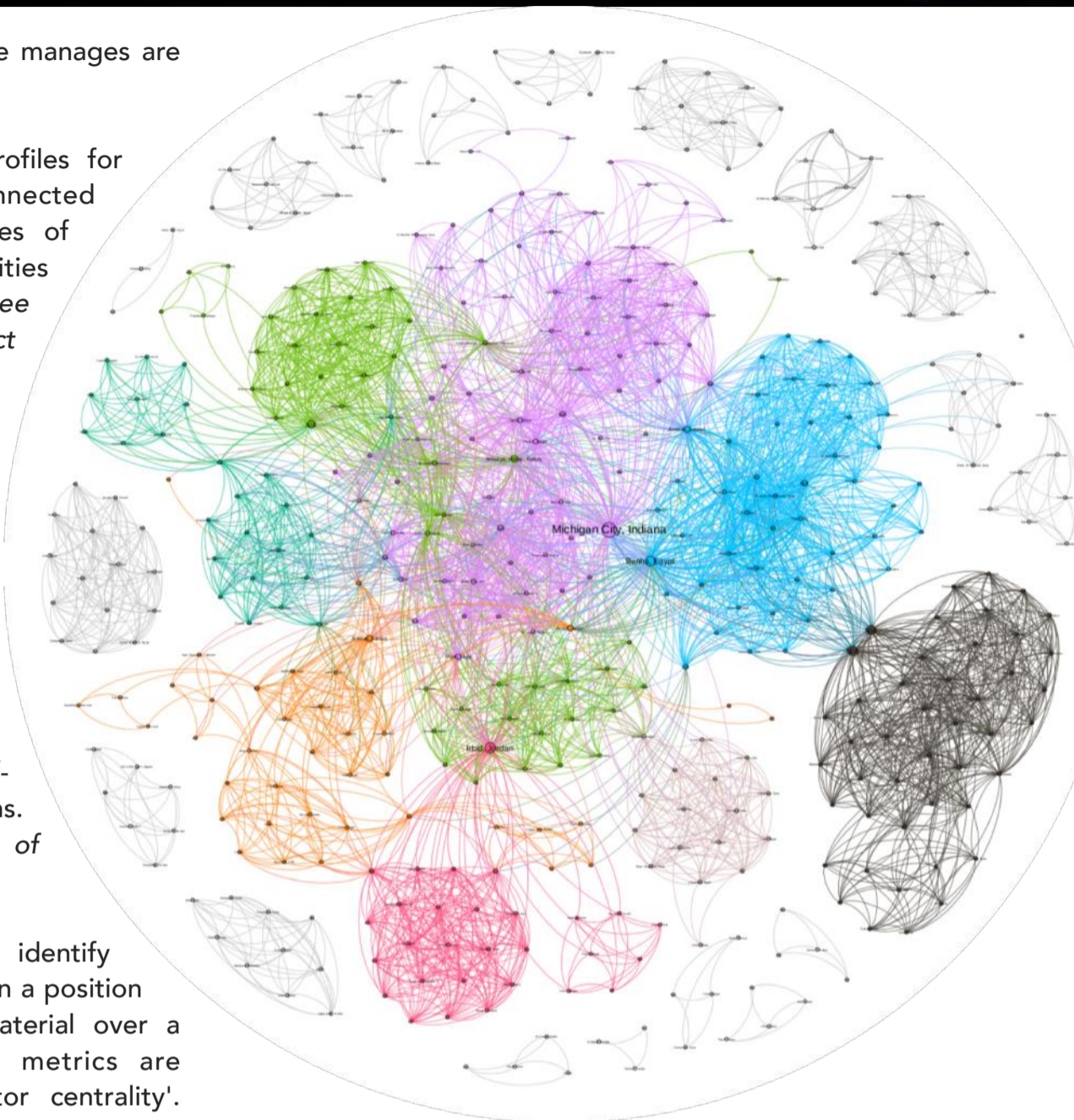


Figure 21: Social network analysis of interconnected admins and moderators managing Facebook antiquities trafficking Groups monitored by the ATHAR Project. Visualization by Shawn Graham

the network. Eigenvector is similar but conceives of importance as a function of being well connected to other well-connected nodes.

The first task is to convert the list of Groups and admins into two separate lists: one where Groups are connected to other Groups by virtue of shared administrators (and the number of shared administrators increases the weight or strength of the connection), and one where subjects are connected to other subjects by virtue of administrating the same Group. When two individuals are administrators of the same Groups (they have Groups in common), the strength of their connection is increased. Reshaping the list into two separate networks was done using Gephi and its multi-mode projection plugin. Social network analyses were conducted within Gephi.³⁰

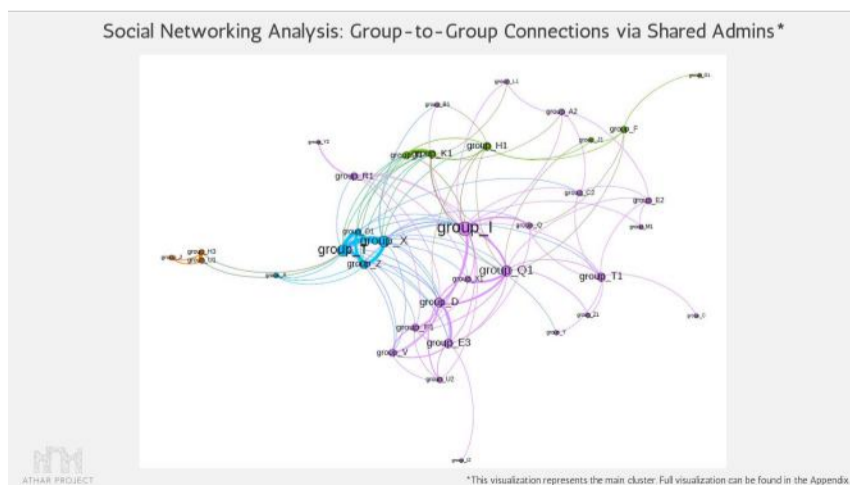


Figure 20: Social Network Analysis: Group-to-Group Connections via Shared Admins. Visualization by Shawn Graham.





Social Network Analysis by Admins and Moderators

The top five individuals, by betweenness centrality, were:

- Subject -- Location
 - subject_470 Michigan City, Indiana
 - subject_313 Irbid, Jordan
 - subject_303 Benha, Egypt
 - subject_227 N/A
 - subject_237 N/A

Using the eigenvector centrality measure, the results were slightly different:

- Subject -- Location
 - subject_303 Benha, Egypt
 - subject_470 Michigan City, Indiana
 - subject_167 Amman, Jordan
 - subject_119 Antakya, Hatay, Turkey
 - subject_420 Tripoli, Libya

We can also explore the larger network structure to detect 'communities' within this patterning of connections. (Figure 21) We use Gephi's 'modularity' statistic.³¹ This approach looks for patterns of similar local connections; it is probabilistic in the sense that it can be attenuated to pay attention to larger or smaller sub-groupings. Using the default values, the resulting partition is reasonably strong (72.7). Five subgroups account for about 50% of the structure of this network:

- Module 43: 15.31%
- Module 30: 10%
- Module 49: 9.59%
- Module 26: 9.18%
- Module 37: 8.16%

These are visualized in the appendix. The size of the node is scaled against its betweenness score. The nodes are laid out using a force-atlas routine that seeks to untangle the knots as best as it can (thus, the x, y coordinates of the nodes are not meaningful). These modules all interconnect with each other, making one larger cluster. As the visualization 'Social Networking Analysis: Admin-to-Admin Connections via Shared Facebook Groups' demonstrates, there are a number of 'isolated' clusters that have not yet been connected into this larger network of individuals. Those isolated clusters may bear examination.

Social Network Analysis by Groups

If we express the network as Facebook Groups connected to other Groups by virtue of shared administrators and moderators, we see a very tight nexus of relationships between the Groups.³² The average degree is around three, meaning that Groups are connected to three other Groups on average; however, the distribution is actually quite uneven, with 35 groups having no other connections, 14 groups having one connection, four groups with two connections, ten groups having three connections each, and as we travel down the 'long tail', a number of groups having eight or more connections. One particularly connected Group has 22 connections to other Groups.

The top groups by betweenness are: (in order of betweenness score)

Group -- betweenness score

- | | |
|------------------------|------------------------|
| • group_I 147.6054029 | • group_E3 42.9977689 |
| • group_T 129.654082 | • group_F 35.58333333 |
| • group_Q1 104.9673909 | • group_R1 35.25952381 |
| • group_X 61.65366023 | • group_H1 25.29762182 |
| • group_T1 57.34967532 | • group_K1 17.74499389 |

The top 10 by eigenvector centrality are:

- | | |
|------------|------------|
| • group_I | • group_E3 |
| • group_T | • group_Z |
| • group_X | • group_K1 |
| • group_D | • group_F1 |
| • group_Q1 | • group_V |

Groups that score highly on both metrics merit closer attention. In the visualizations for groups, the size of the node is scaled against its betweenness centrality score. The thickness of the edge is a function of the number of administrators a pair of groups (nodes) have in common.

Visualizing the connections of the admins and moderators from Group to Group reveals a high level of interconnectivity and a well-organized network of middlemen and traffickers. Groups that scored in the top ten for both betweenness score and eigenvector centrality include some of the largest Groups monitored by the ATHAR Project including Group Q1, which has over 126,000 members, and Group T, which has over





98,000 members. Among Group Q1's admins are Subject 52, a user based in London who manages at least four Groups, and Subject 339, who was previously listed as based in Chicago, Illinois but changed his Facebook location to Az Zarqa, Jordan during the course of this study. Among Group T's admins are Subject 31, a user who runs at least four trafficking Groups and is Facebook friends with an American antiquities dealer. Group T also includes Subject 22, a user whose profile lists him in New York.

Group I, the highest scoring Group for both betweenness score and eigenvector centrality, has 28 admins from countries across North Africa and the Middle East. Although Group I is not one of the larger Groups monitored, its membership at just over 24,000, the transnational connections among the admins have given the Group a stronger reach and network influence than Groups more than four times its size.

In total, there are 488 individual admins controlling a collective 1,947,195 members across 95 Facebook antiquities trafficking Groups. That's more than 404 members for every admin. Of the 488 admins, 23 control four or more Groups. Subject 470, who originally listed his location as Michigan City, Indiana, is one of only two admins controlling seven Groups. Subject 470's Groups include I, T, and Q1, the three Groups scoring highest for both betweenness score and eigenvector centrality, making him a central figure of the trafficking network. These interconnected networks of a few dozen traffickers control a Facebook antiquities black market that consists of nearly two million users. The illicit trade in MENA antiquities that generates thousands of Facebook posts is in the hands of a select number of individuals, presenting options for targeting bottlenecks in the trade.

GROUP COMMUNICATIONS

A critical element to the ATHAR Project's investigations is understanding the meaning behind the posting patterns of actors in Facebook Groups. Particularly, learning what posts are "saying" even if there is not any text associated. The investigation on antiquities trafficking Facebook Groups has revealed that a "code" exists for the types of posts and communications taking place, a necessary element to determine the intent behind even seemingly innocuous posts.

To help evade detection by Facebook or by authorities searching for unregulated sales, users develop language to avoid using terminology that may be tracked by AI. On discussion boards for Facebook antiquities trafficking Groups posts range from explicit sales, to coded requests for "evaluations" and "analysis."

Code: <<للتقييم>> or <<ممكن تقييم>> (Literal translation: "For evaluation" or "Possible evaluation")

What it means: "How much are you willing to offer?"

One of the most common types of posts involves individuals asking for evaluations or "assessments" of pieces they share in images or videos. If there



Figure 22: The user offering the seal posts to the Group requesting evaluation. An interested buyer who appears to be unaware of the "code" comments asking "for sale(?)". The original poster replies to him, "yes for sale, possible evaluation(?)". Source: Facebook





were any question as to what the code for evaluation meant, this post from Group D provides some context. (Figure 22).

Code: [No comment] or [WhatsApp Number]
What it means: "Message me directly to inquire."

Other post types will include a video or image of artifacts and a simple note with the poster's (or

"seller's") phone number as a means of contact – specifically for WhatsApp. (Figure 23)

Sellers and admins often request for interested buyers to leave their phone number in comments so that the seller can contact them via WhatsApp for negotiation. WhatsApp provides encrypted messaging, which helps shield potential monitoring of discussions, making it a communication method of choice for smugglers and traffickers.

Some users have taken the desire to direct message a step further and started turning off the ability for others to reply to their posts. This tactic that has been used more frequently since 2018 to force users to direct message an individual if they are interested in buying an artifact. Disabling comments appears to be more common among users who are well-versed in the Facebook illicit antiquities trafficking community and do not want to have conversations in a publicly accessible forum. The amount of care taken to mask language or identifying information by a user can be indicative of that user's level of experience in digital antiquities trafficking.

Disabling comments may have another use as well. Users who offer fake artifacts are often called out by more experienced traffickers and even admins for offering fake material in a Group. For those who have more convincing fakes, the comments that identify their artifacts as fakes can often dissuade buyers who may have been otherwise interested. Forcing users to inquire directly without seeing the opinions of other members in a Group makes it easier for charlatans to sell fakes to less experienced buyers.

Replies to posts can also follow a form of code. Some users will simply reply with a period, a single letter, or an emoji. These replies, though seemingly irrelevant, allow the users to follow the post and any additional comments or activity that take place. Once a user has commented on a post, Facebook will notify the user of other comments and replies that follow. While some may follow just to learn information and understand more about the type of item being offered or requested, others use these mundane replies in the same way individuals can "watch" an auction on eBay.



Figure 23: In this screenshot from Group B, the user offering what appears to be a historic artifact offers his WhatsApp phone number for interested buyers. The communication below even suggests how the item might be trafficked. A user replies to the post: "From which country?" and the original poster replies, "In Palestine, and you can go down through Egypt." A third user replies, "Communicate with me privately." Where the communication then goes out of public view. Source: Facebook



ARTIFACTS RESURFACING

The items offered for sale on Facebook also appear elsewhere in the trafficking chain. By coordinating with experts in other areas of open source research as well as individuals on the ground we can gain a more complete understanding of the time it takes for artifacts to move out of conflict zones.

The TDA-HPI human intelligence network in Syria and the surrounding regions has captured photos and videos of hundreds of artifacts being smuggled out of Syria. These artifacts have appeared in new contexts on Facebook antiquities trafficking Groups.

On 26 June 2017, a user in Group M2 posted a number of artifacts for sale, including a Roman-era erotic mosaic

mosaic alongside the looted mermaid mosaic suggests that he may still have been in Syria at the time. The mosaic resurfaced among the TDA-HPI network in Istanbul, appearing in a different context in a video on 29 January 2019. The timeline of the mermaid mosaic's movement shows that it took at least a year and a half to leave Syria and reach Istanbul.³³ (Figure 24)

This is not the first instance of artifacts captured by TDA-HPI appearing on Facebook as noted in our first piece on the subject published in World Politics Review in August 2018.³⁴ In 2015, TDA-HPI's network gathered video of a carved artifact with four faces, a unique and identifiable piece. The artifact was videoed by TDA-HPI as it was smuggled from territory previously held by ISIS. The



Figure 24: (Left) Screenshot of mermaid mosaic offered in Facebook Group M2 on 26 June 2017. Source: Facebook (Right) Screenshot of TDA-HPI video of mermaid mosaic in Istanbul on 29 January 2019. Source: TDA-HPI

of a man and a mermaid. The user's profile (examined in May 2019) lists his location in Berlin, Germany. However, a further examination of his profile content indicates the user is likely displaced from Syria. His location at the time of the post is unclear, but the inclusion of an in situ

same item appeared on a now-deleted Facebook Group on 25 July 2017. Screen grabs of the artifact were captured before Facebook deleted the Group where the item had been posted.





Facebook is not the only social media used by traffickers, nor are antiquities the only items trafficked. Armory Bazaar (@ArmoryBazaar on Twitter), a MENA arms

circulate among local networks for six months to a year before they are smuggled out of the country.

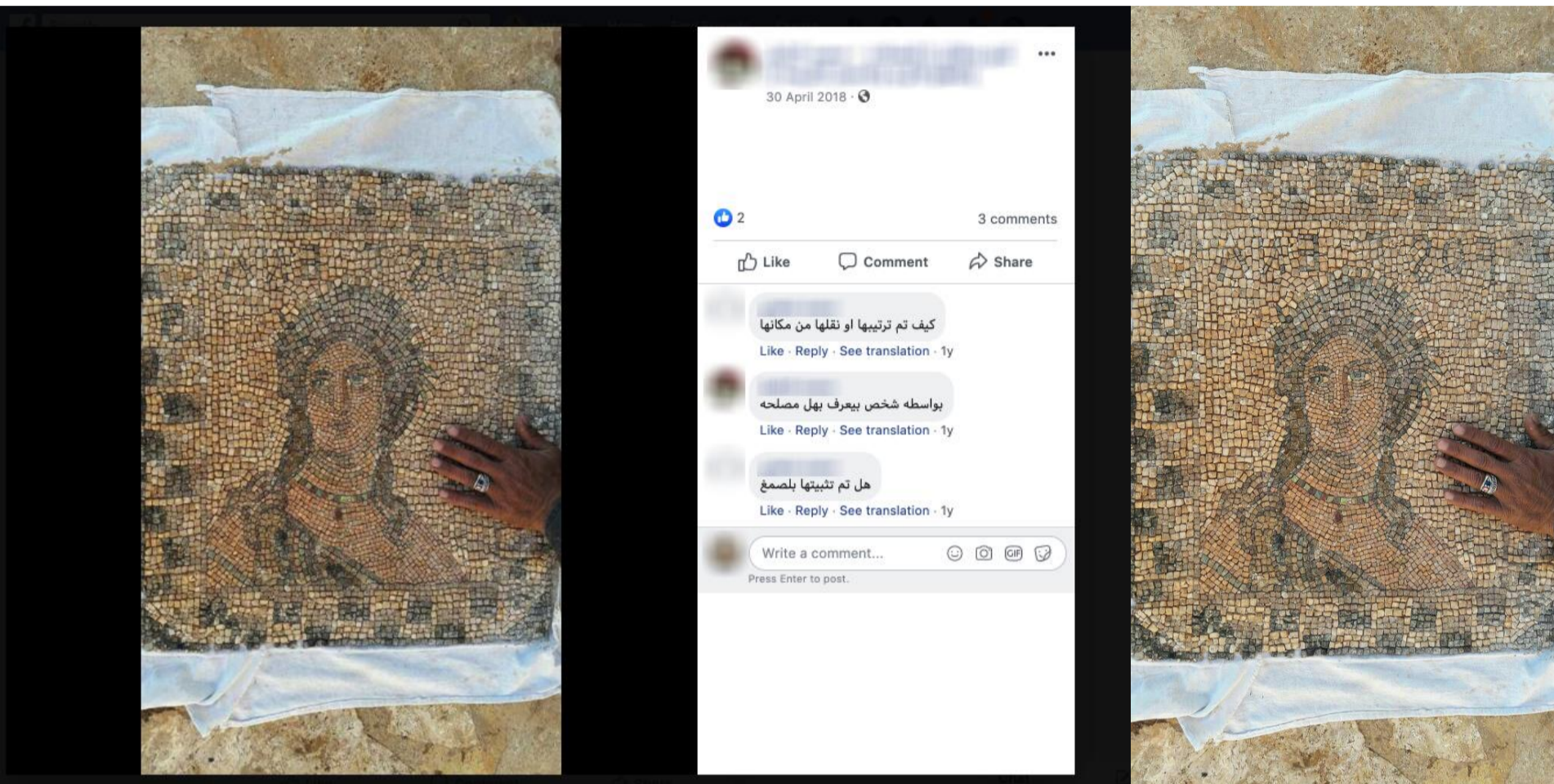


Figure 25: (Left) Screenshot of post in Group Z on 30 April 2018 offering mosaic. Source: Facebook (Right) The same image was found by Armory Bazaar in December 2018 in a northern Syria-based weapons trafficking chat group. Source: Armory Bazaar

researcher studying and documenting weapons trafficking in Telegram and other online chats,³⁵ communicated with the ATHAR Project through Twitter regarding the artifacts he was capturing in Telegram groups for arms trafficking out of Idlib. A Roman mosaic offered in a weapons trafficking group from northern Syria was captured by Armory Bazaar in December 2018. The same photo of the mosaic was offered in Group Z on 30 April 2018. (Figure 25)

One item, a painted religious relic, was offered in an Idlib-based weapons trafficking chat monitored by Armory Bazaar on 17 November 2017. The same item appeared six months earlier in Facebook Group D, posted by an Idlib-based user in a video on 12 May 2017. (Figure 26)

Two different individuals sharing this relic in different Idlib-based social media platforms within a six-month period suggests that looted artifacts are not immediately leaving the country upon finding. Artifacts appear to

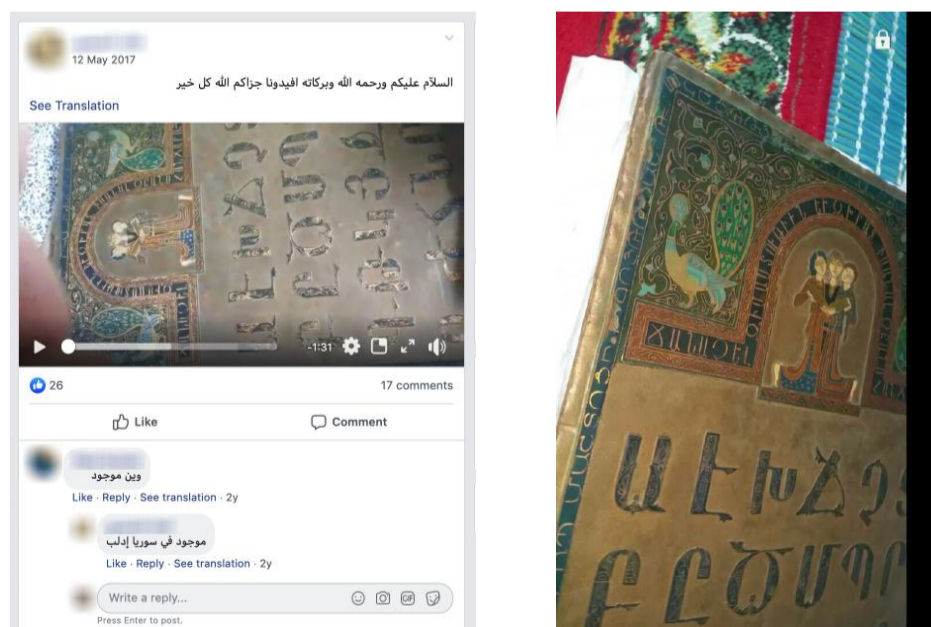
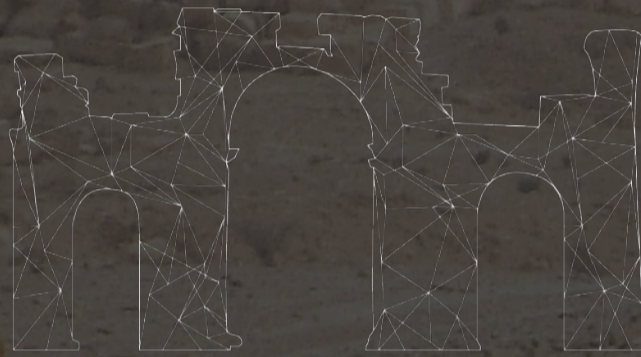


Figure 26: (Left) Screenshot of video post in Group D offering religious relic by user based in Idlib on 12 May 2017. Source: Facebook (Right) Image provided by Armory Bazaar of the same item appearing in a Telegram chat on 17 November 2017 in Idlib in a different context. Source: Armory Bazaar



ILLICIT ANTIQUITIES ON FACEBOOK:
SYRIA CASE STUDY



ATHAR PROJECT

THE ANTIQUITIES TRAFFICKING AND HERITAGE ANTHROPOLOGY RESEARCH PROJECT

JUNE 2019



SYRIA CASE STUDY

Using data from Facebook Group communications supplemented by human-intel on the ground, this report provides a detailed illustration of antiquities trafficking in Syria and throughout the wider Middle East and North African region. The ATHAR Project is currently monitoring 95 Arabic-language Facebook Groups engaging in the illicit antiquities trade.³⁶

The Syria case study examines four of the 95 Facebook Groups currently monitored by the ATHAR Project. The four Groups selected all have listed locations in Syria and the data collected spans from each Group's date of creation through 31 December 2018.

DIGITAL METHODOLOGY

All of the data collected by the ATHAR Project is obtained using open-source research and non-participant observation. For the purposes of this research, the ATHAR Project has developed an undercover Facebook account used to join Facebook Groups for monitoring, observation, and recording. The profile currently does not maintain any friends and not does it interact or communicate with users or their posts.

The ATHAR Project's digital data collection process occurs in three primary steps:

I. Identifying Groups and Pages

Facebook Groups and Pages for antiquities trafficking are identified using ATHAR's monitoring profile. ATHAR uses three main methods of identifying relevant Groups and Pages:

1. Searches within the Facebook platform for the Arabic words for 'antiquities' (أثار) and 'treasures' (كنوز).
2. Utilizing the "recommended" and "related" features on Facebook that suggest Groups and Pages with similar users or characteristics.

3. Examining profiles of admins and moderators in Groups and identifying other Groups they have joined on Facebook.

Not all Groups using the words 'antiquities' or 'treasures' are related to trafficking. Some may be educational or non-profit organizations. The ATHAR Project canvasses each Group for key characteristics of an antiquities trafficking Facebook Group, these can include common users who appear in other trafficking Groups, images of artifacts at rudimentary illegal digs or still in situ (*Figure 27*), and coded language and postings.

II. Monitoring Groups

Once Groups are identified and surveyed, the ATHAR Project's monitoring profile submits a request to join the Group. These requests sometimes require admin approval and other times require the ATHAR profile to answer a series of Arabic language questions that can range from something as simple as inquiries regarding country of origin to questions about the user's level of skill in looting or trafficking. Each Group is different as the questions are arranged at the discretion of the admins.





Figure 27: User from Hama, Syria poses with an in situ mosaic. The image was included in an offer post in Facebook Group D on April 18, 2018. Source: Facebook

III. Group Data Collection

The ATHAR profile does not interact with users or posts beyond its requests to join a Group. After the profile has been approved, the ATHAR Project begins manually collecting data from communications occurring within the Group. The posts and communications are canvassed one-by-one and recorded in external documents to analyze for both qualitative and quantitative data. These communications include posts of simple text, photos, or videos, and the underlying comments and replies on those posts.

The data collection process is the slowest step as collection is manual and data scrapers are not used. Scrapers miss key information embedded in images and videos which can skew the final results. Once a request to join has been granted, all of the historical information within that Group is available to the member, which makes it possible to collect data from the entire 'lifetime' of a Facebook Group. The posts are collected in reverse

chronological order as this is how they appear on Facebook.

The details of each post and related users are maintained in an external spreadsheet to ensure that quantifiable information is preserved in the event that the post is removed, or the Group is deleted. The data recorded includes:

- Date and link of the post;
- The name and profile link of the user;
- The post type (i.e. whether it was an offer or an inquiry to purchase and item);
- The country and city of the posting user;
- Contact information of the user (when provided);
- The type of material offered; and
- A screenshot of the post and its related media.

Not all posts have information for each of the areas recorded.³⁷ In addition, more well-versed traffickers may create fake profiles with names like "treasure hunter" in an effort to hide their real identity. The lack of data or



potentially mis-represented information in some categories are two of the weaknesses of the research. More than half of the users recorded for this case study have provided locations in their profiles or posts, but there is still a large portion of users that do not have listed location details in their public profiles.

HUMAN-INTEL

To verify the validity of our Facebook Group findings, the ATHAR Project works with TDA-HPI to tap into human intelligences sources on the ground in Syria in areas where trafficking activity is concentrated.

The ATHAR Project and TDA-HPI focused on Idlib Province as the regional area for cross-referencing digital sources with real people and verify the validity of their trafficking efforts. Profiles of active Group users who identify their locations as Idlib were gathered by ATHAR and sent to TDA-HPI for comparison with known individuals on the ground.

SYRIAN-BASED GROUPS

The four Facebook Groups included in this report all have listed locations in Syria. Syrian-based Groups were chosen as the focus of the first report due to the critical cultural heritage situation in the country and the ATHAR Project's access to an existing human intelligence network, which allows for the verification of some of the

digital findings. Furthermore, unlike stable countries with functioning state institutions such as Egypt and Jordan, Syria has been unable to maintain standard heritage preservation, documentation, and repatriation efforts due to the ongoing conflict. This case study also seeks to help fill the gap in heritage protection efforts regarding continued documentation of artifacts that are being trafficked out of the country.

Each Group was established in 2017 and has been fully recorded from their creation date through December 31, 2018. The Groups selected represent a range of membership size across the spectrum of the 95 Groups monitored. The case study Groups are a mix of public and private and list their locations in areas of opposing factions across Syria.

Data collection from Groups A, B, C, and D yielded a collective 3,539 individual posts, comments, or replies specifically regarding the purchase or sale of illicit antiquities. The posts recorded do not include posts concerning illicit digging tactics or knowledge sharing. All of the data represented in this report concerns posts that either offer antiquities, request specific items, or express interest in purchasing antiquities that have been offered in the Group discussion.

Communications that express interest in purchasing an artifact occur exclusively in the form of comments or replies to posts by other users on Group discussion boards. As such, communications from interested buyers occur more frequently in every Group analyzed due to the fact that multiple users can reply to a single post.

Group	Group Type *	Access	Date Created	Members **	Location as Listed
Group A	N/A	Closed	18 April 2017	1,803	Idlib
Group B	Support	Closed	12 January 2017	46,564	Damascus, Syria
Group C	Custom	Public	7 November 2017	3,484	Maarat al-Numaan Idlib, Syria
Group D	N/A	Closed	5 January 2017	73,434	Syria

* Group Types, if listed, are selected by admins from categories that have been pre-designated by Facebook.

** The number of Group members listed was recorded as of 5 May 2019.



GLOBAL INTERACTION

The active members in four Syrian-based antiquities trafficking Facebook Groups represented in this case study come from countries across the globe. However, there is also a high level of regional concentration of activity in Syria, Turkey, and the wider Levant.

