Irregular Mobility and Network Capital

Ruta Nimkar, Emily Savage and Abdullah Mohammadi

Abstract

Mobile technology has historically been analysed in the context of regular mobility. In 2015, however, following an inflow of migrants and refugees to Europe, the ways in which mobile technology affect irregular migration became a subject of greater focus. There is a range of literature on how technology has affected migrants, but much less analysis on how mobile technology affects smuggling routes.

This paper contends that smuggling networks are building (intentionally or not) an alternative mobility regime, and that mobile technology is augmenting the network capital required to build this regime. It adapts Urry's (2007) framework for network capital to irregular movement, and uses this framework to analyse the demand, supply and organisational aspects of smuggling networks.

The paper concludes that mobile technology improves the logistics and organisation of smuggling networks, but has not, to date, significantly affected trust between various networks and actors. It also indicates that mobile technology has increased the risk of exposure to government authorities, and that smuggling networks currently have limited capacity to mitigate this risk.

Introduction

Social networks of migrants play a central role in intentions to migrate, route choice, smuggling method, and destination country (Haug, 2008; Dekker and Engbersen, 2014) in a circular manner: successful migrants facilitate prospective migrants, encouraging further prospective migrants and reducing risks and costs associated with movement (Broeders and Engbersen, 2007). To date, literature has focused on formal migration in the context of elites who have access to significant amounts of capital (Bergman et al, 2009, 35), with an increased focus on irregular migration in the last decade with the increase in irregular flows into Europe from North African and the Middle East. Irregular migration takes place when people move outside the regulatory norms of the origin, transit and receiving countries (UNODC 2018). Irregular migration consists of mixed migrants - asylum seekers, those seeking economic or educational opportunities, and victims of trafficking – with intentions and the nature of their movement changing along the route (IOM, accessed 2019).

Irregular migrants are increasingly making use of mobile technology to strengthen social networks and support their journeys, on trend with improvements in accessibility and functionality of social networking and communication applications (e.g., WhatsApp, Viber, Twitter, Facebook) have transformed the migration process for migrants (Dekker and Engbergsen, 2012; Crawley, *et al.*, 2016; Gillespie, *et al.*, 2016;; Zijlstra & Van Liempt, 2017; Frouws et al, 2016; Brenner and Frouws, 2019). Likewise, lack of appropriate technology acts as a barrier for migrants (Sanchez, 2017) and that while most migrants have a mobile phone, sometimes under half of these are smartphones (Brenner and Frouws, 2019). The way in which mobile technology contributes to migrant decisions appears to revolve around strengthening linkages to existing networks (notably family, friends and smugglers who share ethnic or familial ties), rather than provision of new information. Several reports from the Danish Refugee Council indicate that the most important source of information for people on the move are friends and family and smuggling networks (Brenner and Frouws, 2019). Some studies suggest that as few as 6% of migrants use social media as a dominant source of information to prepare for the journey

(Borkert et al., 2018). Social media can, however, represent a way of maintaining communication with those who provide information and services – that is, social media provides the network capital, in particular the bridging capital, to allow people to move. The bridging effect of social media is strong enough that some studies indicate there is a possibility for social media to support an increase in the number of individual journeys – that is, for social media to support migrants in bypassing smugglers (Gillespie et al, 2018).

Yet, the majority of irregular migration still takes place through smuggling networks (UNODC, 2018).[1] Smuggling businesses take multiple forms, from hierarchical groups with centralised organisational structures to networks of loosely organised groups and individuals (UNODC, 2018). Those within smuggling networks are often closely linked to those who purchase smuggling services – there are often shared ethnic, clan or familial links (UNODC, 2018) – or strong social networks. There is an acknowledgement that social networks both between migrants and smugglers and between smuggling networks are a critical facilitating factor in movement and that these networks appear to make increasing use of mobile technology to organise their activities (Sanchez, 2017; Gillespie et al, 2018; Milivojevic, 2018).[2] There also appears to be a general understanding that a significant amount of interaction between migrants and smugglers continues to take place in person, due both to preference (Sanchez et al, 2018) and to lack of appropriate communication technology. The existing research on smuggling and technology focuses on the relationship between migrants and smugglers and covers two primary uses: self-advertising and communication (Hacsek and Visnansky, 2017; UNODC, 2018; Boyd and Musto 2014). However, there is less research, both in the academic sphere and in the policy and practice realms, regarding the ways in which information technology affects these networks. The lack of research into this topic reflects a more general dearth of information on smuggling networks more broadly, driven by access constraints (UNODC, 2018; IOM, 2018).

