University of Trento

Doctoral School of International Studies

Transit crimes in the Internet age:

How new online criminal opportunities affect the organization of offline transit crimes

A dissertation presented

by

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in partial fullfillment of the requirements

for the degree of Doctor of Philosophy

December 2013

University of Trento

Doctoral School of International Studies

Transit crimes in the Internet age:

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PhD Programme in International Studies, XXVI cycle

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Academic Year 2012/2013

Abstract

There is a general consensus that the Internet has expanded possibilities for so-called transit crimes—i.e., traditional trafficking activities. However, the extent to which the Internet is exploited by offenders to carry out transit crimes and the way in which it has changed those offenders' behaviors and the criminal processes remains under-investigated.

The aim of this thesis is to understand what kind of criminal opportunities the Internet offers for conducting transit crimes and how these opportunities affect the organization of transit crimes, as concerns both the carrying out of the criminal activity and the patterns of relations in and among criminal networks.

In order to achieve this goal, a model of script analysis—a way to highlight the sequence of actions that are carried out for a determinate criminal activity to occur— was developed in order to classify the criminal opportunities that the Internet supplies for selected transit crimes (wildlife trafficking, trafficking in counterfeit medicines, sex trafficking, and trafficking in recreational drugs), to identify cyber-hotspots, and to allow a richer and deeper understanding of the dynamics of Internet-mediated transit crimes. The data were collected by means of case study research and semi-structured interviews to law enforcement officers and acknowledged experts.

For each criminal activity considered, through the script framework it has been possible to identify different types of criminal opportunities provided by the Internet. The empirical evidence presented demonstrates that the criminal markets considered have become—even if to a different extent—hybrid markets which combine the traditional

social and economic opportunity structures with the new one provided by the Internet. Among other findings, this research indicates that not only has the Internet opened the way for new criminal actors, but it also has reconfigured relations among suppliers, intermediaries, and buyers. Furthermore, results were compared across transit crimes to illustrate whether and to what extent Internet usage impacts them differently. The differences seem to depend primarily on the social perception of the seriousness of the criminal activity, on the place it fills in the law enforcement agenda, and on the characteristics of the actors involved.

This study, albeit with limitations, provides an accurate description of the Internet as crime facilitator for transit crimes. It concludes by highlighting the possibilities of environmental criminology as a theoretical framework to investigate Internet-mediated transit crimes, offering some final observations on how relevant actors behave online, and suggesting new directions for research.

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Acknowledgements

regard to my theoretical framework. He made me feel part of a stimulating community and he has been generous with precious suggestions. I will forever be thankful to Ronald Clarke. He is a real role model and mentor. His enthusiasm and love for teaching and research are contagious, his kindness and readiness to help inspiring. I would also like to express my sincere gratitude to Edward Kleemans, who provided encouraging and constructive feedbacks. The discussions that we had were always very beneficial and provided me with new insights. Furthermore, he has been of great help in getting contacts with my interviewees in the Netherlands. With regard to my research period at Rutgers, my thanks would not be complete if I did not mention Dean Todd Clear, who has been my primary resource for getting contacts with my interviewees in the US. I would not have been able to get valuable data in such a short period of time without his help. A very special thank goes to Phyllis Schultze from the Don M. Gottfredson Library of Criminal Justice, a wonderful person who certainly sets new standards for efficiency and support.

I wish to express my profound gratitude to all the law enforcement officials and other key informants that I have consulted in the course of this research and who have provided invaluable assistance. Without their help, this study would have never been possible.

To the many people that gave me constructive feedbacks at the various conferences I have attended and to the anonymous referees of the journals where I have submitted some parts of this study, thank you for helping to shape and guide the direction of this work with your careful comments.

A good support system is important to surviving grad school. My time at Trento was made enjoyable in large part due to the many friends that became (and remained) a part of my life. Thank you for your moral support: you kept me smiling, and helped me to keep things in perspective. A big thank you in particular to my PhD colleagues and friends Yuliya, Viktoria, and Irina for the stimulating discussions and all the encouragement. In addition, I wish to thank the members of the eCrime research group. Thank you also to the friends and colleagues of the Standing Group on Organised Crime. I had the best conversations about criminological research over a pint of beer with you, and the

invaluable chance to learn a lot, from all of you. A special thank you to Catherine for proofreading my abstract.

Of course no acknowledgments would be complete without giving thanks to my parents. I would like to thank especially my mother for teaching me about persistence, resilience, and self-respect.

Finally, a tremendous thank you goes to my partner, Gianluca, who has also helped me with the LaTeX editing of this dissertation. Through his love, kindness, and unwavering belief in me, I've been able to complete my PhD research, enjoy the journey, and maintain my sanity. Regardless of distance, I never felt alone with Gian by my side.

For any errors or inadequacies that may remain in this work, of course, the responsibility is entirely my own.

Chapter 1

Introduction

"People ask me to predict the future, when all I want to do is prevent it. Better yet, build it. Predicting the future is much too easy, anyway. You look at the people around you, the street you stand on, the visible air you breathe, and predict more of the same... I want better".

Ray Bradbury, Beyond 1984: The People Machines (1979)

1.1   Research significance

The society we all are living in has been affected by major changes in the ways in which we interact and communicate with each other thanks to the use of the Internet. Indeed, the Internet has peculiar characteristics when compared with other forms of Information and Communication Technologies (ICTs), since it is not only a technical tool but also a part of today's culture (Maltzahn, 2005). It has accelerated some of the features that characterize late modernity and created a new social space where modern and traditional social orders are increasingly separated and where "being and interaction are grounded within technology" (Walker et al., 2000: 15). The Internet can be conceived as a new social environment characterized by being virtual, dynamic, interactive, global, commercialized, and networkable. Its usage is more and more widespread: the world's online population

is currently estimated to be almost 2.5 billion, about 33 per cent of world total population (Internet World Stats, 2012).

Crime is part of this society, and it is not immune to these changes. Not surprisingly, the possibilities offered by the Internet to perpetrate crimes have attracted the attention of criminologists for more than two decades. Most scholars have underlined how the Internet has enabled the existence of new types of crimes, such as spamming and malicious software, exposing its users "to a panoply of new risks while threatening the communications and commercial infrastructure" (Wall, 2004: 309). However, not only does the Internet provide a new space for committing new types of crimes, but it also facilitates traditional crimes perpetrated in the real world (Newman, 2009). The latter aspect remains under-investigated.

Does the Internet facilitate also traditional transnational organized crimes? Some believe that transnational organized crime is just a mouse click away:

> "Organized crime is primarily about the pursuit of profit and can be understood in Clausewitzian terms as a continuation of business by criminal means. Consequently, just as brick-and-mortar companies move their enterprises on to the Worldwide Web seeking new opportunities for profits, criminal enterprises are doing the same thing".
> (Williams, 2001: 22)

As underlined by Williams (2001) among others, it is at least likely that organized criminal groups have taken advantage of the new opportunities offered by the Internet for carrying out their illegal businesses (Williams, 2001; Yar, 2006; Grabosky, 2007). It is hardly surprising that benefits from using the Internet are not lost on the transnational organized crimes and particularly for so-called transit crimes—i.e., criminal trafficking activities (Kleemans, 2007): having no borders, the virtual word is indeed extremely attractive for transnational criminals involved in illegal and illicit trades, who could take advantage of greater international mobility and more rapid and secure communications. For instance, thanks to the inherently transnational character of the Internet, the physical location of

criminal actors is less important than it was before, providing them with the opportunity to operate in countries where there are loopholes in legislation and security that can be exploited or to easily connect with distant criminal peers (Shelley, 2003; Grabosky, 2005; Europol, 2011a).

Also an increasing number of news media and investigative reports underline that the Internet is a tool exploited by criminals in transnational trafficking flows. Just to give a few examples, the UK Child Exploitation and Online Protection Centre has recently emphasized (CEOP, 2010) some of the risks connected to the Internet in cases of trafficked children, where it is used for instance to make primary contacts with victims in order to arrange offline meetings. Similarly, the last Zoomafia reports edited by the Italian Anti-Vivisection League (Troiano, 2011, 2013) have underlined the role of the Internet in facilitating the trafficking in domestic and exotic animals—some of them worth thousands of Euros—by criminal groups with a high degree of sophistication. One has only to take a look at the websites of institutes like the FDA (U.S. Food and Drug Administration) or the AIFA (the Italian Medicines Agency) to realize the importance of the Internet in the dangerous trade of counterfeit pharmaceuticals (AIFA, 2012; FDA, 2012). These examples, drawn from heterogeneous fields, have something in common: the fact that the Internet has the role of a crime facilitator, by providing new criminal *opportunities* for certain types of criminal commerce (in persons, animals, or objects) to happen. However, news media and investigative reports seem not to pay enough attention to the modalities and the extent to which this is true. Even if there is an increasing attention concerning the relationship between the Internet and these types of criminal activities, there is still a lack of criminological research on this topic. It is not easy to distinguish between new stereotypes and what is actually going on: in what ways does the use of the Internet facilitate trafficking flows? Is the Internet changing the criminal panorama as concerns these criminal activities? To what extent? How? These and many more questions still need to be answered.

1.2   Structure of the thesis

Before moving into the substantial elements of this PhD dissertation, it is useful to provide an outline of its structure.

Chapter 1 has broadly introduced the rationale of this study, presenting the main issues that will be debated in substance in the rest of this work.

Chapter 2 reviews the literature and identifies the research questions. First of all it briefly presents the notion of *transit crimes.* By using this notion I can avoid the ambiguity of the wording "transnational organized crime" and identify more precisely the types of criminal activities I am looking at. Moreover, in this way the focus is on the criminal activity rather than on the criminal group, and thus on the *how* rather than on the *who.* The second part of this chapter introduces the main theoretical premises on which this dissertation has been developed. Since I am investigating *how* transit crimes are committed and the *opportunities* that the Internet provides them, environmental criminology can offer a proper theoretical framework for my research. The use of this theoretical approach to investigate complex crimes and Internet crimes has already been used in the literature. However, this framework has never been used to specifically identify the criminal opportunities provided by the Internet for transit crimes. Furthermore, as concerns the relationship between the use of the Internet and traditional transit crimes, the review of the literature reveals that this issue remains under-investigated: at present there is no empirical research that the Internet represents more than an enhanced communication tool for these types of criminal activities, and the consequences that the Internet has brought to them are still not clear. After having identified a gap in the existing literature, the final part of Chapter 2 specifies the overall aim of my research and presents the research questions.

Chapter 3 presents the research design. First of all, it introduces the principles of script analysis: indeed, this approach will help me to highlight the opportunities the Internet offers to carry out transit crimes and to give a more comprehensive and precise description

of how actors involved in these criminal activities behave in the Internet environment. Secondly, a selection of transit crimes that I have taken into consideration for my analysis will be presented and the rationale for this choice explained. After briefly dealing with the methodological considerations that have driven my research choices, this chapter continues by describing how data have been collected and by explaining the analytical strategy I have used to address my research questions—i.e., the crime script scheme used to analyze my data. The final part of this chapter discusses the limits of the research.

Chapter 4 consists of the analytical part of this research. For each transit crime taken into consideration, after a brief and focused literature review, data are organized in crime scripts, and findings are thoroughly discussed. A final section compares findings across transit crimes to illustrate whether—and, if so, to what extent—the use of the Internet impacts them differently.

Chapters 5 concludes this PhD dissertation by presenting some additional findings of interest and by outlining new directions for further research.

Chapter 2

Literature review
and research questions

*"Nature has placed mankind under the governance of two sovereign masters,
pain and pleasure. It is for them alone to point out what we ought to do, as
well as to determine what we shall do. On the one hand the standard of
right and wrong, on the other the chain of causes and effects, are fastened to
their throne".*

Jeremy Bentham, An Introduction to the Principles of Morals and Legislation (1789)

2.1   Introduction

With the emergence of new Information and Communication Technologies (ICTs) and in
particular computers in the last century, criminals found themselves operating within
a new environment: ICTs have created an almost unlimited market-place for the
propagation and sale of ideas, goods, and services, with huge possibilities for deception
(Walker et al., 2000: 1; Pease, 2001: 23). Following these technological developments,
criminologists have begun to pay increasing attention to crime and deviance involving
the use of these new tools, and to search for new forms of understanding. The Internet, in
particular, not only has positively affected the lives of millions of people in areas ranging
from commerce to entertainment, but it also has provided new opportunities for illegal

activities, enabling potential criminals to commit large-scale offences with fewer personal risks and costs (Bequai, 2001; Smith and Jorna, 2011; Wang and Huang, 2011). The role of the Internet as crime facilitator has proven to be a real time critical issue.

Despite the fact that criminological research on ICTs-related issues is a relatively new area of inquiry, a number of studies have already addressed the criminogenic features of the Internet. Most of these works, however, have taken into consideration "new" types of crimes, so-called *cybercrimes in a narrow sense*—any criminal act that uses electronic operations and that targets the security of computer systems and data—while *cybercrimes in a broader sense*—any criminal act committed by means of, or in relation to, a computer system or network—so far have received very little scholarly attention[1].

Having a proper theory to describe and explain how certain criminal groups behave in the Internet environment is necessary in order to assist crime policy and practice to deal with offenders in the real world and to think about crime prevention. Different theoretical frameworks have been used to address the role of the Internet in criminal activities. The mainstream literature, consistent with so-called environmental criminology, has focused on the new opportunities for criminal activities offered by the Internet. In doing so, however, the notion of *opportunity* has been considered only in general terms: the criminogenic potential of the Internet has been recognized, but the ways in which criminals behave in the new online environment are still under-investigated (Savona and Mignone, 2004). Only recently there has been new attention to elaborate innovative theories—such as Jaishankar's Space Transition Theory—that take into consideration the peculiarities of the Internet environment (Jaishankar, 2007, 2009)[2]. However, while this approach is promising for explaining new forms of crime that can take place entirely in

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[1] As reported by Jaishankar (2009: 286), this distinction between cybercrimes in a narrow or broader sense has been first made in a workshop during the Tenth United Nation Congress on the prevention of Crime and Treatment of Offenders (2000). For a similar distinction, see also Burden et al., 2003.

[2] In his Space Transition Theory, Jaishankar (2007, 2009) considers the movement of persons from physical to cyber space and the other way round, starting from the assumption that people tend to behave differently in the physical world and in the Internet. Jaishankar argues that people's behavior is different when they move from one space to another and that this movement has

the virtual space, it does not consider criminal activities that are facilitated by the Internet but are finalized or developed substantially in the physical world, such as transit crimes.

What do we know about the types of criminal opportunities the Internet provides for traditional transit crimes to occur? What are the ways in which the Internet affects these types of criminal activities?

To answer these questions and to set this dissertation in the context of existing research, this chapter reviews the relevant literature. Section 2.2 defines the notion of *transit crimes* and delimitates the scope of my research to these types of criminal activities. Section 2.3 offers a synthetic outline of the literature addressing the theoretical approach informing this study, i.e., environmental criminology: after briefly introducing the main concepts—in particular, *criminal opportunity*—and the themes addressed by environmental criminology, this section considers the existing body of research dealing with how the Internet can provide new opportunities for crimes, thus serving as crime facilitator. Section 2.4 shows how at present there is only little empirical research that the Internet represents more than an enhanced communication tool for transit crimes, by examining (the rare) existing studies on the relationship between the Internet and complex, organized crimes. It takes into account both studies addressing criminal activities (basically drug trafficking and sex trafficking) and those regarding organized criminal groups that are usually considered involved in these types of activities. The chapter concludes by identifying and making explicit the gap in the existing literature that this dissertation aims to fill, and by specifying my research questions (Section 2.5).

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criminogenic features. For instance, he hypothesizes that persons who repress criminal behavior in the physical world have a propensity to commit crimes in cyberspace, and that criminal acts can be exported from physical to cyber space and vice-versa. It's easy to think of episodes—such as in cyber-bullying and cyber-stalking cases—when the Internet has been used as a shield that allows individuals to lower their inhibitions and to exhibit antisocial behavior, with serious repercussions also in the physical world (Patchin and Hinduja, 2006). Space Transition Theory has started to be empirically tested only recently to see whether it is possible to predict or determine the occurrence of computer crimes. However, preliminary results seem to show that Jaishankar's postulates are not applicable to all types of cybercrimes: according to the findings of Danquah and Longe (2011), for instance, in cases of cyber-violence, cyber-pornography, and cyber-trespass there was no record of people colluding online to commit a crime in the physical space, thus contravening one of the theory's postulates.

2.2 Transit crimes

This section identifies the types of criminal activities examined in this study by conducting a focused literature review on so-called *transit crimes*, which can be defined as international illegal trades where criminal groups are involved using the same opportunity structure that facilitates legal economic activities (Kleemans, 2007: 176). The notion of transit crimes has been developed as an alternative concept in policy and research circles in the Netherlands to get rid of the wording "transnational organized crime" (Kleemans, 2007).

The notion of transnational organized crime has dominated the international crime control agenda over the last three decades, and it still marks it in a considerable way, being increasingly studied by scholars and practitioners. However, this notion remains controversial and ambiguous (Edwards and Levi, 2008; Felson, 2009; Alach, 2011; van Dijk and Spapens, 2013). Indeed, even if it has become widely accepted in the rhetoric of social scientists, policy makers, and law enforcement officials, the boundaries of what to include and what not under this umbrella term are not yet clear.

From a legal point of view, the notion of transnational organized crime is defined at the international level in the United Nations Convention against Transnational Organized Crime, adopted by the General Assembly resolution 55/25 in November 2000 and opened for signature at the Palermo Conference the following month[3]. As underlined by

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[3] According to the Palermo Convention, an "organized criminal group" is "a structured group of three or more persons, existing for a period of time and acting in concert with the aim of committing one or more serious crimes or offences established in accordance with this Convention, in order to obtain, directly or indirectly, a financial or other material benefit" (art. 2a), a "structured group" being "a group that is not randomly formed for the immediate commission of an offence and that does not need to have formally defined roles for its members, continuity of its membership or a developed structure" (art. 2c). The element of transnationality is defined by the act instead: "an *offence* is transnational in nature if: (a) It is committed in more than one State; (b) It is committed in one State but a substantial part of its preparation, planning, direction or control takes place in another State; (c) It is committed in one State but involves an organized criminal group that engages in criminal activities in more than one State; or (d) It is committed in one State but has

Longo (2010), the Convention adopted a "two level approach" in which the presence of an organizational structure (identified very broadly) is ontologically part of organized criminal groups, while the element of transnationality refers to the nature of the criminal act[4]. Thus, the transnational dimension is seen as the mere "reorganization" of traditional organized crime activities to adapt to the increasing globalization of the international system (Longo, 2010: 25). However, a problem remains as concerns the expression "organized crime", for which the "dilemma between generalisation and specification" (Edwards and Gill, 2002: 204) has not yet been fully solved, probably because it is not a neutral and aseptic notion but one that is deeply soaked with historical and cultural elements.

It has often been underlined how it is possible to look at (transnational) organized crime by focusing both on the criminal group or on the criminal activity carried out (Cornish and Clarke, 2002)[5]. So far, attention has mainly been given to criminal

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substantial effects in another State"(art. 3.2, italics added). This approach has been adopted also at the European level: indeed, the EU has ratified the UN Convention on Transnational Organized crime in 2004 (Council Decision 2004/579/EC). Though having maintained this approach, the EU has slightly revised its definition of organized crime in 2008 (Council Framework Decision 2008/841/JHA, art. 1). Recently, the EU made a new call to submit a draft directive that contains a more concrete definition of organized crime. One criterion is that the new directive should focus "in particular on the key concept of organisation" and take into account new types of organized crime (European Parliament, Committee on Civil Liberties, Justice and Home Affairs, 2011, par. 7).

[4] In this way, the problem that organized crime can be described either by the activities it engages in or by the groups involved (Albanese, 2008) has been overcome. Moreover, this approach allows to avoid the "paradoxes of organized crime" (Paoli, 2002) that occur when the term is used to capture both the criminal activities and the organization itself. Indeed, especially in its transnational dimension, organized crime is best described as "the fluid way to act of several organized ethnic groups which link each others for strategic, tactic, or logistic reasons", no matter "the level, duration and intensity of the cooperative relationships among different groups" (Longo, 2010: 22): in fact, the fluidity (or "disorganization") of transnational organized crime is necessary to be competitive in criminal markets (Reuter, 1983).

[5] This is a traditional distinction in criminological research on criminal organizations. Cohen, already in his 1977 study of the concept of criminal organization, distinguished between "structures of *activity*" and "structures of *association*" (98-99, italic in original): "for one thing, they are different kinds of patterning we can discover when we look at the same universe of events from two different points of view. For another thing, neither can be understood except in

groups, while relatively few researchers—such as the ones working on the application of situational crime prevention to organized crimes (see Section 2.3)—have focused on the criminal activities (transnational organized *crimes*), thus looking at the *how* rather than at the *who* (Bullock et al., 2010). In mainstream (transnational) organized crime research (the one looking at the groups), despite the presence of a common international legal framework, it appears that there are "as many descriptions of organized crime as there are authors" (Albanese, 2000: 410). Without lingering too long on this aspect, which exceeds the scope of this dissertation, it should however be underlined how criminological definitions of organized crime include a variety of phenomena—ranging from traditional and stereotypical Mafias to simpler criminal groups—thus shifting from overly narrow to overly broad definitions. The very nature of the criminal phenomena described by this label makes its definition problematic (Abadinsky, 1981/2010; Finckenauer, 2005; Wright, 2006; van Duyne and van Dijck, 2007; Arsovska, 2011), because organized crime is conceptualized around the world in different ways, depending on the historical context (Hobbs, 1998; Liddick, 1999; Albanese et al., 2003; Wright, 2006; Lavorgna et al., 2013). To borrow the words of Dina Siegel and Henk van de Bunt (2012: vii), "there is no doubt that organized crime has many faces, but it is also holding up a mirror to every society in which it is able to manifest itself".

Starting from these premises, it is easy to understand how transnational organized crime research is a broad and dynamic field of study. In a recent publication, von Lampe (2012) has specified what types of criminal activities are considered to be part of this body of research: he underlines that even if most scholars have their centre of attention on drug trafficking and trafficking in human beings, there are several studies dealing—for instance—with cigarette smuggling, trafficking in stolen vehicles, trafficking in stolen art and antiquities, trafficking in protected wildlife, trafficking in arms, illicit waste disposal, fraud, and organized cybercrime. Even if transnational organized crime should not be

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relation to the other. To understand the team, we must know something about the games they play and, to understand the games, we must know something about the organisation, interests and problems of the teams that play them".

reduced to illicit and illegal trades—where *illegal* refers to the trade of a product forbidden by law (such as heroin) and *illicit* to the trade of a product that could be legally traded under different circumstances (such as in the case of cigarette smuggling) [Table 1][6]— these opportunistic and market-driven criminal activities appear to be the core problem of transnational organized crime[7]. This is exactly why the concept of *transit crime* has been introduced—i.e., to underline that the primary businesses of organized crime are international smuggling activities, while ignoring all the activities involving controlling economic sectors or regions that characterize only certain experiences of organized crime (Kleemans, 2007: 169 ff; Lavorgna and Sergi, 2013, forthcoming). Moreover, in this way the focus is on the criminal activity rather than on the criminal group, thus allowing researchers to focus on the *how* rather than on the *who*. Similarly, this permits to suspend judgment on the minimum degree of organization and sophistication that is necessary and sufficient in order to label a criminal group as "organized": indeed, groups

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[6] To some extent, it is possible to depict the possible marketplaces for legal and criminal businesses as in Table 1, where the term "legal business circumstance" indicates that the business is performed in accordance with the law. According to this framework, the term *illicit* would then describe just the other face of the legitimate industry, while the term *illegal* would refer to a market that is forbidden because it endangers some fundamental interests of society. This distinction, which is often overlooked, is important: indeed, the fact that criminals operate in a "grey" or in a "dark" market entails different challenges that have to be met, and thus different patterns follow. For instance, are criminal actors selling pets via the Internet following different steps than their legal counterparts? How does the system of opportunities in the Internet environment change if they are selling cocaine instead? And what if they are advertising a good or a service that is legal where the server is located but not where the consumer is?

[7] Indeed, transnational organized crime may concern a wider set of crimes, from extortion and murder to infiltration of legitimate business and money laundering. However, the provision of illicit goods and services not only is considered one of the major threats that have to be addressed as an international priority (UNODC, 2010; McCarthy, 2011), but also as the core problem of transnational organized crime. For instance, the more recent Transnational Organized Crime Threat Assessment report stresses that the main problems of transnational organized crime relate to trafficking flows in drugs, human beings, natural resources, and counterfeit products, followed by trade in firearms, maritime piracy, and cybercrime (UNODC, 2010). In fact, most organized criminal groups operating transnationally are involved in one or more of these illegal trades (Glenny, 2008; McCarthy, 2011). Furthermore, as underlined by Naylor (2002/2004: 15 ff), organized crime is easily associable with market-based offences, where the flow of trafficked products to willing consumers needs a structure to be maintained over time.

Table 1 – *Marketplaces for legal and criminal businesses*

	Legal good or service	Criminal good or service
Legal business circumstances	Legal market	
Criminal business circumstances	Illicit (grey) market	Illegal (dark) market

involved in transit crimes are conceived as "criminal networks", avoiding conceptions of organized crime as hierarchical, pyramidal structures that are not in line with empirical facts (or, at least, that could depict only a sub-species of organized crime in certain specific geographical manifestations) (Kleemans, 2007: 170)[8].

Despite the obvious differences between trafficking a person, stolen antiquities, and ivory, all transit crimes share several common features, since they are all comparable to commercial businesses[9]. Like their legitimate counterparts, criminal networks employ all the features that are best designed to carry out their activities (Cohen, 1977: 103; Godson and Olson, 1995: 20; Dean et al., 2010). After all, as underlined by Bouloukos et al., "crime is often considered organized... if the activity is one of continuing criminal enterprise", meaning that criminal networks involved in transit crimes adopt strategies and assets that are comparable to those used in licit activities (2003: 178). Indeed, enterprises take place across a spectrum including both legitimate and criminal businesses, and the separation between what is legal and what not is not intrinsic but it is rather set at an arbitrary point (Smith, 1980: 370-371). There is an "essential ambiguity" between criminal and legal

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[8] As emphasized by Naìm (2006: 240), the real focus in considering trafficking flows are transactions rather than commodities, since most criminal groups involved operate as opportunistic economic agents: they do not care what they trade as long as there is a valuable profit, which entails that in many cases only at the local level—the extreme end of the trafficking chain—there are product specialists. In a way, criminal groups are more interested in skills than in products, which implies changes in the very structure of organized crime itself, to the point that the traditional rigid structures are increasingly being superseded by more decentralized, flexible, and dynamic ones (Naìm, 2006: 32).

[9] The idea of comparing certain criminal groups to a business company is not new, especially as concerns organized crime. See, for instance, Smith, 1975; Naylor, 1997; van Duyne, 2006; Albanese, 2008; Bouchard and Wilkins, 2009; Smith, 2009; McCarthy, 2011.

commerce (Hobbs, 1995: 9): the legality threshold can originate in the market economy or it can rather be identified by politics when the threshold aims at protecting social values that are not inherent in the market economy, as in the case of consumer or environmental protection (Smith, 1980: 378). As Schelling argued (1984: 175):

> "We single out certain goods and services as harmful or sinful; for reasons of history and tradition, and for other reasons, we forbid heroin but not tobacco, gambling in casinos but not on the stock market, extramarital sex but not gluttony, erotic stories but not mystery stories. We do all this for reasons different from those behind the laws against robbery and tax evasion. It is policy that determines the black markets. Cigarettes and firearms are borderline cases. We can, as a matter of policy, make the sale of guns and cigarettes illegal. We can also, as a matter of policy, make contraceptives and abortion illegal. Times change, policies change, and was banned yesterday can become legitimate today; what was freely available yesterday, can be banned tomorrow".

Thus, the upper-world and the criminal underworld should not be seen as two unrelated and non-communicating realities, because between legal and dark markets there are grey areas where the boundaries of what is criminal and what not are more blurred, and no product is safe from illicit trade, including master and doctoral dissertations[10].

How has the Internet revolution transformed the way in which criminal businesses are carried out? It is at least likely that the same technology that is successfully used to open new frontiers in legal commerce is also exploited to enhance the efficiency of illegal and illicit trades. In order to answer this question, in particular by identifying the system of opportunities that are used for transit crimes to occur in the Internet age, environmental criminology provides a sound theoretical framework.

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[10] It is sufficient to surf the Web to find sites, such as *Bestdissertation.com*, that despite the presence of some forms of disclaimer basically offer a whole range of academic papers.

2.3 Applying the environmental criminology perspective

2.3.1 *Opportunity as cause of crime:*
origins and evolution of environmental criminology

In recent years, an increasing number of studies have investigated complex criminal activities by looking at *criminal opportunities*—i.e., "what provides both the *occasion* (the objective condition) for the action and the *temptation* (the condition perceived as favorable)" (Mayhew et al., 1976: 7, emphasis in the original). This notion of opportunity comes from the theoretical framework of environmental criminology. Under the broad umbrella of *environmental criminology*—that here is taken into consideration more as a multifaceted framework rather than as a rigorous theoretical model—three main complementary theories have been developed about predatory crimes that, while operating at different levels of explanation, share the idea that opportunity is a root cause of crime (Felson and Clarke, 1998) and aim to reduce crimes by looking for crime patterns in specific environments (Clarke, 2009: 262). Once it is recognized that opportunity plays a fundamental role in shaping behaviors, reducing opportunities is seen as the best way to combat crime: this goal can be implemented by identifying how offenders and victims interact in their everyday lives and consequently by manipulating the immediate environment to prevent the commission of crimes.

Rational choice theory (Cornish and Clarke, 1986) is a micro level theory dealing with the decision-making process that reasoning offenders undertake when they decide to commit a crime. *Crime pattern theory* (Brantingham and Brantingham, 1993) is a meso-theory focused on the geographical distribution of crime that explains criminal behaviors by looking at the interactions between targets and offenders in their daily routines. Finally, *routine activity* (Cohen and Felson, 1979) is a macro-theory dealing with broader societal changes affecting crime opportunities (Clarke, 2005): it relates criminal activities to the everyday patterns of social interaction, starting from the idea that, for a criminal act to happen, there has to be convergence in space and time of a likely or motivated offender, a suitable target, and the absence of a capable guardian. According to this view, "the

opportunity for... crime [is] enmeshed in the opportunity structure for legitimate activities to such an extent that it might be very difficult to root out substantial amounts of crime without modifying much of our way of life" (Cohen and Felson, 1979: 605). The very products of "freedom and prosperity" that we can find in the routine activities of our lives may also increase the opportunity for crimes (Cohen and Felson, 1979: 605).

As summarized by Clarke (2009: 262 ff), all these theories are grounded on four main assumptions: first, crime is intended as a real act and not as a mere propensity towards criminal behavior, and thus it is seen as the actual result of an interaction between a certain motivation and a specific situation. In other words, unlike criminological theories that try to explain why some people become criminals by looking at biological or social dispositions, environmental criminology focuses on the system of opportunities that allow a specific type of crime to occur. Secondly, offenders choose to commit crime because they believe this will bring them a certain type of benefit. In the third place, opportunity is explicitly recognized as a fundamental cause of crime, enabling individuals to start a criminal career or to commit a greater number of crimes. Finally, all these theories argue that situational factors can stimulate crime, as in the case of the urban disorder explained by the broken windows theory (Wilson and Kelling, 1982)[11]. The focus is thus on the situation in which crime occurs and on the "stimulus conditions" (Mayhew et al., 1976: 2) that provide opportunities and inducements for the criminal event. If behavior is seen in a dynamic relationship with the environment, the propensity to commit crime depends upon immediate circumstances, which have an active role in "readying" the (potential) criminal to act (Wortley, 1997: 74). In other words, all these theories build on the saying that "opportunity makes the thief" (Felson and Clarke, 1998: v), being grounded in the idea that opportunity—conceived considering the risk/benefit ratio—is a major driver for crime (Laycock, 2010: xv). That opportunity is a cause of crime has been shown by a large number of studies, in particular evaluative case studies and interviews with offenders (Clarke, 2005).

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[11] The broken windows theory is a criminological theory stating that vandalism and escalation into more serious crimes can be stopped by maintaining and monitoring urban environments in a well-ordered condition.

Having "depathologized" crime (Cornish and Clarke, 1986: 15), environmental criminology offers some important ideas that are of great interest when applied to types of criminal behavior other than predatory crimes. Indeed, this approach can be applied to organized crimes and in particular to transit crimes, which are rational and economic phenomena, and not (at least not only) moral ones (Naìm, 2006: 239). After all, the initiators of opportunity theories claimed that their analyses could be applied to different types of crimes in the future: for instance, Cornish and Clarke (1986: 14 ff) have explicitly addressed the possibility that rational choice theory be extended to a wider variety of crimes, such as corporate crime. Furthermore, in conclusion of their seminal work, Cohen and Felson (1979: 605) foresaw that routine activity theory could be applied not only to criminal activities but also to criminal offenders and their inclinations, to the point that they have suggested the integration of their work with approaches focusing on different criminogenic factors that might affect the likelihood of a crime, such as social control. Thus, not only the notion of opportunity is also relevant to different criminological approaches and explanations of crime that look at social structures and processes can also benefit from the concept of opportunity, but the idea that the immediate environment plays an active role in the formation of behavioral patterns can be applied also to more complex criminal activities.

According to some scholars, the theoretical framework of environmental criminology—and shared by the approach to crime control identified as *situational crime prevention*[12]—entails a basic difference from traditional criminology, which focuses more on criminals' motivations than on crime events themselves (Clarke and Felson, 2010). According to this vision, while situational crime prevention enjoys well documented successes, traditional criminology has generally failed to reduce crime, and it has not fully benefited

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[12] This approach, originally developed out of the UK Home Office research programs from the 1960s, seeks generally to alter the "near" or immediate causes of crime by modifying the decisions that precede the commission of a crime. Proximal causes closest to the criminal event are seen as the most easily changeable (Clarke, 2008). The reduction of crime is achieved through twenty-five mechanisms that can be reduced to five main opportunity-reducing techniques: increasing the offender's perceived effort, increase the risk, reduce the rewards, reduce provocations, and remove the excuses (Clarke, 1992/1997; Cornish and Clarke, 2003).

yet from the incorporation of opportunity theories (Clarke, 2005; Smith and Clarke, 2012). For this reason, "crime science" has been proposed as a discipline alternative to mainstream criminology, adopting an evidence-based, multidisciplinary, and problem-solving approach (Clarke, 2008). While the necessity to develop crime science as a separate discipline is debatable (since it shares the same scope and rationale of significant parts of traditional criminology, even if has a different focus), what is certain is that environmental criminology has a lot to offer to several fields of research and emerging areas of study investigated by mainstream criminology, including the study of transit crimes.

Even if environmental criminology has been adopted as a theoretical framework mainly to "conventional high-volumes crimes"—such as burglary and shop theft (Heal and Laycock, 1986; Bullock et al., 2010: 5)—this approach has been constantly under refinement and its scope increasingly extended (Newman and Freilich, 2012). Especially in its practical application of situational crime prevention, environmental criminology has been used in recent years to inform the research agenda on a series of different deviant and criminal acts such as violent behavior (Shoham, 1997), child sexual abuse (Wortley and Smallbone, 2006), corruption (Gorta, 1998; Sidebottom, 2010), mortgage fraud (van Gestel, 2010), and e-commerce crime (Newman and Clarke, 2003). A further step forward has been achieved by Clarke and Newman, who refer to "outsmarting terrorists" drawing on the field of situational crime prevention (Clarke and Newman, 2006; Freilich and Newman, 2009; Taylor and Currie, 2012). Having recognized a great degree of overlap between crime and terrorism, these authors have developed the idea that "terrorism can be reduced by identifying and removing the opportunities for it to occur... by systematically analyzing the opportunities that terrorists exploit when committing acts of terrorism, and then finding economical and acceptable means to block these opportunities" (Clarke and Newman, 2006: vii). By looking at the world from the

perspective of terrorists, it would be possible to grasp their decision-making processes and consequently to find effective interventions, interfering in the decisions they make[13].

There are severe difficulties in applying environmental criminology and situational approaches to complex criminal phenomena such as organized (and transit) crimes; one particular problem is that offenders are involved in complicated activities, for prolonged periods of time, and they are often connected in a non-permanent way. Thus, it may be difficult to identify a common modus operandi and to break criminal activities down to understand (and, in case, intervene in) the conditions that allow them to be performed (Laycock, 2010; von Lampe, 2011). Moreover, organized crime can be so complex that even a tangible target in the "crime triangle" of motivated offender, suitable target, and absence of a capable guardian may be absent or difficult to identify (von Lampe, 2010). Finally, the outcomes of preventive measures applied might be extremely difficult to measure, for instance in terms of displacement—i.e., the relocation of crime or criminals as a result of crime prevention measures (Nelen, 2010)[14].

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[13] One of the justifications Clarke and Newman provide in advocating "think terrorist" (22) is that, given that terrorism is a less common crime than those traditionally investigated by situational crime prevention and it is almost impossible to have access to terrorists for research, understanding of how they work step by step is necessary to be able to interfere in their risk/benefit ratio. In this way, by intervening in the conditions of everyday life that make terrorists attacks possible, by protecting vulnerable targets, and by controlling the tools used by terrorists, it could be possible to stop terrorists before they can attack. These issues— both in terms of practical research problems and potential benefits—are common also in the research on (transnational) organized crime.

[14] Also from a practical point of view, law enforcement agencies have been traditionally more focused on the detection or conviction phases rather than in identifying potential criminal opportunities along the whole crime process in countering organized crime. In particular as concerns illegal markets, until now most efforts to tame them have been centered on the supply side of the market, with criminalization through RICO-like statutes (Naylor, 2002/2004: 42). Governments have largely preferred to deploy most of their efforts and resources to attack producers and transporters. Despite the political profitability and maybe the "telegenic" characteristics of these types of responses (Naìm, 2006: 234), criminal markets continue to prosper. A situational approach could serve as a way to emphasize the importance of preventing or disrupting criminal activities and not merely to curb them through the might of the criminal justice system or through interventions on social conditions: in particular these latter, while deserving on other grounds (as in the case of educational programs for potential victims of human trafficking),

Nonetheless, academia has increasingly recognized that there are potential benefits from combining research on organized crime with situational crime prevention approaches (van De Bunt, 2003; Bullock et al., 2010; von Lampe, 2011; Felson and Clarke, 2012; Natarajan, 2012). In fact, by using crime prevention techniques, organized crime research might be affected in an effective and efficient way (Bouloukos et al., 2003: 190): it would be possible, for instance, to reduce opportunities such as social arrangements and facilitating conditions that are exploited by criminal groups to make the crime possible or to launder the profit of their criminal activities (Bullock et al., 2010: 7 ff). Indeed, the need for developing more analytical, systematic, and problem-solving approaches in respect to complex forms of crime has been depicted far-back as something necessary to reduce serious criminal activities (Levi and Maguire, 2004).

Some potential or actual uses of situational crime prevention in relation to (transnational) organized crimes have already been established, among other things, for sex-trafficking (Finckenauer and Ko-lin, 2010), infiltrations in the public construction industry (Savona, 2010), the cigarette black market (von Lampe, 2010), timber theft (Graycar and Felson, 2010), and the drug trade (Kleemans et al., 2010). What emerges from these studies is that, so far, most potential points for intervention have been identified in reducing the rewards—in particular by disrupting markets and denying benefits— as well as in increasing the risk by strengthening formal surveillance, utilizing place

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at times have been blamed to show limited effect on existing criminal groups (Graycar and Felson, 2010; Laycock, 2010). However, it should be noted that in practice crime prevention is already used to counter organized crime, even if sometimes it is not recognized as such. As effectively pointed out by Bouloukos et al. (2003: 188), passports are nothing else than a way of increasing the risk of crossing international borders illegally. Administrative approaches such as the ones adopted in the Netherlands (Nelen and Huisman, 2008) and in Italy (Cimmino, 1995) have tried to eliminate opportunities to commit serious crimes by relying on administrative measures and bodies. The new UK National Crime Agency (NCA) underlines the importance of its "target hardening capability" in creating "a hostile operating environment for organised crime groups" (NCA, 2013). Similarly, the former Serious and Organised Crime Agency (SOCA) used to assert that, beyond using traditional criminal justice tools and proceedings, it also relied on "other new and innovative tools and powers to make crime harder to commit", such as disqualification orders, alerts, or the use of license conditions (Bullock et al., 2010: 13; SOCA, 2012). What is this if not an implicit recognition of the potential of situational crime prevention strategies in taming organized crimes?

managers, and reducing anonymity. Moreover, the idea of extending guardianship and assisting natural surveillance has been stressed in cases where complex illicit and illegal trades were at issue (Kleemans et al., 2010; Von Lampe, 2010): for instance, to counter trafficking in chemical precursors for the production of ecstasy, Kleemans et al. (2010: 23) suggest a local approach for a global problem—i.e., to raise awareness among glassblowers, whose glassworks are used in the production of synthetic drugs.

In all these cases, the situational crime prevention approach has been slightly modified, in particular as concerns the level of analysis which has been often broadened: in studying and researching event decisions on complex criminal activities, most researchers have bent the level of analysis toward more general contexts. As Kleemans (2013) underlines, since situational crime prevention is crime specific, it cannot address—just to say—organized crime in general, but it should concentrate "on cocaine smuggling or even more specific activities or events, such as passengers smuggling swallowed 'balloons' of cocaine on transnational flights". Indeed, being crime-specific allows for the identification of the specific opportunity structure exploited by criminals. However, as concerns complex, organized crimes, it has already been shown how existing studies have focused on specific criminal activities (such as sex trafficking or cigarette smuggling), but not *that* specific as in the example of the airplane passengers smuggling cocaine. Even if it is true that these studies, by not looking at specific points in space and time of the criminal act, lose some explanatory and predictive power, they nonetheless show how opportunities and constraints arising from the external environment delineate patterns and trends with regard to complex criminal activities.

To sum up, it should be underlined that environmental criminology—with its focus on the notion of criminal opportunity—has served as the theoretical basis for developing a better understanding of complex and organized criminal activities (as transit crimes generally are) and has become an established framework for investigating *how* these activities are carried out and *what type of opportunities* they exploit.