The highest concentration of offers is based in Syria, an unsurprising result given that each of the groups in this case study is listed as based in Syria. Within Syria, there are more offers out of Idlib than any other area. Idlib has been a hotbed of ongoing activity by extremist groups, even after the fall of the so-called Caliphate of ISIS. The looting and trafficking of antiquities has been relegated

ATHAR Syria Case Study: Sale Offers for Antiquities Trafficking Facebook Groups A, B, C, & D
Number of Individual Posts Offering Artifacts by Country Listed in Their Profile

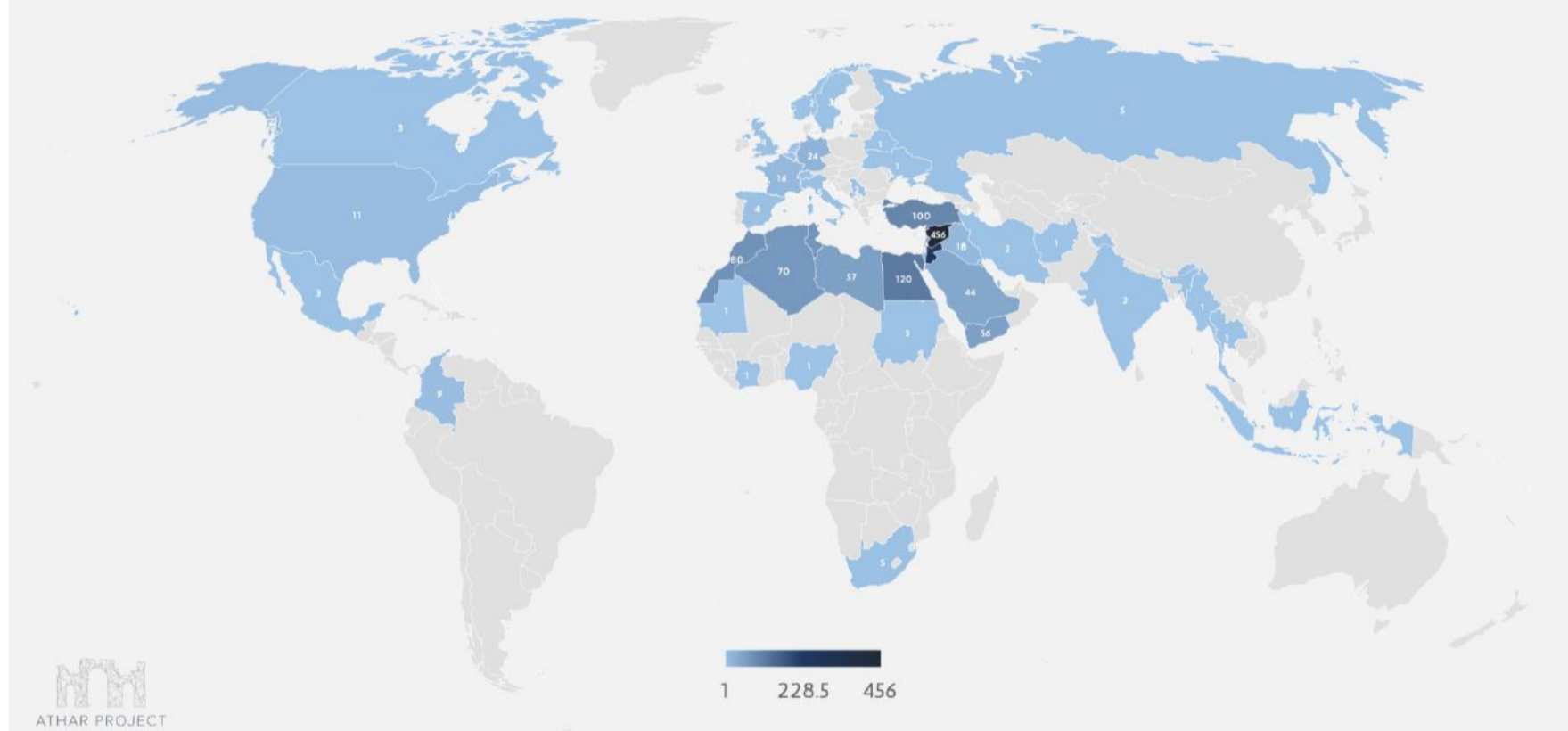


Figure 28: ATHAR Syria Case Study: Sale Offers for Antiquities Trafficking Facebook Groups A, B, C, & D, Number of Individual Posts Offering Artifacts by Country Listed in Their Profile.

The location data are collected in one of two ways: 1) Location is gathered from what is listed in a user's profile, or 2) data is collected from information in a user's explicit mention of location if posted in a Group discussion. Roughly one-third of all users identified in Groups A, B, C, and D collectively did not have listed locations or provide location details in discussions. The visualizations in figures 28 and 29 are not reflective of the complete array of buyer and seller locations as they only map data based on provided locations.

to localized militant groups and regional terrorist designated organizations like Jabhat Al Nusra and later Hay'at Tahrir Al Sham (HTS).

The locations of interested buyers largely reflect the areas of offers. This is in part due to the middleman-to-middleman level of the trafficking process we are primarily looking at. At this level, buyers and sellers are often interested with coordinating with someone in their local area that they can connect with in person to make an exchange. This is indicated by conversations discussed in the replies to posts. In these posts, interested buyers



ATHAR Syria Case Study: Interested Buyers for Antiquities Trafficking Facebook Groups A, B, C, & D
 Number of Individual Posts Interested in Purchasing Artifacts by Country Listed in Their Profile

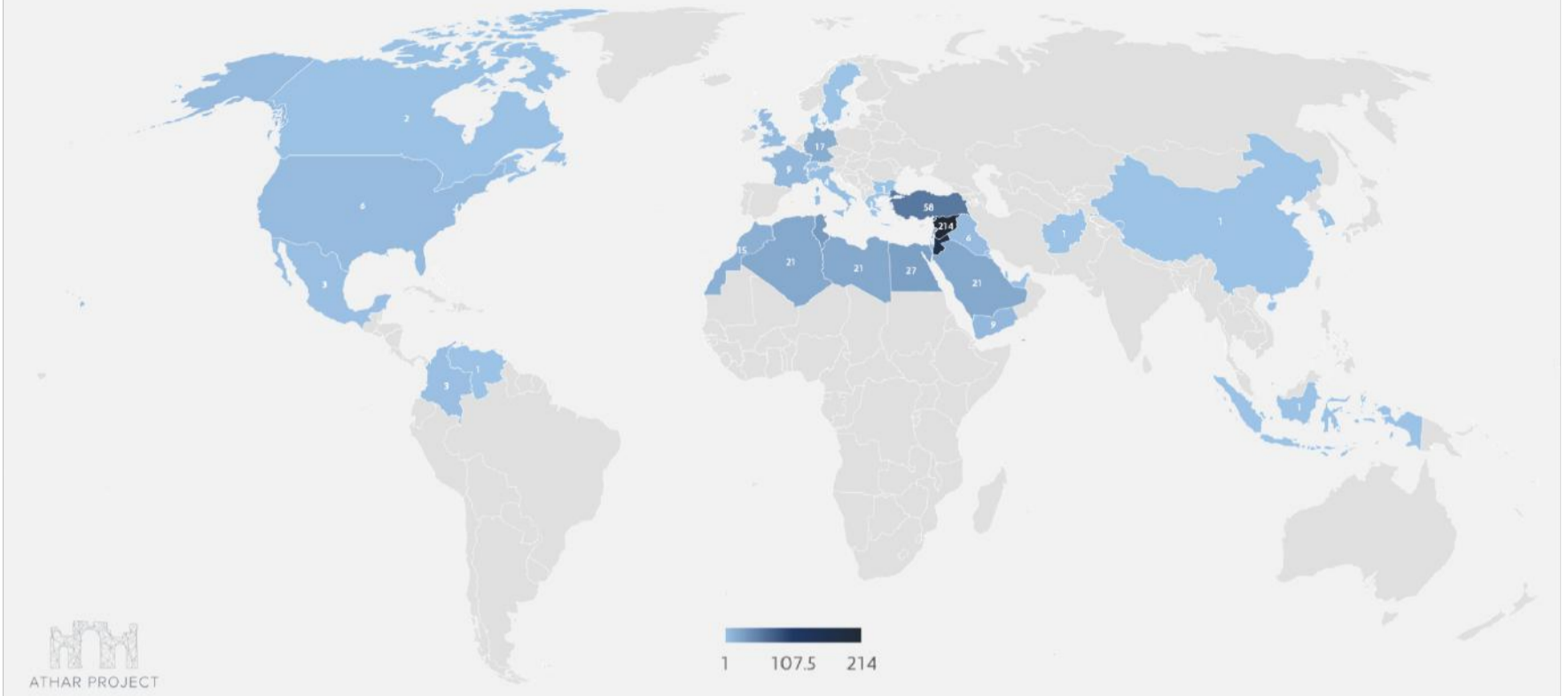


Figure 29: ATHAR Syria Case Study: Interested Buyers for Antiquities Trafficking Facebook Groups A, B, C, & D, Number of Individual Posts Interested in Purchasing Artifacts by Country Listed in Their Profile.

ask location details including what parts of a particular city a seller is based so they can determine if coordination is viable. This is particularly the case in Syria where blockades and ongoing conflict can hinder the ability for individuals to move from one area to another.

In total, there are 47 countries represented by users who have posted offers across Groups A, B, C, and D.

Only five of those countries (less than 11%) are currently in conflict or have designated conflict zones in them. However, among all posts where a user’s location was available, more than one third of the posts offering artifacts, 36%, were from countries currently with ongoing conflict within them. A further 44% of the posts offering artifacts with listed locations were from nations bordering conflict zones, yet countries

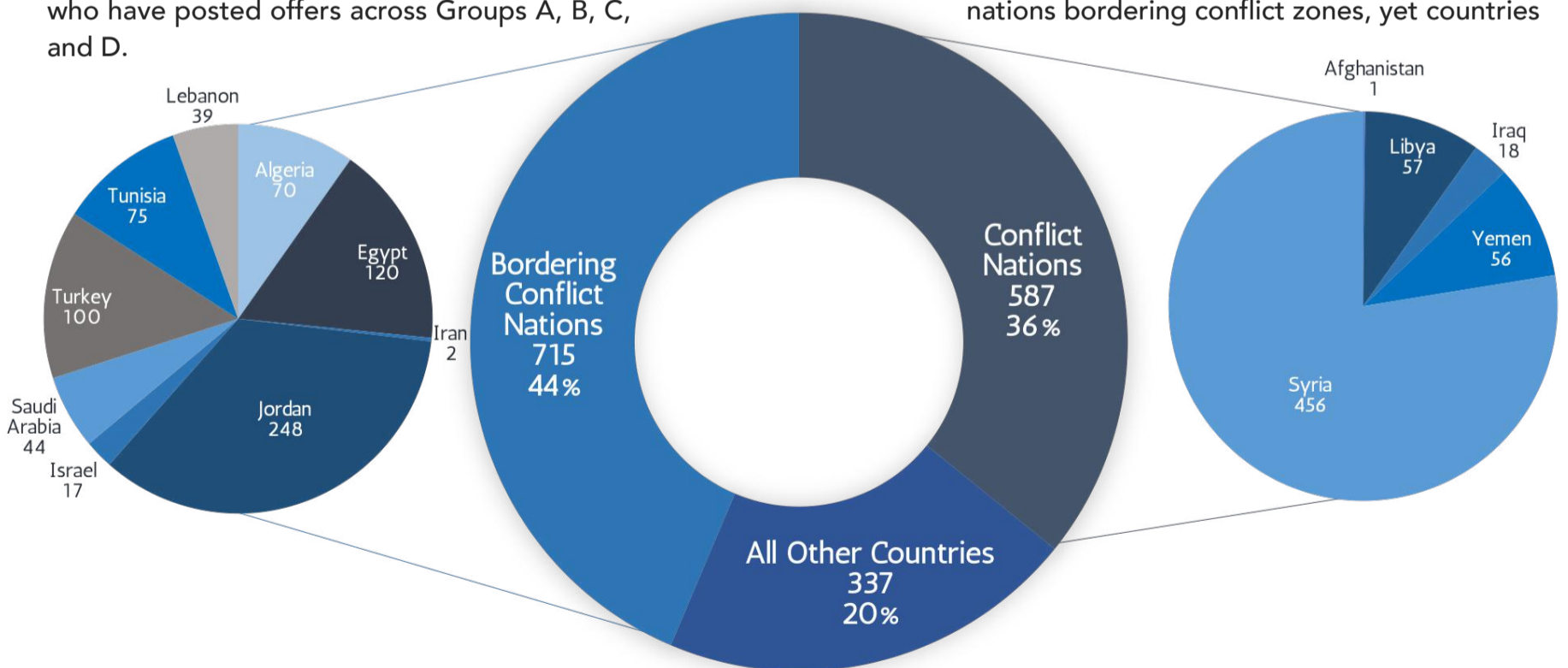


Figure 30: ATHAR Syria Case Study: Sale Offers for Antiquities Trafficking Facebook Groups A, B, C, and D, Number of Individual Posts Offering Artifacts by Country Listed in Their Profile. *Does not include posts where country information was not available.



bordering conflict zones only made up 19% of all countries where users offered artifacts that were represented in the Groups. (Figure 30)

Nations in conflict and those bordering conflict do not even represent one-third of the nations identified where artifacts were posted for sale. Yet the posts offering artifacts from conflict countries and their bordering nations represented 80% of all offer posts with listed locations, indicating a strong correlation between conflict and antiquities trafficking.

ADMIN AND GROUP MEMBER GEOGRAPHY

The geographic distribution of the admins and moderators is reflected in the active membership of the Group. Active members are those recorded in the case study as engaging in discussions and posting with interest to buy or sell illicit artifacts. These active users make up a small portion of overall Group membership. The majority of Group members either remain as observers or only communicate through direct messaging, which is out of public view .

In general, data for this study shows that more diverse and globally distributed admins and moderators also means a more diverse and global Group membership. This is in part due to Facebook's algorithms. The platform's functions allow a user to invite his or her friends to join a Group or 'like' a Page that they manage on the site. As is the case in real life, most users, admins, and moderators in these Groups have a network of friends who are primarily in their local area. This is one reason that the geographic distribution of Group members echoes that of the Group's admins and moderators.

The algorithm is also designed to recommend both closed and public Groups to users if their friends are members of those Groups.³⁸ Some of the admins of Groups, while based in Europe are originally from countries in the MENA region, primarily Syria as indicated by the publicly available information in their Facebook profiles. Those users with networks of friends

and acquaintances on two continents help expand the geographic reach of the Groups.

Active Member Geography: Group A

With 1,803 members, Group A is the smallest Facebook antiquities trafficking Group examined in the case study. While small, Group A has the highest rate of membership actively engaged in trafficking antiquities on the Group's discussion board. There were 168 active users recorded as selling or interested in buying antiquities in the Group, roughly 9.3% of the Group's 5 May 2019 membership. Of the 168 users, 92 (55% of active users) listed locations in their profiles. An additional four users provided country locations but not city: three in Syria, and one in Turkey. The remaining 72 (43% of active users) did not provide any location details that were publicly accessible.

Group A is small and has a heavily localized membership. A local and accessible active user population makes the ability to transmit illicit goods from one individual to another more efficient and could be an explanation for the higher rate of active members as opposed to Groups B, C, and D. Group A's focal points in northwestern Syria, Turkey, Saudi Arabia, and Germany are reflective of the Group's admin and moderator distribution. The highest concentrations of active users based in Syria are around Idlib and Aleppo. (Figures 31-33)

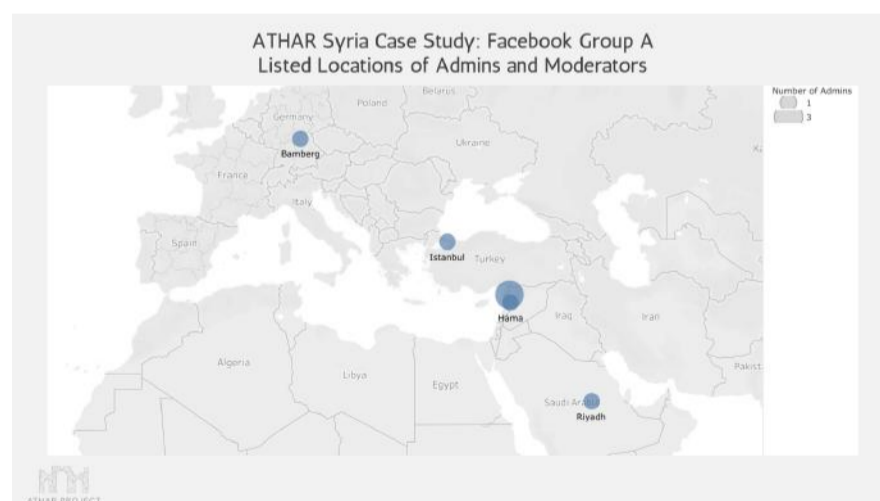


Figure 31: ATHAR Syria Case Study: Facebook Group A Listed Locations of Admins and Moderators

Data is based on locations provided by admins in public profiles or Group discussions.

Number of admins not represented due to unlisted locations: 1



ATHAR Syria Case Study: Facebook Group A Locations of Individual Users Interacting in Group for Sale or Purchase of Artifacts



Figure 32: ATHAR Syria Case Study: Facebook Group A Locations of Individual Users Interacting in Group for Sale or Purchase of Artifacts. This map represents the number of individual users actively engaging on the discussion board of Facebook Group A. Data is based on locations provided by admins in public profiles or Group discussions. Number of users not represented due to unlisted locations: 76*

ATHAR Syria Case Study: Facebook Group A Locations of Individual Users Interacting in Group for Sale or Purchase of Artifacts

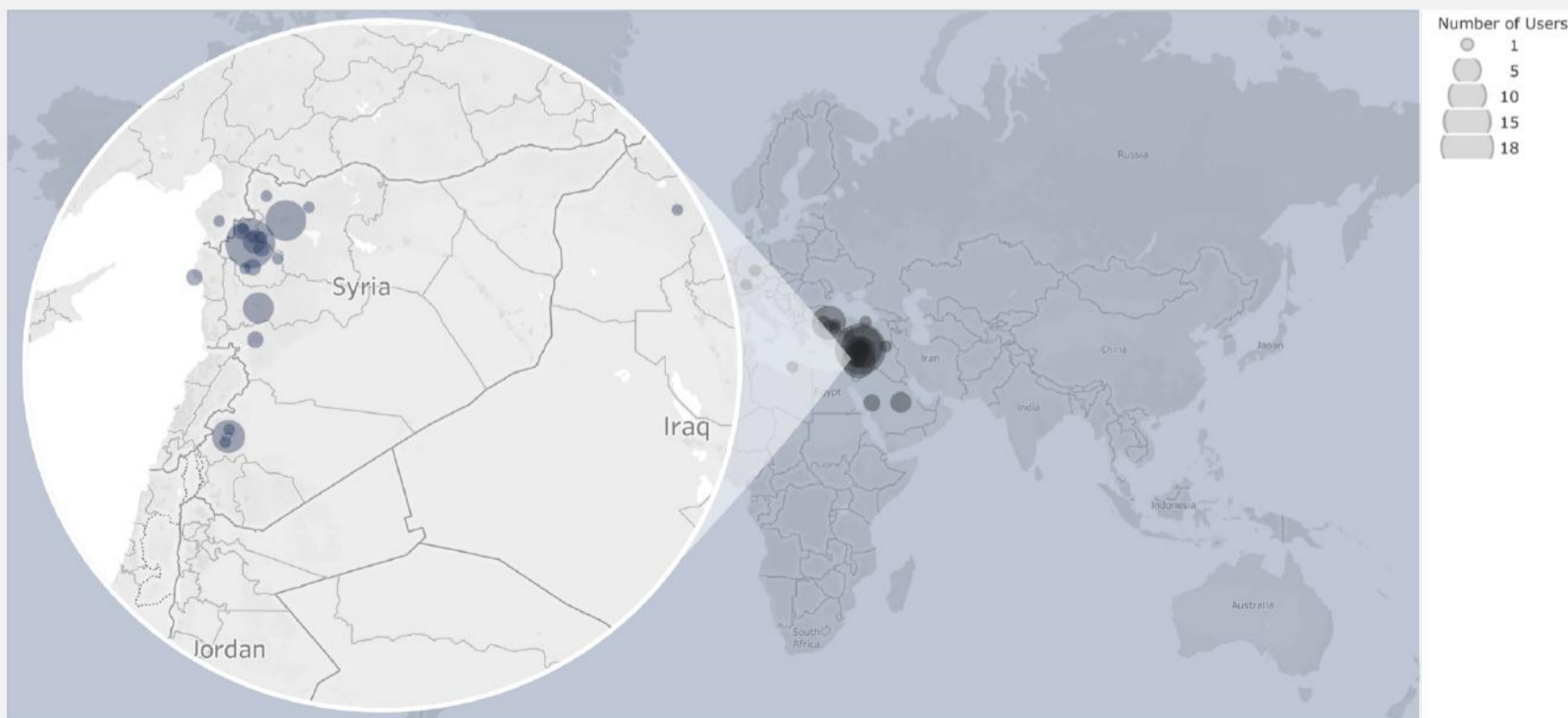


Figure 33: Zoomed in view of the Syrian concentration in Figure 32 ATHAR Syria Case Study: Facebook Group A Locations of Individual Users Interacting in Group for Sale or Purchase of Artifacts.



Active Member Geography: Group B

Facebook antiquities trafficking Group B is based in Damascus, Syria with 46,564 members as of 5 May 2019. There were 975 total active users recorded as buying or selling antiquities in the Group, roughly 2.1% of the Group's May 2019 membership. Of the 975 users, 587 (60% of active users) listed locations in their profiles. An additional 52 users provided country locations but not city: six in Algeria, four in Egypt, six in Jordan, two in Lebanon, three in Morocco, three in Palestine, one in Saudi Arabia, eight in Syria, 12 in Tunisia, three in Turkey, and four in Yemen. The remaining 336 (35% of active users) did not provide any location details that were publicly accessible.

Group B is a mid-sized Group and its user distribution is much more diverse than that of Group A or Group C. Among the active members there are eight recorded active users from across the United States. The distribution throughout Syria was also more diverse than the smaller Groups in the case study, with relatively equal concentrations from northern to southern Syria. In addition, Group B has high concentrations of active users throughout the Levant including in Jordan and the West Bank. Among users that listed locations, Group B had more users in Amman, Jordan than any other city with 50 active users listed in Amman. The next highest city was Idlib, Syria with 30 users.³⁹ Only two additional cities had 29 users each with listed locations: Damascus, Syria and Tripoli, Libya. (Figures 34-36)

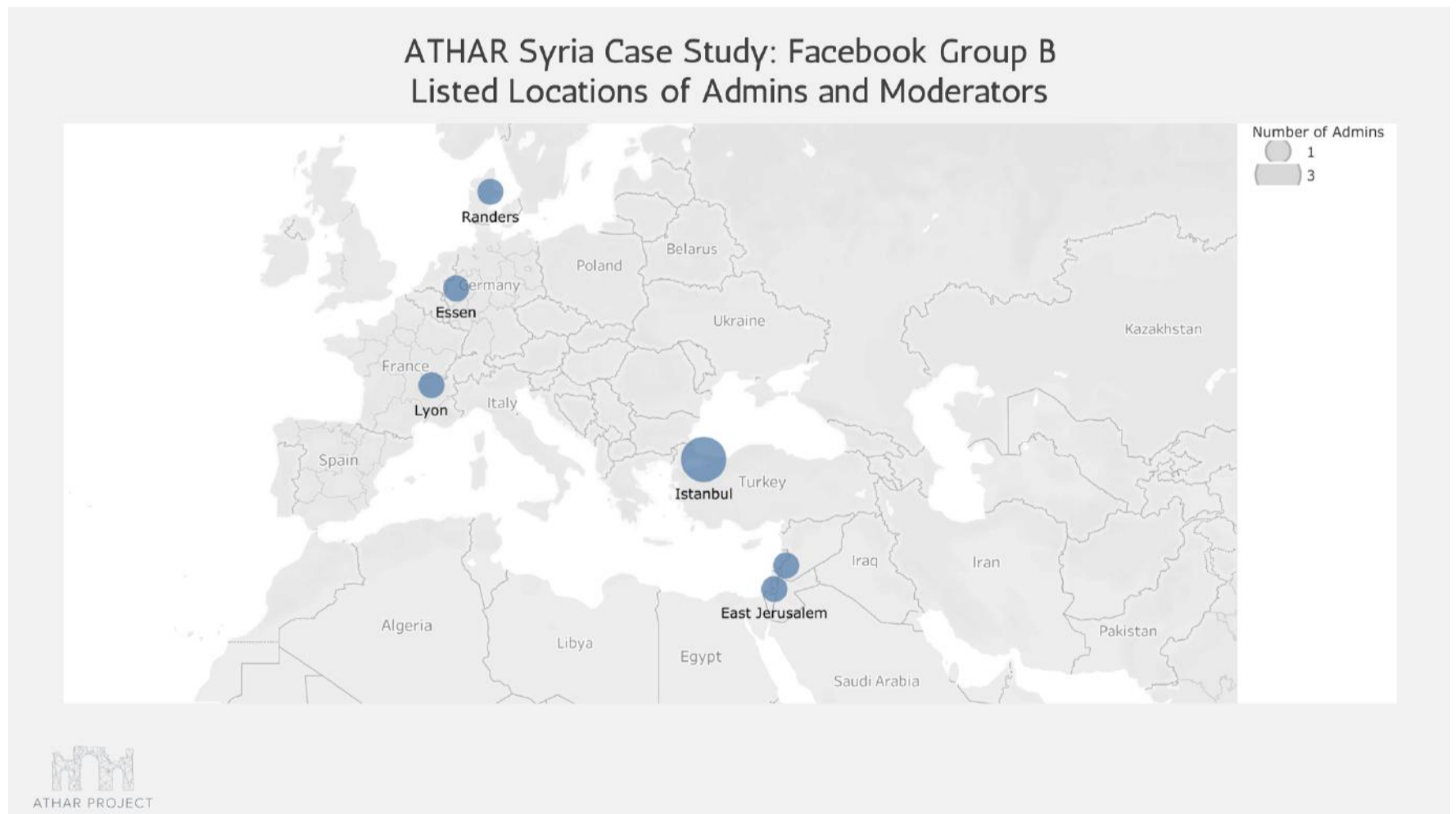


Figure 34: ATHAR Syria Case Study: Facebook Group B Listed Locations of Admins and Moderators
Data is based on locations provided by admins in public profiles or Group discussions.
Number of admins not represented due to unlisted locations: 2
Number of moderators not represented due to unlisted locations: 1



ATHAR Syria Case Study: Facebook Group B Locations of Individual Users Interacting in Group for Sale or Purchase of Artifacts

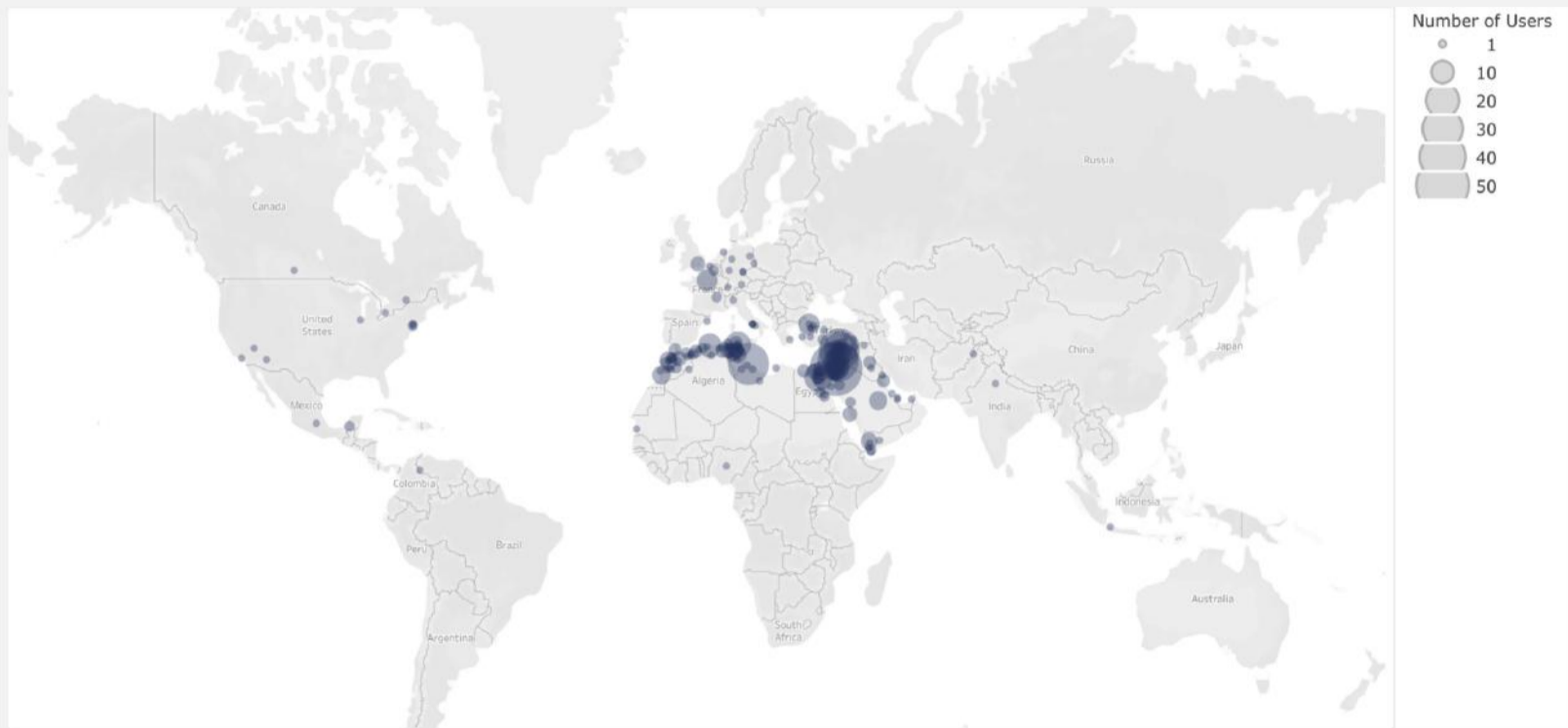


Figure 35: ATHAR Syria Case Study: Facebook Group B Locations of Individual Users Interacting in Group for Sale or Purchase of Artifacts. This map represents the number of individual users actively engaging on the discussion board of Facebook Group B. Data is based on locations provided by admins in public profiles or Group discussions.

Number of users not represented due to unlisted locations: 388*
 *52 of the unlisted users disclosed country locations but not cities.

ATHAR Syria Case Study: Facebook Group B Locations of Individual Users Interacting in Group for Sale or Purchase of Artifacts

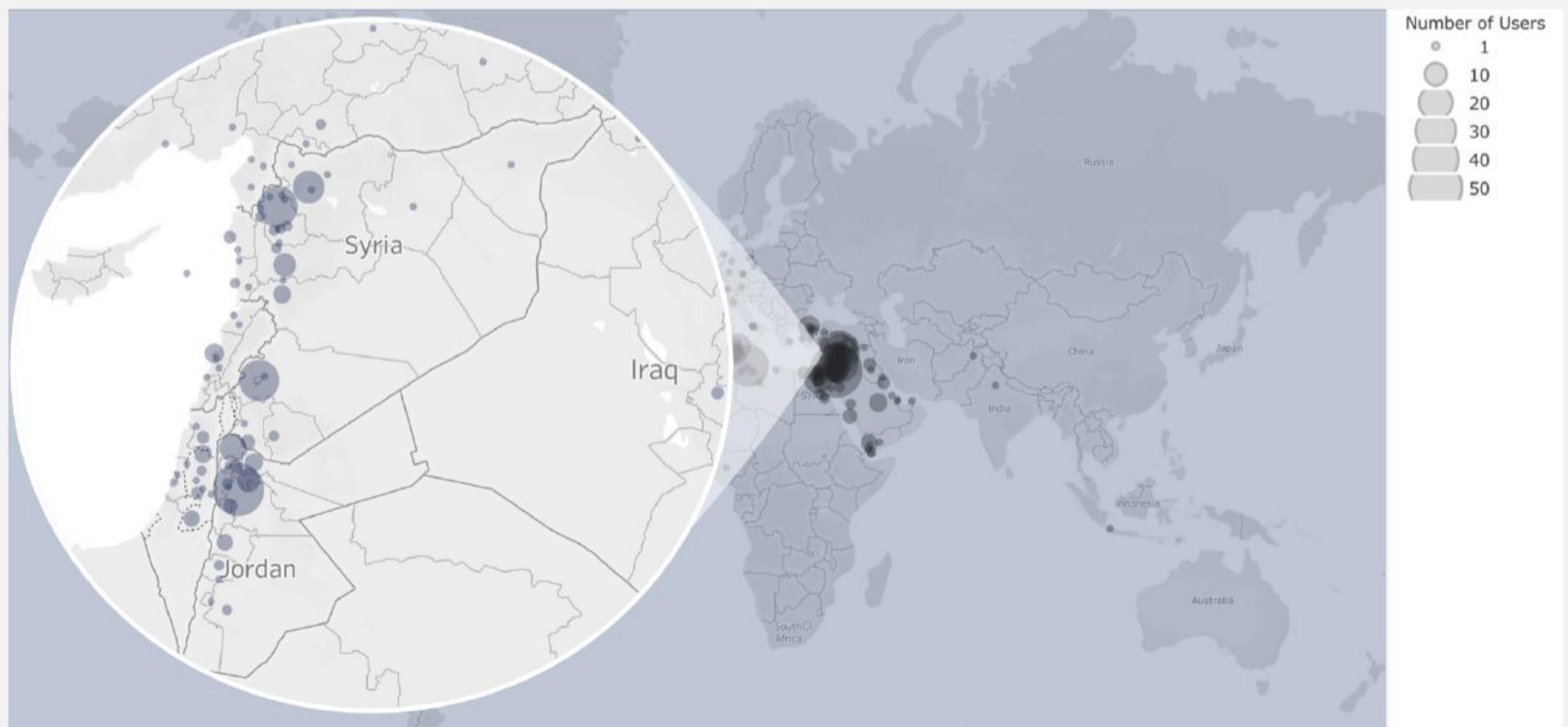


Figure 36: Zoomed in view of the Syrian concentration in Figure 35 ATHAR Syria Case Study: Facebook Group B Locations of Individual Users Interacting in Group for Sale or Purchase of Artifacts.





