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**Reference:**

Titeca Kristof.- Illegal ivory trade as transnational organized crime? An empirical study into ivory traders In Uganda  
The British journal of criminology, delinquency and deviant social behaviour - ISSN 0007-0955 - 59:1(2019), p. 24-44  
Full text (Publisher's DOI): <https://doi.org/10.1093/BJC/AZY009>  
To cite this reference: <https://hdl.handle.net/10067/1503250151162165141>

# ILLEGAL IVORY TRADE AS TRANSNATIONAL ORGANIZED CRIME? AN EMPIRICAL STUDY INTO IVORY TRADERS IN UGANDA

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This is a pre-edited version of the article published as Titeca, Kristof (2018) 'Illegal ivory trade as transnational organized crime? An empirical study into ivory traders in Uganda', *British Journal of Criminology* Online first: <https://doi.org/10.1093/bjc/azy009>

## 1. Introduction

From 2007 onwards, illegal ivory trade became a global and urgent problem, largely fueled by increasing demand and consumption in East and South East Asia (Milliken et al 2016a: 11, 24; Underwood et al. 2013: 6). Particularly since 2010, the illicit ivory trade has been at record high levels (Miliken et al. 2016b: 3). Similar trends can be seen when looking at other indicators, such as poaching and ivory prices: there have been increasing levels of poaching since 2006, with a peak in 2011 (UNEP et al. 2013: 11; 33). It is estimated that between 2010 and 2012, 100,000 elephants were killed in Africa (Wittmeyer et al 2014).

How is this booming trade organized? Academic, policy- and media-reports dominantly explain this trade through the involvement of transnational crime – reports refer respectively to “ballooning criminal networks that allow this transnational crime to operate” (Wasser et al 2015: 87), “international crime syndicates” (EIA 2014: 9,15), or the “undeniable” fact that “commercial poaching and trafficking are run by multi-national criminal gangs” (McCann 2017). These results strongly resonate with international policy: new CITES regulations – the UN Convention on International Trade in Endangered Species, now consider poaching and wildlife trafficking as a form of transnational organized crime (Biegus and Bueger 2017: 29).

These statements are largely based on confiscation data, which feature prominently in CITES reports and other policy studies, academic studies and press articles. Concretely, these data show how large raw ivory shipments of over 100 kilograms are the driving force behind the increased illegal ivory trade (Miliken et al. 2016a: 8; Miliken et al. 2016b). For example, in 2009, 2010 and 2011, there respectively were 8, 9 and 17 seizures over 800kg, for a total of almost 61 tonnes of ivory (UNEP et al 2013: 46). This kind of large ivory seizures are unprecedented. Based on these data, analyses are quasi-unanimous: it is argued how this pattern, and seizures of large movement of “ivory represents the involvement of international criminal syndicates in the trade operating through sophisticated networks that link Africa with Asia” (UNEP et al. 2013: 46). In other words, international organized crime, and existing networks in the trade in drugs, arms and humans, have come to infiltrate and dominate the ivory trade (Clarke and Babic 2016: 57). Other research, based on DNA analysis of confiscated ivory, presents similar results highlighting how “crime syndicates were targeting specific populations for intense exploitation, hitting them hard and fast to satisfy the demands of a particular consignment” (Wasser et al 2008: 1070).

Yet, how is this transnational organized crime organized? The above statements on “ballooning criminal networks”, “crime syndicates”, “gangs” remain only that: statements, without an explanation or empirical analysis on what these look like, or how this trade is organized. A major gap in the academic literature is therefore in-depth academic research on the organization of illegal ivory trade, particularly on this recently increased trade within Africa: little is known on how illegal ivory is traded through the continent, i.e. up to the moment it exits the continent.

This gap is acknowledged and highlighted in the policy literature. The UN office on Drugs and Crime (UNODC 2013: 48) for example argues how “A major research gap is the groups, routes and methodology used to move ivory within Africa, between the poaching sites and the ports of exit.” Milliken (2014: 13) argues for more understanding of the structure of the ivory trade, and in particular understanding on how “criminal operations are collecting, consolidating and shipping ivory between regions”; while other studies specifically argue to target traders (Somerville 2014).

This paper engages with this debate and these specific questions: by analysing the organization of illegal ivory trade through Uganda, it aims to better understand the role of transnational organized crime in the illegal ivory trade. In doing so, and in line with Runhovde (2017), this article aims to deconstruct the “over-homogenized discourse surrounding transnational organized crime”, in order to actually “understand the complexity of the trade and to respond to it efficiently, more precision about local actors, activities and context is needed”.

Uganda is chosen as a case-study. Since 2007, Uganda has increasingly established itself as a major transit point for ivory. CITES (2016) calls Uganda a country of ‘primary concern’ in the illicit ivory trade: it is listed as one of the ten countries worldwide ‘linked to the greatest illegal ivory trade flows since 2012’ (CITES 2016: 25), and serves as “an important entrepôt/export centre in East Africa with clear links to Central African ivory trade flows.” (CITES 2016: 15).

### *Methodology*

Crucial in understanding this organization was in-depth research among illegal ivory traders in Uganda (and, to a lesser extent, in the Democratic Republic of Congo), with whom were semi-structured interviews conducted between 2012 and 2017.

First, this research was part of a long-term research engagement with a group of illegal cross-border traders in the Uganda-DRC border region, with whom I have been interacting since 2005 (e.g. Titeca 2006). This research initially paid no attention to illegal ivory trade, until this started becoming more and more present in their trading activities. As will be shown in the text, from around 2009 onwards, ivory was becoming an increasingly important commodity in the Uganda-DRC borderlands, and in the traders’ activities.

Second, between 2012 and 2017, specific interviews with ivory traders were conducted on two specific locations, which are key-nodes in the illegal ivory trade: the Ugandan-DRC borderlands (in particular the border towns Arua in Uganda and Aru in DRC), and the Ugandan capital Kampala. More specifically, 11 ivory traders were followed throughout these years. Trust was crucial in this process (and more generally in conducting research on illegal trade, Ellis and MacGaffey 1996). Given that I have been conducting research on illegal trade since 2005, this meant that I had built up a reputation as being

'reliable' – particularly among traders in the Uganda-DRC borderlands. This facilitated introduction to ivory traders, as well as the interviews themselves.

In addition, interviews were conducted with law-enforcement officials, journalists, NGOs, and analysts who are working on this issue. 76 interviews were conducted in total. 49 with 11 ivory traders. At the time of writing (2017-2018), this is the first study primarily based on empirical research with illegal ivory traders.

The paper is structured in the following way: the next section discusses the literature on the way (dis)organized crime is structured, and how these findings apply to the illegal wildlife trade, in particular the ivory trade. The third section discusses the activities of the ivory traders in Uganda. In doing so, a distinction is made between 'local' and 'regional' traders. The fourth section concludes.