Framing Technology, Social Media, and Smuggling

Network theory demonstrates that the ways in which individuals interact and network within their social system helps to develop payoffs in terms of social capital (Lin, 1999) through increasing the strength and number of relationships and acquaintances (Bourdieu and Wacquant, 1992). Network theory contends that migration is linked to personal capacities and characteristics at the individual migrant level but also to the relationality of individuals (Bergman et al, 2009; Urry, 2012.). The theory was developed in a context characterised by technological developments in the field of transport and communications (Koslowski, 2011), including the uptake of mobile phones and social media platforms. Network theory provides a framework for understanding how technological developments affect the ways in which individuals relate to their communities, and as such, provides an appropriate framework for analysing migration patterns. It "acknowledge[s] that moves tend to cluster, can be circular, and take shape within

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[1] Migrant smuggling is distinct from human trafficking in that smuggling is voluntary, though it is acknowledged that individual migrants may find the voluntary and involuntary nature of their movement change along their route.

[2] Mobile technology includes both hardware (mobile phones) and software (e.g., smartphone applications). Social media is defined broadly, and includes social networking sites (e.g., Facebook, Instagram), private messaging applications (e.g., Skype, WhatsApp, Vibr, Telegram), web logs (blogs), and content communities (e.g,, Wikipedia) (McGregor and Siegel, 2013; Frouws et al, 2016).

wider contexts and systems." (O'Reilly, 2015, p5). Mobile phones and social media play a catalytic role in mobility, increasing access to networks and facilitating network ties (Rettie, 2008; Grabowicz, 2014).

Urry (2007) outlined eight enabling factors that help to support relations between individuals and their networks and to facilitate mobility, wherein people experience stratified 'mobility regimes' on the basis of the varying access they have to the eight elements of network capital (Gillespie *et. al*., 2017). This in turn determines their access to specific resources. Smuggling networks offer migrants access to a parallel and irregular mobility regime. Smugglers are known to offer services such as access to physical and informational movement capacities, access to safe and appropriate meeting places, and access to transportation (UNODC, 2018). As such, they provide access to network capital for those who may not have such access through formal means. The elements of Urry's (2007) conceptualisation apply, broadly, to regular and irregular migration routes, with some adjustments. For example, Urry's (2007) Element 1 is predicated on access to, and privilege in, the formal migration system; smugglers offer, instead, a network which enables this system to be bypassed through other social networks, bribes, and other means of facilitation that allow the passage through international borders. This paper uses an adapted version this model to analyse the effects of technology on smuggling networks (Table 1).

Table 1: Eight Elements of Network Capital (Urry, 2007) adjusted to Migrant Smuggling

Network Capital Element	Smuggling Adjusted Elements
An array of appropriate documents, visas, money, qualifications that enable safe movement.	An array of networks within and information about the relevant authorities (official and unofficial) to permit safe movement
Social contacts at a distance offering hospitality and invitations	Social contacts offering connections that are relevant to the next phase of the route
Physical and informational movement capacities	Physical and informational movement capacities with minimal oversight from authorities
Location-free information and contact points such as real or electronic diaries, answer phones, mobile phones, email, etc	Location-free information and contact points with minimal oversight from authorities
Communication devices	Unchanged
Appropriate and safe meeting places	Unchanged
Access to means of transportation	Unchanged
Time and other resources to manage and coordinate the other seven elements.	Unchanged

The paper analyses the effects of mobile technology on smuggling networks using the basic assumption that smuggling organisations are developing (intentionally or not) an alternative mobility regime for those who cannot access the standard mobility regime. The regular mobility regime can be described through the framework of Urry's (2017) eight elements of network capital; this framework can also be adapted to irregular migration routes. For the purposes of this paper, the elements are then clustered into three groups, reflecting components of a smuggling network:

- *Relationships between smugglers and migrants*: Generating new business and delivering the smuggling service to clients depends on the capacity of smuggling networks to engage with potential

migrants – to disseminate information and marketing material to potential migrants, and attract the migrants to the services they offer. This is linked to Element 3 (physical and informational movement capacities).

