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Annette Hübschle

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## Fluid interfaces between flows of rhino horn

Annette Hübschle 

Institute for Safety Governance and Criminology, Law Faculty, University of Cape Town, Cape Town, South Africa

### ABSTRACT

In spite of the regulation, financial assistance and securitisation of responses to rhino poaching, rhino deaths have escalated over the past decade. This article discusses why efforts to disrupt illegal flows of rhino horn have been unsuccessful by honing in on structural and functional aspects of the broader rhino horn economy. Existing scholarly literature tends to focus on the legal–illegal binary in markets. The focus of this article is on grey flows in wildlife markets through an examination of rhino horn laundering and illegal hunting in the wildlife industry. Fluid interfaces of legal, grey and illegal flows have led to the creation of hybrid and highly adaptable flows. It is also argued that the international regulatory framework is not geared towards effective transnational enforcement and lacks social legitimacy amongst key actors. The article draws on research findings from a multi-sited ethnography, during which the researcher followed rhino horn from the source to the market.

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Illegal trade in wildlife; policing of flows; rhino poaching; wildlife trafficking; illegal markets; grey markets; illegal hunting; laundering

## Introduction

Three rhinoceroses are shot dead in the South African bush each day; their horns are chopped off and sold to intermediaries operating in lucrative wildlife markets. South Africa is home to 79% of the world's remaining rhinoceros. Of the 20 306 South African rhinos, 18 413 are southern white rhinos and approximately 1 893 animals belong to the black species.<sup>1</sup> Roughly one-third of South Africa's white rhinos are on private land, local communities protect 0.5 % of the black rhino population through a custodianship programme, and national and provincial parks authorities look after the remainder.<sup>2</sup> Although the South African Minister of Environmental Affairs<sup>3</sup> announced that poaching had stabilised in 2015 with 40 animals less killed than the previous year, the International Union for Conservation of Nature (IUCN) Species Survival Commission's African Rhino Specialist Group (AfRSG)<sup>4</sup> warns of 'the deepening rhino poaching crisis in Africa' with poachers killing 1377 rhinos across the continent in 2015 (see [Table 1](#)).

At the core of the rhino crisis is the tenacious demand for rhino horn in consumer markets. Powdered rhino horn has been used in Traditional Asian Medicine (TAM) for more than four millennia. Carved into hilts for traditional daggers known as 'yambiyas', rhino horn was also in great demand in Yemen during the 1970s and 1980s.<sup>5</sup> Another

**Table 1.** Known rhino killings in South Africa (2000-2016).

Year	Kruger National Park	Rest of South Africa	Total
2000	0	7	7
2001	4	2	6
2002	20	5	25
2003	14	8	22
2004	7	3	10
2005	10	3	13
2006	17	7	24
2007	10	3	13
2008	36	47	83
2009	50	72	122
2010	146	187	333
2011	252	196	448
2012	425	253	668
2013	606	398	1004
2014	827	388	1215
2015	826	349	1175
2016	662	392	1054

Source: Source: Department of Environmental Affairs (2014) & Molewa (2016).

centuries-old tradition relates to the trophy hunting of rhinos. The resultant hunting trophies are exported to the hunter's home country where they are kept in private collections, galleries and museums. Whilst these 'traditional' uses endure to lesser degrees, rhino horn is increasingly employed as an investment tool and as criminal currency. It also serves as a status symbol, religious or cultural artefact and gift amongst the upper strata of Asian societies. The price of rhino horn is contingent on provenance, use and type, averaging at US \$ 45 to 65 000/kg in consumer markets.

The research for this article emanates from a multi-sited ethnography, during which the author followed rhino horn from the southern African bush to southeastern Asian markets. More than 420 research informants were interviewed during 14 months of fieldwork in 2013 and 2014<sup>6</sup>, and follow-up visits to the field were conducted in 2015 and 2016. The sample included, amongst others, convicted rhino poachers, wildlife traffickers, private rhino breeders and farmers, anti-poaching rangers and state security forces, as well as affected local communities and Asian consumers. The article starts with a conceptualisation of markets and flows. It continues with an analysis of flows of rhino horn by honing in on flows that escape or bypass regulations. The focus is on specific structural, institutional and functional aspects of flows, which render regulation and enforcement difficult. Empirical examples are provided to illustrate the argument. The article concludes with an assessment as to why the illegal market continues to thrive and provides ideas on how to improve the policing of flows.

## Markets and flows

Scholarly contributions on the illegal trade in wildlife have largely focused on individual segments or stages of the supply chain,<sup>7</sup> specific actor constellations<sup>8</sup> and disruptive measures.<sup>9</sup> Much of the literature has focused on the supply side of the market, identifying poachers as the main suppliers of illicit wildlife contraband.<sup>10</sup> The recent escalation of poaching and wildlife trafficking has not only been attributed to rising demand in consumer markets but also to the entry of organised crime networks in what

is seen as a 'low risk, high reward' criminal activity. Scholars have analysed the role of organised crime networks in ordering, transporting and distributing wildlife products.<sup>11</sup> Agency in illegal wildlife markets is not only theoretically significant but also bears policy consequences in the real world. Little is known about the flow or onward journey along the supply chain once the wild animals have been poached, harvested or caught<sup>12</sup> or the demand side (two recent articles deal with the demand for rhino horn in China<sup>13</sup> and Vietnam.<sup>14</sup> The focus on either actors or market segments conceals the dynamic and fluid structure and functioning of the broader wildlife economy.