Active Member Geography: Group C

Facebook antiquities trafficking Group C is based in Ma'arrat al-Numan, Syria, roughly 20 miles south of Idlib. Like Group A, Group C is small with 3,484 members as of 5 May 2019. Although Group C's overall membership is about twice the size of Group A, its active users are less than a third of those found in Group A. Group C had 57 total active users recorded as buying or selling antiquities, roughly 1.6% of the Group's May 2019 membership. Of the 57 users active, 31 (54% of active users) listed locations in their profiles. An additional five users provided country locations but not city: two in Jordan, one in Syria, one in Tunisia, and one in Turkey. The remaining 21 (37% of active users) did not provide any location details that were publicly accessible.

Although Group C's listed location is in Ma'arrat al-Numan, a city in Idlib Governorate, its highest concentration of active members is actually in Damascus. This is may be significant because of the geopolitics of the civil war. Damascus has been largely unaffected by the war as it remains under the tight control of Assad regime forces. On the other hand, Ma'arrat al-Numan evolved as a stronghold independent for civil society

activism and local governance, rejecting association with terrorist groups like Jabhat Al Nusra. Most recently the city has fallen under the control of the Salvation Government as a result of HTS's campaign in February 2019 to eliminate any remaining opposition to its rule. The concentration of more active users from Damascus than from the whole of Idlib Governorate may be a reflection of the city's more independent nature and provide evidence of a relationship between antiquities traffickers in Damascus and those in Ma'arrat al-Numan.

Group C's geographic distribution features what appears to be an anomaly in South America. The Group's most active admin is listed as located in Cali, Colombia. The admin's profile and name appear to suggest he may indeed be based in Colombia, but this same admin has also posted multiple loot-to-order requests seeking artifacts available in Idlib. It is possible this admin is either using a fake profile or transits between the two regions, retaining the Colombia location on his public profile. He could also be posting the loot-to-order requests on behalf of other individuals he is connected with on Facebook. Further information could not be obtained without connecting directly with this user. (Figures 37-39)



Figure 37: ATHAR Syria Case Study: Facebook Group C Listed Locations of Admins and Moderators. Data is based on locations provided by admins in public profiles or Group discussions.



ATHAR Syria Case Study: Facebook Group C Locations of Individual Users Interacting in Group for Sale or Purchase of Artifacts

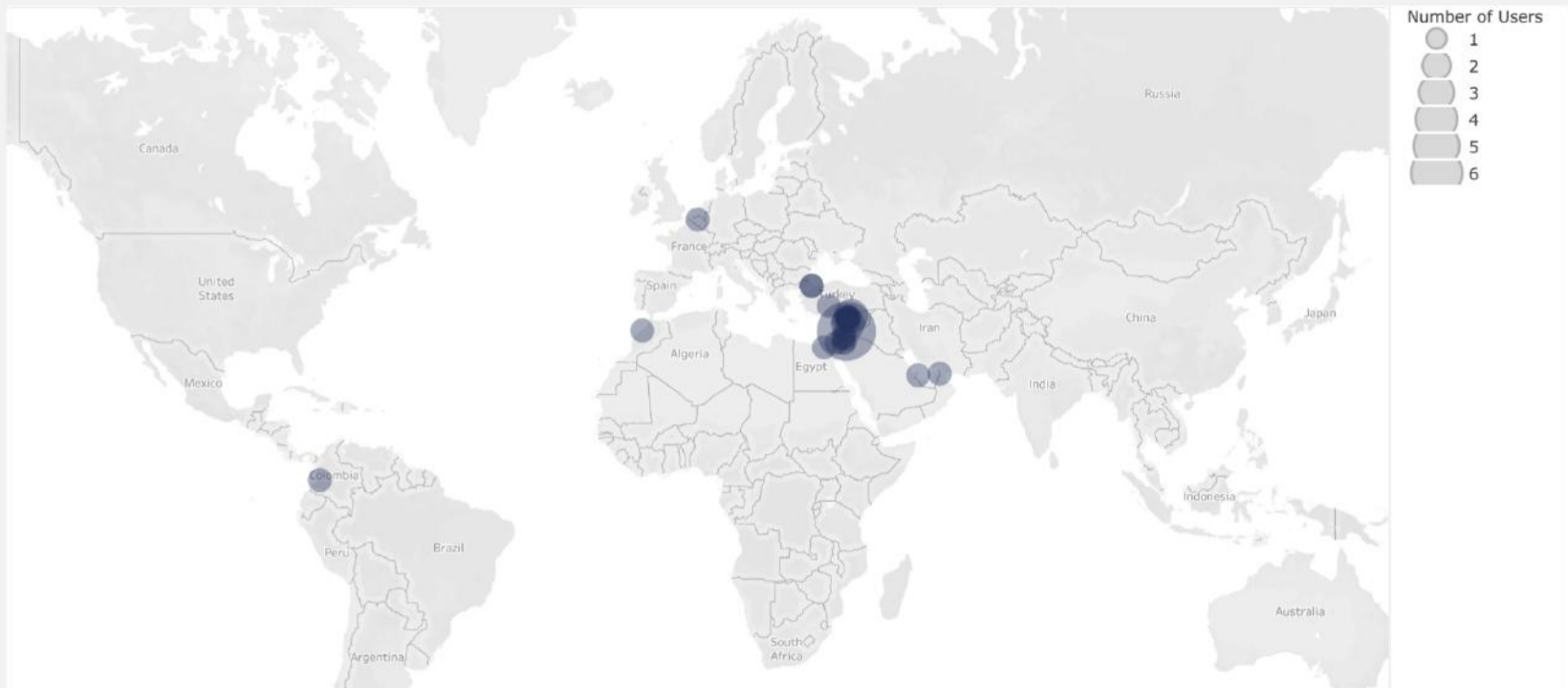


Figure 38: ATHAR Syria Case Study: Facebook Group C Locations of Individual Users Interacting in Group for Sale or Purchase of Artifacts. This map represents the number of individual users actively engaging on the discussion board of Facebook Group C. Data is based on locations provided by admins in public profiles or Group discussions.

Number of users not represented due to unlisted locations: 26*
 *5 of the unlisted users disclosed country locations but not cities.

ATHAR Syria Case Study: Facebook Group C Locations of Individual Users Interacting in Group for Sale or Purchase of Artifacts

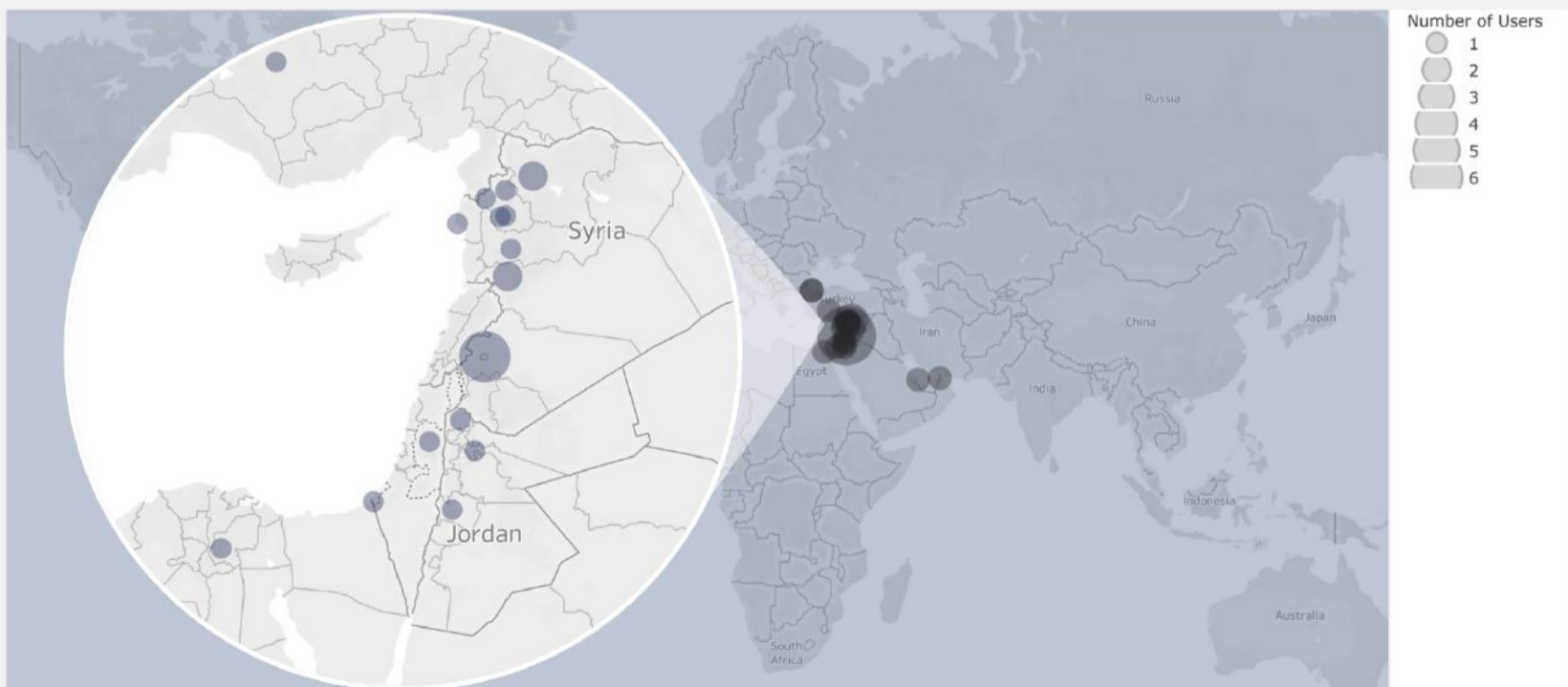


Figure 39: Zoomed in view of the Syrian concentration in Figure 38 ATHAR Syria Case Study: Facebook Group C Locations of Individual Users Interacting in Group for Sale or Purchase of Artifacts.



Active Member Geography: Group D

Facebook antiquities trafficking Group D has the broadest location description of the four Groups in the case study, listed simply as Syria. Group D is also the largest of the four Groups with 73,434 members as of 5 May 2019. Its size may be related in part to its vast admin list compared to others with 27 total admins managing the Group. Two of the Group's admins are women, the only female admins or moderators among the Groups in the case study.

Group D has 1,411 total active users recorded as buying or selling antiquities in the Group, roughly 1.9% of the Group's 5 May 2019 membership. Of the 1,411 users, 876 (62% of active users) listed locations in their profiles

or posts. An additional 52 users provided country locations but not city: four in Algeria, two in Egypt, one in Iraq, 12 in Jordan, three in Lebanon, four in Libya, four in Morocco, two in Palestine, 16 in Syria, two in Tunisia, and two in Turkey. The remaining 483 (34% of active users) did not provide any location details that were publicly accessible.

The Group's highest concentration of active users is in Amman with 103 members operating in that area, a possible reflection of the Group D admins' geography. Four admins are based in Amman, more than any other listed city. Idlib is the second highest concentration of users with listed locations, housing 65 active users in the Group. (Figures 40-42)

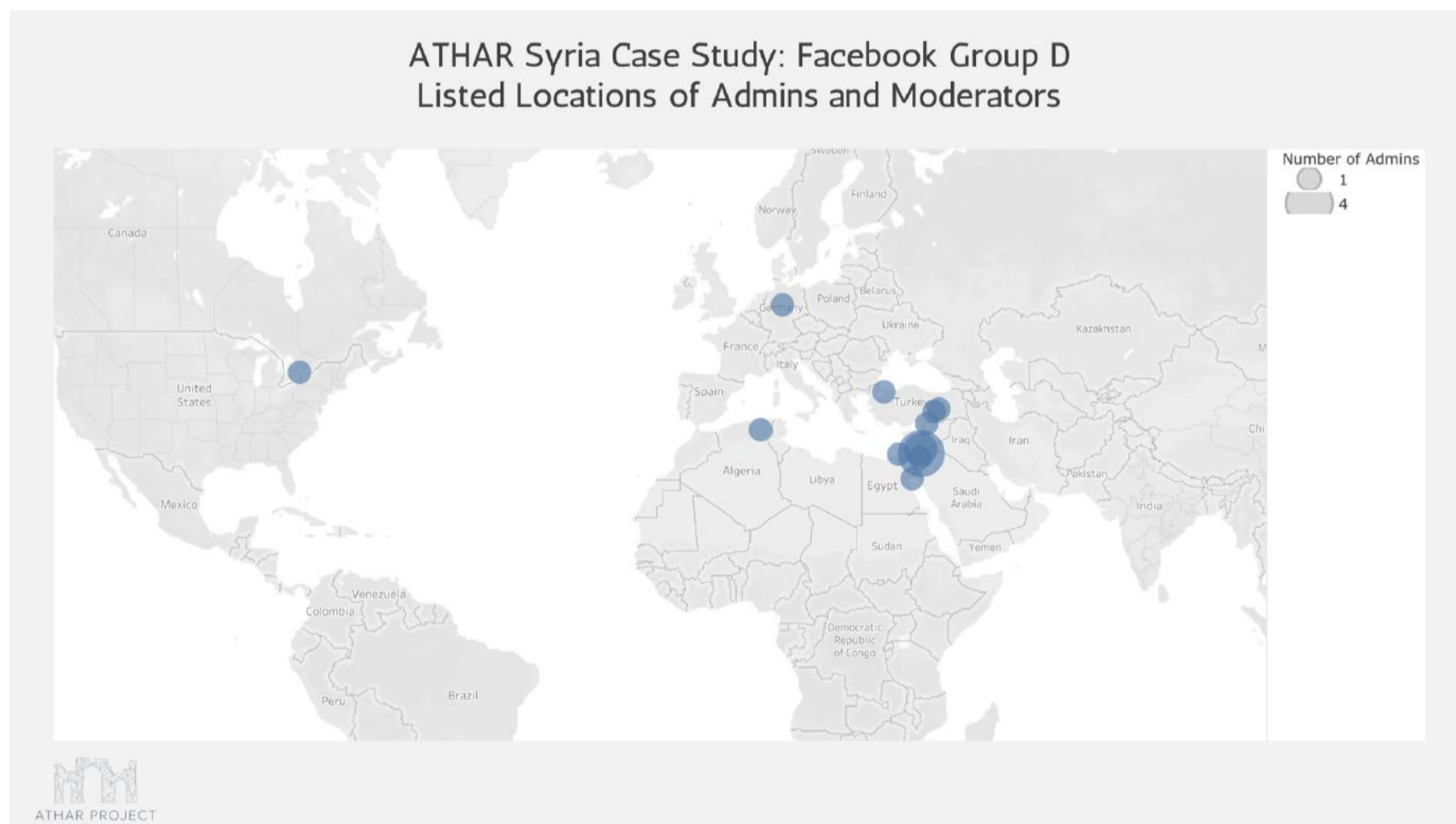


Figure 40: ATHAR Syria Case Study: Facebook Group D Listed Locations of Admins and Moderators
Data is based on locations provided by admins in public profiles or Group discussions.
Number of admins not represented due to unlisted locations: 11



ATHAR Syria Case Study: Facebook Group D Locations of Individual Users Interacting in Group for Sale or Purchase of Artifacts

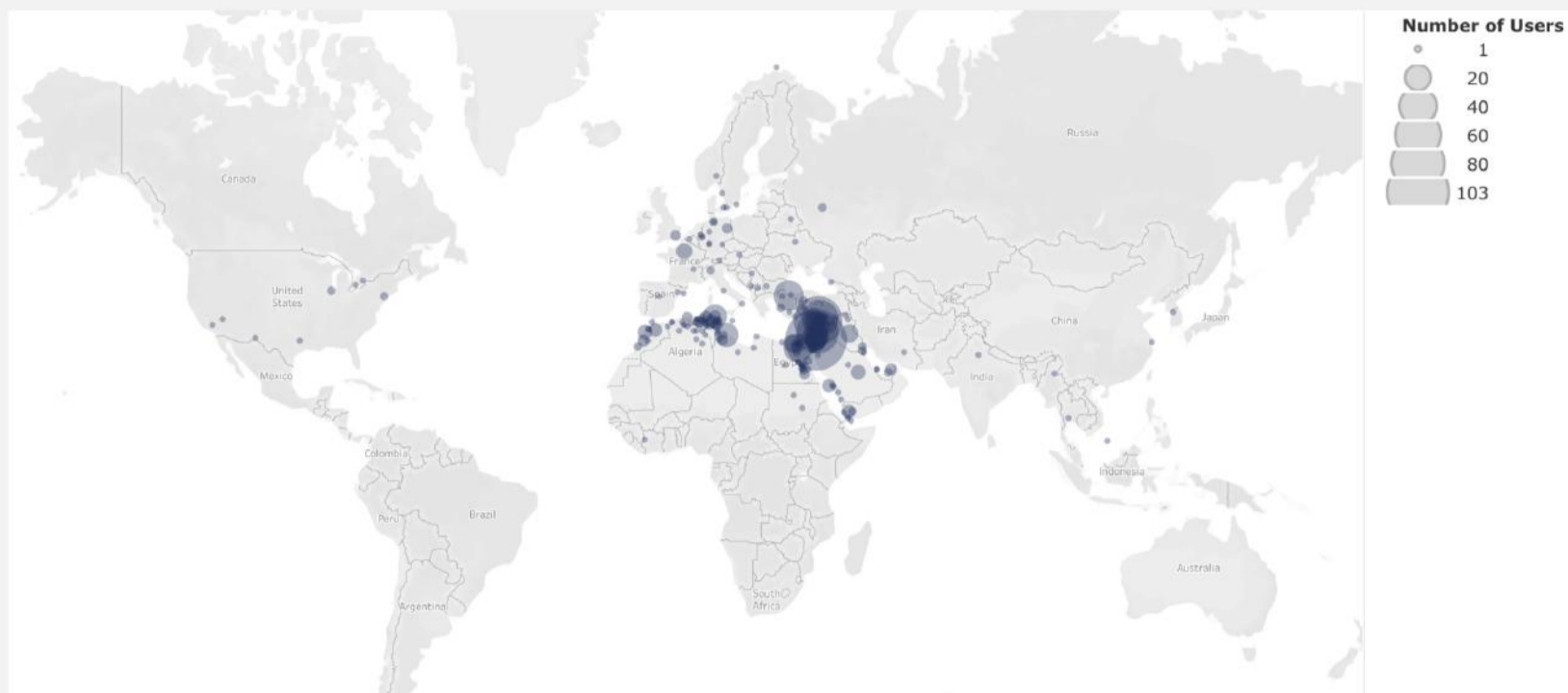


Figure 41: ATHAR Syria Case Study: Facebook Group D Locations of Individual Users Interacting in Group for Sale or Purchase of Artifacts. This map represents the number of individual users actively engaging on the discussion board of Facebook Group D. Data is based on locations provided by admins in public profiles or Group discussions. Number of users not represented due to unlisted locations: 535*
*52 additional unlisted users disclosed country locations but not cities.

ATHAR Syria Case Study: Facebook Group D Locations of Individual Users Interacting in Group for Sale or Purchase of Artifacts

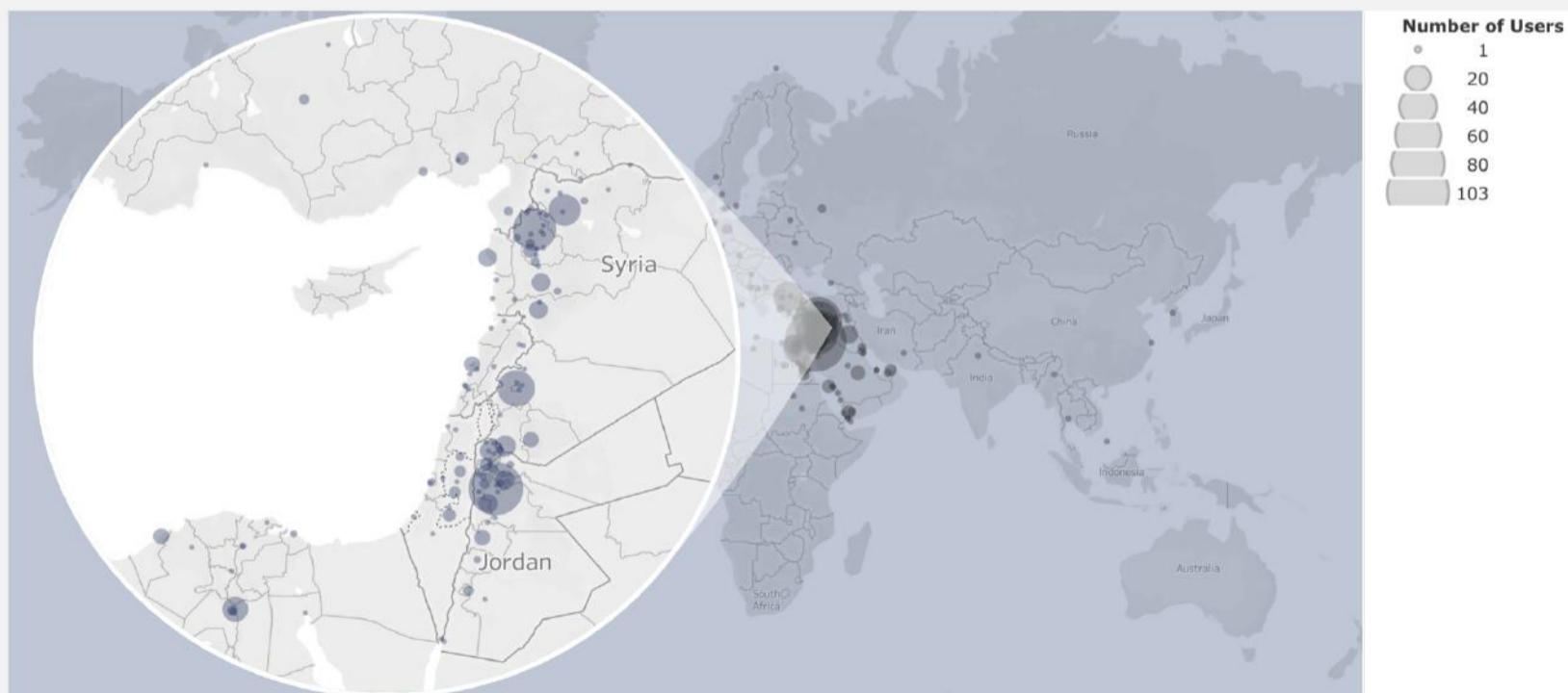


Figure 42: Zoomed in view of the Syrian concentration in Figure 41 ATHAR Syria Case Study: Facebook Group D Locations of Individual Users Interacting in Group for Sale or Purchase of Artifacts.





Throughout the case study, active users with listed locations represented 55% or more of the users analyzed. Mapping the locations of these Group members can provide insights into how the geographic distribution of a Group’s admins can line up with the membership.

However, there are shortcomings to this type of data, namely that we can only display the locations of members as they are provided. In addition, the platform only allows us to collect user locations as they exist at the time of recording data and does not provide information on whether or not a user’s profile location has changed over time. Gathering data manually from a platform like Facebook that makes it notoriously difficult to collect such data (while at the same time selling it) create gaps in the information we can glean from our analysis. But even the most basic location information we are able to gather has provided a new look at the transnational connections of antiquities traffickers online.

MATERIALS TRAFFICKED

The size and geographic reach of a Facebook antiquities trafficking Group’s active members can also have an impact on the types of materials offered in the

Category	Description
Architectural	Columns, building pieces, doors, tombstones
Artifact	Pottery, glass, seals, amulets, statuettes, shabtis
Books	Historic texts, Bibles, Qurans
Coins	Coins
Fossil	Preserved remains of prehistoric flora and fauna
Jewelry	Rings, necklaces, earrings, bracelets, broaches, pins
Manuscripts	Historic texts, documents, Hebrew Torah, Quran pages, maps
Mosaic	Tiles or glass pieced together to arrange an image
Relief	Engraved artwork with raised or sunken in carvings
Statue	Free standing statue or bust, or the head or body parts of a statue
Weapon	Guns, daggers, swords, axes
Wildlife	Animals (living or dead) or animal parts such as ivory
Other	Any material that does not fit an existing category

discussions. The case study created basic categories for types of material offered on the platform in order to understand themes among artifacts offered.

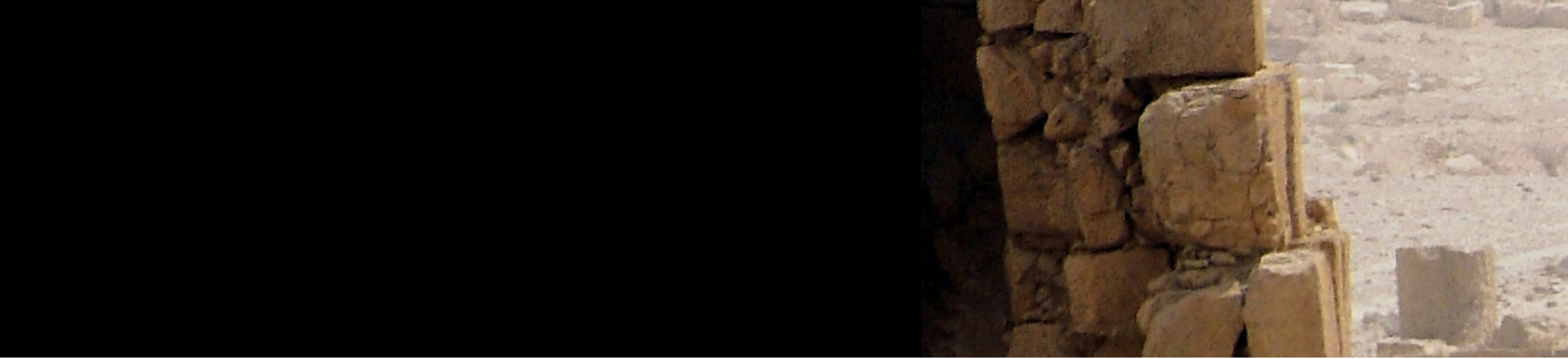
The items offered or requested were categorized into these material types whether they were believed to be authentic or fake. Graphing the materials offered presented themes in the types of items that are sold across all Groups versus those materials that are rarer. Only three categories of materials appeared in all four Facebook Groups in the case study: artifacts, coins, and statues. (Figures 43-46)

In every Group, coins represented the most frequently offered artifact in posts. This is due to a number of factors: First, coins are easy to transport without detection, making them an attractive asset for individuals who must cross borders and smuggle materials through checkpoints on their person. They require little labor to collect, move, or conceal. Second, coins are the only category where every item in the category can be found using a metal detector. Discussions regarding metal detector reliability, usage, and availability are common across all Groups monitored by the ATHAR Project. Metal detecting communities online are popular in countries like Turkey, where they have been recorded operating in large numbers.⁴⁰ Finally, in addition to ease of transport, coins are one of the easiest items to launder. Unlike most artifacts which require provenance to be offered through a major auction house or dealer at the end of the market chain, coins can be easily sold at any point in the chain to a collector or even offered through e-commerce sites.

Artifacts are the second most frequently offered materials across all Groups in the case study. This may be in part due to the variety of objects the category encompasses (i.e. pottery, seals, statuettes). However, like coins, artifacts are also fairly easy to conceal and require little effort to transport from one place to another.

The discrepancy between posts offering items and those interested in buying them can partially be attributed to the way responses were recorded. Replies and comments on posts that indicated an interested buyer were recorded as well as the primary post. There are many





posts where materials are offered and Group members do not reply in public comments, which could lead to a higher rate of offer posts overall than buyer posts. As noted earlier, some users will also deliberately turn off commenting in order to force use of encrypted messenger. This type of activity can affect the recorded number of interested buyers as those seeking to

purchase the materials offered may be communicating with the seller out of the public eye. It should also be noted that in some cases the same item may have been posted across two or more Groups, as discussed earlier. However, this is an activity reserved by a small group of high-engagement traffickers and not a common occurrence among all active Group members.

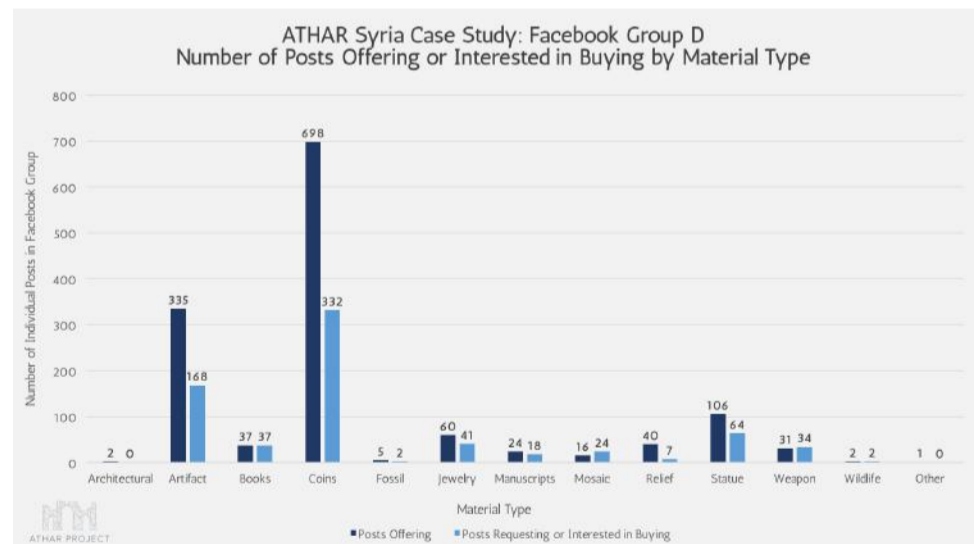
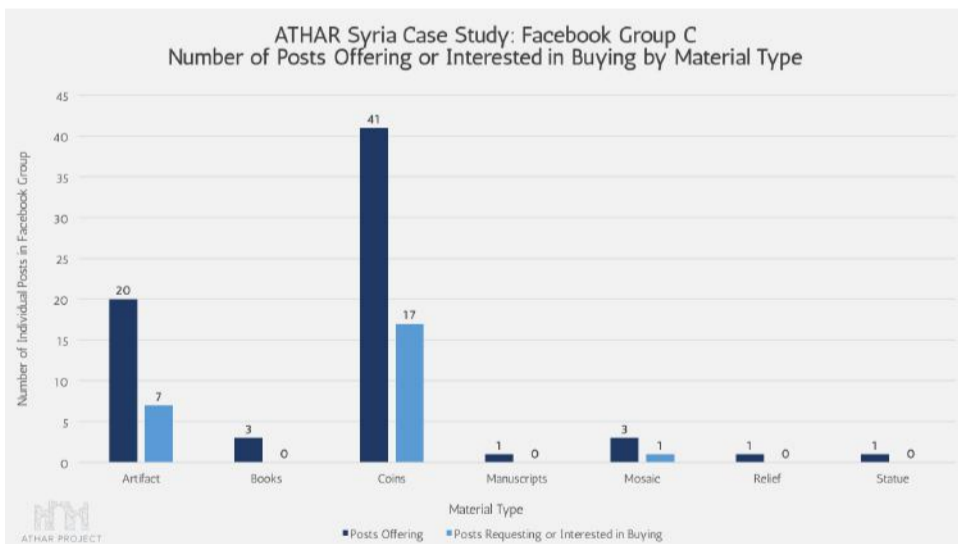
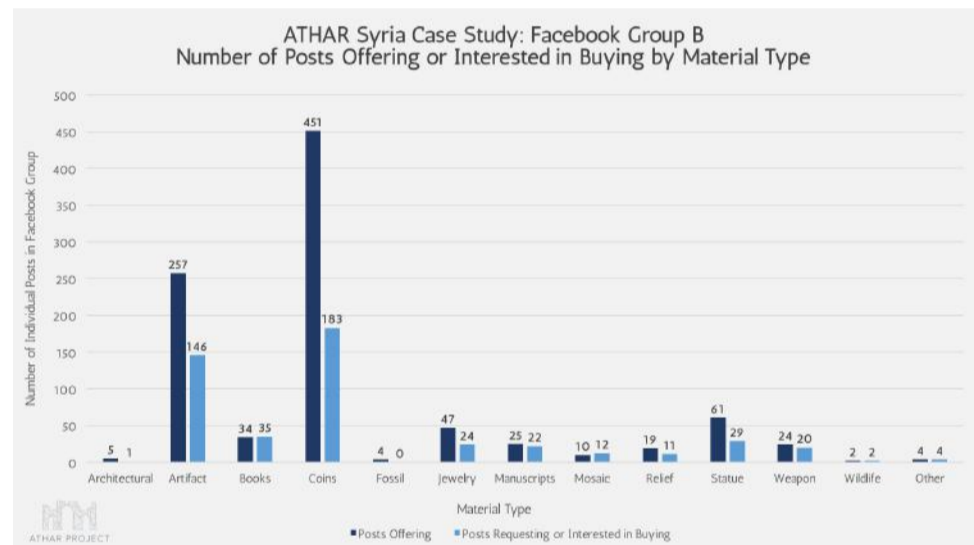
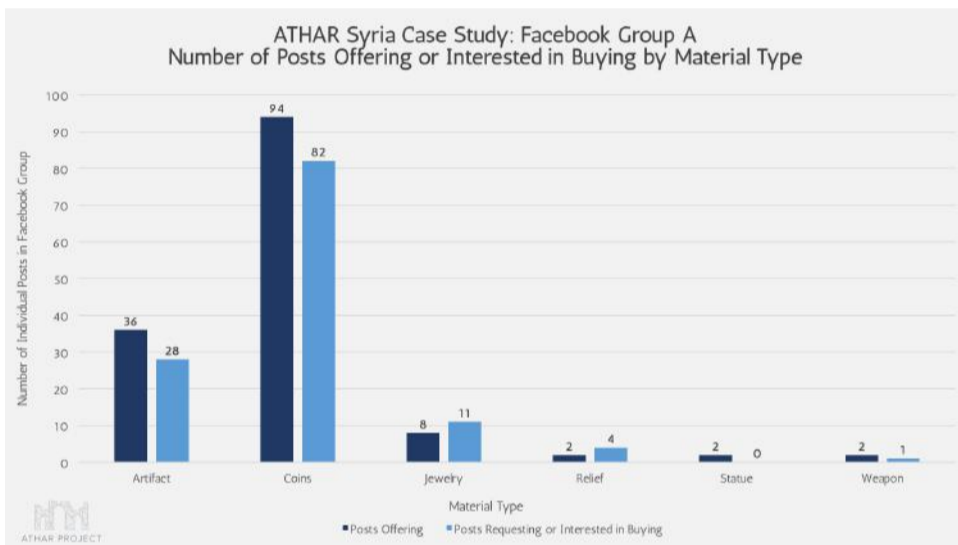


Figure 43 (top left), Figure 44 (top right), Figure 45 (bottom left), Figure 46 (bottom right).