## **2. Transnational (Dis)organized crime and illegal wildlife trade**

### **2.1 Transnational (dis)organized crime**

Definitions of organized crime differ considerably in their conceptualizations, and are often vague or overly broad (Finckenauer 2005: 68). Central in understanding organized crime is to which extent it is 'organized' (Hagan 2006: 133; Finckenauer 2005: 60), and the different structures through which it organizes itself. Generally, there is a consensus that the structures with well-structured hierarchies – the 'mafia model' – has become an exception, and have been replaced by crime which is much more 'disorganized' (Reuter 1983) of "loosely affiliated networks of criminals who coalesce around certain criminal opportunities" and which are "much more amorphous, free floating, and flatter, and thus lacking in a rigid hierarchy" (Finckenauer 2005: 65-66). For example, the literature on organized crime in Europe shows how large hierarchical structures are no longer common; but how these groups are instead characterized by loose affiliations and less obvious chains of command – as flexible and changeable networks, small and ephemeral enterprises (Paoli and Fijnaut 2004: 607-610).

Why is this the case? Similar to legal, legitimate businesses, the kind of structure utilized in organized crime is influenced by contextual factors such as the dynamic character of the environment or the competitors in this particular market (Southerland and Porter 1993). For example, the organization of human smuggling and heroin trafficking is influenced by market conditions and operational requirements (Zhang and Chin, 2003: 478). They are organized into "small-sized groups" which are able to "adapt well to ever-changing market constraints and uncertainties. They have little vertical bureaucratic structure, even though their operations may involve highly specialized tasks. They ally with only those with valuable resources to contribute to their objective of making a profit." (Zhang and Chin 2003: 478).

The latter point (i.e. the objective of making a profit) illustrates how the structure of organizations crime is also related with the kind of criminal activities these actors are engaged in: organizations with a primary interest in rule-enforcement and dispute-settlement will have a different structure from organizations who primarily want to make money. The latter are flexible and fluid by nature, rather than vertically and horizontally integrated organizations. Instead, they "flexibly cooperate in changing combinations of individuals and small groups within larger transnational networks of criminally exploitable ties" (Von Lampe 2014: 86). Moreover, the high demands on communication, and the risks

associated with it, constitute an important downside of strongly hierarchical organizations (Zaitch 2002). This has been shown in other fields, such as drug trafficking: research shows how this is primarily organized by “small groups of loosely linked entrepreneurs rather than large, highly structured criminal syndicates” (Natarajan 2006: 171; Zaitch 2002), allowing these loose networks to “quickly react to shifting market conditions” (Bichler et al 2017: 2). How does this apply to environmental crime? This is discussed in the next section.

## **2.2 Illegal wildlife trade**

The term ‘transnational environmental crime’ is used to study the transnational character of environmental crimes. Transnational environmental crime is mostly defined as a crime with cross-border transference and an international or global dimension. Specifically, these are crimes related to pollution or crimes against wildlife, such as illegal wildlife trade (White 2011). The value chain of the latter category is very often transnational, involving for example supply from Africa (such as ivory) and demand from other parts in the world (such as Asia or Europe). Much of the findings on the organization of illegal wildlife trade therefore analyse its transnational character.

The concepts of ‘transnational crime’ and ‘organized crime’, to a large degree overlap, but are not always the same. Organized crime which does not cross a border is an example of this (White 2011). This section aims to understand the organization of a specific transnational environmental crime, illegal wildlife trade. More specifically, it aims to understand the extent to which the above insights on organized (transnational) crime apply to illegal wildlife trade.

A first strand of research on illegal wildlife trade shows the strong involvement of ‘traditional’ organized crime, i.e. the interest of vertically organized “mafia-style groups” and “major international smuggling rings” (Zimmerman 2003: 1668). This has also been shown for transnational ivory trade. A research report (Vira and Ewing 2014: 9) for example argues how a “global criminal enterprise” is controlling ivory trade from poaching up to the final consumer. Subsistence and artisanal poaching has been “co-opted or crowded out by an illicit commercial trade that is monopolized by organized crime” (Vira and Ewing 2014: 10). Miliken (2014: 23; 18) argues how “transnational criminal organized organizations”, which are “typically led by African-based Asian nationals, are directly involved in the procurement and illegal movement of rhino horn out of Africa to markets in Asia”. Bergenas and Knight (2015: 124) describe ivory poaching as “methodic and militarized”, while ivory trade is considered to be controlled by sophisticated networks of “Asian-based criminal syndicates”. Specifically on Tanzania, a research report argues how ivory trade is dominated by “international criminal syndicates’ and ‘sophisticated criminal networks” (EIA 2014: 9; 15).

A second stream of research shows the dominance of loosely organized networks instead of ‘traditional’ vertical-organized syndicates. It is shown how most environmental crime is committed by “loosely organized networks of individuals” (Hayman and Brack 2011: 7), or small groups organized for a short period of time (Wright 2011: 338). Wyatt (2013: 87-89) shows how illegal wildlife traders are not part of hierarchical networks, but operate more in informal networks; while Van Uhm (2016b) shows how the illegal trade in Barbara Macaques is based on semi-structured, flexible, yet sophisticated trading networks.

A third stream argues that the focus on organized crime is misguided, and is “not the dominant picture as some journalists and researchers would like to believe” (Pires and Moreto 2011: 105). Rather than organized crime as such, it is the participation of corrupt officials which fuels this trade. Naylor (2004: 263) calls the involvement of organized crime a ‘recurrent fable’ and a ‘tale’, in reality run by “complicit politicians and corrupt functionaries”. However, empirical data on this rare and thin. Hubschle (2016) is helpful: she argues how the label of ‘transnational organized crime’ is of limited use, as the illegal wildlife trade is driven by ‘insider trading’, i.e. corruption and collusion between state officials and wildlife traffickers: it is a “business enterprise facilitated by a multitude of diverse actors with close, limited or no links to ‘organized crime” (Hubschle 2016: 195). Specifically for Uganda, Rundhovde (2017) looks at Uganda. Based on interviews with law-enforcement officers, she does not find indications of organized crime in the illegal ivory trade, but of a range of individuals with various organizational capacities. However, little analysis or data are presented on these individuals. Moreover, it is unclear to which extent this conclusion is the outcome of methodological bias, rather than an analysis of the illegal trade: the study is based on interviews with law enforcement officers, and no illegal ivory traders.<sup>1</sup>

Yet, are all these viewpoints mutually exclusive? Van Uhm (2016a) for example shows how the degree of organization and structure of the illegal wildlife trade widely varies, ranging from opportunistic poachers and traders to highly organized poaching and trading networks (Van Uhm 2016a: 263). Others argue how “depending on the species and region of the world, ‘organized’ can simply mean anything from three individuals who are loosely organized together to a vast criminal enterprise that compromises all stages of the wildlife trade (i.e. vertically integrated organizations)” (Pires and Moreto 2011: 104). A central element is that illegal wildlife involves different steps: a multi-level chain typically involving poachers, middlemen and markets (Pires and Moreto 2011: 104). It is perfectly possible that each step in the chain has different actors which are involved, with different levels of organization. For example, Pires and Clarke (2011: 315) argue that while poaching might be a largely opportunistic activity with little links with organized crime, this becomes different after the initial act of poaching, when “greater organization becomes apparent in subsequent stages that involve a variety of middlemen, processing centres and markets.” Specific research on ivory trade suggest similar dynamics, in which local actors are responsible up to the point when “ivory is consolidated and hidden inside a container, while Asian and other organized crime groups control the supply chain from containerization all the way through the shipping and transport systems to market.” (Vira and Ewing 2014: 14). The relation between ‘local’ and ‘transnational’ trade helps to further unpack this, which is discussed in the next section.