2.3.2   Internet as crime facilitator

The commercialization of the Internet, like any other technological change, modifies the environment in which crime operates, the opportunity structure, and the dynamics of criminal activities by creating the possibility for offences that are completely new or intervening only in some phases of the activities[15]. For instance, if on the one hand the coming of the Internet has allowed new crimes (such as phishing and data stealing malware), on the other hand it has also allowed criminals to change only some aspects of already existing criminal activities. In the case of child pornography, for example, the existence of this new channel of distribution has permitted a significant increase of the availability and accessibility of child abuse images (Prichard et al., 2011). Indeed, at least in most cases, so-called "cybercrimes" (in a narrow or broader sense) are not something entirely new, but are merely expanding pre-existing deviant possibilities (Grabosky, 2001; Felson, 2006; McGuire, 2007; Smith and Jorna, 2011): they are "new to the extent that technologies are new" and virtual "to the extent that our everyday lives are virtual" (Newman, 2009: 551).

In his sophisticated analysis, McGuire (2007) has effectively stressed how the pivotal change is that "hyperspatialization"—the reduction of time and space in the transmission of information—and the consequent modification in social interaction have transformed the relationship between deviance and control, leading to "a new geometry of harm"[16]. Besides the expansion of criminal possibilities via the Internet, there is also an inflation of

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[15] A good example of the adaptability of crime in this sense is that given by Newman (2009: 553) on the connections between the evolution of certain crimes and the history of money, from metal coin and paper to online transactions. Another similarity can be seen with the increasing mobility that became a feature of everyday life in the last decades, thus providing offenders more lucrative opportunities and anonymity (Canter, 2003; Kirby and Penna, 2010: 196).

[16] According to McGuire, what is usually called cyberspace is a pervasive and integral part of society, that generates crime and deviance as well as new forms of surveillance and regulation: in this way, key dimensions of social systems have been reshaped. For instance, traditional law-enforcement is not enough to ensure safety on the Internet, and site operators and Internet users without any specific training have an increasing role in monitoring and reporting criminal behaviors online.

fears and expectations of harm: there is the feeling that everyone is potentially dangerous and that threats may come from anywhere, at any moment (McGuire, 2007: 7). On the other hand, the so-called "online disinhibition effect" has been recognized in psychology to explain that people behave in cyberspace with less restraint than in the physical world because of factors such as anonymity, asynchronicity (i.e., the fact that conversations do not happen in real time), and minimization of authority, which entail the loosening of social restrictions (Suler, 2004). Furthermore, since the Internet facilitates the sharing of information— sometimes even beyond the control of the person that first published that content—the existing balances between privacy, security, and freedom of speech have been called into question. Thus, the peculiarity of the Internet is that it has redesigned the entire environment in a significant way, abolishing barriers and easing contacts among people in an exponential way.

Environmental criminology can find a new dimension of development in the Internet arena, conceived as a new *locus*. The Internet, in a way, changes the very meaning of "place" in criminology not only by providing a new space where to commit online crimes but also by facilitating crimes perpetrated in the real world (Newman, 2009). Furthermore, as we can distinguish among different types of places in the real world (by way of example, residential or commercial areas, rather than suburbs or central districts), in the same way within the Internet environment we can identify different *loci* depending on different criminal opportunities they provide. According to Newman (2009: 560 ff), there are: places where the information is stored; places that neutralize distance from targets; places where information is traded or exchanged; virtual places that exists only in cyberspace; places where computing and network services are freely available. In short, the Internet is not only a useful tool for connecting people and facilitating commerce, but also a new criminogenic environment. We can interpret it as a *system*—i.e. "any set of organized or consciously developed habitual human behaviours" (Tilley, 2005: 267): as explained by Tilley, certain systems can be conductive to crime because they provide rewards for crime, make crime easy, facilitate its planning or its teaching, promote the creation of criminal networks, generate need, can supply likely offenders or targets, and

can disinhibit, provoke, or legitimate crime. For instance, virtual forums emerged as "convergence setting" for criminals—i.e., locations where potential offenders can easily meet each other, creating new challenges for law enforcement (Soudijn and Zegers, 2012). Thus, the Internet provides a certain structure and continuity for criminal activities: the criminogenic setting persists despite changes in the persons participating in it (Felson, 2006: 10)[17].

To explain crime on the Internet, many criminological scholars have already used environmental criminology and especially Cohen and Felson's routine activity theory (Adamski, 1999; Clarke, 2004; Grabosky, 2007; Holt and Bossler, 2008; Cox et al., 2009; Ouimet, 2009; Smith, 2010; Choi, 2011; Marcum, 2011). These approaches have been only slightly adapted to cyberspace, "where traditional conceptions of time and space are less relevant" (Reyns et al., 2011: 1149)[18]. For instance, focusing on the lifestyle changes due to the development of the Internet, Aebi and Linde (2010) underline how young people in Western Europe have fewer opportunities to engage in conventional violent offences and more to be involved in computer crimes. Focusing on employee computer crime, Willison (2006) notes that the theoretical concepts of environmental criminology can be easily moved into the information system security field and emphasizes the importance of understanding the relationship between the offender and the context to highlight new areas where to implement safety devices. His case study "the collapse of Barings Bank" provides an example of the way in which a rogue employee can perpetrate a financial fraud (unauthorized trading) by exploiting his or her access to high quality information

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[17] To find patterns of criminal behavior and to match them to different cyber-hotspots could have important implications for tackling offenders and potential offenders in the Internet age: in this way, in fact, it would be possible to manipulate the opportunity structure they exploit, while keeping to the minimum interventions that could jeopardize Internet freedom and the open Internet agenda.

[18] Alternative explanations of criminal behavior such as theories defining crime as a product of disadvantaged delinquents have been less utilized instead (Clarke, 2004). Nevertheless, other scholars have turned towards sub-cultural and differential association theories (Adamski, 1999; D'Ovido et al., 2009; Downing, 2011). Lastly, new research on the psychology of cybercrimes has been carried out (Baggili and Rogers, 2009).

(a suitable target) and the physical absence of a manager (absence of a capable guardian, according to routine activity theory).

In short, in the effort to find a suitable theoretical framework for criminal activities in or via the Internet, most studies have been based on theories originally created for crimes in the physical world: the mainstream literature, coherently with environmental criminology, has underlined how the Internet can provide new opportunities for crimes, thus serving as a crime facilitator. However, this approach so far has mainly been used to investigate new types of cybercrimes, while it has not been used yet to investigate the way in which the Internet can facilitate conventional complex criminal activities such as transit crimes. In doing so, moreover, the notion of *opportunity* has been considered only in general terms. The opportunities provided by the Internet, for instance, have been classified at a broad level of abstraction into: those facilitating communications; those creating a transnational environment; those allowing new types of crimes (Wall, 2005/2010). Trading sexual materials and stalking can both be included in the first group, while ID theft and organized pedophile rings are better explained by the second group, since in this case the Internet is what allows criminals to transcend national jurisdictions more easily. Offences like illegal online gambling or targeted hate speech, on the other hand, are seen as new types of crime allowed by the Internet. However, it is not clear yet the degree to which criminals' actions and interactions differ from the physical world to the Internet.

2.4 Internet and transit crimes: the state of the art

2.4.1 *What criminal activities have been addressed?*

The previous section has shown that the existing literature agrees that the Internet provides new opportunities for criminals but it does not agree on what extent this is

true. As concerns the relationship between the use of the Internet and transit crimes, in particular, this issue remains under-investigated.

This seems due to the fact that most scholars are treating transit crimes (or, more in general, organized crimes) and Internet crimes as if they are independent and distinct from one another, so that they are usually studied by two different branches of criminology: (transnational) organized crime research and cybercrime research. However, there is an increasing awareness that it would be possible to have a better understanding of the reality of crime by looking at the connections and overlappings between them. Indeed,

> "similar to how human activities are becoming increasingly more dependent on new information and communication technologies, organized crime has clearly identified all of the potential at its disposal, including discretion, speed, lack of paper trails, internationalization, low risk, high profitability, and more. The use of these technologies is therefore expected to increase, both for a wide range of mafia activities and for concealing and laundering financial gain from these activities, making cybercrime an essential convergence for organized crime".
> (McAfee, 2011: 31)

On the one hand, there is an increasing awareness that "even new forms of crime have physical requirements": most criminal activities still need "a physical delivery process" and thus "must surface in the physical world" (Felson, 2006: 13). On the other hand, it has been underlined that ICTs can facilitate traditional forms of organized crime. According to Grabosky and Smith (1998: 188), this can happen in principle in four basic ways: by enhancing ICTs' capacity to plan and coordinate criminal activity; by sustaining the organizational structure; by facilitating the marketing and distribution of illegal services; by obstructing criminal investigations. Furthermore, a number of studies has already considered how advances in ICTs have influenced the way in which organized criminals can launder their illicit proceeds in easier and less risky ways by transferring them to other countries through electronic means, or how they can exploit new hugely profitable criminal markets on the Internet where law enforcement oversight is still minimal, such

as in the case of online auctions and online gambling (Grabosky and Smith, 1998; INCB, 2001; Morris, 2004; McAfee, 2007; Choo, 2008, 2009; Giacopassi and Pitts, 2009).

Substantial evidence that organized criminals exploit the new opportunities offered by computer networks for carrying out their illegal businesses has been compiled during the last decade by international bodies such as the INCB (2001, 2010), Interpol (Khoo Boon Hui, 2011), and Europol (2011a). The last Threat Assessment of Internet Facilitated Organized Crime (Europol 2011a), in particular, has stressed how increasingly Internet-mediated economies facilitate all types of offline organized criminality. However, apart from anecdotical evidence, there is still a lack of knowledge concerning the real presence of organized crime in cyberspace and the extent to which organized criminal groups use the Internet. One of the major problem is the scarcity of reliable data, which has been partially attributed to the separation between law enforcement units dealing with organized crimes and cybercrimes so that the criminal phenomenon under investigation cannot be seen in its entirety (Council of Europe, 2005: 227)[19]. McCusker (2006: 257) has described this lack of clarity as "a tension between logic and pragmatism". Logic suggests that

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[19] Existing regulatory frameworks do not offer yet enough space of maneuver and clear directives for law enforcement bodies to operate in the Internet environment. As summarized by Clough (2010), the evolution of legislation for ICTs followed successive waves, reflecting worries surrounding the misuse of computers. Initially, fears were mostly related to unauthorized access to private information and economic crimes. As the Internet became more and more popular, initial concerns were joined by fears regarding remote attacks on computers, infringement of copyright, and the distribution of child pornography, as it is exemplified by the 2001 Budapest Convention on Cybercrime. There are signals that a third wave started: if we consider recent debates in the international policy arena it is possible to note an increasing attention to the role of the Internet as crime facilitator for offline activities. For instance, during the 2009 meeting of the CITES Standing Committee, a working group on e-commerce of endangered species was created, and the 2010 CITES Conference of the Parties urged major attention to Internet-related wildlife crimes (Decision 15.58). However, most relevant existing legal frameworks do not address explicitly the numerous problems (both substantial and procedural) caused by the peculiar features of Internet usage. With regard to sex trafficking, for instance, in the more recent European directive (Directive 2011/36/EU) the role of the Internet in this criminal activity is never mentioned. So far, despite all its limitations (see Section 2.2), the best international legal instrument to consider Internet-mediated trafficking activities remains the Palermo Convention. Even if this Convention is not specifically directed at Internet crimes, it has a significant complementary role for addressing some of the worse aspects of these criminal activities (Broadhurst, 2009; Chambers-Jones, 2012).

the opportunities the Internet provides for high profits with relatively low risks should attract traditional organized criminal groups; moreover, since (transnational) organized crime has always shown meaningful adaptive abilities in utilizing new technological opportunities, it is at least likely to think that nowadays it operates also via the Internet. On the other hand, pragmatism implies that it is not clear yet whether these groups have the capacity to exploit the profitable opportunities offered by the Internet environment. Have transit crimes really expanded in the new Internet realm? To what extent this is true?

If we consider how organized crime behaves in cyberspace, logically we have to take into consideration two major preliminary issues: what type of organized criminal activities (for the scope of this research, transit crimes) are relocating or expanding on the Internet, and what type of criminal organizations are exploiting the Internet. Empirical differences between the physical world and cyberspace could prevent the effective transfer of certain existing criminal activities; similarly, criminal organizations that have proven successful in the real world may not be adaptable to the Internet (Brenner, 2002).

As concerns the relationship between traditional transit crimes and the Internet, apart from the vague statement that the Internet is a facilitator of organized criminal activities that can be found in a number of investigative reports (CEOP, 2010; Europol, 2011a, 2011b; Troiano, 2011; AIFA, 2012; FDA, 2012), so far only a few traditional transit crimes—such as drug and sex trafficking—have been subject to systematic analysis.

According to the state of the art of academic literature and investigative reports, drug trafficking groups use new technologies not only to communicate through encrypted messages or to counter the work of law enforcement agencies through digital attacks, but also to deliver and distribute their products more effectively (INCB, 2001; Rider, 2001; Britz, 2008; Walsh, 2011; Christin, 2012; EMCDDA, 2013). For instance, as reported by Mosés Naìm, drug dealers track shipments online to see when the drug arrives (2006: 79). Apart from facilitating the drug business as any other communication tool does, the Internet seems to have impacted the drug market in a deeper way: through the use of instruments such as chat rooms and e-mails, buyers, sellers, and other like-minded

persons can exchange information and products very easily (Christin, 2012; Finley, 2009: 101 ff). In this way the risk is that of "amateurization" of drug-related crime, meaning that laypersons (both users and potential drug chemists) without specific criminal contacts can easily locate drug suppliers (INCB, 2011: 4). According to Finley's analysis, in contrast to traditional drug dealers, online dealers have no problems is advertising their products to the global market provided by the Internet (2009: 107). The peculiarities of cyberspace are likely to have an impact also on users: "virtuality" is considered to be a crime facilitator, since "the warning signals that might deter or frighten a young person in the real world are minimized, and the filtering process by which an individual moves into physical contact with a criminal organization disappears" (INCB, 2011: 4). Another interesting aspect has been raised by Finley (2009) concerning prescription drugs, which are licensed medicines that require a medical prescription to be obtained. Thus, when a prescription drug is sold without being prescribed by a doctor, it constitutes an illicit—or grey—market. After marijuana, these drugs are the second most abused substances by young people and they are significantly sold over the Internet (Finley, 2009: 109). Even if preliminary evidence seems to show that to date the involvement of drug trafficking organizations in pharmaceutical trafficking is limited and most online sales are for small amounts, the criminal market for prescription drugs sold via the Internet is becoming so extensive that it has been claimed it is "changing how we conceive of drug users, drug dealers, and the war on drugs" (Finley, 2009: 101).

Another typical activity carried out by transnational organized crime that has been considered in the new Internet environment is human trafficking, and especially the trafficking of women and children for sexual exploitation (Council of Europe, 2003; Chawki and Wahab, 2005; Sykiotou, 2007). Naìm (2006: 102-103) has compared the use of websites to display "the wares" (i.e., trafficked persons) in cyberspace to slave auctions. As Naìm stresses, there is a sharp contrast between the extent to which sex traffickers rely on advanced consumer technologies and their reliance on brute violence. He considers in particular the case of "mail-order brides": in the nineteenth-century frontier America, this practice was used to bring women from the East coast to marry

men who found financial success in the migration West. In the Internet age, women—especially form developing Asian countries and Eastern Europe—are listed on online catalogues or can be meet in online meeting-places. This system can certainly provide major opportunities for traffickers. According to the UN Global Initiative to Fight Human Trafficking (UN.GIFT, 2008) the Internet is used both to recruit victims and to exploit them. However, the same technologies exploited by criminal groups can become also part of the solution in disrupting them: new technologies not only can be used to investigate and consequently interrupt trafficking, but they can also offer the way to use new "creative approaches" (UN.GIFT, 2008: 20 ff). A good example is provided by Operation PIN – The Virtual Global Taskforce: in 2003 a website containing images of child abuse was created as a bait for persons looking for pedo-pornography in the Internet. Everyone entering the website was confronted with a law enforcement message stating that his or her details were captured and that they would have been transmitted to the relevant national authorities. In this way, details of (potential) offenders were captured, and potential offenders were deterred.

Recently, also the trading of counterfeit items via the Internet has received scholarly attention: in an exploratory study, Treadwell (2011) shows how the Internet is providing new opportunities to distribute counterfeit goods and suggests that this is leading to a transformation of the criminal marketplace, transforming it into a more flexible and disembodied "cyber-bazaar" (187).

2.4.2 *Criminal actors involved and possible trends*

As for criminal groups involved in transit crimes via the Internet, there are just some anecdotal evidence but little research on what type of groups use the Internet, and to what degree. Williams claims that there is "growing evidence" that "the dark side of the Internet" involves not only "disorganized crime" as in the case of individuals or pedophile rings, but also criminal organizations (2001: 22). According to Williams,

however, even if organized crime and cybercrime are not synonymous and never will be—since the former continue to exist in the real world and the latter is often perpetrated by individuals—these two types of activity are increasingly overlapping. Choo and Smith (2007: 37) and Choo (2008) have reached a similar conclusion: they have identified three categories of groups exploiting ICTs, namely traditional organized crime, groups ideologically and politically motivated, and organized cyber criminals. While the first two groups use computer networks only to enhance and facilitate their illegal activities in the real world, organized cyber criminals operate exclusively online. However, according to Choo and Smith, these three groups are converging on financially-motivated crimes in international virtual economies.

Some traditional organized groups are reported to have entered the Internet environment in a significant way. For highly structured groups ("organized crime" in a strict sense), for instance Russian mafias, the Internet has been used to enhance their market reach and operational efficiency (Kshetri, 2010: 143). Also the prior criminal experience of some Asian criminal groups seems to be compatible with the Internet (Grabosky, 2007; Kshetri, 2010: 14; Wing and Kwok, 2012). With regard to traditional Italian mafias, so far there is just some anecdotical evidence of some Camorra and Cosa Nostra groups advertising themselves on social media such as Facebook and Youtube, or using Skype as a communication tool (*La Repubblica*, 2009, 2010a, 2010b, 2012), while some Camorra groups are reported to be involved in Internet gambling (*La Repubblica*, 2011). Looser groups, such as street gangs, are reported to exploit the Internet environment as "a new venue for people who share or are sensitive to the values underlying the street gang lifestyle to come together" (Morselli and Décary-Hétu, 2013: 152).

Another aspect that has to be considered when dealing with criminal actors operating via the Internet regards how they organize themselves. It has been claimed that the Internet has changed the organizational life of crime (Rider, 2001: 335-336; Brenner 2002, 2003; Grabosky, 2007; Wall, 2007: 39 ff; McQuade: 2009, 453; Lusthaus, 2013), and recent studies have tried to identify the extent to which this has happened as well as

to forecast possible trends[20]. However, criminological scholarship so far has mainly considered this issue with regard to new types of Internet crimes, while there have been only few speculations and hypotheses concerning whether and how the Internet environment is also affecting the organization of organized crime groups. For instance, it has been hypothesized that the Internet could favor criminal groups based on flat-structured networking more than on hierarchical structures (Council of Europe, 2005: 228-229; McAfee, 2007).

As concerns more specifically changes in the organization of more traditional criminal activities and in the division of criminal labor due to the transformative impact of the Internet, Wall (2007: 39 ff) has stressed how, thanks to new technological developments, it is likely that also individuals can carry out complex and far-reaching activities, given their possibility of a greater control over the criminal process. This hypothesis is particularly significant and could lead to important implications. Indeed, as underlined by Brenner (2002: 9 ff), logically there are three modalities for criminal activity: "solo commission, collaboration by two people, and activity conducted by three or more people". In her opinion, only the third alternative can represent organized criminal activity: a single individual cannot involve organization, and an organization of only two persons inherently implies a limited level of harm. Similarly Harding (2007), in considering criminal responsibility in the context of modern organizational activities, underlines that criminal actors work together non only because in certain cases concertation is necessary for a successful criminal outcome. In fact, the organizational framework provides criminals with something qualitatively different, that allows them to have a different *delinquent ambition* and consequently a different *scale of activity* compared to the

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[20] Mann and Sutton (1998) were probably the pioneers: dealing with criminal activities in Internet newsgroups, in their exploratory study they have developed tentative typologies of the structures of these groups and underlined the role of the Internet as a medium for recruiting criminal peers and disseminating criminal techniques (hacking techniques, in this case). After that, the role of the Internet in linking actual and potential offenders and the organizational sophistication of criminal groups operating online has been the focus of an increasing number of research (Adamski, 1999; McMullan and Perrier, 2003; Adler and Adler, 2006/2009; Grabosky, 2007; Choo, 2008; Holt, 2009; Jaishankar, 2009; Yip et al., 2012).

individual offending (199, italic in original). This theorization needs to be re-discussed in the Internet environment, where activities carried out by one or two persons could potentially have global reach and cause long range harm (Lavorgna and Sergi, 2013).

What about the future? With regard to possible trends in the organization of criminal groups operating via the Internet, Brenner has probably offered the more significant work. In her 2002 speculative article on how cyberspace may affect the structure of criminal relationships, she suggests that "online criminal organization will be a matter of the moment or of situation-specific association" (47). These organizations will have a "transient nature", so that traditional issues of membership and commitment will lose importance (47). In her opinion, also trust will prove less important in the Internet, since anonymity can be used to minimize the risk of exposure and apprehension (47)[21]. Thus, organizational models that have appeared and evolved to carry out criminal activities in the physical world could not be needed in the realm of the Internet: on the contrary, "cyber-entrepreneurs purveying illegal goods and services should be able to operate effectively without utilizing the type of formal, hierarchical organizational structure employed by real-world criminal entrepreneurs" (36). Furthermore, she hypnotizes that some organizational layers will be eliminated as a consequence of different production and more automated distribution techniques. According to Brenner, networks will displace hierarchies in cyberspace, while hierarchies are likely to maintain a relevant role in activities based in the physical world (68). Matusitz (2008) reaches a similar conclusion. By drawing analogies between current cyber-terrorist networks and terrorist networks in the antiquity, he relies on empirical organizational analysis to claim the superiority of networks compared to hierarchically-based structures. Indeed, criminal networks are usually considered as organizational forms better protected from law enforcement if compared with hierarchical structures (INCB, 2001).

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[21] The role of *trust* in criminal activities committed via the Internet has only recently received scholarly attention. According to Lusthaus' analysis (2012), criminals operating in the Internet environment have developed a range of mechanisms to support and reinforce trust in their online activities. The bigger challenge for cyber-criminals seems to be the search of a proper balance between anonymity and reputation: the latter is needed to carry out their criminal businesses, but it is anonymity what assure them security.

Other trends have been hypothesized. The INCB Report (2001) concludes, among other things, that transnational crime could augment because some cross-border crimes are easier to commit, and that minors might be increasingly involved in crimes entailing the use of ICTs. According to some scholars, the characteristics of the offenders could change also because there will be growing network connections between hackers, small-time criminals, and transnational organized criminal groups, so that also less technologically skillful criminals can exploit new and inviting criminal opportunities with fewer risks (Williams, 2001; Kshetri, 2010: 41). Moreover, as legal businessmen are today tempted to engage on organized forms of economic crime, it is likely that they will be increasingly tempted by opportunities offered by Internet crimes, so that legal commercial entities could organize themselves for crime and become organized cyber criminals (Council of Europe, 2005: 170).

What about the geography of crime? It has been hypothesized that this could change, too: as developing economies will more and more depend on connectivity and technology to flourish, it is likely that crimes committed via the Internet will likewise increase "in line with broadband Internet uptake, finding new offenders and victims in areas of the world where Internet access has previously been limited to large organisations and Internet cafés" (Europol, 2011a: 10). Moreover, in certain countries, "the combination of over-educated and under-employed computer experts" could be a risky factor (Kshetri, 2010: 178): as Kshetri underlines, this unfortunate combination might be the reason why Russia and other European countries are already considered fertile ground for hackers. Other countries, like India, still enjoy a low cybercrime profile thanks to the presence of legitimate IT working opportunities in the country. Until now these geographical aspects have been taken into consideration only with reference to cybercrimes in a narrow sense. However, this is an issue that could become relevant also as concerns traditional criminal markets where the Internet has a facilitating role.

2.5   The gap in the literature and the research questions

This second chapter has presented a synthetic review of the body of research addressing the relationship between the Internet and transit crimes and has introduced the theoretical framework informing this research. Although there has been a lot published on Internet crime research given its trendiness, there is still a substantial gap in the literature concerning the role of the Internet as a crime facilitator and in particular as regards what kind of criminal opportunities the Internet offers for criminal networks running cross-border trafficking flows.

Two decades after the commercialization of the Internet, one would expect scholars to have thoughtfully and considerably examined the impact of the Internet revolution on traditional criminal activities and, more specifically, on transit crimes. However, this is not the case: we have seen that only a few criminal activities have been taken into consideration, and even if an increasing interest in the relationship between the Internet and transit crimes exists, there is still a lack of empirical research on this topic. Furthermore, the (scarce) research dealing with how the Internet is having (or could have) an impact on certain transit crimes has not yet pinpointed the opportunities made available by the specificities of the Internet, nor has it focused on whether and how these types of criminal activities have been affected.

Environmental criminology can provide a proper framework for looking at the structure of criminal opportunities that the Internet supplies for transit crimes to occur, thus allowing a richer and deeper understanding of the dynamics of these criminal activities in the Internet age.

In this regard, the aim of my thesis is to understand *what kinds of criminal opportunities* the Internet offers for traditional transit crimes and *how* these opportunities affect the organization of these transit crimes. This entails identifying in what specific phases of these criminal activities and for what purpose the Internet is used, as well as understanding the consequences that the Internet has on the way in which transit crimes

are carried out, both with regard to the organization of the criminal activity and of the criminal group.

In particular, the following research questions are investigated:

1. To what extent does the Internet provide new criminal opportunities for transit crimes? What kind of criminal opportunities are provided? What specific phases of these activities are facilitated by the Internet?

2. How do actors involved in these transit crimes exploit these new criminal opportunities?

3. Does this new opportunity structure change the relationships between actors involved in these transit crimes? If so, how?

4. Does the Internet impact various types of transit crimes differently?

Chapter 3

Research design

"'Cheshire Puss,' she began, rather timidly, as she did not at all know whether it would like the name: however, it only grinned a little wider.

'Come, it's pleased so far,' thought Alice, and she went on.

'Would you tell me, please, which way I ought to go from here?'

'That depends a good deal on where you want to get to,' said the Cat.

'I don't much care where–' said Alice.

'Then it doesn't matter which way you go,' said the Cat.

'–so long as I get SOMEWHERE,' Alice added as an explanation.

'Oh, you're sure to do that,' said the Cat, 'if you only walk long enough.'"

Lewis Carrol, Alice's Adventures in Wonderland (1865)

3.1   Introduction

In order to understand *what kind of criminal opportunities* the Internet offers for traditional transit crimes to occur and *how* these opportunities affect the organization of transit crimes, this dissertation examines the modus operandi of offenders operating in a range of criminal marketplaces that have used the Internet as a tool to perpetrate their offences.

This chapter describes the methodology used in order to achieve this goal and to address the specific research questions. First, this chapters identifies *script analysis* as a proper tool to look at opportunity structures: Section 3.2 takes into consideration the existing studies that have used this analytical tool to research event-decisions, and explains why script analysis can be useful for investigating transit crimes. Also the limitations of applying script analysis to complex criminal activities are discussed.

The chapter continues by refining the object of inquiry. Indeed, according to the principles of environmental criminology, it is necessary to be crime-specific in order to look at criminal opportunities: since the whole universe of transit crimes cannot be taken into consideration, Section 3.3 identifies the criminal activities that will be examined in the analysis and explains this selection.

In criminological research, there is a broad range of possible research strategies. Sections 3.4 and 3.5 review both the methodological choices made to answer my specific research questions and the strategies used to collect and analyze the relevant data. *Methodology* is defined as the way of thinking and studying social phenomena; it is different from the *method* used, which is the set of techniques and procedures for gathering and analyzing data (Corbin and Strauss, 1990/2008: 1; Travers, 2001: vi). Section 3.6 concludes this chapter by further discussing research limitations.

3.2   Script analysis

This section introduces the principles of script analysis: indeed, a script scheme will be used to highlight the opportunity structure the Internet offers to carry out transit crimes and to give a more comprehensive and precise description of how actors involved in these criminal activities behave in the Internet age.

It has already been underlined how, according to the principles of environmental criminology, a criminal event is the result of specific opportunities. The focus is on the

criminal activity rather than on the offenders and their motivations. It has also been pointed out that the theoretical framework offered by environmental criminology is at the basis of so-called situational crime prevention, a practical approach to crime-control. In order to identify potential points of intervention, situational crime prevention teaches us to think about a crime by breaking it up into the sequential phases of its commission. Mayhew et al. (1967: 6) have underlined that criminal behaviors can be seen as consisting of "a number of discrete activities which are heavily influenced by particular situational inducements and by the balance of risks and rewards involved".

Cornish (1994) elaborated the concept of "crime scripts" to describe the essential stages of a criminal activity, making the decision points explicit. The notion of *script*, derived from cognitive science (Abelson, 1976; Nisbett and Ross, 1980), has proved to be a "useful analytic tool for looking at behavioural routines in the service of rational, purposive, goal-oriented action", and to provide the "way of generating, organizing and systematizing knowledge about the procedural aspects and procedural requirements of crime commission" that Cornish was looking for (1994: 151). The criminal event is interpreted both as the outcome of a decision-making process and as a part of an ongoing process that continues even after such an event: this means that the crime is part of a chain of events and so also what happens after its commission can be meaningful. However, crimes can be located in space and time and can be unfolded into separate but related phases—as single scenes in a theatre play script—to better identify the opportunity structures that are used during their commission. To continue with the theatrical metaphor, offenders are like actors with certain characteristics and skills, and real "castings" can take place to match them with scripts (Cornish, 1994: 183). Moreover, as scenes in a play can have different length and complexity, scripts in a criminal event can operate at different levels of empirical specificity: the choice of the level of abstraction at which to work—which can be problematic—will determine the identification of different possible points of intervention (Tilley, 1997).

In his seminal work, Cornish (1994) explains his idea of a procedural analysis of offending by providing a few examples of criminal activities that can be unfolded by

using the script approach (namely subway mugging, auto theft, joyriding, and graffiti writing). To provide a model of these initial crime scripts, Table 2 reports Cornish's script analysis of tag writing.

Table 2 – *Steps in tag writing and associated responses*

SCENE/FUNCTION	SCRIPT ACTION	SITUATIONAL CONTROL
PREPARATION	Buy spray-can Find a good setting	Sales regulation City paint-out program
ENTRY	Enter setting	Access control Entry/exit screening
PRE-CONDITION	Loiter	Surveillance
INSTRUMENTAL PRE-CONDITION	Select target	Remove target
INSTRUMENTAL INITIATION	Approach target	Surveillance
INSTRUMENTAL ACTUALIZATION	Reach target	Protective Screens Legal target provided
DOING	Spray graffiti	Graffiti-resistant paint
POST-CONDITION	Get away quietly	Moisture activated alarm
EXIT	Leave setting	Entry/exit screening
DOING (later)	"Getting up"	Rapid cleaning

Source: Cornish (1994: 165)

The script approach has proven successful in criminological research, having the merit of casting light on the modus operandi of offenders when committing a specific criminal activity by focusing on the identification of specific criminal opportunities and by explaining how they are exploited. Thus, it allows a better understanding of the criminal problem. Even though not all of them explicitly used the term "script", several works in criminological research have shown the importance of identifying the set of choices and constraints available to offenders in a range of relatively "simple" forms of crime. Just to make a few examples, script analysis has been mainly used in investigating predatory crimes (Tremblay et al., 2001; Petrosino and Brenisilber, 2003; Smith, 2005), but also check and credit card counterfeiting (Mativat and Tremblay, 1997; Lacoste and Tremblay, 2003), and employee computer crimes (Willison, 2006). Script analysis has

also been used to identify vandalism targets (Smith, 2003) or to assess the risk of theft of consumer electronic products (Ekblom and Sidebottom, 2008).

In the last decade, crime script analysis has been extended in its scope to more complex and transnational types of offending. Sarrica (2005), for instance, used crime scripts to better explain the smuggling of migrants. Clarke and Newman (2006) uncovered the opportunities available to terrorists through each step of their acts, depending on different activities. More recently this approach, together with social network analysis, has been utilized to examine the impact of brokers in the commission of complex vehicle ringing operations (Morselli and Roy, 2008). Leclerc et al. (2011) and Brayley et al. (2011) have used scripts to investigate child sex offenders and map out potential situational crime prevention measures. Finally, Tompson and Chainey (2011) have used scripts as a methodology to identify points of vulnerability and opportunities to detect criminal events in the waste management sector.

Is it possible to use crime scripts in the analysis of even more complex criminal activities, as traditional forms of organized crimes (and specifically transit crimes) are? The using of crime script as an approach to investigate organized crimes has been heartily recommended by Cornish and Clarke (2002). Indeed, organized crime can be seen as "a chain of criminogenic events" relying on an environment that provides opportunities to make profit (Kirby and Penna, 2010: 209). Recent works relied on script analysis to enhance their understanding of organized criminal activities. For instance, Chiu et al. (2011) have used a seven-stages crime script as a tool to better understand the criminal process of clandestine drug laboratories and identify potential points for preventive measures. Von Lampe (2010), in his analysis of the cigarette black market, has broken it down into scripts of illicit activities according to their setting. Savona (2010) analyzed the chain of events in the infiltration of organized crime in the public construction sector by considering five main script scenes, from the agreement among offenders to commit the criminal activity to subsequent behaviors resulting from the crime under investigation: preparation, enabling conditions (precondition), target selection (instrumental precondition), "the doing", and the post-conditions or aftermath. Rowe et

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al. (2012) and Zanella (2013) developed crime scripts to look at the *how* of corruption in public procurement.

The state of the art in the use of script analysis to investigate organized crime is offered by Hancock and Laycock (2010): they recently proposed "the integrated organised crime script" for cases concerning drug or people trafficking, which operates at an even more thorough level of empirical specificity by distinguishing functions, script categories, and actions in the script scenes, as well as by stressing the pinch-points for interventions. This last scripting model, in particular, can improve our understanding of organized crime also by distinguishing and addressing its components parts—lifestyles and crime groups—instead than considering these two elements together, as they were a unique thing (188) (for a more detailed description of "the integrated organised crime script", see Section 3.5.2).

What can be inferred from this brief overview of the literature is that there is an increasing attention in investigating when, where, and how criminal opportunities are exploited, rather than relaying only on macro level analyses that address crime as one single entity. This is true also as concerns organized crime cases, where script analysis has the merit to shift the attention from the definitional problems of what organized crime is to the methods used in the activities carried out.

Nonetheless, it is not easy to apply the script approach to complex criminal activities as organized and transit crimes are: there are several critics that could be moved against this analytical tool, as well as several intrinsic limits in using it to understand how organized crimes are accomplished. Moreto and Clarke (2013) have recently dealt with these issues while discussing how script analysis could be undertaken to investigate the transnational market in endangered species. First of all, script analysis is by definition crime-specific and this would be an impediment in investigating a trafficking flow where extremely different species are traded, with different purposes (from the desire of an exotic pet to medicinal purposes), and involving different countries. Furthermore, different types of criminal actors can be involved, from independent poachers to organized groups. For a series of different reasons (lack of research funding, potential dangers), it would be

difficult to investigate certain parts of the trafficking chain, and especially the initial ones, through fieldwork. Besides, there is no agreed model of the criminal market, which has a dynamic nature.

Despite all these impediments in using a script approach in the study of trafficking in endangered species, however, Moreto and Clarke concluded that script analysis remains "an useful tool for achieving an understanding of its constituent steps" (2). Indeed, many potential criminal opportunities can be outlined also through "desk research", by discussing with key observers, by analyzing the police and prosecution case papers, and by "thinking thief" (i.e., by looking at the crime process from the perspective of criminals, so that it would be possible to understand their event decisions and the opportunity structure they exploit) (8). In this way, it could then be possible to undertake a detailed script analysis only of possible effective pinch points, without developing an extensive master script of the entire criminal market, which is much more complicated. The fact is that script analysis can maintain a role in the study of complex transnational crimes if we recognize that this role is necessarily more limited than in simpler criminal activities: in particular, since no agency or organization can be responsible for taking preventive actions against the criminal activity in its whole, script analysis is certainly limited in its capacity to identify proper preventive measures. Nonetheless, if we initially broaden the level of analysis, crime scripts can still offer a valid help in identifying the more vulnerable phases in the trafficking chain (to be then addressed by the usual, more narrow, level of analysis).

To sum up, since investigating the opportunity structures exploited in a complex criminal activity involves the deconstruction of its complexity to comprehend how crime operates or needs to operate, script analysis can have an important role in identifying, step-by-step, the modus operandi of groups involved in routinized activities like transit crimes.

3.3 Which transit crimes are taken into consideration?

According to the principles of environmental criminology, the opportunity structure is crime specific. Thus, rather than "transit crimes" in general, it is necessary to consider certain specific types of transit crimes. This thesis focuses on *wildlife trafficking, trafficking in counterfeit products, trafficking in recreational drugs*, and *sex trafficking*. This is a convenience choice: first of all, these are by far the most reported transit crimes where the Internet is used both in media news and investigative reports [see, for instance, Annex A]. Furthermore, for these criminal activities it was possible to access also judicial transcripts and records from police investigations and to have detailed descriptions in the interviews.

However, driven by the empirical evidence gathered, for some of these activities I have considered appropriate to move from these criminological categories towards more specific sub-categories, namely: *trafficking in counterfeit pharmaceuticals* (for trafficking in counterfeit products), and *trafficking in traditional drugs* and *trafficking in synthetic drugs and new psychoactive substances* (for trafficking in recreational drugs).

Some cases were found also as concerns *trafficking in human beings for labor exploitation, trafficking in art and other cultural objects, trafficking in arms*, and *trafficking in organs and human tissues*, but these cases will not be discussed since they were sporadic and, for the aim of this dissertation, they did not seem to add much to the analysis.

All the transit crimes taken into consideration share the fact that they are all comparable to business-like activities. Nonetheless, they cover very different phenomena: first of all, some of these criminal activities are considered by the international community more "serious" than others; secondly, some of these trafficking flows are considered illegal in most countries while others are not; thirdly, they are directed towards different types of "customers". In order to better understand the opportunity structure provided by the Internet and exploited by offenders for their criminal businesses, it is possible to take advantage of these differences by means of a comparative framework: as recently underlined by von Lampe (2012), comparing phenomena across different contexts (defined, for instance, by the type of crime) allows us to go beyond mere description, try to see possible patterns, and gain deeper theoretical insights.

3.4 Methodology

Choices of methodology are driven by research questions, as well as by theoretical considerations. In order to answer the proposed research questions, the methodology utilized is qualitative. Being "inductive and idiographic" (Hagan, 2011: 300), this approach is suited to the descriptive nature of this study and enjoys a more fluid and dynamic nature (Champion, 1993/2005: 102; Corbin and Strauss, 1990/2008; Yin, 2011).

Being aware that every technique has different strengths and weaknesses, I think that, given the current stage of research on transit crimes committed via the Internet, there are no appropriate data for quantitative analysis. Moreover, such an approach would be insufficient in its own in explaining opportunity structures and not sufficiently sensitive to contextual factors (Tewksbury, 2009). Social systems involve many uncontrolled variables, and especially in criminological research some of these are well hidden, being the phenomena under examination against the law. Obviously the difficulties in studying what is in the underworld is not a reason to desist. However, to follow a more quantitative approach would have implied a number of simplifications and abstractions at the cost of a deeper understanding of what is actually occurring.

As concerns the research validity of the thesis, two main issues need to be briefly discussed. First of all, with regard to *external validity*—or generalizability—it has to be reminded that generalization is certainly a desirable goal for qualitative social researchers (Seale, 1999; Lincoln and Guba, 2000), but it is not the purpose of qualitative research. Indeed, the goal of qualitative research is to produce a detailed and clarifying description of and perspective on a certain situation, pinning down the contemporary facts (Lincoln and Guba, 2000: 126; Schofield, 2000: 71). Generalization is usually assured by randomness and representativeness of the sampling, while qualitative researchers, in order to improve their understanding about a certain phenomenon, can learn a lot also from the study of a single event (Corbin and Strauss, 1990/2008: 319)[22].

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[22] A classical example in criminology is Sutherland's *The Professional Thief* (1937), which provides an extremely thoughtful description of the profession of theft as experienced by *one* professional thief, "Chic Conwell".

Secondly, as concerns the *internal validity* of a qualitative work, this could be questioned if other researchers think that the evidence does not support results. Since it would be unpractical to think that other researchers could replicate the same study (as it happens in natural sciences or, to a certain extent, in quantitative works in the social sciences), internal validity is generally increased by means of triangulation, member validation (Bloor, 1997: 38), the use of multi-sites (Schofield, 2000: 79 ff), and a proper selection of cases for the study on the basis of available information (Gomm et al., 2000: 105 ff). In this research, I have respected all these criteria: by triangulating data from different primary and secondary sources, by presenting my findings to the practitioner communities to receive their feedback (when possible), by using data collected in a number of different settings (different criminal activities and, where possible, different countries), and by using adequate sampling strategies to select cases that were typical in relevant aspects.

3.5 Method[*]

3.5.1 *Data gathering strategies: case studies and semi-structured interviews*

This section explains the choices I have done regarding the method by describing the data collection strategies and the sources used. This work relies on two data gathering strategies (Hagan, 2011), namely *case studies* of transit crimes in which the use of the Internet had a meaningful role and *semi-structured interviews*.

a) Case studies

Case studies can be defined as an "intensive examinations of specific social settings or places or groups of persons" (Champion, 1993/2005: 101). Case-oriented approaches

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[*]A detailed description of the method used in this PhD dissertation, including practical problems encountered, has been accepted for publication in *SAGE Research Methods Cases*, which is to be published by Sage Publications in May 2014 (Lavorgna, forthcoming b)

are popular in qualitative research (Ragin, 1987: 49). Case studies can offer important advantages in identifying opportunity structures by using a script approach, where it is fundamental to investigate the criminal phenomenon within its broader context: through case studies much contextual factors can easily be taken into consideration, since in this way it is possible to include thorough examinations of specific social settings, as well as behavioral descriptions of agents in these arenas. Moreover, case studies have potential to allow for high conceptual refinement even in small samples (George and Bennet, 2005: 19 ff; Champion, 1993/2005: 101 and 117). In this study, I followed an (*embedded*) *multiple case design* (Yin, 2003), meaning that I have considered more embedded cases (more transit crimes), where in each embedded case multiple units of analysis are included (i.e., specific law enforcement operations). Multiple case design is usually preferred in social sciences because it allows the triangulation of evidence in order to gain more profound insights of social phenomena (Yin, 2003).