- *Relations within smuggling networks*: In order to sustain themselves, smugglers need to develop an informal network consisting of, at minimum: information and contact points, communication devices, safe and secure meeting places, transportation and time. This reflects Element 4, 6, 7 and 8.
- *Relationships between smuggling networks and external actors (other networks and authorities)*: Elements 1 and 2 (an array of networks permitting safe movement and social contacts offering connections) are clustered together as three elements that address engagement with external networks including authorities such as the border police and armed forces, as well as other smuggling networks.

The paper analyses the effects of mobile technology on smuggling networks using the basic assumption that smuggling organisations developing (intentionally or not) an alternative mobility regime for those who cannot access the standard mobility regime. The regular mobility regime can be described through the framework of Urry's eight elements of network capital; this framework can also be adapted to irregular migration routes. This adapted framework, which focuses on supply, organisation and demand, is the structure which informs this paper.

The paper focuses on small scale smuggling – that is, on decentralised, local level smuggling networks that rely on family and ethnic ties and provide basic services (guiding, driving, accommodation) to migrants. The paper adopts Afghanistan as a case study, and more particularly the movement of Afghans across the Afghanistan-Iran border to the West.

Methodology

This study builds on a previous study conducted by the same authors (Mohammadi, *et. al.*, 2019) by engaging an additional 8 Afghan smugglers - 7 in Kabul and 1 in Herat, ranging in age from 26 to 53 years old. Of the smugglers identified, the researchers made an effort to select those from diverse ethnic background, ages, monthly client figures, and network sizes. Smugglers identified represent different segments of the smuggling economy in terms of services provided and the 'level' of service (*e.g*, visa purchases and direct flights to overland travel through multiple connected networks). The smugglers were identified through migrants and sources known to the authors as well as the researchers' networks with international non-governmental organizations working on mixed migration data collection.

The data collection was made possible because the researchers have significant experience in and engagement with communities affected by migration. The researcher responsible for data collection has been collecting data about migration in Kabul, Nimruz and Herat since 2016. The research team has close links with community members within these areas, including with local officials, migrants, people responsible for maintaining accommodation for migrants and moneylenders. The team drew on these connections when identifying potential interviewees.

The researchers collected data using semi-structured interview formats, and analysed data using inductive coding methods. Data collection teams comprised two people, the lead researcher and a field assistant, all male. Interviews were generally held at the interviewee's home, office or workplace and were held in the local language (Dari). Interviews took place in January 2019. Interviews were conducted

with full informed consent, but most interviewees did not permit the researchers to record the interviews or to refer to their names in the research.

The research has several limitations. First, the sample size is very low due to the difficulties in identifying informants willing to share specific information relating to their business as it is considered a criminal activity. Due partially to travel schedules, fewer informants were identified in the border areas than anticipated. Furthermore, this research is primarily engaging with smugglers who engage in the Western smuggling route via Iran and Turkey and onwards to Europe, rather than the Western route through Pakistan. Despite the limitations, the perspectives of smugglers are a significant gap in the literature and thus this research offers limited but important insight into smuggler engagement with social media.

Social Media and Network Capital between smugglers and migrants

The relationship between smugglers and migrants consists of two phases. In the first phase, smugglers and migrants gain information and make first contact with one another. This phase can include direct advertisement where smugglers disseminate information on the services they provide, and migrants initiate contact based on the information provided or direct contact is made through word-of-mouth referrals. The second phase consists of more concrete interactions in preparation for movement, during movement, and upon arrival at the destination or transit point where the migrant will be transferred to another smuggling network for onward travel. Increasingly, mobile technology allows for a feedback loop between the two phases where migrants who have good experiences provide feedback to potential migrants as do those who have bad experiences (Tinti and Reitano, 2017). Previous analysis regarding the relationships between migrants and smugglers has focused on the migrant's point of view (e.g., Gillespie *et al.*, 2018; Crawley *et al*, 2018; Dekker and Engbergsen, 2018). The following section details the changing nature and mechanisms of relationships between migrants and smugglers from the point of view of smugglers, but provide, by and large, a validation of existing migrant-centric research in that mobile technology and social media has enhanced the network capital element of physical and informational capacities and, due to the irregular nature of the intended movement, can do so without oversight from authorities.