### **2.3 Connectivity, nodes, and transnational trade**

Much research on organized crime has shown how this no longer fixed to one location or limited to having a strictly regional character, but instead has “evolved into an international or transnational character complete with regional and global alliances” (Hill 2005: 47). Transnational crime can be defined as “the illicit procurement, transportation, and distribution of commodities across

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<sup>1</sup> Moreover, the study is based on one-off interviews with law enforcement officers; which may explain the ‘conflicting accounts’ (Runhovde 2017: 15) given by the respondents: trust is essential in this kind of sensitive research on illegal commodities, particularly given the strong involvement of law enforcement officers (Ellis and MacGaffey 1996).

international borders” (Warchol et al 2003: 1). In other words, organized crime has expanded its scope of operation on a global level, partnering with actors located in other countries or regions to gain access to new markets. The discussion on the organization of transnational organized crime largely mirrors the debate on organized crime. While some reference is made towards the involvement of ‘traditional’ mob-style organizations (UNODC 2002), most of the literature emphasizes the loose character of transnational organized crime: at the heart of transnational crime are temporary arrangements of ever changing actors, in which particular groups or individuals act as hubs, allowing social networks organizing crime allowing to operate in “infinite variety of deviant collaborations” (Hobbs and Dunninghan 1998: 299; 296). Transnational crime is therefore organized through “constant mediations and re-negotiations that are duplicated as perpetually mutating social systems” (Hobbs and Dunninghan 1998: 298; Hobbs 1998: 417) It is the connectedness, created through the degree of connectivity between groups and individuals, which constitutes the structural in ‘organized crime’, operating on a transnational scale.

In other words, connectivity is key in this debate: different levels of crime are closely connected with each other, and it are particular connections which make a particular crime transnational. Writing on the Mediterranean, Horden and Purcell (2000) use connectivity to describe the ways in which micro-regions cohere, “both internally and also one with another – in aggregates that may range in size from small clusters to something approaching the entire Mediterranean” (Horden and Purcell 2000: 123). The Mediterranean can therefore be considered as a zone of “intense topographical fragmentation, overlaid by a kaleidoscope of human micro-ecologies, which are in turn densely interconnected.” (Horden 2012: 28). In this way, connectivity refers to the way in which micro-regions are both internally connected, and externally relate with each other.

The literature on inter- and trans-Saharan trade is specifically useful in understanding these connections. When discussing Saharan trade, the focus has particularly been on transnational trade, with little attention to the importance of intra-regional and local trade in its history. Inter-Saharan trade has always been considered less important than trans-Saharan trade: the Sahara itself was considered a “blank, ready to be washed by cultural ‘tides’ from elsewhere” (Horden 2012: 26). However, as particularly the work of Judith Scheele has shown, the dominance of long-distance trade in the Sahara is an “illusion”, but depends on local exchange and inter-Saharan trade. (Scheele 2010: 282; Scheele 2011: 145). Concretely, transnational trade largely relies on regional and local infrastructure, for access to transport, manpower and for access to networks of protection. Trans-saharan trade external to the Sahara was therefore rare, as it remained dependent on local alliances and pre-established social-networks, in which regional traders for example act as intermediaries (Scheele 2011: 145, 160; Scheele 2010: 298). Transnational and local trade are therefore very much embedded in each other: the difference between these categories is one of “scale rather than of kind, as the one is already and necessarily contained in the other: places appear as nodes of particular density in overlapping networks of connectivity.” (Scheele 2010: 283). Saharan trade should in this context be considered as a “network of interdependent sub-systems, of short-, medium- and long-distance exchange”, of which “trans-Saharan traffic was only one part of this network”. (Wilson 2012: 409). The local, regional and transnational are in this way closely connected with each other.

Nodes play a central role in these connections: they are the points in which these various scales come together, and in which connections take place. In nodes, the ‘local’ has to be understood with

references to wider scales : the local and/or regional is connected with the transnational, and vice-versa. Nodes often act as entrepôt points: points where goods are stored, sold, traders meet, break up and reform, connecting local, regional and transnational economies. (Wilson 2012: 414). Border towns are a good example of nodes. Connections and nodes do not only manifest themselves in localities, but also through persons: it particularly are middlemen who play a central role in connecting various networks and scales. They are the “critical nodes that intermediate flows in a directed networks” (Sim and Gilles 2016). Similar to border towns, middlemen are therefore able to connect different scales: the local, regional and transnational trade.

This paper builds further on these insights: in order to understand transnational crime, it argues, a number of issues are crucial. First, the paper argues how, similar to the trans-Saharan trade above, the understanding of transnational crime (and in particular transnational illegal ivory trade), needs an understanding of local and regional illegal ivory trade: transnational ivory trade relies on regional trade. Second, connections are crucial in linking these various levels. Nodes are crucial in connecting these different levels, and in particular the traders acting as middlemen: it are these traders which connect the various scales of this illegal trade. However, the paper adds a third, and crucial element: it argues how the power of these connections are crucial. In order to do so, specific attention needs to be given to the role of the traders, and the various connections they hold. For example, it will be shown some traders limit their activities to the ‘micro-region’ of the Uganda-DRC borderlands, whereas other traders operating from Kampala are able to work directly with foreign exporters and are able to charge higher prices. They are able to do so because of their more powerful connections with state-operatives. In other words, a better understanding of the connections in place allows a better understanding of the nature of transnational crime: these connections not only integrate different scales, but also allow to understand the various degrees of power.

### **3. Ivory traders in Uganda**

Individual ivory traders are the central actor in the illegal ivory trade in Uganda. They are the ones smuggling the goods across borders, looking for a market, or for supply. In this paper, the term trader, rather than the terms ‘middlemen’, ‘broker’, ‘trafficker’ or ‘smuggler’ will be used, as all traders involved perform a variety of functions: on occasions, they smuggle goods across the borders; on other occasions, they arrange physical transport within a particular country (i.e. not crossing borders or smuggling). On certain occasions, they simply link up people and don’t touch the ivory, on other occasions they are only responsible for the storage of ivory. Sometimes they buy ivory themselves, and look for buyers; on other occasions they are simply taking a commission on ivory delivered from one actor to another.

This section follows the line of argument(s) as outlined above: first, the paper shows the importance of regional trade for transnational trade, and how illegal ivory trade is part of regional trade dynamics. Second, it shows how traders and their connections are central. Third, and importantly, it shows the various degrees of power of the traders’ connections, which is particularly related with access to government officials. In order to do so, the paper looks in detail at how these connections develop themselves in key-nodes of the trade: we start by looking at the Ugandan border town, which is a



central entry-point for the ivory trade; and then look at Kampala, which is a central exit-point out of Uganda.

### **3.1 The Ugandan border town of Arua as a nodal point**

The first nodal point this paper focuses on is the Ugandan border town of Arua, bordering the Democratic Republic of Congo and South Sudan. This area is a key nodal point in the regional trade: much ivory originating from North-Eastern DRC, South Sudan or the Central African Republic (CAR) passes through this border town, and its twin (border) town Aru on the Congolese side of the border. In the next sub-sections, the ivory supply, smuggling and -sale of the local traders is discussed.

[Insert Map 1 here (in annex): Uganda and Arua.]