Regarding the *sources* and the *case selection*, relevant case studies were identified first of all through a preliminary keyword search on *media sources* and in particular Italian newspaper online archives (*La Repubblica*, *Il Corriere della Sera*) [Annex A], *judicial databases* (*Dejure* for Italian cases, *Westlaw* for US cases, and *The Law Pages* for UK cases) [Annex B], and through the reading of *investigative reports* (accessible in Italian or English) on specific transit crimes[23]. In order to be taken into consideration, the case had to deal with a specific law enforcement operation concerning a transit crime where the Internet had a meaningful role. Additional cases were identified during *interviews* with law enforcement officers and acknowledged experts (see part *b* of this sub-section).

Afterward, by following a *non probability sampling plan* and in particular an *accidental or convenience sampling*, a total of 112 cases were selected for the analysis[24]. Despite

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[23] There are several associations and institutions interested in various trafficking activities that edit thoughtful reports. As underlined by Naìm (2006: 205), many of the most complete sources of information on transit crimes come from these types of interest groups that have specialized in the study of different criminal markets.

[24] In this type of research it is virtually impossible to accurately enumerate population elements in advance to draw random samples: my reference population (cases of transit crimes where

the limited generalizability of convenience sampling, this method is largely used in criminology and criminal justice research because it allows the inclusion of certain types of data that are otherwise difficult to access and have certain particular characteristics of interest—i.e., the usage of the Internet in certain transit crimes—and to select cases that give the possibility to be studied with necessary depth. For some of these cases (about 8 for each transit crime under consideration), I had the chance to use also primary documentary sources (*judicial transcripts* and *records from police investigations*), sometimes obtaining copies of them and sometimes only the possibility to consult them briefly and taking some notes[25].

b) Semi-structured interviews

The second data gathering strategy used are semi-structured interviews to law enforcement officers and acknowledged experts with expertise on specific transit crimes. Indeed, the documentary sources used to identify relevant case studies have not been recorded for the research's purposes, and so I had the need to improve the quality of my data by deepening the contextual aspects related to the use of the Internet in committing transit crimes: as underlined by Noaks and Wincup (2004: 79), semi-structured interviews allow opportunities for dialogue and exchange between the interviewer and the interviewee, and offer the interviewer the possibility to facilitate

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the Internet had a meaningful role) is hard to circumscribe, constantly changing, and largely inaccessible (Hagan, 2011; Rosander, 1977; Vanderstoep and Johnson, 2009).

[25] Documentary sources are broadly used in criminological research (Noaks and Wincup, 2004: 106 ff). Judicial transcripts and records from police investigations are particularly useful in providing evidence on the way in which criminals operate, including the way in which they interact. As underlined by Chiu et al. (2011: 360), archival judicial data, in particular, are based on evidence that has undergone stringent legal scrutiny before being presented in court. Moreover, being "based on multiple sources of evidence", they are considered likely to offer a less biased picture than other dataset. Police records, on the other hand, resulted extremely useful in providing additional information on elements that did not emerge from many judicial files. Regarding the access to these sources, the main problem was due to the fact that most court cases were not finished yet, being almost all of them very recent. Furthermore, these types of primary sources have restricted access and gatekeepers were reluctant to share documents, since they contain sensitive information.

alertness to themes that are meaningful for the context of the research. Moreover, semi-structured interviews also allow to obtain desired information relatively quickly, economically, and—even if they are based on an interview guide listing questions and topics to be covered—with flexible format (Bernard and Ryan, 2010: 29)[26]. For the interview template, see Annex C.

Also as concerns the *selection* of the interviewees, I relied on *non-probability sampling methods*, specifically purposive sampling and snowball sampling. In the case of *purposive sampling*, interviewees were selected on the basis of their specific characteristics. In this way, all selected respondents epitomized the criteria I was interested in, being knowledgeable about a specific transit crime, willing to talk, and providing a suitable amount of geographical diversity. Moreover, some of them were in a position to help me accessing some information otherwise difficult to access, as in the case of some police records (Hagan, 2011: 129 ff; Warren, 2002: 88). *Snowball sampling*, on the other hand, allowed me to rely on the initial contacts to provide me additional interviewees (Champion, 2005: 180 ff). I interviewed 8 experts and 23 law enforcement officials (prosecutors and police officials) (for details, see Annex D).

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[26] As suggested in the dedicated literature, I began every interview with initial icebreakers, where I explained the purposes of the interviewing project and asked for the permission to use the tape recorder. Then, I continued with open-ended and descriptive questions addressing the main theme of my research (the Internet as a facilitator of the transit crime considered in the interview), thus giving the respondent the possibility to convey his or her own insight and understanding. Besides asking for an overview of my research topic ("grand-tour questions"), I requested for specific examples ("examples questions"), and for direct experiences of relevant cases ("experience questions") (Jorgensen, 1989: 86). I was then able to move to the heart of the research questions, asking more in detail about specific criminal opportunities and modus operandi. With the ending questions the main purpose was to stimulate additional memories and thoughts. Finally, I tried to bring the participant back to a normal conversational level before concluding the interview. Interviews often took unexpected digressions, following the respondent's interests and expertise. In some cases I had to be assertive enough to return to the intended track, but in other cases those digressions were productive and have allowed me to obtain richer data. Indeed, the possibility to "go with the flow" even if only for a while is one of the great advantages of semi-structured interviews, where the possibility of learning original information and exploring new themes as they arise is not precluded (Johnson, 2002: 111).

Even if interviewing entails fewer practical and ethical dilemmas than other methods in criminological research, some issues had to be solved, in particular as concerns the relationship with interviewees, identity disclosure, and confidentiality (Kvale and Birkmann, 1996/2009: 61 ff). To overcome reluctance and gain access, I was helped by the sponsorships of my home University and the other academic institutions I had the opportunity to attend during my research period (the UCL Jill Dando Institute of Security and Crime Science, the Rutgers School of Criminal Justice, and the Faculty of Law of VU Amsterdam). Similarly, relational background such as the mentioning of common acquaintances (people I already interviewed and academics) was useful (Adler and Adler, 2002: 523 ff). Since some potential interviewees had the tendency not to answer promptly to email requests, I found it effective to approach them during events (such as conferences) were both academics and practitioners were present. When law enforcement officials and experts preferred not to be formally interviewed, I asked them for more informal interviews or I offered anonymity (Lewis, 1980). Other specific problems have been solved as suggested by the method literature (Bernard and Ryan, 2010, 31 ff; Jorgensen, 1989: 87 ff; Reinharts and Chase, 2002; Schwalbe, 2002: 207 ff). I always asked permission to record interviews. However, when permission was denied, I took notes or relied on memory of what was said according to interviewing techniques (Dexter, 1970/2006; Kvale and Brinkmann, 1996/2009: 177 ff; Noaks and Wincup, 2004: 125 ff; Schwalbe, 2002: 209 ff).

3.5.2 *Data analysis*

In order to identify the criminal opportunities provided by the Internet for transit crimes and to understand how this new system of criminal opportunities affects their organization, a framework to look at my data in a coherent and consistent way was needed. According to the environmental criminology approach and the teachings of script analysis, I divided each transit crime in key phases in order to investigate in which stages of the criminal activity the Internet plays a role and how it facilitates crime. To

do this, data have been analyzed within a script model greatly inspired by the Hancock and Laycock's "organised crime integrated crime script" (2010) [Table 3]. Indeed, even if this script model was almost exclusively build on drug trafficking cases, it does not focus on a specific criminal activity but it rather aims at looking at the crime commission process on a range of transit crimes. Moreover, in their model Hancock and Laycock take into consideration not only the *primary criminal act* (e.g., drug importation), but also the *criminal lifestyle* (series of activities that are independent from any active offending process) and the participation in/the access to *criminal networks, groups, or individuals*. All these three components, which are interrelated, need to exist because of the complexities of transit crimes, and Internet usage might affect all of them.

Table 3 – *The integrated organized crime script*

FUNCTION	SCRIPT CATEGORY	ACTION	PREVENTIVE RESPONSE
Preparation	Lifestyle Network	Formation/existence of an organized crime group	Association bans for those suspected/convicted of organized crime through imposition of SCPO[27]
Entry	Crime Network	Interaction with other networks and groups to discuss opportunity	Imposition of travel bans post conviction and association bans based on intelligence not conviction (SCPO)
Precondition	Lifestyle Network	Maintenance of anonymity for group members due to illegal/undetermined residence in the UK	Introduction of ID cards; Restricting access to prepay mobile phones; Improving vehicle registration data
Instrumental precondition	Crime Network	Agreement to undertake criminal act	Restricting access to prepay mobile phones
Instrumental initiation	Crime Lifestyle	Establishment of a bogus front company	Persons convicted of organized criminal offences to be banned from company ownership/directorship; Tighter control of company formation; Stricter adherence to AML regulations by solicitors[28]

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[27] SCPO, Serious Crime Prevention Order.

[28] AML, Anti-money laundering.

Table 3 – *The integrated organized crime script (continued)*

FUNCTION	SCRIPT CATEGORY	ACTION	PREVENTIVE RESPONSE
Instrumental actualization	Crime Lifestyle Network	Arrange criminality through the use of mobile phones	Remove anonymity afforded by prepay mobile phones. All mobile phones to have registered subscriber and billing address
Instrumental actualization	Crime Lifestyle Network	Movement of cash through corrupt money exchanges to pay for commodity	Vetting exchange staff; Increased regulation or restriction on Money Service Bureau
Doing	Crime	Movement of commodity into the UK utilizing "legitimate haulage firm"	Accreditation of companies entitled to take tractor units abroad; Accreditation of drivers; Introduction of bonded warehouse-style scheme for all goods
Doing	Crime Lifestyle	Movement of commodity within the UK using stolen/ unregistered vehicle	Fuel purchase dependent on production of correct documentation
Post condition	Crime Lifestyle Network	Movement of cash through bogus bank accounts	Banks withdrawing services under voluntary code to clients whose accounts raise suspicion; Persons convicted of money laundering or organized crime to declare conviction to bank; Financial reporting order restrictions
Post condition/ exit	Crime Lifestyle	Disposal of funds through lavish lifestyles	Improved compliance with Money Laundering Regulation 2007 by the regulated sector, e.g. improved submission of suspicious activity reports (SARs); Financial reporting orders
Post condition/ exit	Crime Networks	Complicity of accountants and lawyers in disposal of crime groups proceeds	Restrictions on the type of transactions that pass through client accounts; External auditing; Suspicious activity regime

Table 3 – *The integrated organized crime script (continued)*

FUNCTION	SCRIPT CATEGORY	ACTION	PREVENTIVE RESPONSE
Exit	Crime Lifestyle	Disposal of funds through purchase of property	Compliance with AML Regulations and submission of SARs; Purchase of property dependent upon proof of taxable income
Exit	Crime Lifestyle	Disposal of funds through purchase and false registration vehicles	HMRC notification for all vehicles[29]. Tighter control on vehicle registration requirements. Fuel purchase controls, e.g. ID cards
Exit	Crime Lifestyle	Purchase of semi-legitimate business to launder money through	Compliance with AML Regulations by legal representatives handling transactions; Cross-checking VAT records and tax revenues

Source: Hancock and Laycock (2010: 185-186)

Since the transit crimes considered in my analysis are very different among them, slight modifications to this script model have been made when needed. Moreover, unlike the scheme developed by Hancock and Laycock, possible preventive responses have not been described in order to avoid exceeding the scope of this dissertation, and thus the corresponding column is not present. While in their model Hancock and Laycock also identify possible preventive measures for each criminal action, in my analysis I am using their model only to understand (for each transit crime I am considering) in what phases of the criminal activity the Internet has been used and what kind of opportunities it has provided, as well as to cast light on the modus operandi of the offenders involved (e.g., has the Internet affected the primary criminal act, the criminal lifestyle, or the relationships within a criminal network?).

Furthermore, a column labelled *stages* has been added to juxtapose the specific parts of the script (the various *functions* in the activity and the corresponding *actions* where

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[29] HMRC, Her Majesty's Revenue and Customs.

the Internet has been used) to the main stages of each trafficking flow as identified by the existing literature. Indeed, there is no fixed correspondence between the sequence of traditional stages in transit crimes (phases that are generally present in the transfer of an object, animal, or people from the country of origin to the country of destination) and the sequence of functions in the crime scene as identified by Cornish (1994) and used by Hancock and Laycock (2010) (preparation, entry, precondition, instrumental precondition, instrumental initiation, instrumental actualization, doing, post condition, and exit). For instance, different preconditions for a certain trafficking activity to occur could be needed in different stages. By placing the stages alongside the Action and Function columns, it has been easier to assess whether and how the Internet is having an impact on the way in which a certain transit crime is carried out, and at what stages in the trafficking chain such impact is stronger. Since different types of offenders are traditionally involved in the various stages, this juxtaposition has also been useful for underlining which actors involved in the trafficking activity use the Internet.

Finally, in the column *Action*, in the parenthesis the modalities used in exploiting the Internet have been identified. In particular, both services (such as email providers and instant messagging) and cyber-hotspots (online "places" such as social networks, commercial websites, forums, etc.) have been specified.

The framework utilized for the analysis is exemplified in Table 4.

Table 4 – *The crime script to identify Internet-related criminal opportunities*

STAGE	FUNCTION	SCRIPT CATEGORY	ACTION
0 (directly antecedent to the transit crime *per se*)		Crime	
N (as part of the transit crime)	From preparation to post condition	Lifestyle	Actions in which the Internet has been used (also HOW or WHERE)
N + 1 (directly consequential to the transit crime)		Network	

Please note that this script framework does not consider all the actions needed for trafficking activities, but only the ones in which the Internet had been used, as emerging from the case studies under consideration.

3.6 Research limitations

Although this research was carefully prepared, there are some limitations. First of all, like other studies grounded on the script approach, this research has limited generalizability: indeed, scripts are unavoidably tentative, being necessarily based on a limited sample size (Chiu et al., 2011). Moreover, the requirement of being crime-specific had to be partially sacrificed to allow a broader understanding of the use of the Internet as crime facilitator for transit crimes. In Section 3.2, potential problems in applying script analysis to complex criminal activities (and how to deal with them) have already been discussed. Those problems were mainly related to the use of script analysis for situational crime prevention purposes. In my research, however, script analysis serves only as a framework to identify an opportunity structure, so that most of those problems do not apply to this study in any case.

Secondly, there are research limitations related to my data gathering strategies. As concerns the sources used for the case studies, the number of primary documentary sources was inferior than what I expected at the beginning of my research. This was mainly due to the fact that most relevant cases were extremely recent, under investigation, or the trial was still ongoing. However, data gathered through the semi-structured interviews with key informants helped to provide current, rich, and detailed knowledge.

Another problem is that, depending on the accessibility and availability of relevant material, not all cases could be studied in the same depth. However, cases that were investigated more superficially have helped to verify the validity of the findings from the main case studies.

Finally, a major limitation is that most of the cases under consideration, even if transnational in nature, were prosecuted or investigated in Italy. Given the limited amount of time and other resources available to complete my research, it was not feasible to access to the same amount of information in several countries. However, some considerations have to be made: first of all, Italy has a core position in the so-called "Southern criminal hub" (Europol, 2009), and it is affected by all the criminal activities I have considered both as an origin, a transit, or a destination country. Moreover, since I am interested in examining criminal behaviors in the borderless Internet environment, it is likely that the system of challenges and opportunities that offenders have to deal with are similar in different countries (at least as regards developed countries with a similar degree of Internet usage). Case studies and interviews have been taken into consideration and carried out also in UK, the US, and in the Netherlands. All of them resulted consistent with the data gathered in Italy. When differences arose, this has been specified in the analysis.

Chapter 4

Analysis and findings

"Ille crucem sceleris pretium tulit, hic diadema".
(A men undergoes an ignominious punishment for a crime that confers the
crown to another)

Decimus Iunius Iuvenalis, Satires (I-II AD)

4.1   Introduction

This analytical chapter answers to the four groups of research questions (as identified in Section 2.5) by applying the crime script proposed in Sub-section 3.5.2 to each selected transit crime—i.e., wildlife trafficking, trafficking in counterfeit pharmaceuticals, sex trafficking, and trafficking in recreational drugs.

In the following sections (one for each transit crime), after a brief overview of the main features of the criminal market under consideration, data gathered by case studies and interviews have been organized according to the crime script conceptual framework. In this way, it has been possible to obtain a comprehensive understanding of what kind of criminal opportunities the Internet offers for transit crimes and in what phases of the criminal activity they are present (thus answering to the first group of research questions).

Each of the following sections concludes with a discussion part, where data are additionally analyzed and interpreted, and the main findings are stressed. In particular, by differentiating among the three different *script categories* as identified by Hancock and Laycock (2010)—namely "primary criminal act" (*crime*), "criminal lifestyle" (*lifestyle*), and "participation in and further access to criminal networks, groups or individuals" (*network*)—it has been possible to outline how criminal opportunities offered by the Internet affect the organization of criminal activities and criminal networks (thus answering to the second and the third groups of research questions).

Section 4.6 concludes this chapter by comparing across transit crimes to illustrate whether the Internet impacts them differently (thus answering to the fourth and final research question).

4.2 Wildlife trafficking*

4.2.1 The criminal market

Wildlife trafficking—i.e., the illegal trade of any wild plant or animal, both indigenous and exotic, and any derivative thereof (Wyatt, 2009)—is a transit crime that has far-reaching implications for society. Not only does it severely affect the environment by impacting biodiversity, but it also hinders social and economic development in many communities (Sand, 1997; Warchol, 2004; Izzo, 2010; Sollund, 2011). Furthermore, wildlife trafficking represents an increasing threat to national and global security (IFAW, 2008), being partially run (sometimes in parallel to other transit crimes) by sophisticated crime syndicates that use the profits for terrorism and guerrilla insurgency, or launder them in a way that compromises economic stability (Warchol et al., 2003; IFAW, 2008; Dalberg,

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*A version of this chapter has been accepted for publication in Lavorgna (forthcoming a).

2012)[30]. Wildlife trafficking can also pose risks to global health: as emerges from the example of the illegal bush meat trade in many African countries, it can serve as a disease transmission mechanism (Dalberg, 2012). Finally, it harshly impacts animal care and conditions (Troiano; 2010; Dalberg, 2012). Wildlife crimes affect all countries of the world, both at the local level and in an international dimension. Most plants and animals are trafficked from developing countries to the Western world, and the European Union is considered the top global importer by value of wildlife, ranging from live reptiles and birds to caviar and reptile skins (Engler and Parry-Jones, 2007).

The black market in wildlife is estimated from 6 to 10 billion dollars per year (Warchol, 2004; Sollund, 2011; Dalberg, 2012), and it allows for huge possibilities for profits since prices increase enormously throughout the distribution chain: for instance, as reported by Sollund (2011), the price of parrots rises from 2-25 to 150 dollars, while some rare species may rise up to 150,000 dollars per pair. Surprisingly, wildlife trafficking still receives little attention from criminologists, that so far—with very few exceptions—have underinvestigated it. Only recently, because of the alleged links between wildlife trafficking and transnational organized crime, this criminal activity seems to have been accepted in the remit of mainstream criminological studies (Nurse, 2011: 41). Moreover, wildlife crimes have low priority on the law enforcement agenda (IFAW, 2008; South and Wyatt, 2011): most governments consider it as a "mere" environmental issue, and as a consequence investigations are generally scarce and sparse (Zimmerman, 2003). This very fact entails that there are minimal consequences for criminals for perpetrating wildlife trafficking, which makes it an high-profit, low-risk criminal business[31].

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[30] Also the violent and corruptive behaviors that are usually associated with wildlife trafficking jeopardize the effectiveness of governments and the rule of law in fragile countries, as well as deter investments and civil engagement in local communities (Dalberg, 2012: 5).

[31] The fact that wildlife trafficking is not seen as a priority has been reported in many countries (IFAW, 2008). Wyatt (2009), for instance, complains that in the Russian far east, a major area for wildlife illicit trade, there are [were] only two wildlife inspectors, with little access to technologies. Similar problems emerged during the interviews with experts and law enforcement officials. In particular, in the Netherlands it was explicitly said that wildlife crimes were not a law enforcement priority, while in Italy problems of lack of resources have been underlined.

The demand for wildlife products is considerably influenced by culture and depends on different consumer groups (Dalberg, 2012). On the one hand, some wildlife products are smuggled in local and international markets because of their perceived value in traditional medicine and in traditional (or exotic) gourmet dining—as in the case of rhino horn, tiger bones, shark-fin, and beluga caviar—or because they are considered as a status symbol—as for private zoos in Saudi Arabia or the villas of Colombian drug lords and Camorra bosses (Zimmerman, 2003; Warchol, 2004; Legambiente, 2010; Sollund, 2011). Plants and animals of all types and values are poached for private collectors and pet shops worldwide; birds and reptiles, in particular, seem to dominate wildlife trafficking flows (Warchol et al., 2003; Sollund, 2011). The demand is also fueled by biomedical laboratories for scientific purposes, by hunters preparing for canned hunt or falconry, and by fur and skin dealers (Zimmerman, 2003; Wyatt, 2009; Sollund, 2011)[32].

Concerning the supply side, there are considerable variations in the types of the offenders involved—ranging from individual subsistence hunters to sophisticated crime syndicates—depending on the market demand and on the different species

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However, also as concerns law enforcement and government agendas, a trend can be identified in considering wildlife trafficking more and more as a critical criminal activity: since the early 2000s, even Interpol has become involved in tacking wildlife crimes with a specific Working Group, that has coordinated operations concerning the illegal trade of big mammals (Projects Predator and Wisdom), endangered reptiles and amphibians (Operation RAMP), and traditional medicines containing wildlife products (operation TRAM). Furthermore, in November 2010, the International Consortium on Combating Wildlife Crime (ICCWC) was also launched as a collaborative effort by five intergovernmental organizations (the CITES Secretariat, INTERPOL, UNODC, the World Bank, and the World Customs Organization) to help the coordination among national wildlife law enforcement agencies and other local networks. While wildlife trafficking is currently beyond the scope of the Palermo Convention because it generally does not meet the "seriousness" criteria, this situation could change in the future: indeed, in September 2012 the UN Economic and Social Council adopted (on the recommendation of the Commission on Crime Prevention and Criminal Justice) Resolution 2012/19, which encourages governments to strengthen their national legal frameworks to counter these types of criminal activities, for instance by making wildlife trafficking a serious crime—i.e, a crime that is assigned prison sentences of at least four years.

[32] Canned hunting is a private trophy hunt in which exotic or native animals are kept in a more confined area, within enclosures, to facilitate the likelihood of the hunter obtaining a kill. Falconry is the hunting by means of a trained bird of prey.

traded (Warchol, 2004; IFAW, 2008). Zimmerman (2003) has identified three main types of criminals involved in wildlife trafficking: local farmers trying to supplement their incomes, mafia-style groups operating in developing countries, and international smuggling rings. Evidence suggests that most wildlife trafficking, particularly in regards to the initial part of the market supply chain, is carried out by individuals: opportunistic villagers who try to supplement their income, and professional trappers. However, in other stages of the trafficking chain and especially in international trades, higher levels of sophistication and several organizational layers may be required (Warchol et al., 2003; Wyatt, 2009; Pires and Clarke, 2012).

The involvement of organized criminal groups (as well as militias and terrorist groups) in wildlife trafficking has received increasing attention, to the point that a recent report from the International Fund for Animal Welfare stated that "the global illegal trade in wildlife crime *is* organized crime" (IFAW, 2008: 7, italic in original). While this affirmation appears probably too deterministic to describe the multifaceted reality, it is true that there are proxy indicators suggesting that sophisticated criminal networks are exploiting wildlife as source of profit, especially in its most lucrative areas such as caviar smuggling (Cook et al., 2002; Cooper, 2006; IFAW, 2008) and the fur trade (according to two interviewees). First, organized criminal networks can easily incorporate these smuggling activities with other types of contraband by using pre-established trafficking routes or even by employing wildlife as currency for money laundering (Cook et al., 2002; Zimmerman, 2003; IFAW, 2008)[33]. Second, the extent of wildlife trafficking and the need of facilitators—such as forgers to make fake export/import documents and businessmen in the transport sector—imply the need of organized criminal structures (IFAW, 2008; Wyatt, 2009; Pires and Clarke, 2012). Furthermore, wildlife crimes are often associated with high levels of violence and corruption (Zimmerman, 2003).

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[33] In particular, investigative reports and media news show that in many cases narcotics and wildlife trafficking flows are closely connected. After all, in many cases the countries of origin are the same (for instance, Latin America). Animals are often used as drug mules: in many cases narcotics have been hidden inside snakes, while in a 2013 international case it emerged how cocaine was hidden inside big size dogs that were then brutally killed in the destination country (Italy) to recover the drug (interview material).

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From the legal point of view, wildlife trafficking is mainly regulated by the 1975 UN Convention on the International Trade in Endangered Species of Wild Fauna and Flora (CITES). By 2013, 178 countries had signed onto the treaty. CITES provides three levels of protection for endangered species (Warchol, 2004; IFAW, 2012): species listed on Appendix I are considered highly endangered so that their trade is banned; species included on Appendix II are considered vulnerable if uncontrolled trade continues so that their export is strictly controlled and restricted; species listed in Appendix III are protected in at least one country, which has asked other CITES parties for assistance in controlling the trade[34]. In the US, CITES has been implemented by the Endangered Species Act (ESA), while in the EU it has been done through Council Regulation N. 338/1997 and Commission Regulation 865/2006. The EU Wildlife Trade Regulations, directly applicable in all Member States, provide a four levels, stricter control over wildlife trade (Engler and Parry-Jones, 2007)[35]. Without lingering too much on these legal aspects, for the aim of this dissertation what

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[34] Even if CITES is certainly the more successful convention on wildlife trade (Zimmerman, 2003), it has been subject to a number of critics. First of all, the regulation and control of wildlife trade depends on different national environmental policies and ethical value judgments, so that national legislations are not strongly harmonized yet and it is easy to find loopholes for criminal exploitation (Sand, 1997; IFAW, 2008; Lemieux and Clarke, 2009; Shneider, 2012). As stated by Sand (1997: 55) already fifteen years ago, CITES may have "reached its outer limits": many species remain outside its protection because they are considered as national resources (as in the case of ocean fisheries); furthermore, the relevance of CITES-type border controls does not work properly with the abolition of internal trade borders in "new" realities such as the European Union. The use of the Internet is likely to have exasperated these problems even further. Secondly, there are problems concerning the enforcement of CITES, which is not a self-executing treaty and it lacks a system of sanctions against defaulting states (Zimmerman, 2003; Izzo, 2010). Thirdly, according to the critical stand of Sollund (2011), the legal structure provided by CITES could even legitimate wildlife trafficking: indeed, it regulates the trade of already endangered animals and plants rather than banning it *tout court*.

[35] Indeed, Annex A of the Council Regulation contains not only all the species listed in CITES Appendix I but also other species threatened with extinction in the wild and some look-alike species of the same genus. As for all species listed in Annex A, as a general rule all commercial trade from, to, and within the EU in prohibited. Species listed in Annex B (which is stricter than the corresponding CITES Appendix II) require specific documentation both for the import and the export into and from the EU, while for species listed in Annex C (comparable to CITES Appendix III) an import permit is not required. Finally, Annex D lists species that do not have a CITES equivalent but that require nonetheless an import notification.

worths noting is that in the relevant legal framework two main types of criminal wildlife trades can be identified: *illegal* trade—for wildlife whose commerce is permitted only in exceptional licensed circumstances, while in general it is prohibited by the law—and *illicit* trade—for wildlife that can be commercialized providing that the legal business requirements are respected[36].

Parallel to wildlife trafficking, is the *illicit trade in pets* when they are native species originating from puppy mills, as in the case of dogs. Regulations for trade in pets largely varies from state to state (and often within a single state) and an international regulation is missing[37]. This phenomenon overlaps with that of wildlife trafficking: many exotic species are increasingly considered as pets in the Western markets, and the distribution channels often are the same (for instance, pet stores). In this research, trafficking in pets will be considered alongside the *illicit* trade in wildlife.

The use of the Internet entails new challenges in countering wildlife trafficking, making it more difficult to trace and hinder (Beardsley, 2007; IFAW, 2008). According to the wildlife trade monitoring network TRAFFIC (2007), wildlife authorities should make greater efforts to bring trades via the Internet under a stricter regulatory structure. Indeed, the online market in wildlife is currently poorly regulated and monitored, even if a large proportion of the trafficking is reportedly conducted in cyberspace (IFAW, 2012; Interpol, 2013)[38]. As regards criminological research, apart from some general claims that

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[36] It is not always easy to distinguish among these two types of trade. The ivory trade provides a clear example: while in 1989 all elephants were listed in CITES Appendix I—thus making the trade in ivory illegal—a few years later in several African countries elephants had been downlisted to Appendix II—thus making for those countries the trade in ivory possible—with the consequence that now in the global market for ivory it is very difficult to distinguish between what is legal and what is not (IFAW, 2012; Interpol, 2013).

[37] Generally speaking, certain documents—such as a passport for the animal and a recent certificate from a veterinary stating its good health—are required. As concerns the EU see, for instance, Regulations 998/2003 CE and 438/2010 UE, and Decision 2003/803 CE.

[38] So far, only few concrete actions have been taken to counter wildlife trafficking via the Internet. For Instance, eBay instituted a global ban on ivory sales after the International Fund for Animal Welfare (IFAW) surveyed publicly accessible websites in 11 countries in 2008 finding that ivory was a major area for wildlife trafficking, especially on public auctions websites (Izzo, 2010, IFAW,

the Internet facilitates wildlife trafficking, so far it has not focused on the online trade of animals and plants.

4.2.2 *Identifying the criminal opportunities provided by the Internet*

Expanding on Dalberg (2012: 11)—which focuses on the value chain of wildlife products—and from the interviews done for this research, it is possible to distinguish between five main stages of wildlife trafficking (stages 1-5). Since criminal opportunities can be identified also in the activities that are antecedent and consecutive to the trafficking activity *per se*, two additional stages have been added (stages 0 and 6).

Stage 0: preparatory activities antecedent to the commission of wildlife trafficking

Stage 1: poaching, harvesting, or breeding of the animal/plant

Stage 2: intermediate passage through local middlemen/the domestic market

Stage 3: passage through a regional middlemen/international traders

Stage 4: intermediate passage through local middlemen/the domestic market

Stage 5: distribution of the animal/plant/product

Stage 6: activities that are directly consequential or subsequent to the trafficking activity

In order to answer to my research questions, these six stages have been juxtaposed to the script *functions* following the scheme provided by Hancock and Laycock (2010).

2012). From a legal perspective, however, the only stance on this issue has been taken at the 58th meeting of the CITES Conference of the Parties in 2010, when a resolution was adopted, asking—among other things—to "establish, at the national level, a unit dedicated to investigating wildlife crime linked to the Internet or incorporate wildlife trade issues into existing units that investigate or monitor computer o cyber-crime" (Resolution 11.3, Rev. CoP15).

Moreover, according to their example, different *script categories* have been distinguished every time that the Internet has been found to have played a role. Obviously, not all functions (and the relative actions) are present in all the cases. A total of 25 cases investigated from 2007 to 2013 were analyzed.

Table 5 – *The crime script for Internet-mediated wildlife trafficking*

STAGE	FUNCTION	SCRIPT CATEGORY	ACTION IN WHICH THE INTERNET HAS BEEN USED
0	Preparation	Lifestyle Network	Formation/existence of a criminal network (email, dedicated forums)
1	Preparation	Crime	Buy traps and other instruments to poach animals (commercial websites, dedicated forums)
1 and 4	Preparation	Crime	Use of Google translator to post announcements in different languages
0	Preparation	Crime Lifestyle	Discussion with other members of the criminal network about the existing relevant legislation (email)
0	Entry	Crime Lifestyle Network	Discussion with criminal peers in order to exchange information on new potential buyers (email)
1 and 4	Entry	Crime Lifestyle Network	Interaction with potential buyers (auction websites, generalist commercial websites, dedicated commercial websites, dedicated forums, reserved area in a website)
0	Precondition	Network Lifestyle	Maintenance of contacts with other members of the criminal network (email, Skype)
0	Precondition	Lifestyle Network	Signal species that have been recently discovered/that are more rare and valuable (dedicated websites)
4	Precondition	Crime	Get information on specific species (on their morphology and on how to breed them)
2 and 4	Precondition	Crime	Get information on relevant legislation
1 and 4	Precondition	Network Lifestyle	Share information about the location of the animal/plant/product in its natural environment (dedicated blogs)
3 and 4	Instrumental precondition	Crime Network	Agreement to exclude local middlemen who hesitate due to fear of prosecution over illegal activities (email)
4	Instrumental precondition	Network Crime	Search for new suppliers (emails, dedicated forums)
4	Instrumental precondition	Lifestyle Network	Inform potential clients/middlemen on updated prices (emails)

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The crime script for Internet-mediated wildlife trafficking (continued)

STAGE	FUNCTION	SCRIPT CATEGORY	ACTION IN WHICH THE INTERNET HAS BEEN USED
4	Instrumental precondition	Lifestyle Network	Advertising fairs and exhibitions (dedicated websites, dedicated forums)
4	Instrumental initiation	Lifestyle Network	Forward emails from suppliers who can fulfill orders from potential customers (email)
0	Instrumental initiation	Crime	Identify the location of the animal/plant/product via GPS and web mapping services (e.g., Google Maps)
5	Instrumental actualization	Crime Lifestyle	Order/reserve a specific animal/plant/product (dedicated commercial websites, dedicated forums, email)
3 and 4	Instrumental actualization	Crime Lifestyle	Advertise availability of new animals/plants/ products (dedicated forums)
4	Instrumental actualization	Crime	Arrange sales of the animal/plant/product to final buyers (international auction websites)
1 and 3	Instrumental actualization	Crime Network	Arrange sales of the specimen to middlemen (international auction websites)
4 and 5	Instrumental actualization	Crime Lifestyle	Discuss prices/meeting places in the physical world to complete the deal (emails)
2, 3, and 4	Instrumental actualization	Crime Lifestyle	Discussion with other members of the criminal network about how to ship animal/plant/ product in small packages with deceptive labels when sending them through regular mail (email)
4	Instrumental actualization	Crime Lifestyle	Agreement among criminal peers to physically meet and exchange animals/plants/products (private messaging in dedicated commercial websites, email)
4	Instrumental actualization	Crime Network	Put costumers directly in contact with middlemen or suppliers (emails)
4 and 5	Instrumental actualization	Crime Lifestyle	Contact directly consumers reassuring them that without documents the price is significantly lower (emails, dedicated forum)
4 and 5	Instrumental actualization	Crime Lifestyle	Discuss with potential customers the absence of required documentation (emails)
4 and 5	Instrumental actualization	Crime Lifestyle	Reassure customers about the quality of the animal/plant/product (dedicated commercial website, auction website)
1 and 4	Doing	Crime Lifestyle	Agreement to send animals/plants/products via regular mail among supplier and middlemen (emails)
1 and 4	Doing	Crime	Sell animals/plants/products on auction websites (e.g., eBay)

The crime script for Internet-mediated wildlife trafficking (continued)

STAGE	FUNCTION	SCRIPT CATEGORY	ACTION IN WHICH THE INTERNET HAS BEEN USED
4	Doing	Crime	Automated sell of the animal/plant/product (order form on dedicated commercial website)
4, 5, and 6	Doing/ post condition	Crime	Monitor the delivery via regular mail
4 and 5	Post condition	Crime	Payment (prepaid cards that can be recharged online)
6	Post condition	Lifestyle Network	Buy accessories/ share videos and pictures in cases of zooerasty where wildlife animals are involved (dedicated forums, deep web)
4 and 6	Post condition	Crime Lifestyle	Attempt to cover the criminal act by claiming that animals/plants/products have been imported in the past with CITES certificates but they have been all given to others (dedicated website)

Through this conceptual framework, it has been possible to identify eight main types of criminal opportunities that the Internet provides for wildlife trafficking.

1. *Communicative opportunities*: communication is facilitated by the use of services such as emails, Skype, and instant messaging in forums both among traders and between them and (potential) customers. Communicative opportunities affect all functions (from preparation to post condition) and all script categories. Communicative opportunities are generally present in all stages of the criminal activity; however, they particularly serve the final ones.

2. *Informational opportunities*: the Internet provides access to useful information, ranging from tips on very practical aspects (such as how to feed parrots) to knowledge of the existing legal framework. Informational opportunities impact preconditions of the script category "crime", and they affect the stages of the trafficking (2 and 4) where local intermediaries are involved.

3. *Technical opportunities*: certain online services can provide solutions to specific problems; for instance, the Internet has been used to translate advertisements into other

languages (precondition), to identify the location of rare plants in their country of origin in order to organize efficiently their harvest (instrumental initiation), and to track the shipment of animals, plants, and products when sent by mail (doing/post-condition). Technical opportunities affect the script category "crime". They have been found in all stages of the criminal activity apart from those regarding the passage through local and regional intermediaries in the beginning of the trafficking chain (stages 2 and 3).

4. *Managerial opportunities*: the management of wildlife trafficking is facilitated by the Internet throughout the trafficking chain and especially in Stage 4. For instance, regardless of the distance, traders can easily look for new suppliers if needed (instrumental precondition), and put consumers directly in contact with other members of the criminal network (instrumental actualization). Managerial opportunities generally affect the script categories "crime" and "network". When used for management, the Internet does not merely provide an enhanced communication tool, but it rather offers a unique framework to adjust the needs of the trafficking activity to meet changes in the marketplace to ensure efficiency in the trafficking chain.

5. *Organizational opportunities*: the use of the Internet facilitates the internal organization of criminal networks; in particular, it can reduce the organizational layers. Indeed, some organizational layers now are no longer necessary: in particular, a distinction between international and local intermediaries as expected in stages 3 and 4 was generally missing in the cases observed, where the same people were involved in both cross-border trades and relationships with final buyers, thus acting as local retailers.

6. *Relational opportunities*: the Internet can affect the external interactions of criminal networks, facilitating the relationships among them as well as their contacts with (potential) buyers. Thus, the Internet provides an irreplaceable platform to expand offenders' networks of relationships by building new business ties with actors involved in the trafficking chain in various capacities. Relational opportunities affect the script categories "crime" and "network" in the preparation, entry, and instrumental precondition functions. Relational opportunities have been found in all stages of the criminal activity apart from

Stage 2, which regards the passage through local intermediaries at the beginning of the trafficking chain.

7. *Promotional opportunities*: events in the physical world such as fairs and exhibitions (instrumental precondition) and the availability of animals, plants, and products to be sold online (instrumental actualization) are advertised via the Internet. Promotional opportunities affect particularly stages 3 and 4 of wildlife trafficking and the script category "lifestyle".

8. *Persuasive opportunities*: the Internet can be used to reassure (potential) buyers about the reliability of the trade and the validity of the animal, plant, and product sold. For instance, in one case regarding caviar smuggling, a semblance of legality was attained by stating that the caviar had been purchased as a gift from the Russian wife of the advertiser (instrumental actualization). In another case, the criminal activity was disguised by the existence of outdated legal documentation (post-condition). Persuasive opportunities have been found in the final stages of the trafficking (stages 4 and 6) and mainly affect the "crime" and the "lifestyle".

4.2.3 Discussion

From existing media and investigative reports it was difficult to understand the extent to which the Internet has affected wildlife trafficking: while in most cases the use of the Internet is disregarded, when this is mentioned it is usually done with alarmist tones. From the keywords searches and the interviews with Italian law enforcement officers (from CITES and NIRDA, the detective squads assigned to combat crimes against animals) and acknowledged experts (officials from wildlife NGOs), an impressive number of investigative cases where the Internet played a major role in the trafficking flow did not emerged. However, this seems to be mostly due to the lack of attention (and of resources) from law enforcement in many countries: indeed, one just has to key-in the name of a wildlife specimen on Google to be overwhelmed by hundreds, if not thousands,

of announcements[39]. From the case studies and from additional information gathered during the interviews, it emerges how the Internet, as one interviewee reported, has not only "entailed an explosion of the phenomenon", but also re-designed several stages of wildlife trafficking and the modalities through which some of them are carried out. Two interviewees claimed that an "evolution" of this criminal market has occurred, and one stressed how the Internet not only is a crime facilitator but it also made possible the criminal activity itself by serving as "the real instrument for the [criminal] organization to work".

The extent to which the use of the Internet affects wildlife trafficking depends on the specific phase in the trafficking chain. From the script framework and particularly from the Stage column, it clearly emerges that the Internet plays a major role in the preparation of the criminal activity and in the final parts of wildlife trafficking—namely the transit through local intermediaries in the destination countries and the distribution stage. In particular, regarding the new criminal opportunities in the distribution stage, the criminal market in wildlife closely resembles the flexible "cyber-bazaar" in counterfeit goods described by Treadwell (2011: 187). On the contrary, apart from its obvious usage as a communication tool, the Internet does not seem to have affected the opportunity structure in the initial stages of the criminal activity. This is so because most poachers aim to supplement their income by relying on traditional social and economic structures to sell their products.

Only in a couple of cases has the Internet allowed for the planning of the criminal activity directly from the destination country: for instance, in a case of trafficking in cacti, the use of new technologies has eliminated the initial stages of the criminal activity by allowing offenders to plan these stages completely (from preparation to post-condition) from Italy.

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[39] As concerns Italy in particular, the identification of cases was favored by the fact that since 2011 a dedicated task-force for wildlife trafficking committed via the Internet is operational, as demanded by the last CITES Conference of the parties.

Case. Eleven persons were investigated for trafficking rare cacti from Chile, Argentina, and Peru (Appendixes I and II CITES). The perpetrators geo-referentied and identified the position of specific species via the Internet before going to the location to harvest them. Cacti were then sold on dedicated forums and websites to cactus lovers in the destination country[40].

The order of certain phases can be shuffled: as illustrated in the following case, for instance, the poaching can happen at a later stage, after the interaction with the buyer, when he/she orders a specific animal, plant, or product (instrumental actualization).

Case. Specific types of turtles (Appendix I CITES) were ordered from the Internet and then poached directly from their natural environment (in Sardinia). Apparently, the supply was insufficient to satisfy the number of requests received after online announcements, so that the Internet was again used also to search for new suppliers[41].