In a bid to move beyond existing analyses, this article proposes that the global rhino horn trade be understood in terms of a transnational market where different flows impact its sustainability, resilience and profitability. Markets, in this instance, are defined as 'arenas of regular voluntary exchange of goods or services for money, goods or services of equitable value.'<sup>15</sup> Markets are considered illegal if the product per se, its exchange or consumption violates legal stipulations. The state has the power to prosecute market actors<sup>16</sup>; it denies property rights in such markets and sets and enforces no quality standards.<sup>17</sup> Legal definitions contained within a country's national legislation thus delineate whether an economic exchange registers as legal or illegal in a jurisdiction. Such legal definitions may differ across geographies and time. An economic exchange may be declared illegal in one country whilst being legal and legitimate elsewhere. In other words, segments of supply chains of any type of good or service may hold a different legal status in supply, transit or demand countries. An important distinction relates to economic exchanges that occur at the interface between legality and illegality; these markets are neither legal nor illegal as they hover in an undetermined grey zone. Some market actors may exploit legal or enforcement loopholes in what is termed as 'grey' markets or flows in this article. Actors capitalise on ambiguities of the legal/illegality nexus by falsifying the provenance of a traded good as a formerly legal good (e.g. pre-CITES horn)<sup>18</sup> or convert an illegally acquired good to a 'legal' good (e.g. poached horn is converted into trophy hunted rhino horn). The contested illegality of a good or service may legitimise participation in grey or illegal markets. Cultural norms, traditions and cognitive frames influence the social legitimacy pertaining to the exchange or consumption of a good or service. Thus, whilst lawmakers might have outlawed its exchange or consumption, the woman in the street might not accept or know about the changed legal status. In some instances, contested illegality serves as a legitimisation mechanism, facilitating the participation in illegal or grey markets.<sup>19</sup>

A further consideration relates to the transnational nature of the illegal market in rhino horn. Historically, market and place were closely intertwined. Whilst markets often involved the inclusion of long distance trade and foreign merchants, markets were connected to the social and economic lives of local communities, occurring at fixed intervals and in specific places – the local marketplace.<sup>20</sup> With the emergence of migrant labour and hut taxes during the colonial era in the southern African context,<sup>21</sup> market and place started to separate. Producers, traders and consumers no longer had to be at a fixed time and location to engage in economic exchange. In the current climate of instantaneous capital flows, global transactions and virtual marketplaces, economic transactions are fluid and difficult to police or locate. In recognition of the fluid and dynamic structure of the global economy and markets, the concept of flows (instead of commodity or supply chains) is employed here. Asymmetries in legislation, knowledge,

economy and culture shape the flow of goods.<sup>22</sup> The concept is useful in showcasing the fluid connections and crossovers between legal, illegal and grey economic exchanges. Castells<sup>23</sup> introduced the concept of 'spaces of flow', suggesting that 'material arrangements allow for simultaneity of social practices without territorial contiguity'. In later publications, Castells<sup>24</sup> and others<sup>25</sup> use the concept of flows with specific reference to the 'network society',<sup>26</sup> which is characterised by increasing fragmentation of individuals and communities, necessitating interdependent relationships among individuals, public services, the police, information communication technology (ITC) and modes of transport. According to this view, people, money, goods and information are in circulation, travelling to and from different places, employing different infrastructures and thereby generating different 'flows' which connect, collide or meet in nodes.<sup>27</sup> The governance of flows and nodes provides a complex conundrum to regulators whilst offering immediacy, connectedness and new opportunities for economic actors.

The application of the concept of flows allows flexibility with regard to trajectories, influences and contingent relationships that may evolve, develop or disappear between actors, flows and institutions. Taken in a literal sense, the concept of 'flows' invokes different imaginaries, such as bifurcation (flows split because of a blockage, disruption or intervention), directionality and interdependence (what happens upstream may have an impact downstream), the confluence of tributaries (flows that merge), dead ends (flows that dry up or disappear), deltas (a flow splits into myriad offshoots) and dry riverbeds that flow again upon new rains (re-joining flows). The idea of different flows forming constitutive elements of the aggregate market in rhino horn presents a dynamic model that integrates market processes, actors, social networks and institutions whilst also covering spatial-temporal considerations. It will be argued that illegal, grey and legal flows of rhino horn cannot be studied in isolation because they merge, converge and diverge, impacted by one another and by institutions, networks and cognitive frames found in the market field. Unlike the rather static concept of a singular supply chain, the concept of 'flows' allows for dynamic and interdependent relationships.

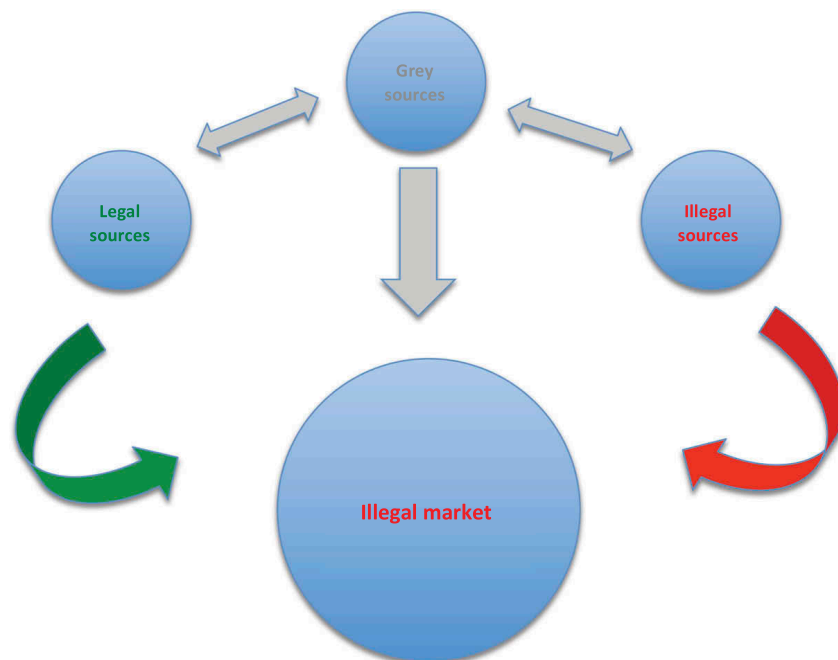
### **The existence of legal, grey and illegal flows out of South Africa**

The United Nations Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) provides the international regulatory framework for international trade in endangered plant and animal species. All rhino species were placed in Appendix I in 1977, effectively banning international trade except under exceptional circumstances.<sup>28</sup> In recognition of South Africa's success with rhino conservation and management (see below), the populations of white rhino in South Africa were moved to Appendix II in 1994. An annotation confined permissible trade to live rhinos to 'acceptable and appropriate destinations and hunting trophies only'.<sup>29</sup> Whilst CITES deals with international trade and trade bans, member states have to transpose CITES stipulations to the local level and regulate the domestic trade of endangered species. The domestic trade of rhino horn remained unregulated in South Africa until 2009 and presented a regulatory loophole, which criminal actors were readily exploiting. As an example, rhino horn deriving from illegal hunts and unregistered stockpiles was laundered into illegal markets.