#### **- Ivory supply**

Historically, the border towns of Aru and Arua have been regional smuggle centers , facilitated by the presence of three borders (Uganda, DRC, South Sudan), weak border infrastructure, close connections between ethnic groups on various sides of the border, refugee streams, and different tax regimes (Titeca 2009; Meagher 1990). Starting in the late 70s and early 80s, this trade has led to the establishment of a range of what are locally called ‘tycoons’ or ‘Arua boys’ in Uganda: Ugandan traders active in the illegal cross-border trade, dealing in a wide portfolio of illegal goods such as petrol, minerals, sugar, clothes, batteries, and so on (Titeca 2012). Historically, traders in the border town have acted as middlemen, largely between the transnational, regional and local level: goods such as petrol and cigarettes were smuggled in from neighboring countries, such as the DRC or South Sudan, and sold to local traders at a cheaper price. Minerals were also sold to international traders, who came to the border town. Ivory was present as a commodity, but rare: very few Ugandan traders had access to this commodity, and were trading in it. This changed from around 2009-2010 onwards, when large quantities of ivory reached the area.

This ivory came from all neighboring countries in the region: South Sudan, Central African Republic, but particularly from the DRC. During those years, the Garamba National Park – which is near the Ugandan and South Sudanese borders – became increasingly militarized, and led to increased levels of poaching. While this park traditionally has been a site of poaching, the impact on the ivory trade and elephant levels remained limited (Titeca 2013). This changed in the late 2000’s (particularly 2008-2010), when a whole range of armed actors started poaching elephants in the park: the rebel group the Lord’s Resistance Army, South Sudanese and Sudanese poachers, individual Congolese soldiers, as well as reports involving individual Ugandan soldiers (as will be shown below).

Suddenly, the border region had a major supply of ivory. As a Ugandan trader summarized: “before 2008, I didn’t know of ivory. I was trading in other things across the border. But from this time onwards, there was plenty of it.”<sup>2</sup>

A variety of actors were supplying this ivory: first, Congolese traders, who buy ivory from Congolese poachers, mostly from in or around Garamba National Park. They bring this ivory to various locations

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<sup>2</sup> Interview Ugandan trader, border region, 18 May 2012.

on the border, but particularly one of the two border towns (mostly on the Congolese side), where they sell it to the Ugandan traders. In doing so, this supply was largely relying on this historical trading network. Second, some of this ivory originating from Garamba (which is poached by South Sudanese or Congolese poachers) first passes through South Sudan, in which South Sudanese traders are the ones offering the ivory to the Ugandan traders. A third possibility is a collaboration between Ugandan truck drivers and Ugandan soldiers. Since late 2008, the Ugandan army was involved in a military operation against the LRA on this territory, first in the DRC, but also in South Sudan, and later on in CAR. The Ugandan military have a history of smuggling natural resources from neighboring countries, in particular Congo (Titeca 2011). The anti-LRA operations did not lead to the structural involvement of the Ugandan army, but individual Ugandan soldiers tried to profit from their exposure to natural resources, and particularly ivory. Civilian trucks, supplying the military with for example food or medicines, played an important role in this: after having supplied the military with these goods, the truck drivers in collaboration with individual soldiers, return with other goods such as timber or ivory, which were smuggled across the border.<sup>3</sup>

As one of these truck drivers summarized:

“We were civilian trucks hired by the military. What we did: we hid the ivory in the trucks. We were not being controlled, because we were working for the military. (...) The number of kilograms varied: sometimes 100 kilograms, sometimes less. We didn’t always find ivory. Sometimes we did find, sometimes we did not. (...) It was up to 2011 we went to Garamba. (...) How ivory was bought: soldiers collaborated with locals, who were selling it. And these locals delivered it to their – how do you call this? – their barracks there.”<sup>4</sup>

Not all traders were able to collaborate with the military, and smuggled the ivory themselves across the border.

- How is it smuggled across the border?

Historically, the illegal trading networks of the border region have been smuggling goods across the border in two main ways: First, through smuggling routes which avoid border posts altogether. In this ‘ant-trade’, these goods are smuggled in small quantities, largely on bicycles, and then stored until a sufficiently large quantity is achieved. For example, an estimated 40,000 kg of sugar passed daily through these smuggling routes in the second half of the 2000s (Titeca 2012). A second possibility is that goods are smuggled through the border points, by hiding under-declaring them (i.e. not paying tax on a substantial amount of the goods crossing the border). A large percentage of goods pass through Uganda’s customs points in this way. For example, research of the Uganda Bureau of Statistics and the Bank of Uganda (who had placed surveyors at the border points) show how in 2008, informal exports out of Uganda were worth U.S.\$1.35 billion, while formal exports were worth U.S.\$1.7 billion

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<sup>3</sup> The timber trade was for example confirmed by an internal UN report: MONUSCO Ituri Brigade Military Daily Sitrep Period Covered: 31800B JAN 10 to 011800B FEB 10, p11. The ivory trade is mentioned in a more recent policy report (Cakaj and Lezhnev 2017).

<sup>4</sup> Interview trader, Arua, 12 November 2015. Similar stories are reported in recent reports, i.e. how army trucks are smuggling in a variety of goods, including timber and ivory; and how government officials are not allowed to check their trucks (Cakaj and Lezhnev 2017).

(UBOS 2009). In other words: more goods were leaving Uganda untaxed or smuggled, than taxed – showing the fluidity of these official border points (Titeca and Flynn 2014).

Ivory is smuggled across the border in the same two ways: a first option is that smuggling roads are used (given the bad state of these roads, mainly on bicycles, but also with cars), and stored in storage locations, such as shops, small warehouses or traders' homes.

As a trader summarized

“We take it [ivory, KT] through the porous borders. You hire a team; they are based a border post. These are not the official border; but through panya roads [smuggling road, KT]. This can be on foot, on a bicycle, and so on. All of it in a small quantity. It is then loaded in a car.”<sup>5</sup>

A second possibility is that ivory is smuggled through border points, either through hiding the ivory in various ways, or by bribing the customs officials. For example, sometimes ivory is hidden in busses, as the following trader explains:

“ I have an arrangement with the ‘turnboy’, the boy who opens and closes the booth of the busses. (...) They create a hidden space in the booth, which cannot be seen. When the bus goes to the washing bay upon arrival, they take the ivory. Sometimes the owner is not aware of this.”<sup>6</sup>

Other traders rely on their relations with customs officials to smuggle the goods: traders have developed personal relations with these officials, facilitating this trade.

“Getting ivory from Congo is the easiest! I know all the border people. All the Congolese at the border, they are friends. If it's necessary, I give them 50 or 100 USD. (...) In all these things, personality is the most important! People know me at the border. I succeed in this because I have an easy personality.”<sup>7</sup>

In total, seven of these traders were followed throughout the course of the research. For all of these traders, ivory is only one of the commodities which is traded in these networks. In other words, the traders have the know-how to move a variety of commodities, of which ivory is only one. As mentioned above, for these interviewed traders, ivory is a fairly ‘new’ commodity, which recently became part of their portfolio of goods, but became integrated in the historically embedded trading networks.

- How do traders sell it?