Trafficking wildlife via the Internet is perceived as a low risk activity, to the point that in one case, according to records from police investigations, it was evident that the trafficking continued even when the perpetrators were conscious that some co-offenders were targeted by law-enforcement[42]. Similarly, one of the interviewees underlined that "for the time being, these groups do not take many precautions: they are conscious that some controls exists, but also that they are sporadic".

In the Action column of the script framework, also the modalities through which the Internet was used are identified. In particular, the Internet services through which the trafficking activity has been carried out as well as the types of *cyber-hotspots* used are specified: they are not only "convergence settings" (Felson, 2006) as identified by Soudijn and Zegers (2012)—i.e., online places where potential offenders can easily meet each

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[40] CITES investigative material, 2007.
[41] CITES investigative material, 2010.
[42] CITES investigative material, 2011.

other—but rather *loci* where interactions among *all* actors involved in wildlife trafficking are facilitated. Apart from generalist commercial and auction websites, there are a number of *dedicated* commercial websites (such as ItalyPet), forums, and blogs. Furthermore, people interacting in cyberspace often meet in the physical world to conclude their deals, so that in many instances cyber-hotspots are better described as extensions of traditional hotspots. A clear example is provided by the fact that fairs and exhibitions where live animals and plants are sold are often advertised in conjunction with the online selling.

Regarding the cyber-hotspots identified, what garners the attention is that, in almost all cases, criminal opportunities arose from the so-called "surfing web", open to the wider public: thus, the demand for contacting potential collectors of specific species overcomes the need for discretion in the trafficking activity[43]. This is true especially in the case of both illicit and illegal sales of animals, plants, and products that might be confused by non-experts as legally marketable items. It is safe to say that differences in the degree of concealment of wildlife trafficking activity in cyberspace are better explained by the different perceptions of the seriousness of the criminal act (in terms of what is trafficked) than by the degree of illegality of the market (illegal or illicit).

So far, the analysis has focused on the impact the Internet has on how criminal acts are carried out. The Script Category column of the script framework, however, shows that the *crime* is only one of the parallel processes taking place in complex criminal activities, together with the criminal lifestyle and the participation in criminal networks. By including these aspects in the analysis, it is possible to describe how various actors involved in wildlife trafficking exploit the Internet, and how the use of the Internet changes the relationships among these actors.

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[43] One of the interviewees described a case where dogs were sold in a forum accessible only from a reserved area of a website. However, in this case the need of hiding the criminal activity was due not much to the illegality *per se* of the trade but to the fact that this was linked to a wider activity of dog fighting. A second interviewee reported about the presence of wildlife trafficking in the so-called "deep web"—the hidden part of the Internet that cannot be reached through standard search engines—in cases where the selling of exotic animals or animals' parts were specifically connected to phenomena of zooerasty and other sexual perversions.

The Internet is exploited for wildlife trafficking by three main categories of actors: merchants that are involved in legal wildlife trade, full-timers for whom wildlife trafficking is the main source of income, and people involved in "extemporaneous" criminal activities (to use the word of one of the interviewees). In this last (more rare) case, individuals or couples run small-scale criminal trades that depend on transient opportunities—for instance, the poaching of a couple of wildlife animals during an exotic holiday.

In most cases, Internet-mediated wildlife trafficking is intermingled with legal markets: on the one hand, legitimate companies provide legal coverage for illegal trades; on the other, many legitimate traders in wildlife and pets simply decide to expand their businesses by embracing criminal opportunities in the online realm as an easy and safe way to increase their profits. The following two cases exemplify this.

> *Case.* Black caviar (Appendix I CITES) was illegally traded by Russian couriers from the Russian Federation to Italy through Moldova thanks to the legal coverage of a legitimate Italian company operating in that area. Once in Italy, the caviar was sold online by Italian advertisers through dedicated websites (in one of these there was also an order form to make the purchase completely automated) and online auctions (eBay) well below market prices[44].

> *Case.* Two out of 11 persons investigated for trafficking rare cacti (Appendixes I and II CITES) worked in a garden center. Because of their jobs, they had genuine certificates of origin for cacti from Chile that were more than 10 years old, and they were trying to use these to cover the illegality of their current trades. They also attempted to conceal the criminal nature of their recent activities by publicly denying on a dedicated website (run by them) that they ever traded endangered species and by claiming that the cacti regularly imported in the past with CITES certificates had all been given to others[45].

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[44] CITES investigative material, 2011.
[45] CITES investigative material, 2007.

While in most cases traders simply expanded their business activity over the Internet, one of the interviewees underlined that some trades (for instance, dogs sold via the Internet) are so profitable that many persons have left their legitimate work to dedicate full time to the criminal market.

Regarding Internet-mediated wildlife trafficking, the case studies highlight that the actors behind the scenes are often persons professionally involved in large-scale criminal trades. In some of the law enforcement operations considered, there were the same people behind various announcements, even if they appeared with different names. Furthermore, they claimed to be able to provide a broad range of animals from different geographical areas, which suggests the existence of criminal networks with stable international connections.

Media and investigative reports often relate wildlife trafficking to transnational organized crime and create the idea that this transit crime is run by sophisticated criminal groups. Indeed, there are also organized criminal organizations specializing in wildlife trafficking which are involved as intermediaries in profitable and large scale types of trades, especially in the initial stages of the trafficking flow. There are no specific elements that indicate that these organized criminal groups are facilitated by criminal opportunities that are specifically provided by the Internet. On the other hand, new technologies have allowed the entrance into the wildlife criminal market by very loose organizations: where a structured criminal association was once needed to commit cross-border crimes, in many instances this is no longer the case. For instance, both payment and product delivery can be made from a safe distance through online banking and automated postal services. Sometimes only specific parts of the trafficking chain need the involvement of professional, organized criminal groups. According to a couple of interviewees, the Internet has facilitated the creation of contacts with some of these criminal actors—for instance, with groups operating in the Netherlands that are specialized in forging documents.

Even if in certain cases many people were involved (often about 10 people, though one investigation charged 27 people), in most instances the networks running the criminal business via the Internet were composed of very few people, often couples or small family

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groups (for instance father, son, and the son's partner). One would expect a certain degree of sophistication from criminal networks running wildlife trafficking, given its intrinsic complexity. Nonetheless, the use of the Internet has allowed very loose organizations and even individuals to enter the market and to be equally (if not more) efficient. The technical skills required are low, and the essential information needed to carry out the trade can be easily accessed online by beginners. It should be noted that in the case studies criminal networks operating via the Internet were often intergenerational, and in cases were genders were specified approximately one fourth of the identifiable investigated or convicted persons were women.

> *Case*. Capuchin monkeys (Appendix II CITES) were trafficked from West Africa to Italy. In particular, they were delivered in Milan by members of the West and Central African communities and in Padua by a Belgian couple. Online announcements were hosted by a Spanish website[46].

> *Case*. The defendant was found with 70,000 euros cash in his apartment. He was selling different types of animals via the Internet. Given their different native habitats, it is likely he had several suppliers. During the search, sloths, aardvarks, Asian bats, snowy owls, flying foxes, and venomous snakes were found[47].

Greater ease in communications as well as new managerial and organizational opportunities allow for highly flexible and fluid organizational forms, which are capable of adapting to contingent needs. In several cases, everything was managed via the Internet, so that it was possible to react promptly to specific buyers' needs—for instance, by putting them in contact with partner suppliers (instrumental actualization) or by finding new suppliers (instrumental precondition) to meet buyers' requests. In many cases, thanks to this flexibility it was possible to bypass local intermediaries. As a consequence, no case exhibited all the five stages identified by Dalberg (2012).

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[46] Journalistic inquiry from *La Repubblica*, April 4, 2007.
[47] Media news from *Il Corriere della Sera*, March 26, 2010 and interview material.

Case. Offender A, an American shop owner, sold sperm whale teeth and narwhal tusks (Appendix I CITES) to tourists and a regional intermediary, offender B. Offender B, in particular, acted as the US-based distributor for offender C, a Ukraine-based dealer selling the product to overseas customers and to several other smugglers. Offender A decided to expand his business by selling the products to online buyers from all over the world. Some of the buyers were likely to be regional intermediaries in other (European) countries given the large quantities of products bought. After a "flurry of emails" (as reported in the judicial file), offender A decided to bypass offender B (who displayed doubts regarding going on with the criminal activity) and to sell directly to offender C[48].

Many investigations, however, highlight the fact that relationships between suppliers, intermediaries, and traders are stable over time. In a couple of cases, it was possible to note that traders and suppliers were careful not to get into each other's way and respected a certain division of labour even when there was the possibility to have direct contacts with buyers, probably in order to maintain good relations with intermediaries for future deals.

Case. The core of the criminal network—trafficking mainly turtles (Appendix I CITES) but also cats and dogs—was formed by offender A, offender B, and offender C. Offender A was in charge of posting advertisements on dedicated commercial websites and of relations with customers, while offenders B and C were the suppliers (sometimes actings as regional intermediaries, sometimes directly as poachers). The poaching and the illegal trade were rather intense, as signaled by the impressive amount of turtles advertised online. Prices were particularly low (about half of the price in the legal market). Departing from this central triad, a complex criminal network emerged during the investigation. Even if online announcements were done under different names and they referred to different parts of Italy, mobile numbers were the same. Furthermore, some of the customers seemed to be particularly

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[48] Judicial material from the US Court of Appeals, First Circuit, 2012.

active: in connection to that, CITES officials suggested that they could be intermediaries themselves[49].

Finally, it has to be mentioned that the Internet is linked to wildlife trafficking in many cases of fraud. Even if these have not been considered in the analysis, it should be noted that all interviewees underlined how many online announcements (in commercial websites or sent as email spam) promise animals for free or at very low prices. Those announcements regard especially animals whose trade is manifestly illegal such as monkeys or tigers, but also expensive full-blood dogs, allegedly sent from Western and Central Africa. Victims are then asked to pay unexpected expenses for the transport. Obviously, animals are never delivered.

To sum up, the use of the Internet has affected the organization of wildlife trafficking, as concerns both the carrying out of the criminal activity and the patterns of relations in and among criminal networks. Thus, for wildlife traffickers, the Internet does not seem to be only used as a communication tool (e.g., through Skype and emails) but it has also affected this criminal market in a much more extensive way by making it a *hybrid market* that combines the traditional social and economic opportunity structures with the new one provided by the Internet.

Some tendencies can be identified: first of all, the Internet has boosted wildlife trafficking in a substantial way by lowering the barriers to entry into criminal markets and opening the way for new criminal actors. Secondly, as hypothesized by Brenner (2002) and Wall (2007: 39 ff), the transformative impact of the Internet has affected the organization of criminal networks and the division of criminal labor: individuals and looser groups can now carry out complex and far-reaching activities, given their greater potential control over the criminal process. Instead of by hierarchical organizational structures, Internet-mediated wildlife trafficking is run by fluid networks adapting to transient criminal opportunities. At the same time, some organizational layers have

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[49] CITES investigative material, 2011.

been eliminated. Furthermore, the Internet has re-configured relations among suppliers, intermediaries, and buyers: not only does it facilitate communication and exchange of information, but it also affects how trust among them is earned. Finally, in most cases Internet-mediated wildlife trafficking comprises routinized criminal acts carried out by professional offenders for whom this transit crime is a major source of income and indeed a way of life: they may have as well other sources of income, but their economic interests are primarily connected to criminal profits, so that their lives are organized around a criminal way of behaving (Mack, 1972: 44-45; Hobbs, 1995). They do not rely on sporadic opportunities, but they are rationally geared to the needs of their criminal activity, which depends to a significant degree on their handling of "the technical problems of crime— which are the problems of combating social control in its widest sense" (McIntosh, 1975: 73). In the Internet environment, new technical problems have to be overcome.

As has already been underlined, an important innovation in wildlife trafficking can be attributed to the new actors that have entered the market as traders, especially young collectors. Most cyber-hotspots act as *fora* where not only persons with peculiar interests can more easily "meet", but also potential sellers and buyers can contact each other. People interacting in these "places" usually share the same types of passions and tend to recognize themselves as part of the same social network. Furthermore, no matter how highly-specialized or segmented the market in trafficked animals, plants, or products is, it would be in any case much easier to find potential buyers or sellers online than in the physical world. From this point of view, the Internet seems to have further boosted the importance of *niche criminal markets*.

4.3 Trafficking in counterfeit pharmaceuticals*

4.3.1 The criminal market

The commercialization of the Internet during the 1990s has lead to a silent consumers'
revolution. It is theoretically possible to buy all types of items online, including
pharmaceuticals for human use. Despite the obvious benefits of having the possibility of
purchasing these drugs via the Internet, a major problem connected with this e-commerce
regards the massive presence of counterfeit medicines available through the online market.
According to the World Health Organization (WHO, 2006), up to 50 percent of medicines
sold online are counterfeits. These counterfeits are an extreme threat to health: even if
incident trends are difficult to assess because of the very high dark number, estimates
range from 100,000 to 700,000 deaths per year (Harris et al., 2009; Bate, 2012a). Despite
the increasing awareness that the production and the trade of counterfeit pharmaceuticals
"ought to be considered a more serious transnational crime than it is" (Attaran et al., 2011:
2), this criminal market has been surprisingly under-investigated by criminologists, and
the (rare) scholarly work that addressed this issue comes from other disciplines such as
pharmacy, medicine, or chemistry[50].

In scientific debates and in different legal systems, there are various definitions
of "counterfeit pharmaceuticals". A common understanding can be identified in the
broad definition offered by the World Health Organization (WHO), according to which
"spurious/falsely-labelled/falsified/counterfeit (SFFC) medicines are medicines that are

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*Since early 2013, I have been part of the project "www.fakecare.com - Developing expertise
against the online trade of fake medicines by producing and disseminating knowledge,
counterstrategies and tools across the EU", coordinated by the eCrime group of the University
of Trento and financed by the EU Commission under the program ISEC 2011. Any possible
overlapping of this chapter with the final outcomes of the Fakecare project might be due to my
participation in it.

[50] In this regard, it has to be mentioned an ongoing project carried out by the eCrime group at
the University of Trento, entitled "www.fakecare.com - Developing expertise against the online
trade of fake medicines by producing and disseminating knowledge, counterstrategies and tools
across the EU".

deliberately and *fraudulently* mislabeled with respect to identity and/or source" (WHO, 2012, emphasis added). The criminal market in counterfeit pharmaceuticals concerns both categories of medicines as they are generally distinguished by national regulatory agencies: "over the counter" (OTC) and "prescription only" (POM). While the former are sold directly to buyers without a medical prescription, the latter can be sold only with the approval of a healthcare professional (Gentilomo et al., 2006).

It is impossible to provide a precise quantification of the market in counterfeit medicines. However, there is consent that it is very profitable: the business value of fake drugs is estimated to be about 75 billion dollars per year (Jackson, 2009: 181; WHO, 2012), about 10 percent of the global trade in medicines. Even if counterfeiting pharmaceuticals is a pervasive and global problem (a real "worldwide pandemic" according to Wertheimer and Santella, 2005: 619), its extent varies depending on the area of the world and it has been claimed that there is a "North-South divide" (Cahoy, 2008). In developing countries counterfeit medicines are a dramatic problem for healthcare: it has been estimated that in certain African, Asian, and Latin American countries at least 30 per cent of medicines consumed are counterfeit (Dondorp et al., 2004; IMPACT, 2008). On the contrary, in developed countries estimates are far more optimistic: less than 1 per cent of medicines are likely to be counterfeit (IMPACT, 2008). The Internet is basically the only way in which counterfeit medicines enter these markets, since the legal production and supply chains are essentially safe because of effective control policies set by national authorities (Bate, 2012a). Most counterfeit medicines are manufactured in India and China, and then sold in the rest of the world (Pincock, 2003), but "pockets of local production" exist also in other poorly regulated countries, such as Spain and Russia (Bate, 2012b: 7). When they are exported to Europe and Russia, they are often shipped through legal safe-heavens—such as the Emirates—to hide their origin (IRACM, 2012a).

The global range of the transnational trade in counterfeit medicines is seen as an indicator that this trafficking flow is run by organized criminal networks with a considerable degree of sophistication (Satchwell, 2004; Attaran et al., 2011; Interpol, 2012; IRACM, 2012a). Indeed, it is at least likely to think that highly sophisticated

criminal enterprises are involved in this trade, given the need to manage and control different phases of the criminal activity, from pressing ingredients into pills and preparing packaging to distributing the final products and deceiving end-users (Attaran et al., 2011: 4). Furthermore, the lack of a harmonized legal framework creates gaps and loopholes in legislation that can be exploited, while the lack of adequate sentencing for this type of criminal activity makes it less risky for criminals than other comparable trafficking flows, such as the one in traditional drugs (Attaran et al., 2011). There is also anecdotical evidence that some groups operating in this market use organized crime methods, such as violence, threats, and corruption (Cohen et al., 2007). The trade in counterfeit medicines is also considered a source for financing international terrorism (Gibson, 2004; Finlay, 2011; IRACM, 2012a).

Legal frameworks addressing counterfeit medicines vary substantially between countries. The EU has been a pioneer in adopting regulatory control measures. The first relevant legal instrument can be traced to Directive 2001/83/EC, recently amended by Directive 2011/62/EU. This new directive is the first legal act that explicitly addresses the online trade in medicines. It aims to harmonize Member State legislation in this field: national laws on the online trade in medicines are currently extremely different and in some countries the online sale is even banned *tout court*[51]. Once implemented, Directive 2011/62 will allow Member States to sell via the Internet both OTC drugs and POMs, or only OCT medicines, depending on their choice. At the international level, the more diffused legal instrument is Resolution 20/6 of 15 April 2011 by the UN Commission on Crime Prevention and Criminal Justice (Countering fraudulent medicines,

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[51] Member States are in principle sovereign in matters of health (168 TFEU) and they are allowed discretion on the level of protection they want to afford to public heath (Hancher and Sauter, 2010). However, this instance has to be balanced with free movement rules. Before Directive 2011/62/EU, this trade-off was mostly regulated by case law. In particular, with the 2003 DocMorris case (C-322/01), addressing the question whether the cross-border sale of counterfeit medicines via the Internet is allowed in the EU, the European Court of Justice held that domestic prohibitions on the online sale of medicines are allowed, provided that they are proportionate: this means, for instance, that limitations to the sale can occur when the pharmaceutical product requires the prescription of a healthcare professional to be sold (for further analysis, see Gentilomo et al., 2006; Hancher and Sauter, 2010).

in particular their trafficking). In this resolution, the Commission urges States to enact proper legislation to prevent and counter the illegal trade in counterfeit medicines in all stages of the supply chain and to improve cooperation in enforcement practice. However, no specific reference is made to the use of the Internet for trafficking in medicines[52]. To sum up, depending on the countries involved, the online trade in medicines can be legal, illicit, or even illegal. When the pharmaceuticals are counterfeits, the trade is always illegal, but for consumers it is difficult to detect them. The situation is made even more complex by the fact that sometimes it is the *use* of pharmaceuticals to be illegal—i.e., when they are used for doping purposes.

Concerning specifically the online trade in counterfeit medicines, this problem is strictly related to the presence, since the 1990s, of *online pharmacies*—i.e., retail pharmacies that operate partially or exclusively over the Internet and that ship orders to customers by mail. Within a little bit more than a decade, the number of these websites grew exponentially, and recent scholarly works and investigative reports are consistent in denouncing the presence of thousands of websites that sell counterfeit pharmaceuticals (Arruñada, 2004; Orizio et al., 2010). Three main types of online pharmacies can be identified: legal online pharmacies, fake online pharmacies, and illegal online pharmacies (Di Giorgio, 2011): *legal online pharmacies* respect the legal framework of the country where they are established[53]; *fake online pharmacies* sell medicines only in appearance while in reality they operate frauds and phishing activities; *illegal online pharmacies* are the main system to sell counterfeits in Western markets. Illegal online pharmacies can be accessed both via spamming and through a search engine (Gentilomo et al., 2006).

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[52] The Council of Europe already in 2010 adopted the Convention on the counterfeiting of medical products and similar crimes involving threats to public health (Medicrime Convention) to criminalize acts related to pharmaceutical counterfeiting. The Medicrime Convention—not yet into force—has been the first international treaty in this field. It considers the use of mass distribution means (e.g., the Internet) to trade counterfeit medicines as an aggravating factor (Cabezas and Piqueras, 2011; IRACM, 2012b).

[53] The concept of "legality", nonetheless, has to be considered in a relative sense: indeed, the inherent transnational nature of the Internet entails that an online legal pharmacy could be accessed by customers from a country where the sale is considered illegal.

Usually they rely on "mirror sites"—i.e., websites that are located in countries where the online commerce of pharmaceutical products is illegal, and that send the user back to the head pharmacy, located where the product can be sold or the activity is less risky (Senato della Repubblica, 2010). It is difficult to distinguish illegal pharmacies from the legal ones. Nonetheless, several indicators have been identified to help buyers as well as law enforcement to pinpoint illegal websites. First of all, in illegal pharmacies it is possible to buy POMs without medical prescription. Secondly, there are no physical mailing addresses and telephone numbers, or they are false. Thirdly, there are continuous reassurances concerning the anonymity of the transaction. Finally, there is no possibility to interact with a healthcare professional, all payments can be done only through credit cards, and they do not accept health insurance (Gentilomo et al., 2006).

From the analysis of the existing literature, it emerges that two main types of counterfeits medicines are sold via the Internet (Di Giorgio, 2011): first of all, so-called "lifestyle drugs"—i.e., pharmaceuticals that are assumed voluntarily to improve appearance or certain aspects of personal life, for instance drugs for erectile dysfunction (in particular sildenafil citrate, sold as Viagra, Cialis, and Levitra), obesity (such as sibutramines), and male pattern baldness. A second type is that of opioid analgesics (for instance, Vicodin) and psychotropic substances such as stimulants, antidepressants, and benzodiazepines (Forman et al., 2006; Raine et al., 2008), which could be misused also by drug addicts (Ghodse, 2010: 170). The literature also reports cases of psychopharmacological drugs and anti-HIV drugs (Gentilomo et al., 2006). A new trend has been identified in pharmaceuticals that are sold online as "natural products" or nutritional supplements to exploit their looser regulation (Senato della Repubblica, 2010).

A number of initiatives have been taken to prevent and counter the online trade in counterfeit medicines at both the national and international levels by public and private stakeholders. First of all, several actions have already been taken to raise consumers' awareness by helping them to distinguish between legal and illegal online pharmacies. For instance, in 1999 the US National Association of Boards of Pharmacies (NABP) established the Verified Internet Pharmacy Practice Sites (VIPPS) program: a

hyperlink seal that can be displayed in the online pharmacy's webpage if it complies with certain standards (Olivier, 2000). Secondly, a challenging but fundamental task is that of monitoring online pharmacies. The main service in this field is currently provided by LegitScript, a private actor which is endorsed by many government agencies in the Western world (Jena et al., 2011). Thirdly, as concern law enforcement, the role of Interpol (and of its national partners providing technical support) as a major actor in countering the online criminal trade in counterfeit medicines has to be mentioned. Interpol, in particular, coordinates Operation Pangea—i.e., an annual week of action that brings together law enforcement, regulatory agencies, and private stakeholders from several countries to target online trade in counterfeit pharmaceuticals (Interpol, 2012). The first Pangea was held in 2008, while the last one (the sixth) has been carried out in late June 2013. Finally, also pharmaceutical companies play a pivotal role in tackling the criminal trade in pharmaceuticals: Pfizer, one of the world's largest companies, in May 2013 has taken the unusual step of selling its famous erectile dysfunction drug (Viagra) directly from its website in order to counter its illegal sell online.

4.3.2   *Identifying the criminal opportunities provided by the Internet*

In accordance with the crime script model presented in Sub-section 3.5.2, also in the case of counterfeit pharmaceuticals the trafficking activity was sorted out into stages. Re-elaborating from Finlay (2011: 9) and from the interviews carried out, it is possible to distinguish between four main stages (stages 1-4). Stages 0 and 5 have been added for criminal opportunities emerging in the actions that are directly antecedent and consecutive to the trafficking activity *per se.*

Stage 0: preparatory activities antecedent to the trade in counterfeit pharmaceuticals

Stage 1: production of pharmaceutical products

Stage 2: intermediate passage through transit networks (wholesalers and other importers operating at the international level)

Stage 3: intermediate passage through local retailers

Stage 4: distribution of the pharmaceutical product to the final user

Stage 5: activities that are directly consequential or subsequent to the trafficking activity

A total of 30 cases investigated from 2000 to 2013 were analyzed.

Before proceeding with the script analysis and the subsequent discussion, a clarification has to be made: when pharmaceuticals are sold via the Internet, the tendency is that to consider them as counterfeit products, given the existing knowledge on the quality of the medicines sold online (see Section 4.3.1) and the fact that it is basically impossible to distinguish counterfeits without a closer observation or chemical testing (which can be done only after the purchase). However, pharmaceuticals bought online could not be counterfeit *stricto sensu*. Moreover, when pharmaceuticals are sold online as doping products, the narrative generally tends to change: the focus is not on the counterfeiting problem anymore, but rather on the illegal usage of the product. To the author's knowledge, no research has yet been made to specifically assess the extent to which doping pharmaceuticals sold online are counterfeits. However, since doping products sold via the Internet usually originate from the same counties, follow the same distribution routes, and are sold through the same channels than other pharmaceuticals, they will be considered alongside the *illegal* online trade in POMs if not otherwise specified.

Table 6 – *The crime script for Internet-mediated trade in counterfeit pharmaceuticals*

STAGE	FUNCTION	SCRIPT CATEGORY	ACTION IN WHICH THE INTERNET HAS BEEN USED
0 and 1	Preparation	Crime	Buy technical lab equipments to prepare pharmaceuticals (commercial websites, auction websites)
1, 3, and 4	Preparation	Crime	Obtain active ingredients and excipients (commercial websites, auction websites)
2, 3, and 4	Entry	Crime Lifestyle	Individual contact with potential clients (email spam)

The crime script for Internet-mediated trade in counterfeit pharmaceuticals (continued)

STAGE	FUNCTION	SCRIPT CATEGORY	ACTION IN WHICH THE INTERNET HAS BEEN USED
2, 3, and 4	Entry	Crime Lifestyle Network	Interaction with potential clients (auction websites, dedicated commercial websites, dedicated forums, dedicated online magazines, online social networks)
3	Entry	Crime	Obtain unpackaged pharmaceuticals
0	Precondition	Lifestyle	Obtain information on how to treat a particular disease or condition (by users)
4	Instrumental precondition	Crime Lifestyle	Get rid of national legal restrictions concerning specific pharmaceutical products (e.g., emergency contraceptive pills)
4	Instrumental precondition	Crime Lifestyle	Obtain information about clients and their health conditions
3	Instrumental initiation	Crime Lifestyle Network	Buy pharmaceuticals from international wholesalers in order to re-sell them as local retailers (commercial websites, auction websites)
2, 3, and 4	Instrumental actualization	Crime Lifestyle	Advertise pharmaceutical products (online pharmacies, commercial websites, auction websites, dedicated blogs and forums, dedicated online magazines, online social networks)
2, 3, and 4	Instrumental actualization	Crime Lifestyle	Advertise online pharmacies (dedicated blogs and forums, dedicated online magazines)
4	Instrumental actualization	Crime Lifestyle	Reassure clients about the safety and the legality of the sale (online pharmacies, dedicated forums)
4	Instrumental actualization	Crime Lifestyle	Reassure clients about the quality of the pharmaceutical product (online pharmacies, dedicated forums)
3 and 4	Doing	Crime	Sell of the pharmaceutical product (auction websites, dedicated forums)
3 and 4	Doing	Crime	Automated sell of the pharmaceutical product (order form on online pharmacies)
3 ,4, and 5	Doing/ post condition	Crime Lifestyle Network	Customer loyalty strategies (online social networks, dedicated forums)
4	Post condition	Crime	Payment (prepaid cards that can be recharged online)

Through the crime script for the Internet-mediated trade in counterfeit pharmaceuticals and doping products, it is possible to identify nine main types of criminal opportunities provided by the Internet.

1. *Communicative opportunities:* communication is facilitated among offenders and (potential) clients. Communicative opportunities affect the "crime" and "lifestyle"

categories and are mainly present in Stage 4, which regards the distribution of the pharmaceutical product to the final user (entry, instrumental precondition, instrumental actualization, and doing). Communication generally occurs, for instance, via email spam and online pharmacies, so that in most cases it is unidirectional from the seller to the buyer.

2. *Informational opportunities*: the Internet provides access to useful information for both clients and offenders. Informational opportunities may hide a severe danger for certain buyers, that could be encouraged to rely on self-medication (precondition). Informational opportunities impact mainly the "lifestyle" and they affect relationships with clients.

3. *Targeting opportunities:* the Internet allows offenders to obtain information about clients and their health condition (instrumental precondition). In this way, for instance, customers can be profiled and online advertisement be tailored to their specific habits and needs.

4. *Managerial opportunities:* the management of the trade is made more efficient in the final stages of the trafficking chain (3 and 4) thanks to the automated sell of pharmaceutical products (doing). Managerial opportunities generally affect the script category "crime".

5. *Organizational opportunities:* the use of the Internet can modify the organizational layers, since it allows newcomers to interject in the trafficking chain as local or even international retailers (preparation, entry, and instrumental initiation). Organizational opportunities affect the stages of the trafficking regarding the production and the international distribution of pharmaceutical products (0, 1, and 3).

6. *Relational opportunities:* the Internet allows new contacts between offenders and (potential) clients and among offenders in all the central stages of the trafficking activity, and particularly in those regarding the interactions among international traders and local retailers. Relational opportunities affect all script categories.

7. *Promotional opportunities*: both pharmaceutical products and cyber-hotspots where they are sold are advertised via the Internet (instrumental actualization). Promotional opportunities affect particularly stages 2, 3, and 4, and the script categories "crime" and "lifestyle".

8. *Persuasive opportunities*: the Internet can be used to reassure (potential) buyers about the reliability and the legality of the trade, and the quality of the pharmaceuticals sold (instrumental actualization). Persuasive opportunities have been found in Stage 4 and they mainly affect the "crime" and the "lifestyle".

9. *Marketing and loyalization opportunities:* the Internet is used as a retention tool for both new and old clients (doing/post condition). Loyalization opportunities have been found in the final phases of the trafficking (stages 3, 4, and 5) and they affect all script categories.

4.3.3 Discussion

Considering the case studies analyzed and the interviews that have been carried out, in the last decade the Internet seems to have deeply transformed the criminal market in counterfeit pharmaceuticals, as it has done for other counterfeits (Treadwell 2012). However, not all stages have been affected to the same extent. Indeed, from the Stage column in the script framework it emerges that the Internet affects more the phases of the trafficking chain where clients are involved, while it is almost irrelevant in the initial phases of production. This may be explained by the fact that this criminal activity is still mainly run by criminal networks with a certain degree of sophistication that already have a convenient opportunity structure to rely on (for instance, in the countries of production of pharmaceuticals). For them, the primary need to go online is to enter into contacts with potential clients and to globally increase their reach. Many investigations show the impressing transnationality of the online trade in counterfeit pharmaceuticals. The following two cases exemplify this: the former refers to the first major operation tackling the online trade in counterfeit pharmaceuticals carried out in the US (in 2005), while the latter to an investigation carried out in Italy in 2008.

> *Case.* Two Indian nationals were found guilty of heading a Philadelphia-based international Internet drug trafficking organization. The offenders were smuggling repackaged controlled substances into the US mainly from India and other Asian countries and distributing them throughout the US and Europe[54].

> *Case.* Counterfeit POMs were sold in Italy (at that time, in Italy it was illegal to trade any type of medicine online) by an online pharmacy (www.eurodrugs.eu, now obscured). The pharmacy pretended to have a physical address in the UK. The criminal network, headed by an Indian national, was in fact based in Switzerland, while the servers were in Canada and in the US. The supply chain management operated through drop-shippers—i.e., people in charge of storing items ready to

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[54]Interview material and DEA press releases, 2005.

be delivered—strategically placed in different European countries to avoid customs inspections (for instance, shipments to Italy were sent from Germany), while online financial operations were run in Eastern Europe[55].

In most cases, and especially in the older ones, interactions with clients occured through email spam or via online pharmacies. The following case provides a typical example:

> *Case.* Defendants A and B owned Pharmacom International Corporation, a company operating the online pharmacy www.buymeds.com (now obscured) and 18 other affiliated websites, all systematically advertised online. In order to purchase POMs (mainly pain reliefs substances), potential customers had to log onto one of the websites, compile a short health history questionnaire, and provide credit card information. No medical records were required. Pharmacom was in contact with doctors that approved orders perfunctorily[56].

According to a Senior Chemist Officer of the Italian Medicines Agency and Director of the Counterfeit Prevention Unit, the online market in counterfeit medicines went under major transformation in the last few year, to the point that three main phases can be currently identified: initially, about 7-8 years ago, the pharmaceutical sector was suffering from poor control against crime, so that most offenders merely used online pharmacies resembling the original ones (that were allowed in countries such as the UK and the US) to sell counterfeits or to fraud customers via phishing activities[57]. As Internet users started to become more informed, some offenders moved to new online pharmacies—presented as alternative to the legal and notorious ones—where it was allegedly possible to buy generic pharmaceuticals directly from producers, without getting through "Big Pharma"

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[55] Interview material.

[56] Judicial material from the US District Court in Iowa, July 2008.

[57] Phishing is an online scam that allows offenders to obtain financial or other confidential information from Internet users.

companies. Over the last couple of years, a new starting trend can be identified: probably as a response from enacted legislation and law enforcement attention against the illegal trade in pharmaceuticals, offenders are trying to hide the fact that the products sold are illegal, for instance by pretending that they are dietary supplements instead (which are regulated in a different, more lenient way). To use the interviewee's words, nutritional supplements are "used as Trojan horses to sell counterfeit medicines".

However, regardless of the degree of concealment of the criminal market, online pharmacies remain the major *cyber-hotspots* for pharmaceuticals, even though currently they are not more the only ones: especially with regard to doping products and lifestyle drugs, dedicated forums, social media, and online magazines are increasingly playing a bigger role for selling and advertisement. Because of the primary need to reach a large number of potential clients, illegal and illicit trades in pharmaceuticals are carried out in the surfing web. The interviewees recalled only one Australian investigation of counterfeit medicines sold in the deep web together with hard drugs. However, it is not clear whether the absence of other similar cases is due to a real absence of this criminal activity in the hidden parts of the web or to the fact that law enforcement is not focusing yet on this type of investigations. Indeed, as underlined by an expert on trafficking in doping products, many pharmaceuticals and especially doping products are often sold in conjunction with traditional and synthetic drugs to balance or enhance their effects[58], so that it is not unlikely that there may be resemblances and connections also in their online markets.

Another change that can be observed in the criminal market is that some clients are assuming a new role, acting as traders themselves: in some recent investigations,

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[58] Doping pharmaceuticals cannot be assumed uninterruptedly: a break of 1-2 weeks is needed every 2-3 weeks. When their assumption is interrupted, a "rebound effect" usually happens: the body tries to bring itself back into balance by pulling in the opposite direction of the drug, so that doped people may experience, for instance, strong depression. Cocaine and synthetic drugs (they are all "performance drugs") are often assumed to go back to excitement. Another problem is that anxiolytic or sedative pharmaceuticals (such as barbiturates) could be needed to go back to the limits and sleep when doping is used. In many online pharmacies, the sale of sedative and doping products is often paired.

pharmaceuticals are bought online in order to be re-sold. In this way, a new layer is added in the trafficking chain. This fact has been confirmed by one of the interviewees, who stressed that while the medium package intercepted by law enforcement a few years ago used to contain about 20-30 tablets, now it is usual to intercept bigger packages of about 150-200 tablets each. The interviewee also underlined that certain online pharmacies indicate that in case of big orders they will send pharmaceuticals divided in smaller shipments to escape law enforcement attention. Indeed, as reported by three different interviewees, so many packages are intercepted that when they contain quantities for personal use the tendency is that to ignore. Thus, entering the online market in counterfeit pharmaceuticals and doping products does not entail many risks for potential offenders.

In most cases, people who purchase pharmaceuticals to re-sell them act as local retailers *offline*. This is especially true as concerns two categories of pharmaceuticals: some lifestyle drugs such as the ones for erectile dysfunction—then sold in sex shops— and doping products—sold in gyms and other sport centers to both professional and amateurs.

> *Case*. Erythropoietin (EPO)—i.e., a blood doping that increases athletic performance and delay fatigue by artificially rising an athlete's red blood cell count—and anabolizing steroids—i.e., a class of hormones used to maximize muscle growth—were bought online in order to be re-sold in gyms and cycling societies in the Milan hinterland. A total of 102 persons were investigated and 8 arrested. Pharmaceuticals were bought on dedicated commercial websites based in the US (such as www.massandpower.com and www.originalanabolics.com, now obscured)[59].

> *Case*. Fourteen people (sports trainers and body builders) were arrested in Italy and charged for conspiracy after they sold for almost one year doping pharmaceuticals and in particular anabolizing steroids. These products were bought via the Internet in Eastern Europe and re-sold in a shop dedicated to nutritional supplements for sport people in

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[59] Media news, September 2011, and interview material.

Northern Italy. They had 60 clients for a turnover of about 300,000 euros. One of the offenders had the specific role to use the Internet to loyalize customers by keeping contacts with them through emails and Facebook[60].

From the latter example it is possible also to observe how the Internet can be used as a powerful retention tool: indeed, as emerges also from other cases, offenders selling certain types of pharmaceuticals—maliciously or not—target specific typologies of consumers that are inherently more prone to trust them. In this case, for instance, both sellers and buyers belong to the same social group (i.e., sportsmen), and are likely to share the same system of values and beliefs.

In some recent investigations, however, people who buy pharmaceuticals via the Internet remain in the *online* market as retailers: in this way, individuals or small groups (often just two people) can start a (potentially) large-scale criminal market by interjecting themselves in the trafficking chain. Usually, as illustrated by the following two examples, offenders step into the market without intervening in the production stage but only in the packaging or even merely in the marketing.

> *Case.* A couple (facilitated by crooked pharmacists and doctors) was illegally importing from abroad anorectics such as sibutramine and phendimetrazine (mostly POMs). These pharmaceuticals were sold online via a dedicated website, which was heavily advertised on a forum thread on health and wellness in a popular Italian website dedicated to women. Three persons were arrested and 30 were investigated[61].

> *Case.* A man set up a website to sell pharmaceuticals for erectile dysfunction (POM in most countries, included Italy). Medicines were bought from India at 40 cents each and delivered via regular mail throughout Italy at 7 euro each[62].

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[60] Media news, May and September 2012, and interview material.

[61] Media news from *La Repubblica*, September 29, 2011.

[62] Media news from *La Repubblica*, February 1, 2011. An very similar case had been found in the UK (June 2009). In both cases, offenders were middle-age men without any type of medical expertise (respectively, an architect and a bankrupt businessmen already convicted in the past for selling steroids).

One of the interviewees reported of a recent investigation where a young man bought active ingredients and excipients from an international action website in order to produce himself the tablets, that were then sold online. In another case, people trading counterfeit medicines"improvised" themselves producers:

> *Case.* A couple without any type of medical preparation was selling homemade medicines and dietary supplements (included one allegedly imported from the US) to miraculously cure several types of diseases— from cancer to depression. Some of the ingredients used were long expired. They set up an online pharmacy (www.naturafabene.it, now obscured)[63].

It is interesting to note how also in this case offenders were targeting their victims by looking for specific categories—i.e., people interested in natural and alternative treatments. This is clear starting from the name they chose for their website ("nature is healthy").

Apart from attention in targeting specific social groups, concrete efforts are made to obtain the trust of clients online.

> *Case.* An online pharmacy selling different types of OTC drugs and POMs displayed a Swiss number as call center to provide medical advice. However, calls were answered by the six men (4 Italians and 2 French men) running the criminal activity from a storehouse in Northern Italy. In the law enforcement operation, pharmaceuticals for 3 million euros were seized[64].

In other cases, the method to gain the clients't trust was to post enthusiastic comments by fake clients in online pharmacies and dedicated forums. However, criminal networks pay attention also not to overdo in order to avoid making law enforcement suspicious:

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[63] Media news from *La Repubblica*, May 19, 2013, and interview material.
[64] Media news, June 2010, and interview material.

Case. Defendant A used to work for an online pharmacy specialized in diet and sleeping pills. Over the two years of the conspiracy (from May 2002 to May 2004), the pharmacy satisfied about 123,000 requests. Defendant A explained that the Internet company used to reject one to three orders daily to make it appear that the pharmacy was practicing legitimately[65].

To sum up, the use of the Internet has certainly affected the organization of the trade in counterfeit medicines, making it a profitable and large-scale criminal business that certainly deserves more attention from criminologists. Until a few years ago, the problem seemed to be "limited" to the presence of online pharmacies, most of which operating on a very large scale. However, recent changes in the way in which the Internet is commonly employed by average users have boosted specific changes also in this criminal market. In particular, the entry of new criminal actors—usually involved in smaller-scale or specialized trades but with dangerous potential—has been facilitated. Rather than fostering the elimination of organizational layers as in the case of wildlife trafficking, as regards the trafficking in counterfeit pharmaceuticals the Internet has allowed to add a new layer when the market offered the possibility for *segmentation*—i.e., targeting subsets of clients who have common needs and that can be reached though specific touch-points. Also in the case of pharmaceuticals, it is possible to say that the Internet fostered *niche markets*, even if in this case these markets are high-demand, mainstream ones.

The Internet has maintained its core role in facilitating contacts with potential clients, but this role is not limited anymore to online pharmacies and spam. Targeted clients are reached also though different marketing strategies: rather than "shooting in the dark" by means of generic advertisements, the analysis of cases has shown how offenders (both wholesalers and retailers) solicit clients by appealing to their sense of belonging to certain social groups (as in the case of "natural" products, lifestyle drugs, and doping). Dedicated blogs and forums, online magazines, and social media play an important role in this.

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[65] Judicial material from the US District Court in Florida, October 2007.

Especially in the case of doping products, vendors and clients usually *share* the same lifestyle, offenders are generally involved in legal activities connected with this lifestyle in the physical world, and the Internet has merely expanded opportunities for interactions already existing offline. In many more cases, however, cyber-hotspots are the only meeting places for offenders and clients, that otherwise would not have traditional opportunity structures to rely on to easily access certain substances, as in the case of youngsters buying pharmaceuticals for erectile dysfunction—often assumed together with other controlled substances—or opioid analgesics—used to replace other recreational narcotics.