Social Media and Advertisement of Smuggling Services

Social media platforms have been noted to spread unrealistic and false migration experiences to encourage potential migrants to pursue movement (Dekker and Engbersen, 2012; Gillespie *et al.*, 2018; EMSC 2018). A bulk of the research on this subject focuses on diaspora populations using social media and creating a pull factor for other potential migrants (Frouws *et al*, 2016; RVI 2016). Studies that examine advertisement and recruitment directly from smugglers often focus on the content and tactics of advertisements rather than how relationships are built (Roberts, 2017). Advertisement takes place primarily over 'public' social media such as Facebook and Instagram (Sanchez, Hoxhaj, Nardin, Geddes, Achilli, Kalantaryan, 2018). It may take place in a subtle fashion, with Sanchez et al (2018) pointing out that most facebook posts consist of carefully curated self-representations of migrants and smugglers in Europe. Smugglers have also been found to advertise 'trip packages' online through social media and messenger groups (EMSC, 2017).

The interviews conducted over the course of this study generally reinforce the findings of existing research. Most smugglers mention using wider social media outlets such as Facebook and Instagram for

reaching a wide audience; when a more individualised conversation starts, they general use messenger services such as WhatsApp and Vibr.

> Facebook and Telegram are very useful in terms of advertisement… There is no need to be straight about your business mentioning that you cross people illegally. Just mention migration opportunities and people will know what you mean… in Telegram we have made some groups for consultation about migration, education and health visas, giving information about migrants in Germany, Sweden, Norway, etc. on Facebook also we have several pages that do the same.

> *- Male, 26, Hazara, Interviewed in Kabul*

Seven of the eight smugglers who responded to questions about whether there was false advertising in the social media market agreed that false advertising was a problem, though perspectives on migrant's willingness to be deceived varied.

> Some other networks are trying to find clients through Facebook and Telegram channels, and they say what they have to say to find new migrants… yes, they tell lies, they say that there is work in Turkey, but we know that there isn't such a thing. Many of migrants are wandering in Turkey without job and a roof to sleep under.

> *- Male, 40, Tajik, Interviewed in Kabul*

While some of the smugglers interviewed indicated that migrants come to smugglers with unrealistic expectations based on advertisements, others felt the bulk of advertising came from migrants' friends and family members posting positive stories and photos of their journeys – not as a result of images propagated by individual smugglers or smuggling networks themselves. Others conceded that smugglers have no choice but to promote positive images and stories to attract clients.

> You have to do that to attract people's attention. Otherwise they just skip the ads and go to someone else. Of course, it's not false information - we just encourage them to migrate by posting beautiful pictures of European countries. Europe is beautiful and with full security. So, it's technically not a lie or false information. I personally think that the youth should migrate from Afghanistan at any costs because their lives are wasted here. At least there, they could have a normal life far from explosions, suicide attacks, or unemployment.

> *- Male, 28, Tajik, Interviewed in Kabul*

It is widely understood that when smugglers are advertising, the alternative to social media platforms is ethnic, clan and familial networks (Frouws *et al*, 2016; Monsutti, 2012). Many smugglers still rely heavily on these networks to conduct advertising and find clients (Stone Cardena, 2018), with some smugglers using personal recruitment methods (RVI, 2016) Nonetheless, in areas where mobile technology is being taken up, social media is providing a new outlet for advertisement and gaining clients that otherwise would have been out of reach of many low-level smugglers, both with regard to advertisement conducted directly by smuggling networks, and encouragement provided by positive social media posts about destination countries.

Advertisement of smuggling services to a market of actual and potential migrants reflects an improvement in information available to migrants. The use of digital technology and social media

platforms helps to spread the reach of advertising messages; as such, it improves informational movement capacities, that is, Element 3 of social capital.

Messenger Apps and Organisation of Journeys

Mobile technology also facilitates more direct communication between different groups on irregular migration paths. Private platforms such as Telegram and WhatsApp are frequently used to organise logistics (Haczek and Visnansky, 2017; Brenner and Frouws, 2019). Prior to low-cost mobile technology, smugglers and migrants had short-term interaction, whereby the migrant and smuggler were not likely to be in contact after the migrant passed to a new geographic area. Technological advancements and social media have facilitated longer-term interaction where migrants can continue to contact smugglers, and vice versa, through messenger apps to verify information, understand next steps, share contacts, and make payments (Frouws *et al*, 2016). Migrants have always heavily relied on information provided by smugglers (Koser and Pinkerton, 2002; Zijlstra and van Liempt, 2017). Social media and improved access to ICT generally has begun to shift the balance of power; migrants can now check on the quality of smuggling services from a wider source of information, including reviews and recommendations by other migrants through direct links made with successful migrants over social media or through public channels such as Instagram and Facebook. Though not all of the information is high quality, this may support a feeling of empowerment among migrants. Some studies suggest that migrants may even monitoring smugglers in real-time against planned routes (Gillespie, *et al.*, 2016). Through these increased checks, studies suggest that migrants may place an increased level of trust in their smugglers as smugglers have an interest in maintaining 'positive reviews' and attracting more clients (Triandafyllidou and Maroukis, 2012; Roberts, 2017; Zijlstra and van Liempt, 2017). Some interviewees in this study confirmed this conclusion, suggesting that, despite having ultimate control over the information, it was not in their interest to misrepresent the realities of the journey to clients.