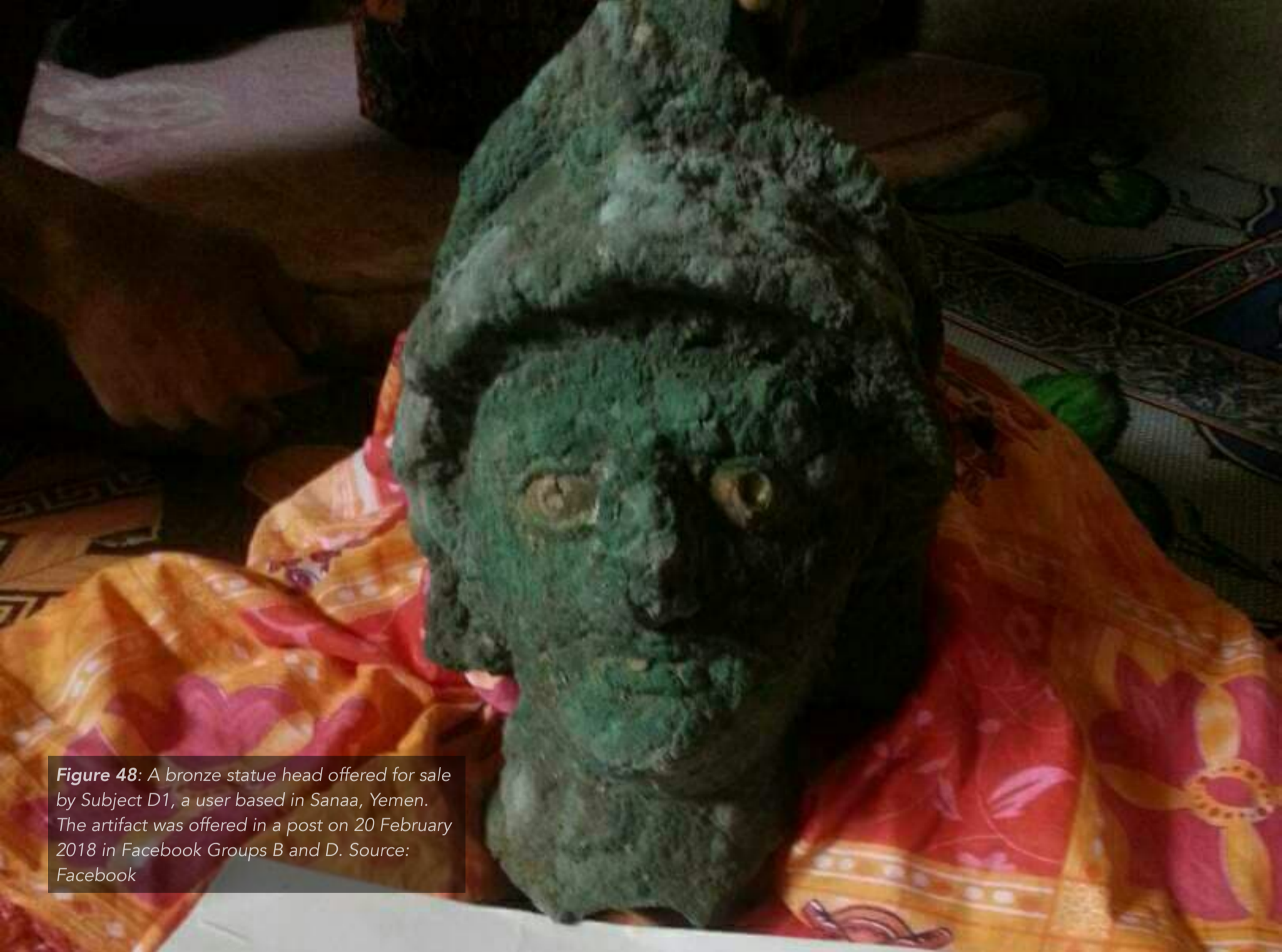


Figure 48: A bronze statue head offered for sale by Subject D1, a user based in Sanaa, Yemen. The artifact was offered in a post on 20 February 2018 in Facebook Groups B and D. Source: Facebook

TRAFFICKERS IN CONFLICT ZONES: A LOOK AT YEMEN

Identifying the users who have offered artifacts in five posts or more across Groups A, B, C, and D can help narrow down focal points of trafficking activity and identify more high-profile actors. There are 24 users who have offered artifacts in five or more posts.

The most active actor offered artifacts in 27 posts, more than twice the amount of the next highest-posting user. This user, referred to here as Subject B1 is based in Aden, Yemen, according to his public Facebook profile. Aden is currently occupied by Saudi-led coalition forces. Subject B1 is a member of Facebook Group B and posted all of his offers within that Group. The materials offered range

from statues to guns and include both ancient and historic items (*Figure 47*).

Another Yemeni trafficker was also among the users most frequently offering artifacts. Referred to here as Subject D1, the user is based in Sanaa, Yemen, an area in Houthi territory. Subject D1 is a member of Group B and Group D and has been observed offering the same artifacts in both of these Groups as well as other Facebook Groups monitored by the ATHAR Project (*Figure 48*).

On 13 February 2018, Subject D1 posted a large bronze statue head in Facebook Group B. Five days later on 18



February, D1 posted a video that contained the bronze statue head seen on 13 February alongside a bronze statue body and a second bronze statue head. Then, on 20 February 2018, Subject D1 posted two photos of the initial statue head in Facebook Group D. While Subject D1 posted images of the large bronze head across multiple groups, he only posted video in Group B. This may indicate that D1 considered the market of buyers available through Group B more valuable than other Facebook Groups he belongs to.

Subject D1 offered a Buddhist artifact in Group B. The artifact is an indicator of the globalized network that D1 may be tapped into – one that has access to central or southeast Asia. But D1 is not the only user from a MENA conflict nation to offer artifacts from outside the region. Another user from Sanaa, Yemen and a based in Al Bab, Syria also offered items from Asia. (Figure 49)

The connections between artifacts from central or southeast Asia and conflicts in Syria and Yemen can serve as an important piece of evidence in examining militant

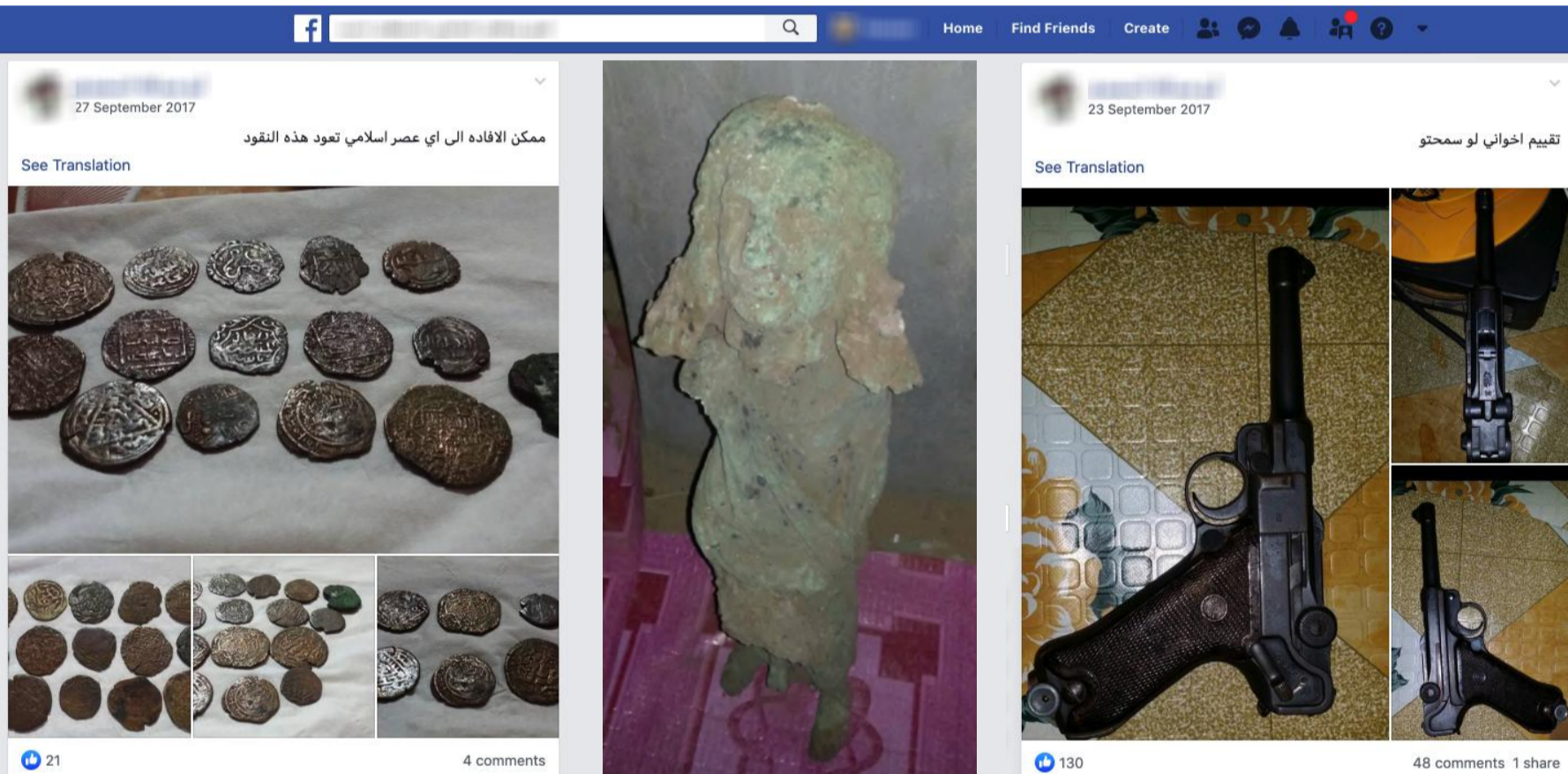


Figure 47: Variety of items offered in posts by Subject B1, all of these items were offered in Facebook Group B and all were posted in September 2017. Source: Facebook

Although Subject D1 does not post as frequently as Subject B1, the artifacts he offers are higher quality and generally larger in scale – a possible indicator of connections to a well-resourced smuggling network. Larger artifacts are more difficult to move quickly and to conceal, the scale of items can be an indicator of a powerful or well-connected trafficking network.

The material D1 posts may also provide insights into the geographic reach of his network. On 13 February 2018,

and terrorist group connections. Groups like ISIS and Al Qaeda both have factions stretching well beyond the boundaries of the Middle East and into Asia. Although Hindu and Buddhist artifacts and historic items are anomalies in Arabic language Facebook Groups their presence can serve as a valuable marker in understanding the reach and connections of the trafficking networks operating throughout the MENA region.



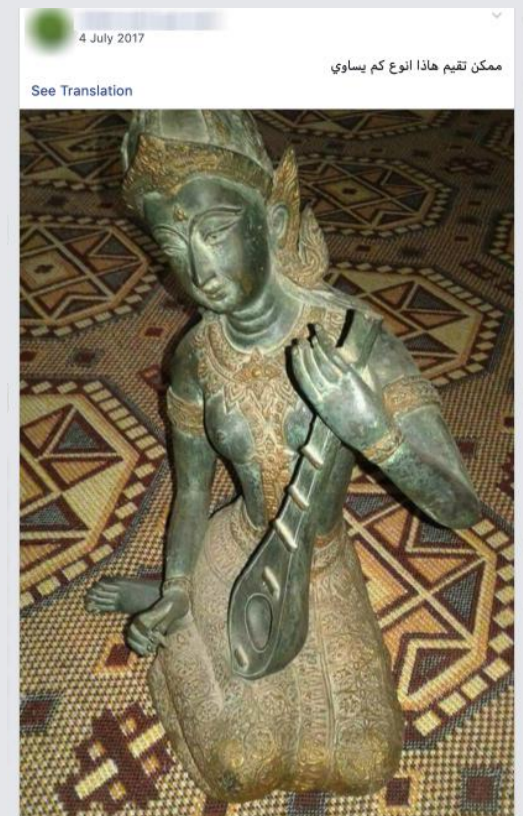
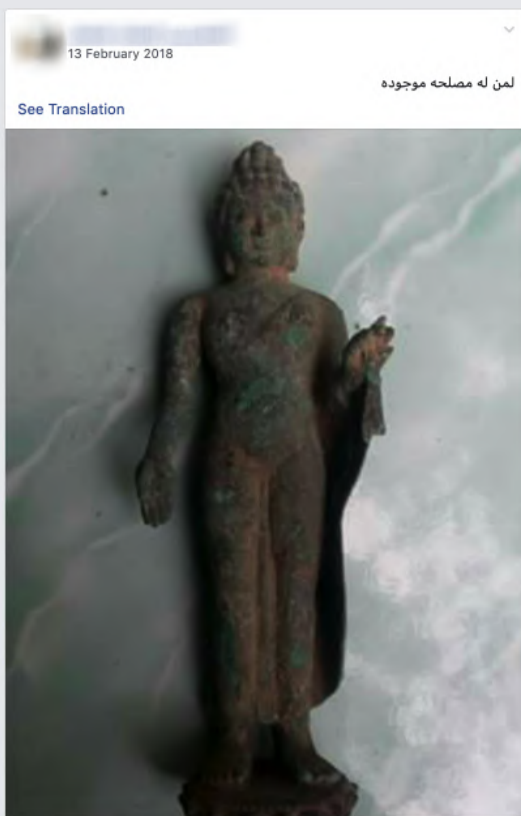


Figure 49: The appearance of Hindu and Buddhist artifacts on Facebook antiquities trafficking Groups in the Middle East has only been seen thus far exclusively in conflict countries in the region. (Left) Screenshot of a Buddhist artifact is offered by Subject D1, a user based in Sanaa, Yemen, on 13 February 2018. (Center) Screenshot of a Hindu god is offered by a user based in Al Bab, Syria on 8 September 2017. (Right) Screenshot of an artifact possibly from Southeast Asia is offered by a user in Sanaa, Yemen on 4 July 2017. Source: Facebook

TERRORIST ANTIQUITIES TRAFFICKING BEYOND ISIS: A LOOK AT SYRIA

The looting of antiquities by ISIS has been the focus of media attention since the group's rise in 2014. This is in part due to the social media savvy of the group and their release of propaganda videos featuring archaeological sites. But ISIS is not the only group involved in this activity. An array of violent extremist organizations having taken up looting and trafficking of antiquities.

In 2017, Hay'at Tahrir Al Sham (HTS) was formed and quickly taken over by Jabhat Al Nusra's leader Abu Mohammad Al Jolani. Jabhat Al Nusra's merge with HTS has helped the group become the most powerful Opposition force and completely dominates the opposition held areas in the Idlib region.⁴¹

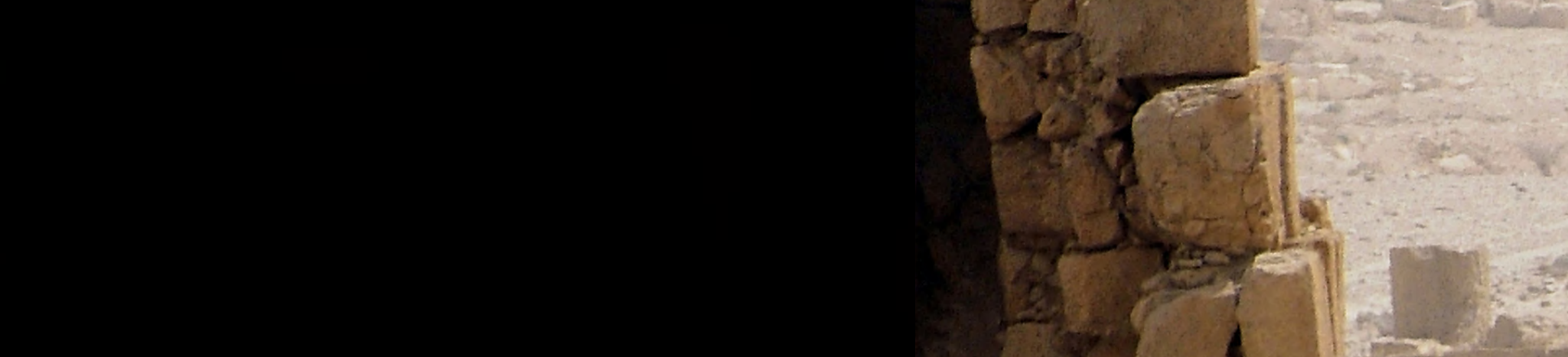
As part of its efforts to legitimize its takeover of Idlib, HTS created the Salvation Government (SG) in 2018, which it is closely linked to. Through the SG, HTS has effectively taken over all civil administration and means for revenue raising both direct (through taxation) and indirect including illicit forms of revenue. One manifestation of this takeover is the projected sense of

normalization that is associated with a functioning administration/government in an effort to legitimize it. An example of this process can be seen in the reopening of the Idlib Museum in August 2018, which was used to showcase that the SG is a functional entity and that life under it is normalized.

Furthermore, HTS/SG sees cultural heritage and the Idlib Museum as having potential to generate revenue for the SG and HTS. Since 2017 there have been repeated efforts to recruit individuals (archaeologists and cultural heritage experts) to take it over with the express understanding that they are expected to then generate revenue for the SG (and HTS leaders) by facilitating the looting and trafficking of antiquities including the remnants of the museum's own collections.

This marks a significant shift in the attitude of HTS to cultural heritage from one prior to 2016 of publicly declared indifference⁴² to a keen interest in exploiting it as a resource. In part this is likely to have been caused by the arrival and recruitment of new individuals from





eastern Syria following the collapse of ISIS. These new recruits most likely brought with them the skill set and modus operandi (MO) that we had become familiar with in areas previously under ISIS control.

Facebook antiquities trafficking Groups in higher numbers than individuals who have declared affiliation with HTS or other terrorist entities.

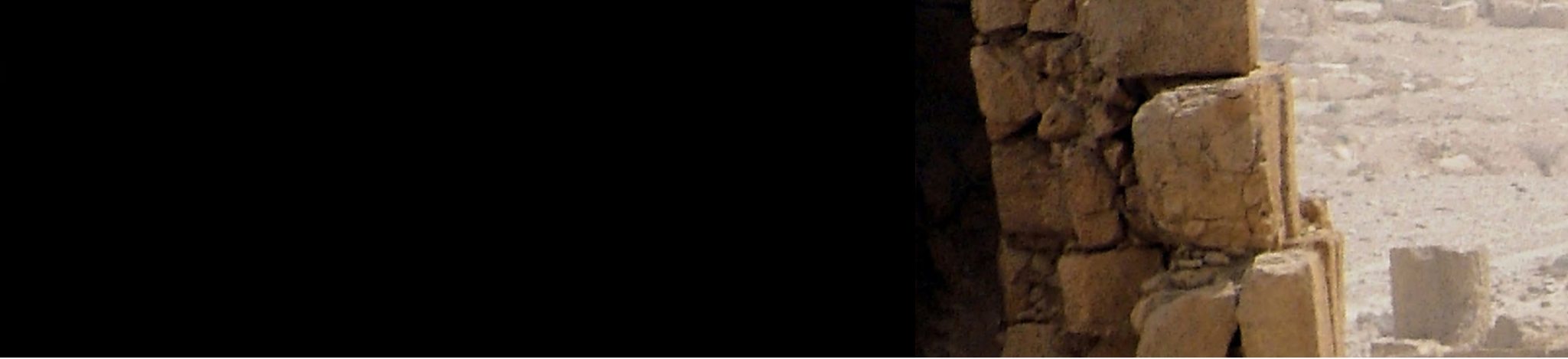


Figure 50: Screenshots of a video posted in Group R1 on 28 October 2018 of the active looting at an Al Nusra Front-controlled Roman site near Idlib, Syria. Source: Facebook

On the ground, monitoring of the situation demonstrates ongoing collusion between SG personnel and HTS. It should be noted that HTS is using a variety of methods other than those mentioned above to exploit and profit from the looting and sale of cultural heritage artifacts. These include establishing networks of looters and dealers who are either licensed by HTS to loot or being directly involved in the looting and sale of antiquities. These individuals, while not members of HTS, are helping generate income for the terrorist group, and operate on

The methods employed by HTS were widely used by ISIS previously and reminiscent of the aggressive institutionalization of the process by them. Since 2017 there has been a steady increase in the systematic and aggressive looting of archaeological sites in the Idlib region and this has coincided with the creation of the numerous new Facebook Groups currently based in Idlib. All four Syrian-based Facebook Groups in the case study were established in 2017, two of them with listed locations in Idlib.





Individuals associated with terrorist designated organizations only make up a small portion of the active users in the Facebook Groups monitored by the ATHAR Project. But the Facebook Groups monitored are representative of the wider population of users both in the MENA region and on Facebook. Terrorists do not

Sham had set up a security perimeter around the site while it carried out looting, specifically searching for artifacts to sell as a means of financing the group, according to the article in *Al Jadeed*.⁴⁵ Video posted in Facebook antiquities trafficking Group R1 revealed that the archaeological area was severely damaged from the

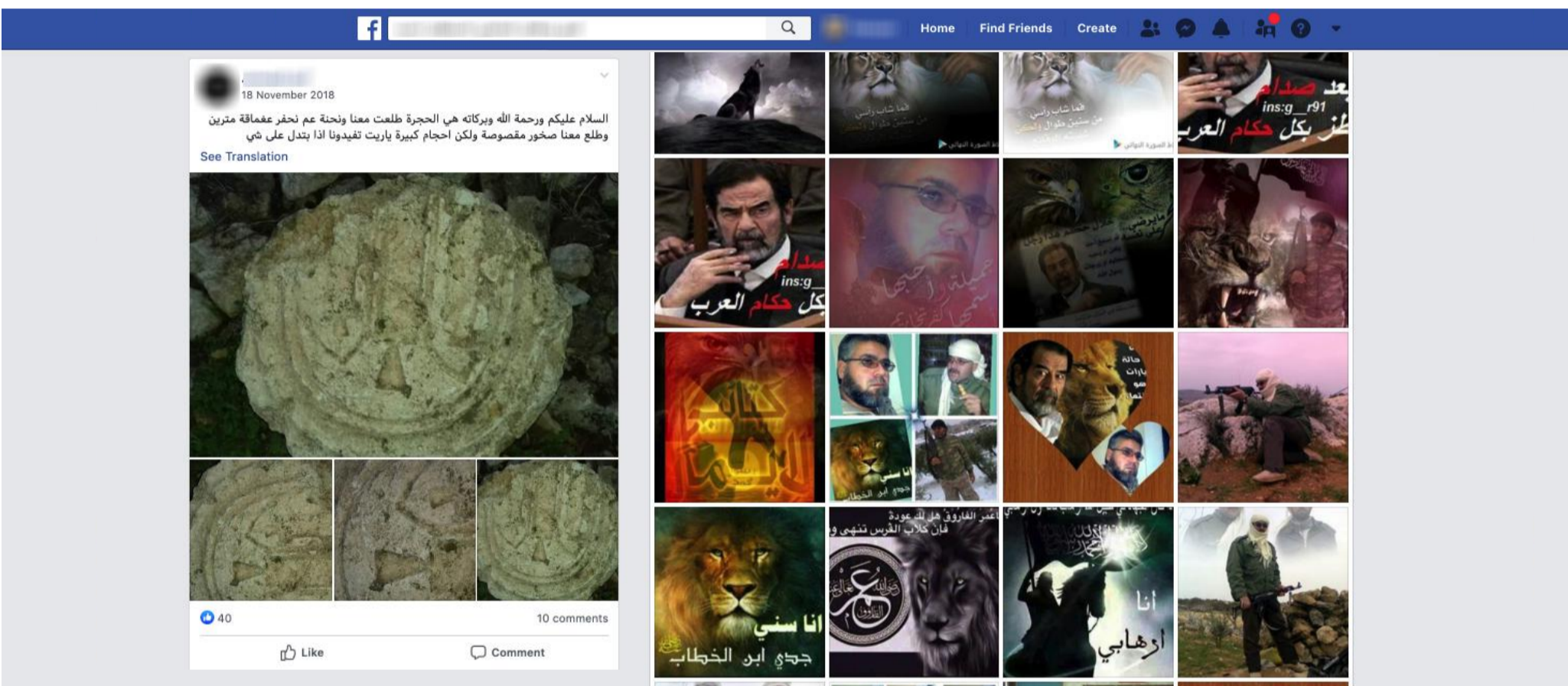


Figure 51: Screenshot of Subject B2's Facebook Group post (left) and photos on his profile (right). Source: Facebook

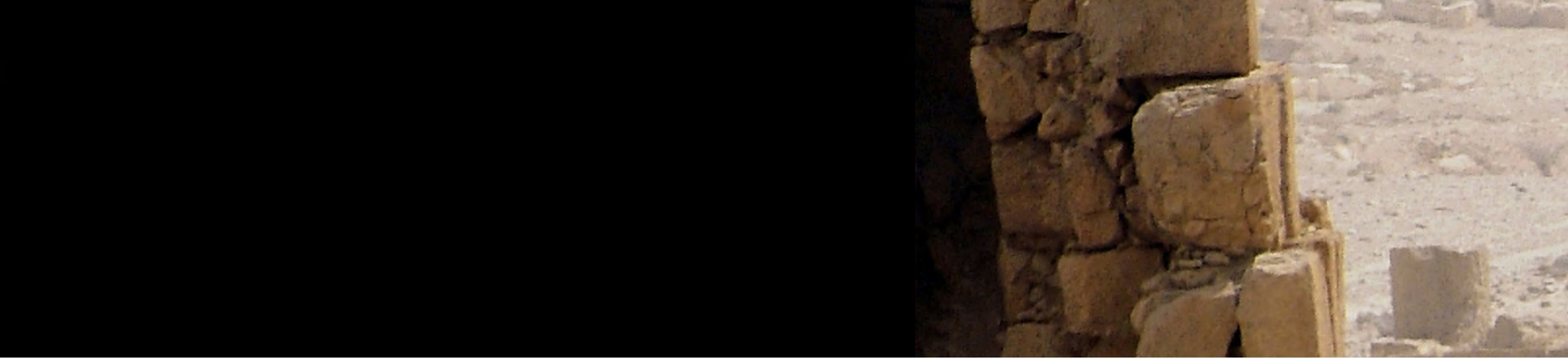
make up a significant portion of people in the region, this is reflected in the membership of Facebook Groups. However, those users affiliated with specifically designated terrorist organizations, while small in number, are some of the most active members in antiquities trafficking Groups.

Extremist users are not just posting to buy or sell artifacts, they also post video of looting at sites linked to terrorist designated groups in Syria. On 28 October 2018 a user posted video of active looting at a Roman or Byzantine site near Idlib. That same day, the site was featured in an article stating that the terrorist group HTS (formerly known as Jabhat Al Nusra)⁴³ found gold at a Roman archaeological site, noting that photos of the site were circulating on extremist channels.⁴⁴ Hay'at Tahrir Al

use of heavy machinery used to illegally excavate the site. Group R1 has over 150,000 members, which provides a wide network for the user posting the video to draw into conversation.

The user notes that a Roman cemetery has been found (Figure 50) – a common tactic in Facebook antiquities trafficking Groups for sellers looking to “bait” someone into communicating about purchasing potential finds that may arise. The fact that this user and the affiliated site are associated with HTS provides a new level of concern. It is evidence that these type of bait posts are being deployed in Groups to communicate with a population beyond the typical networks of like-minded extremists.





The looting of the Roman site by HTS is just one of a series of activities by terrorists in Facebook Groups in 2018. In November 2018, a user in Facebook Group B based in Kafar Takharim, a town in Idlib Governorate, referred to here as Subject B2, provides an example of TDA-HPI's on-the-ground verification of recorded users.