In 2009, the Minister of Environmental Affairs and Water imposed 'a national moratorium on the trade of individual rhinoceros horns and any derivatives or products of

the horns within South Africa'.<sup>30</sup> Citing a lack of public consultation prior to its issuance, the North Gauteng Division of the High Court<sup>31</sup> lifted the domestic trade moratorium in 2015. This was in response to two private rhino breeders instituting a lawsuit against the Department of Environmental Affairs (DEA). The purpose of the lawsuit is unclear as there is no known domestic market for rhino horn in South Africa.<sup>32</sup> In May 2016, the Supreme Court of Appeal refused the Minister of Environmental Affairs leave to appeal, upholding the High Court's ruling. By appealing to the Constitutional Court, the DEA reinstated, only temporarily, the 2009 ban. In February 2017, the DEA then issued draft regulations for the domestic trade in rhinoceros horn or a part, product or derivative of rhinoceros horn.<sup>33</sup> According to public officials and conservationists (personal communication with author, 2017), the draft regulations are a pre-emptive strike aimed at providing a regulatory framework in case the Department were to lose the Constitutional Court appeal. In April 2017, the Constitutional Court indeed lifted the moratorium. Since then, the domestic trade in rhino horn has been legal on paper; however, the existing regulatory framework requires permits for buying, selling or possessing rhino horn. In their current iteration, the new draft regulations on domestic trade remain vague, allowing room for interpretation and clever manoeuvring.<sup>34</sup> The regulations are likely to be fine-tuned, incorporating written representations and objections made by the public after a 30-day notice period.

The annotation of permissible trades and the relatively short lifespan of the CITES prohibition (42 years at the time of writing) have allowed for legal flows to co-exist with grey and illegal flows (see [Figure 1](#)). It is legal for live animals and hunting



**Figure 1:** Flows of rhino horn entering the illegal market.

Legal sources: Hunting trophies, legal horn stockpiles, pre-Convention horn, live rhino exports, antique rhino artefacts.

Grey sources: Horns emanating from sources where legal and regulatory loopholes were exploited. Illegal

sources: Illegally killed rhinos, theft, fake horn.

trophies to be exported from rhino range countries to elsewhere in the world (certain safeguards apply). Once the live rhino or the hunting trophy leaves African shores, national regulatory agencies relinquish their responsibilities to authorities in receiving countries.

The existence of flows with differing legal status is not peculiar to the rhino horn economy. Many products do have associated illegal or grey flows and markets. The example of the rhino horn economy is used to show how shrewd market actors manipulate the interface between legality and illegality through clever schemes.

### ***Context to private rhino ownership in South Africa***

To understand why the private sector is well-situated to orchestrate both illegal and grey rhino horn traffic, a basic understanding of the private ownership of wildlife in South Africa is needed. South Africa constitutes a special case within the southern African region because private individuals are allowed to own wildlife including rhinos.<sup>35</sup> Wild animals are considered *res nullius* in South African common law, meaning that nobody owns them. Through successive changes in the law, game ranchers were granted ownership over wildlife and the right to derive income from consumptive utilisation, such as the killing of wild animals for profit.<sup>36</sup> The rhino plays an important role in the privatisation drive of wildlife in South Africa. The number of white rhinos in the Hluhluwe-Umfolozi Game Reserve<sup>37</sup> in KwaZulu-Natal had been reduced through unrestrained hunting to about 50 to 70 animals in the early twentieth century and had gone locally extinct elsewhere in South Africa. Through successful breeding and conservation programmes within the park, white rhino numbers had increased by the 1960s. Rhino numbers started exceeding the carrying capacity of the park and conservators feared that an outbreak of disease could revoke the recovery of the white rhino. It was at this point that the Natal Parks Board<sup>38</sup> commenced 'Operation Rhino', in which over the course of the 1960s and early 1970s saw more than 1200 white rhinos relocated from the Hluhluwe-Umfolozi Game Reserve to the Kruger Park, private game reserves, as well as zoos and safari parks abroad. Nowadays, the total size of South African private rhino reserves stretches over an area of about two million hectares incorporating about 330 separate properties. According to a survey conducted by the Private Rhinos Owner Association (PROA) in 2015, 33% of the national herd (about 6 200 animals) were kept on private land in South Africa (personal communication with Pelham Jones, Private Rhino Owners Association, 2016).<sup>39</sup> Until the end of the apartheid regime in 1994, black South Africans were excluded from private land and rhino ownership. Due to the slow pace of economic transformation in South Africa and other socio-economic factors, ownership patterns have changed little: black communities protect 0,5% of black rhinos through custodianship programmes. The vested interest of the wildlife industry in rhino conservation and management is clear from the above. Not only are rhino owners and wildlife industry professionals knowledgeable when it comes to rhino conservation, but they also know the tricks of the trade and the associated profitability of rhino horn.

Grey flows are largely linked to the harvesting of rhino horns on private land. The process may be consumptive (lethal) through the trophy hunting or illegal killing of a

rhino, or non-consumptive by way of dehorning a rhino above the growth point. Unlike the tusks of elephants, rhino horns grow at a rate of 6 to 10 centimetres or 0,6 kg to 1 kg in female white rhinos and 0,8 kg to 1,5 kg in male white rhinos per annum. Horn growth is contingent on gender, sex, age, population type (i.e. free-range versus captive-bred) and species.<sup>40</sup> Rhino horn is thus a renewable resource, which is highly profitable on illegal markets. The dehorning of rhinos has been employed as an anti-poaching strategy.<sup>41</sup> The process is regulated through a permitting process, which includes the registering of rhino horn stockpiles with nature conservation officials. Currently, the international trade of rhino horn is banned through the Threatened or Protected Species (TOPS) regulations and the CITES prohibition while domestic trade is allowed if the seller and buyer stick to the new regulations (see section on regulatory framework).

Actors capitalise on the room to manoeuvre between legal and illegal forms of rhino horn trade. Bolstered by sentiments of contested illegality and legality,<sup>42</sup> criminal actors have no qualms to exploit or manipulate regulatory loopholes. Involved are wildlife industry professionals with intimate knowledge of the product (rhino horn) and of the institutional and legislative framework governing the international trade of rhino horn. Rhino owners, professional hunters, wildlife veterinarians, taxidermists, helicopter pilots, corrupt government officials and other categories of wildlife professionals are the principal actors. These actors belong to influential and transnational networks with links to political and economic elites in supply, transit and consumer countries. Actors from the formal wildlife sector did not only orchestrate illegal rhino hunts in private and public conservation areas and thefts from rhino horn stockpiles, but also they were involved in complex schemes that bypass existing conservation regulations, exploit regulatory loopholes and use legal trade channels to export illegally obtained rhino horn.