The involved traders do not only smuggle goods across the borders, they also stock the ivory: similar to their other commodities, they store the ivory in and around the border town. This allows them to store the ivory in case of increased security controls, collect bigger quantities upon demands of buyers, wait for more favorable prices, and so on. They also sell the ivory to traders who come to the border town of Arua. These outside traders mainly originate from the capital Kampala. Some of the interviewed traders are in regular contact with a number of these Kampala traders, and call them when

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<sup>5</sup>Interview ivory trader, Arua, 21 May 2012

<sup>6</sup> Interview ivory trader, Kampala, 29 January 2014.

<sup>7</sup> Interview ivory trader, border region, 14 November 2015.

they have sufficient supply of ivory. Other outside traders 'show up' in Arua, and start looking for ivory. Before ivory started arriving on a large scale in a border region, these buyers were absent in the region. During the interviews, a wide range of nationalities were mentioned as ivory buyers, such as Chinese, Korean, Pakistani, Turkish, South Africans.<sup>8</sup>

- Connections and their limits

The Uganda-DRC border region can be considered a 'micro-region' (Horden and Purcell 2000), which is connected to external regions by the abovementioned traders: they play an important role as middlemen, connecting various scales of the illegal ivory trade. The border town of Arua acts as a central node connecting traders within the micro-region (i.e. across the Uganda-DRC border), but also towards outside actors: the traders connect the historically embedded regional trading networks and the transnational level. By selling the ivory to outside actors, and particularly to international actors, the ivory is fed into the international market.

The traders perform a range of functions which are necessary for the ivory to be moved: buying, smuggling, and selling on. Rather than being characterized by a hierarchical structure of an organized crime group, these local ivory traders operate in loose and flexible networks. Within these networks, the traders' connections are crucial, and particularly the power of these connections. On the one hand, their illegal trade is mainly based on connections with lower-level government officials: custom officials which allow their goods to be passed, local security officials which inform them about checkpoints, and so on. Second, they know the local context very well: they know whom to hire as transporters, and whom to sell to – including outside traders. These connections allow goods to cross the border, allows them to stock their goods, and allows them to sell the ivory. However, the nature of these connections has its limits: transport and trade outside of this 'micro-region' is particularly difficult. For example, transporting ivory to Kampala involves a number of risks, for which the traders do not have sufficiently powerful connections: connections are needed with more, and particularly higher-level officials, to avoid confiscation on the way to Kampala – which involves bypassing several police-checkpoints. Moreover, selling in Kampala also involves knowledge of the market there, which basically involves knowing reliable buyers: Throughout the course of the research, many traders had been cheated in one way or the other, in which they for example sold ivory to another trader, but never received the money. The quote from the following trader is an illustration of this dynamic:

"In my ivory dealings I've been cheated before. I gave ivory to a man, and he told me: when I reached Pakwatch, the army confiscated everything: they opened the booth, and confiscated everything. He had only given me 1000 USD, and he still owed me 15,000 USD! (...) After this, I even lost interest in the business, and I lost hope. (...) Q: *Did you believe him – that everything was confiscated?* A: No, he was lying. Because he knew that there are certain things, if you take them, you can't go to the police."<sup>9</sup>

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<sup>8</sup> For example, a trader in the border region argued how "there are Chinese who come here; they know have someone looking for market. Also South Africans are here, looking. (...) It is us, Arua boys, who are the ones selling to them." (Interview ivory trader, Arua, 2 November 2015).

<sup>9</sup> Interview ivory trader, Arua, 11 January 2016.

Selling ivory requires knowledge of the Kampala ivory market: throughout the course of the research, a number of the local traders tried to expand their reach to Kampala, but encountered major problems in doing so. For example, one trader in this border region, from the town of Arua, summarized the situation as the following:

“For you as a local to go to Kampala, it is risky. And you don’t know your way there. So we don’t this. (...) These traders [from the capital Kampala, KT] had created the image that it’s very difficult to sell ivory there, that there is no market! It are these traders who know the market in Kampala. The locals from here don’t know the market there. And the government had started confiscating ivory. So the Arua boys here [the local traders, KT] had enough it. They did not want anything to do with this [trading in Kampala, KT]. And the traders who know the market in Kampala, they don’t want to share the market with their colleagues: they do not want to tell us where we can sell this.”<sup>10</sup>

Similar examples were given by other traders, who either encountered problems in transporting ivory (such as confiscation on a police road block), or in finding a market. In other words, for many Arua traders, their activities are clearly limited: their networks are clearly located in the border region, and do not reach the capital Kampala, where they do not know the market, and are not able to sell the ivory.

As a result, many traders not sell ivory in the capital Kampala, although they could make more profit there: Kampala is the last nodal point before it exits the continent through the airport, or is traded further towards Indian Ocean Ports – and has consistently higher ivory prices. For example, between 2010 and 2011, the ivory selling price was between 100 and 120 USD per kilogram in Arua, and around 150 USD per kilogram in Kampala. More generally, my field research shows how between 2010 and 2017, significantly more profit can be made in Kampala: ivory prices are consistently between 30 and 70 USD per kilogram more expensive in Kampala.

In sum, many traders limit their activities to their ‘micro-region’: their connections are mainly embedded in this region. In the next section, we look at the activities of traders in another key-node in the illegal ivory trade: Uganda’s capital Kampala, which acts as a major exit-point for ivory, out of Uganda.

### **3.2 Connections with government officials: Kampala as a nodal point for illegal trade**

The connections of traders are not uniform, but differ in power: these differences are principally based on the contacts with the government officials. As shown above, most of the Arua traders base their activities on connections with lower-level government officials based in the region (such as customs officials). Other traders have connections with higher-level government officials, and in particular security officials. These connections give an increased level of security at various points of the trading chain: when crossing the border, when transporting throughout the country, on exit points, and so on. It also allows for access to information on security operations, and interventions in case of a problem, such as the potential release of confiscated goods.

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<sup>10</sup> Interview ivory trader, Arua, 12 November 2015

A few of these traders are based in Arua, but they are mainly based in Uganda's capital, Kampala. The city is a nodal point for regional illegal trade: it is a key collection point for illegal commodities such as ivory, from where it transits to the national airport (in Entebbe), or to Kenya (and more particularly the port of Mombasa). Operating in these areas is particularly risky, as the airport is a particularly sensitive point, and as exporting ivory to Kenya involves longer distances (and more police checkpoints). Connections with high-level government officials allow to navigate these difficulties. Importantly, it also gives access to a wide(r) range of sources (which in turn allows for bigger stocks of ivory).