Idlib who worked with the terrorist group HTS. In addition, TDA-HPI sources found that Subject B2 works at a checkpoint near Al Jabbane, a position that provides him with access to individuals moving material and giving him the opportunity to act as a siphon for trafficking in the region. The looting and trafficking unit in Idlib that B2

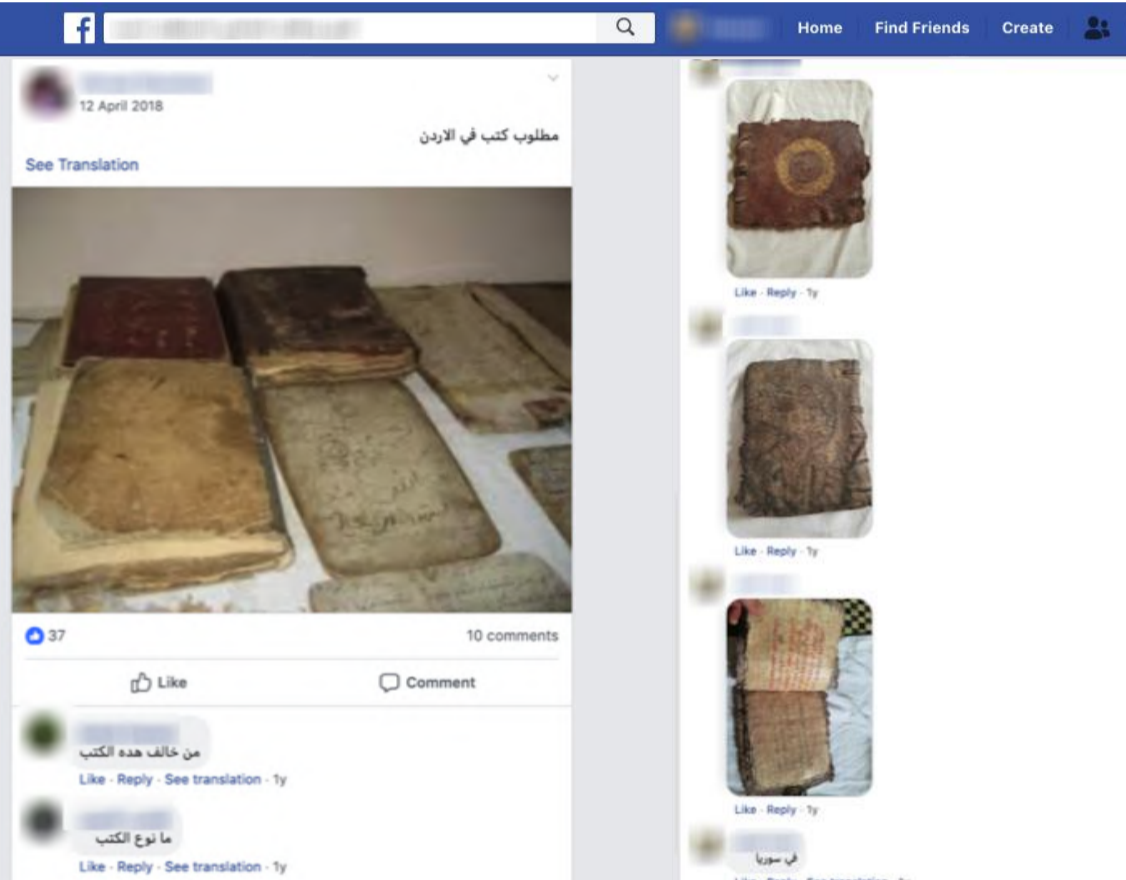


Figure 52: (Left) Screenshot of loot-to-order request for books available in Jordan that was posted in Facebook antiquities trafficking group B on 12 April 2018. (Right) Screenshot of books offered by Subject B3 on 14 April 2018 in response to the loot-to-order request. Source: Facebook

Subject B2 posted images of an artifact still in situ on Group B's discussion board on 18 November 2018. The bait post was meant to provide evidence of active looting and forthcoming artifacts for sale. An examination of B2's Facebook profile revealed extremist iconography – a violation of Facebook's Community Standards for content – as well as imagery celebrating martyred extremists. The iconography included several images of the Black Standard flag and photos of militant activity that has remained on Facebook for years without interruption by the platform's AI or content moderators. (Figure 51)

TDA-HPI sources reviewed B2's profile and were able to match the Facebook profile with a known trafficker in

operates with had split with HTS as of the end of November but continued to actively coordinate with the terrorist organization. B2's profile, including extremist iconography, remain active as of 24 May 2019.

Users affiliated with extremist groups do not only post active looting imagery to bait Facebook Group members into communication, they also reply to loot-to-order requests with artifacts already in their coffers. On 12 April 2018, a user posted a loot-to-order request in Facebook Group B seeking books to be available in Jordan.





Figure 54: Subject A1 poses with the Black Standard flag and heavy weaponry in a photo publicly available on his Facebook profile. The image was posted on 23 November 2018. Source: Facebook

A user replied two days later on 14 April 2018 and offered a series of ancient books. The user, referred to here as Subject B3 noted that the books he had were available in Syria. Subject B3's profile lists his location as

group known as *Ülkü Ocakları* ("Grey Wolves").⁴⁶ His Facebook profile is littered with iconography and propaganda for the group, including an image of the Grey Wolves' official logo. (Figure 53)



Figure 53: Screenshot of Subject B3's Facebook profile with iconography of the Turkish Grey Wolves including the group's official logo located in the bottom right corner of the image. Source: Facebook

Al Bab, Syria – it also reveals his extremist ideological affiliations.

B3's profile cover photo features the Turkish flag with a hand sign of two-index fingers pinched together, a symbol associated with a Turkish far-right extremist

Facebook profiles provide a look at the ideological and violent extremist affiliations of users who actively engage in antiquities trafficking Groups. Affiliation with terrorist groups is particularly evident in profiles when users share images with the flags and logos of terrorist groups.

One user, referred to here as Subject A1, is a member of at least a dozen antiquities trafficking Facebook Groups, including Group A and Group B in the Syria case study. Subject A1's profile indicates that he is an extremist based in Idlib, Syria. He is one of the most active members of Group A and has engaged in discussion for both buying and selling artifacts.

Subject A1's profile includes imagery of he and two others holding up the black standard flag with the name of a group called *Harakat Saraya Al Sham*, literally "People of the Sham Movement" (حركة سرايا الشام). People of the Sham Movement is a small local faction in Idlib (Figure 54). The group was originally one of the early Free Syrian Army (FSA) brigades under Riad Al Assad, an army defector who at one time was very prominent. Riad Al Assad later briefly offered allegiance to Jabhat Al Nusra several years into the conflict. Shortly



after that his faction was disbanded altogether. The timing of the photo and use of the Black Standard flag provide rare insights into the group's short-lived allegiance to Jabhat Al Nusra.

The presence of Subject A1 in our study is valuable twofold: First, it reveals that the trafficking of antiquities has permeated well beyond ISIS and is a financing tactic adopted by terrorist groups large and small. Second, it shows that studying the illicit antiquities trade on Facebook can yield important intelligence on little known extremist factions. Both of these are also evidence as to why Facebook is no longer in a position to simply delete this information and forget that it is happening.

FACEBOOK DELETING EVIDENCE OF WAR CRIMES

By simply deleting these Facebook Groups and extremist profiles rather than deactivating and sharing the information with authorities, Facebook is deleting evidence of war crimes in Syria, Yemen, Libya, and other countries in conflict. The company has already been

accused of deleting evidence of war crimes in places like Syria.⁴⁷

Under The Second Protocol to the 1954 Hague Convention Article 15 (1): "Any person commits an offence within the meaning of this Protocol if that person intentionally and in violation of the Convention or this Protocol commits any of the following acts: e. theft, pillage or misappropriation of, or acts of vandalism directed against cultural property protected under the Convention."⁴⁸

When preserved, photo and video data of cultural crimes in conflict can serve as critical evidence in prosecuting the actors involved. The International Criminal Court (ICC) case of *The Prosecutor v. Ahmad Al Faqi Al Mahdi* was the first ever conviction of cultural destruction as a war crime.⁴⁹ Al Mahdi was a member of the terrorist group Ansar Dine and took part in the destruction of cultural sites in the ancient city of Timbuktu, Mali. The group filmed the destruction to circulate as propaganda and the video quickly spread on social media. YouTube footage of Al Mahdi destroying the sites was key evidence in the case. Indiscriminate deletion of this content would have surely damaged the case.⁵⁰

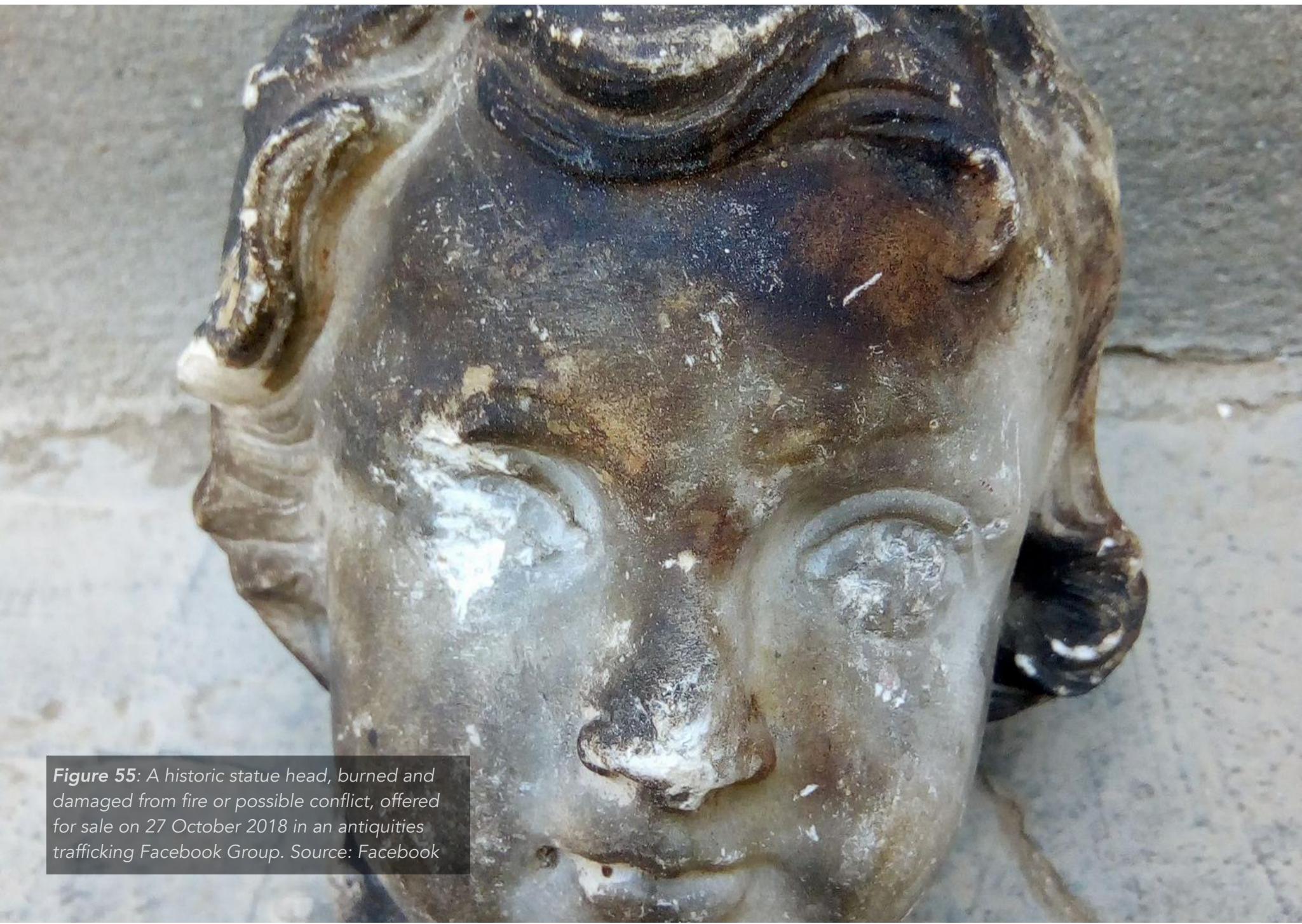



Figure 55: A historic statue head, burned and damaged from fire or possible conflict, offered for sale on 27 October 2018 in an antiquities trafficking Facebook Group. Source: Facebook



Another important argument against deletion is that Facebook has become a massive repository of information and in many instances the only source of information on the objects being trafficked on it. The vast majority of objects being trafficked on Facebook come from looted archaeological sites where the only record that such an object ever existed is the posted photo or

video of it. In this case, these photos are now part of the cultural record in their own right and should therefore be preserved for that reason too. This is unlike objects looted from a museum or even private collection where there is likely to be a record of it somewhere.

CONCLUSIONS AND RECOMMENDATIONS FOR COMBATING DIGITAL BLACK MARKETS ON FACEBOOK

The immediate reaction to the issues outlined above might be to focus on the closing of Facebook Groups and removal of content associated with looting and trafficking antiquities. But this is not a successful long-term solution. A far more effective approach is one that attempts to generate counter narratives on Groups and Pages promoting looting and employ disruptive tactics whilst monitoring trafficking activity. Closing down a suspect Group should only be used as a final resort in the full knowledge that the individuals responsible will either reopen the Group under a different name or more likely move on to a different and more secure platform like WhatsApp, where it is much harder to track their illegal activities.

On April 10, 2018, Facebook CEO Mark Zuckerberg entered his first hearing on Capitol Hill with the Senate to deal with the multiple issues plaguing his platform.⁵¹ With the myriad Facebook problems with personal privacy and data security taking center stage, there was one shared element plaguing Facebook that was highlighted: the Facebook User Agreement.⁵²

Senator John Neely Kennedy (R-La.) railed against the lack of clarity in Facebook's User Agreement, "Here's what everyone's been trying to tell you today — and I say it gently — your user agreement sucks... I'm going to suggest you go home and rewrite it, and tell your \$1,200


dollar and hour lawyer... you want it written in English not Swahili, so the average American user can understand."⁵³

Facebook has undertaken a massive rewrite of their User Agreement and Community Standards. But the company did not take that opportunity to incorporate language that explicitly bans illicit cultural property. Adding this to their user policies could help the platform target and remove future content before it can create momentum on Groups and Pages that foster criminal activity.

Zuckerberg emphasized the increased incorporation of AI in the company's efforts to identify and clamp down on hate speech. "Over the long term, building AI tools is going to be the scalable way to identify and root out most of this harmful content."⁵⁴ Understanding the codes and language used for trafficking online in antiquities and other illicit trades could help create more targeted instructions for Facebook's AI operations.

More recently, Facebook claimed that because of its vast resources it can police the internet with a level of enforcement that other technology companies couldn't match, suggesting that a breakup of the company (a threat from pending antitrust investigations) would be detrimental to these efforts.⁵⁵ But the platform is facilitating transnational crime and widespread illicit





trade, some amounting to war crimes — and deleting the evidence when faced with the issue. The company has not only failed to accept responsibility for the crimes occurring openly on its platform, it fails to make attempts to fix them when continued challenges arise.

On 2 May 2019, BBC released an investigative report that examined some of the antiquities trafficking Groups on Facebook. Journalist Steve Swann reached out to Facebook for comment on the illicit antiquities trade that the ATHAR Project had uncovered on their platform. Facebook provided little more than a cookie-cutter response: “Coordinating illegal activity is not allowed on Facebook. Following the BBC’s investigation, we have removed 49 groups where there was evidence of this taking place.”⁵⁶

The company took no responsibility for the fact that crime was openly occurring on its platform. And while Facebook claims it removed 49 Groups, only four of the Groups monitored by the ATHAR Project were affected by this removal. Facebook did not provide any explanation as to how it identified the 49 Groups nor what specific violations it found. To our knowledge, Facebook has not made any attempts to reach out to subject matter experts on antiquities trafficking. The company included no follow-up on this removal – in fact, more antiquities trafficking Groups have actually been formed since the release of the BBC report. A new Group created on 9 May 2019, one week after the BBC report, already had over 5,300 members less than three weeks later (as of 29 May 2019).

Facebook has positioned itself for these kinds of media-focused responses before, taking action for the sake of public relations and providing little or no follow-up on the issue. In March 2018, Facebook along with twenty other technology companies joined the Global Coalition to End Wildlife Trafficking Online organized by the World Wildlife Fund (WWF).⁵⁷ But six months later reports continued to arise showing the widespread illegal wildlife trade on Facebook. One report from September 2018 found more than 1,500 Facebook listings of illegal wildlife in Thailand alone.⁵⁸

In May 2018, Congressmen Raúl Grijalva and Jared Huffman, ranking members of the House Committee on

Natural Resource wrote a letter to the Securities and Exchange Commission (SEC) calling on the organization to investigate the trafficking of wildlife on Facebook.⁵⁹ Congressmen Grijalva and Huffman stated that while Facebook’s Community Standards include prohibitions on wildlife, they don’t go far enough. The company has yet to include any mention of illicit cultural property in its Community Standards or Commerce Policies.

The lessons from the illicit wildlife trade, which is still flourishing on Facebook, show that action without follow up and policies without enforcement will not stop transnational crime. The formation of a coalition for the purposes of public relations will not solve the problem of illicit antiquities on Facebook, just as such as move has failed to solve the black market trade in wildlife on the platform.

There are basic policy changes that Facebook can make to update their internal controls and help reduce the use of social media by nefarious actors to sever what often serves as a first step in the communications and connections for traffickers. Facebook and its affiliated companies can also mitigate these risks by increasing their cooperation with agencies engaged in combating the trafficking of looted antiquities.

1. Facebook’s User Agreement and Community Standards⁶⁰ should be updated to include prohibiting subscribers from communicating with organized crime, not just prohibiting the criminals themselves. This would ensure that the thousands of subscribers communicating with the intent of purchasing illicit goods are also subject to the same rules as those who are selling.
2. Facebook should add “illicit cultural property” to the “Promoting or Publicizing Crime” section of their Community Standards and to their Commerce Policies as prohibited items.⁶¹
3. Facebook should work with law enforcement to incorporate coded phrases and transliterated misspellings into their AI monitoring methods for identifying traffickers online. Similar AI efforts are already underway as part of Facebook’s “language understanding” for its mechanisms to counter





terrorism.⁶² Facebook's Data Use Policy states, "We may also access, preserve and share information when we have a good faith belief it is necessary to: detect, prevent and address fraud and other illegal activity; to protect ourselves, you and others, including as part of investigations."⁶³

4. Facebook should work in partnership with subject matter experts and authorities to actively support the development counter-narratives to trafficking and looting to implement strategies designed to disrupt the trafficking of antiquities. This can be an expansion of Facebook's existing counter-narrative efforts used in combating online radicalization by Islamists.⁶⁴

These policy changes will only be effective if Facebook begins to adequately enforce them and ensure that content moderation is done with care and curation, not indiscriminate deletion. But there are changes that need to occur outside of the platform as well at the legislative level. Congress has already passed laws to force Silicon Valley companies to take action to combat specific crimes on their platforms.

In 2018 Congress passed SESTA-FOSTA ("Stop Enabling Sex Traffickers Act and Fight Online Sex Trafficking Act") to combat sex trafficking online and hold technology companies and social media platforms accountable for allowing the activity to occur on their platforms.⁶⁵ Facebook and other technology firms heavily lobbied against the legislation, eventually giving in to supporting the legislation as they moved to focus on combating other regulatory challenges.⁶⁶

SESTA-FOSTA is notable as the first law to puncture the immunities that technology firms held under Communications Decency Act Section 230 (CDA 230). Companies like Facebook and Google have used CDA 230 as a means of shielding themselves from legislation regarding content posted by third-parties on their platforms. But if Facebook and other technology firms can be held responsible for one crime on their platforms,

they should be held responsible for all crimes on their platforms.

There is precedent for companies in certain industries to be liable for activity by third-parties using their services and to share evidence of illegal activities with authorities. The Bank Secrecy Act (BSA), in place since 1970, was established to combat crimes like money laundering and terrorist financing. The BSA serves as a model for reporting mechanisms that could be adopted in legislation regarding criminal activity on technology platforms.⁶⁷

If Facebook cannot or will not sufficiently police crime on its platform. Congress and the SEC should act to hold Facebook responsible for its continued facilitation of criminal activity. It is up to lawmakers to ensure that a publicly-traded American company stops serving as the world's largest online black market platform.



APPENDIX

TRANSLATIONS OF REPORT IMAGES

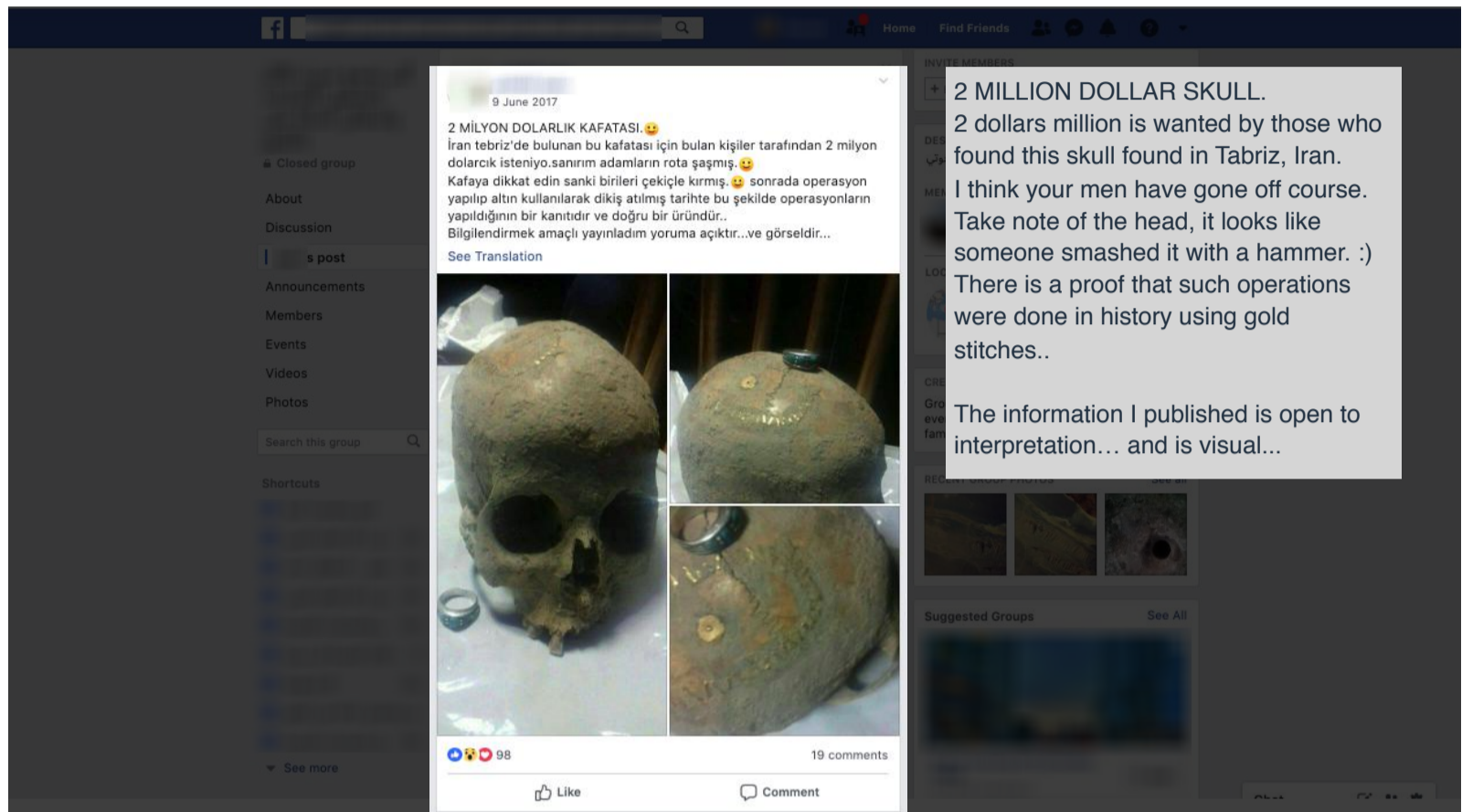


Figure 1: A screenshot of a post offering human remains shows the range of transnational connections exhibited through the Facebook antiquities trade: A trephined skull alleged to be from Iran, in a Syrian-based antiquities trafficking Facebook Group D by a Turkish-speaking Group member on 9 June 2017. Source: Facebook

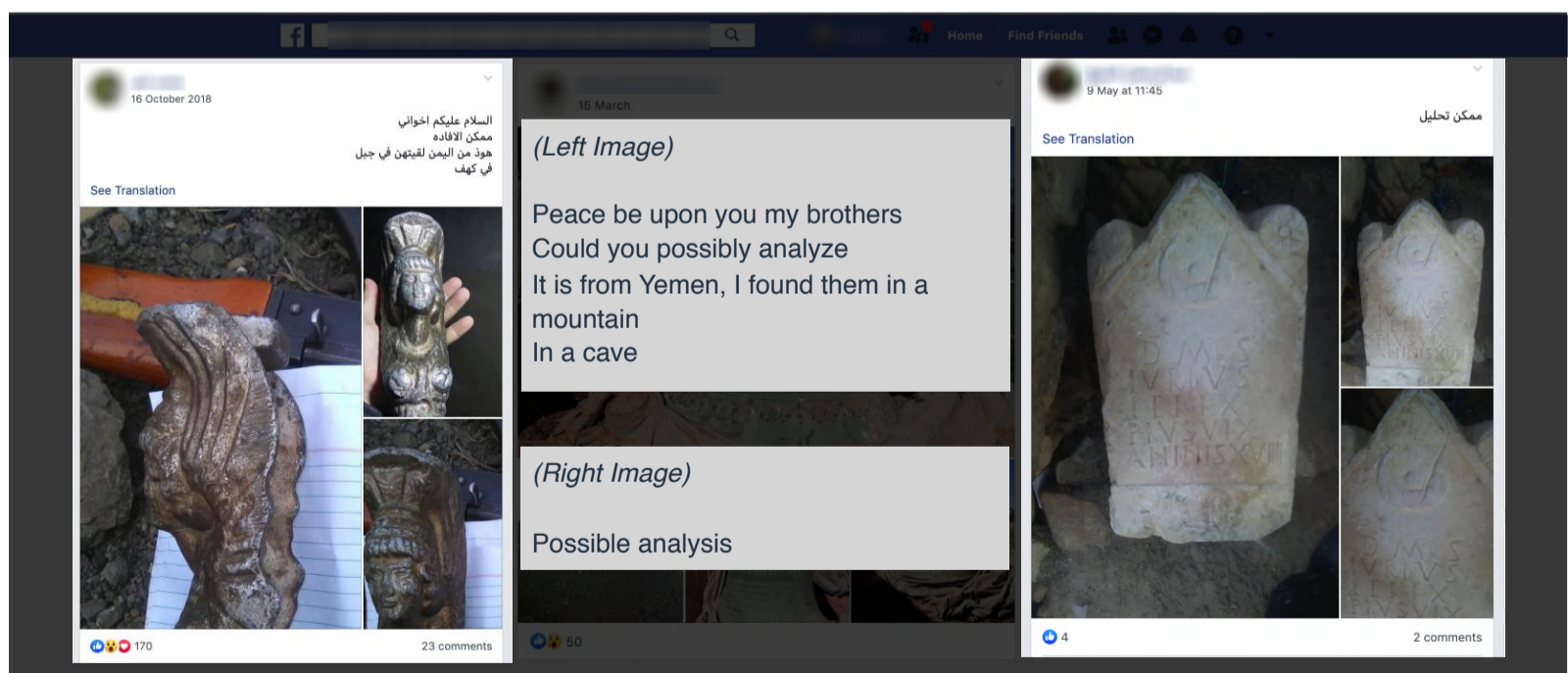


Figure 3: Screenshots from Facebook antiquities trafficking Groups monitored by the ATHAR Project show a variety of illicit items offered on the platform. (Left) Artifact offered on 16 October 2018 by a user based in Yemen - the artifact rests on the butt of his gun in the image. (Center) A user in Zintan, Libya posts photos offering a large church bell on 15 March 2019. (Right) A user in Tunis, Tunisia posts photos of a tombstone still in situ on 9 May 2019, the photos appear to have been taken under cover of darkness. Source: Facebook



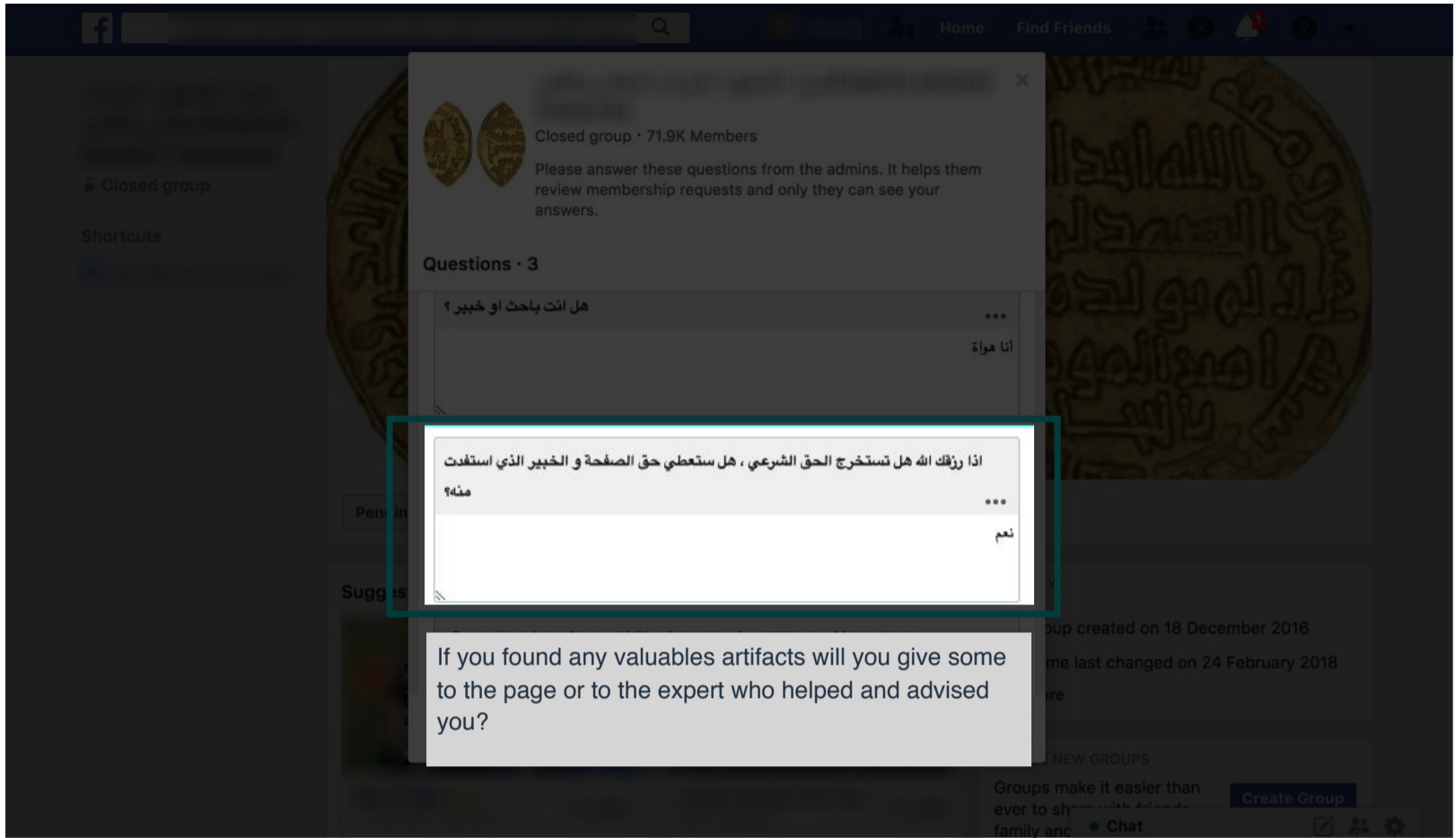


Figure 6: A screenshot of a Group entry questions. Question two translates to: "If God grants you wealth [ie you make money a transaction] do you agree to pay legitimate dues [one fifth or Khums according to Sharia law] to the page and the expert that you benefited from?" Source: Facebook

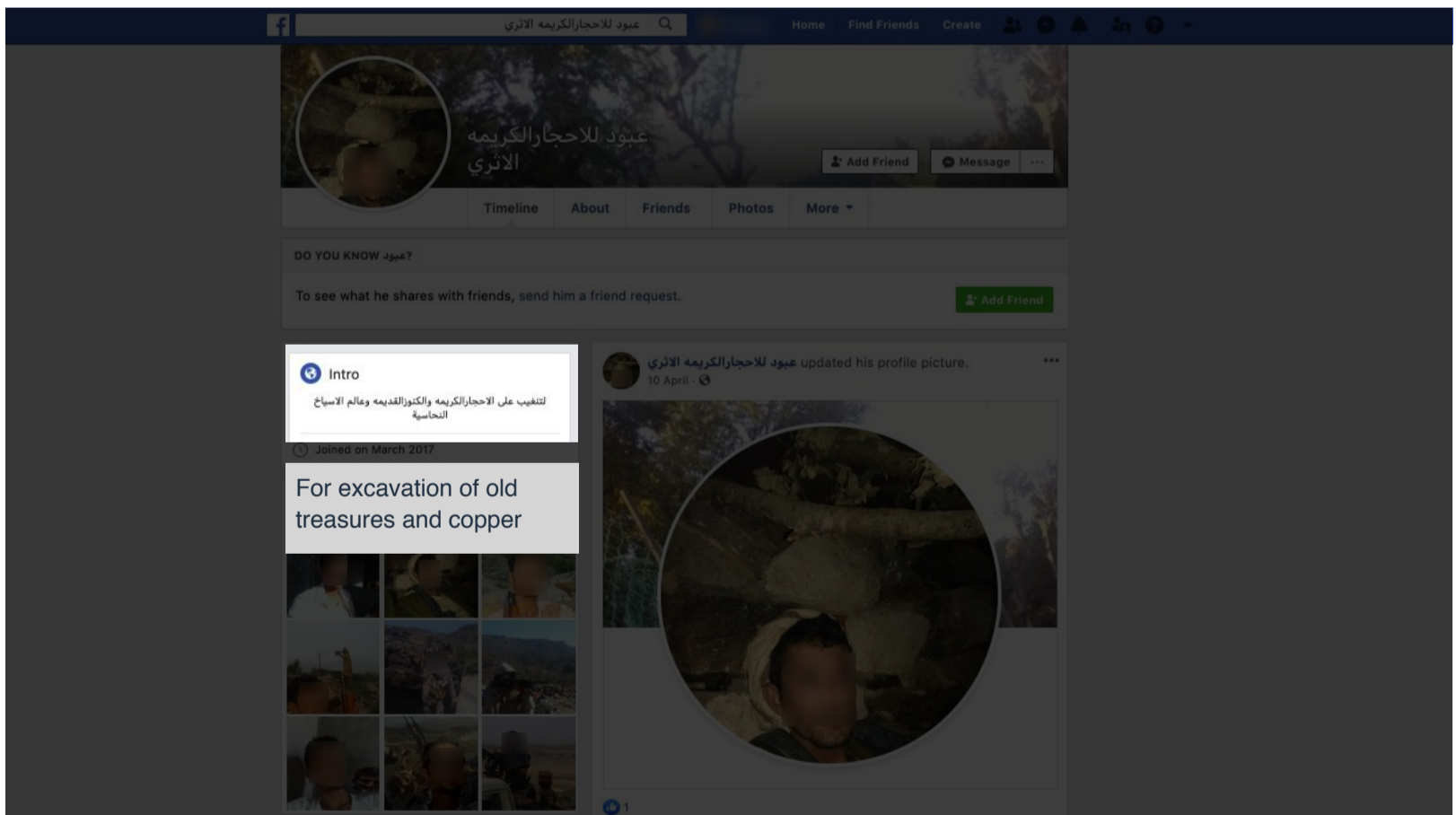


Figure 7: Screenshot of the Facebook profile for a Yemeni trafficker who uses his profile name and bio as signals to other traffickers that he is open for business. Source: Facebook