### ***The pseudo-hunting phenomenon: appropriation and re-channelling of legal flows***

A creative way of supplying Asian consumer markets with 'legally' attained rhino horn involved the recruitment of hunters originating from consumer countries that have no tradition and culture of sports hunting. In continuation of colonial big game hunting and safaris, the majority of 'traditional' rhino hunters herald from Europe and North America (data supplied by Professional Hunters Association of South Africa). As of the early 2000s, young Vietnamese nationals with no or a limited (sometimes falsified) track record of trophy hunting booked white rhino hunts with South African hunting outfitters. In terms of CITES stipulations and domestic laws in South Africa, hunters are allowed to shoot one white rhino per calendar year, whilst the annual quota for black rhinos is restricted to five animals. These hunting trophies may be exported as hunting memorabilia for non-commercial use. Vietnamese crime groups together with their local intermediaries recruited Vietnamese citizens as stand-in trophy hunters to bypass the rule of 'one white rhino, per person, per annum'. Their role was hence to pose as trophy hunters for the purposes of compliance with permit regulations, whilst a South African professional hunter would shoot the rhino on their behalf.



Vietnamese horn importers were using CITES export permits to import multiple rhino horns on the same single-use export permit to Vietnam until its expiration date was reached after six months.<sup>43</sup> Official records show that the export of 'legally' attained rhino trophies from South Africa to Vietnam was prevalent throughout the 2000s. Pseudo-hunting contributed 20% of all rhino horns leaving for Africa for illegal markets until the South African government closed down regulatory loopholes and instituted a national database that tracked actual trophy hunts taking place.<sup>44</sup> According to annual export and import data provided to CITES, the southeast Asian country acknowledged receipt of about 25% of the legally imported rhino horn trophies between 2003 and 2010. This suggests that approximately 487 of 657 'legal' rhino horns entered the illegal market in Vietnam.<sup>45</sup> Once South African authorities had identified the clever ploy, direct exports of rhino trophies from South Africa to Vietnam ceased. The manipulation of export permits and the failure of the relevant CITES management authorities to scrutinise trophy and rhino horn exports and imports allowed the laundering of horn that was ostensibly legally acquired, into illegal markets in Vietnam.

By the time, the legal loophole had been plugged and a temporary ban had been imposed on Vietnamese trophy hunters in 2012; a new type of 'non-traditional' hunters had slipped into the region. Czech trophy hunters were now posing as 'proxy' hunters for criminal networks. In this case, the export permits were forged and the horns redirected to Vietnam. The modus operandi changed again in response to law enforcement disruptions, and the horns were first flown to the hunters' home country before getting smuggled into Vietnam. Slovakian and Polish nationals were also implicated in the scheme (Interviews with law enforcement officials and conservators, 2013 and 2016). More recently, there have been suspicions that 'traditional' Big 5 hunters (notably American, Ukrainian and Russian nationals) were also hunting on behalf of Vietnamese groups (Interviews with organised crime investigators, 2015 and 2016). Discrepancies in the CITES trade data continue to provide cause for concern with South Africa's reported exports being far greater than the declared imports by receiving countries.<sup>46</sup>

What renders grey flows particularly efficient and safe is the early stage conversion of an essentially illegal good to legal status (the laundering of illegally harvested horn into legal trade flows), and contrariwise, the conversion of a legal product (hunting trophy) into an illegally traded good once it arrives in consumer markets. The early conversion curtails opportunity costs and risks further down the supply chain. From an illegal market actor's perspective, this mode of obtaining horn is not only the safest and most expedient method, but it also minimises the number of intermediaries required from the bush to the consumer market. It allows a largely unhindered passage of the horn through the minimal exposure to social control agents and measures aimed at disrupting the illegal market. Moreover, the horn stays in its original state, meaning that it is not processed into smaller pieces or powder form before reaching the consumer market. This is significant when it comes to quality control, valuation and pricing of the horn on the consumer market.

### ***Case study: sex workers as rhino trophy hunters***

The following case study provides an excellent example of the creativity of rhino traffickers and their ability to employ new strategies that bypass regulations and the

law. Unlike the 'pseudo-hunters' who had to be flown in from their home country, a Laotian wildlife trafficking network using a front company called 'Xaysavang Trading Export-Import', employed an ingenious cost-saving measure. Chumlong Lemthongthai, the representative of the criminal network in South Africa, recruited Thai sex workers who were already based in South Africa to accompany him and his colleagues to private hunting reserves and farms to act as stand-ins for trophy hunters. The wildlife traffickers thus saved on financing travel costs from Southeast Asia to South Africa. The network's infamous pseudo-hunting scheme commenced in late 2010. Of significance was a clear separation of duties. The criminal network sought out South African wildlife industry professionals and conservation officials with a penchant for 'dodgy deals' that would facilitate their nefarious activities by availing their services and providing unhindered passage of rhino horn out of the country. To the wildlife network, cooperation with South African wildlife industry professionals involved little effort and operational risk. However, the 'legal' export of hunting trophies involved comparably more administrative and organisational footwork than a poaching excursion into a protected area would have (Interviews, 2013).