> Many smugglers give false information about the situation on the route or in the destination countries, but we don't. It's bad for the business, because most of our customers are introducing us to other migrants especially to people in their community back in Afghanistan. So, if we give false information, we will lose our future costumers.
>
> *- Male, 33, Hazara, Interviewed in Kabul*
>
> Look, every route has its own difficulties. If we don't tell the migrants about them, we ourselves will face problems. We tell them that they have to walk for 16 hours or they have to get warm clothes...We try to keep them as much as possible informed about what is ahead of us so they are prepared and not get surprised. Their problem is our problem.
>
> *- Male, 28, Herati, Interview in Herat*

The practice of providing detailed information on journeys is consistent with other studies in the region (Koser, 1997; van Liempt, 2007) and suggests a fairly consistent practice of providing specific information that the smuggler alone would have access to. Furthermore, past research has suggested that the personal or community relationships between smugglers and smuggled is crucial in determining the level of information and the accuracy of information provided to migrants. It has been consistently been shown that when migrants and smugglers share similar social networks, the migrant is less likely to be deceived (van Liempt, 2007; Monsutti, 2008). Likewise, exploitation may be more likely in cases with low network ties and where business interests supersede altruistic motivations (Dekker and Engbersen,

2012). In the case of Afghan smugglers explored here, linkages and relationships that exist electronically do have the potential to serve similar roles as traditional local networks.

While migrants certainly face very real protection risks or even death and thus receiving forms of assurances and trust building is paramount to decision-making behaviour, smugglers also face risk of arrest, detention and extortion as they are participating in an illicit economy. Smugglers interviewed for this research highlighted this challenge – suggesting social media offered them the same assurances and risks as potential migrants. Specifically, social media has allowed smugglers to more easily trust potential clients as their background (presumably using Facebook or other networking applications) could be checked and extensive conversations could take place before ever meeting in person. This included sensitive conversations about costs and arranging payment. Other smugglers suggested that, although state surveillance through 'tapping' applications was less of a risk than previous methods, impersonation by authorities or criminals was a risk that ultimately presented the same risks as in the past. Smugglers also highlighted that, although social media provides a different set of assurances to a larger clientele base, it has not necessarily increased trust to a level comparable with traditional direct or communal ties or to a level that would ultimately change the power imbalance between migrants and smugglers completely:

> Trust is when you know someone…the migrants don't know me - it doesn't matter if he sees me in person or on Facebook or Telegram.
>
> *- Male, 26, Hazara, Interviewed in Kabul*
>
> The migrants are afraid of us because their money and their lives are in our hands. They have to do whatever my colleagues tell them otherwise they will be in trouble. So, what is here: it's not trust - it's fear.
>
> *- Male, 53, Pashtun, Interviewed in Kabul*

The capacity to discuss smuggling routes, prices, and mechanisms in a safe and secure fashion represents an improvement in availability of information, as well as an improvement in the type of information provided. The possibility for discussion ensures that migrants have access to a greater amount of more tailored information from smuggling networks. As such, messenger applications support informational movement capacities, and through this, help to support the alternative mobility regime provided by smuggling networks.

Social Media and the Internal Dynamics of Smuggling Networks

An individual smuggling organisation may provide an array of services, including planning, transportation, guiding irregular border crossing, accommodation, networks and information to evade capture by local authorities, and fraudulent travel documents (UNODC, 2018). In order to provide these services, smuggling networks require internal network capital. Internal network capital allows smugglers from within the same network to engage and coordinate between themselves in order to provide services. Key elements of the infrastructure required to organise smuggling networks include information and contact points, communication devices, meeting places, and accommodation (UNODC, 2018). Smuggling networks tend to consist of groups of friends and family members, often linked by ethnic or clan ties (Sanchez, 2017; UNODC, 2018), often consisting of individuals who have themselves

been (irregular) migrants (Sanchez, 2017; Stone Cadena, 2018). Current research suggests that smugglers rely on mobile phones for their operation (McAuliffe 2016; Newelle, et. al., 2016).