4.4 Sex trafficking

4.4.1 The criminal market

Sex trafficking is a sub-species of the criminal phenomenon of trafficking in human beings. Even if people trafficked for sexual exploitation represent less than 50 percent of the total number of victims of human trafficking, sex trafficking has largely informed legal and scholarly debates. From an historical perspective, in the last century narratives over trafficking in human beings in Western countries have usually been related to sex trafficking and forced prostitution, even if these concepts are only partially overlapping[66].

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[66] Public concern about European girls trafficked as prostitutes (the so-called "white slave trade") led several European states to sign in 1904 the International Agreement for the Suppression of the White Slave Traffic, and in 1949 the UN Convention for the Suppression of the Traffic in Persons and of the Exploitation of the Prostitution of Others, where for the first time also men were considered as potential victims of trafficking (Bruckert and Parent, 2009; Oude et al., 2011). These legal instruments adopted an abolitionist approach toward prostitution: they considered people as victims *tout court*, even if there was their consent. Starting from the 1980s, however, with changes in sexual mores, prostitution has been increasingly considered as a legitimate profession: as stressed by Oude et al. (2011), the fight against trafficking started to be "mainly seen as fight against *forced* prostitution"(emphasis added). The white slave trade become "trafficking in women", with the focus this time being on non-Western women (Bruckert and Parent, 2009: 3).

Also in criminological research, the focus has generally been on the international trade in women and children, the so-called "sex trade" (Taylor and Jamesion, 1999). Sex trafficking can be defined as "the recruitment, harboring, transportation, provision, or obtaining of a person for the purpose of a commercial sex act" (US Victims of Trafficking and Violence Act, Sec. 103(9), 2000).

Even if sex trafficking has received lot of attention from policy makers, law enforcement, and academia in the last couple of decades, this phenomenon is still continuing and (according to some authors) even increasing (Derks, 2000; Shelley, 2010; Di Nicola, 2013). However, estimates on human trafficking are always difficult to make because of the massive dark number of victims and the lack of reliable data and statistics in many of the countries involved (Savona et al., 2009; Troshynski and Blank, 2008; O'Brien, 2010). On a global scale, according to the estimates of the International Labour Organization, about 2.5 million persons are trafficked each year (considering cross-border trafficking only), and more than 40 percent of them are victims of sex trafficking (Kutnick et al., 2007; Turner and Kelly, 2009). However, some researchers suggest that there could be a possible over-representation of victims of sex trafficking, given the great deal of media, scholarly, and political attention towards this form of exploitation (Di Nicola, 2007; O'Brien, 2010; Hepburn and Simon, 2013).

While all countries of the world are affected by human trafficking, its nature and extent vary significantly among geographical regions (Derks, 2000; Shelley, 2010). Trafficking for forced labour is more frequently detected in Africa, the Middle East, and in South and East Asia, while sex trafficking seems to be more common in Europe, Central Asia, and the Americas (UNODC, 2012). The dedicated literature commonly distinguishes among three main and common stages of the trafficking activity: recruitment, transport, and exploitation, depending on the place where they occur. *Recruitment* usually takes place in the country of origin of the victim, *transport*—that can be divided into *transit* (the journey) and *entry* (the crossing of borders)—involves several locations depending on the trafficking route chosen, while *exploitation* generally occurs in the destination country, even if it may start during the transport stage (Savona et al., 2009: 40). Typically, victims

are transported from developing to developed countries, such as from Eastern Europe to Western European countries, and from Asia and Latin America to the United States (Zhang, 2009).

The last UNOCD report on global trafficking (2012) stresses that women account for about 75 percent of all victims. In Western countries, most trafficked women are lured into sex industry and forced to indoor (in brothels, hotels, apartments, and so on) or outdoor (on the streets) prostitution (Savona et al., 2009). Common factors giving rise to sex trafficking can be identified (Savona et al., 2009): factors that induce victims to leave their countries of origin (such as political instability, natural catastrophes, discrimination, and poor economy), and factors that make destination countries attractive (such as social stability and security, rich economy, historical links, and personal expectations).

Sex trafficking is a heinous crime that entails a whole range of negative effects: not only does this criminal activity—often considered as a new form of slavery (Kara, 2010; Jakobsson and Kotsadam, 2013)—gravely affect victims physically and physicologically, but it also involves serious social consequences for entire communities, undermines the internal stability of countries, challenges the respects of human rights, and distort labour markets (Shelley, 2010: 59 ff).

In the last fifteen years, trafficking in human beings (including sex trafficking) has become part of the fight against transnational organized crime. This is reflected by the fact that the major international legal instrument on human trafficking is currently the Protocol to Prevent, Suppress and Punish Trafficking in Persons, Especially Women and Children (the UN Trafficking Protocol), which supplements the 2000 UN Convention against Transnational Organized Crime. As underlined by Oude et al. (2011), this protocol contains the first widely accepted definition of human trafficking[67]. Sex trafficking is

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[67] Trafficking in persons is defined as "the recruitment, transportation, transfer, harboring or receipt of persons, by means of the threat or use of force or other forms of coercion, of abduction, of fraud, of deception, of the abuse of power or of a position of vulnerability or of the giving or receiving of payments or benefits to achieve the consent of a person having control over another person, for the purpose of exploitation. Exploitation shall include, at a minimum, the exploitation

clearly intended as a sub-species of human trafficking and it is characterized by a specific purpose of exploitation, namely the "prostitution of others or other forms of sexual exploitation" (art. 3). It worths noting that this expression was left quite undefined in order to leave its specification to different jurisdictions according to their particular policies on prostitution (Savona et al., 2009). National laws on sex and human trafficking are still diverse, and to a large extent inspired to different values and traditions of prostitution and foreign migration (Oude et al., 2011: 36)[68]. Even though formally the Palermo protocol enjoys a high level of acceptance, with 117 signatories and 157 parties at October 2013, in reality many countries have not implemented the treaty effectively: for instance, as reported by the UNODC (2012), progress in convictions remains limited.

While the UN Trafficking Protocol is primarily an instrument to ease cooperation among states to counter organized crime (Anderson and Andrijasevic, 2008), nowadays, especially in the European narrative, the discourse about trafficking in human beings is usually framed as a human right issue (Oude et al., 2011)[69]. Furthermore, the EU legal framework appears more complete and updated than the UN one, and it has a broader definition of trafficking[70]. In particular, while the UN Trafficking Protocol focuses

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of the prostitution of others or other forms of sexual exploitation, forced labour or services, slavery or practices similar to slavery, servitude or the removal of organs" (the UN Trafficking Protocol, art. 3).

[68] Di Nicola et al. (2005) identified four models for prostitution policies in the EU as regards both indoor and outdoor markets: abolitionism (when prostitution by adults is not subject to punishment, but profiting from another person's prostitution is criminalized); new abolitionism (when brothels are explicitly prohibited while outdoor prostitution is tolerated); prohibitionism (when both outdoor and indoor prostitution are explicitly prohibited); regulationism (when prostitution is regulated by the state).

[69] The EU approach is developed around a complementary legal framework that places the victim at the centre of several actions aiming at countering human trafficking from a multidisciplinary perspective. Recent Directive 2011/36/EU of the European Parliament and of the Council of 5 April 2011 (replacing Council Framework Decision 2002/629/JHA) and Directive 2012/29/EU of the European Parliament and the Council of 25 October 2012 (replacing Council Framework Decision 2001/220/JHA), for instance, cover actions in different areas (including prosecution of offenders) but are focused on victims' support and protection, including their rights in criminal proceedings.

[70] "The recruitment, transportation, transfer, harboring or reception of persons, including the exchange or transfer of control over those persons, by means of the threat or use of force or other

on a particular type of trafficking—i.e., the one run by organized criminal networks operating transnationally—, in the EU directives it is explicitly recognized that this phenomenon is "*often* committed within the framework of organized crime" (Directive 2011/36/EU, premise 1, emphasis added), and the word "transnational" is missing[71]. In fact, human (and specifically sex) trafficking can occur even within national boundaries (Bruckert and Parent., 2009). Indeed, while the legal discourse has traditionally stressed the transnationality of this transit crime, ethnographic narrative highlights how, besides "omnipotent, transnational and (well) organized" criminal networks, there "may also be... locally embedded networks that operate in only one or a few European cities" (Oude et al., 2011: 43). According to recent estimates, 27 percent of victims are believed to be trafficked within their countries of origins (UNODC, 2012).

Lack of reliable data on sex trafficking entails lack of agreement on the characteristics of the offenders. First of all, even if most traffickers are men, an increasing number of women is reportedly involved actively in sex trafficking: however, this aspect appears still overlooked in legal and law enforcement narratives (Oude et al., 2012: 43; UNODC, 2012). Secondly, the nature of the relationship between sex trafficking and organized crime is vehemently debated. On the one side, most scholars claim that sex trafficking is run by organized criminal syndicates (Stoecker, 2000; Turner and Kelly, 2009; Shelley, 2010): indeed, it is at least plausible that complex networks are required to organize and manage travels over long distances, control victims, and promptly react to law enforcement initiatives. Furthermore, sex trafficking is a tempting market for organized crime: profits for sex trafficking are estimated to be of about seven billion dollars per

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forms of coercion, of abduction, of fraud, of deception, of the abuse of power or of a position of vulnerability or of the giving or receiving of payments or benefits to achieve the consent of a person having control over another person, for the purpose of exploitation... Exploitation shall include, as a minimum, the exploitation of the prostitution of others or other forms of sexual exploitation, forced labour or services, including begging, slavery or practices similar to slavery, servitude, or the exploitation of criminal activities, or the removal of organs" (Directive 2011/36/EU, art. 2).

[71] Furthermore, the emphasis on women and children from the very title of the UN Protocol reflects a stereotype that may partially work for sex trafficking but not for labour trafficking, where most victims are men (Oude et al., 2011: 34)

years (Blank 2007), and victims can be sold repeatedly (Shelley, 2010: 3). However, many researchers underline that, even if this idea is broadly widespread, there is "lack of valid information to support it" (Salt, 2000: 43). Empirical research has shown that sometimes key players in sex trafficking are entrepreneurs at the edge between legality and illegality, as well as small groups of criminals (Taylor and Jamesion, 1999). To sum up, to borrow the words of Bruckert and Parent (2009: 19), "the association between trafficking and organized crime is neither self-evident nor always very substantial": while it is true that sex trafficking is sometimes run by sophisticated and well-organized criminal groups, this is not always the case.

As anticipated in Sub-section 2.4.1, the use of the Internet for sex trafficking is mentioned in academic literature and investigative reports. Sykiotou (2007), for instance, introduced the term "cyber-trafficking" in relation to the use of the Internet for recruiting victims, advertising sexual services, and attracting clients. The most relevant works on this issue are probably those by Hughes (2002) and Chawki and Wahab (2005): however, these analyses are limited to the use of the Internet by collectors of child pornography, stalkers trying to contact children, and buyers of women and children for the purpose of sexual exploitation. Moreover, apart from stressing the importance of new ICTs in cases of sexual exploitation (in particular of children), the authors do not linger on the use of the Internet as a facilitator throughout the trafficking chain. Only Latonero (2012), in considering the use of new technologies for trafficking minors for sexual exploitation in the US, has suggested that "the rise of mobile technology may fundamentally transform the trafficking landscape" (iv), but this aspect has not been further investigated.

4.4.2   *Identifying the criminal opportunities provided by the Internet*

As in the analyses of wildlife trafficking and the trade of counterfeit pharmaceuticals, also in the case of sex trafficking the criminal activity has been sorted out into stages. Re-elaborating from Savona et al. (2009) and from the interviews carried out, it is possible

to distinguish between three main stages (stages 1-3). Stages 0 and 4 have been added for criminal opportunities emerging in the activities that are antecedent and consecutive to the sex trafficking activity *per se.*

Stage 0: preparatory activities antecedent to sex trafficking

Stage 1: recruitment of the victim

Stage 2: transport (transit and entry) of the victim

Stage 3: sexual exploitation

Stage 4: activities that are directly consequential or subsequent to sex trafficking

A total of 16 cases investigated from 2006 to 2012 were analyzed. Concerning the case selection, a clarification has to be made. It has already been underlined that victims of sex trafficking are mainly women and children. The following analysis will consider, if not otherwise specified, sex trafficking of (allegedly) adults and late adolescents. This limitation originates from two types of considerations: first of all, sex trafficking usually emerges as (forced) prostitution. Prostitution and other forms of sexual exploitation of underage boys and girls are largely considered more reprehensible acts and are generally ruled by harsher legislation. This entails that they are always *illegal*, while adult prostitution may be *illegal* or *illicit* depending on different national policies, which makes the analysis of this transit crime more coherent with the others. Secondly, sexual acts involving minors could blur with pedophilia (commonly considered as a psychiatric disorder) when victims are prepubescent. This latter form of sexual exploitation usually follows different patterns (Albanese, 2007; Todres, 2010): in particular, clients have completely different modus operandi, so that it would have been inaccurate to put cases together for the script analysis.

Table 7 – *The crime script for Internet-mediated sex trafficking*

STAGE	FUNCTION	SCRIPT CATEGORY	ACTION IN WHICH THE INTERNET HAS BEEN USED
0 and 1	Preparation	Crime Lifestyle	Select potential victims (online social networks)
0 and 1	Preparation	Crime Lifestyle	Interactions with potential victims (chatrooms, online social networks)
0 and 1	Preparation	Crime Lifestyle	Advertise (fake) working opportunities in prostitution/other jobs (dedicated websites)
3	Preparation	Crime	Use of Google translator to post prostitution advertisements in different languages
2	Preparation	Crime	Arrange transportation and accommodation for the victims (online booking services)
0 and 3	Entry	Crime Lifestyle	Interaction with potential clients (generalist commercial websites, dedicated websites)
0-4	Precondition	Network Lifestyle	Maintenance of contacts with other members of the criminal network (Skype)
0-4	Precondition	Crime	Verify ip-addresses to be sure that the person they interact with online is a real potential client or a potential victim and not, for instance, an undercover law enforcement officer
0, 1, and 2	Instrumental precondition	Crime Lifestyle Network	Deceit victims (chatrooms, online social networks, dedicated websites)
1	Instrumental precondition	Crime	Arrange offline meeting with targeted victims
0 and 3	Instrumental precondition	Lifestyle Network	Advertise brothels (dedicated websites, dedicated forums)
0 and 1	Instrumental initiation	Crime Lifestyle Network	Solicit (potential) victims to do sexual acts online to blackmail them/ to "test" them (chatrooms, online social networks)
0 and 1	Instrumental initiation	Crime	Verify that the person offenders interact with is a real potential victim and not, for instance, an undercover law enforcement officer (cross-checking data online)
3	Instrumental actualization	Crime Lifestyle	Advertise girls as prostitutes, sometimes publicizing explicitly sexual services provided and prices (dedicated websites, general commercial websites,)
2 and 3	Instrumental actualization	Crime Lifestyle	Threaten victims to post their photos or videos online (online social networks)
3	Instrumental actualization	Crime	Book rooms where to make meet victims with clients (online booking services)
2 and 3	Doing	Crime	Control victims through Internet camera systems
4	Post condition	Crime Lifestyle Network	Money transfer (online banking)
4	Post condition/exit	Crime Lifestyle	Threaten victims to post their photos or videos online (online social networks)

Through the script framework, in the case of sex trafficking it has been possible to identify ten different types of criminal opportunities provided by the Internet:

1. *Communicative opportunities:* communication is facilitated by the use of services such as Skype and instant messaging both among offenders and between them and (potential) victims. Communicative opportunities affect all stages of the trafficking chain and all script categories.

2. *Victim selection opportunities*: online social networks in particular are powerful tools for traffickers to easily get information on potential victims and to identify the ones that are more vulnerable (preparation). Victim selection opportunities affect the initial stages of the trafficking activity (0 and 1) and the script categories "crime" and "lifestyle".

3. *Victim subjection opportunities*: the Internet offers new instruments to remotely control victims (for instance, by using online cameras) (doing) and to intimidate them (instrumental actualization and post condition/exit). Victims subjection opportunities affect stages 2, 3, and 4 of sex trafficking, and the script categories "crime" and "lifestyle".

4. *Technical opportunities*: certain online services can provide solutions to specific problems. For instance, the Internet has been used to translate advertisements into other languages (preparation), to allow traffickers control remotely banking accounts in the victims' name (post condition), to book rooms where to make victims meet clients (instrumental actualization). Technical opportunities mainly affect the script category "crime" and they have been found in the final stages of the trafficking activity (3 and 4).

5. *Managerial opportunities:* the management of sex trafficking is facilitated by the Internet throughout the trafficking chain; for instance, offenders can easily arrange transportation and accommodation for the trafficked victims through online booking services (preparation), and control them from a safe distance (doing). Managerial opportunities mainly impact stages 2 and 3, and the script category "crime".

6. *Organizational opportunities:* in certain cases Internet usage has simplified the trafficking chain by reducing organizational layers. Some organizational layers are no

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longer necessary: for instance, victims can be deceit and recruited from afar (preparation), without needing to rely on members of the criminal network on the premises. Organizational opportunities impact all script categories, and may affect all stages of the trafficking.

7. *Relational opportunities:* the Internet facilitates the interactions both between offenders and victims (preparation) and between offenders and clients (entry). Relational opportunities affect the script categories "crime" and "lifestyle" and they impact stages 0, 1, and 3.

8. *Promotional opportunities*: girls are advertised as prostitutes via the Internet; sometimes also sexual services provided and prices are explicitly publicized (instrumental actualization). Furthermore, brothels or other prostitution places are advertised online (instrumental precondition), especially in countries where they are legal. Promotional opportunities affect stages 0 and 3 and all script categories.

9. *Deceptive opportunities:* the Internet can be used to deceive potential victims with regard to both the emotional and romantic sphere (as in the case of "loverboy" scams) (instrumental precondition) and their working prospectives (preparation). Deceptive opportunities have been found in stages 0, 1, and 2 of sex trafficking and they affect all script categories.

10. *Countermeasure opportunities*: the Internet can be used to check on people offenders have to interact with online, namely potential clients and victims, to avoid being deceived by undercover law enforcement officers (precondition and instrumental initiation). Countermeasures have been found throughout the stages of the criminal activity, and they affect the script category "crime".

4.4.3 Discussion

The Internet has severely affected all stages of the sex trafficking chain but in particular the initial ones, by acting as an important facilitator non only in recruiting victims, but

also in targeting them according to their vulnerabilities, and in deceiving them. To use the words of one of the interviewees, the Internet is "at the intersection where victims and traffickers meet".

Victims recruited via the Internet are usually very young women. Not only they are pre-selected—for instance, by looking at their pictures on online social networks—for their physical aspect, but also for their psychological vulnerabilities as they emerge from their Internet profiles. An interviewee from the Netherlands reported of a recent investigative case where social networking sites, both local—such as Hyves and Partyflock—and European—such as Netlog—were used to make first contacts with potential victims. The following US case shows a similar pattern:

> *Case.* Victim A was selected by looking at her pictures on the Internet. The offender requested victim B (already in his control) to message with A on a social media website (MySpace) and to solicit from her sexual conducts online. This allowed the offender to have A under his control. The offender then arranged an offline meeting with A, trafficked her, and organized an encounter between A, B, and a client[72].

So-called *loverboys*—i.e., young men luring girls into sex trafficking and prostitution—often play a pivotal role in the initial stage of the criminal activity, to the point that, according to several interviewees, this is now the main recruitment method for young girls in several countries. When loverboys are involved, victims and traffickers generally share the same nationality. One of the interviewees defined loverboys as "psychologists without any study" to underline their capacity to know exactly what to say to make young girls trust them online. As specified by the interviewee, they "look for girls with a specific profile, girls in disadvantaged situations, around 17 years old. They isolate these girls from family and friends... and make them work starting from when they are 18 years and one day old, so that it is more difficult for us to prove human trafficking". The interviewee also underlined that loverboys prefer to use the Internet rather than to rely on

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[72] Judicial material from the US Court of Appeals in Maryland, August 2011.

offline relations because in this way it is much easier and less risky for them to get rid of the girl if they realize that the situation is not working out as planned. Loverboys usually work on their own; sometimes, since they are often part of the same offline social group, they start cooperating among each other and gather together in small criminal networks. This is exemplified in the following case:

> *Case.* Six men exploited victims of sex trafficking in window prostitution in the Amsterdam hinterland. They recruited victims by starting relationships online with them as loverboys. Over the last ten years, a total of 25 women were lured into prostitution with this method[73].

In more sophisticated criminal organizations, "double role girls"—i.e., former victims that have climbed up the hierarchy in the criminal network, often as survival strategy— are usually the ones to find and groom new girls via the Internet. Another way to recruit victims is that to use fake job alerts. Sometimes the advertisement regards a job in the sex industry:

> *Case.* Girls were recruited in Central and Eastern Europe via online advertisements with the promise of a role in porn movies. However, when victims arrived in the destination country (the Netherlands), they were locked up into an hotel and enslaved into forced prostitution[74].

In cases where victims are aware that they are going to work as prostitutes or otherwise in the sex industry in the destination country, exploitation may not be easy to prove. However, when girls agree to migrate, they cannot imagine the condition of captivity they will be subject to. The gap between coercion and volition makes them equally victims of sex trafficking. In other cases, victims are completely unaware to be destined to the sex industry when they reply to online job alerts. For instance, one of the interviewees described a recent case in which an online temp agency recruited Russian girls to work as

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[73] Interview material.
[74] Interview material.

secretaries in Western European countries; once arrived in the destination country, girls were forced into prostitution.

The Internet plays a major role also in advertising sexual services, thus allowing the demand to meet the supply. Sexual services of trafficked women are advertised through every possible commercial website, even the popular Craiglist.org[75]. In most of the cases under consideration, however, advertisement occurs in dedicated commercial websites:

> *Case.* An organized group operating in Italy and involved in large scale sex trafficking activities used specialized websites for personal announcements (such as www.bachecaincontri.it and www.pianetaescort.it) in order to advertise Eastern European girls. Girls were replaced about every week[76].

A Dutch interviewee underlined a peculiar aspect of online advertisements in a country like the Netherlands where prostitution is legal: it is usual to find online very young girls offering all types of sexual conducts without precautions, which is strange for voluntary prostitutes. This may be an indicator that many of the alerts that can be found online regard victims of sex trafficking. Besides advertising directly sexual services, online messages are also used to publicize brothels where the victims are forced into prostitution. Usually, however, online messages do not specify too many information concerning the location where to find the girls: they rather indicate a mobile phone that has to be to contacted to receive additional information. This allows offenders to move the following part of the offender-client relationship towards a less risky, offline dimension.

In all the cases under consideration, the Internet was used in the surfing web. However, interviewees reported that when sex trafficking intermingles with other crimes, such as pedo-pornography, the deep web plays a major role. However, as explained above, these cases follow completely different patterns and do not fall into the scope of this study.

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[75] Judicial material from the US District Court in Hawai'i, March 2010.
[76] Media news, December 2012, and interview material.

With regard to the role of the Internet for communication purposes, Skype is heavily used to avoid wiretapping. According to all the interviewees, it is not rare for law enforcement to intercept text messages asking criminal peers to get on Skype when they need to talk.

The Internet is used by traffickers to set up counterstrategies' measures. Offenders generally seem to be very aware and cautious in assuming risks while operating online. For instance, a couple of interviewee reported that during recent and ongoing investigations it emerged that ip-addresses were verified by criminals to be sure that the person they were interacting with in chatrooms was a real potential victim and not, for instance, an undercover law enforcement officer. This is why many law enforcement offices increasingly use "protected" access to the Internet in the course of their duties; however—as explicitly reported by a Dutch interviewee—not in all police offices there is this type of attention. Similarly, another interviewee reported of a recent investigation where traffickers, after making contacts with potential victims online, asked them the details of their Amazon account to cross-check data and look for a physical address, so to verify that the person on the other side of the screen was not an undercover law enforcement officer.

Internet usage made safer for criminals also the handling of money. Even if most criminal networks still rely on cash and offline underground banking systems, online services have been used for transferring money from victims to traffickers and between traffickers, and to easily move profits towards the traffickers' countries of origin. One of the interviewees described a recent, illustrative case:

> *Case.* Bulgarian men trafficked young women in the Netherlands. Offenders opened current accounts online in the destination country, making them in the girls' name, but taking for themselves the cash cards. Victims had to put their profits as prostitutes in the online current accounts, while offenders picked up money from those accounts daily from Bulgaria[77].

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[77] Interview material.

Regarding more specifically the transit stage, the Internet made sex trafficking less risky because of the possibilities it creates to manage several phases of the criminal activity without interacting with law-abiding citizens that could become suspicious and alert authorities. As stressed by one of the interviewees, in the past, for instance, there was the (rare) chance to identify a case of sex trafficking because of travel agencies reporting dubious operations. To avoid this risk, a criminal network had to be enough sophisticate and organized to be able to control its own travel agency. Nowadays, on the contrary, online booking systems are a safer way for criminals to arrange the trafficking. However, as exemplified in the following case, proper collaboration between law enforcement and people in charge of online services may contain the advantage that new online criminal opportunities provide to criminals.

> *Case.* Rumanian girls were trafficked throughout Europe and forced into prostitution. Booking.com, a notorious international website for booking hotels, was used to arrange the transport and the exploitation of the girls. Booking.com provided Belgian law enforcement with users' credit card information, which helped investigations by allowing to reconstruct the structure and the dynamics of the criminal network[78].

The following case shows how a couple managed to run an itinerant prostitution ring by relying (almost) completely on online services:

> *Case.* Offender A (a German national) and offender B (his wife) managed an itinerant prostitution ring in Germany and France. They relied on Rumanian traffickers to get the girls, while they carried out on their own all other stages of the trafficking chain over the Internet. They created several websites advertising about 30 girls, mainly Rumanian, as escorts. The girls were often moved from Strasburg to Nancy (and vice versa), where offenders A and B owned at least 7 apartments for indoor prostitution. Furthermore, they also used a "system of city tours", according to which the girls were forced into prostitution in hotels in other 12 French cities. To control the girls, they used online cameras. It

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[78] Interview material.

was possible to trace offenders A and B as the common exploiters of all these girls because the same German phone number and the same email address were present in all the online advertisements[79].

This latest case exemplifies how the Internet can be used as a tool allowing to control girls 24/7, no matter their location, which worsens their level of subjugation. Furthermore, the Internet may serve a similar function by being used as a powerful blackmailing or threatening system: if victims try to rebel, compromising pictures and videos may be diffused online. In this way, victims' reputation—and often the possibility to return to their families, especially when victims have certain ethnic origins—may be jeopardized.

> *Case.* A young Moroccan girl trafficked in the Netherlands tried to escape her pimps and filed a complaint to the police. One of the traffickers entered in her Facebook account and created a new profile of her as a prostitute, with unequivocal pictures, and invited all her friends and relatives to join the new profile. As a consequence, the girl soon withdrew her complaint[80].

Sex trafficking is generally linked to organized crime. Quite unexpectedly, the use of the Internet seems to have facilitated the entry into the market of smaller criminal groups, that thanks to the possibility to recruit girls online (as in the case of loverboys, see above) as well as to manage all other phases of the trafficking activity efficiently from afar can organize all stages of sex trafficking on their own rather than relying on complex criminal networks. As explained by one of the interviewees, this is true especially when looser groups operate in areas where there is not a strong presence of endogenous sophisticated criminal networks already involved in the trafficking business.

> *Case.* The defendant, along with his wife (that "shared much of the executive control") ran a multi-million pound prostitution ring in between 2006 and 2008 in the Republic of Ireland and in Northern

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[79] Interview material.

[80] Interview material.

Ireland. He controlled "a chain of many brothels, perhaps some 35 brothels, both in the North and the South". After a first conviction, he moved to Wales to avoid Irish jurisdiction and started again operating the same activity from there. He placed online adverts to attract through deception women from different countries to work for him. Most girls were trafficked from Nigeria, and "they believed they were escaping to a better life". He also set up Internet websites to advertise girls, and invested a significant amount of money (about 32,000 euros) in advertising his websites also on newspapers. Also his daughter was involved in the criminal activity and specifically in laundering profits[81].

Even when Internet-related criminal opportunities allow to make sex trafficking a small family scale business, this criminal activity is carried out by professional offenders, full timers for whom the trafficking activity and specifically the exploitation of victims are the main source of income.

This section has not considered cases of trafficking for labour exploitation. However, it should be noted that the Internet is used also for this type of transit crime, making it even more difficult to identify: as underlined by one of the interviewees, in the case of labour trafficking "the Internet is legitimate" as it is merely used to advertise working possibilities, while the illegal part lies on the sub-contract of that work.

Case. A criminal network of 10 people, allegedly a cell of a larger criminal organization, advertised online in Poland and Eastern European countries the possibility to work as farmers in Italy. However, once arrived in the destination countries, they were enslaved into forced labour in a gangmaster system (*caporalato*)[82].

In cases of labour trafficking, Internet usage affects only the recruitment and transit stages, while for other stages traffickers rely on their traditional social opportunity structures.

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[81] Judicial material from Cardiff Crown Court, February 2010.

[82] Judicial material from the Italian Criminal Supreme Court, September 2010.

4.5 Trafficking in recreational drugs

4.5.1 The criminal market

As in the case of sex trafficking, and contrary to trafficking in wildlife and counterfeit pharmaceuticals, the criminal market in recreational drugs has received much attention from policy makers and criminologists. Since the eighteen-century in China and the late nineteenth-century in Western countries, many addictive drugs have been prohibited and their commerce criminalized. It was only with the twentieth-century and in particular after the 1960s, however, that drug trafficking as it is recognized today became a major issue in the international security agenda (Meyer and Parssines, 1998; Jenner, 2013).

"Drug" is a term of varied usage that indicates any chemical agent that alters the biochemical or physiological processes. Drugs considered in this section are all *recreational drugs*—i.e., drugs used with the intention of creating or enhancing recreational experiences. Depending on their origin, drugs can be divided into *naturally occurring, semi synthetic* (chemical manipulations of substances extracted from natural materials), or *synthetic* (created entirely by laboratory manipulation) (UNODC, 2013b).

In the context of the international security agenda, controlled drugs are those listed in the schedules annexed to two international treaties: the 1961 Single Convention on Narcotic Drugs—which considers mainly plant-based products such as cannabis, coca, opium and its derivatives, but also synthetic narcotics such as methadone—and the 1971 Convention on Psychotropic Substances—which extended the international drug control system to include substances such as amphetamine-type drugs, sedative-hypnotic agents, and hallucinogens. Depending on the schedule they are listed in, drugs are subject to different control regimes: for instance, some of them may be also used as licit pharmaceutical products and thus have less tight restrictions[83]. The last core international treaty dealing with drug trafficking is the 1988 UN Convention against Illicit Traffic in

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[83] To be able to update their schedules with new drugs, both conventions regulate mechanisms involving the World Health Organization and the UN Commission on Narcotic Drugs.

Narcotic Drugs and Psychotropic Substances, which adds additional legal provisions for enforcing the 1961 and 1971 conventions in order to consolidate international cooperation between law enforcement bodies. The 1988 Convention regulates also chemicals used to manufacture controlled drugs[84].

Besides these international legal instruments, all modern nations have regulatory frameworks that prohibit the importation, manufacturing, growth, distribution, sale, and use of a variety of drugs (Desroches, 2005)[85]. However, efforts to counter drug trafficking suffer from the presence of so-called *new psychoactive substances* (NPSs, sometimes called also "designer drugs" and "legal highs"), an umbrella term indicating all those drugs that are not yet under international control but that may pose a public health threat (UNODC, 2013a; van Amsterdam et al., 2013). Especially in the past five years, their presence became pervasive[86]. The bulk of their misuse is concentrated in a dozen

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[84] Chemicals serve both as inputs for the production of synthetic drugs (in this case, they are called *precursor chemicals* and are not easily replaceable) and as refining agents and solvents for the production of plant-based drugs such as cocaine and heroin (so-called *essential chemicals*, which can be replaced by other chemicals with similar properties) (Department of State, 2013).

[85] European drug policy focuses mainly in reducing supply and demand, and it is largely centered around provisions set forth in the international conventions above mentioned. However, each EU Member State has a different national approach for drug policies and advocates different solutions for tackling drug abuse. For instance, in the Netherlands drug use is not a criminal offence but rather a health issue, and drug policies rely on the distinction between *hard drugs* (such as heroine and cocaine) and *soft drugs* (such as cannabis). Production, trafficking, and possession are criminalized, but often for soft drugs the law is not enforced. Also Italian legislation makes a distinction between hard and soft drugs. Drug use is not a criminal offence, but acquisition and possession (up to a certain limit, which is established by the law considering the users's average daily dose) are criminalized. While obtaining a drug for personal use may be only a minor offence, acquisition for a third party may be interpreted as trafficking and subject to harsher penalties. In the UK, the use of drugs other than opium is not an offence. However, both possession and acquisition of drugs are criminalized, and drugs are divided into three categories for law enforcement's purposes. As concerns the US, drug policies have deep roots in the so-called "war on drugs" started by president Nixon in the early 1970s. Drug abuse is seen by policymakers primarily as a law enforcement problem to be mainly addressed with aggressive criminal justice policies.

[86] The term "new psychoactive substances", used in the last UNODC report (2013a), has been introduced by the EU to define new narcotic drugs or new psychotropic drugs, in pure form or in a preparation, that are not scheduled under the 1961 and 1971 conventions, but which may pose a

of substances: according to latest data, those identified are mainly cannabinoids and phenethylamines (stimulants), followed by synthetic cathinones (so-called "bath salts", stimulants), tryptamines (hallucinogen), and plant-based substances such as kratom (a stimulant Thai plant), khat (an African stimulant), and salvia divinorum (a Mexican hallucinogen) (UNODC, 2013a). It is very difficult to tackle the problem of NPSs by means of law, since manufacturers constantly try to escape the changing legal framework by creating and commercializing new substances.

Drug trafficking affects all countries of the world, even if to a different degree depending on the specific substance traded[87]. Drug trafficking patterns are constantly changing. For instance, there is evidence that Africa is increasingly becoming a major hub for drug trade, and that cocaine market is expanding in Asia (UNODC, 2013a). Most NPSs seems to originate from East and South Asia, especially from countries where chemical and pharmaceutical industries are advanced. However, domestic manufactures are present in Europe and North America, which remain the major destination areas (UNODC, 2013a). In the US, most drug comes from South and Central America, Mexico, the Caribbean, and the Eastern Pacific, with the Atlantic route increasing its centrality (Department of State, 2013; UNODC, 2013a). As concerns Europe, Germany and the Netherlands remain the major source and transit countries for chemical precursors,

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public health threat comparable to that posed by controlled drugs (Council of the European Union decision 2005/387/JHA on the information exchange, risk-assessment, and control of NPSs). In between the end of 2009 and mid-2012, the number of NPSs reported by Member States to the UNODC rose of more than 50 percent, from 166 to 251. Thus, for the first time in history, the number of NPSs reported exceeded the number of illegal drugs under international control (234 in total) (UNODC, 2013a).

[87] Some countries, however, are particularly problematic. The US Department of State has identified as major drug producing and/or drug-transit countries: Afghanistan, the Bahamas, Belize, Bolivia, Burma, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Haiti, Honduras, India, Jamaica, Laos, Mexico, Nicaragua, Pakistan, Panama, Peru, and Venezuela. Similarly, the following countries have been identified as major sources of chemical precursors used in the production of illegal drugs: Afghanistan, Argentina, Bangladesh, Belgium, Bolivia, Brazil, Burma, Canada, Chile, China, Colombia, Egypt, Germany, India, Indonesia, Iraq, Mexico, the Netherlands, Singapore, South Africa, South Korea, Switzerland, Taiwan, Thailand, and the United Kingdom (Department of State, 2013).

followed by Belgium and the UK (Department of State, 2013). The increase in cannabis herb to the detriment of hashish (cannabis resin) seems to indicate that domestically produced cannabis is replacing the one imported from extra European countries and in particular from Morocco (UNOCD, 2013a).

There is not a simple measure of the harm caused by drug trafficking. Paoli et al. (2013) have recently presented a taxonomy of possible harms related to cocaine trafficking, which can provide some useful indications. In their analysis, harms have been allocated to their ultimate bearers, namely: individuals, private-sector entities (including businesses and non-governmental organizations), government entities, and the environment (both physical and social). What is important to notice is that possible harms are very diffuse and pervasive, ranging from the loss of material interests, privacy, and reputation, to the loss of life and other physical and psychological damages[88].

In assessing the extent of drug trafficking, a major problem regards the scarcity of data: indeed, as complained in the last report by the European Monitoring Center for Drugs and Drug Addiction, "currently, outside of North America, Australia and the European Union, the information available on the global drug market remains extremely weak" (EMCDDA, 2013: 10). According to the last UNODC report (2013a), however, in 2011 about five percent of the world adult population used illicit substances (between 167 and 315 million people aged 15-64). In the last few years, on a global scale, the drug use situation has remained overall stable, with a slight increase in consumption that may be attributed to the increase in global population.

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[88] Generally, drug trafficking and violence are presented as inevitably linked. However, the use of violence by criminal groups involved in drug trafficking is rather "selective" (Friman, 2009) and it mainly depends on disputes between criminal groups over control of lucrative marketplaces for distribution, and on the attempt by trafficking organizations to pursue political goals. In this latter case, violence is used against the state (Friman, 2009; Snyder and Duran-Martinez, 2009). Regarding violent behavior of individual drug users, the casual relationship between drug use and violence is still debated by scholars (Phillips, 2012). These approaches, however, seem to neglect the impressive levels of violence that drug trafficking entails in certain origin countries, such as Mexico and Peru (Shirk, 2010; van Dune, 2013).

The nature of demand in developed countries has slightly changed: for instance, it is possible to observe an overall decline in heroine consumption, while the cannabis and amphetamine-type stimulants markets remain pervasive and characterized by high demand (Department of State, 2013; EMCDDA, 2013; UNODC, 2013a). Cannabis is the most widely used illicit substance (UNODC, 2013a). As underlined by the last EMCDDA report (2013), this entails that the criminal market in recreational drugs has become "less discriminating" (13): to the decrease in the use of highly stigmatizing substances (such as heroin), the growing importance of cannabis, cocaine, and synthetic drugs corresponds. A recent trend can be identified regarding the use of poli-drugs—i.e., the assumption of two or more drugs in combination to achieve a particular effect. This fact rises particular concerns, especially as regards the combination of prescription drugs (such as sedatives and analgesics) and illicit substances (UNODC, 2013a).

Different types of criminal groups are involved in drug trafficking. This transit crime, however, generally occurs in the context of organized crime: it is associated to highly structured criminal organizations such as the Mexican La Familia Michoacana (Kostelnik and Skarbek, 2013) and the Italian 'Ndrangheta (Calderoni, 2012), as well as to more flexible and diffused criminal networks such as Colombian groups (Kenney, 2007).

Regarding specifically the role of the Internet in drug trafficking, over the last decade it has often been underlined that cyberspace has increasingly become an online marketplace for recreational drugs, in particular by facilitating communication in the trafficking process (INCB, 2001; Rider, 2001; Britz, 2008; Walsh, 2011; Christin, 2012; Dipartimento Politiche Antidroghe, 2013). Among all transit crimes, drug trafficking is probably the one where the role of the Internet has received more scholarly attention. While older reports presented mainly anecdotal evidence, very recently the analysis of how the Internet is used for drug trafficking became more detailed. The last EMCDDA report, for the first time, distinguished among different roles that the Internet has in the drug trade apart from being a facilitator for communication (EMCDDA, 2013: 118 ff). Regarding drug distribution, the report underlines the existence of hotspots in the deep web—such as Silk Road, an online platform with a global reach used for trafficking cannabis products,

opiates, and synthetic drugs[89]—that make both drug sellers and buyers benefit from anonymous communication, while frustrating law enforcement attempts to identify them (Barratt, 2012; Christin, 2012). In these hotspots, sellers also have the chance to work in a "stealth" mode, meaning that they can hide under another level of security and conduct business with trusted clients on an invitation-only basis. Furthermore, the report underlines that the Internet allows for different methods of payment, including prepaid cards and virtual currencies such as Bitcoin. In cyberspace, buyers can also review the quality of drugs, thus enabling sellers to build online reputation. Online social networks of trusted couriers are used to recruit new people by attracting them with the possibility of undertaking profitable "holidays" in exotic destinations. Finally, according to the EMCDDA report, the Internet is used to access information on how to produce drugs.

Internet usage seems to play a fundamental role especially for NPSs: according to the UNODC (2013a), almost 90 percent of its Member States consider the Internet a key supply source. However, the same study recalls the results of a 2011 Eurobarometer survey, conducted among 15- to 24-year-olds, which suggested that the retail sale still relies on traditional distribution channels[90]. In any case, as underlined by the EMCCDA (2013), the number of online shops selling NPSs is growing: until January 2011, 693 shops were identified in Europe, a more than threefold increase from the previous year. The EMCCDA also notes that these online shops sell also bulk quantities of psychoactive substances, which suggests resale. Online shops use several marketing techniques: in particular, they imply that new substances are a good replacement for controlled drugs, or they manipulate results on search engines to be ranked in the top results (EMCDDA, 2013).

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[89] On October 2, 2013, Silk Road was shut down by the FBI and its 29 years-old administrator arrested.

[90] Just 7 percent of the respondents purchased NPSs via the Internet, while about 33 percent did it in a specialized shop, 36 percent at a party or in a club, and 54 percent were offered them by a friend.

4.5.2 *Identifying the criminal opportunities provided by the Internet*

In accordance with the previous sections, also in the case of trafficking in recreational drugs the criminal activity was sorted out into stages. Expanding on Desroches (2005), the UNODC (2013b), and from the interviews carried out, it is possible to distinguish between four main stages of drug trafficking (stages 1-5). Stages 0 and 6 have been added for criminal opportunities emerging in the actions that are directly antecedent and consecutive to the trafficking activity *per se.*

Stage 0: preparatory activities antecedent to drug trafficking

Stage 1: cultivation of the plant-based drug and/or production of chemicals

Stage 2: intermediate passage through local middlemen

Stage 3: passage through transit networks (wholesalers and other importers operating at the international level)

Stage 4: intermediate passage through local retailers

Stage 5: distribution of the recreational drug to the final user

Stage 6: activities that are directly consequential or subsequent to the trafficking activity

A total of 41 cases investigated from 2001 to 2013 were analyzed. After a first assessment of the cases identified for the analysis, it was clear that at least two main groups of recreational drugs could be recognized, that follow different patterns when it comes to the use of the Internet as crime facilitator: on the one side "traditional" drugs (naturally occurring and semi-synthetic), and on the other side synthetic drugs and NPSs. The interviewees, when consulted on this point, agreed that it would have been helpful to rely on this core distinction.