The local organiser of these pseudo-hunts was a South African game farmer and safari operator who employed the services of a professional hunter to shoot the rhinos on behalf of the Thai pseudo-hunters. The farmer also supplied rhinos, arranged rhino hunts, the removal and weighing of the rhino horns. The live rhinos were purchased at discounted prices at auctions as rhino farmers were starting to sell rhinos in the face of the escalating poaching crisis. He would also find farmers and outfitters who were willing to host the Thai pseudo-hunting party. Upon receiving the Thai nationals' passports, he would forward the necessary information as well as copies of passports to the outfitters or landowners who then applied on their behalf for the hunting permits.<sup>47</sup> The Thai sex workers would accompany the network members to game reserves and hunting farms to pose next to the dead rhinos in exchange for free food and drinks and R 5000 (475 €) for the 'job'.<sup>48</sup> A professional hunter killed the rhinos, and the farmer and his workers would dehorn the rhinos and take care of the carcasses. According to the hunting regulations, nature conservation officials ought to be present and monitor all rhino hunts. The Department of Environmental Affairs failed to provide proper supervision of these hunts<sup>49</sup> and Lemthongthai and other members of the network boasted later that 'everyone has a price in South Africa' (Interviews, 2013). Olivier's police statement<sup>50</sup> provides a list of contacts of the Xayasavang network within the North Western<sup>51</sup> nature conservation department, the customs and airports authority, as well as pliable taxidermists.<sup>52</sup>

### **Entry into illegal markets in Vietnam: regulatory and enforcement shortcomings**

According to a report from the International Union for the Conservation of Nature Species Survival Commission African and Asian Rhino Specialist Groups and TRAFFIC to the CITES Secretariat ahead of the CITES CoP17, Vietnam<sup>53</sup> is one of four countries that is heavily involved in rhino horn trade transactions based on an analysis of global seizure data.<sup>54</sup> In January 2013, the Prime Minister of Vietnam issued Decision 11 on the prohibition of the export, import, selling and buying of specimens of some wild animal species listed in the

Appendices of CITES. This decision effectively bans all domestic sales of African rhino horn in Vietnam. An exception excludes ‘imports for the purpose of diplomacy, scientific research, biodiversity conservation, display at zoos, exhibitions, non-profit circus performances, law enforcement and exchange of specimens amongst CITES management authorities of member countries are still allowed.’<sup>55</sup> The exceptions relating to the imports of rhino horn for the purposes of diplomacy and law enforcement are rather curious, as data collected for this project implicates both diplomats and law enforcement officials in the smuggling and distribution of rhino horn.<sup>56</sup> Despite these specified exemptions, Vietnam confirmed to the CITES rhinoceroses working group in July 2014 that no permit had been issued for ivory or rhino horn since the effective date of the decision on 24 January 2013.<sup>57</sup> Vietnam also banned ‘non-commercial import of hunting trophies’ unless cooperation agreements had been signed between the Vietnam CITES management authority and the CITES management authority in the exporting country.<sup>58</sup> At the time of writing, Vietnamese hunters were still banned from hunting in South Africa as the Vietnamese authorities had made no further progress in ensuring that the hunting trophies stayed with the original trophy hunter (Interview with government official, 2016, South Africa). This loophole relates to the lack of regulations and enforcement pertaining to what happens to hunting trophies once they have reached Vietnamese shores. Whilst rhino trophy hunters are not legally allowed to sell their trophies, there are no regulations preventing the owners from donating or gifting them. In fact, Vietnam’s national civil law permits the trophy owner to decide how to use their trophies. Because hunting trophies are categorised as personal effects in the southeastern Asian nation, authorities said that they found it difficult to control and monitor them. In addition, there are no punitive measures or permit regulations<sup>59</sup> should the trophy owner decide to cut up the horn(s) or dispose of the trophy without prior authorisation.<sup>60</sup>

Vietnam was on the receiving end of a great deal of criticism at the CITES Conference of Parties (CoP) 16 in 2013 and CoP 17 in Johannesburg in 2016. Vietnamese government officials denied the role their country played in the illegal supply chain of rhino horn and pointed their fingers at their neighbour, suggesting that Vietnam served as a transit and processing hub for rhino horn en route to China (CITES Secretariat 2013, Interview with government official 6, Vietnam, 2013). At CoP 17, Vietnam claimed that rhino horn consumption had decreased and 21 rhino horn traffickers had been convicted. However, no supporting evidence was provided for both claims. Moreover, a revision to Vietnam’s penal code has been postponed with no timelines for implementation provided. In its current form, the new code proposes monetary penalties of up to US \$ 90 000 or a prison term of up to five years for minor offences and from 10–15 years for major offences. However, these penalties do not apply to individuals found ‘illegally storing, transporting [or] trading’ less than 50 grams of rhino horn (or 2 kg of ivory). Such infractions would be subject to lesser punitive measures in accordance with existing regulations.<sup>61</sup> Given the loopholes in the existing and proposed regulations and the lack of enforcement in Vietnam, illegally sourced rhino horns are likely to continue arriving via grey and illegal flows in Vietnam.

### **Transportation of rhino horn to the market**

Due to the high incidence of fake horn, criminal actors, traders and consumers employ a number of measures to guarantee the authenticity of their acquisition. Criminal groups

ensure that a trusted ally such as the rhino horn organiser or smuggling intermediary attends the hunt or receives the horn immediately after the hunt, without the precious good changing hands in the interim. By being present during the hunt and the subsequent dehorning of the animal, intermediaries safeguard the quality and the provenance of the horn. This mechanism is an important aspect of the valuation of rhino horn when it lands in Asia. Transport intermediaries who coordinate both grey and illegal flows of rhino horn ensure that the horn dispatched at the point of origin is the same as the one that arrives on the other side. The intermediaries stay connected by way instant or text messaging, or the horn is marked with concealed signs only known to the intermediaries. Of significance is the chosen route, mode of transportation, the length of the flow (how many segments or intermediaries are involved), and who receives the horn on the other side. The shorter and more direct the route (usually a legal flow), the lesser the risk of tampering with the expensive commodity. Should diplomats, law enforcement, customs, port or conservation officials be involved in the transportation or facilitation thereof; then, the risk of defection is reduced as the person's position or status holds sway and 'opens doors' (Interviews with rhino horn smugglers, South African correctional centres, 2013). Research elsewhere<sup>62</sup> and empirical data collected for this study at both ends of the supply chain<sup>63</sup> suggest that most rhino horn leaves the African continent by plane, and its onward journey from entrepôts depends on the connectedness of transport intermediaries. Rhino horn derived from legal or illegal trophy hunts and exported as hunting trophies is transported via an ostensibly 'legal' flow from the source to the supposed trophy hunter's home. Once the rhino horn reaches Asia, several pathways are possible including immediate distribution and trade, stockpiling or processing, distribution and trade.