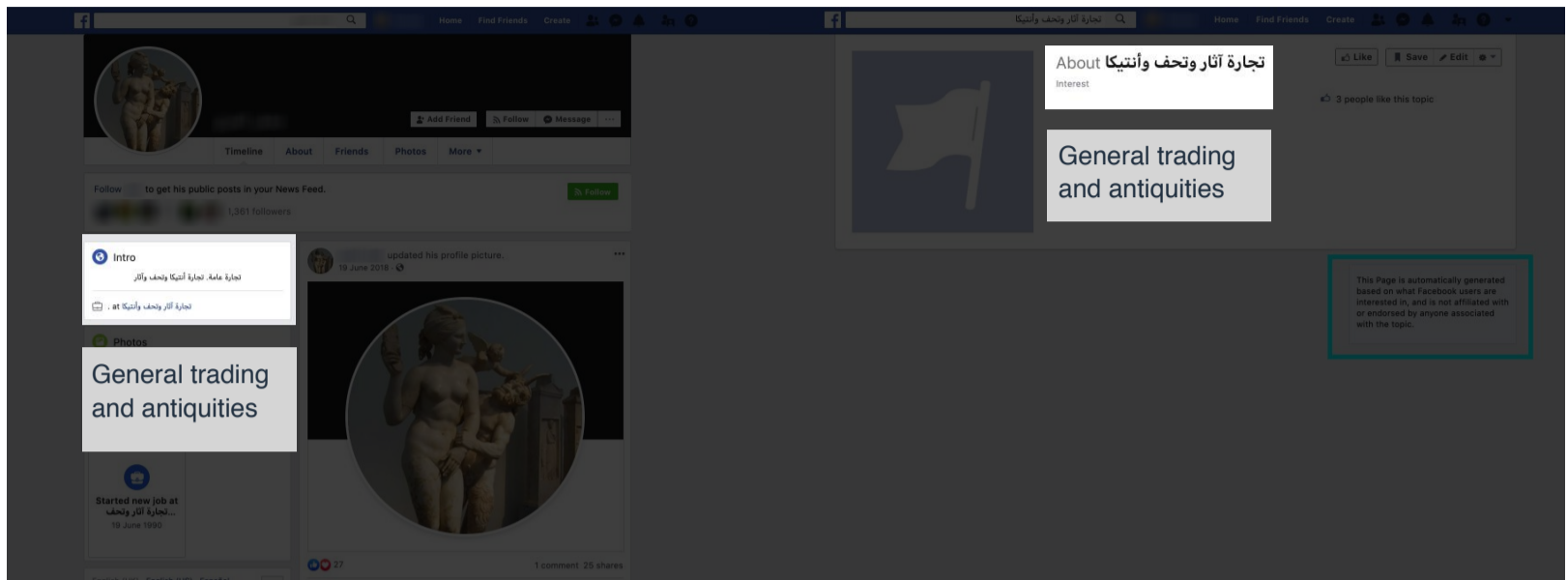


Figure 8: (Left) Screenshot of a trafficker's profile where his intro bio and workplace position indicate that he trades in antiquities. (Right) Screenshot of the auto-generated page Facebook created and linked to the workplace position listed in the user's profile. Source: Facebook

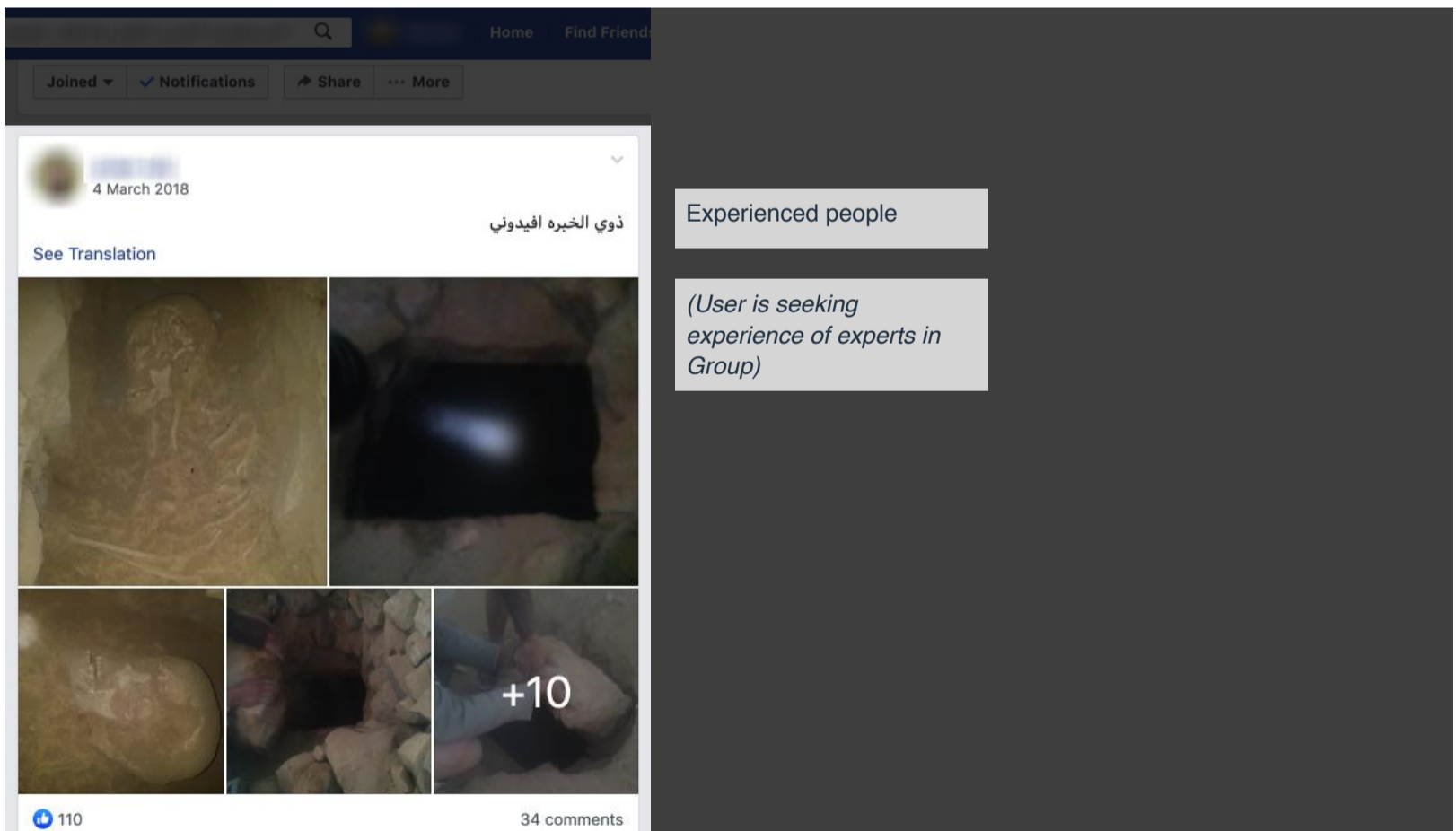


Figure 9: Screenshot of post from a user based in Sanaa, Yemen sharing action photos of himself and others desecrating a grave and looting a tomb. Source: Facebook



Figure 11: (Left) Loot-to-order request posted by an admin in Group C seeking coins available in Idlib, Syria, the post also asks for photos of available items. (Center and Right) Replies from Group members include images of coins available. The reply screenshots are a sample of dozens of replies to this loot-to-order request. Source: Facebook

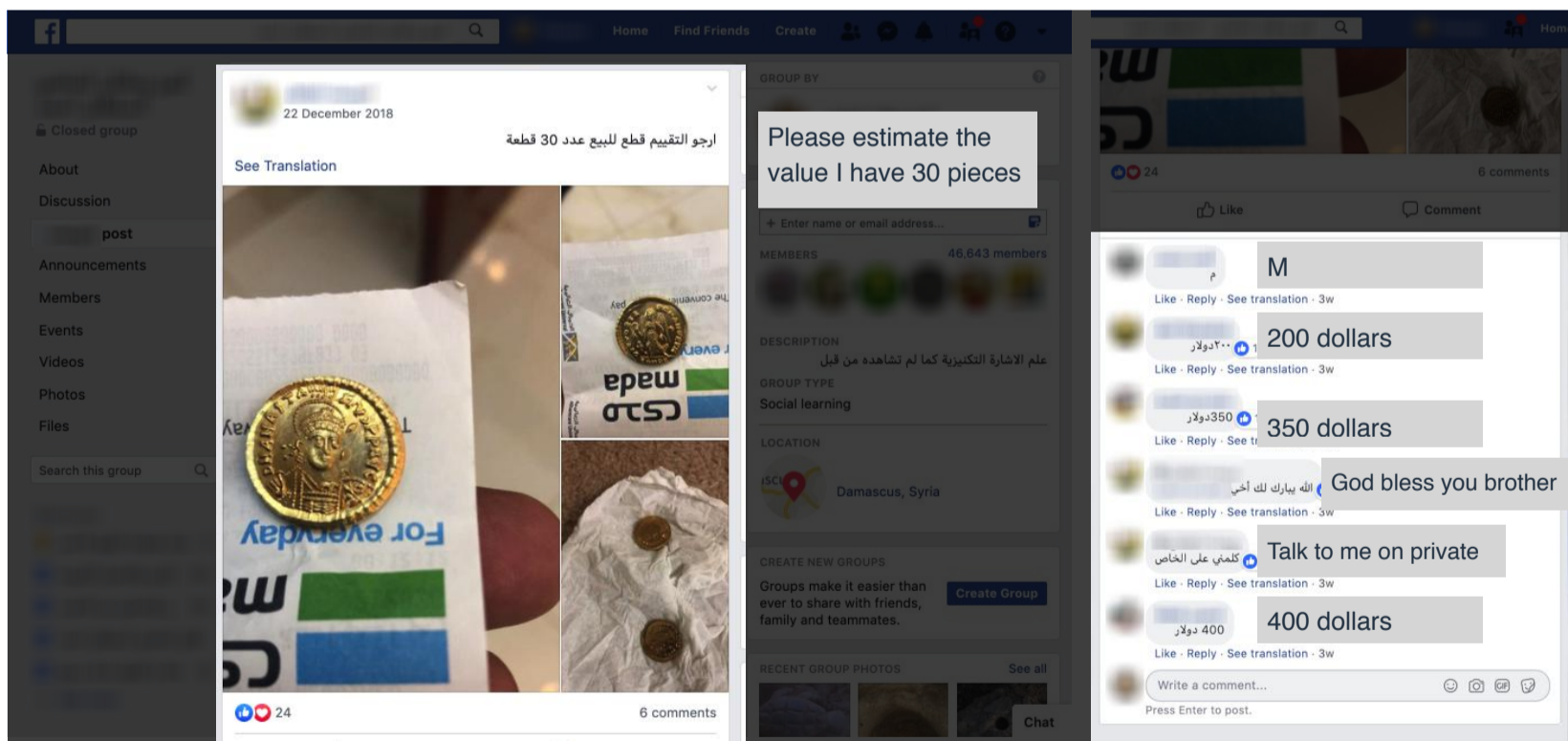


Figure 12: (Left) Screenshot of post offering coins for sale. (Right) Users bid on coins in U.S. dollars in replies to the post. Source: Facebook



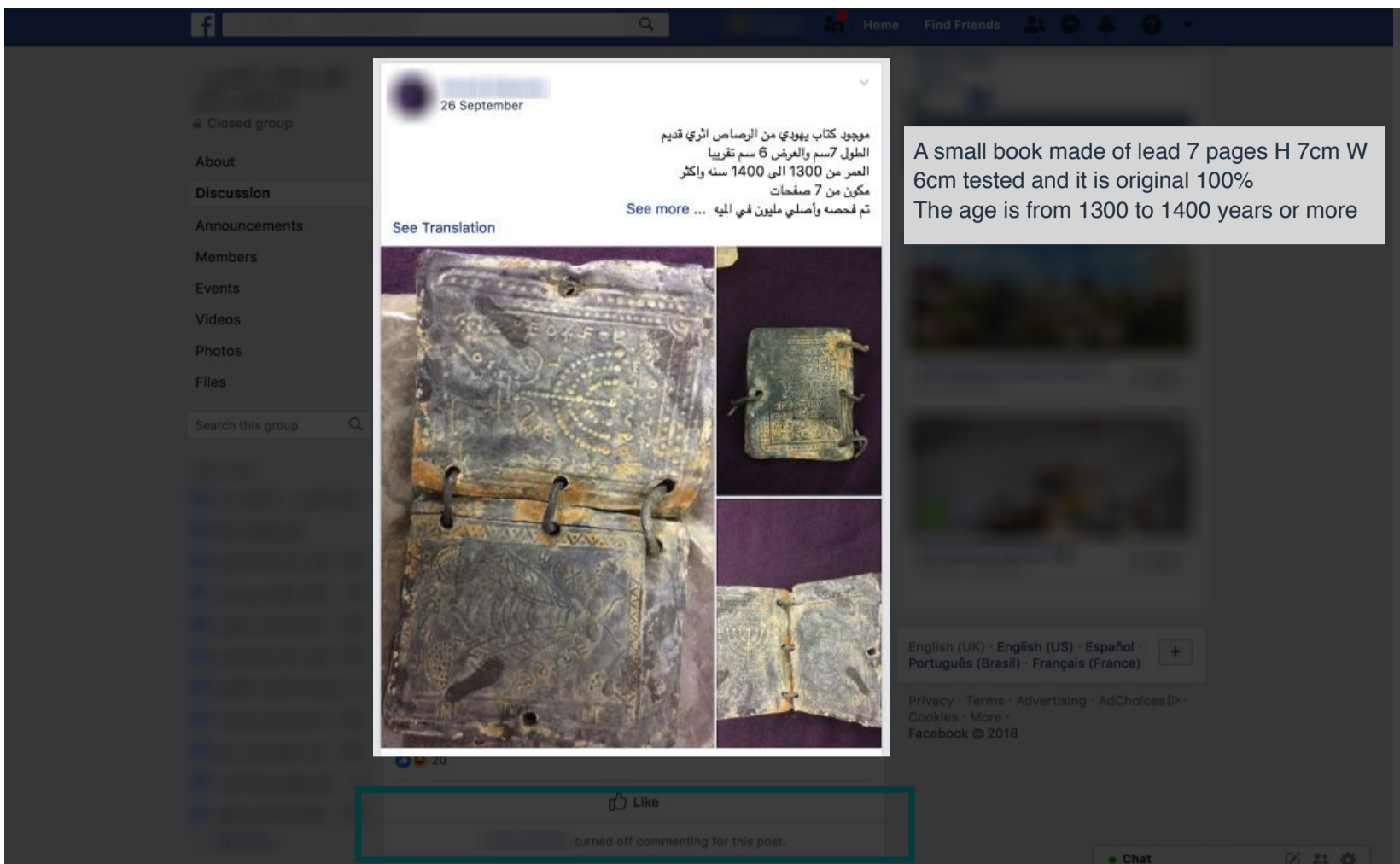


Figure 16: The screen shot of a 26 September 2018 post from Group B above is an example of a user who has turned off comments so that interested buyers are forced to message with him directly. Source: Facebook



Figure 17: Screenshot of post offering carved artifact from Libya for "free" but also noting that it is for sale. Source: Facebook





Figure 18: Screenshot of post offering a bronze bull in Sanaa, Yemen for \$200,000 U.S. dollars. Source: Facebook



Advice number 2
 Note: I advise for free and please accept my apology for not responding to your questions because I am an admin in 6 pages so I am very busy. And please the PM is for the family and friends.

The advice is:
 When you try to excavate from up first after you removing the sands and you find the stones before you start removing them you have to clear the stone area and remove the sands then you have to attach yourself to a safety rope and attached to a tree or a rock then you can start removing the stones otherwise your suddenly find yourself in a hole and the stones on top of you.

Remember life of the excavator is more important than the artifacts

Figure 19: Screenshot of post by moderator apologizing for not replying because he is running so many different Facebook Groups. Source: Facebook





Figure 22: The user offering the seal posts to the Group requesting evaluation. An interested buyer who appears to be unaware of the “code” comments asking “for sale(?)”. The original poster replies to him, “yes for sale, possible evaluation(?)”. Source: Facebook

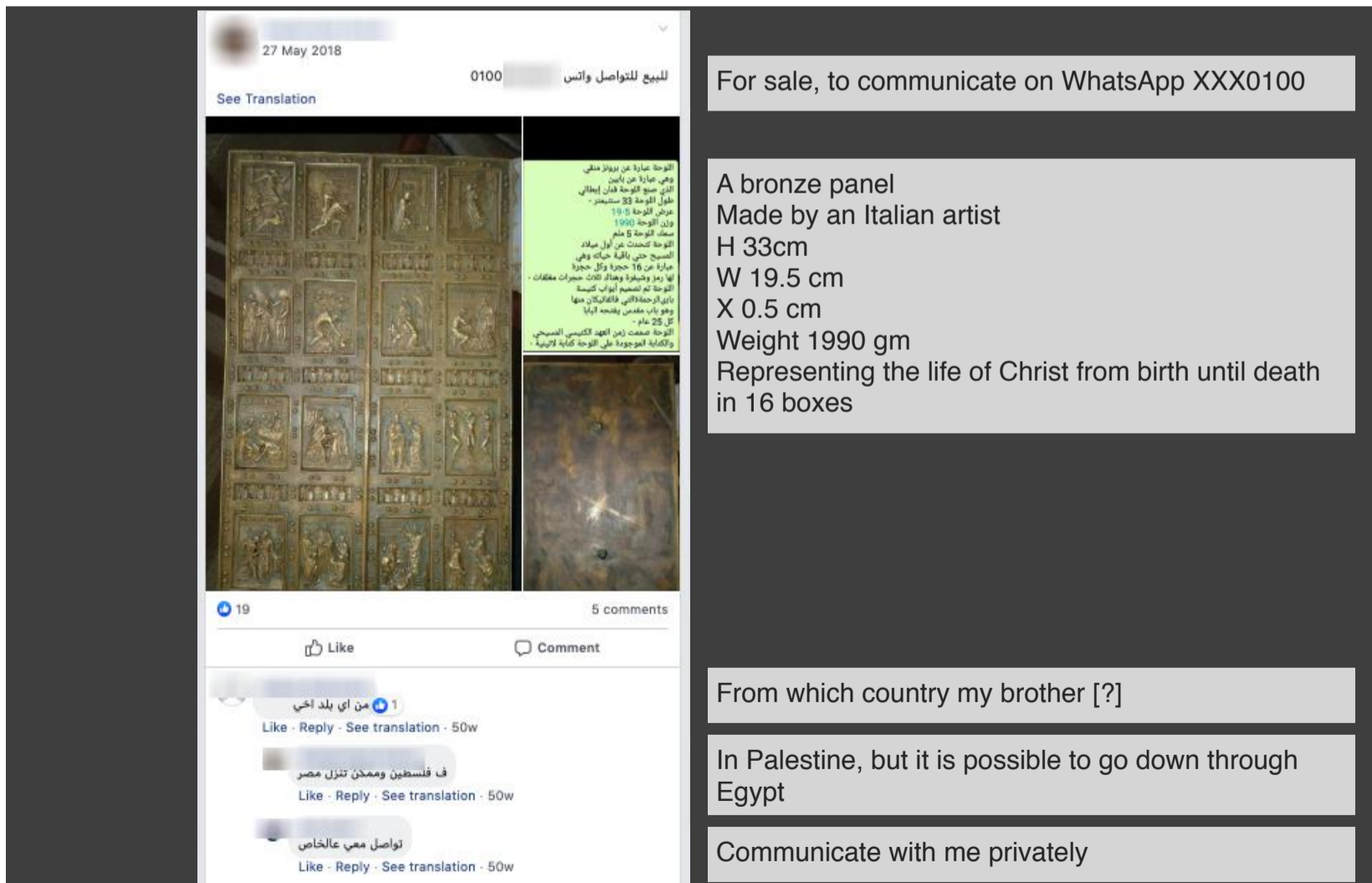


Figure 23: In this screenshot from Group B, the user offering what appears to be a historic artifact offers his WhatsApp phone number for interested buyers. The communication below even suggests how the item might be trafficked. A user replies to the post: “From which country?” and the original poster replies, “In Palestine, and you can go down through Egypt.” A third user replies, “Communicate with me privately.” Where the communication then goes out of public view.

Source: Facebook



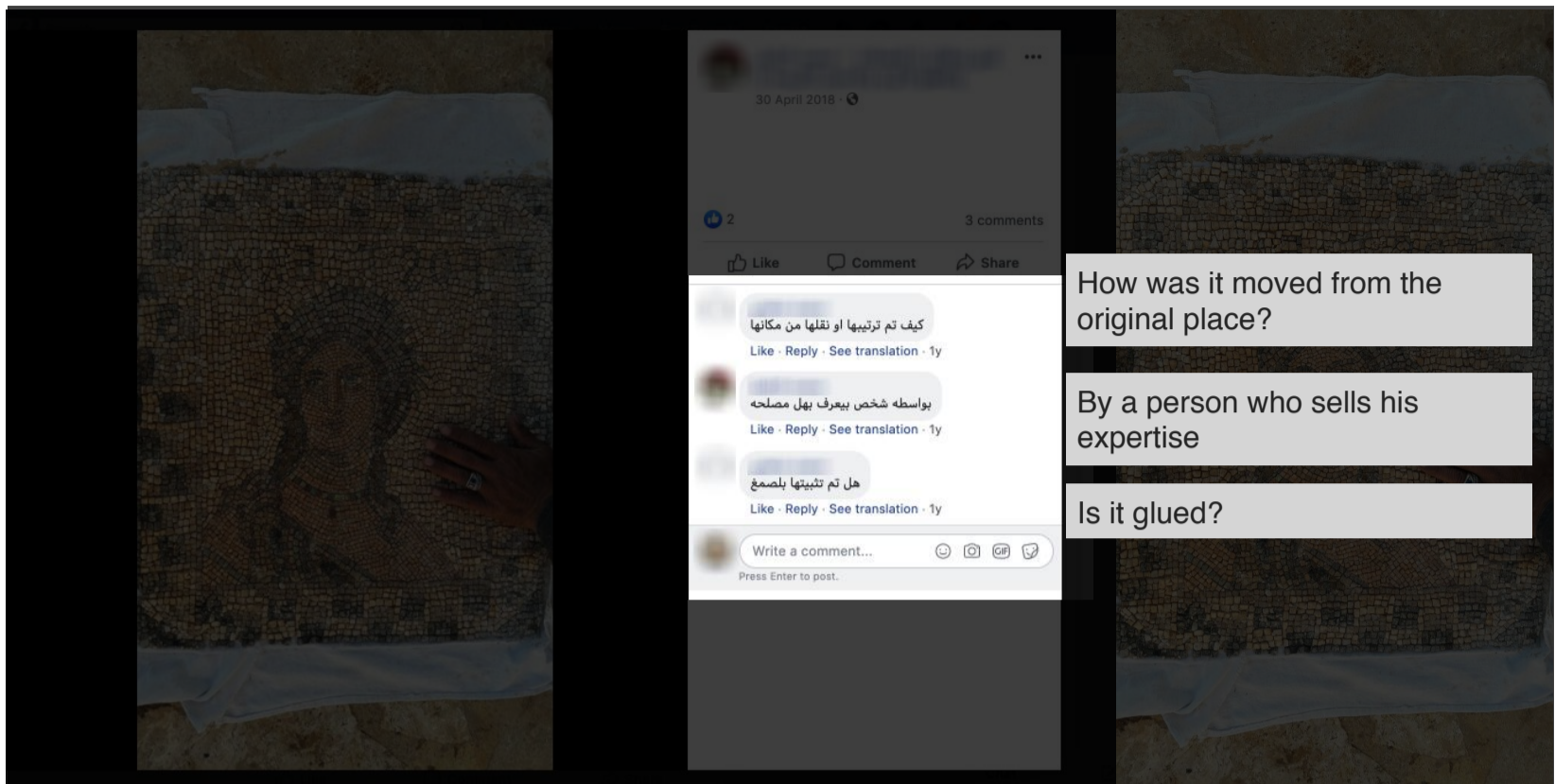


Figure 25: (Left) Screenshot of post in Group Z on 30 April 2018 offering mosaic. Source: Facebook (Right) The same image was found by Armory Bazaar in December 2018 in a northern Syria-based weapons trafficking chat group. Source: Armory Bazaar

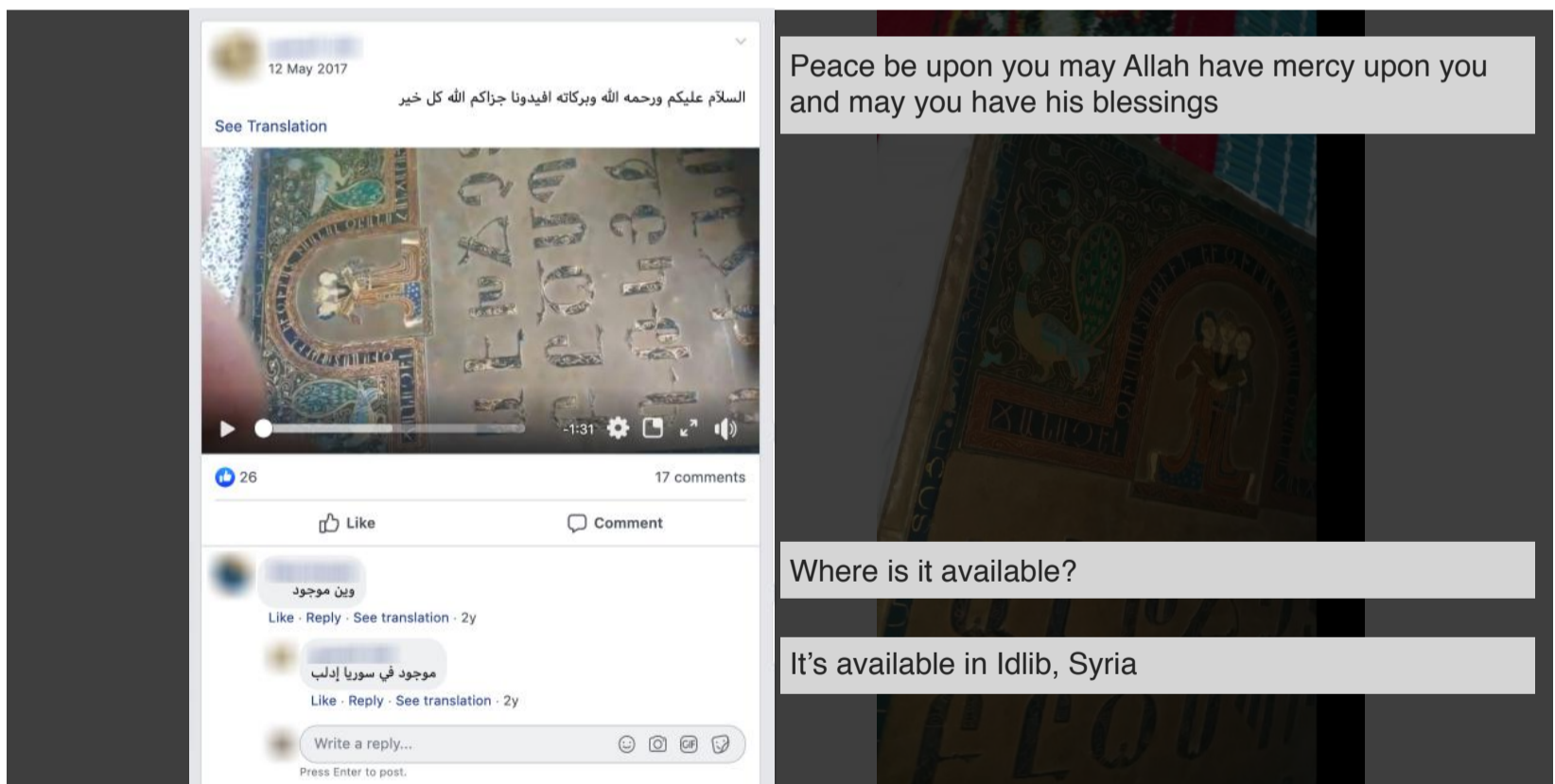


Figure 26: (Left) Screenshot of video post in Group D offering religious relic by user based in Idlib on 12 May 2017. Source: Facebook (Right) Image provided by Armory Bazaar of the same item appearing in a Telegram chat on 17 November 2017 in Idlib in a different context. Source: Armory Bazaar

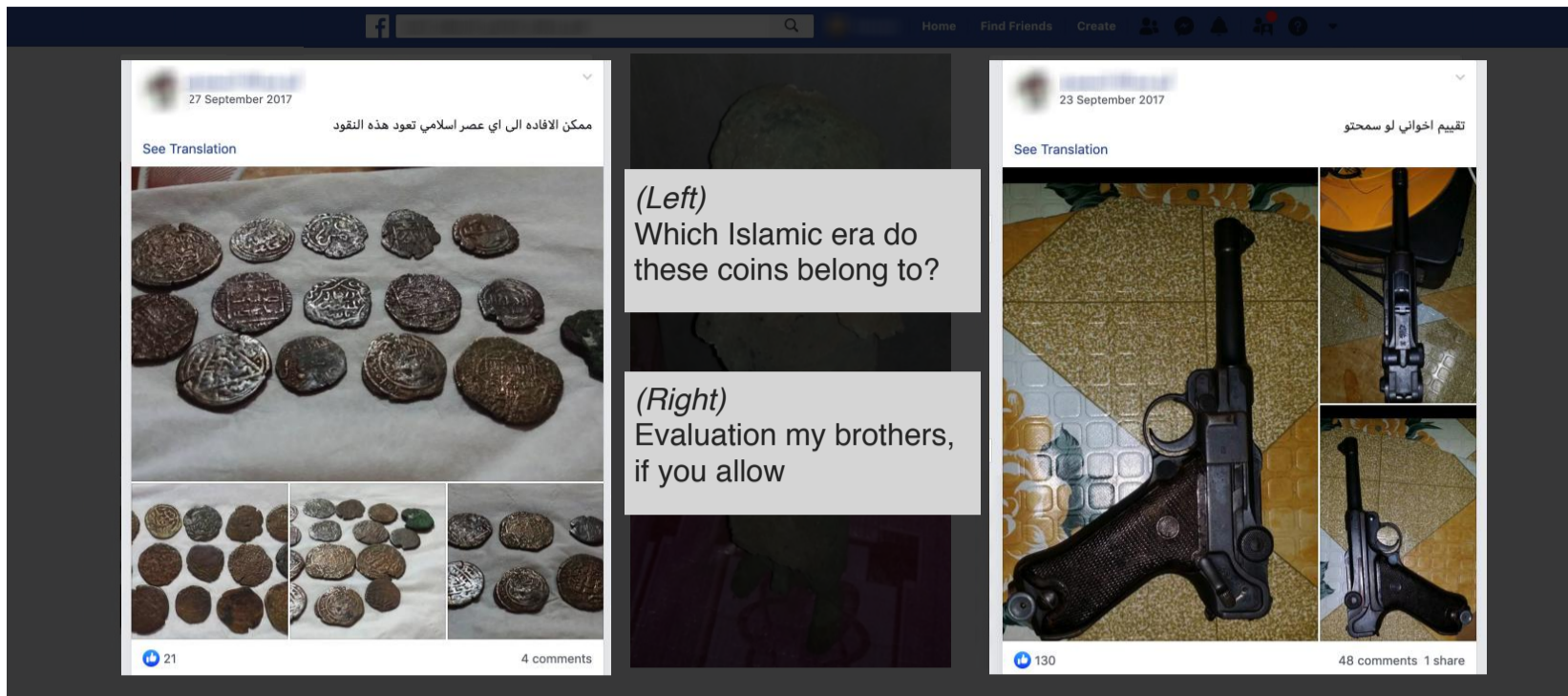


Figure 47: Variety of items offered in posts by Subject B1, all of these items were offered in Facebook Group B and all were posted in September 2017. Source: Facebook