Let us look at the example of Adam (a pseudonym), who is an ivory trader based in Kampala. He has been trading in illegal ivory for about 15 years, and throughout the years, he has been receiving ivory from a range of different sources, with whom he remains in (ir)regular contact:

- The Tanzanian Wildlife Authority: corruption with Tanzanian government officials is a major problem for wildlife in Tanzania (Brockington 2008), and allows confiscated ivory to re-enter the market – amongst others, in the hands of Adam. In his words: “I know this guy who used to deal with the Tanzania wildlife authority. So they would steal it from the stock, or from poachers, and they would bring it here. (...) They come here, because here the law enforcement department is much easier to manipulate! You always take the route which is the easiest to manipulate.”<sup>11</sup> On a number of occasions, Adam went to buy this ivory on the Tanzanian-Ugandan border.
- Officers from the Ugandan Wildlife Authority (UWA) have been engaged in a number of corruption scandals, equally allowing ivory to enter the market (Tenywa 2014, 2015). Adam frequently collaborates with a trader who used to be an UWA official, and who was a regular source. As this person explained: “when I was working with UWA, we were systematically selling ivory. When I was working in [national park XY] we did not declare everything which we confiscated. For example, if we confiscated 10 pieces, we declared 2. The rest we were selling.”<sup>12</sup>
- Burundian traders: these traders, bringing over ivory from Bujumbura, largely bought their ivory in Eastern DRC. Adam himself claimed that this ivory was largely from rebel groups in Eastern DRC.
- Individual Ugandan soldiers, who bring it from Central African Republic. As will be discussed below, Adam has close connections with army officials, allowing him to fairly easily tap in to this supply stream.
- The above mentioned ‘Arua boys’ Adam has been organising transports from the border region to Kampala.

Four traders such as Adam were followed for this research project: two of those (including Adam) had a wide variety of sources; two others were mainly relying on the military. From these various sources, the traders were transporting ivory to Kampala in a number of ways: Either it is smuggled directly to the capital, in which the traders is hidden in various ways (in busses, trucks, cars). Another option is for the traders to go and pick it up at border points, for which they are able to mobilise the necessary contacts. The traders can either smuggle the goods themselves to Kampala, or purely act as a middlemen, in which they pass on the ivory towards another trader (and pocket the profit). Traders

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<sup>11</sup> Interview ivory trader, Kampala, 17 January 2017.

<sup>12</sup> Interview former UWA official, Kampala, 17 November 2015.

can also rely on military transport infrastructure to do so. These traders have a variety of nationalities: there are not only the Ugandan traders, but there is also a particularly significant presence of West African traders, from for example Nigeria, Guinea, Sierra Leone or Côte D'ivoire.

All Kampala traders mentioned personal links with these government actors, particularly army officials: one trader was groomed in the illegal trade business through an army commander who was a family friend; another trader went to high school with an army commander, another traders' best friend is the brother of a high-level army commander, and so on. These connections in turn allow operations to be conducted on a bigger scale. Adam, the illegal ivory trader mentioned above, is a good example: his area of operation was virtually the whole of the country, from border zones with Tanzania or Congo, to operating in the airport. Key for his operations are his connections with politico-military elites. Particularly his friendship with one army commander (a family friend) proved to be crucial in his introduction to the illegal business:

“We used to chill at his place when I was at university. We have a drink, and in this way, I knew him; and he introduced me in the business. He was a shrude guy: he only knew the language of money. And he had the cover to make things moving. Also the white people, whom we call ‘investors’, they all knew the big guys. The mainly go to the big guys, they particularly go to the big guys, and they tell the commander what they are looking for. At the same time, many Congolese came here, and in this way business was created.”

Hanging out with the commander exposed him to a range of contacts and business opportunities. This happened at the time of the Congolese wars, when Ugandan army officers were profiting from Congo's natural resources, in particular minerals (Titeca 2011). While his close connection with the above army official introduced him to the trade, and remained important, this introduction allowed him to build up his own network, involving other traders, buyers, and so on. In doing so, he expanded his network, and started dealing in a variety of commodities – minerals, drugs, but also ivory. Similar stories were told by the other Kampala traders.

Importantly, it is through these connections with government officials that traders such as Adam were able to handle this diversity of sources, and trade over such a big territory: different from the localised engagements of the Arua traders<sup>13</sup>, high-level connections allow transport over a bigger territory.

Through these connections, Adam – and other traders with more powerful connections – act as nodes between different scales. First, they have connections with a number of micro-regions: not only with the Uganda-Congo border region, but also with other border regions, and with a steady supply from various government agencies. Second, they are able to connect these various micro-regions to the transnational level, by selling to transnational traders. The contacts of the traders with the international traders varies: a few of them are regularly meeting the international recipients, many of them do not. While the latter were aware of dealing to international traders, they were not aware of the eventual recipient. As one trader summarized “I never see the person for whom the ivory is eventually intended; I always see an intermediary. So there's a whole chain of people (...). The final

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<sup>13</sup> These traders have a much more localised engagement with government officials: they know the custom authorities at the border, which they pay something from time to time, and with whom they have developed relations allowing ivory to pass through the border.

buyer is the Chinese, Thai or Russian. But I never see the person on the meeting: they all have national agents”<sup>14</sup>

In some cases, more powerful traders are involved in having the ivory pass through customs and/or airport. For example, one trader primarily dealt with the airport:

“I depend on the airport. When there suddenly is a window of opportunity: then it can suddenly leave. They call and say: it can leave the country now. It are the airport agents who make sure this happens. They tell me: there’s now place on a plane.”<sup>15</sup>

Another trader highlighted how

“It used to be a high-level military officer who would help things pass through the airport. (...) So they’re in charge of that business, and they would make sure the plane is delayed for 5 minutes, and the ivory would get in board.”<sup>16</sup>

- Connections and power.

In sum, connectedness is crucial in this trade, as well as particular nodes providing these connections. These nodes can be both places and persons: the paper highlighted the Ugandan border town of Arua, and the capital Kampala as central localities in the illegal ivory trade, in which various scales come together. They each constitutes nodes, bringing together illegal ivory trade from a variety of sources, and acting as a place to store the ivory, bring together various traders and so on. Also the traders act as nodes, in which their connections bridge various levels and scales: both the traders in Arua and Kampala connect with transnational traders. While both are linking up the regional with the transnational level, the power of their connections in doing so differs, particularly their internal connections: the connections of less powerful traders (such as the majority of the traders in Arua) are with lower-level, largely street-level government officials. While this allows goods to cross borders, and allows them to sell to international traders, it doesn’t do more than that. It makes their activities largely limited to the micro-region in which they are based. Other traders which have connections with higher-level officials (such as the Kampala traders we discussed), have a number of advantages from these connections: they are able to operate on a bigger scale, make bigger profit, and so on. They face less risks, and are better equipped, to operate on a larger territory, allowing them to collect supplies from various regions. They can also transport larger quantities (as they e.g. can be in a position to rely on army trucks), and are able to store larger quantities (as they are better informed about potential confiscations). A last quote to illustrate this dynamic, in which one of the Kampala traders explains how ivory is traded, with the help of a high-ranked military official:

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<sup>14</sup> Interview ivory trader, Kampala, 29 January 2014.

<sup>15</sup> Interview ivory trader, Kampala, 29 January 14.

<sup>16</sup> interview ivory trader, Kampala, 26 January 2017. The airport came back in many of the traders’ accounts, as well as in interviews with law enforcement officials, journalists and analysts: all of these actors point at the increasing importance of Entebbe airport as an exit-point for ivory. In the words of a trader, when discussing the regional interest in the airport: “All these traders prefer to trade ivory through Entebbe, because things are more flexible here” (interview ivory trader Kampala, 17 November 2015).



“A Congolese contacted me here in Kampala, and told me about the ivory he had. It was stuck at the border in Congo. I contacted [high-ranking army official]. The Congolese had 3 pieces of ivory as a sample, and they told me they had a ton. The problem was bringing it over; and [high-ranking army official] was the one able to offer protection. So [high-ranking army official] came with the money; and he gave me a truck with soldiers. I negotiated with the traders 20 USD per kg, and I told [high-ranking army official] 50 USD per kg. So I made a lot of money then.”