### **Distribution and trade of rhino horn**

Street- and shop-based Vietnamese wildlife traders are increasingly using social media platforms and instant messaging to sell wildlife contraband to their predominantly Chinese clientele. According to research undertaken by the Wildlife Justice Commission in 2015 and 2016, open trade of rhino horn, ivory and tiger bones is taking place in public view without law enforcement disruption in the village of Nhi Khe on the outskirts of Hanoi.<sup>64</sup> High-end dealers who sell to Vietnamese clientele prefer to enter into business arrangements with individuals whom they trust to pay the asking price for the right amount or quantity of horn. The preference is to sell whole horns or large quantities of horn as opposed to grams or pieces of horn (Interviews with intermediaries, 2013). The deal or exchange does not happen in a back alley or 'bad part of town' but at the buyer's, referent or dealer's residence or workplace (Interviews with consumers and intermediaries, 2013). The location of the deal serves the function of normalising the transaction as it happens in respectful surroundings such as the private or public sphere of the transacting parties. It also provides another layer of security<sup>65</sup> and legitimises the deal as a business transaction that can be safely and legitimately done from one's place of residence or work. This suggests that market participants are not concerned about law enforcement responses, stigma or social sanctions that might obtain from dealing or consuming rhino horn by their inner circle of family, friends or colleagues. In other words, these

actions carry social and cultural legitimacy further cementing the legitimisation mechanism of contested illegality. These deals nevertheless form part of an informal underground economy in big urban centres and stand in direct contrast to the open trade of wildlife contraband in peripheral locations removed from the prying eyes of the international community and local law enforcement.

People in certain positions are assumed to be worthy of trust and respect by virtue of their status and role in society, as well as the access to horn supplies and influence the position confers upon them; consumers thus trust the provenance and authenticity of rhino horn if the supplier is either a 'trophy hunter', law enforcement, customs or conservation official, or a diplomat with legitimate connections to the source (Interviews with intermediaries, Johannesburg and Massingir, 2013; consumers, Hanoi and Ho Chi Minh City, 2013). Law enforcement and customs officers are believed to have easy access to confiscated rhino horn,<sup>66</sup> whilst government officials and diplomats who had been posted to South Africa in the past, or family members of diplomats on mission in South Africa were also perceived as credible suppliers of rhino horn with direct links to the source country (Interviews with consumers and suppliers, 2013). A forensic scientist in Hanoi supported this assumption, stating that horn confiscated at the airport and brought in for testing by the police, customs or CITES management authority was usually the 'real thing' (Interview, Hanoi, 2013). Some law enforcement officials are also known to abuse their position of power to seize illegal horn stocks that never enter the legal chain of custody but are laundered directly into illegal market flows (Interview with TCM trader and intermediary, 2013).

### **Regulation and grey flows**

Grey flows originating in pseudo-trophy hunting, the dehorning of rhinos on private land and the laundering of horn from unregistered stockpiles or illegally hunted rhinos contributed their fair share to the illegal market in rhino horn until the late 2000s. Criminal actors pioneered the use of legal transport routes and flows, expanded the trade network and market reach and tested the legislative and regulatory frameworks for loopholes and enforcement weaknesses. Local South African intermediaries had access to wide-ranging social and professional networks that facilitated illegal and grey transnational trade with Asian trafficking and trade networks. The displacement of grey sources of rhino horn by the late 2000s is partially explained by the promulgation of tougher conservation regulations, including the moratorium on domestic trade in rhino horn in South Africa, as well as the private sector 'out-pricing' itself. Although pseudo-hunts carried the semblance of legality, operators had to shoulder punitive expenses, including the cost of the hunt, transport and security premiums (e.g. bribes to conservation, customs and law enforcement officials). Essentially, it became cheaper and more efficient to pay local hunters to poach rhinos in protected areas than to orchestrate pseudo-hunts or pay market-related prices for rhino horn deriving from private sources. Some poaching groups established their own organisational structures and trade connections, whilst criminal networks with experience in other illegal markets also became involved in wildlife trafficking. Criminal actors continue to rely on the transportation and distribution infrastructures and networks associated with these grey flows.

The attractiveness of grey markets and flows lies in the façade of legality through the use of legal operators, transport channels and trade networks. Whilst the private sector remained under-regulated, law-abiding rhino breeders saw no problem in selling rhino horn or hunts to fellow ‘farmers’ as they were not breaking the law. However, once the law became clear about what was legal and legitimate and what was not, the supply of sub-legal/grey rhino horn started to dry up. Given that the moratorium was lifted, the proposed regulations pertaining to the domestic trade in rhino horn in South Africa are pragmatic in light of the apparent need to control and regulate domestic trade. However, if not carefully worded, these regulations may open up new opportunities for circumvention and creative *flow-hopping*. As it stands now, South Africa lacks the conservation management and law enforcement systems to manage domestic trade without corruption playing a role or domestic and foreign illicit trade systems penetrating it (personal communication with security official, 2017).

### **Conclusion: how to disrupt the illegal rhino horn economy?**

Central to disrupting the rhino horn economy is thus an understanding of the interface between legal, grey and illegal markets for rhino horn. The focus of this article was on grey flows and markets, whilst links to illegal and legal flows of rhino horn were shown. These flows were presented as distinct entities for the purposes of analytical clarity. However, they are interconnected and contribute to the structure and functioning of the overall rhino horn economy (refer back to figure 1). In essence, the broader rhino and rhino parts economy are constituted of complex hybrid flows that involve recurring actors who perform specialised functions. Bolstered by sentiments of contested illegality, criminal actors have no qualms to exploit regulatory loopholes or to diversify into unchartered territory. These actors belong to influential and transnational networks with links to political and economic elites in supply, transit and consumer countries. Scholars<sup>67</sup> and practitioners<sup>68</sup> point to the involvement of organised crime in transnational rhino horn flows. Organised crime has become a catchall concept with close to 200 definitions<sup>69</sup>; the focus is often on the ‘underworld’, whilst the role of the ‘upperworld’ is acknowledged but not sufficiently analysed. In the case of the rhino horn economy, the role of the wildlife and transport industries, and government officials and law enforcement agents (all arguably representatives of the ‘upperworld’), is significant in explaining why the illegal market is resilient and difficult to disrupt. Insider knowledge, the ability to utilise and instrumentalise legal, grey and illegal flows and access to transport, distribution and trade networks gives criminal actors the edge over market disruptors and law enforcers. The international regulatory protection regime, meanwhile, is riddled with ambiguities such as allowing the trophy hunting of rhinos, which usually leads to a hunting trophy whilst not allowing other non-lethal forms of harvesting rhino horn and deriving financial benefit from it. Diffusion of the international trade ban to national jurisdictions is further complicated through the disconnection of legal rules from cultural norms and traditions in consumer markets.<sup>70</sup> Of importance is the recognition that the bifurcation of legal versus illegal forms of economic exchange is of limited use when a multilateral trade treaty is involved. Rhinos and their body parts enjoy differing legal status along the time-space continuum. Markets for hunting rights, for example, allow affluent trophy hunters to hunt rhinos and export trophies of the dead