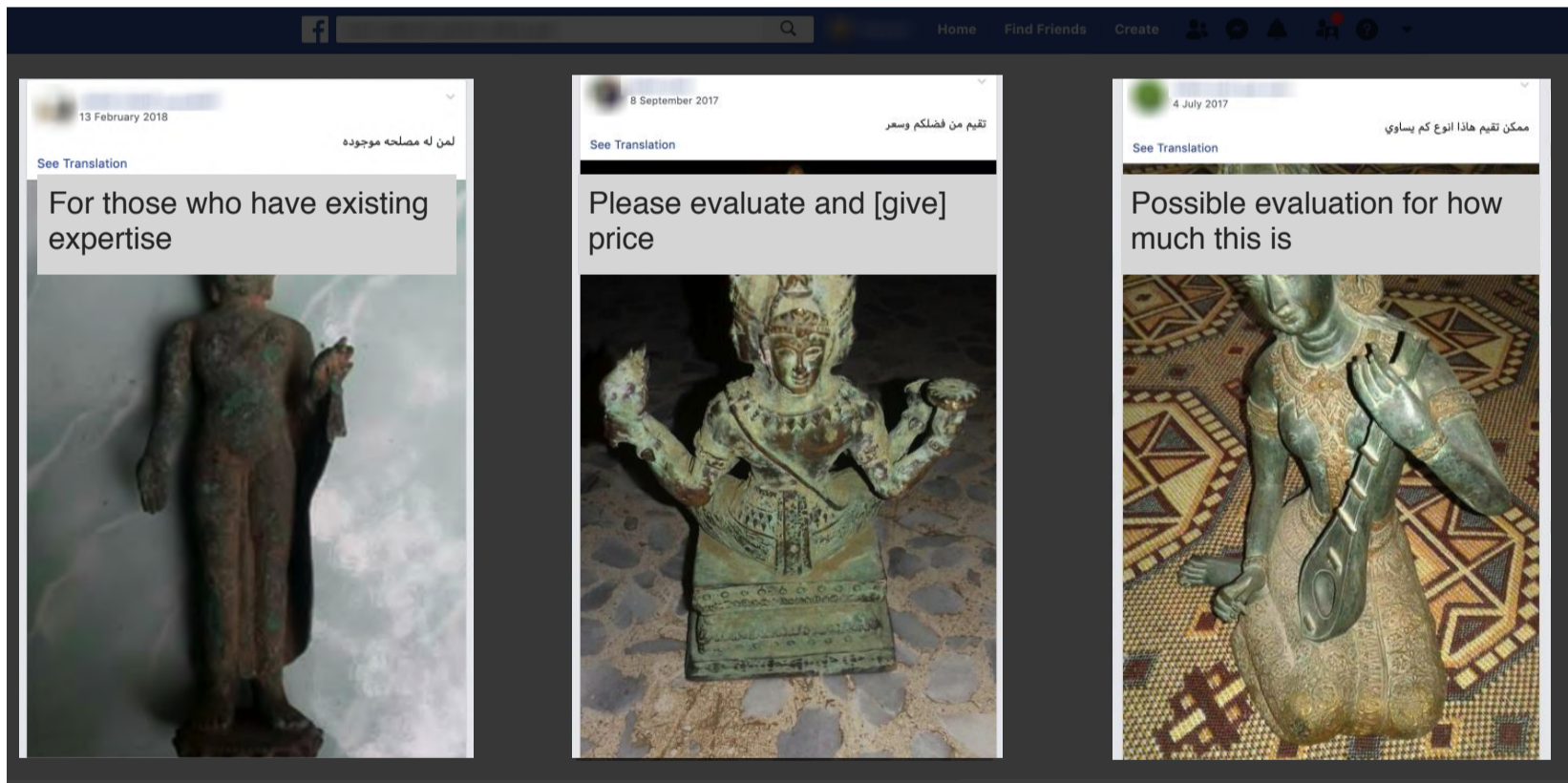


Figure 49: The appearance of Hindu and Buddhist artifacts on Facebook antiquities trafficking Groups in the Middle East has only been seen thus far exclusively in conflict countries in the region. (Left) Screenshot of a Buddhist artifact is offered by Subject D1, a user based in Sanaa, Yemen, on 13 February 2018. (Center) Screenshot of a Hindu god is offered by a user based in Al Bab, Syria on 8 September 2017. (Right) Screenshot of an artifact possibly from Southeast Asia is offered by a user in Sanaa, Yemen on 4 July 2017. Source: Facebook



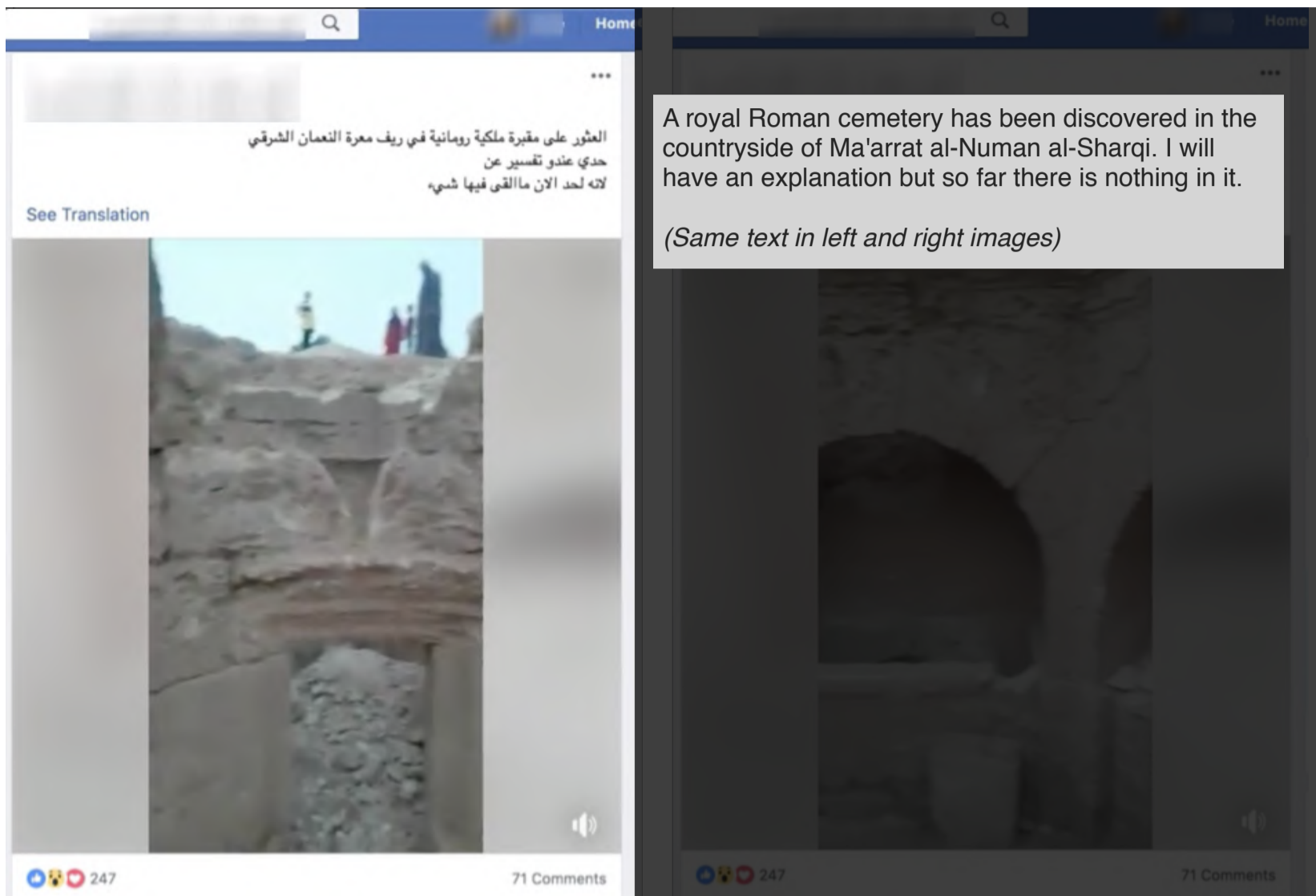


Figure 50: Screenshots of a video posted in Group R1 on 28 October 2018 of the active looting at an Al Nusra Front-controlled Roman site near Idlib, Syria. Source: Facebook

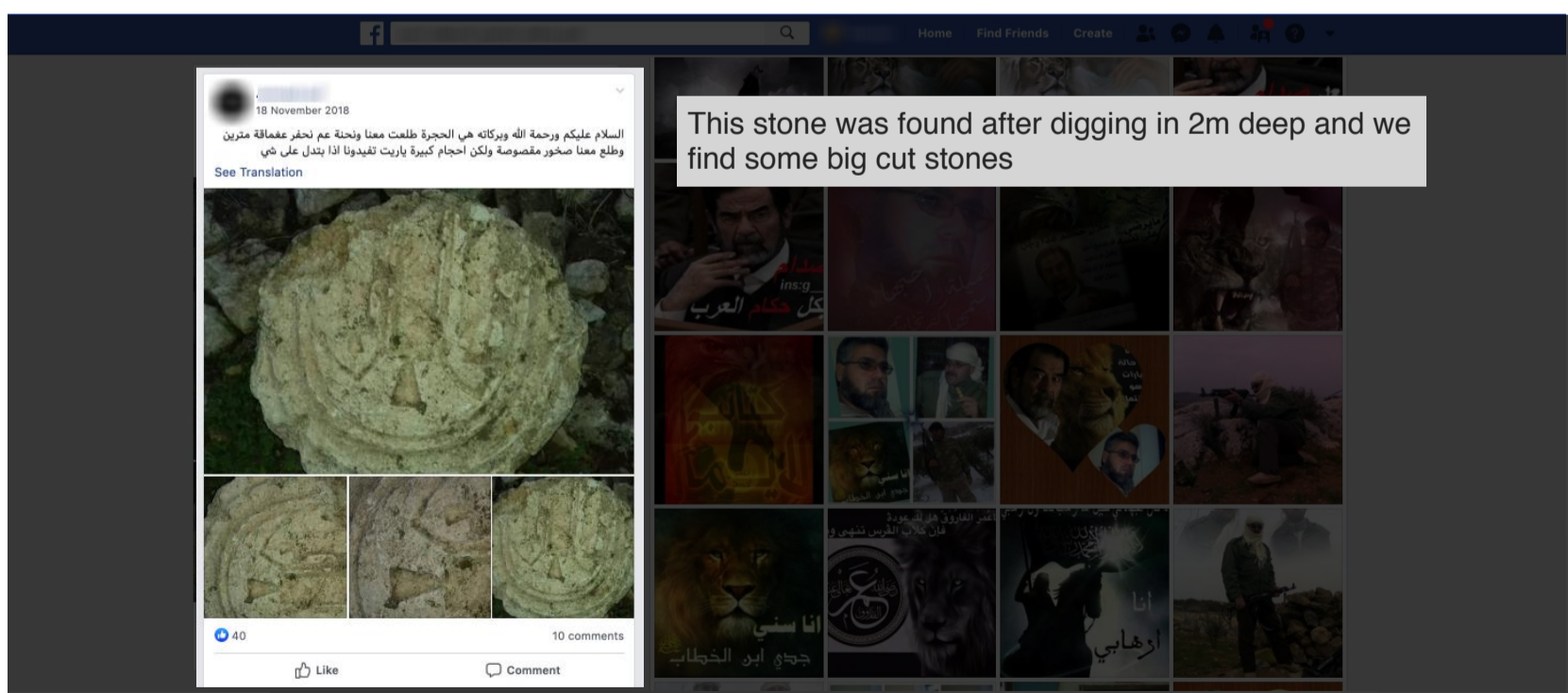


Figure 51: Screenshot of Subject B2's Facebook Group post (left) and photos on his profile (right). Source: Facebook

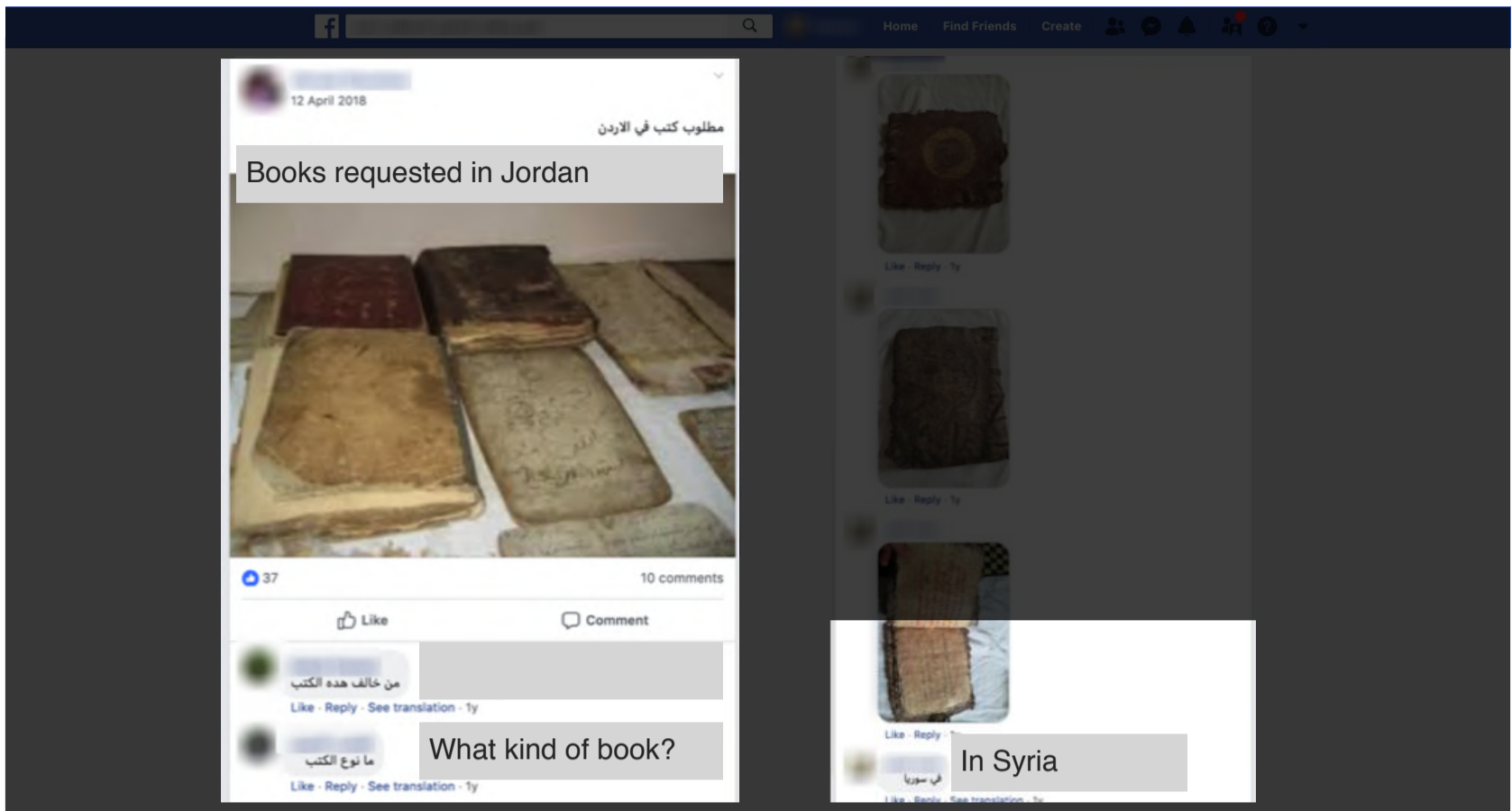


Figure 52: (Left) Screenshot of loot-to-order request for books available in Jordan that was posted in Facebook antiquities trafficking Group B on 12 April 2018. (Right) Screenshot of books offered by Subject B3 on 14 April 2018 in response to the loot-to-order request. Source: Facebook

TABLE OF GROUPS MONITORED BY ATHAR

Group	Group Type	Created	Members (As of 5 May 2019)	Location
Group A	N/A	4/18/2017	1,803	Idlib, Syria
Group A1	Custom	12/3/2016	13,254	N/A
Group A2	Custom	5/23/2012	45,592	N/A
Group A3	Social Learning	6/12/2018	1,420	Cairo, Egypt
Group B	Support	1/12/2017	46,564	Damascus, Syria
Group B1	N/A	6/19/2017	3,268	Oran, Algeria
Group B2	N/A	8/5/2017	4,642	Marrakesch, Morocco
Group B3	N/A	2/12/2018	686	N/A
Group C	Custom	11/7/2017	3,484	Ma`Arat An Na`Man, Idlib, Syria
Group C1	N/A	12/21/2011	11,408	N/A
Group C2	N/A	9/21/2018	5,142	N/A
Group C3	N/A	8/22/2018	398	Cairo, Egypt
Group D	N/A	1/5/2017	73,434	Syria
Group D1	Buy and Sell	12/19/2011	25,770	N/A
Group D2	N/A	10/12/2017	5,321	Oum El Bouaghi, Oum El Bouaghi, Algeria
Group D3	N/A	5/23/2015	1,840	Damascus, Syria
Group E	Social Learning	10/23/2015	4,012	Thailand
Group E1	Study Group	9/16/2015	3,643	N/A
Group E2	Custom	1/12/2019	997	Casablanca, Morocco
Group E3	Custom	4/16/2017	17,221	Syria
Group F	N/A	9/1/2017	29,841	N/A
Group F1	Team	1/5/2013	14,838	N/A
Group F2	N/A	2/23/2018	922	N/A
Group F3	Buy and Sell	11/26/2016	869	N/A
Group G	N/A	4/16/2014	4,808	N/A
Group G1	Custom	12/19/2016	7,115	N/A
Group G2	Custom	6/3/2017	1,355	N/A
Group G3	N/A	1/28/2018	406	N/A
Group H	N/A	12/17/2015	12,425	N/A
Group H1	Team	4/5/2017	4,990	N/A
Group H2	Custom	2/16/2017	2,170	N/A
Group H3	N/A	3/31/2018	5,854	N/A



Group I	Study Group	3/19/2018	24,627	La Chebba, Tunisia
Group I1	N/A	6/30/2018	20,458	N/A
Group I2	Custom	5/25/2015	1,360	Cairo, Egypt
Group I3	N/A	12/26/2011	3,040	N/A
Group J	Study Group	6/3/2015	21,563	N/A
Group J1	Study Group	3/14/2018	2,124	N/A
Group J2	N/A	11/3/2017	3,391	Cairo, Egypt
Group J3	N/A	10/31/2017	2,030	N/A
Group K	Project	9/15/2016	57,752	Dubai, UAE
Group K1	N/A	4/26/2017	10,260	N/A
Group K2	Team	6/20/2017	7,895	Egypt
Group K3	Buy and Sell	2/21/2018	2,275	N/A
Group L	Custom	5/23/2017	154,733	N/A
Group L1	Social Learning	5/30/2018	5,049	Palestine
Group L2	N/A	12/8/2015	1,454	N/A
Group L3	N/A	11/3/2018	1,029	N/A
Group M	N/A	1/10/2017	24,029	N/A
Group M1	N/A	1/25/2017	13,524	N/A
Group M2	N/A	10/4/2013	2,786	N/A
Group M3	N/A	2/8/2012	1,316	N/A
Group N	N/A	11/28/2014	22,218	N/A
Group N1	Study Group	7/31/2014	14,067	Jordan
Group N2	Buy and Sell	11/28/2016	45,341	N/A
Group N3	Support	9/28/2016	47,318	Jordan
Group O	Study Group	9/25/2014	13,483	N/A
Group O1	Custom	10/25/2018	23,590	N/A
Group O2	N/A	6/5/2018	7,259	Egypt
Group O3	N/A	10/31/2017	2,177	N/A
Group P	Team	12/11/2016	23,109	N/A
Group P1	Custom	9/12/2014	99,808	Al Mukayfifah, Al Mafraq, Jordan
Group P2	N/A	3/28/2015	1,177	N/A
Group P3	N/A	6/19/2017	3268	Oran Algeria
Group Q	N/A	12/18/2016	80,123	N/A
Group Q1	Custom	1/3/2017	126,964	N/A
Group Q2	Buy and Sell	8/23/2012	10,128	N/A
Group R	N/A	7/10/2015	12,524	N/A
Group R1	Custom	9/1/2016	150,607	Syria
Group R2	N/A	7/4/2017	6,341	N/A
Group S	Custom	8/18/2016	13,254	Egypt
Group S1	Buy and Sell	10/4/2016	2,742	N/A



Group S2	N/A	3/14/2018	2,511	N/A
Group T	Custom	5/20/2016	98,114	N/A
Group T1	Support	9/14/2016	64,025	N/A
Group T2	Team	9/16/2015	9,459	N/A
Group U	Team	12/17/2016	19,326	N/A
Group U1	N/A	6/7/2018	7,854	Gaza City
Group U2	N/A	12/12/2014	15,281	N/A
Group V	Study Group	10/8/2016	5,386	N/A
Group V1	N/A	3/15/2018	2,592	N/A
Group V2	Custom	2/17/2015	2,354	N/A
Group W	N/A	9/7/2013	18,611	N/A
Group W1	Social Learning	7/22/2015	3,899	N/A
Group W2	Buy and Sell	12/5/2017	1,783	N/A
Group X	Custom	1/8/2018	46,800	N/A
Group X1	N/A	7/24/2016	16,854	Turkey
Group X2	Buy and Sell	9/10/2016	27,430	N/A
Group Y	Team	10/5/2016	6,559	Syria
Group Y1	Study Group	7/31/2014	14,031	Jordan
Group Y2	Social Learning	8/16/2017	121,955	N/A
Group Z	Custom	4/1/2017	33,687	N/A
Group Z1	Social Learning	11/9/2018	1,408	N/A
Group Z2	N/A	3/17/2018	4,474	Luxor, Egypt
Group Q3	Social Learning	4/26/2016	1,117	Downtown San Antonio, Texas, USA



TABLE OF GROUP ADMINS BY SUBJECT NUMBER

Additional excel documents and CSVs of data used for social networking analysis can be found in zip folder on the ATHAR Project website at www.atharproject.org

Subject	Subject Location	Admin or Moderator	Group(s)
1	Ubari, Libya	Moderator	Group E
2	Manchester, UK	Admin	Group G
3	Paris, France	Admin	Group A2
4	Sarmada, Syria	Moderator	Group T
		Moderator	Group X
		Moderator	Group Z
		Admin	Group O1
5	Montreal, Quebec	Admin	Group I1
6	N/A	Admin	Group A2
7	N/A	Moderator	Group F
8	N/A	Moderator	Group U1
9	N/A	Moderator	Group H3
10	Amman, Jordan	Moderator	Group R1
11	Al Hoceima, Morocco	Admin	Group B2
12	N/A	Admin	Group A2
13	N/A	Admin	Group I
14	Rome, Italy	Admin	Group V2
15	Tajerouine, Tunisia	Admin	Group M1
16	N/A	Admin	Group R
17	N/A	Admin	Group D1
18	N/A	Moderator	Group U1
19	Amman, Jordan	Moderator	Group Q1
		Moderator	Group T1
		Moderator	Group Z1
20	Al Mafraq, Al Mafraq, Jordan	Admin	Group P1
21	Amman, Jordan	Admin	Group T
		Admin	Group C2
22	New York, USA	Moderator	Group T
23	N/A	Admin	Group P
24	N/A	Admin	Group U1
25	Tunis, Tunisia	Admin	Group M1
26	Kuwait City, Kuwait	Admin	Group G2
27	N/A	Admin	Group L1
28	Zirya, Azerbaijan	Admin	Group S2



29	N/A	Admin	Group O
30	N/A	Admin	Group R
31	Al-Nabek, Rif Dimashq, Syria	Admin	Group T
		Admin	Group X
		Admin	Group Z
		Admin	Group O1
32	PAGE (not profile)	Admin	Group T
		Admin	Group X
		Admin	Group Z
		Admin	Group O1
33	Cairo, Egypt	Admin	Group T2
34	Damascus, Syria	Admin	Group U1
		Admin	Group H3
35	N/A	Admin	Group F
		Admin	Group Q
36	N/A	Admin	Group Q
37	Tunis, Tunisia	Admin	Group U1
38	Tripoli, Libya	Moderator	Group U1
39	N/A	Admin	Group N
40	Damascus, Syria	Moderator	Group N1
		Moderator	Group Y1
41	Amman, Jordan	Admin	Group U2
42	N/A	Admin	Group D
43	Amman, Jordan	Admin	Group C1
44	Bab Ezzouar, Algeria	Admin	Group B1
45	N/A	Moderator	Group Q
46	N/A	Moderator	Group R1
47	Fes, Morocco	Moderator	Group E2
48	N/A	Admin	Group B2
49	Hamburg, Germany AND Afrin, Halab, Syria	Admin	Group D
		Admin	Group E3
50	Irbid, Jordan	Moderator	Group N1
		Moderator	Group Y1
51	N/A	Admin	Group J1
52	London, UK	Moderator	Group F
		Admin	Group H1
		Admin	Group J1
		Moderator	Group Q1
53	Hyderabad, India	Admin	Group D2
54	N/A	Moderator	Group I3



55	N/A	Admin	Group M1
56	Amman, Jordan	Admin	Group N1
		Admin	Group Y1
57	N/A	Admin	Group W
		Admin	Group J2
		Admin	Group L2
		Admin	Group P2
58	N/A	Moderator	Group K
59	Madaba, Jordan	Admin	Group U
60	Jerusalem, Israel	Admin	Group A2
61	Casa Branca, Casablanca, Morocco	Admin	Group I
62	Setif, Algeria	Admin	Group E1
63	Tripoli, Libya	Moderator	Group V1
64	N/A	Admin	Group Q
65	Testour, Tunisia	Admin	Group M1
66	N/A	Admin	Group D
67	Aleppo, Syria	Admin	Group T1
68	Tangerang, Indonesia	Admin	Group E1
69	Beirut, Lebanon	Moderator	Group R1
70	Cairo, Egypt	Admin	Group H2
71	Cairo, Egypt	Moderator	Group O2
72	N/A	Admin	Group E2
73	N/A	Moderator	Group Z2
74	Agadir, Morocco	Admin	Group D1
75	Jerash, Jordan	Admin	Group Z1
76	Amman, Jordan	Admin	Group D
		Admin	Group Q1
		Admin	Group X1
77	Al Mafraq, Jordan	Moderator	Group Z
78	N/A	Moderator	Group Z
79	N/A	Admin	Group A2
80	N/A	Moderator	Group H3
81	N/A	Admin	Group H1
82	Michigan City, Indiana, USA	Admin	Group E3
83	Amman, Jordan	Admin	Group Z
84	Giza, Egypt	Moderator	Group H2
85	N/A	Admin	Group D
86	New Fes, Fès, Morocco	Moderator	Group C2
		Admin	Group E2
87	Safi, Morocco	Moderator	Group E2



88	N/A	Admin	Group I
		Admin	Group H1
89	N/A	Admin	Group H1
90	Jordan	Admin	Group A2
91	Amman, Jordan	Admin	Group I3
92	Amman, Jordan	Admin	Group M1
		Moderator	Group E2
93	Haifa, Israel	Admin	Group A2
		Admin	Group C2
94	Giza, Egypt	Admin	Group A1
95	Cali, Colombia	Admin	Group C
96	N/A	Moderator	Group X
		Moderator	Group Z
97	Mansoura, Egypt	Admin	Group K
98	Al Karak, Jordan	Admin	Group C1
99	N/A	Moderator	Group U1
100	Amman, Jordan	Moderator	Group F
101	N/A	Admin	Group X
102	Istanbul, Turkey	Moderator	Group B
103	N/A	Moderator	Group O2
104	Maarat, Syria	Moderator	Group C
105	Az Zarqa, Jordan	Admin	Group L1
106	Damascus, Syria	Moderator	Group I3
107	Cairo, Egypt	Admin	Group G3
108	Cairo, Egypt	Moderator	Group T
109	Jerash, Jordan	Moderator	Group U2
110	Damascus, Syria	Admin	Group D3
111	N/A	Moderator	Group L
112	Cairo, Egypt	Admin	Group I2
113	Cairo, Egypt	Admin	Group W
		Admin	Group J2
		Admin	Group L2
		Admin	Group P2
114	Berlin, Germany	Admin	Group V2
115	N/A	Moderator	Group U1
116	N/A	Admin	Group J1
117	N/A	Admin	Group W2
		Admin	Group B3
118	Damietta, Egypt	Admin	Group R1
		Admin	Group I



119	N/A	Moderator	Group X
		Admin	Group B1
		Moderator	Group H1
120	N/A	Admin	Group A2
121	Hebron, West Bank	Admin	Group Y2
122	Daraa, Syria	Admin	Group A2
		Admin	Group A2
123	Azilal, Morocco	Admin	Group D1
124	N/A	Admin	Group G
125	N/A	Moderator	Group U1
		Admin	Group H3
126	Dubai, UAE	Moderator	Group R1
127	Cairo, Egypt	Moderator	Group H2
128	Damietta, Egypt	Moderator	Group T
129	Doha, Qatar	Admin	Group A2
		Moderator	Group E2
130	Az Zarqa, Jordan	Admin	Group H1
131	N/A	Admin	Group B
132	N/A	Admin	Group N2
133	Sohag, Egypt	Admin	Group N2
134	Bakersfield, California	Moderator	Group F
135	PAGE - Furniture Shop	Admin	Group R1
136	N/A	Moderator	Group R1
137	Esenyurt, İstanbul, Turkey	Admin	Group O1
138	Malatya, Turkey	Moderator	Group C2
139	N/A	Moderator	Group K1
140	N/A	Moderator	Group T
		Moderator	Group X
141	Ramtha, Jordan	Moderator	Group Q
142	Angers, France	Admin	Group I1
		Admin	Group K1
143	Sharm El Sheikh, Egypt	Admin	Group D
144	N/A	Admin	Group B
145	N/A	Moderator	Group X1
146	N/A	Moderator	Group E2
147	N/A	Moderator	Group L
148	East Jerusalem, Palestine	Moderator	Group Z
149	Mafraq, Jordan	Admin	Group I
		Admin	Group D
		Admin	Group Q1



