



University
of Glasgow

Weirich, Christine Acosta (2019) *Situational crime prevention of antiquities trafficking: a crime script analysis*. PhD thesis.

<https://theses.gla.ac.uk/73012/>

Copyright and moral rights for this work are retained by the author

A copy can be downloaded for personal non-commercial research or study, without prior permission or charge

This work cannot be reproduced or quoted extensively from without first obtaining permission in writing from the author

The content must not be changed in any way or sold commercially in any format or medium without the formal permission of the author

When referring to this work, full bibliographic details including the author, title, awarding institution and date of the thesis must be given

Enlighten: Theses

<https://theses.gla.ac.uk/>
research-enlighten@glasgow.ac.uk

Situational Crime Prevention of Antiquities Trafficking: A Crime Script Analysis

Christine Acosta Weirich
B.F.A., B.A., M.S.

Submitted in Fulfilment of the Requirements of the Degree of
Doctorate of Philosophy

School of Social and Political Sciences, College of Social Sciences
University of Glasgow
November 2018

Abstract

In the aftermath of the Arab Spring in 2011, many nations in the Cradle of Civilization faced civil unrest, much of which continues today in the form of the ongoing Syrian Civil War, the conflict in Yemen, and instability in nations such as Iraq and Turkey. As a consequence, antiquities and cultural heritage in the region are currently facing a notoriously exacerbated level of risk. Despite the looting and destruction of cultural objects and monuments presenting a longstanding global and historical trend, the field of antiquities trafficking research lacks a unique and effective perspective within its current body of work and research. Likewise, criminology as a scientific field of study has largely overlooked the complex issue of looting and trafficking of cultural objects.

This thesis focuses on the issue of Antiquities Trafficking Networks from a crime prevention perspective and attempts to demonstrate the effectiveness and apt nature of Crime Script Analysis and Situational Crime Prevention. This is accomplished first with a study and analysis of the wider phenomenon of Antiquities Trafficking Networks (from looting to market), followed by a specific case study of antiquities trafficked from within Syria since the beginning of the Civil War.

Following these analyses, thirteen prominent Situational Crime Prevention strategies for Antiquities Trafficking Networks, and ten strategies for future conflict zones are generated by this research project. Through these strategies, Crime Script Analysis – in conjunction with Situational Crime Prevention – has proven to be a highly effective and efficient method and framework for studying this particularly difficult field.

Ultimately, this thesis proposes a new crime prevention-focused methodology, to help tackle the issue of antiquities trafficking, as well as presenting one of the first prevention-specific analyses in this area. In doing so, it offers of a basic model that maps the structure and necessary elements for antiquities trafficking to occur and allows for future research projects to adapt or customize this script model to situation-specific cases of antiquities looting, transit and marketing.

Table of Contents

Abstract	2
List of Tables	8
Acknowledgements	10
Author's Declaration	11
1. Introduction	12
1.1 Motivation for the Study	13
1.2 Aim and Scope of the Study	14
1.3 Structure of the Study	15
1.4 Significance	17
2. Antiquities Trafficking Networks	18
2.1 Introduction	18
2.2 Defining the Problem	19
2.3 What are Antiquities Trafficking Networks?	20
2.4 Previous Research	21
2.4.1 Establishing the Field	21
2.4.2 Policy	23
2.4.3 Antiquities in Conflict	28
2.4.4 Criminological Research and Contributions	28
2.4.5 Crime Prevention/Potential Preventative Systems	30
2.5 How Antiquities Trafficking Networks Operate	32
2.5.1 The Actors	33
2.5.2 Source, Transit, and Market Countries	38
2.5.3 Provenance	41
2.5.4 Grey Market	42
2.5.5 Illicit Market/Network	43
2.5.6 Demand Drives the Market	44
2.5.7 Relevance	44
2.6 Conclusion	45
3. Theoretical Framework	47
3.1 Introduction	47
3.2 Evolution of Situational Crime Prevention Theory	47