Thus, two different scripts have been used to sort out cases. Only five cases have been included in both scripts; in these rare cases where the trafficking regarded both groups

of recreational drugs, it has been specified in the analysis. The former script takes into consideration a total of 25 cases, the latter of 24 (16 regarding mainly synthetic drugs, 6 mainly NPSs).

Table 8 – *The crime script for Internet-mediated trafficking in traditional recreational drugs*

STAGE	FUNCTION	SCRIPT CATEGORY	ACTION IN WHICH THE INTERNET HAS BEEN USED
0	Preparation	Crime Lifestyle	Learn about cyber-hotspots where to sell drugs (online newspapers)
0	Preparation	Crime Lifestyle	Learn about (offline) hotspots where to buy drugs (dedicated website)
1	Preparation	Crime	Buy chemicals (commercial websites, auction websites)
0, 3 and 4	Preparation	Crime Lifestyle Network	Recruitment of young people to smuggle drugs (online social networks, commercial websites)
0	Preparation	Crime Lifestyle Network	Interaction with (potential) members of the network (email, encrypted messages)
2, 3, and 4	Preparation	Crime	Arrange transportation and accommodation for the offenders (online booking services)
3, 4, and 5	Entry	Crime Lifestyle	Enter into contact with (potential) clients (online social networks, dedicated commercial websites both in the surfing and in the deep web, dedicated forums in the deep web)
0-4	Precondition	Network Lifestyle	Maintenance of contacts with other members of the criminal network (email, Skype)
0	Precondition	Crime	Get information on relevant legislation
0-5	Precondition	Crime	Verify identities of people met online to be sure that they are not undercover law enforcement officers
4 and 5	Instrumental precondition	Lifestyle Network	Inform potential clients/middlemen on how to obtain plant-based drugs from homemade cultivation (dedicated commercial website)
4	Instrumental initiation	Crime Lifestyle Network	Buy recreational drugs from international wholesalers in order to re-sell them as local retailers (commercial websites, auction websites)
2, 3 and 4	Instrumental actualization	Crime Lifestyle Network	Give orders concerning the local (offline) drug marketplace (online social networks)
4 and 5	Instrumental actualization	Crime Lifestyle	Advertise availability/prices of drugs (online social networks, commercial websites, dedicated forums in the deep web)
4 and 5	Instrumental actualization	Crime Lifestyle	Arrange sales of the drug to final buyers (online social networks)

The crime script for Internet-mediated trafficking in traditional recreational drugs (continued)

STAGE	FUNCTION	SCRIPT CATEGORY	ACTION IN WHICH THE INTERNET HAS BEEN USED
5	Instrumental actualization	Crime Lifestyle	Order the drug (online social networks, dedicated commercial websites, dedicated forums, email)
3, 4, and 4	Doing	Crime Lifestyle	Agreement to send the drugs via regular mail among supplier and middlemen (emails, online social networks, dedicated commercial websites and forums in the deep web)
3 and 4	Doing	Crime	Conceal drug trafficking by means of coded messages (online social networks, Skype)
4 and 5	Post condition	Crime	Payment (prepaid cards that can be recharged online, online money orders to be collected offline with a password, Bitcoin)
5 and 6	Post condition	Lifestyle	Discussion with other drug users about the quality of the drug purchased (dedicated forums in the deep web)
6	Post condition	Crime Network	Money laundering (online banking scams, online gambling)
6	Post condition/exit	Crime Network	Report back to criminal leaders in the countries of origin (Skype and other Internet phone services)

Table 9 – *The crime script for Internet-mediated trafficking in synthetic drugs and NPSs*

STAGE	FUNCTION	SCRIPT CATEGORY	ACTION IN WHICH THE INTERNET HAS BEEN USED
0	Preparation	Crime Lifestyle	Learn about cyber-hotspots where to sell drugs (online newspapers)
0	Preparation	Crime Lifestyle	Learn about (offline) hotspots where to buy drugs (dedicated website)
1	Preparation	Crime	Buy chemicals (commercial websites, auction websites)
0, 1 and 4	Preparation	Crime	Buy technical lab equipments to manufacture drugs (commercial websites, auction websites)
0-6	Preparation	Crime Lifestyle Network	Interaction with members of the criminal network (email, Skype)
3, 4, and 5	Entry	Crime Lifestyle	Enter into contact with (potential) clients (online social networks, dedicated commercial websites and forums both in the surfing and in the deep web)
0-4	Precondition	Network Lifestyle	Maintenance of contacts with other members of the criminal network (email, Skype)
2, 3, and 4	Instrumental precondition	Lifestyle Network	Inform potential clients/middlemen on how to manufacture drugs (YouTube, dedicated forums)

The crime script for Internet-mediated trafficking in synthetic drugs and NPSs (continued)

STAGE	FUNCTION	SCRIPT CATEGORY	ACTION IN WHICH THE INTERNET HAS BEEN USED
3 and 4	Instrumental precondition	Crime	Get rid of national legal restrictions on specific drugs by locating the server elsewhere
4 and 5	Instrumental precondition	Lifestyle Network	Advertise offline social events (such as rave parties) where drugs can be found (online social networks, dedicated forums)
4	Instrumental initiation	Crime Lifestyle Network	Buy drugs online from international wholesalers in order to re-sell them as regional or local retailers (commercial websites, auction websites)
4 and 5	Instrumental actualization	Crime Lifestyle	Reassure clients about the anonymity and the secrecy of the sale (dedicated commercial website)
4 and 5	Instrumental actualization	Crime Lifestyle	Advertise availability/prices of drugs (online social networks, commercial websites, dedicated forums in the deep web)
4 and 5	Instrumental actualization	Crime Lifestyle	Arrange sales of the drug to final buyers (online social networks, email)
5	Instrumental actualization	Crime Lifestyle	Order the drug (online social networks, dedicated commercial websites, dedicated forums, email)
3, 4, and 4	Doing	Crime Lifestyle	Agreement to send the drugs via regular mail among supplier and middlemen (emails, online social networks, dedicated commercial websites and forums both in the surfing and in the deep web)
3 and 4	Doing	Crime	Conceal drug trafficking by advertising recreational drugs sold online under the guise of other items (commercial websites)
4, 5, and 6	Doing/ post condition	Crime Lifestyle Network	Customer loyalty strategies (online social networks, dedicated forums)
4 and 5	Post condition	Crime	Payment (prepaid cards that can be recharged online, Bitcoin)
5 and 6	Post condition	Lifestyle	Discussion with other drug users about the quality of the drug purchased (dedicated forums both in the surfing and the deep web)
1 and 5	Post condition	Crime Lifestyle	Adapt the production of drugs depending on consumers' feedbacks (dedicated forums both in the surfing and in the deep web)
6	Post condition	Crime Network	Money laundering (online gambling)

The crime script for Internet-mediated drug trafficking illustrates a list of actions (and corresponding functions) where the Internet has been used as a facilitator. Through this

conceptual framework, it has been possible to identify ten major typologies of criminal opportunities that the Internet provides for drug trafficking.

1. *Communicative opportunities*: communication is facilitated by the use of services such as emails, Skype, and forums both among traders and between them and (potential) buyers. Communicative opportunities affect all functions (from preparation to post condition) and all script categories, and they are generally present in all stages of the criminal activity with the exception of Stage 1. Especially as regards traditional drugs, offenders seem to exploit communicative opportunities offered by the Internet by paying attention not to expose themselves, for instance by making use of encrypted messages (preparation).

2. *Informational opportunities*: the Internet provides access to useful information, ranging from knowledge of the existing legal framework (Table 1, precondition) to instructions on how to manufacture drugs (Table 2, instrumental precondition). Informational opportunities impact all script categories, and they affect stages 0, 2, 3, and 4 of the trafficking flow.

3. *Technical opportunities*: in the case of traditional drugs (Table 1), online booking services have been used to arrange transportation and accommodation for the offenders (preparation) so to make them avoid physical contacts with potential witnesses that could recognize them. Technical opportunities affect the script category "crime". They have been found in intermediate stages of the criminal activity (stages 2, 3, and 4).

4. *Managerial opportunities*: the management of drug trafficking is facilitated by the Internet throughout the trafficking chain apart from stages 0 and 6. Managerial opportunities generally affect the script categories "crime" and "lifestyle". However, their use differs with respect to the type of drugs under consideration. For instance, regarding traditional drugs, managerial opportunities are exploited to better control offline marketplaces regardless of the distance (instrumental actualization), while in the case of synthetic drugs and NPSs managerial opportunities are used to adapt the production of drugs depending on consumers' feedbacks received online (post-condition).

5. *Organizational opportunities*: the use of the Internet can modify the organizational layers. On the one hand, some organizational layers are no longer necessary: for instance, chemicals can be bought directly online rather than through local intermediaries (Table 1, preparation). On the other hand, however, the use of the Internet may allow new middlemen to step into the trafficking chain: for example, in some cases offenders bought drugs online from international wholesalers in order to re-sell them as regional or local retailers (instrumental actualization). Organizational opportunities impact the "crime" and the "network", and they generally affect the stages of the trafficking (2 and 4) where local intermediaries are involved.

6. *Relational opportunities*: the Internet provides an irreplaceable platform to expand offenders' networks of relationships. For instance, the Internet allows to enter into contact with criminal peers (preparation) and with potential clients (entry). Concerning specifically traditional drugs, the Internet has also been used to recruit new drug mules (preparation). Relational opportunities affect all script categories, and they are present in the stages 0, 3, 4, and 5 of the criminal activity.

7. *Promotional opportunities*: the availability and the price of various types of drugs to be sold online are advertised via the Internet (instrumental actualization). Moreover, in the case of synthetic drugs and NPSs, events in the physical world such as rave parties are advertised online (instrumental precondition). Promotional opportunities affect particularly stages 4 and 5, and the script categories "crime" and "lifestyle".

8. *Persuasive opportunities*: in the case of synthetic drugs and NPSs, the Internet is used to reassure (potential) buyers about the anonymity and the secrecy of the sale (instrumental actualization). Persuasive opportunities have been found in the final phases of the trafficking (stages 4 and 5) and they mainly affect the "crime" and the "lifestyle".

9. *Marketing and loyalization opportunities:* especially in the case of synthetic drugs and NPSs, the Internet is used as a retention tool for both new and old clients (doing/post condition). For instance, a website selling these products offered clients a membership to obtain discounts if they were regular buyers. In the case of traditional "soft" drugs, it has

been observed that traffickers loyalize users by appealing to their sense of belonging to a certain social community, for instance by using pro-legalization rhetoric.

10. *Countermeasure opportunities*: in the case of traditional drugs, the Internet is used throughout the trafficking chain to check on people offenders have to interact with online, namely potential clients, to avoid being deceived by undercover law enforcement officers (precondition).

4.5.3 Discussion

As regards the extent of the Internet usage for drug trafficking, from interviews it clearly emerges that the perception of this problem differs depending on the nationality of the interviewee, as well as on her/his ranking in the law enforcement hierarchy. Generally speaking, the more the interviewee was someone closer to the operational level, the more he/she recognized that Internet usage plays a major role in drug trafficking nowadays. While interviewees from countries with longer experience regarding online investigations were, for instance, absolutely positive with regard to the use of commercial websites (such as Craiglist.org) to advertise drugs, colleagues from other countries suggested that certain advertisements were probably "frauds" because the criminal activity was "not concealed enough". The overall impression is that law enforcement operations dealing with drug trafficking via the Internet show only the tip of the iceberg. In most countries, no specific investigations regarding Internet-mediated drug trafficking are carried out. Some interviewees suggested that this is because large criminal organizations—which are the main targets of law enforcement—are not extensively using the Internet, and many law enforcement agencies do not have enough resources to tackle also smaller groups. Even when Internet investigations are in the law enforcement agenda, only in the recent past specialized investigative units started to be operational[91], and they are

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[91] For instance, in Italy the eUnit of the Central Directorate for Anti-Drug Services was created in March 2012. At least for the moment being, however, this unit is mainly used for monitoring the web. Its officers do not have the legal means to operate as undercover agents, which limits their operative capacities.

building experience as they go, which reflects on the way in which they approach their work[92].

Internet usage can be found in all stages of the trafficking flow, and in particular in preparatory activities antecedent to the drug trafficking, as well as in stages where local retailers and final users enter into play. Regarding particularly traditional drugs, the Internet has not meaningfully affected the opportunity structure in the initial stages of the trade, which suggests that producers and middlemen in the countries of origin and importers operating at the international level generally rely on already established opportunity systems for their businesses.

In general terms, the Internet seems to have boosted in particular trafficking in synthetic drugs and NPSs. As explained by one of the interviewees, these "drugs that run on the edge of legality" are more trafficked via the Internet because "a person... reluctant in becoming a cocaine or heroine trafficker might be more willing to create a designer drug that isn't obviously illegal, so that they get to a comfort level... doesn't take a lot of effort... you do not need tremendously sophisticated delivery systems that go from Colombia and Mexico to get here, you can do it in your basement-lab". The following two cases exemplify how the Internet can facilitate drug trafficking by allowing to arrange most phases of the criminal activity directly from the destination country.

> *Case.* The defendant was involved in illegal manufacturing of metham-phetamine, then sold in a local American marketplace. He bought via the Internet large amounts of precursors (such as muriatic acid) and other items that are commonly used to manufacture synthetic drugs[93].

> *Case.* Offenders A and B are respectively mother and son. They were running a small (offline) shop in Italy selling, among other things,

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[92] For instance, one of the interviewees with experience on cross-border drug trafficking cases was confident in saying that English is used as *lingua franca* in cross-border drug trafficking, but other interviewees admitted that in monitoring the Internet they generally only use their national languages.

[93] Judicial material from the US District Court in Tennessee, January 2007.

synthetic drugs and NPSs. They bought these substances online from the website of a firm legally located in Czech Republic but operating in Northern Italy. They were arrested in the course of a major law enforcement operation, that lead to seizures for 1.5 million euros and to a dozen of arrests throughout the country. The firm selling NPSs online was manufacturing them by buying itself chemicals from China via the Internet. Drugs were sold under the guise of licit products, such as incenses[94].

As it can be noted from this latter case, a specific problem regarding synthetic drugs and NPSs massively commercialized via the Internet is that it is not easy to draw a line between what is legal and what is not. Users themselves may not be aware that they have been involved in an illegal act, since many drugs are sold with the pretense of being legal products. In a case where house perfumes were sold as bait-items, the investigating prosecutor named this issue as "disguised dissemblance"[95]. A similar problem is that controlled substances used for recreational purposes may also have a legitimate use, so that it might be difficult to determine whether an illicit trade is happening or not.

> *Case.* The defendant bought online a big quantity of GBL (γ-butyrolactone), a colorless oily liquid soluble in water, from a German website. GBL is a common solvent and reagent in chemistry, but it is also used as essential chemical for GHB (a date rape drug). The defendant claimed he used GBL as sexual disinhibitor for personal use, he ignored it was illegal to buy it in Italy, and that it was not possible to buy a fewer amount online[96].

In any case, even when users are fully aware of the illegality of their purchase, the dissemblance may still hinder the work of law enforcement agencies.

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[94] Media news, January 2012.

[95] Judicial material from the Italian Criminal Supreme Court, April 2011.

[96] Media news, July 2011, and interview material. Parliamentary point of order C.4/13108, January 22, 2013. Retrieved from: http://documenti.camera.it/leg16/resoconti/assemblea/html/sed0739/leg.16.sed0739.allegato_b.pdf

> *Case.* Defendant A controlled Curious Goods, LLC, a business company based in the US. Defendant A was charged together with other seven people with conspiracy to distribute synthetic drugs. They were allegedly selling online a product called "Mr. Miyagi" that was infused with synthetic cannabinoids, for a turnover of about 5 million dollars in less than one year. Although mislabeled as a potpourri, "Mr. Miyagi" was sold to be smoked for the sole purpose of getting the consumer of the product "high"[97].

As regards cyber-hotspots for trafficking in recreational drugs, they are present in both the surfing and the deep web, and they serve different purposes. As in other transit crimes, in drug trafficking sellers and clients can easily "meet" online in the surfing web in commercial websites, auction websites, dedicated forums, and online social networks—particularly Facebook and its photo-sharing service Instagram. As exemplified by the following case, sellers and buyers often interact only via the Internet to conclude the deal. This is common especially for cases regarding NPSs.

> *Case.* Students and former students at Columbia University were involved in distributing controlled substances (NPSs and POMs) advertised online. Orders were sent to anonymous email accounts. The buyer then received an email reply confirming the sale and asking her/him to mail cash payment to a specified address. Upon the receipt of payment, the order was shipped to the buyer's address[98].

With regard to traditional drugs and especially "soft" drugs, similar modus operandi can be found, but they seem to be more rare.

In cases concerning "hard" drugs in particular, cyber-hotspots in the surfing web are more frequently a mere extension of traditional hotspots: when operating in the open web to reach potential clients, offenders apparently prefer to avoid using the Internet to conclude the deal.

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[97] Media news, October 2012.

[98] Judicial material from the US District Court in NY, November 2007.

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> *Case.* Illegal narcotics (including cocaine, heroine, and ecstasy) and POMs (mostly opioid painkillers) were advertised online as "study aids" or "pain relieves" in the popular commercial website Craiglist, but sales happened offline, usually in public places (such as street corners or stores) in Manhattan[99].

In these cases, apart from creating new cyber-hotspots, Internet usage might be affecting traditional, offline hotspots. According to one American interviewee, the core of the distribution has moved from city centers to suburban areas: clients do not have to move to purchase drugs, but they can easily order them online and have them delivered at home by a drug courier.

The situation is different if we consider the deep web, where hidden online platforms dedicated to drug trafficking exist. The notorious Silk Road has already been investigated by scholars and its existence recalled in Section 4.5.1. The following case describes a similar but less well-known marketplace for drugs, The Farmer's Market, that could be accessed through the TOR computer network. The Farmer's Market has been taken down in April, 2012.

> *Case.* Eight people (described as "an organized criminal network, even if not in a traditional sense") were arrested in the US because they were allegedly involved in running a drug market with a global reach in the deep web. Many more suspected were arrested in other countries in joint operations, included the alleged ringleader, a Dutch citizen. In only two years of activity, the online marketplace had a turnover of about 1 million dollars and processed around 5,000 orders. LSD, fentanyl, ecstasy, ketamine, and cannabis were some of the drugs for sale[100].

When the trade occurs in the deep web, drugs are generally delivered via mail, without physical interactions among buyers and suppliers, that could be even living at the antipodes.

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[99] Interview material.

[100] Media news, April 2012, and interview material.

As already underlined in the last EMCDDA report (2013), apart from places that make the drug supply meet the demand, there are forums in the deep web were clients discuss among them about the quality of drugs sold by different traffickers. For instance, as reported by one of the interviewees, in a recent case a synthetic drug commercialized online caused nausea as side-effect. By following a dedicated forum, offenders were able to discover real-time these negative feedbacks, and consequently to customize their drug production accordingly to better meet the consumers' needs (Table 2, post condition).

The role of the Internet as a convergence setting for users, however, is not limited to the deep web. From a simple Google search, several websites and forums can be identified offering platforms where to be informed on offline and online places where to buy drugs, prices, how to cultivate plant-based drugs, and how to manufacture synthetic drugs. Also information about legislation and law enforcement's attitudes (for instance, whether it is safe to bribe, and to what extent restrictive legislation is enforced in a certain country) can be found. These cyber-hotspots are easy to find especially as concerns "soft" drugs such as cannabis, both at the global (for instance, www.icmag.com and www.seedbankreview.com) and local (www.enjoint.info) levels. Some of these websites, such as www.webehigh.org ("A travel guide to getting high"), are a sort of Wikipedia for drugs, since they are open for users to comment in order to improve information in a collaboration with others.

Also in the case of drug trafficking, the craving for contacting potential clients seems to overcome the need for concealing the trafficking activity in cases where the drug trade is in "grey areas" (as for NPSs) or it is perceived by a relatively large part of the population as not socially reprehensible (as for cannabis). Otherwise, as underlined by one of the interviewees, "traffickers try to stay as anonymous as they can, they are cautious in using the Internet because they know they could be tracked". When operating in grey areas, traffickers/entrepreneurs can be bolder and play with legal loopholes, by placing themselves at the edge of legality. The case presented hereafter, for instance, was described by the Italian investigating prosecutor as a "criminal phenomena that has never been conceived before".

> *Case.* Through the websites of an Italian company (Semitalia Ldt.) based in Tuscany (such as www.semini.it and www.semini.biz, now obscured), it was possible to buy cannabis seeds. Seeds were delivered via ordinary mail to the buyer, together with instructions to make home-grown drug. During the seizure, 80,000 seeds were found in stock, as well as small amounts of cocaine and hashish. Four men in between 26 and 33 years old were arrested, and other 21 were put under investigation because they bought significant amounts of seeds (which could suggest they were acting as local retailers). The investigation highlighted that alongside Semitalia Ldt. there were 62 cannabis cultivation-related grow-shops—i.e., retail stores who sell equipment and supplies to make it possible to grow plants indoors[101].

In March 2011 two of the arrested, namely the entrepreneurs running Semitalia Ldt. were released because, according to the Court of Florence, selling cannabis seeds online is not a crime, even if also the small-scale growing of cannabis is illegal in Italy.

Another way to play with legal loopholes is to take advantage of differences in national regulations: in many observed cases, for instance, commercial websites were hosted within the Netherlands to escape jurisdictions with more stringent drug laws. The following case, which describes the oldest investigation carried out in Italy regarding Internet-mediated drug trafficking, exemplifies this latter point.

> *Case.* Various types of synthetic drugs, NPSs, and chemical precursors were ordered online from four Dutch websites and delivered to Italian buyers by ordinary mail. In eight months of investigation, about 1,000 packages were intercepted at Milan post offices, ordered by a total of 235 Italians, many of whom underage. Dutch websites underlined they do not have responsibility of the legal consequences of the sale in other countries, and stressed that buyers should be overage[102].

Regarding actors involved in Internet-mediated drug trafficking, as suggested by a couple of interviewees, it might be useful to draw a major distinction between organized

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[101] Media news, 2010, 2011, and interview material.

[102] Media news from *Il Corriere della Sera* and *La Repubblica,* November 21, 2003 and interview material.

criminal networks and other types of offenders running drug trafficking ("sophisticated" and "unsophisticated" networks, in the words of another interviewee).

Organized criminal networks are professionally involved in drug trafficking. They particularly exploit communicative opportunities provided by the Internet, for instance by using Internet phone services such as Skype and online chats. In this way, not only can they easily maintain constant contacts with other members of the network based in other countries, but also reduce the risk of being wiretapped. When the Internet is used for communication, extra security measures are often adopted. For instance, one of the interviewees reported of a case where the defendants used Skype to communicate among them by showing each other pieces of paper with information (flight numbers, container numbers, checking accounts, and so on). Indeed, if intercepting Skype calls is technically very complicated because of its peer-to-peer architecture, tapping video calls is even more difficult. Also coded messages are used in order to avoid leaving traces:

> *Case.* A 27 years old man under house arrest in Northern Italy ran a highly sophisticated criminal network based in Sicily trafficking in hashish and cocaine. He used Facebook chat in order to avoid controls and wiretappings. As an extra security measures, he used culinary metaphors as coded messages (e.g., "How much pasta have you prepared for lunch?")[103].

Another trick commonly employed is the use of email drafts—i.e., using a common email account and communicating by saving emails as drafts online rather than sending them—, which increases the difficulty of traceability of the traffickers.

> *Case.* A criminal network of at least 20 people trafficked huge quantities of cocaine and hashish from South America to Italy via the Netherlands and Spain. The network was described as a sort of "joint venture between the 'Ndrangheta and Cosa Nostra". Offenders used email drafts for their communications[104].

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[103] Media news, June 2011, and interview material.

[104] Judicial material from the Italian Criminal Supreme Court, November 2005.

Regarding drug distribution, long-running organized groups—such as traditional mafias—generally do not use much the Internet. According to some interviewees, an explanation to this fact is that these groups are often ruled by old criminal generations, which are not used yet to the specificities of the Internet. In the trade-off between anonymity and efficiency, they choose the former: for instance, cash is preferred to online payments because it is less traceable. Furthermore, they already have widespread and consolidated distribution channels to rely on. When specific "technical" problems have to be solved, these criminal networks rely on Internet savvy members of the group or on the specific expertise of non-members (such as hackers). For instance, in an ongoing investigative case, a mafia-style criminal network was building up its own gambling website in order to launder money generated by drug trafficking[105]. However, this happens rarely. In the following case, the criminal group relies on non-members to carry out a specific task involving Internet usage; in order to obtain a sufficient level of trust regarding the non-member partner, a meeting was organized offline to discuss the details of the illegal operation.

> *Case.* A criminal network linked to Camorra trafficked cocaine between the Naples hinterland, Northern Italy, and Spain. For money laundering purposes, high-level members of the network had contacts with a broker and legal consultant with hi-tech expertise based in London. This broker basically operated a sophisticated online banking fraud by proposing false investments to his/her wealthy clients. As emerges in one of the wiretappings, the broker affirms to be part of "a virtual network committed in carrying out these types of illicit operations"[106].

More recent organized criminal networks, generally run by younger people, use the Internet to make drug trafficking more efficient and less risky, or even to broaden their networks of relationships. These structured criminal groups relying on criminal opportunities offered by the Internet other than for communication are generally middle

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[105] Interview material.

[106] Interview material and DDA investigative material, 2010.

level criminal networks, that in this way are able to manage both international trades and local distribution.

> *Case.* A structured organization, with stable contacts in various European countries, bought synthetic drugs (particularly synthetic cannabinoidis) and NPSs from the Netherlands and Eastern Europe. Drugs were successively re-sold online in several countries after an intermediate passage in Romania to disguise the trafficking chain[107].

> *Case.* A 29 years old man with links to the 'Ndrangheta ran a criminal network based in the Milan hinterland and composed by about 40 people (Italians and South Americans). They were trafficking cocaine imported from South America, for a turnover of more than 200,000 euros per year. Besides using traditional trafficking modalities (cocaine ovules and postal packages), the criminal network relied on Internet advertisements to recruit couriers, with messages such as: "we are looking for young men in between 22 and 35 years old to travel to South America (Argentina, Peru, Bolivia, and Ecuador) in order to transport cultural goods, jewelry, and alpaca clothing". Most respondents were students, that in this way were able to gain up to 2,000 euros per month[108].

Apart from sophisticated and organized criminal networks, other types of offenders run drug trafficking—or at least some if its stages—via the Internet. In many of the cases observed, very loose gangs (up to 8-10 people) or even individuals used the Internet to set up their own drug marketplaces of local distribution. Regarding synthetic drugs and NPSs, in more than half of the cases the trafficking was carried out in a professional or semi-professional way by loose groups of full-timers for whom drug trafficking became the main source of income, as well as by people legitimately involved in legal activities who decided to increase their profits by amateurishly embracing the new criminal opportunities provided by the Internet.

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[107] Judicial material from the Italian Criminal Supreme Court, April 2011.
[108] Media news, September 2012.

Case. Defendants A and B, legally selling cleaning products via the Internet, were involved in a large-scale trafficking in Buteneidol (BD), a controlled substance whose chemical structure is substantially similar to the one of a forbidden one (gamma-hydroxybutynic acid GHB) and that is used to "get high", as a growth hormone, and to facilitate sexual assaults. However, BD is also used as industrial solvent. Defendants A and B sold BD over the Internet under the guise of a cleaning product. The Internet was broadly used for all stages of the trafficking activity. Communications with clients generally occurred by email. However, from interceptions it appears that, when discussing with clients about the legality of the sale, the defendants preferred to verbally discuss with clients (by phone)[109].

Case. 21 people aged from 22 to 63 years old were arrested because they were selling illegal narcotics and POMs by posting advertisements on the popular commercial website Craiglist.org. Most of the arrested had legitimate occupations, including a student, a teacher's aide, a human resource professional, a celebrity photographer, and a dot com entrepreneur. However, some of the arrested had no identifiable source of legitimate income[110].

Given the fact that for drug traders operating online it is easier and less risky to get in touch with potential customers without having to meet them in person, offenders can take fully advantage from the Internet anonymity so that their online reputation is unrelated from the one they have in the physical world.

Because of new criminal opportunities in the online realm, the cost of entry in the criminal market for recreational drugs is fairly low. Newcomers operate especially in the NPSs market: in this way, they do not have to compete directly with criminal groups already established in trafficking traditional drugs. As explained by one of the interviewees, "if you try to take over a route of cocaine or heroine delivery, you are going to get killed, or you are going to be pushed back. But you can create your own new market over the Internet and in a semi-anonymous fashion".

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[109] Judicial material from the US District Court in Missouri, July 2003.
[110] Interview material.

With regard to "soft" drugs, synthetic drugs, and NPSs, some investigations concerned teenagers selling small quantities of drugs to people related to their circles of friends and schoolmates via online social networks such as Facebook[111]. An important innovation in drug trafficking can indeed be attributed to young "psychonauts"—i.e., people who take drug themselves—entering the market as small-scale traders: they have basically added an organizational layer to the trafficking chain by acting as local retailers for their (extended) circles. Even if most of these psychonauts seem to be involved in small-scale trades, a couple of interviewees underlined that in some recent cases the quantities purchased imply that some transactions are directed towards retailers operating on a larger scale (from business-to-consumer to business-to-business).

At the same time, however, some organizational layers that were necessary in the initial stages of the activity appear to be no longer necessary: for instance, as suggested by some of the cases analyzed, precursor chemicals can be bought online anonymously from Chinese factories from the destination country, so that criminal networks dealing with synthetic drugs might not need anymore a man on the spot there.

4.6   Comparing across transit crimes

This section concludes the analytical part of this PhD dissertation by considering the transit crimes analyzed so far in a comparative perspective. The comparative framework is foremost used in order to answer to the fourth research question (does the Internet impact various types of transit crimes differently?), as well as to obtain a more exhaustive understanding of what kinds of criminal opportunities the Internet offers for traditional transit crimes and how these opportunities affect the organization of transit crimes.

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[111] Media news from *Il Corriere della Sera* and *La Repubblica*, November 2003, March 2010, and September 2010; interview material.

Assuming a comparative perspective, as already underlined by von Lampe (2012), allows also to try and see possible patterns beyond mere description. From this point of view, by comparing across transit crimes it would be possible to overcome some "blind spots" that might be given by data deficiencies for a specific transit crime. This might be useful to "think thief" better—i.e., to look at the crime process from the criminal perspective, which allows to comprehend the opportunity structure exploited in order to prevent and tackle crime more effectively (Clarke and Newman, 2006).

Online investigations are not always used as a common tool against all transit crimes, or at least not in all the countries considered; when dedicated squads exist to tackle criminal networks involved in Internet-mediated transit crimes, these squads are often recent innovations. Some practices, however, are particularly positive and groundbreaking, such as certain law enforcement initiatives in the field of the online trade in counterfeit pharmaceuticals, the monitoring unit for wildlife crimes committed via the Internet, and the experience developed in investigating the deep web as regards trafficking in recreational drugs. When these practices occurred, it was possible to gather more (and more detailed) data from law enforcement operations. Given the fact that existing data on the modus operandi of criminal networks exploiting the Internet environment necessarily show only a partial angle, by looking at experiences that are comparable even if outside the scope of a specific law enforcement agency it could be possible to grasp something more on how offenders behave online.

Indeed, by observing through the same lens—i.e, the script framework—different transit crimes, it has been possible to note certain parallelisms and similarities among some of these trafficking activities, particularly with regard to how possible clients are approached (e.g., in trafficking in counterfeit pharmaceuticals and trafficking in NPSs, vs. in trafficking in wildlife and trafficking in plant-based traditional drugs), how certain cyber-hotspots are used (e.g., in trafficking in counterfeit pharmaceuticals vs. trafficking in synthetic drugs and NPSs), and the presence of risk-avoidance methods (in sex trafficking vs. trafficking in traditional drugs). Furthermore, it is at least likely that many more similarities exist but they are not observable from data yet, and that offenders

will soon/are starting to adapt to the continuous evolution of criminal markets and the corresponding changes in law enforcement's mode of operation (e.g., offenders trading in wildlife could move to the deep web as law enforcement attention has started focusing on this trafficking activity, and new generations of clients are on average enough Internet savvy to access to the hidden part of the web)[112]. Thus, by investigating different Internet-mediated transit crimes it is possible to learn more on each of them by capitalizing on the knowledge gained from the others, which could also positively direct law enforcement attention and benefit law enforcement responses. As it was recently acknowledged by an experienced law enforcement officer, this could have great utility to "predict" how certain offenders would be likely to behave, thus allowing law enforcement to be more proactive[113]. After all, an hypothesis-based approach to crime prevention has been recently encouraged also in academia (Ekblom, 2010: 71)[114].

So far, for each transit crime taken into consideration, it was possible to classify through the crime script framework different types of criminal opportunities made available by the Internet[115]. They are summarized in Table 10. The impact of these

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[112] Moreover, most classifications for transit crimes (and the relative criminal markets), though indispensable to lower complexity, are necessarily tentative. Just a few examples. Rhino horn is used in the traditional medicine of many Asian countries to treat fever, rheumatism, and other disorders; is the trafficking in rhino horn a wildlife crime or a medicine trade? What if the product sold as rhino horn powder is counterfeit and it might badly affect the health of the final user? Where is the dividing line between pharmaceuticals, doping products, and synthetic drugs if they all might be used for the same end, and they are in fact often assumed together (so-called "poli-drugs")?

[113] Comment received during the last International Conference on Synthetic Drugs (SYNDEC 6) and its workshops (19-21 November 2013), where I presented the methodology and the findings of this study with regard to the Internet-mediated trafficking in recreational drugs.

[114] In presenting his 5Is framework (intelligence, intervention, implementation, involvement, and impact), a knowledge management approach to capture, assess, and replicate knowledge of good crime prevention practices, Ekblom suggests that the 5Is might be used also to identify possible gaps in knowledge, as well as to foster communication between practitioners from different agencies, disciplines, and countries.

[115] Of course, a certain degree of overlap exists between the different types of criminal opportunities identified. Indeed, the proposed classification does not aim to pigeonhole behaviors into a certain category while precluding them from fitting elsewhere. Depending on the analytical needs, more fine-grained or coarse-grained classifications are certainly possible.

criminal opportunities with regard to both the criminal activity and the criminal networks involved has been discussed. This section explicitly addresses the question whether the Internet affects various types of transit crime differently. In brief, it is safe to say that that the answer to such a question is affirmative. However, the following considerations have to be taken with a grain of salt: the fact that some criminal opportunities are missing in certain transit crimes may merely be due to deficiencies in the data. Anyway, as explained above, such considerations can provide guidance on the interpretation of Internet-mediated transit crimes in a comparative perspective, and they have been developed in the light of all the other information gathered via case studies and interviews.

Table 10 – *The criminal opportunities provided by the Internet: a summary*

	Wildlife trafficking	Trafficking in counterfeit pharmaceuticals	Sex trafficking	Trafficking in recreational drugs
Communicative	✓	✓	✓	✓
Informational	✓	✓	-	✓
Technical	✓	-	✓	✓
Managerial	✓	✓	✓	✓
Organizational	✓	✓	✓	✓
Relational	✓	✓	✓	✓
Promotional	✓	✓	✓	✓
Persuasive	✓	✓	-	✓
Targeting	-	✓	-	-
Marketing and loyalization	-	✓	-	✓
Victim selection	-	-	✓	-
Victim subjection	-	-	✓	-
Deceptive	-	-	✓	-
Countermeasure	-	-	✓	✓

In all the transit crimes considered five types of opportunities have been found, namely *communicative*, *managerial*, *organizational*, *relational*, and *promotional opportunities*. The first two generally refer to the criminal act *per se:* for instance, the Internet has provided a way to ameliorate efficiency in transit crimes by allowing offenders to easily and promptly adjust the trafficking activity to meet changes in the demand. The other ones have a broader scope and mainly concern relationships among the actors involved in the transit crime—namely offenders and clients—and their lifestyle. Thus, not only has the Internet facilitated communications and enhanced efficiency, but it also has changed the internal organization of criminal networks, has affected the way in which they build new business ties with criminal peers and (potential) clients, and has served as a resource to sneak into the clients' attitudes and spending habits in order to promote their trafficked products.

Other criminal opportunities provided by the Internet, however, seem to affect only some transit crimes. Generally speaking, the differences depend mainly on the social perception of the seriousness of the criminal activity, on the place it fills in the law enforcement agenda, and on the characteristics of the actors involved. *Informational opportunities* and *persuasive opportunities*, for instance, have not been found in sex trafficking. Regarding informational opportunities, a possible explanation may be that actors involved in this trafficking activity are generally not newcomers: they have pre-existing criminal experiences to rely on. Informational opportunities seem to play a bigger role in the case of criminal activities that are perceived as low-risk by offenders (and that traditionally suffer form relative carelessness in the law enforcement agenda, such as wildlife trafficking): in these cases, the Internet is often used by unexperienced offenders to get the basic information needed to enter the trafficking activity. With regard to persuasive opportunities, in the case of sex trafficking clients do not need to be boosted, as they already know what they are looking for online on their own initiative, and they do not question the legality (or the illegality, depending on the country) of the sexual service offered. Persuasive opportunities have been usually found in cases of trafficking in synthetic drugs and NPSs, counterfeit pharmaceuticals, and wildlife, where clients were not fully aware that they were going after items sold illegally or illicitly, so that

persuasion was used to reassure potential buyers about the reliability and the legality of the trade, and the validity of the product sold.

Technical opportunities are not present in trafficking in counterfeit pharmaceuticals. This might be due to the fact that, because of the Internet, this trade has found new vitality in the countries considered for the data collection (it should be remembered that the Internet is basically the only way in which counterfeit medicines enter these markets), so that the criminal activity has been completely built around the opportunity structure provided by the online environment. Thus, offenders do not have to rely on online services to find solutions to problems in the trafficking chain, since this chain has been developed to be carried out efficiently via the Internet since its very beginning. On the contrary, offenders involved in the online trade in counterfeit pharmaceuticals exploit specific *targeting opportunities* to profile potential clients or to reach specific social groups in order to increase their chances to conclude the sale. Both in the online trade of counterfeit pharmaceuticals and in the Internet-mediated trafficking in recreational drugs, offenders use *marketing and loyalization opportunities:* indeed, in both cases the products trafficked might be assumed over a long period of time and it is in the interests of sellers to attract and retain old and new clients. In particular, when clients may become habitual, the Internet is used as a powerful tool make clients feel as part of the same social group. The use of so-called "social engineering"—i.e., the capacity offenders have to "persuade potential victims with emotional appeals such as excitement or fear or establishing interpersonal relationships or create a feeling of trust and commitment" (Kshetri, 2010 :10)—to commit cybercrimes (in a narrow sense) has already been underlined (Kshetri, 2010; Glenny, 2011). From the finding of this research, it is possible to conclude that social engineering is a common tool also in many Internet-mediated transit crimes.

There are three types of criminal opportunities that are specific for sex trafficking and that directly affect relationships with victims: *victim selection*, *victim subjection*, and *deceptive opportunities*. Finally, *countermeasure opportunities* have been found only in those activities—namely, sex trafficking and trafficking in recreational drugs—that are

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generally perceived as more "serious" and receive more attention from law enforcement, so that offenders take extra precautions in carrying them out.

Regarding the extent to which the use of the Internet affects traditional transit crimes, it is possible to note that, apart from the case of sex trafficking, Internet usage is mainly found in the final stages of the trafficking chain in the destination countries, where clients— and otherwise buyers entering the market as retailers—come into play. This suggests that actors involved in the trafficking chain in the countries of origin and those operating at the international level still tend to rely on already established social and economic opportunity structures for their businesses. In sex trafficking cases, on the contrary, the use of the Internet seems to have deeply affected the initial part of the trafficking chain, in particular by changing radically the recruitment of victims. In any case, Internet usage apparently has not changed the geography of transit crimes.

The Internet has overall allowed to anticipate interactions between offenders and customers to an earlier stage of the trafficking chain: specific items can be directly ordered and the clients' feedbacks can be received instantaneously, so that the trade can be customized accordingly.

Thanks to the flexibility allowed by the Internet, it is generally possible to bypass international or local intermediaries, thus eliminating an organizational layer. This should make the trade more efficient, and possibly lower final prices. However, it has already been underlined that at the very final stages of the trafficking chain certain clients start acting as retailers themselves, which restores a new layer. As stressed in the analysis of the trade in counterfeit pharmaceuticals, this peculiarity is evident especially in criminal markets that offer the possibility for segmentation.

With regard to the cyber-hotspots used, it is possible to observe that offenders use them according to two opposite aims: to conceal and to divulge the trafficking activity. There is a constant trade-off between the need to reach for new potential clients (or, in the case of sex trafficking, also potential victims) and the necessity to keep the criminal activity hidden from law enforcement. The threshold varies depending not only on the

degree of illegality of the act (e.g., being NPSs in a "grey area", their online trade is less concealed than the one in traditional drugs), but also and most importantly on the social perception of such an illegal or illicit act. For instance, with regard to trafficking in traditional drugs, trafficking in cannabis—even in countries where this is absolutely illegal—is socially considered as less reprehensible than trafficking in heroine, so that the online trade of the former is less concealed than that of the latter. A possible explanation, corroborated by some of the interviews, is that offenders are aware that law enforcement does not have enough resources and capabilities to monitor and investigate the enormous Internet environment. In cyberspace informal social control has an increasing role in monitoring and reporting criminal behaviors online (McGuire, 2007: 7), but this social safety system does not work properly when the criminal activity is not perceived as dangerous or harmful, and when its visibility is somehow limited to online social spaces built for people with the same system of values and beliefs (e.g., online forums dedicated to cannabis users or rare turtles collectors).

Overall, the Internet seems to be boosting certain trafficking flows more than others. In particular, *illicit* criminal activities that can more easily play with gaps in legislation or that are usually perceived as "less serious" seem to have been impacted more by the Internet. Furthermore, the Internet opened new profitable possibilities for criminal markets that were generally considered not very profitable: the possibility to reach—at least potentially—an indefinite number of potential buyers makes almost any type of criminal market worthwhile for criminals, regardless of the limited monetary value of the single item.

When introducing the various transit crimes, it has been underlined how they are often linked to the organized crime rhetoric. However, alongside (more or less) organized criminal groups, in many of the cases analyzed criminal networks operating online were composed by very few people, and also by small family groups, couples, and even individuals. Apparently the Internet is changing the way in which certain trafficking flows—traditionally put in correlation with (transnational) organized crime—are carried

out, opening the way also for smaller-time criminals with a potential global reaching[116].