In the primary data collection for this paper, the researchers considered the ways in which mobile technology and social media changed internal dynamics within an individual smuggling network and has been found to have significantly improved internal organisational network capital for smuggling organisation. According to the modified network capital framework, improved location-free information and contact points have been made available, improved communication and transportation coordination can now be organized – ultimately freeing additional time and capacity to move more migrants. These changes come about in light of reduced cost and improved speed of operations facilitated by cheap and accessible phones and secure social media applications. Eight of the ten smugglers pointed out that technology made smuggling operations cheaper, due to decreased communication costs. One smuggler added that improved communication reduced the necessity for smugglers to travel, thus making the operation more profitable. Similarly, six of the ten smugglers discussed the fact that mobile technology made operations more convenient and faster.

> It's not comparable with five year ago at all. Five years ago, it was only phones and satellite phones that we can communicate with each other. It was expensive, especially satellite phones, and also very dangerous.
> - *Male, 45, Pashtun, Interviewed in Kabul*

> Many places didn't have phone coverage, so we had to use a Thuraya phone [satellite phone] which is much more expensive than ordinary phones. With Whatsapp and Viber, it's easy and everywhere is covered by the network.
> - *Male, 40, Tajik, Interviewed in Kabul,*

Coordination of services within a network becomes easier to organise and less costly as members of networks can now be based in diffuse areas and easily gain information about movements from other partners. Smugglers have noted that it is less necessary to send a person to accompany a caravan or to organise specific elements of a trip – these aspects of the trip can now be organized and monitored remotely. This reduces the costly lack of coordination between facilitators that has been noted in other studies (McAuliffe 2016; Sanchez 2018). Improvements in communication affect a wide variety of services, across the spectrum in which smugglers operate. Interviewees included travel agents, money transfer agents and facilitators; eight out of ten interviewees indicated that mobile technology had improved communications within their own networks. Respondents came from a variety of backgrounds, and also referred to several different services in their responses.

> Before, arrangement of the journeys was very difficult. For example, to provide accommodation along the way, you have to call and one of our colleagues must go there before the caravan reaches there to prepare the place, buy or prepare the food if necessary and do other tasks. But now, it's only calls.
>
> - *Male, 33, Hazara, Interview in Kabul*

Mobile technology and social media have also improved the division of tasks within a network. Past studies indicate that smuggling facilitators often work independently, often performing highly specific tasks (Zhang 2007, Campana 2016). Facilitators often do not know each other, and the cost of meeting is

also significant (Sanchez 2017). Some smugglers take on coordinating roles in which they monitor journeys, put people in contact, support logistics and regulate financial transfers (Sanchez). For the smugglers who take on coordinating roles, mobile technology provides a mechanism to improve communication. This has already been pointed out by some academics (Sanchez) and is strengthened by the interviews conducted for this piece of research.

> It's not like before that everything was arranged by phone and we all accompany the caravans to destinations. Now, we can easily distribute the tasks among ourselves and make the operations more efficient and safe as much as possible.
> - *Male, 53, Pashtun, Interviewed in Kabul*

Mobile technology has also improved the logistics systems needed to operate an organisation, including improved money transfer practices. Money transfer often takes place through informal money transfer mechanisms (hawala) that rely on familial and ethnic linkages for their trustworthiness. Increased usage of mobile phones has resulted in same-day money transfers through the informal hawala system, which, prior to the prevalence of smartphones, would take around one week (Male, 33, Hazara, Interviewed in Kabul). By improving communication for money transfer networks, mobile technology has improved the overall infrastructure for smuggling networks, facilitating business and attracting prospective clients.

Social Media and Network Capital between smugglers, smuggling networks, and authorities

To provide adequate service, migrant smugglers and networks engage with two primary external networks: other smuggling networks and state authorities. Engagement with other smuggling networks allows smugglers to provide a smooth service in which migrants transition relatively seamlessly from one network to another to proceed as far as possible along the smuggling route. Smuggling networks may also engage authorities or monitor them with the intention of complete avoidance to reduce the risks associated with irregular crossing (e.g., physical assault by border guards or detention) and ensure successful crossing (UNODC, 2018). Technology and social media has significantly improved the capacity of networks to share information and expand social contacts to pass migrants onwards along the route with limited or no cost, across international boundaries, and without oversight from authorities – ultimately reinforcing element 1 and 2 of the modified network capital framework.