animal to their country of origin. Policing these hunting markets (and other linked markets and services) falls outside the purview of traditional law enforcement agencies that deal exclusively with policing issues (conservation agencies deal with hunting transgressions). Moreover, once the hunting trophy (or the live animal) leaves the country of origin, its onward journey and final destination move beyond the national jurisdiction and reach of national agencies. As is the case in many other illegal markets, international efforts have focused on disrupting the supply side of the illegal market.<sup>71</sup> With most rhino horn entering illegal markets nowadays originating from poached rhinos, southern African law enforcement and criminal responses have been directed at poachers. Despite the increasing militarisation, 100s of arrests and more than 200 confirmed deaths of poaching suspects in South Africa's Kruger National Park between 2010 and 2015,<sup>72</sup> rhino poaching statistics remain high, and the tipping point in rhino population growth is believed to have been reached with the number of rhino deaths outstripping births.<sup>73</sup> Whilst such measures may have achieved some measure of success in dealing with the piracy phenomenon along the East African coastline<sup>74</sup> and rhino poaching in India (Vira 2017)<sup>75</sup> and Nepal (Aryal et al. 2017),<sup>76</sup> they have contributed to further alienation of local communities from conservation and protected areas in South Africa.<sup>77</sup> Meanwhile, little attention has been paid to stopping actors and flows originating in the wildlife industry, transportation and conservation sectors. Corrupt practices within these sectors and in government entities facilitate the passage of horn through transport nodes and border points that are well policed. Professional associations and industry oversight groups should enforce professional standards and sanction bad apples in their peer groups. Regulating flows, plugging new loopholes and disrupting illegal flows will require multi-sectorial, multi-agency and transnational interventions that involve private–public and international partnerships.

## Notes

1. Emslie et al., "African and Asian rhinoceroses," 1.
2. Ferreira, "Management and conservation of rhino populations," 2.
3. Molewa, "Minister Edna Molewa highlights progress."
4. IUCN, "IUCN reports deepening rhino poaching crisis."
5. Varisco, "Beyond rhino horn", 215–219.
6. The initial research project formed part of my doctorate at the Max Planck Institute for the Study of Societies. The chapter 'Researching illegal markets' provides an analysis of research, methodological and ethical challenges encountered in the field and how they were resolved or bypassed (compare with: Hübschle 2016a).
7. Lavorgna, "Wildlife trafficking," 1–12; Pires, "The heterogeneity of illicit parrot markets," 1–16.
8. Leberatto, "Understanding the illegal wildlife trade," 42–66; Wyatt, "The illegal trade of raptors," 103–123; van Uhm and Siegel, "The illegal trade in caviar," 67–87.
9. Elliot, "Fighting transnational environmental crime," 87–104; Di Minin et al., "Identification of policies," 1–11; Duffy, "Waging a war," 819–834.
10. Herbig and Warchol, "South African conservation crime," 1–16; Moreto, "Law enforcement monitoring in Uganda," 82–101.
11. Shelley, "Convergence," seminar presentation; Reuter and Bisshop, "Keeping the horn on the rhino," 149–185; Haas and Ferreira, "Combating rhino horn trafficking," 1–26.

12. For a comprehensive analysis of specific wildlife markets and flows, compare with Wong, "The organisation of the illegal tiger parts trade," 1–19; Zabyelina, "The "fishy" business," 1–18; van Uhm, *The illegal wildlife trade*.
13. Gao et al., "Rhino horn trade in China," 343–347.
14. Truong et al., "The marketplace management of illegal elixirs," 1–17.
15. Beckert and Aspers (2008) cited in Beckert and Wehinger, "In the shadow," 7.
16. The ability to prosecute actors within illegal markets is not restricted to illegal markets. The state may equally prosecute market actors in legal or grey markets.
17. Ibid.
18. The abbreviation CITES refers to the Convention on the International Trade in Endangered Species of Wild Fauna and Flora, which has been in place since 1975. Details are discussed below.
19. See Hübschle, "Contested illegality," 1–20.
20. Zukin, *Landscapes of power*, 6.
21. A similar pattern can be observed in Western Europe during Industrialisation.
22. Passas, "Cross-border crime," 19–37. Bissshop and Valle, "Environmental victimisation," 34–54.
23. Castells, "Grassrooting the space of flows," 295.
24. Castells, *The rise of the network society*, 407.
25. van Sluis et al., "Nodal security in the ports," 73–96; Côté-Boucher, "The paradox of discretion," 1–19; van Sluis et al., "Nodal policing in the Netherlands," 365–371.
26. Castells, "Materials for an Exploratory," 5 suggests that the network society is a specific form of social structure emblematic of the Information Age.
27. van Sluis et al., "Nodal security," 73.
28. Milliken and Shaw, "The South Africa-Vietnam rhino horn trade nexus," 44.
29. CITES, "Resolution Conference 9.14: Conservation of and trade in rhinos."
30. Department of Environmental Affairs and Tourism, *Government notice on moratorium*.
31. North Gauteng High Court, "Kruger and another versus Minister of Water and Environmental Affairs."
32. Emslie et al., Ibid, 11.
33. Molewa, *Draft regulations for domestic trade in rhino horn*.
34. The draft regulations, for example, stipulate that a person 'may export a maximum of two rhinoceros horns, and then only for personal purposes' (Molewa 2017: 7). It is unclear whether a temporal limitation is in place, such as the regulation proposing an annual or once-off export rate of rhino horn for personal purposes. No definition of 'personal purposes' is provided.
35. Namibia also allows private ownership of wildlife.
36. Lindsey et al., "Economic and conservation significance of the trophy hunting industry," 463.
37. South Africa's oldest proclaimed nature reserve is now known as the Hluhluwe-iMfolozi Park.
38. The former province of Natal is known as KwaZulu-Natal since the end of apartheid, and its parks authority is known as Ezemvelo KZN Wildlife, the former Natal Parks Board.
39. PROA is lobbying for the lifting of the CITES trade ban.
40. See Pienaar et al., "Horn growth rates," 97–105.
41. See Lindsey and Taylor, *A study on the dehorning of African rhinoceroses*.
42. The notion of 'contested illegality' is conceptualised as a legitimisation mechanism employed by illegal market actors to justify their participation in grey or illegal flows.
43. Milliken and Shaw, Ibid, 58.
44. See note 32 above.
45. See note 43 above.
46. See note 32 above.