For the type of information gathered, it is difficult to determine and generalize for all transit crimes whether offenders had or not previous criminal experience: however, the low technical skills required to enter the criminal markets considered and the fact that often offenders were carrying out in parallel legitimate activities could be considered proxy indicators of the fact that some actors involved in Internet-mediated transit crimes are newcomers. Jaishankar (2009) already underlined that a peculiar problem of criminal behavior in the Internet environment is that, at least potentially, it "cuts across a wide spectrum of society" (289), and that most average people can hypothetically join a group of offenders or start a criminal career on their own. As concerns Internet-mediated transit crimes, Jaishankar's remark is more than an hypothesis.

With regard to more structured and organized criminal networks, a major distinction should be drawn between traditional mafia-style organized groups and looser groups merely moved by profit. Mafia-style groups strongly depend on their strong connections with the territory, and for many of their activities (extortion is probably the more blatant example) the physical presence is what makes the difference. Even if in certain cases the Internet is used as a communication tool to avoid wiretappings, it seems that traditional groups are quite reluctant to go online. According to many interviewees, a possible explanation is that traditional mafia-style groups are so successful in their activities that they do not feel the need to change. Moreover, the people with higher status are not digital native, and they seem to prefer face-to-face interactions to build trust. From this

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[116] The importance of social relations for understanding organized crime has been repeatedly underlined, and especially the role of family ties and bonds of friendships as foundations of criminal associations (Kleemans and van De Bunk, 1999). Similarly, Kleemans and de Poot (2008) relied on the notion of social opportunity structure—defined as social ties providing access to profitable criminal opportunities—to explain the involvement in organized criminal activities, while van Koppen and de Poot (2013) emphasized the role of professional bonds for some offenders to be involved in organized crimes. Without denying the role of settings and situations experienced in life in entering complex criminal markets, it seems that Internet usage has partially modified these patterns, by introducing a new opportunity structure: newcomers and youngsters can more easily have an active role in Internet-mediated transit crimes, regardless of their offline experiences.

point of view, it could be that the situation will change in the forthcoming years, as new generations are used to rely on computer networks for all their routines.

Looser groups moved by profit exploit the Internet not only as a communication tool, but also to manage their trafficking activities in order to enhance efficiency and lower risks. In general, these groups do not need a strong connection with the territory: they can take fully advantage from the Internet anonymity, and their online reputation is unrelated from their physical one[117].

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[117] For a more detailed analysis of how different types of organized crime groups exploit the Internet, see Lavorgna and Sergi (2013).

Chapter 5

Conclusion

"Generally, old media don't die. They just have to grow old gracefully".

Douglas Adams, The Hitchhiker's Guide to the Future, a BBC Radio 4 programme (2001)

5.1   Final remarks

The previous sections have highlighted what types of criminal opportunities the Internet offers for traditional transit crimes and shown how Internet usage has affected the organization of these trafficking activities, as regards both the carrying out of the crimes and the patterns of relations in and among criminal networks. In this regard, crime scripts have allowed to identify in what specific phases of these criminal activities and for what purpose the Internet is used, which has helped to provide a detailed description of how actors involved in transit crimes behave in the Internet age.

By looking at several Internet-mediated transit crimes, it has been possible to see how there is a constant tension between display and concealment, and how the equilibrium is set differently depending on the characteristics of the trafficked good. While this tension is not peculiar of cyberspace, in the online environment it becomes ontological. This crucial aspect has led to a transformation of the way in which relevant actors interact

among each other. As a consequence, it has also diverted offenders' attention towards new cyber-hotspots and convergence settings that reflect the need to approach potential clients (and victims) while avoiding law enforcement attention.

This dissertation has made a contribution in remarking that environmental criminology provides a proper theoretical framework to interpret the impact of the Internet on criminal activities, included traditional transit crimes. Indeed, by relying on an environmental criminology approach, it is possible to locate the criminal phenomenon in the broader social system, and to debunk myths and stereotypes. By focusing on the notion of opportunity, it has been possible to shed light on the degree to which criminals' behavioral patterns differ from the physical world to the Internet environment.

Transit crimes are continuously evolving criminal activities. They are pliable innovations as well as to transformations in the market economy, in the law enforcement action, and in the policy agenda. As one of the interviewees pointed out, it is hard "to take a picture of an evolving phenomenon". Given the speed of Internet-related technological innovations, it is likely that some of the findings of this dissertation will have to be updated soon. However, it has been possible to highlight some tendencies which should give this study longevity.

Before concluding, two final aspects are worth underlying. First, as explained in Section 2.2, in this dissertation the notion of "transit crimes" has been used to avoid the expression "(transnational) organized crime", that is generally associated with the criminal activities considered in this study but that could trigger preconceived notions. The findings of this PhD research have shown the critical importance of individuals and loose criminal networks when it comes to Internet-mediated trafficking activities. In an increasingly Internet-dependent society, it might be opportune and well-timed for criminologists to reconsider taking (often) for granted the transnational organized crime narrative when addressing business-like criminal activities. Otherwise, the risk is that to neglect taking into consideration actors in the criminal process that could be likewise efficient and harmful in carrying out their activities.

Second, as the Internet provides a new structure of criminal opportunities for offenders, it also affects criminals' vulnerabilities. In particular, the Internet is changing the dynamics of social and institutional control. It is likely that security in the Internet age will increasingly depend on international cooperation among a wide range of institutions, as well as on victim self-help, market forces, and technology (Grabosky and Smith, 2001: 29). As stressed by Smith (2010), there is a variety of stakeholders—ranging from law enforcement and governments to technology industries and computer users—with an interest in enhancing the control of the Internet environment[118]. However, their efforts as "capable guardians of cyberspace" appear uncoordinated so that success is difficult to achieve (Smith, 2010: 214)[119]. Thus, new forms to enhance dialogue, partnerships, and collaborations among these various actors will be essential to counter Internet-mediated transit crimes in an effective and efficient way.

In conclusion, this study contributes to the current debate on how the Internet is changing the characteristics of criminal endeavors by considering how it facilitates certain offline crimes. The identification of the specific criminal opportunities provided by the Internet for transit crimes is a challenging task. Nonetheless, this is a necessary step for understanding the way in which the use of the Internet has affected criminal markets, and a necessary starting point to enhance crime prevention and disruption while maintaining a balance between openness and security on the Internet.

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[118] "Extended guardianship", in the situational crime prevention narrative (Clarke, 1992/1997; Cornish and Clarke, 2003).

[119] A common problem observed in the countries considered in this study—and often raised during interviews— is that contemporary law enforcement and regulatory agencies seem to lack the capacity to control much Internet-mediated transit crimes. Not only online investigation of transit crimes are not yet a commonly used tool for law enforcement, but also substantial differences and gaps still remain between different jurisdictions (Smith et al., 2004: 105; Koops and Brenner, 2006). These issues are profoundly hindering investigations while offering a considerable advantage to offenders.

5.2   Suggestions for future research

Because of its scope and framework, this thesis has only hinted at certain meaningful issues that should be investigated more thoroughly. Some perspectives for future research will be briefly suggested hereafter.

This study has highlighted that the risk of getting caught for buyers and clients operating online is generally offset by the ease of selling and ordering, which has increased the host of actors that might be involved in illegal and illicit trades. Some of the buyers seem to be exploiting the possibilities offered by the Internet to step into criminal markets as traders themselves, or at least as local retailers. If this is the trend, more knowledge on these actors has to be build. Furthermore, this research can be used as a foundation for more specific studies into the role of cyber communities and other cyber-hotspots where offenders and clients meet. We have seen that, in the Internet environment, it is extremely easy to find cyber-hotspots populated 24/7 by like-minded people: it is in these places that relevant actors reinforce or legitimate certain behaviors, and learn how to carry out the criminal activity (Adler and Adler, 2006/2009: 372).

Changes in the social organization of criminal networks involved in Internet-mediated transit crimes should be investigated more in details. This study has shown that criminal marketplaces have been subject to major modifications because of the Internet, which has allowed for new criminal actors to enter the market, for other actors to become unnecessary, and for new partnerships to be created between professional traffickers and newcomers. There is a whole body of research that has addressed the social organization—i.e., patterns of relationships—of criminal groups and activities. The underlying idea is that offenders have to face several problems, from acquiring resources and gaining profits to maintaining their lifestyle and assuring security: social organization is what helps them to solve these problems (McIntosh, 1975; Best and Luckenbill, 1982/1994)[120]. While the

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[120] As Potter effectively explained, even if is true that the criminal market influences the actual structure, scope, and style of a criminal group, what is vital to understand organized crime are the environmental factors (Potter, 1994: 133), such as Internet usage. Indeed, these factors are what provide both opportunities and constraints to criminal groups and activities, thus giving shape to their social organization.

number of studies dealing with the social organization of crime is on the whole relatively scarce—being outclassed by works that focus on static criminal structures and do not consider the wider social context—a recent body of research seems to rely again on social organization to investigate criminal behaviors in the Internet environment (Mann and Sutton, 1998; Brenner 2002, 2003; McMullan and Perrier, 2003; Wall, 2007; Holt, 2009; McQuade: 2009). Existing studies, however, have not yet addressed Internet-mediated transit crimes. The literature on social organization might complement effectively the environmental criminology approach in looking at the dynamics of relationships within and between criminal networks, as well as between criminal networks and non-offenders, which matter as potential points of intervention to counter transit crimes.

Further research in the domain of this study on a broader set of primary documentary sources would certainly be useful to strengthen and generalize the findings. Moreover, while this PhD dissertation is mostly based on investigative and judicial records and interviews with key informants, it would be very useful to proceed by looking at the way in which traders and buyers work and interact in cyberspace by focusing on "the other side of the coin"—i.e., by tracking directly their behavior through the use of innovative means such as social media network analysis, virtual ethnography (both in the surfing and the deep web), and honeypot websites.

Finally, it has to be remarked that script analysis is generally used as the starting point for situational crime prevention. This study stopped a step before that. However, it offers a detailed description of the current situation, thus providing updated insights also for policy approaches: Internet usage has changed the possibilities offenders have, and therefore how law enforcement bodies have to work. Understanding of how the Internet has been misused in the past is the preliminary step to identify proactive and efficient interventions to counter Internet-mediated transit crimes: by identifying the system of opportunities criminals exploit in the Internet, it would be possible not only to adequately tackle transit crimes in a new battlefield, but also to prevent criminal activities by targeting offenders where it is more efficient. In this regard, this research should be seen as part of a process, not the end.

Appendix A

Preliminary keyword search on Italian newspaper online archives

Table 11 – *Keyword search on Italian newspapers*

Keywords	Il Corriere della Sera		La Repubblica	
	Files identified	Files selected	Files identified	Files selected
"Crimine organizzato" AND Internet	0	0	128	0
Mafia AND Internet	24	2	1065	3
Transnazionale AND Internet	6	0	137	3
Internazionale AND Internet	298	5	11623	21
"Crimine organizzato" AND Web	0	0	797	1
Mafia AND Web	13	0	517	0
"Criminalità organizzata" AND Internet	0	0	831	3
"Criminalità organizzata" AND Web	0	0	548	1
"Network criminale" AND Internet	0	0	325	5
"Network criminale" AND Web	0	0	38	1
Camorra AND Internet	3	0	419	2
Camorra AND Web	4	0	222	0
Ndrangheta AND Internet	1	0	114	0
Ndrangheta AND Web	1	0	68	0

La Repubblica and *Il Corriere della Sera* are the largest and most important newspapers in Italy.

Trying not to miss potentially relevant documents, the keyword search was over-inclusive and followed by a careful reading of the news selected. Most articles identified

through the keyword search and immediately dismissed focused on pedo-pornography, illegal file sharing, credit card frauds, defamation, and terrorism. Furthermore, a number of dismissed articles explicitly considered the links between transit crimes and the Internet but in very generic terms and with no reference to specific investigative or judicial cases. They were focused on sex trafficking, drug trafficking, child trafficking, pet trafficking, trafficking in organs, trafficking in counterfeit products (and particularly in toys), trafficking in art and cultural objects, and on the online trade in prescription drugs and doping products.

In respect to the same attempt of over-inclusiveness, conjunctive (AND) rather than disjunctive (OR) queries were utilized, and no temporal limits were set (the upper temporal limit is March, 2013). *La Repubblica*'s online archive starts with 1984, while *Il Corriere della Sera*'s archive starts with 1992. However, all files identified were no older than 1995 (which is consistent with the timeline of the commercialization of the Internet). Most cases were extremely recent.

This keyword search does not have the presumption of being exhaustive (many more keywords may have been utilized, and not all existing cases are reported in national newspapers). Nonetheless, it was a proper starting point to identify relevant cases.

Appendix B

Preliminary keyword search on judicial databases

Table 12 – *Keyword search from Dejure (Italy)*

Keywords	Files originally identified and authority	Files selected
"Crimine organizzato" AND Internet	1 Court of Cassation (penal division)	1 Court of Cassation (penal division)
Mafia AND Internet	1 Court of Cassation (penal division) 1 European Court of Justice 1 Constitutional Court 9 Courts ruling on merits (Court of first instance, Court of appeal)	1 Court of Cassation (penal division)
Transnazionale AND Internet	19 Court of Cassation (penal division) 1 European Court of Justice 1 "massima" (ruling-ratio decidendi)	1 Court of Cassation (penal division)
Internazionale AND Internet	2 Constitutional Court 8 "massime" (ruling-ratio decidendi) 9 Court of Cassation (civil division) 57 Court of Cassation (penal division) 59 Administrative Courts 168 European Court of Justice or ECtHR 173 Court ruling on merits (Judge for preliminary investigations, Courts of first instance, Court of appeal)	6 Court of Cassation (penal division) 1 Judge for prelim. investigations
"Crimine organizzato" AND Web	1 European Court of Justice	0
Mafia AND Web	2 Court of Cassation (civil division) 1 Court of Cassation (penal division) 3 Courts ruling on merits (Court of first instance, Court of appeal)	0

Keywords	Files originally identified and authority	Files selected
"Criminalità organizzata" AND Internet	12 Court of Cassation (penal division) 1 Constitutional Court 2 European Court of Justice or ECtHR 3 Administrative Courts 9 Courts ruling on merits (Court of first instance, Court of appeal)	
"Criminalità organizzata" AND Web	1 Court of Cassation (penal division) 3 Courts ruling on merits (Court of first instance, Court of appeal)	0
"Network criminale" AND Internet	0	0
"Network criminale" AND Web	0	0
Camorra AND Internet	0	0
Camorra AND Web	1 Court of Cassation (penal division)	0
Ndrangheta AND Internet	2 Court of Cassation (penal division)	0
Ndrangheta AND Web	1 Courts ruling on merits (Judge for preliminary investigations)	0

Table 13 – *Keyword search from Westlaw Campus Research (US)*

Keywords	Files originally identified and authority	Files selected
"Organized crime" AND Internet	163 (federal cases)	1 (federal case)
Internet AND conspiracy AND trafficking	325 (federal cases)	30 (federal cases)
Transnational AND crime AND Internet	13 (federal cases) 1 (state case)	0

Keywords	Files originally identified and authority	Files selected
Transnational AND crime AND Web	11 (federal cases) 1 (state case)	0
"Criminal network" AND Internet	5 (federal cases)	0
Mafia AND Internet	76 (federal cases) 35 (state case)	0
Mafia AND Web	37 (federal cases)	0

Table 14 – *Keyword search from The Law Pages.com (UK)*

Keywords	Files originally identified	Files selected
"Organized crime" AND Internet	0	0
Internet AND conspiracy AND trafficking	1350	about 100[121]
Transnational AND crime AND Internet	31	0
Transnational AND crime AND Web	31	0
"Criminal network" AND Internet	0	0
Mafia AND Internet	0	0
Mafia AND Web	0	0

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[121] From the information reported in *The Law Pages.com* it was not possible to clearly determine whether the Internet had a meaningful role in the trafficking chain, since the database reports

Dejure is an online legal research service that provides the best collection of decisions taken by Italian courts. *Westlaw Campus Research* is one of the leading online legal services providing access to American jurisprudence. *The Law Pages.com* is a legal resource that offers a database of sentences from across the UK allowing users to search for a range of sentencing information.

Trying not to miss potentially relevant documents, the keyword search was over-inclusive and followed by a careful reading of the judicial decisions selected. In respect to the same attempt of over-inclusiveness, no temporal limits were set (the upper temporal limit is March, 2013), and all types of courts were considered. However, it worths noting that most cases were extremely recent.

This keyword search does not have the presumption of being exhaustive (many more keywords may have been utilized). The keyword search has been adjusted according to major differences in the legal systems considered.

In most of the files excluded from the selection the word "Internet" was present only incidentally (e.g., with reference to previous judicial decisions) or the file was not about a transit crime (indeed, most files dealing with criminal activities via the Internet focused on pedo-pornography and money-laundering).

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only a very synthetic summary of the sentence. However, a little bit less than 100 cases seemed consistent with the object of this research. Additional information was then searched through media sources, and some of the courts were contacted to have access to judicial transcripts. For two cases it was possible to have access to judicial transcripts.

Appendix C

Interviews: semi-structured questionnaire

N.B. This questionnaire is intended to be only an outline to show the main themes that have been covered during the interviews.

Preliminary questions

1) Introduction

2) Brief explanation of the research's aim

3) Ask for the possibility to use a voice recorder

General considerations on the relationship between the use of the Internet and the specific transit crime the interviewee has an expertise on (as acknowledged expert or in the course of his/her duties as police officer or prosecutor)

4) How would you describe the impact of the use of the Internet on the transit crime under consideration?

5) According to your personal experience, what are the main problems/possibilities faced by criminal networks due to the use of the Internet?

6) Could you provide me some examples of cases where the Internet played a meaningful role? Which role was that?

More specific questions on the transit crime under consideration in order to identify the criminal opportunities offered by the Internet and how they have changed the organization of the criminal activity/of the criminal network

7) In what phases could this criminal activity be divided into?

8) In which of these phases does the Internet play a role? For what purpose?

9) What strategies the criminal network has pursued to operate in the Internet environment? Which ones have succeeded and which ones have failed? On what bases do you know (cases)?

More specific questions for each phase identified

10) What types of technical problems have been overcomed through the use of the Internet for a successful criminal outcome?

11) Has Internet usage lowered the barriers to entry into this criminal market?

12) Which countries are involved in this phase of the criminal activity? Has the use of the Internet changed this aspect?

13) According to your personal experience, what type of criminal actors (individuals, loose gangs, organized groups, etc.) use the Internet in this phase of the activity?

14) Is the ethnicity of the criminal network maintained in this phase of the criminal activity?

Questions to identify possible new risks and problems for the criminal network caused by the Internet and to understand how these are affecting the organization of the specific transit crime under investigation, for each phase identified

15) What type of problems did the Interned caused to the criminal network? Have these been solved? How?

16) How do criminal networks operating via the Internet handle problems concerning access, anonymity, detection, surveillance, trust, and relations with suppliers/customers/victims?

Questions on the importance of the Internet as a facilitator for the transit crime under investigation as regards other aspects

17) Some criminal groups are effective in changing from one profitable illegal activity to another, depending on changes in risks and opportunities. Do you think the Internet has affected this capacity?

18) Which actors in the criminal network are using more the Internet? For what scope? How are organizational positions affected by the use of the Internet?

19) Which were/are the countries of origin, transit, and destination of the trafficking flow? Did the criminal group have an identifiable geographical base? Do criminals exploit a "digital divide" between countries involved in the criminal activity?

20) (When the discussion concerned criminal networks with a low degree of organization) Would you define this loose criminal group operating via the Internet as "organized crime"? Why?

Questions on the role the Internet as as a tool to counter the transit crime under investigation

21) Is the Internet a problem/a resource in countering transnational organize crime? Why? To what extent?

22) What strategies are you pursuing to deal with transit crimes via the Internet? Is there a specialized unit?

23) What phases of the criminal activity are easier to control/to counter more effectively? How? What phases are more difficult to control/to counter? Why?

24) There has been any investigation/prosecution/conviction? If yes, for what crimes? If not, may you provide any apparent reasons for the failure to successfully investigate/prosecute/convict?

Questions to stimulate again the description of cases (law enforcement operations) that the interviewee knows as privileged observer, and closing of the interview

25) (Again on) Specific cases emerged in the course of the interview

26) Is there anything else you would like to tell me?

Appendix D

Interviews: additional information

Table 15 – *Interviewees*

Interviewee details	Date	Country	Duration	Recorded (Y/N)	Face to face/ by telephone
Senior Officer, New Scotland Yard	20 Mar '12	UK	~ 1h	N	Face to face
Senior Officer, MET trafficking division	4 Apr '12	UK	~ 30'	N	Telephone
Director of the Postal and Communications Police	25 Jul '12	Italy	~ 30'	N	Face to face
Senior Officer at the Postal and Communications Police	25 Jul, 1 Aug '12	Italy	~ 1h 30'	N	Face to face
Expert in animal trafficking	28 Jul '12	Italy	1h 20'	Y	Face to face
Expert in trafficking in wildlife	7 Aug '12	Italy	~ 30'	Y (partially)	Face to face
Senior officer at the Italian Forest Corps (NIRDA Unit[122])	14 Aug '12	Italy	25'	Y	Face to face

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[122] NIRDA is the specialized investigative group for animal cruelty crimes.

Interviewees (continued)

Interviewee details	Date	Country	Duration	Recorded (Y/N)	Face to face/ by telephone
Director of the CITES service at the Italian Forest Corps[123]	27 Aug '12	Italy	55'	Y	Face to face
Senior officer at the CITES service (web monitoring unit)	27 Aug, 17 Sept '12	Italy	~ 2h	Y (partially)	Face to face (two-person interview)
Senior officer at the CITES service (web monitoring unit)	27 Aug, 17 Sept '12	Italy	~ 2h	Y (partially)	Face to face (two-person interview)
Special agent in charge at DEA	16 Oct '12	US (NY)	43'	Y	Face to face
US Attorney, criminal division	24 Oct '12	US (Newark)	44'	Y	Face to face (two-person interview)
Assistant US Attorney (cybercrime unit)	24 Oct '12	US (Newark)	44'	Y	Face to face (two-person interview)
Special agent in charge at FBI (drug trafficking division)	25 Oct '12	US (Newark)	37'	Y	Face to face
Senior officer at the Central Directorate for Anti-drug Services (Police)	4 Dec '12	Italy	~ 2h (+1h)[124]	Y (partially)	Face to face
Police officer at the Central Directorate for Anti-drug Services (eUnit)	4 Dec '12	Italy	54'	Y	Face to face (two-person interview)
Police officer at the Central Directorate for Anti-drug Services (eUnit)	4 Dec'12	Italy	54'	Y	Face to face (two-person interview)

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[123] CITES is the Convention on the International Trade in Endangered Species of Fauna and Flora.

[124] An additional hour was off-record.

Interviewee details	Date	Country	Duration	Recorded (Y/N)	Face to face/ by telephone
Expert on trafficking in looted antiquities and art trafficking/ UNESCO expert	14 Dec '12	Italy (Greek expert)	53'	Y	Face to face
Expert on trafficking in doping products/ WADA consultant[125]	17 Dec '12	Italy	2h 43'	Y	Face to face
Anti-mafia Prosecutor at the DNA[126]	18 Dec '12	Italy	49'	Y	Face to face
Former Prosecutor, currently expert at the Ministry for the Cultural Heritage	18 Dec '12	Italy	1h 2'	Y	Face to face
Anti-mafia Prosecutor at the DNA	9 Jan '13	Italy	51'	Y	Face to face
Expert on trafficking in counterfeit medicines at AIFA[127]	9 Jan '13	Italy	1h 22'	Y	Face to face
Senior researcher at KLPD[128]	22 Jan '13	The Ned	~ 30'	Y (partially)	Face to face
Anti-mafia Prosecutor at the DNA/Current Italian national member at Eurojust	25 Jan '13	The Ned (Italian prosecutor)	39'	Y	Face to face

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[125] WADA, World Anti-Doping Agency.

[126] DNA, National Anti-Mafia Directorate, Italy.

[127] AIFA, Italian Medicines Agency.

[128] KLPD, National Police Services Agency, The Netherlands.

Interviewees (continued)

Interviewee details	Date	Country	Duration	Recorded (Y/N)	Face to face/ by telephone
Senior officer at Europol (Human trafficking unit)	1 Feb '13	The Ned	1h 06' (+1h)	Y	Face to face
Senior officer at Europol (Drug trafficking unit)	1 Feb '13	The Ned	41'	Y	Face to face
Senior officer at Dutch police-Cybercrime program	12 Feb '13	The Ned	54'	Y	Face to face
Senior researcher at KLPD	14 Feb '13	The Ned	1h 9'	Y	Face to face
Detective at National Crime Squad (human trafficking unit)	18 Feb '13	The Ned	44'	Y	Face to face
Senior researcher (on human trafficking) at WODC[129]	18 Feb '13	The Ned	~ 30'	N	Telephone
TOTAL: 31 (8 experts; 23 law enforcement officials)					

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[129] WODC, Research and Documentation Center, Ministry of Security and Justice, The Netherlands.

References

Abadinsky H. (1981/2010). *Organized crime*. Belmont (CA): Wadsorth.

Abelson R.P. (1976). "Script processing in attitude formation and decision making". In Carroll J.S. and Payne J. eds. *Cognition and social behavior*. Hillsdale: Erlbaurn Lawrence (NJ): Lawrence Elbraun Associates.

Adamski A. (1999). "Crimes related to the computer network. Threats and opportunities: A criminological perspective". In Joutsen M. ed. *Five issues in European criminal justice: Corruption, women in the criminal justice system, criminal policy indicators, community crime crevention, and computer crime.* Proceedings of the VI European Colloquium on Crime and Criminal Policy, Publication Series N. 34, Helsinki.

Adler P.A. and Adler P. (2002). "The reluctant respondent". In Gubrium J.F. and Holstein J.A. eds. *Handbook of interview research. Context and method*. Thousand Oaks (CA): Sage Publications.

Adler P.A. and Adler P. (2006/2009). "Self-injures". In Adler P.A. and Adler P. eds. *Constructions of deviance. Social power, context, and interaction*. Belmont (CA): Thomson.

Aebi M.F. and Linde A. (2010). "Is there a crime drop in Western Europe?" *European Journal on Criminal Policy and Research* 16: 251-277.

AIFA (2012). *Lotta alla contraffazione farmaceutica* [Countering pharmaceutical counterfeiting]. Available at http://www.agenziafarmaco.gov.it/it/content/lotta-alla-contraffazione-farmaceutica (last accessed on 15 November 2013).

Alach Z.J. (2011). "An incipient taxonomy of organised crime". *Trends in Organized Crime* 14 (1): 56–72.

Albanese J.S. (2000). "The causes of organized crime. Do criminals organize around opportunities for crime or do criminal opportunities create new offenders?" *Journal of Contemporary Criminal Justice* 16(4): 409-423.

Albanese J.S. (2007). *Commercial sexual exploitation of children: What do we know and what do we do about It?* NIJ Special Report from Issues in International Crime. Washington, DC: National Institute of Justice.

Albanese J.S. (2008) "Risk assessment in organized crime. Developing a market and product-based model to determine threat levels". *Journal of Contemporary Criminal Justice* 24 (3): 263-273.

Anderson B. and Andrijasevic R. (2008). "Sex, slaves and citizens: The politics of anti-trafficking". *Soundings* 40: 135-145.

Arruñada B. (2004). "Quality safeguards and regulation of online pharmacies". *Health Economics* 13: 329-344.

Arsovska J. (2011). "Conceptualizing and studying organized crime in a global context. Possible? Indispensable? Superfluous?" In Smith C.J., Zhang S.X. and Barberet R. eds. *Routledge handbook of international criminology*. Abingdon: Routledge.

Attaran A., Bate R., and Kendall M. (2011). "Why and how to make an international crime of medicine counterfeiting". *Journal of International Criminal Justice* 9(2): 325-354.

Baggili I. and Rogers M. (2009). "Self-reported cyber crime: An analysis on the affects of anonymity and pre-employment integrity". *International Journal of Cyber-Criminology* 3(2): 550-565.

Barratt M.J. (2012). "Silk Road. eBay for drugs". *Addiction* 107 (3): 683.

Bate R. (2012a). *The deadly world of fake medicine*. Available at http://edition.cnn.com/2012/07/17/health/living-well/falsified-medicine-bate (last accessed on 15 November 2013).

Bate R. (2012b). *The deadly world of fake drugs*. Available at http://www.aei.org/files/ 2012/02/27/-appendix-a-master2_170026856632.pdf (last accessed on 15 November 2013).

Beardsley E.R. (2007). "Poachers with PCs: The United States' potential obligations and ability to enforce endangered wildlife trading prohibitions against foreign traders who advertise on eBay". *UCLA Journal of Environmental Law & Policy* 25(1): 1.

Bequai A. (2001). "Organized crime goes cyber". *Computers & Security* 20(6): 475-478.

Bernard H.R. and Ryan G.W. (2010). *Analyzing qualitative data. Systematic approaches*. Thousand Oaks (CA): Sage Publications.

Best J. and Luckenbill D.F. (1982/1994). *Organizing deviance*. Englewood Cliffs (NJ): Prentice-Hall.

Bloor M. (1997). "Techniques of validation in qualitative research: A critical commentary. In Miller G. and Dingwall R. eds. *Context and method in qualitative research*. London: Sage Publications .

Bouchard M. and Wilkins C. (2009). "Illegal markets and the economics of organized crime". *Global Crime* 10(1-2): 1-5.

Bouloukos A., Farrell G., and Laycock G. (2003). *Transnational organised crime in Europe and North America: Towards a framework of prevention*. HEUNI Report no. 40. Helsinki: Heuni.

Brantingham P. and Brantingham P. (1993). "Environment, routine, and situation: Toward a pattern theory of crime". In Clarke R.V. and Felson M. eds. *Routine activity and rational choice, advances in criminological theory,* vol. 5. New Brunswick (NJ): Transaction Publishers.

Brayley H., Cockbain E., and Laycock G. (2011). "The value of crime scripting: Deconstructing internal child trafficking". *Policing* 5(2): 132-143.

Brenner S.W. (2001). "Is there such a thing as 'virtual crime'"? *California Criminal Law Review* 4(1).

Brenner S.W. (2002). "Organized cybercrime? How cyberspace may affect the structure of criminal relationships". *North Carolina Journal of Law and Technology* 4(1): 1-50.

Brenner S.W. (2003). *Toward a criminal law for cyberspace: Distributed security*. Berkeley Electronic Press, Legal Series, Paper no. 15. Available at http://law.bepress.com/expresso/eps/15/ (last accessed on 15 November 2013).

Britz M. (2008). "A new paradigm in organized crime in the United States: Criminal syndicates, cybergangs, and the World Wide Web". *Sociology Compass* 2(6): 1750-1756.

Broadhurst R. (2009). "Developments in the global law enforcement of cybercrime". In Wall D.S. ed. *Crime and deviance in cyberspace*. Dartmouth (NH): Ashgate.

Bruckert C. and Parent C. (2009). *Trafficking in human beings and organized crime: a literature review*. Ottawa: Royal Canadian Mounted Police. Available at http://www.rcmp-grc.gc.ca/pubs/ccaps-spcca/traffick-eng.htm (last accessed on 15 November 2013).

Bullock K., Clarke R.V., and Tilley N. (2010). "Introduction". In Bullock K., Clarke R.V., and Tilley N. eds. *Situational prevention of organised crimes*. Devon (UK): Willan Publishing.

Burden K., Palmer C., Lyde B., and Gilbert W. (2003). "Cyber crime. A new breed of criminal?" *Computer Law & Security Report* 19(3): 222-227.

Cabezas M.D. and Piqueras A.J. (2011). "Medicrime: The international convention of the Council of Europe as a tool to combat counterfeit medicines". *Pharmaceutical Policy and Law*, 13(1): 41-55.

Cahoy D.R. (2008). "Addressing the north-south divide in pharmaceutical counterfeiting". *West Forrest Intellectual Property Law Journal*, 8(3): 407-432.

Calderoni F. (2012). "The structure of drug trafficking mafias: The 'Ndrangheta and cocaine". *Crime, Law and Social Change* 58(3): 321-349.

Canter D. (2003). *Mapping murder. The secrets of geographical profiling*. London: Virgin Books.

184

CEOP. (2010). *Strategic threat assessment of child trafficking in the UK*. London: Child Exploitation and Online Protection Center.

Chambers-Jones C. (2012). *Virtual economies and financial crime. Money laundering in cyberspace*. Cheltenham (UK): Edward Elgar Publishing.

Champion D. (1993/2005). *Research method for criminal justice and criminology*. Englewood Cliffs (NJ): Prentice Hall.

Chawki M. and Wahab M. (2005). *Technology is a double-edged sword: Illegal human trafficking in the information age*. Computer Crime Research Center. Available at http://www.droit-tic.com/pdf/chawki-wahab3.pdf (last accessed on 15 November 2013).

Chiu Y.N., Leclerc B., and Townsley M. (2011). "Crime script analysis of drug manufacturing in clandestine laboratories". *British Journal of Criminology* 51(2): 355-374.

Choi K.S. (2011). "Cyber-routine activities. Empirical examination of online lifestyle, digital guardians, and computer-crime victimization". In Jaishankar K. ed. *Cyber Criminology. Exploring Internet Crimes and Behavior*. Boca Raton (FL): CRC Press Taylor & Francis Group.

Choo K.K.R. (2008). "Organised crime groups in cyberspace: A typology". *Trends in Organized Crime* 11(3): 270-295.

Choo K.K.R. (2009). "Money laundering and terrorism financing risks of prepaid cards Instruments?" *Asian Journal of Criminology* 4(1): 11-30.

Choo K.K.R. and Smith R.G. (2008). "Criminal exploitation of online systems by organised crime groups". *Asian Journal of Criminology* 3(1): 37–59.

Christin N. (2012). "Travelling the Silk Road: A measurement analysis of a large anonymous online marketplace". Working paper. Available at http://www.andrew.cmu.edu/user/nicolasc/publications/TR-CMU-CyLab-12-018.pdf (last accessed on 15 November 2013).

Cimmino U. (1995). *La nuova certificazione e le altre cautele antimafia* [The new anti-mafia administrative certification and other anti-mafia measures]. Palermo: Quattrosoli.

Clarke R.V. ed. (1992/1997). *Situational crime prevention. Successful case studies*. New York: Harrow and Heston.

Clarke R.V. (2004). "Technology, criminology and crime science". *European Journal on Criminal Policy and Research* 10(1): 55-63.

Clarke R.V. (2005). "Seven misconceptions of situational crime prevention". In Tilley N. ed. *Handbook of crime prevention and community safety*. Portland (OR): Willian Publishing.

Clarke R.V. (2008). "Situational crime prevention". In Wortley R. and Mazerolle L. eds. *Environmental criminology and crime analysis.* Devon (UK): Willan Publishing.

Clarke R.V. (2009). "Situational crime prevention: Theoretical background and current practice". In Krohn M.D., Lizotte A.J., and Penly Hell G. eds. *Handbook on crime and deviance*. New York: Springer.

Clarke R.V. and Newman G.R. (2006). *Outsmarting the Terrorists*. Westport (CT): Praeger Security International.

Clough J. (2010). *Principles of Cybercrime*. Cambridge (UK): Cambridge University Press.

Cohen A.K. (1977). "The concept of criminal organisation". *The British Journal of Criminology* 17(2): 97-111.

Cohen L. and Felson M. (1979). "Social change and crime rate trends: A routine activity approach". *American Sociological Review* 44(4): 588-608.

Cohen J.C., Mrazek M., and Hawkins L. (2007). "Tackling corruption in the pharmaceutical systems worldwide with courage and conviction". *Clinical Pharmacology and Therapeutics* 81(3): 445-449.

Cook D., Roberts M., and Lowther J. (2002). *The international wildlife trade and organised crime. A review of the evidence and the role of the UK*. Regional Research Institute, University of Wolverhampton. Report for the WWF, UK.

Cooper S. (2006). "Inside the cartels that built empires and destroyed species". *Seedmagazine*. Available at http://seedmagazine.com/content/article/the_caviar_kings/ (last accessed on 15 November 2013).

Corbin J. and Strauss A. (1990/2008). *Basics of qualitative research. Techniques and procedures for developing grounded theory*. Thousand Oaks (CA): Sage Publications.

Cornish D.B. (1994). "The procedural analysis of offending and its relevance for situational prevention". In Clarke R.V. ed. *Crime prevention studies* no. 3. New York: Criminal Justice Press.

Cornish D.B. and Clarke R.V. eds. (1986). *The reasoning criminal. Rational choice perspectives on criminal offending*. New York: Springer-Verlag.

Cornish D.B. and Clarke R.V. (2002). "Analyzing organized crime". In Piquero A.R. and Tibbetts S.G. eds. *Rational choice and criminal behavior. Recent research and future challenges*. New York: Routledge.

Cornish D.B. and Clarke R.V. (2003). "Opportunities, precipitators and criminal decisions: A reply to Wortley's critique of situational crime prevention". In Smith M.J. and Cornish D.B. eds. *Crime prevention studies* no. 16. New York: Criminal Justice Press.

Council of Europe. (2003). *Group of specialists on the impact of the use of new information technologies on the trafficking in human beings for the purpose of sexual exploitation. Final Report*. Strasbourg: Council of Europe Publishing.

Council of Europe. (2005). *Organised crime in Europe: The threat of cybercrime. Situation Report*. Strasbourg: Council of Europe Publishing.

Cox III R.W., Johnson T.A., and Richards G.E. (2009). "Routine activity theory and the Internet crime". In Schmallager F. and Pittaro M. eds. *Crimes of the Internet.* Upper Saddle River (NJ): Prentice Hall.

D'Ovidio R., Mitman T., Jamillah El-Burki I., and Shumar W. (2009). "Adult-child sex advocacy websites as social learning environments: a content analysis". *International Journal of Cyber Criminology* 3(1): 421-440.

Dalberg. (2012). *Fighting illicit wildlife trafficking: A consultation with governments*. Gland (Switzerland): WWF.

Danquah P. and Longe O.B. (2011). "An empirical test of the space transition theory of cyber criminality: Investigating cybercrime causation factors in Ghana. *African Journal of Computing & ICTs* 4(2): 37-48.

Dean G., Fahsing I., and Gottschalk P. (2010). *Organized crime. Policing illegal business entrepreneurialism*. Oxford: Oxford University Press.

Department of State. (2013). *The 2013 international narcotics control strategy report* (INCSR). Available at http://www.state.gov/j/inl/rls/nrcrpt/2013/ (last accessed on 15 November 2013).

Derks A. (2000). *Combating trafficking in South Asia. A review of policy and programme responses*. Geneve: International Organizaton for Migration.

Desroches F.J. (2005). *The crime that pays. Drug trafficking and organized crime in Canada*. Toronto: Canadian Scholars' Press Inc.

Dexter L.A. (1970/2006). *Elite and specialized interviewing*. ECPR Classics. Colchester (UK): ECPR Press.

Di Giorgio D. ed. (2011). *Counterfeit Medicines. Facts and Practical Advice.* Milan: EDQM-AIFA.

Di Nicola A. (2007). "Researching into human trafficking: Issues and problems". In Lee M. ed. *Human trafficking*. Portland (OR): Willan Publishing.

Di Nicola A. (2013). "Trafficking in persons and smuggling of migrants". In Reichel P. and Albanese J. eds. *Handbook of transnational crime and justice*. Thousand Oaks (CA): Sage Publications.

Di Nicola A., Orfano I., Cauduro A., and Conci N. (2005). *Study on national legislation on prostitution and sex trafficking in women and children*. Milan: Transcrime.

Dipartimento Politiche Antidroghe. (2013). *Relazione annuale al Parlamento 2013. Uso di sostanze stupefacenti e tossicodipendenze in Italia* [Annual report for the Parliament, 2013. Recreational drugs usage and drug addiction in Italy]. Rome: Dipartimento Politiche Antidroga.

Dondorp A.M., Newton P.N., Mayxay M., Van Damme W., Smithuis S., Yeung S.,... White N.J. (2004). "Fake antimalarials in Southeast Asia are a major impediment to malaria control: Multinational cross-sectional survey on the prevalence of fake antimalarials". *Tropical Medicine and International Health*, 9(12): 1241-1246.

Downing S. (2011). "Gaming subculture, social control and virtual criminality: An ethnographic account". *Internet Journal of Criminology*, September: 1-26.

Edwards A. and Gill P. (2002). "Crime as enterprise? The case of 'transnational organised crime'". *Crime, Law and Social Change* 37(3): 203-223.

Edwards A. and Levi M. (2008). "Researching the organization of serious crimes". *Criminology and Criminal Justice* 8(4): 363-388.

Ekblom P. and Sidebottom A. (2008). "What do you mean, 'Is it secure?' Redesigning language to be fit for the task of assessing the security of domestic and personal electronic goods". *European Journal on Criminal Policy and Research* 14(1): 61-87.

Ekblom P. (2010). *Crime prevention, security and community safety. Using the 5Is Framework*. London: Palgrave Macmillan.

EMCDDA. (2013). *EU drug markets report: a strategic analysis*. European Monitoring Center for Drugs and Drug Addiction. Luxembourg: Publications Office of the European Union.

Engler M. and Parry-Jones R. (2007) *Opportunity or threat. The role of the European Union in global wildlife trade*. Brussels: TRAFFIC Europe.

Europol. (2009). *EU organized crime threat assessment (OCTA)*. The Hague: European Police Office.

Europol. (2011a). *Internet facilitated organized crime (IOCTA)* (abridged). The Hague: European Police Office.

Europol. (2011b). *EU organized crime threat assessment (OCTA)*. The Hague: European Police Office.

FDA. (2012). *Counterfeit medicines*. Available at http://www.fda.gov/ Drugs/Resources ForYou/Consumers/BuyingUsingMedicineSafely/CounterfeitMedicine/default.htm (last accessed on 15 November 2013).

Felson M. (2006). *The ecosystem for organized crime*. HEUNI Paper no. 26. Helsinki: Heuni.

Felson M. (2009). "The natural history of extended co-offending". *Trends in Organized Crime* 12(2): 159-165.

Felson M. and Clarke R.V. (1998). "Opportunity makes the thief: Practical theory for crime prevention". *Police research series*, Paper no. 98. London: Home Office.