#### **4. Conclusions**

My findings, based on research among illegal ivory traders in Uganda, aimed to unpack the transnational organization of the illegal ivory trade. Empirical understanding of the trade's organization is limited: a range of academic literature, policy- and media-reports suggests that a transnational organization – a “criminal syndicate” or “gang” – is responsible for this trade. My findings suggest that, similar to research on human smuggling or drug trade (Zhang and Chin 2003; Natarajan 2006), ivory traffickers form ad hoc alliances and flexible networks, in which individual traders are at the thriving force of trade: they constitute nodes at particular points of the value chain (such as the Uganda-DRC borderlands, or the capital Kampala). Instead of relying on a group structure, they form flexible coalitions in order to buy, sell, or transport the ivory.

A crucial explanation for this are the market conditions of ivory, which are dynamic and fragmented: supply and demand are unpredictable, and a variety of dangers loom, such as confiscation, lack of market, being cheated by other traders. In these conditions, their personality and connections are central throughout the trade: personal ties with customs officials in order to cross the border, personal ties with army officials for supply, protection and sale, personal connections with other traders in order to avoid cheating, and so on. This does not mean that the level of (dis)organization is uniform in the ivory trade.

The article has showed the various connections which traders have, have different degrees of power: the better connected with higher-level officials, the more advantages for a trader. More particularly, it gives them a higher degree of security and predictability in their activities: both in supply and sale-points, but also in transporting goods through important points such as customs, they are able to rely on connections with high(er)-level government officials. This in turn allows them to transport and store bigger quantities of ivory. The degree of security and predictability of traders with lower-level connections is more limited, largely limiting their actions to their “micro-regions”.

By emphasizing the dominance of international syndicates in the ivory trade – what Hubschle (2016: 208) calls the idea of a “foreign-dominated parasitic conspiracy” – this research has shown how important realities gets overlooked: firstly, how ivory trade is to a large extent organized and experienced locally and regionally. Transnational ivory trade to a large extent relies on historically embedded trading networks, such as the regional trade along the Uganda-DRC border. Second, it are the traders' (unequal) connections linking the regional and transnational which are central in this trade. In other words, the transnational is not found in global syndicates, but in the various interactions between these different local and global traders, inside and between different countries (Columb 2017).

## Bibliography

Bergenas, J. and Knight, A. (2015) 'Green Terror: Environmental Crime and Illicit Financing', *SAIS Review of International Affairs*, 35/1: 119-131.

Bichler, G., Malm, A. and Cooper, T. (2017), 'Drug Supply Networks: a Systematic Review of the Organizational Structure of Illicit Drug Trade', *Crime Science*, 6/2: 1-23.

Biegus, O. and Bueger, C. (2017), 'Poachers and Pirates.', *South African Crime Quarterly*, 60: 29-36.

Brockington, D. (2008), 'Corruption, Taxation and Natural Resource Management in Tanzania', *Journal of Development Studies*, 44/1: 103-126.

Cakaj, L. and Lezhnev, S. (2017), 'Deadly Profit. Illegal Wildlife Trafficking through Uganda and South Sudan'. The Enough Project.

Clarke, A., and Babic, A. (2016), 'Wildlife Trafficking Trends in sub-Saharan Africa', in: OECD, *Illicit Trade: Converging Criminal Networks*, OECD Reviews of Risk Management Policies, OECD Publishing.

Columb, S. (2017) 'Excavating the Organ Trade: an Empirical Study of Organ Trading Networks in Cairo, Egypt', *British Journal of Criminology*, 57/6: 1301-1321

Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) (2016), 'Report on the Elephant Trade Information System', Seventeenth meeting of the Conference of the Parties Johannesburg, 24 September – 5 October 2016.

Ellis, S. and MacGaffey, J. (1996) 'Research on Sub-Saharan Africa's Unrecorded International Trade: Some Methodological and Conceptual Problems', *African Studies Review*, 39/2: 19-41.

Environmental Investigation Agency (EIA) (2014), 'Vanishing Point. Criminology, Corruption and the Devastation of Tanzania's Elephants'. EIA, November 2014.

Finckenauer, J. (2005), 'Problems of Definition: What is Organized Crime?' *Trends in Organized Crime*, 8:63-83.

Gettleman, J. (2012) 'Elephants Dying in Epic Frenzy as Ivory Fuels Wars and Profit', *The New York Times*, 3 September 2012

Hagan, F. (2006), "Organized Crime" and "Organized Crime": Indeterminate Problems of Definition' *Trends in Organized Crime*, 9:127-137

Hayman, G., and Brack, D. (2011), *International Environmental Crime*. The Royal Institute of International Affairs.

Hill, C. (2005) 'Measuring Transnational Crime', in P. Reichel, ed., *Handbook of Transnational Crime and Justice*. Sage.

Hobbs, D. (1998), 'Going Down the Glocal: the Local Context of Organized Crime', *The Howard Journal*, 37:407-422.

Hobbs, D., and Dunnighan, C. (1998), 'Glocal Organized Crime: Context and Pretext', in V. Ruggiero, N. South and I. Taylor, eds., *The New European Criminology : Crime and Social Order in Europe*. Routledge.

Horden, P. and N. Purcell (2000), *The Corrupting Sea*. Oxford University Press.

Horden, P. (2012) 'Situations both alike? Connectivity, the Mediterranean, the Sahara', in J. McDougall and J. Scheele (eds.), *Saharan Frontiers: Space and Mobility in Northwest Africa*. IN Indiana University Press.

Hübschle, A. (2016), 'Security coordination in an illegal market: the transnational trade in rhinoceros horn', *Politikon*, 43/2: 193-214.

Kiwawula, C. (2017), 'US Trains Ugandans in Combating Wildlife Trafficking', *New Vision*, 17<sup>th</sup> January 2017.

McCann, Niall (2017), 'Attacks on "Militarized Conservation" are Naïve'. *Mongabay*, 10 October 2017, <https://news.mongabay.com/2017/10/attacks-on-militarized-conservation-are-naive-commentary>, accessed on 12 October 2017.

Meagher, K. (1990), 'The Hidden Economy: Informal and Parallel Trade in Northwestern Uganda', *Review of African Political Economy*, 47: 64-83.

Milliken, T. (2014), 'Illegal Trade in Ivory and Rhino Horn:'. USAID and TRAFFIC.

Milliken, T., Underwood, R. Burn R.W. and Sangalakula, L., (2016a), 'The Elephant Trade Information System (ETIS) and the Illicit Trade in Ivory: A Report to the 17th Meeting of the Conference of the Parties to CITES'. 27 may 2016.

Milliken, T., Underwood, R. Burn R.W. and Sangalakula, L. (2016b), 'Addendum to the Elephant Trade Information System (ETIS) and the Illicit Trade in Ivory: A Report to the 17th Meeting of the Conference of the Parties to CITES'. TRAFFIC 22 September 2016

Musisi, F. (2016) 'UPDF Officers Charged Over Illegal Ivory Trade', *Daily Monitor*, 17 April 2016.