		Moderator	Group X1
150	N/A	Admin	Group Q1
151	N/A	Admin	Group H2
152	Souk Ahras, Algeria	Admin	Group O1
153	N/A	Moderator	Group T
154	N/A	Admin	Group D
155	Istanbul, Turkey	Admin	Group T
		Moderator	Group A
		Moderator	Group X
		Admin	Group Z
156	N/A	Admin	Group A2
157	N/A	Admin	Group J
158	Tunis, Tunisia	Admin	Group O1
159	Cairo, Egypt	Moderator	Group I3
160	N/A	Moderator	Group H3
161	Jenin, Palestine	Moderator	Group L
162	Tripoli, Libya	Admin	Group O1
163	Cairo, Egypt	Admin	Group X2
164	Abaza, Khakasiya, Russia	Admin	Group G2
165	N/A	Moderator	Group I3
166	N/A	Admin	Group J
		Admin	Group U1
		Admin	Group H3
167	Batna, Algeria	Admin	Group T
		Admin	Group V
		Admin	Group X
		Admin	Group Z
		Admin	Group D
		Admin	Group E3
168	N/A	Admin	Group L2
169	N/A	Admin	Group P2
170	Batna, Algeria	Admin	Group A2
171	Istanbul, Turkey	Moderator	Group J
172	N/A	Moderator	Group R1
173	N/A	Moderator	Group J
174	Cairo, Egypt	Admin	Group P
175	Aleppo, Syria	Admin	Group V
		Admin	Group F1
		Admin	Group D
		Admin	Group E3



176	N/A	Moderator	Group J
177	Abu Dhabi, UAE	Admin	Group O
178	El Jadida, Morocco	Admin	Group E2
179	Amman, Jordan	Admin	Group I3
180	N/A	Admin	Group K1
181	Mugla, Turkey	Moderator	Group E2
182	N/A	Admin	Group B
183	Beirut, Lebanon	Admin	Group Q
		Admin	Group E3
184	Agadir, Morocco	Admin	Group D1
185	N/A	Admin	Group U1
186	Al Mafraq, Jordan	Moderator	Group Z
187	N/A	Admin	Group A2
188	Manama, Bahrain	Moderator	Group H3
189	N/A	Moderator	Group G2
190	N/A	Admin	Group W1
191	Az Zarqa, Jordan	Admin	Group L1
192	Casablanca, Morocco	Admin	Group E2
193	N/A	Admin	Group B
194	N/A	Admin	Group E2
195	Beirut, Lebanon	Moderator	Group H3
196	N/A	Moderator	Group Z2
197	N/A	Moderator	Group T1
		Moderator	Group T1
198	N/A	Moderator	Group K
199	Tall Manis, Idlib, Syria	Moderator	Group Z
200	N/A	Admin	Group H3
201	Idlib, Syria	Admin	Group E3
		Admin	Group E3
202	N/A	Admin	Group A2
203	N/A	Moderator	Group I3
204	Aryanha, Tunisia	Admin	Group I
205	Antakya, Hatay, Turkey	Admin	Group E3
206	Irbid, Jordan	Moderator	Group L
207	Irbid, Jordan	Admin	Group D
		Admin	Group U2
208	N/A	Moderator	Group Y
209	Damascus, Syria	Moderator	Group T1
210	N/A	Moderator	Group H1
211	N/A	Moderator	Group I1



		Moderator	Group K1
212	Amman, Jordan	Admin	Group G2
213	Al Hoceïma, Morocco	Moderator	Group J
214	N/A	Admin	Group D
215	N/A	Admin	Group I
		Admin	Group Q
216	Damascus, Syria	Admin	Group I
217	Damascus, Syria	Admin	Group I
		Admin	Group Q
218	Irbid, Jordan	Admin	Group T
219	Amman, Jordan	Moderator	Group V1
220	Amman, Jordan	Admin	Group H1
		Admin	Group H1
221	Amman, Jordan	Admin	Group H1
222	Amman, Jordan	Admin	Group I1
223	N/A	Admin	Group H1
224	N/A	Admin	Group T
225	Riyadh, Saudi Arabia	Admin	Group A
226	Al-Karak, Jordan	Admin	Group Q1
		Admin	Group X1
227	N/A	Moderator	Group T
		Admin	Group U1
		Admin	Group H3
228	Aden, Yemen	Moderator	Group C2
229	Amman, Jordan	Moderator	Group X1
230	N/A	Moderator	Group V1
231	Az Zarqa, Jordan	Moderator	Group I3
232	Assiut, Egypt	Admin	Group Z2
		Admin	Group A3
233	Sanaa, Yemen	Moderator	Group Q1
234	Tripoli, Libya	Moderator	Group H3
235	N/A	Admin	Group X1
236	N/A	Admin	Group F1
237	N/A	Moderator	Group T
		Admin	Group U1
		Admin	Group H3
238	N/A	Admin	Group F2
239	Jerusalem, Israel	Moderator	Group H3
		Moderator	Group U1
240	Amman, Jordan	Moderator	Group Q



241	Qena, Egypt	Admin	Group K2
		Moderator	Group O2
242	Damascus, Syria	Admin	Group I1
		Admin	Group K1
243	N/A	Moderator	Group I1
		Admin	Group K1
244	N/A	Moderator	Group X1
245	Amman, Jordan	Admin	Group L1
246	N/A	Admin	Group Q1
		Moderator	Group X1
247	Macedonia	Admin	Group A2
248	Constantine, Algeria	Admin	Group J1
249	Amman, Jordan	Admin	Group V
		Admin	Group F1
250	Amman, Jordan	Admin	Group Q1
251	N/A	Admin	Group I
252	N/A	Admin	Group B
253	N/A	Moderator	Group K
		Admin	Group R2
254	N/A	Admin	Group R2
255	N/A	Admin	Group Z2
		Admin	Group A3
256	Eskisehir, Turkey	Admin	Group S1
257	Amman, Jordan	Admin	Group Q
		Moderator	Group T1
258	Cairo, Egypt	Moderator	Group L
259	Cairo, Egypt	Admin	Group S
260	N/A	Moderator	Group H2
261	N/A	Admin	Group P
262	Assiut, Egypt	Admin	Group Z2
		Admin	Group A3
263	Damascus, Syria	Admin	Group J
		Moderator	Group U1
264	Tunis, Tunisia	Moderator	Group T
		Moderator	Group X
		Admin	Group O1
		Admin	Group O1
265	N/A	Moderator	Group B1
266	PAGE	Admin	Group R1
		Admin	Group Y2



267	Irbid, Jordan	Moderator	Group Z
268	Jerash, Jordan	Moderator	Group T
269	Istanbul, Turkey	Admin	Group S1
270	Husn, Jordan	Admin	Group H1
		Admin	Group I1
		Admin	Group K1
271	Amman, Jordan	Admin	Group K1
272	Damascus	Admin	Group Y
273	Jordan	Admin	Group C1
274	PAGE	Admin	Group Q1
		Admin	Group X1
275	Idlib, Syria	Admin	Group T1
276	PAGE (not profile)	Admin	Group T
		Admin	Group X
		Admin	Group Z
277	Jenin, Palestine	Moderator	Group H3
		Moderator	Group H3
278	N/A	Moderator	Group C2
279	N/A	Admin	Group G2
280	N/A	Moderator	Group I3
281	Aleppo, Syria	Admin	Group C2
282	Amman, Jordan	Admin	Group U
283	Amman, Jordan	Moderator	Group H1
284	Amman, Jordan	Admin	Group A2
285	Tabarbour, `Amman, Jordan	Admin	Group I3
286	N/A	Moderator	Group I3
287	Istanbul, Turkey	Admin	Group T1
288	Irbid, Jordan	Admin	Group H1
289	Qalyub, Egypt	Admin	Group F3
290	PAGE	Admin	Group A2
291	N/A	Admin	Group I
		Moderator	Group K1
		Moderator	Group Q1
292	Istanbul, Turkey	Moderator	Group H
293	N/A	Admin	Group I1
		Admin	Group K1
294	N/A	Moderator	Group H1
		Moderator	Group H1
295	N/A	Moderator	Group I1
		Moderator	Group K1



296	Al Karak, Jordan	Admin	Group D
297	N/A	Admin	Group C1
298	Cairo, Egypt	Moderator	Group Z2
299	Jerusalem, Israel	Moderator	Group H3
300	N/A	Moderator	Group Q
301	N/A	Moderator	Group J
302	N/A	Admin	Group D2
303	Kharja, Irbid, Jordan	Admin	Group I
		Moderator	Group T
		Moderator	Group X
		Admin	Group Z
		Moderator	Group I1
		Moderator	Group K1
304	Idlib, Syria	Moderator	Group C
305	Amman, Jordan	Moderator	Group K1
306	Palestine	Moderator	Group I3
307	N/A	Moderator	Group Q
308	New Fes, Fès, Morocco	Moderator	Group I
		Moderator	Group Q
		Moderator	Group X
309	Toronto, Ontario	Admin	Group X
310	N/A	Moderator	Group Q
311	N/A	Admin	Group X
312	Riyadh, Saudi Arabia	Admin	Group X
313	Az Zarqa, Jordan	Moderator	Group I
		Admin	Group K1
		Admin	Group L1
		Admin	Group A2
314	N/A	Moderator	Group I1
315	Page (not profile)	Admin	Group F
316	Assiut, Egypt	Admin	Group I2
317	N/A	Admin	Group U1
		Admin	Group H3
318	N/A	Admin	Group U1
319	Omboi, Egypt	Moderator	Group H3
320	N/A	Admin	Group M
321	Idlib, Syria	Moderator	Group C
		Moderator	Group T1
322	N/A	Admin	Group D



323	N/A	Admin	Group I
		Admin	Group V
		Admin	Group F1
		Admin	Group D
		Moderator	Group U2
		Admin	Group E3
324	N/A	Admin	Group D
325	PAGE	Admin	Group F1
		Admin	Group Q1
326	Judayta, Irbid, Jordan	Moderator	Group Z
327	N/A	Admin	Group H2
328	PAGE (not profile)	Admin	Group L
329	Ariha, Idlib, Syria	Moderator	Group Z
		Admin	Group O1
330	N/A	Admin	Group I
		Moderator	Group T1
		Moderator	Group C2
331	Amman, Jordan	Admin	Group I
332	Amman, Jordan	Admin	Group H1
333	Amman, Jordan	Admin	Group I3
334	Amman, Jordan	Admin	Group Z
		Admin	Group D
335	N/A	Moderator	Group N1
336	N/A	Moderator	Group Y1
		Moderator	Group Y1
337	Irbid, Jordan	Moderator	Group H1
338	N/A	Admin	Group J1
339	Chicago, Illinois, USA (Now Az Zarqa, Jordan as of 4 May 2019)	Moderator	Group Q1
		Admin	Group Z1
340	Damascus, Syria	Moderator	Group Z
341	N/A	Moderator	Group V1
342	Irbid, Jordan	Admin	Group C1
343	Amman, Jordan	Moderator	Group J
344	N/A	Admin	Group Z
345	PAGE (not profile)	Admin	Group T
		Admin	Group X
		Admin	Group T
		Admin	Group X
		Admin	Group O1
346	N/A	Moderator	Group E2



347	N/A	Moderator	Group I3
348	Amman, Jordan	Moderator	Group I1
349	N/A	Admin	Group I
350	Cairo, Egypt	Admin	Group C3
351	N/A	Admin	Group O1
352	N/A	Admin	Group E3
353	N/A	Admin	Group D
354	Istanbul, Turkey	Admin	Group B
355	Amman, Jordan	Moderator	Group Q
356	Riyadh, Saudi Arabia	Admin	Group Z2
357	N/A	Moderator	Group Z
358	Sharm el-Sheikh, Egypt	Admin	Group M2
359	Cairo, Egypt	Admin	Group L
360	PAGE	Admin	Group X2
361	N/A	Admin	Group J
		Admin	Group U1
		Admin	Group H3
362	New York, NY	Admin	Group F
363	Irbid, Jordan	Moderator	Group H1
364	Hama, Syria	Moderator	Group A
365	Dopi, Mali	Admin	Group Z
366	Amman, Jordan	Admin	Group F
367	N/A	Moderator	Group Q
368	N/A	Moderator	Group Q1
		Admin	Group T1
		Admin	Group E2
369	Idlib, Syria	Admin	Group A
370	Irbid, Jordan	Admin	Group I
371	Idlib, Syria	Admin	Group E3
372	Al Karak, Jordan	Admin	Group I
373	Benha, Egypt	Admin	Group L
374	Tripoli, Libya	Moderator	Group T
375	Ramtha, Jordan	Admin	Group A2
376	PAGE	Admin	Group A2
377	Palestine	Admin	Group H1
378	N/A	Admin	Group N1
		Admin	Group Y1
379	N/A	Admin	Group A2
380	Cairo, Egypt	Admin	Group A1
381	Al Mafraq, Jordan	Moderator	Group P1



382	Irbid, Jordan	Moderator	Group U2
383	N/A	Admin	Group S1
384	PAGE	Admin	Group R1
		Admin	Group Y2
385	Cairo, Egypt	Moderator	Group F
386	N/A	Moderator	Group Z2
387	N/A	Admin	Group F
		Admin	Group G1
388	Az Zarqa, Jordan	Admin	Group N1
		Admin	Group Y1
389	N/A	Moderator	Group Q
390	Cairo, Egypt	Admin	Group B3
391	N/A	Admin	Group P
392	Amman, Jordan	Admin	Group H1
393	N/A	Moderator	Group V1
394	N/A	Admin	Group D
		Admin	Group D
395	Amman, Jordan	Admin	Group D
		Moderator	Group U2
		Admin	Group E3
396	Paris, France	Moderator	Group R1
397	Casablanca, Morocco	Moderator	Group L
398	Tripoli, Libya	Moderator	Group U1
		Moderator	Group H3
399	Idlib, Syria	Moderator	Group A
400	N/A	Admin	Group B
401	Dammam, Saudi Arabia	Moderator	Group Q
402	N/A	Admin	Group I
		Admin	Group Q
403	Gelsenkirchen, Germany	Admin	Group E3
		Admin	Group I2
404	Frankfurt, Germany	Admin	Group A
405	N/A	Moderator	Group X1
406	Istanbul, Turkey	Moderator	Group K1
407	Haifa, Israel	Admin	Group F
408	N/A	Moderator	Group E
409	Damascus, Syria	Moderator	Group J
		Moderator	Group H3
410	Giza, Egypt	Admin	Group Z2
		Admin	Group A3



411	PAGE (not profile)	Admin	Group L1
412	Giza, Egypt	Admin	Group Z2
		Admin	Group A3
413	PAGE (not profile)	Admin	Group N
414	Istanbul, Turkey	Admin	Group B
415	PAGE (not profile)	Admin	Group T
		Admin	Group X
		Admin	Group Z
		Admin	Group O1
416	N/A	Admin	Group L1
417	N/A	Moderator	Group V1
418	N/A	Admin	Group H1
419	Idlib, Syria	Moderator	Group T1
420	Istanbul, Turkey	Admin	Group I
		Admin	Group D
		Admin	Group Q1
		Admin	Group Q1
		Admin	Group E3
421	Amman, Jordan	Moderator	Group U1
422	Salzgitter, Germany	Admin	Group D
423	PAGE	Admin	Group W
		Admin	Group J2
		Admin	Group L2
		Admin	Group P2
424	Daraa, Syria	Moderator	Group R1
425	Idlib, Syria	Moderator	Group J
426	Az Zarqa, Jordan	Admin	Group J
427	Istanbul, Turkey	Moderator	Group T1
428	N/A	Admin	Group K
429	N/A	Moderator	Group Q
430	Amman, Jordan	Admin	Group E
431	Amman, Jordan	Admin	Group D
432	N/A	Moderator	Group B
433	Amman, Jordan	Admin	Group I
434	Amman, Jordan	Admin	Group H1
		Admin	Group I1
		Admin	Group K1
435	N/A	Moderator	Group I1
		Moderator	Group K1
		Admin	Group W



436	N/A	Admin	Group J2
		Admin	Group L2
		Admin	Group P2
437	N/A	Admin	Group K
438	Idlib, Syria	Moderator	Group T1
439	N/A	Admin	Group A
440	N/A	Admin	Group C1
441	Beirut, Lebanon	Admin	Group T1
442	Sofia, Bulgaria	Moderator	Group I3
443	Milan, Italy	Admin	Group O2
444	Amman, Jordan	Moderator	Group I1
		Moderator	Group R1
445	Istanbul, Turkey	Moderator	Group C2
446	Alexandria, Egypt	Admin	Group W2
447	Toronto, Ontario	Admin	Group H1
		Admin	Group D
448	N/A	Moderator	Group I1
449	PAGE	Admin	Group E
450	Beersheba, Israel	Moderator	Group T
		Admin	Group O1
451	Algiers, Algeria	Admin	Group D2
452	Iraq	Moderator	Group L
453	N/A	Admin	Group Z
		Admin	Group O1
454	Nusayban, Turkey	Admin	Group I
455	Nusaybin, Turkey	Admin	Group D
456	N/A	Admin	Group T1
457	Khan Shaykhun, Syria	Moderator	Group L
458	N/A	Admin	Group H1
459	Damascus, Syria	Moderator	Group Q1
460	Ajlun, Irbid, Jordan	Admin	Group A2
461	Taiz, Yemen	Moderator	Group Z
462	Idlib, Syria	Moderator	Group X
		Moderator	Group Y
		Admin	Group T1
463	N/A	Moderator	Group N1
464	Derik, Al Hasakah, Syria	Moderator	Group I1
		Moderator	Group K1
465	N/A	Moderator	Group V1
466	Jerusalem, Israel	Admin	Group R1



		Admin	Group Y2
467	PAGE - Furniture Shop	Admin	Group R1
468	N/A	Admin	Group U1
		Admin	Group H3
469	Nablus, Palestine	Admin	Group I
470	Michigan City, Indiana (* note: changed his location to Jerusalem, Israel during the course of this study)	Admin	Group I
		Moderator	Group T
		Admin	Group F1
		Admin	Group D
		Moderator	Group Q1
		Moderator	Group R1
471	Cairo, Egypt	Moderator	Group H2
472	Ajlun, Irbid, Jordan	Admin	Group H1
473	Tunis, Tunisia	Admin	Group T
		Moderator	Group X
		Moderator	Group Z
		Admin	Group O1
474	Masnaa, Rif Dimashq, Syria	Moderator	Group X1
475	Maznaa, Syria	Admin	Group F1
476	Ech Chlef, Chlef, Algeria	Moderator	Group I
		Admin	Group M1
477	Jerash, Jordan	Admin	Group H1
478	Nazareth, Israel	Admin	Group L1
479	Tripoli, Libya	Moderator	Group H3
480	Rabat, Morocco	Moderator	Group U1
		Moderator	Group H3
481	Amman, Jordan	Admin	Group U2
482	Damascus, Syria	Admin	Group U1
483	Sweida, Syria	Moderator	Group R1
484	Idlib, Syria	Admin	Group A
485	Haifa, Israel	Admin	Group I
486	Aleppo, Syria	Moderator	Group I
		Admin	Group I1
487	N/A	Admin	Group W
		Admin	Group J2
		Admin	Group L2
		Admin	Group P2
488	Irbid, Jordan	Admin	Group H
N/A	Group Archived - no admins	Group Archived - no admins	Group Q2



ENDNOTES

- ¹ See TEFAF Art Market Report for data on legal art market: https://amr.tefaf.com/assets/uploads/TEFAF-Art_Market_Report.pdf
- ² The term *conflict zones* refers to a region that is partially or completely outside the control of a recognized state or government.
- ³ Huang, Carol. "Facebook and Twitter Key to Arab Spring Uprisings: Report." *The National*, 6 June 2011. <http://www.l2f.inesc-id.pt/~fmmb/wiki/uploads/Work/misnis.ref01.pdf>
- ⁴ The ATHAR Project is a founding member of the Alliance to Counter Crime Online, which is comprised of a coalition of researchers and investigators working to stop a variety of black market trades on facebook. www.counterincrimingcrime.org
- ⁵ See <https://newsroom.fb.com/company-info/>
- ⁶ See Facebook Commerce Policy: <https://www.facebook.com/policies/commerce>
- ⁷ See Facebook Community Standards: <https://en-gb.facebook.com/communitystandards>
- ⁸ See Facebook 2018 Community Standards Enforcement Report: https://fbnewsroomus.files.wordpress.com/2018/05/understanding_the_community_standards_enforcement_report.pdf
- ⁹ See 47 U.S. Code § 230. *Protection for private blocking and screening of offensive material* <https://www.law.cornell.edu/uscode/text/47/230>
- ¹⁰ "حبس الشاب المتهم بتأسيس صفحة على فيس بوك لبيع وشراء الآثار الفرعونية" *Youm7*, 30 September 2011. <https://www.youm7.com/story/2018/9/30/%D8%AD%D8%A8%D8%B3-%D8%A7%D9%84%D8%B4%D8%A7%D8%A8-%D8%A7%D9%84%D9%85%D8%AA%D9%87%D9%85-%D8%A8%D8%AA%D8%A3%D8%B3%D9%8A%D8%B3-%D8%B5%D9%81%D8%AD%D8%A9-%D8%B9%D9%84%D9%89-%D9%81%D9%8A%D8%B3-%D8%A8%D9%88%D9%83-%D9%84%D8%A8%D9%8A%D8%B9-%D9%88%D8%B4%D8%B1%D8%A7%D8%A1/3970783>
- ¹¹ Maged, Mira. "Egyptian security arrest ancient mummified body part smuggler." *Egypt Independent*, 12 March 2019. <https://www.egyptindependent.com/egyptian-security-arrest-ancient-mummified-body-part-smuggler/>
- ¹² Throughout this report, use of the capitalized 'Group(s)' specifically references the Facebook feature, which is formally named 'Groups.' Use of the uncapitalized term 'group(s)' refers to the general definition of the word, such as a collection of people.
- ¹³ For information on Facebook Groups see https://www.facebook.com/help/1629740080681586/?helpref=hc_fnav
- ¹⁴ See Facebook on payments at https://www.facebook.com/help/863171203733904/?helpref=hc_fnav
Constine, John. "Facebook Introduces Payments for Messenger." *Tech Crunch*, 17 Mar. 2015, techcrunch.com/2015/03/17/facebook-pay/
- ¹⁵ Zhao, Wolfie. "Facebook to Roll Out 'GlobalCoin' Cryptocurrency in 2020: Report." *Coin Desk*, 24 May 2019, www.coindesk.com/facebook-to-roll-out-globalcoin-cryptocurrency-in-2020-report-says.
Paul, K.A. Ancient Artifacts vs. Digital Artifacts: New Tools for Unmasking the Sale of Illicit Antiquities on the Dark Web. *Arts* 2018, 7, 12.
- ¹⁶ Transcript of Mark Zuckerberg interview <https://abcnews.go.com/Business/interview-facebook-ceo-mark-zuckerberg-transcript/story?id=62152829>
- ¹⁷ See https://www.facebook.com/help/1482876905347766?helpref=faq_content
- ¹⁸ See SEC petition filed by the National Whistleblower Center <https://www.whistleblowers.org/wp-content/uploads/2019/05/Facebook-SEC-Petition-2019.pdf>
- ¹⁹ See auto-generated Facebook Page at <https://web.archive.org/save/https://www.facebook.com/pages/%D8%AA%D8%AC%D8%A7%D8%B1%D8%A9-%D8%A2%D8%AB%D8%A7%D8%B1-%D9%88%D8%AA%D8%AD%D9%81-%D9%88%D8%A3%D9%86%D8%AA%D9%8A%D9%83%D8%A7/1827024854020655>
- ²⁰ See Facebook Help Center on Stories https://web.archive.org/save/https://www.facebook.com/help/126560554619115?helpref=hc_global_nav
- ²¹ Constine, John. "You Might Hate It, but Facebook Stories Now Has 500 Million Users." *Tech Crunch*, 24 Apr. 2019, techcrunch.com/2019/04/24/facebook-stories-500-million/.
- ²² Metz, Cade, and Adam Satariano. "Facebook Restricts Live Streaming After New Zealand Shooting." *The New York Times*, 14 May 2019, www.nytimes.com/2019/05/14/technology/facebook-live-violent-content.html.
- ²³ See Facebook Newsroom press release on Watch Party <https://newsroom.fb.com/news/2018/07/watch-party-launches-around-the-world/>
- ²⁴ Welch, Chris. "US Reportedly Pressuring Facebook to Break Messenger's Encryption over MS-13 Investigation." *The Verge*, 17 Aug. 2018, www.theverge.com/2018/8/17/17725368/us-government-facebook-messenger-app-encryption-ms-13.
- ²⁵ See https://www.facebook.com/help/776978302394267?helpref=faq_content
- ²⁶ The ATHAR Project is not yet naming the dealer pending further investigation from authorities.
- ²⁷ Not all 95 Groups' admins were included, three Groups had either been archived or removed and no longer had admin information available.
- ²⁸ Subjects are the admins and moderators of the Arabic language antiquities trafficking Facebook Groups monitored by the ATHAR Project.
- ²⁹ Graham, Shawn, Ian Milligan, and Scott Weingart. *Exploring big historical data: The historian's macroscope*. World Scientific Publishing Company, 2015. Pp195-264.



- ³⁰ <http://gephi.org> ; Bastian M., Heymann S., Jacomy M. (2009). Gephi: an open source software for exploring and manipulating networks. International AAAI Conference on Weblogs and Social Media.
- ³¹ Modularity routine: Vincent D Blondel, Jean-Loup Guillaume, Renaud Lambiotte, Etienne Lefebvre, Fast unfolding of communities in large networks, in *Journal of Statistical Mechanics: Theory and Experiment* 2008 (10), P1000
- ³² Betweenness centrality: Ulrik Brandes, A Faster Algorithm for Betweenness Centrality, in *Journal of Mathematical Sociology* 25(2):163-177, (2001)
- ³³ Based on the data we know, the timeline is at least a year and a half. However, it likely took longer since the mosaic was already removed from the ground when it was first recorded in the 2017 post.
- ³⁴ Al-Azm, Amr, and Katie A Paul. "How Facebook Made It Easier Than Ever to Traffic Middle Eastern Antiquities." *World Politics Review*, 14 August 2018, www.worldpoliticsreview.com/insights/25532/how-facebook-made-it-easier-than-ever-to-traffic-middle-eastern-antiquities.
- ³⁵ See <https://twitter.com/ArmoryBazaar>
- ³⁶ The ATHAR Project is monitoring ongoing interactions while using a small team of researchers to diligently review and collect all communications in the back-dated history of the remaining Groups.
- ³⁷ Any categories that cannot be filled are recorded as "N/A" ("Not Available").
- ³⁸ See https://www.facebook.com/help/382485908586472?helpref=uf_permalink
- ³⁹ These numbers are based on the 60% of active users recorded for Group B with listed locations in their profiles.
- ⁴⁰ See Sam Hardy's work regarding online metal detecting communities in Turkey and Eastern Europe. <https://www.tandfonline.com/doi/abs/10.1080/23311886.2017.1298397>
- ⁴¹ BBC Monitoring. "Syria Group Hayat Tahrir Al-Sham and Al-Qaeda Legacy." *BBC*, 22 May 2019, www.bbc.com/news/world-middle-east-48353751.
- ⁴² In 2015, Sheikh Abdel Razak Al Mahdi of the "Shura" council issued a statement in support of a fatwa prohibiting the trade and looting of antiquities.
- ⁴³ Al Nusra is the main group which controls HTS and the Salvation Government in Idlib today.
- ⁴⁴ "اجبهة النصرّة تغرّ على كنز من الذهب في إدلب؟" *Al Jadeed*, 28 Oct. 2018, www.aljadeed.tv/arabic/news/arab-world/2810201810.
- ⁴⁵ *Al Jadeed* is a Lebanese news outlet and known to be sympathetic to the Syrian regime.
- ⁴⁶ See the Terrorism Resource and Analysis Consortium for more information on the Grey Wolves <https://www.trackingterrorism.org/group/grey-wolves>
- ⁴⁷ Warner, Bernhard. "Tech Companies Are Deleting Evidence of War Crimes." *The Atlantic*, 8 May 2019, www.theatlantic.com/ideas/archive/2019/05/facebook-algorithms-are-making-it-harder/588931/.
- ⁴⁸ See Second Protocol to the Hague Convention of 1954 for the Protection of Cultural Property in the Event of Armed Conflict 1999 http://portal.unesco.org/en/ev.php-URL_ID=15207&URL_DO=DO_TOPIC&URL_SECTION=201.html
- ⁴⁹ See the International Criminal Court's information on the judgement and sentencing in *The Prosecutor v. Ahmad Al Faqi Al Mahdi* <https://www.icc-cpi.int/Pages/record.aspx?docNo=ICC-01/12-01/15-171>
- ⁵⁰ Freeman, Lindsay J. "Digital Evidence and War Crimes Prosecutions: The Impact of Digital Technologies on International Criminal Investigations and Trials." *Fordham International Law Journal*, vol. 41, no. 2, pp. 283–336., ir.lawnet.fordham.edu/cgi/viewcontent.cgi?article=2696&context=ilj.
- ⁵¹ See a transcript of the testimony from the Senate Judiciary Committee <https://www.judiciary.senate.gov/download/04-10-18-zuckerberg-testimony>
- ⁵² See Facebook Terms of use <https://www.facebook.com/terms.php>
- ⁵³ Aiello, Chloe. "Senator to Zuckerberg: 'Your User Agreement Sucks.'" *CNBC*, 10 Apr. 2018, www.cnn.com/2018/04/10/senator-to-zuckerberg-your-user-agreement-sucks.html.
- ⁵⁴ Harwell, Drew. "AI Will Solve Facebook's Most Vexing Problems, Mark Zuckerberg Says. Just Don't Ask When or How." *Washington Post*, 11 Apr. 2018, www.washingtonpost.com/news/the-switch/wp/2018/04/11/ai-will-solve-facebooks-most-vexing-problems-mark-zuckerberg-says-just-dont-ask-when-or-how/?utm_term=.932f9ce6a4e1.
- ⁵⁵ In a call on 23 May 2019 between Facebook CEO Mark Zuckerberg and reporters, Zuckerberg noted "The amount of our budget that goes toward our safety systems, I believe, is greater than Twitter's whole revenue this year. So we're able to do things that I think are just not possible for other folks." <https://www.wired.com/story/facebook-community-standards-report/>
- ⁵⁶ Swann, Steve. "Antiquities Looted in Syria and Iraq Are Sold on Facebook." *BBC*, 2 May 2019, www.bbc.co.uk/news/amp/world-middle-east-47628369.
Video of BBC "Antiquities Looted in Syria and Iraq Are Sold on Facebook" report available at https://www.youtube.com/watch?v=qXFY_IFb6T4
- ⁵⁷ See information on Facebook's wildlife coalition <https://www.worldwildlife.org/pages/coalition-to-end-wildlife-trafficking-online#ans01>
- ⁵⁸ Baraniuk, Chris. "Facebook Animal Trade Exposed in Thailand." *BBC*, 10 Sept. 2018, www.bbc.com/news/technology-45472159.



⁵⁹ See letter from Representative Grijalva and Representative Huffman of House Natural Resources Committee to Chairman of the Securities and Exchange Commission. "Facebook's lack of disclosure of the illegal activity facilitated by its site and its failure to take adequate steps to address that activity are both violations of SEC rules." <https://naturalresources.house.gov/imo/media/doc/Grijalva%20Huffman%20Letter%20Urging%20SEC%20to%20Investigate%20Facebook%20Wildlife%20Trafficking%20Claims%20May%2014%202018.pdf>

⁶⁰ See Facebook's Community Standards <https://www.facebook.com/communitystandards>

⁶¹ The current "Promoting or Publicizing Crime" section only focuses on the trafficking of wildlife, drugs, and weapons. Wildlife is a recent addition that has been included since the April 2018 Hill hearings for Facebook. See https://www.facebook.com/communitystandards/violence_criminal_behavior/promoting_publicizing_crime/

⁶² See Facebook policies on countering terrorism <https://newsroom.fb.com/news/2017/06/how-we-counter-terrorism/>

⁶³ See Facebook Data Use Policy https://www.facebook.com/full_data_use_policy

⁶⁴ See Facebook policies on countering terrorism <https://newsroom.fb.com/news/2017/06/how-we-counter-terrorism/>

⁶⁵ See SESTA-FOSTA <https://www.congress.gov/bill/115th-congress/house-bill/1865/text>

⁶⁶ Gold, Ashley. "Tech Groups: Not so Fast on FOSTA-SESTA." *Politico*, 23 Feb. 2018, www.politico.com/newsletters/morning-tech/2018/02/23/tech-groups-not-so-fast-on-fosta-sesta-113560.

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⁶⁷ See Internal Revenue Service information on the Bank Secrecy Act <https://www.irs.gov/businesses/small-businesses-self-employed/bank-secrecy-act>