Felson M. and Clarke R.V. (2012). "Comments on the special issue". *Trends in organized crime* 15(2-3): 215-22.

Finckenauer J.O. (2005). "Problems of definition: What is organized crime?!" *Trends in Organized Crime* 8(3): 63-83.

Finckenauer J.O. and Chin K.L. (2010). "Sex trafficking: A target for situational crime prevention?" In Bullock K., Clarke R.V., and Tilley N. eds. *Situational prevention of organised crimes*. Devon (UK): Willan Publishing.

Finley L.L. (2009). "Online pharmaceutical sales and the challenge for law enforcement. In Schmallager F. and Pittaro M. eds. *Crimes of the Internet*. Upper Saddle River: Prentice Hall.

Finlay B.D. (2011). *Counterfeit drugs and national security*. New York: Stimson.

Forman R.F., Woody G.E., Mclellan T., and Lynch K.G. (2006). "The availability of web sites offering to sell opioid medication without prescriptions". *American Journal of Psychiatry* 163(7): 1233-1238.

Freilich J.D. and Newman G.R. ed. (2009). "Reducing terrorism through situational crime prevention". *Crime prevention Studies* no. 25. Monsey (NY): Criminal Justice Press.

Friman H.R. (2009). "Drug markets and the selective use of violence". *Crime, Law and Social Change* 52(3): 285-295.

Gentilomo A., Travaini G.V., Bana A., Arcari V., and Molteni R. (2006). "La vendita di farmaci in internet: Considerazioni medico-legali e criminologiche" [Selling pharmaceuticals online: medico-legal and criminological considerations]. *Rivista italiana di medicina legale* 6: 1099-1114.

George A.L. and Bennett A. (2005). *Case studies and theory development in the social sciences*. Cambridge (MA): MIT Press.

Giacopassi D. and Pitts W.J. (2009). "Internet gambling: The birth of a victimless crime?" In Schmallager F. and Pittaro M. eds. *Crimes of the Internet.* Upper Saddle River (NJ): Prentice Hall.

Gibson L. (2004). "Drug regulators study global treaty to tackle counterfeit drugs". *British Medical Journal* 328(7438): 486.

Ghodse H. (2010). "Watching Internet pharmacies". *The British Journal of Psychiatry* 196(3): 169-70.

Glenny M. (2008). *Mc Mafia. A journey through the global criminal underworld*. New York: Knopf.

Glenny M. (2011). *Dark Market. Cyberthieves, cybercops and you*. London: The Bodley Head.

Godson R. and Olson W.J. (1995). "International organized crime". *Society*, January/February: 18-29.

Gomm R., Hammersley M., and Foster P. (2000). "Case study and generalization". In Gomm R., Hammersley M., and Foster P. eds. *Case Study Method*. London: Sage Publications.

Gorta A. (1998). "Minimizing corruption: Applying lessons from the crime prevention literature". *Crime, Law and Social Change* 30(1): 65-87.

Grabosky P.N. (2001). "Crime in cyberspace". In Williams P. and Vlassis D. eds. *Combating transnational crime: concepts, activities and responses.* London: Routledge.

Grabosky P.N. (2005). "The global dimension of cybercrime". In Galeotti M. ed. *Global crime today. The changing face of organized crime*. Abington (MA): Routledge.

Grabosky P.N. (2007). "The Internet, technology, and organized crime". *Asian Journal of. Criminology* 2(2): 145-161.

Grabosky P.N. and Smith R.G. (with the assistance of Wright P.). (1998). *Crime in the digital age. Controlling telecommunications and cyberspace illegalities*. New Brunswick (NJ): Transaction Publishers.

Grabosky P.N. and Smith R.G. (2001). "Telecommunication fraud in the digital age: The convergence of technologies". In Wall D.S. ed. *Crime and the Internet.* London & New York: Routledge.

Graycar A. and Felson M. (2010). "Situational prevention of organised timber theft and related corruption". In Bullock K., Clarke R.V., and Tilley N. eds. *Situational Prevention of Organised Crimes*. Devon (UK): Willan Publishing.

Hagan F.E. (2011). *Research method in criminal justice and criminology*. Upper Saddle River (NJ): Prentice Hall.

Hancher L. and Sauter W. (2010). "One step beyond? From Sodemare to Docmorris: The Eu's freedom of establishment case law concerning healthcare". *Common Market Law Review* 47(1): 117-146.

Hancock G. and Laycock G. (2010). "Organised crime and crime scripts: prospects for disruption". In Bullock K., Clarke R.V., and Tilley N. eds. *Situational prevention of organised Crimes*. Devon (UK): Willan Publishing.

Harding C. (2007). *Criminal enterprise. Individuals, organisations and criminal responsibility*. Devon (UK): Willan Publishing.

Harris J., Stevens P., and Morris J. (2009). *Keeping it real. Combating the spread of fake drugs in poor countries*. Washington, DC: International Policy Network.

Heal K. and Laycock G. eds. (1986). *Situational crime prevention. From theory to practice*. Home Office Research and Planning Unit. London: Her Majesty's Stationery Office.

Hepburn S. and Simon R.J. (2013). *Human trafficking around the world*. New York: Columbia University Press.

Hobbs D. (1995). *Bad business. Professional crime in modern Britain*. Oxford: Oxford University Press.

Hobbs D. (1998). "Going down the glocal: The local context of organised crime". *The Howard Journal* 37(4): 407-422.

Holt T.J. (2009). "Lone hacks or group cracks: Examining the social organization of computer hackers". In Schmallager F. and Pittaro M. eds. *Crimes of the Internet*. Upper Saddle River (NJ): Prentice Hall.

Holt T.J. and Bossler A.M. (2008). "Examining the applicability of lifestyle-routine activities theory for cybercrime victimization". *Deviant Behavior* 30(1): 1-25.

Hughes D. (2002). "The use of new communication and information technologies for the sexual exploitation of women and children". *Hastings Women's Law Journal* 13(1): 127-146.

IFAW. (2008). *Criminal nature: The global security implications of the illegal wildlife trade*. Yarmouth Port (MA): International Fund for Animal Welfare.

IFAW. (2012). *Killing with keystrokes 2.0: IFAW's investigation into the European online ivory trade*. Yarmouth Port (MA): International Fund for Animal Welfare.

IMPACT. (2008). *Counterfeit drugs kill!* Geneva: World Health Organization.

INCB. (2001). *Globalization and new technologies: Challenges to drug law enforcement in the twenty-first century*. Annual report of the International Narcotics Control Board. New York: United Nations.

INCB. (2011). *Report of the International Narcotics Control Board for 2010.* Annual report of the International Narcotics Control Board. New York: United Nations.

Internet World Stats. (2013). *World Internet users and population stats.* Available at http://www.internetworldstats.com/stats.htm (last accessed on 15 November 2013).

Interpol. (2012). *Pharmaceutical crime.* Fact sheet. Lyon: Interpol. Available at http://www.interpol.int/Crime-areas/Pharmaceutical-crime/Pharmaceutical-crime (last accessed on 15 November 2013).

Interpol. (2013). *Project Web. An investigation into the ivory trade over the Internet within the European Union.* Lyon: Interpol.

IRACM. (2012a) *When fake medicines fund international terrorism and destabilize the global economy.* Paris: Institute of Research Against Counterfeit Medicines. Available at http://www.iracm.com/en/thematic-observatory/organized-crime (last accessed on 15 November 2013).

IRACM. (2012b). *The Medicrime Convention: the first legal document criminalizing The production and distribution of counterfeit medical products.* Paris: Institute of Research Against Counterfeit Medicines. Available at http://www.iracm.com/en/thematic-observatory/the-medicrime-convention (last accessed on 15 November 2013).

Izzo J.B. (2010). "PC pets for a price: Combating online and traditional wildlife crime through international harmonization and authoritative policies". *William & Mary Environmental Law and Policy* Review, Spring.

Jackson G. (2009). "Faking it: The dangers of counterfeit medicine on the internet". *The International Journal of Clinical Practice* 63(2): 181.

Jaishankar K. (2007). "Establishing a theory of cyber crimes". *International Journal of Cyber Criminology* 1(2): 7-9.

Jaishankar K. (2009). "Space Transition Theory of cyber crimes". In Schmallager F. and Pittaro M. eds. *Crimes of the Internet.* Upper Saddle River (NJ): Prentice Hall.

Jakobsson N. and Kotsadam A. (2013). "The law and economics of international sex slavery: Prostitution laws and trafficking for sexual exploitation". *European Journal of Law and Economics* 35(1): 87-107.

Jena A.B., Goldman D.P., Foster S.E., and Califano Jr. J.A. (2011). "Prescription medication abuse and illegitimate Internet-based pharmacies". *Annals of Internal Medicine* 155(12): 848-850.

Jenner M.S. (2013). "Drug trafficking as a transnational crime". In Reichel P. and Albanese J. eds. *Handbook of transnational crime and justice*. Thousand Oaks (CA): Sage Publications.

Johnson J.M. (2002). "In-depth interviewing". In Gubrium J.F. and Holstein J.A. eds. *Handbook of interview research. Context and method*. Thousand Oaks (CA): Sage Publications.

Jorgensen D.L. (1989). *Participant observation. A methodology for human studies*. Newbury Park (CA): Sage Publications.

Kara S. (2010). *Sex trafficking: Inside the business of modern slavery.* New York: Columbia University Press.

Kenney M. (2007). "The architecture of drug trafficking: network form of organisation in the Colombian cocaine trade". *Global Crime* 8(3): 233-259.

Khoo Boon Hui S.R.I.T. (2011). *Opening speech of the Interpol*. 21st Interpol Americas Regional Conference. Aruba, July. Available at http://www.interpol.int/News-and-media/Speeches (last accessed on 15 November 2013).

Kirby S. and Penna S. (2010). "Policing mobile criminality: Towards a situational crime prevention approach to organised crime". In Bullock K., Clarke R.V., and Tilley N. eds. *Situational prevention of organised crimes*. Devon (UK): Willan Publishing.

Kleemans E.R. (2007). "Organized crime, transit crime, and racketeering". *Crime & Justice* 35(1): 163-215.

Kleemans E.R. (2013). "Explanatory theories of on organized crime". In Paoli L. ed. *Handbook of organized crime*. New York: Oxford University Press (online first).

Kleemans E.R. and van De Bunk H.G. (1999). "Social embeddedness of organized crime". *Transnational Organized Crime* 5(1): 19-36.

Kleemans E.R. and de Poot C.J. (2008). "Criminal careers in organized crime and social opportunity structure". *European Journal of Criminology* 5(1): 69-98.

Kleemans E.R., Soudjin M.R.J., and Weenink A.W. (2010). "Situational crime prevention and cross-border crime". In Bullock K., Clarke R.V., and Tilley N. eds. *Situational prevention of organised crimes*. Devon (UK): Willan Publishing.

Koops B.J. and Brenner S.W. eds. (2006). *Cybercrime and jurisdiction. A global survey*. The Hague: Asser Press.

Kostelnik J. and Skarbek D. (2013). "The governance institutions of a drug trafficking organization". *Public Choice* 156 (1): 95-103.

Kshetri N. (2010). *The global cybercrime industry. Economic, institutional and strategic perspectives*. Heidelberg: Springer.

Kutnick B., Belser P., and Danailova-Trainor G. (2007). *Methodologies for global and national estimations for human trafficking victims: Current and future approaches,* Special action programme to combat forced labour. Working Paper. Geneva: International Labour Organization. Available at http://www.ilo.org/sapfl/Informationresources/ ILOPublications/WCMS_081989/lang--en/index.htm (last accessed on 15 November 2013).

Kvale S. and Brinkmann S. (1996/2009). *Interviews. Learning the craft of qualitative research interviewing*. Thousand Oaks (CA): Sage Publications.

Lacoste J. and Tremblay P. (2003). "Crime and innovation: A script analysis of patterns in check forgery". In Smith M.J. and Cornish D.B. eds. *Theory for practice in situational crime prevention studies,* vol. 16. Monsey (NY): Criminal Justice Press.

La Repubblica. (2009). "Riina su Facebook, indaga il pm 'Forse operazione di mafia'" [Riina on Facebook, the investigating prosecutor: 'Maybe a mafia operation']. January 7. Available at http://www.repubblica.it/2008/12/sezioni/tecnologia/ facebook-capodanno/indaga-pm/indaga-pm.html (last accessed on 15 November 2013).

La Repubblica. (2010a). "Su Facebook si tifa Camorra. Oltre ventunomila gli iscritti" [Camorra is cheered on Facebook. More than 21,000 signed up]. November 1. Available at http://napoli.repubblica.it/cronaca/2010/11/01/news/su_facebook_ si_tifa_camorra_oltre_diciannovemila_iscritti-8570666/ (last accessed on 15 November 2013).

La Repubblica. (2010b). "I nuovi boss italoamericani usano Skype 'In questo modo non saremo intercettati'" [The new Italo-american bosses use Skype. 'In this way they cannot wiretap us']. March 11. Available at http://palermo.repubblica.it/cronaca/2010/ 03/11/news/i_nuovi_boss_italoamericani_usano_skype_in_questo_modo_non_saremo_ intercettati_-2592006/ (last accessed on 15 November 2013).

La Repubblica. (2011). "Scommesse. Spunta la Camorra" [Gambling. The involvement of Camorra]. December 20. Available at http://www.repubblica.it/sport/calcio/2011/ 12/20/news/calcioscommesse_camorra-26917822/ (last accessed on 15 November 2013).

La Repubblica. (2012). "La musica di Gomorra" [The music of Gomorrah]. February 12. Available at http://ricerca.repubblica.it/repubblica/archivio/repubblica/2012/02/ 12/la-musica-di-gomorra.html?ref=search (last accessed on 15 November 2013).

Latonero M. (2012). *The rise of mobile and the diffusion of technology-facilitated trafficking.* Research series on technology and human trafficking. Los Angeles: University of Southern California Annenberg. Available at https://technologyandtrafficking.usc. edu/files/2012/11/HumanTrafficking2012_Nov12.pdf (last accessed on 15 November 2013).

Lavorgna A. (forthcoming a). "Wildlife trafficking in the Internet age: The changing structure of criminal opportunities". *Crime Science*.

Lavorgna A. (forthcoming b). "Script analysis of complex criminal activities: Investigating the use of the Internet as a facilitator for offline transit crimes". *Sage research method cases*. Sage Publications.

Lavorgna A. and Sergi A. (2013). "Types of organized crime in Italy. The multifaceted spectrum of Italian criminal associations and their different attitudes in the financial crisis an in the use of Internet technologies". *International Journal of Law, Crime and Justice* (online first).

Lavorgna A. and Sergi A. (forthcoming). "Different manifestations of organised crime and corruption in Italy: A socio-legal analysis". In van Duyne et al. eds. *Shady business and governance in Europe. Cross-border sleaze and crisis*. Selected papers from the 14th Cross-border Crime Colloquium.

Lavorgna A., Lombardo R., and Sergi A. (2013). "Organized crime in three regions: Comparing the Veneto, Liverpool, and Chicago". *Trends in Organized Crime* 16(3): 265-285.

Laycock G. (2010). "Foreword". In Bullock K., Clarke R.V., and Tilley N. eds. *Situational prevention of organised crimes*. Devon (UK): Willan Publishing.

Leclerc B., Wortley R., and Smallbone S. (2011). "Getting into the script of adult child sex offenders and mapping out situational prevention measures". *Journal of Research in Crime and Delinquency* 48(2): 209-237.

Legambiente. (2010). *Ecomafia. Le storie e i numeri della criminalità ambientale* [Ecomafia. Stories and numbers of environmental criminality]. Milan: Edizioni Ambiente.

Lemieux A.M. and Clarke C.V. (2009). "The international ban on ivory sales and its effects on elephant poaching in Africa". *British Journal of Criminology* 49(4): 451-471.

Levi M. and Maguire M. (2004). "Reducing and preventing organised crime: an evidence-based critique". *Crime, Law and Social Change* 41(5): 397-469.

Lewis G.H. (1980). "Social grouping in organized crime: the case of La Nuestra Familia". *Deviant Behavior* 1(2): 129-143.

Liddick D. (1999). *An empirical, theoretical, and historical overview of organized crime*. Lewiston (ME): The Edwin Mellen Press.

Lincoln Y.S. and Guba E.G. (2000). "The only generalization is: there is no generalization". In Gomm R., Hammersley M., and Foster P. eds. *Case study method*. London: Sage Publications.

Longo F. (2010). "Discoursing organized crime. Towards a two-level analysis". In Allum F., Longo F., Irrera D., and Kostakos P.A. eds. *Defining and defying organized crime. Discourse, perceptions and reality.* Oxon (UK) & New York: Routledge.

Lusthaus J. (2012). "Trust in the world of cybercrime. *Global Crime* 13(2): 71-94.

Lusthaus J. (2013). "How organised is organised cybercrime?" *Global Crime* 14(1): 52-60.

Mack J.A. (1972). "The able criminal". *The British Journal of Criminology* 12(1): 44-55.

Maltzahn K. (2005). *Digital dangers: Information & communication technologies and trafficking in women*. APC Issue Paper. Availableathttp://www.apc.org/en/pubs/issue/gender/all/digital-dangers-information-communication-technolo (last accessed on 15 November 2013).

Mann D. and Sutton M. (1998). "Netcrime: More change in the organization of thieving". *British Journal of Criminology* 38(2): 210-229.

Marcum C.D. (2011). "Adolescent online victimization and constructs of routine activities theory". In Jaishankar K. ed. *Cyber criminology. Exploring Internet crimes and behavior*. Boca Raton (FL): CRC Press Taylor & Francis Group.

Mativat F. and Tremblay P. (1997). "Counterfeiting credit cards: Displacement effects, suitable offenders and crime wave patterns". *The British Journal of Criminology* 37(2): 165-183.

Matusitz J. (2008). "Similarities between terrorist networks in antiquity and present-day cyberterrorist networks". *Trends in Organized Crime* 11(2): 183-199.

Mayhew P., Clarke R.V., Sturman A., and Hough M. (1976). *Crime as opportunity*. Home Office Research Study no. 34. London: Her Majesty's Stationery Office.

McAfee. (2007). *Organized crime and the Internet 2007*. McAfee North America Criminology Report. Available at http://www.mcafee.com/apps/view-all/publications.aspx?region=uk&tf=mcafee_labs (last accessed on 15 November 2013).

McAfee. (2011). *Prospective analysis on trends in cybercrime from 2011 to 2020*. McAfee Labs. Available at http://www.mcafee.com/apps/view-all/publications.aspx?region=uk&tf=mcafee_labs (last accessed on 15 November 2013).

McCarthy D.M.P. (2011). *An economic history of organized crime. A national and transnational approach*. Oxon (UK): Routledge.

McCusker R. (2006). "Transnational organized cyber crime: Distinguishing threat from reality". *Crime, Law and Social Change* 46(4): 257-273.

McGuire M. (2007). *Hypercrime. The new geometry of harm*. Oxon (UK) & New York: Routledge.

McIntosh M. (1975). *The organization of crime*. London: The Macmillan Press.

McMullan J.L. and Perrier C.D. (2003). "Technologies of crime: the cyber-attacks on electronic gambling machines". *Canadian Journal of Criminology and Criminal Justice* 45(2): 159-186.

McQuade S. (2009). "Technology-enabled crime, policing and security". In Wall D.S. ed. *Crime and deviance in cyberspace*. Aldershot (UK): Ashgate.

Meyer K. and Parssines T. (1998). *Webs of smoke: smugglers, spies, and the history of the international drug trade*. Lanham (MD): Rowman & Littlefield Publishers.

Moreto W.D. and Clarke R.V. (2013). "Script analysis of the transnational illegal market in endangered species. Dream and reality". In Leclerc B. and Wortley R. eds. *Cognition and crime: offender decision-making and script analysis.* London: Routledge.

Morris S. (2004). *The future of netcrime now: Threats and challenges*. Part 1. Home Office online report. London: Home Office Research, Development and Statistics Directorate.

Morselli C. and Roy J. (2008). "Brokerage qualifications in ringing operations". *Criminology* 46(1): 71-98

Morselli C. and Décary-Hétu D. (2013). "Crime facilitation purposes of social networking sites: a review and analysis of the 'cyberbanging' phenomenon". *Small Wars & Insurgencies* 24(1): 152-170.

Naìm M. (2006). *Illicit. How smuggles, traffickers, and copycats are hijacking the global economy*. New York: Anchor Books.

Natarajan M. (2012). "A rational choice analysis of organized crime and trafficked goods". In Tilley N. and Farrell G. eds. *The reasoning criminologist. Essays in honour of Ronald V.Clarke*. Oxon (UK): Routledge.

Naylor N.T. (1997). "Mafias, myths, and markets: On the theory and practice of enterprise crime". *Transnational Organized Crime* 3(3): 1-45.

Naylor R.T. (2002/2004). *Wages of crime. Black markets, illegal finance, and the underworld economy.* Ithaca (NY): Cornell University Press.

NCA. (2013). *Organized crime command*. Available at http://www.nationalcrimeagency. gov.uk/about-us/what-we-do/organised-crime-command (last accessed on 15 November 2013).

Nelen H. (2010). "Situational organised crime prevention in Amsterdam. The administrative approach". In Bullock K., Clarke R.V., and Tilley N. eds. *Situational prevention of organised crimes*. Devon (UK): Willan Publishing.

Nelen H. and Huisman W. (2008). "Breaking the power of organized crime? The administrative approach in Amsterdam". In Siegel D. and Nelen H. eds. *Organized crime: culture, markets and policies* vol. 7: 207-218.

Newman G.R. (2009). "Cybercrime". In Krohn M.D., Lizotte A.J., and Penly Hell G. eds. *Handbook on crime and deviance*. New York: Springer.

Newman G.R. and Clarke R.V. (2003). *Superhighway robbery. Preventing e-commerce crime*. Devon (UK): Willan Publishing.

Newman G.R. and Freilich J.D. (2012). "Extending the reach of situational crime prevention". In Tilley N. and Farrell G. eds. *The reasoning criminologist. Essays in honour of Ronald V.Clarke*. Oxon (UK): Routledge.

Nisbett R.E. and Ross L. (1980). *Human inference: strategies and shortcomings of social judgment*. Englewood Cliffs (NJ): Prentice-Hall.

Noaks L. and Wincup E. (2004). *Criminological research. Understanding qualitative methods*. London: Sage Publications.

Nurse A. (2011). "Policing wildlife: Perspectives on criminality in wildlife crime". Panel paper. *The British Criminology Conference* vol. 11: 38-53.

O'Brien E. (2010). "Dark numbers: Challenges in measuring human trafficking". *Dialogue eJournal* 7(2).

Olivier A. J. (2000). "Internet pharmacies: Regulation of growing industry". *Journal of Law, Medicine and Ethics* 28(1): 98-101.

Orizio G. and Gelatti U. (2010). "Public eHealth and new scenarios in terms of risks and opportunites: a specific focus on cyberpharmacies". *Social Semiotics* 20(1): 29-41.

Oude B.C., Siegel D., van Reenen P., Beijer A., and Roos L. (2011). "Human trafficking revisited: Legal, enforcement and ethnographic narratives on sex trafficking to Western Europe". *Trends in Organized Crime* 14(1): 30-46.

Ouimet M. (2009). "Internet and crime trends". In Schmallager F. and Pittaro M. eds. *Crimes of the Internet.* Upper Saddle River (NJ): Prentice Hall.

Paoli L. (2002). "The paradoxes of organized crime". *Crime, Law and Social Change* 37(1): 51–97.

Paoli L., Greenfield V.A., and Zoutendijk A. (2013). "The harm of cocaine trafficking. Applying a new framework for assessment". *Journal of Drug Issues* 43(4): 407-436.

Patchin J.W. and Hinduja S. (2006). "Bullies move beyond the schoolyard: a preliminary look at cyberbullying". *Youth Violence and Juvenile Justice* 4(2): 148-169.

Pease K. (2001). "Crime futures and foresights. Challenging criminal behavior in the information age". In Wall D.S. ed. *Crime and the Internet.* London & New York: Routledge.

Petrosino A. and Brensilber D. (2003). "The motives, methods and decision making of convenience store robbers: Interviews with 28 incarcerated offenders in Massachusetts". In Smith M.J. and Cornish D.B. eds. *Theory for practice in situational crime prevention. Crime prevention studies* no. 16. Monsey (NJ): Criminal Justice Press.

Phillips M.D. (2012). "Assessing the impact of drug use and drug selling on violent offending in a panel of delinquent youth". *Journal of Drug Issues* 42(3): 298-316.

Pincock S. (2003). "WHO tries to tackle problem of counterfeit medicines in Asia". *British Medical Journal* 327(7424): 1126.

Pires S. and Clarke R.V. (2012). "Are parrots CRAVED? An analysis of parrot poaching in Mexico". *Journal of Research in Crime and Delinquency* 49(1): 129-146.

Potter G.W. (1994). *Criminal organizations. Vice, racketeering, and politics in an American city*. Prospect Heights (NY): Waveland Press.

Prichard J.P., Watters A., and Spiranovic C. (2011). "Internet subcultures and pathways to the use of child pornography". *Computer, Law & Security Review* 27(6): 585-600.

Ragin C.C. (1987). *The comparative method: moving beyond qualitative and quantitative strategies*. Berkeley (CA): University of California Press.

Raine C., Webb D.J., and Maxwell S.R. (2008). "The availability of prescription-only analgesics purchased from the internet in the UK". *British Journal of Clinical Pharmacology* 62(2): 250-254.

Reinharts S. and Chase S.E. (2002). "Interviewing women". In Gubrium J.F. and Holstein J.A. eds. *Handbook of interview research. Context and method*. Thousand Oaks (CA): Sage Publications.

Reuter P. (1983). *Disorganized crime: the economics of the visible hand*. Cambridge (MA): MIT Press.

Reyns B.W., Henson B., and Fisher B.S. (2011). "Being pursued online: applying cyberlifestyle-routine activities theory to cyberstalking victimization". *Criminal Justice and Behavior* 38(11): 1149-1169.

Rider B.A.K. (2001). "Cyber-organised crime. The impact of information technology on organised crime". *Journal of Financial Crime* 8(4): 332-346.

Rosander A.C. (1977). *Case studies in sample design*. New York: Marcel Dekker.

Rowe E., Akman T., Smith R.G., Tomison A.M. (2012). "Organised crime and public sector corruption: A crime script analysis of tactical displacement risks". *Trends and issues in crime and criminal justice* 444. Canberra: Australian Government & Australian Institute of Criminology.

Salt J. (2000). "Trafficking and human smuggling: a European perspective". In Appleyard R. and Salt J. eds. *Perspectives on trafficking of migrants*. Geneva: International Organization for Migration.

Sand P.H. (1997). "Whither CITES? The evolution of a treaty regime in the borderland of trade and environment". *European Journal of International Law* 8(1): 29-58.

Sarrica F. (2005). "The smuggling of migrants. A flourishing activity of transnational organized crime". *Crossroads* 5(3): 7-23.

Satchwell G. (2004). *A sick business. Counterfeit medicines and organised crime*. London: The Stockholm Network.

Savona E.U. (2010). "Infiltration of the public construction industry by Italian organised crime". In Bullock K., Clarke R.V., and Tilley N. eds. *Situational prevention of organised crimes*. Devon (UK): Willan Publishing.

Savona E.U. and Mignone M. (2004). "The fox and the hunters: How IC technologies change the crime race". *European Journal on Criminal Policy and Research* 10(1): 3-26.

Savona E.U., Belli R., Curtol F., Decarli S., and Di Nicola A. (2009). *Trafficking in persons and smuggling of migrants into Italy. Analysing the phenomenon and suggesting remedies*. Milan: Transcrime.

Schelling T.C. (1984). *Choices and consequence. Perspectives of an errant economist*. Cambridge (MA): Harvard University Press.

Schofield J.W. (2000). "Increasing the generalizability of qualitative research". In Gomm R., Hammersley M., and Foster P. eds. *Case study method*. London: Sage Publications.

Schwalbe M.L. and Wolkomir M. (2002). "Interviewing men". In Gubrium J.F. and Holstein J.A. eds. *Handbook of interview research. Context and method*. Thousand Oaks (CA): Sage Publications.

Seale C. (1999). *The quality of qualitative research*. London: Sage Publications.

Senato della Repubblica. (2010). *Indagine conoscitiva sul fenomeno della contraffazione e dell'e-commerce farmaceutico* [Preliminary investigation on pharmaceutical counterfeiting and pharmaceutical e-commerce]. Resoconto stenografico no. 16. Rome: Tipografia del Senato.

Shelley L. (2003). "Organized crime, terrorism and cybercrime". In Bryden A. and Fluri P. eds. *Security security sector reform: institutions, society and good governance*. Baden-Baden: Nomos Verlagsgesellschaft.

Shelley L. (2010). *Human trafficking. A global perspective*. New York: Cambridge University Press.

Shirk D.A. (2010). "Drug violence in Mexico: Data and analysis from 2001–2009 (excerpts)". *Trends in Organized Crime* 13(2-3): 167-174.

Shoham S.G. (1997). "Situational aspects of violence". In Newman G.R., Clarke R.V., and Shoham S.G. eds. *Rational choice and situational crime prevention*. Dartmouth (NH): Ashgate.

Sidebottom A. (2010). *Enriching corruption: Some suggestions on how situational crime prevention can inform the analysis and prevention of corruption*. 2010 ACRN young researchers competition. Available at http://corruptionresearchnetwork.org/ resources/frontpage-articles/the-acrn-research-paper-competition#winning-submission (last accessed on 15 November 2013).

Siegel D. and van de Bunt H. eds. (2012). *Traditional organized crime in the modern world. Responses to socioeconomic change*. New York: Springer.

Smith Jr. D.C. (1975). *The mafia mystique*. London: Hutchinson.

Smith Jr. D.C. (1980). "Paragons, pariahs, and pirates: A spectrum-based theory of enterprise". *Crime & Delinquency* 26(3): 358-387.

Smith M.J. (2003). "Exploring target attractiveness in vandalism: An experimental approach". In Smith M.J. and Cornish D.B. eds. T*heory for practice in situational crime prevention. Crime prevention studies* no. 16. Monsey (NY): Criminal Justice Press.

Smith M.J. (2005). "Robbery of taxi drivers". *Problem-specific guides series* no. 34. Available at www.cops.usdoj.gov (last accessed on 15 November 2013).

Smith M.J. and Clarke R.V. (2012). "Situational crime prevention: Classifying techniques using 'good enough' theory". In Welsh B.C. and Farrington D.P. eds. *The Oxford Handbook on Crime Prevention.* Oxford: Oxford University Press.

Smith R.G. (2009). "Understanding entrepreneurial behaviour in organized criminals". *Journal of Enterprising Communities: People and Places in the Global Economy* 3(3): 256-268.

Smith R.G. (2010). "The development of cybercrime". In Lincoln R. and Robinson S. eds. *Crime over time: Temporal perspectives on crime and punishment in Australia.* Newcastle upon Tyne (UK): Cambridge Scholars Publishing.

Smith R.G., Grabosky P.N., and Urbas G. (2004). Cyber criminals on trial*. Cambridge (UK): Cambridge University Press.*

Smith R.G. and Jorna P. (2011). "Corrupt misuse of information and communications technologies". In Graycar A. and Smith R.G. eds. *Handbook of global research and practice in corruption*. Cheltenham (UK): Edward Elgar Publishing.

Snyder R. and Duran-Martinez A. (2009). "Does illegality breed violence? Drug trafficking and state-sponsored protection rackets". *Crime, Law and Social Change* 52(3): 253-273.

SOCA. (2012). *How we work*. Available at http://www.soca.gov.uk/about-soca/how-we-work (last accessed on 15 November 2013).

Sollund R. (2011). "Expressions of speciesism: The effects of keeping companion animals on animal abuse, animal trafficking and species decline". *Crime, Law and Social Change* 55(5): 437-451.

Soudijn M.R.J. and Zegers B.C.H. (2012). "Cybercrime and virtual offender convergence settings". *Trends in Organized Crime* 15(2-3): 111-129.

South N. and Wyatt T. (2001). "Comparing illicit trades in wildlife and drugs: An exploratory study. *Deviant Behavior* 32(6): 538-561.

Stoecker S. (2000). "The rise in human trafficking and the role of organized crime". *Demokratizatsiya* 8: 129-131.

Suler J. (2004). "The online disinhibition effect". *CyberPsychology & Behavior* 7(3): 321-326.

Sutherland E.H. (1937). *The professional thief*. Chicago: University of Chicago Press.

Sykiotou A.P. (2007). *Trafficking in human beings: Internet recruitment*. Strasbourg: Directorate General of Human Rights and Legal Affairs, Council of Europe.

Taylor I. and Jamesion R. (1999). "Sex trafficking and the mainstream of market culture. Challenges to organised crime analysis". *Crime, Law & Social Change* 32(3): 257–278.

Taylor M. and Currie P.M. eds. (2012). *Terrorism and affordance*. London: Continuum.

Tewksbury R. (2009). "Qualitative versus quantitative methods: Understanding why qualitative methods are superior for criminology and criminal justice". In *Journal of Theoretical and Philosophical Criminology* 1(1): 38-58.

Tilley N. (1997). "Realism, situational rationality and crime orevention". In Newman G.R., Clarke R.V., and Shoham S.G. eds. *Rational choice and situational crime prevention*. Dartmouth (NH): Ashgate.

Tilley N. (2005). "Crime prevention and system design". In Tilley N. ed. *Handbook of crime prevention and community safety*. Portland (OR): Willian Publishing.

Tompson L. and Chainey S. (2011). "Profiling illegal waste activity: Using crime sripts as a data collection and analytical strategy". *European Journal of criminal Policy and Research* 17(3): 179-201.

Travers M. (2001). *Qualitative research through case studies*. London: Sage Publications.

Treadwell J. (2012). "From the car boot to booting it up? eBay, online counterfeit crime and the transformation of the criminal marketplace". *Criminology and Criminal Justice* 12(2): 175-191.

Tremblay P., Talon B., and Hurley D. (2001). "Body switching and related adaptations in the resale of stolen vehicles". *British Journal of Criminology* 41(4): 561-579.

Todres J. (2010). "Taking prevention seriously: Developing a comprehensive response to child trafficking and sexual exploitation". *Vanderbilt Journal of Transnational Law* 43(1).

Troiano C. (2010). *Rapporto zoomafia 2010. Malaffare, crimini e animali* [Zoomafia report 2010. Thievishness, crimes, and animals]. Rome: LAV.

Troiano C. (2011). *Rapporto zoomafia 2011. Crimini deriali a danno degli animali* [Zoomafia report 2011. Crimes against animals]. Rome: LAV.

Troiano C. (2013). *Rapporto Zoomafia 2013. Sistemi criminali e animali* [Zoomafia report 2013. Criminal systems and animals]. Rome: LAV.

Troshynski E.I. and Blank J.K. (2008). "Sex trafficking: An exploratory study interviewing traffickers". *Trends in Organized Crime* 11(1): 30-41.

Turner K. and Kelly L. (2009). "Trade secrets. Intersections between diasporas and crime groups in the constitution of the human trafficking chain". *British Journal of Criminology* 49(2): 184-201.

UN.GIFT. (2008). *Workshop technology and human trafficking*. Background Paper. Vienna: The United Nations Global Initiative to Fight Human Trafficking.

UNODC. (2010). *The globalization of crime. A transnational organized crime threat assessment (TOCTA)*. Vienna: United Nations Office on Drugs and Crime.

UNODC. (2012). *Global report on trafficking in persons.* Vienna: United Nations Office on Drugs and Crime.

UNODC. (2013a). *World drug report*. New York: United Nations.

UNODC. (2013b). *Drug trafficking*. Available at http://www.unodc.org/unodc/en/drug-trafficking/index.html (last accessed on 15 November 2013).

van Amsterdam J., Nutt D., and van den Brink W. (2013). "Generic legislation of new psychoactive drugs". *Journal of Psychopharmacology* 27(3): 317-324

van de Bunt H.G. (2003). *Prevention of organised crime. A situational approach*. Den Haag: Wetenschappelijk Onderzoek en Documentatiecentrum (WODC).

van Dijk J. and Spapens T. (2013). "Transnational organized crime networks". In Reichel P. and Albanese J. eds. *Handbook of transnational crime and justice*. Thousand Oaks (CA): Sage Publications.

van Dune M. (2013). "'It's never a sure deal': Drug trafficking, violence, and coping strategies in a Peruvian cocaine enclave (2003-2007)". *Journal of Drug Issues* 10.

van Duyne P.C. (2006). "The organisation of business crime". In van Duyne P.C., Maljevic A., van Dijck M., von Lampe K., and Newell J.L. eds. *The organisation of crime for profit. Conduct, law and measurement*. Nijmegen: Wolf Legal Publishers.

van Duyne P.C. and van Dijck M. (2007). "Assessing organised crime: The sad state of an impossible art". In Bovenkerk F. and Levi M. eds. *The organized crime community. Essays in honor of Alan A. Block*. New York: Springer.

van Gestel B. (2010). "Mortage fraud and facilitating circumstances". In Bullock K., Clarke R.V., and Tilley N. eds. *Situational prevention of organised crimes*. Devon (UK): Willan Publishing.

van Koppen V. and de Poot C.J. (2013). "The truck driver who bought a café. Offenders and their involvement mechanism for organized crime". *European Journal of Criminology* 10(1): 74-88.

Vanderstoep S.W. and Johnson D.D. (2009). *Research methods for everyday life*. San Francisco (CA): Jossey Bass.

von Lampe K. (2010). "Preventing organized crime: The case of contraband cigarettes". In Bullock K., Clarke R.V., and Tilley N. eds. *Situational prevention of organised crimes*. Devon (UK): Willan Publishing.

von Lampe K. (2011). "The application of the framework of situational crime prevention to 'organized crime'". *Criminology and Criminal Justice* 11(2): 145-163.

von Lampe K. (2012). "Transnational organized crime and challenges for future research". *Crime, Law and Social Change* 58(2): 179-194.

Walker C., Wall D., and Akdeniz Y. (2000). "The Internet, law and society". In Akdeniz Y., Walker C., and Wall D. eds. *The Internet, Law and Society.* Harlow (UK): Pearson.

Wall D.S. (2004). "Digital realism and the governance of spam as cybercrime". *European Journal on Criminal Policy and Research* 10(4): 309-335.

Wall D.S. (2005/2010). "The Internet as a conduit for criminals". In Pattavina A. ed. *Information technology and the criminal justice system.* Thousand Oaks (CA): Sage Publications.

Wall D.S. (2007). *Cybercrime: the transformation of crime in the information age*. Cambridge (UK): Polity.

Walsh C. (2011). "Drugs, the Internet and change". *Journal of Psychoactive Drugs* 43(1): 55-63.

Wang S.Y.K. and Huang W. (2011). "The evolutional view of the types and identity thefts and online frauds in the era of Internet". *Internet Journal of Criminology*, pp. 1-21.

Warchol G.L. (2004). "The international illegal wildlife trafficking". *Criminal Justice Studies: a Journal of Crime, Law and Society* 17(1): 57-73.

Warchol G.L., Zupan L.L., and Clack V. (2003). "Transnational criminality: an analysis of the illegal wildlife market in Southern Africa". *International Criminal Justice Review* 13(1): 1-27.

Warren C.A.B. (2002). "Qualitative interviewing". In Gubrium J.F. and Holstein J.A. eds. *Handbook of interview research. Context and method*. Thousand Oaks (CA): Sage Publications.

Wertheimer A.I. and Santella T.M. (2005). "Counterfeit drugs: Defining the problem and finding solutions". *Expert Opinion on Drug Safety* 4(4): 619-622.

WHO. (2006). *General information on counterfeit medicines*. Fact sheet. Geneva: World Health Organization. Available at http://www.who.int/medicines/services/counterfeit/overview/en/ (last accessed on 15 November 2013).

WHO. (2012). *Substandard/spurious/falsely-labelled/falsified/counterfeit medical products: report of the Working Group of Member States*. Geneva: World Health Organization. Available at http://apps.who.int/gb/ebwha/pdf_files/WHA65/A65_23-en.pdf (last accessed on 15 November 2013).

Williams Ph. (2001). "Organized crime and cybercrime: Synergies, trends, and responses". *Arresting Transnational Crime. An Electronic Journal of the U.S. Department of State* 6(2).

Willison R. (2006). "Understanding the offender/environment dynamic for computer crimes". *Information Technology & People* 19(2): 170-186.

Wilson J.Q. and Kelling G.L. (1982). "Broken windows: The police and neighborhood safety". *Atlantic Monthly*, March.

Wing L.T. and Kwok S.I. (2012). "Traditional organized crime in the modern world: How triad societies respond to socioeconomic change". In Siegel D. and van De Bunt H.

eds. *Traditional organized crime in the modern world. Responses to socioeconomic change*. New York: Springer.

Wortley R. (1997) "Reconsidering the role of opportunity in situational crime prevention". In Newman G.R., Clarke R.V., and Shoham S.G. eds. *Rational choice and situational crime prevention*. Dartmouth (NH): Ashgate.

Wortley R. and Smallbone S. eds. (2006). "Situational crime prevention for child sexual abuse". *Crime prevention studies* no. 19. Monsey (NY): Criminal Justice Press.

Wright A. (2006). *Organised crime*. Devon (UK): Willan Publishing.

Wyatt T. (2009). "Exploring the organization of Russia Far East's illegal wildlife trade: Two case studies of the illegal fur and illegal falcon trades". *Global Crime* 10(1-2): 144-154.

Yar M. (2006). *Cybercrime and society*. London: Sage Publications.

Yin R.K. (2003). *Case study research. Design and methods*. Thousand Oaks (CA): Sage Publications.

Yin R.K. (2011). *Qualitative research from start to finish*. New York: The Guildford Press.

Yip M., Shadbolt N., and Webber C. (2012). "Structural analysis of online criminal social networks". In IEEE International Conference on Intelligence and Security Informatics (ISI), Washington, 11-14 June. Available at eprints.soton.ac.uk.3370761 (last accessed on 15 November 2013).

Zanella M. (2010). "An exploratory research on the situational factors affecting corruption in public procurement procedures". Available at SSRN: http://ssrn.com/ abstract= 2025405 (last accessed on 15 November 2013).

Zhang S.X. (2009). "Beyond the 'Natasha' story. A review and critique of current research on sex trafficking". *Global Crime* 10(3): 178-195.

Zimmerman M.E. (2003). "The black market for wildlife: Combating transnational organized crime in the illegal wildlife trade". *Vanderbilt Journal of Transnational Law* 36: 1657-1689.