However, the effect of technology and social media on the relationship between different smuggling networks is significantly different from the effect of technology and social media on the relationship between smuggling networks and authorities. While mobile technology appears to have significantly improved operational links between smuggling networks, it has had no significant effect on relationships with authorities. Technology and social media has instead presented unique benefits for evasion of authorities but also new risks for capture and punishment.

Other Smuggling Networks

In order to move migrants across long distances smugglers must form associations and links with different networks, often with different family and ethnic origins (UNODC, 2018). Trust between different smuggling networks is assumed to be low (IOM, 2016; IOM, 2018), and communication and engagement can be challenging due to geographical circumstances. There is a general lack of data

regarding how different smuggling networks communicate between each other, linked to the overall challenges associated with gathering data on smuggling (IOM, 2016).

The smugglers interviewed in this research were clear that mobile technology and social media applications has had distinct benefits for interactions between smuggling networks. Out of 10 respondents, only one said that relationships with other smuggling networks were unchanged. Most respondents stated that mobile technology improved communication around logistical arrangements and improved clarity in relationships and roles between smugglers. However, only half of the interview respondents indicated that mobile technology increased trust between smuggling networks. Those who argued that technology increased trust cited multiple reasons including improved knowledge about the state of the route and the security conditions. Similar to providing a check on the migrant-smuggler power imbalance, some respondents indicated that improved technology opened up a new punishment mechanism for those who were not trustworthy. Those who believed that mobile technology had no effect on trust between smuggling networks based their opinions primarily on the fact that exchanges between networks remain transactional in nature.

> [Mobile technology] made the communication between different networks more easy but haven't increased the trust because it's a business and when it comes to business and money you cannot trust your brother.
>
> - *Pashtun, 45, Kabul*

Two of the respondents who indicated that trust would remain constant indicated that trust is formed through longer-term links and personal interactions. One of these respondents indicated that ethnic and family links are predominant in establishing trust. In this case, mobile technology can smooth day-to-day interactions, but overcome the barriers of ethnicity and nationality.

Authorities

Migrant smuggling involves engagement with local authorities, with the degree of complicity between smuggling networks and local authorities depending on context. One study on smuggling routes from Somalia to Yemen found that government authorities owned some of the ships used for smuggling (REF 2017); data from the Danish Refugee Council on relationships between smugglers and authorities in Central Asia and Horn of Africa found that one of the most prevalent forms of protection violations was bribery, directed primarily at local authorities. The relationship between smuggling networks and authorities has not been explicitly analysed; this again is due to the fact that there is limited data about smuggling (IOM, 2018).

The smugglers interviewed for this research indicated that contact with authorities often takes place face-to-face and that this is unlikely to change in the near future. The reliance on face-to-face communications with authorities who accept bribes is likely due both to the fact that authorities are aware that communication may be traced. One smuggler detailed the ways in which visas can be purchased from officials by smugglers and that, given the details of these interactions are complex, are easier to negotiate in-person.

Smugglers universally highlighted that social media made their work more secure by providing a free means of encrypted communication (*i.e.*, WhatsApp, Viber) that could easily be deleted as often as needed to maintain a 'clean' device. Furthermore, informants mentioned that increased communication

amongst networks in general had helped smugglers understand in real-time changes in roads and border crossing conditions, thereby reducing interactions with authorities.

> … the risk of attracting attention of security officials or getting caught by police is reduced. The government have no control over these media. While when it comes to phone calls, they can control it. This is true mostly for our colleagues in Iran.
>
> - *Male, 40, Tajik, Interviewed in Kabul*

> If it [the app] gets dangerous because of government control, we change it to another secure app. For example, after the Iran Government filtered Telegram, we start using IMO there because it's safer.
>
> - *Male, 28, Herati, Interview in Herat*

Most respondents also suggested that mobile phones also presented a new risk. Five of those interviewed pointed to security and authorities as the most significant risk associated with adopting new technology. Smugglers are aware that authorities often inspect phones and with the smuggling business being conducted primarily through applications, detailed information about clients, plans, and networks can be uncovered from a single device.