47. Navasa et al., "Lemthongthai versus the State," 9.
48. Kvinta, "The madness of modern-day poaching."
49. Navasa et al., *Ibid*, 12–13.
50. Johnny Olivier was a South African associate of the network, who was responsible for the 'administrative go-between activities'. He turned state witness during Lemthongthai's trial.
51. The North West Province is one of South Africa's nine provinces.
52. Olivier, "Police statement," 9.
53. See note 32 above.
54. The other three countries are China, Mozambique and South Africa.
55. Vietnam, "Illegal trade of rhinoceros horn in Vietnam."
56. The dubious role of Vietnamese embassy staff in South Africa came initially under the spotlight after South African journalists filmed the embassy's former first secretary receiving rhino horns from a known trafficker on the street outside the Vietnamese embassy in Pretoria in 2008 (50/50 2008). Since then, several Asian diplomats have been investigated for their involvement in rhino horn and ivory trafficking (compare with: Rademeyer 2016a). The smuggling of any contraband through diplomatic channels is the most secure (and "legal") flow because law enforcement bodies hold no jurisdiction to open and search diplomatic pouches (compare with: United Nations Conference on Diplomatic Intercourse and Immunities 1961: Article 27 of the Vienna Convention on Diplomatic Relations).
57. CITES Rhinoceros Working Group, "Species trade and conservation: Rhinoceroses," 5.
58. Vietnam, *Ibid*, 1.
59. CITES Secretariat, Species trade and conservation: Rhinoceroses," 7–8.
60. In its September 2012 report to the CITES Secretariat, Vietnam indicated that many hunters cut up their hunting trophies (the horns) and gifted pieces of rhino horn to friends and family. When the Management Authority in Vietnam undertook "random checks" of hunting trophies, only 7 out of 40 trophies were found in an unadulterated form whilst 11 hunters could not be contacted (CITES Secretariat 2013: 23).
61. See note 32 above.
62. Milliken, "Illegal trade in ivory and rhino horn," 20–21.
63. According to interdiction data of Vietnam's CITES Scientific Authority provided in 2013 (personal communication, 2013), all interdictions involving rhino horn had occurred at the two main international airports in Ho Chi Minh City and Hanoi, except for one interdiction along a major highway in 2004.
64. See for example Accountability Panel, "Decision on the Map of Facts."
65. Illegal business transactions (including drug deals) are commonly believed to take place at locations that appear to guarantee the anonymity of the market participants such as hotel rooms, restaurants, and busy or isolated public spaces. The corollary suggests that the dividing lines between public and private lives and work and leisure are blurred.
66. Amman, "The Rhino Horn Story" made a similar observation after talking to a horn dealer in the northern parts of North Vietnam who had his horn stocks confiscated by members of the drug enforcement unit claiming that they would pay the dealer later.
67. Ayling, "What sustains wildlife trade?" 57–80.
68. Milliken, *Ibid*.; Rademeyer, "Tipping point," 1–64.
69. Compare with Klaus von Lampe's database of 190 definitions of organised crime.
70. See Hübschle, "The social economy of rhino poaching," 427–447.  
Ayling, *Ibid*.
71. Several conservation NGOs are involved in demand reduction campaigns in consumer countries. Lack of objective measurement as to the size of the illegal market renders the impact of such campaigns an educated guess.
72. According to Joaquim Chissano, the former president of Mozambique, South African security forces had intercepted and shot dead close to 500 Mozambicans in the KNP over the same time period. SANParks officials confirmed that 134 alleged poachers had been killed between 2010 and August 2014. Recent media reports augment the figure to about 200 known deaths. The national parks authority no longer shares the death toll with the public.

73. See note 4 above.”
74. The use of armed guards on ships passing through the Gulf of Aden and the establishment of an international multi-agency Contact Group on Piracy off the Coast of Somalia are believed to have brought down pirate hijackings and demands for ransom. However, pirates appear to have diversified into new ventures, including the provision of protection to fishing trawlers involved in illegal fishing in the region.
75. Although the Kaziranga National Park in India has achieved rhino population growth, Vira, “India’s Militant Rhino Protectors” argues that these conservation successes have come at a high cost affecting relationships with local people living near the park.
76. Aryal et al., “Global Lessons from Successful Rhinoceros” argue that beyond changes in policy and coordination of law enforcement, the role of local communities in protecting and profiting from wildlife was a crucial element of Nepal’s success in reaching a zero-rhino poaching rate for four consecutive years.
77. Compare with Annecke and Masubelele, “A review of the impact of militarisation,” 195–204; Hübschle, “The social economy of rhino poaching,” 427–447.

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## Notes on contributor

*Annette Hübschle* is a senior researcher and postdoctoral fellow with the Institute for Safety Governance and Criminology at the University of Cape Town (UCT). Annette holds a PhD in Economic Sociology from the International Max Planck Research School on the Social and Political Constitution of the Economy and the University of Cologne and a Masters of Philosophy in Criminology from the University of Cape Town. Her research focuses on the governance of safety and security with a specific focus on illegal wildlife economies and environmental futures, as well as the interface between licit and illicit economies, and environmental and social justice. Before joining UCT, Annette was a doctoral researcher in the Illegal Markets research group at the Max Planck Institute for the Study of Societies in Germany. In the past, Annette worked as a senior researcher for the former Cape Town office of the Institute for Security Studies, a pan-African applied policy institute. She led and conducted research into organized crime and

terrorism in Africa. Annette has worked as a researcher, consultant, and practitioner on a variety of organized crime, environmental security and broader African security issues. She also acts as a senior research advisor to the Global Initiative against Transnational Organized Crime.

## ORCID

Annette Hübschle  <http://orcid.org/0000-0002-7566-7067>

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