Natarajan, M. (2006), 'Understanding the Structure of a Large Heroin Distribution Network: a Quantitative Analysis of Qualitative Data', *Journal of Quantitative Criminology*, 22:171–192.

Naylor, R.T. (2004), 'The Underworld of Ivory', *Crime, Law & Social Change*, 42: 261-295.

Ndagire, B. (2017) 'Uganda: Soldiers Fined Shs4 Million for Stealing Ivory', *Daily Monitor*, 28 February, 2017.

Paoli, L., and Fijnaut, C. (2004), 'Comparative Synthesis of Part II', in L. Paoli, C. Fijnaut, eds., *Organized Crime in Europe: Concepts, Patterns and Control Policies in the European Union and Beyond*. Springer.

Pires, S. and Clarke, R. (2011) 'Sequential Foraging, Itinerant Fences and Parrot Poaching in Bolivia', *British Journal of Criminology*, 51: 314-335

- Pires, S., and Moreto, W. (2011), 'Preventing Wildlife Crimes: Solutions That Can Overcome the "Tragedy of the Commons"', *Eur J Crim Policy Res*, 17:101–123.
- Reuter, P. (1985), *Disorganized Crime*. The MIT Press.
- Runhovde, S. (2017), 'Merely a Transit Country? Examining the role of Uganda', *Trends in Organized Crime*, online only.
- Scheele, J. (2010) 'Traders, saints and irrigation: reflections on Saharan connectivity', *Journal of African History*, 51/3: 281-300.
- Scheele, J. (2011) 'Circulations marchandes au Sahara : entre licite et illicite', *Hérodote*, 3/142: 143-162.
- Scheele J. (2016), 'The Libyan Connection', *Journal of African History*, 57/1: 115-134.
- Sims, O., Gilles, R. 'Middlemen and Contestation in Directed Networks'. December 2016.
- Somerville, K. (2016), *Ivory. Power and Poaching in Africa*. Hurst Publishers.
- Southerland, M., Potter, G.W. (1993), 'Applying Organization Theory to Organized Crime', *Journal of Contemporary Criminal Justice*, 9/3: 251-267.
- Tenywa, G. (2014), 'Sh3B Ivory Goes Missing from UWA', *New Vision*, 11 November 2014.
- Tenywa, G. (2015), 'UWA Ivory Scandal Sucks in Army, Police', *New Vision*, 02 February 2015.
- Tenywa, G. (2016), 'Soldiers Arrested over Ivory', *New Vision*, 26 March 2016.
- Titeca, K. (2006), 'Les OPEC boys en Ouganda, trafiquants de pétrole et acteurs politiques', *Politique Africaine*, 103 : 143-159.
- Titeca, K. (2009), 'The changing Cross-border Trade Dynamics between North-western Uganda, North-eastern Congo and Southern Sudan', *Crisis States Working Paper 63 series 2*, London School of Economics and Political Science, London.
- Titeca, K., De Herdt, T. (2010), 'Regulation, cross-border trade and practical norms in West Nile, north-western Uganda', *Africa*, 80/4: 573-594.
- Titeca, K., (2011), 'Access to Resources and Predictability in Armed Rebellion: The "Force Armée du Peuple Congolais" Short-lived 'Monaco' in Eastern Congo', *Afrika Spectrum*, 2/2011: 43-70.
- Titeca, K. (2012), 'Tycoons and contraband: informal cross-border trade in West Nile, north-western Uganda' *Journal of Eastern African Studies*,6/1: 47-63.
- Titeca, K. (2013), 'Out of Garamba, into Uganda: poaching and trade of ivory in Garamba National Park and LRA-affected areas in Congo', *IOB Analysis and Policy Briefs No. 5*. University of Antwerp.

Titeca, K., Flynn, R. (2014), 'Hybrid Governance', legitimacy and (il)legality in the informal cross-border trade in Panyimur, north-west Uganda. *African Studies Review*. 57/1: 71-91.

The Independent (Uganda) (2017), 'Uganda Gets Kits to Combat Wildlife Crime', 22 January 2017.

Uganda Bureau of Statistics (UBOS) (2009), 'The Informal Cross Border Trade Survey Report 2008.' UBOS and Bank of Uganda.

United Nations Office on Drugs and Crime (2002), 'Results of a Pilot Survey of Forty Selected Organized Criminal Groups in Sixteen Countries'. United Nations Office on Drugs and Crime.

Underwood, F., Burn, R., and Milliken, T. (2013) 'Dissecting the Illegal Ivory Trade: An Analysis of Ivory Seizures Data' *PLoS ONE*, 8/10: 1-12.

UNEP, CITES, IUCN, TRAFFIC (2013) 'Elephants in the Dust – the African Elephant Crisis.' United Nations Environment Programme.

United Nations Office on Drugs and Crime (UNODC) (2013), 'Transnational Organized Crime in Eastern Africa'. UNODC.

Van Uhm, D. (2016a), *The Illegal Wildlife Trade*. Springer Publishers.

Van Uhm, D. (2016b), 'Monkey Business: the Illegal Trade in Barbary Macaques', *Journal of Trafficking, Organized crime and security*, 2/1, 36-49.

Vira, V., and Ewing, T. (2014) 'Ivory's Curse', C4ADS, April 2014.

Von Lampe, K. (2014), 'Transnational Organized Crime in Europe', in Albanese and Reichel, eds, *Transnational Organized Crime: An Overview from Six Continents*. Sage, 75-92

Warchol, G., Zupan, L., Clack, W. (2003), 'Transnational criminality', *International Criminal Justice Review*, 13/1:1-26.

Wasser, S.K, Brown, L., Mailand, C., Mondol, S., Clark, W., Laurie, C. and B.S. Weir (2015), 'Genetic Assignment of Large Seizures of Elephant Ivory Reveals Africa's Major Poaching', *Science*, 349 (6243): 84-87.

Wasser, S.K, Clark, W.J., Drori, O., Kisamo, E.S, Mailand, C., Mutayoba, B. and Stephens, M. (2008), 'Combating the Illegal Trade in African Elephant Ivory with DNA Forensics', *Conservation Biology*, 22/4: 1065-1071.

White, R. (2011), *Transnational environmental crime. Toward an eco-global criminology*. Routledge.

Wilson, A. (2012), 'Saharan trade in the Roman period', *Azania: Archaeological Research in Africa*, 47/4: 409-449

Wittmeyer, G., Northrup, J., Blanc, J., et al. (2014) 'Illegal Killing for Ivory Drives Global Decline in African Elephants', *Proceedings of the National Academy of Sciences*, 11/36.

Wright, G. (2011), 'Conceptualising and Combating Transnational Environmental Crime' *Trends in Organized Crime*. 4/4: 332-246.

Wyatt, T. (2013), *Wildlife Trafficking. A Deconstruction of the Crime, the Victims, and the Offenders*. Palgrave Macmillian

Zaitch, D. (2002), *Trafficking Cocaine: Colombian Drug Entrepreneurs in the Netherlands*. Kluwer Law International.

Zhang, S., and Chin, K. (2003), 'The Declining Significance of Triad Societies in Transnational Illegal Activities.' *British Journal of Criminology*, 43/3:469–488.

Zimmerman, M. (2003), 'The Black Market for Wildlife', *Vanderbilt Journal of Transnational Law*, 36: 1657-1690.