> Last year, we made a group in WhatsApp among our network to share our information during journey and coordinate it. But once one of the caravans were caught and arrested and the phone of our colleague was seized by the police and it made a lot of trouble for us, because our group chats were all there. So, from then we only chat one-by-one. Because of the security of ourselves.
>
> - *Male, 40, Tajik, Interviewed in Kabul*

Despite the universal recognition of the risks, very few smugglers suggested grave concern or put in place mitigation measures beyond deleting messages from the applications, with only one taking regular precautions to erase his digital record through replacing his phone every two months. Many seemed resigned to the risks inherent in smuggling: "[I] Just trust in god that such thing won't happen" (Male, 45, Pashtun, Interviewed in Kabul). One smuggler pointed to bribery as a risk mitigation mechanism, saying "Many time people from national security office came here and asked about our activities and every time we gave some bribes to not put ourselves in trouble" (Male, 28, Tajik, Interviewed in Kabul). This same smuggler recognised, however, that this mitigation mechanism was unsustainable, adding, "But till when? They will come back and harass us. It's possible that they come tomorrow and get all our documents and laptops."

Conclusion

This paper makes the general hypothesis that smuggling organisations create a parallel mobility regime and that network capital makes this parallel regime functional across core relationships necessary to operate smuggling networks. On the basis of this hypothesis, it has adopted a network capital approach to analyse the ways in which mobile technology have altered the operation of smuggling networks, and suggested a modification to Urry's (2007) eight elements of network capital. The modified elements can support improved understanding of how technology can affect smuggling networks more broadly.

The paper concludes that mobile technology has reduced cost and increased speed and effectiveness of smuggling organisations. Reduction in cost arises from improved capacity to communicate and coordinate within and between smuggling networks, as well as improved capacity to disseminate advertising messages to migrants and expand their client base. While mobile technology generates substantial logistical and operational improvements for smuggling businesses, several core elements of the business remain unaffected. Trust between actors does not appear to be significantly enhanced through the use of mobile technology.

The demand side of the smuggling business – that is, relations between migrants or potential migrants and smugglers – has been significantly affected by improvements in mobile technology. The development of social media platforms has improved informational movement – that is, they have increased outreach and availability of information regarding irregular mobility regimes. Messenger services such as WhatsApp and Telegram have supported confidential discussions between smugglers and migrants about routes, costs and logistical arrangements. This has improved informational movement as well – messenger services support more tailored and appropriate information.

Smuggling organisations have significantly benefited from mobile technology. In order to operate, smugglers require location free information and contact points, communication devices, safe and secure meeting places, transportation and time. As mobile technology has improved, communication devices have become cheaper and more effective, particularly compared to previous devices used by smuggling networks (satellite phones). Improvements in communication devices, in turn, have enabled smugglers to more easily, cheaply and securely organise meeting places, accommodation and transport; this has generated significant time savings. Organisations can operate more cheaply and effectively, thus increasing the reach of irregular mobility regimes, due to mobile technology.

The supply side of migrant smuggling networks relies on a network of contacts –in particular, contacts with other smuggling networks to permit movement to more distant geographic areas and contacts with authorities to enable smooth passage through borders. Mobile technology improves the links between different smuggling networks – but has not, according to the data gathered for this research, increased the trust between the networks. Mobile technology has not affected relationships with authorities, but has increased risk of exposure. Although smugglers are aware of this risk, they have limited means to put in place mitigation measures.

This paper represents only one case study regarding the ways in which mobile technology have affected the business of smuggling. Authors including Sanchez (2017) rightly point out that many smuggling operations continue to use very basic technology, including non-internet enabled mobile phones, and acknowledge that lack of usage is more likely to be due to lack of available and affordable technology, rather than lack of interest or sophistication on the part of smugglers (Sanchez). As mobile coverage increases and the cost of both smartphones and airtime decreases, it is likely that smuggling networks will make increasing use of this technology. The effects of mobile technology on smuggling are therefore likely to amplify, and the parallel mobility regime that has already started to develop is likely to institutionalise.

There are currently significant gaps in the literature around the ways in which mobile technology affects the smuggling business. As a result, the ways in which the smuggling business will expand, and the consequences of this expansion to migrants, as mobile technology becomes more affordable is not well understood. In order to better preserve the safety of migrants along the route, it is suggested that a

series of parallel case studies across migration routes with greatest traffic, or in some of the most frequented smuggling hubs, is recommended. Such case studies would help to generate empirical evidence that can support more effective policy making, which in turn can help develop a more protective environment for migrants.

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