3.2.1 Framework	49
3.2.2 Original Crime Prevention Techniques	52
3.2.3 Wortley's Critique.....	54
3.2.4 25 Techniques of Situational Crime Prevention.....	55
3.3 Application of Situational Crime Prevention.....	57
3.3.1 How it Functions.....	57
3.3.2 Successful Examples	58
3.3.3 Situational Crime Prevention within Illicit Networks.....	60
3.4 Crime Script Analysis	61
3.4.1 Previous Research/Literature Review	62
3.5 Conclusion.....	68
4. Methodology and Research Design.....	69
4.1 Introduction	69
4.1.1 Purpose of Research	69
4.2 Methodology	70
4.2.1 Why Situational Crime Prevention?.....	71
4.2.2 Why Crime Script Analysis?	76
4.2.3 Why Antiquities Trafficking Networks?	78
4.2.4 Why Syria?.....	79
4.3 Research Design.....	81
4.3.1 Methods	81
4.3.2 Data Collection and Script Development.....	85
4.3.3 Data Analysis.....	87
4.4 Difficulties Faced in the Study of Antiquities Trafficking Networks	88
4.4.1 Lack of Documentation and Legal Issues	89
4.4.2 Grey Market.....	90
4.4.3 Lack of Criminal Association.....	91
4.4.4 Nature of the Global Antiquities Market.....	91
4.5 Limitations	92
4.5.1 Nature of Antiquities Market	92
4.5.2 Conflict Zones	93
4.5.3 Inherent Data Bias	94
4.5.4 Language.....	95
4.6 Intended Goal/Consequences.....	96
4.7 Conclusion.....	96

5. Using Crime Scripting in Antiquities Trafficking Networks	97
5.1 Introduction	97
5.1.1 Crime Script/Model of Antiquities Trafficking Networks	98
5.1.2 Antiquities Trafficking Network Crime Script Example	98
5.2 Looting Phase	102
5.2.1 Types of Looters	103
5.2.2 Access Site	105
5.2.3 Search and Find (Discovering) Objects	105
5.2.4 Source Object (Loot)	106
5.2.5 Distribution	107
5.3 Transit Phase	109
5.3.1 Obtains Object	110
5.3.2 Transit Decision	112
5.3.3 Smuggle/Transport	113
5.3.4 Deliver/Sell Object	114
5.4 Market Phase	114
5.4.1 Middleman	115
5.4.2 Broker	116
5.5 Conclusion: The Value of Crime Script Analysis for Crime Prevention	120
6. Facilitating Factors of Antiquities Trafficking Networks	121
6.1 Introduction	121
6.2 Facilitating Factors of the Looting Phase	121
6.2.1 Lack of Formal Infrastructure	122
6.2.2 Known Archaeological Sites	122
6.2.3 Access to Equipment	123
6.2.4 Nature of Antiquities	124
6.3 Facilitating Factors of the Transit Phase	125
6.3.1 Previously Established Smuggling/Trafficking Routes	125
6.3.2 Easily Disguised/Hidden	125
6.3.3 National Borders	126
6.3.4 Corruption	126
6.4 Facilitating Factors of the Market Phase	127
6.4.1 Provenance Unnecessary	127
6.4.2 Profit	129

6.4.3 Long-Term Investment	130
6.5 Entire Antiquities Trafficking Networks.....	131
6.5.1 Criminal Networks (Organised Crime)	131
6.5.2 Non-Criminal Association.....	133
6.5.3 Online Antiquities Market	135
6.6 Conclusion.....	136
7. Situational Analysis of Antiquities Trafficking Networks.....	138
7.1 Introduction	138
7.2 The Crime Triangle.....	139
7.2.1 The Triangle.....	139
7.2.2 Super Controllers	142
7.2.3 CRAVED.....	144
7.3 The Antiquities Trafficking Triangle	145
7.3.1 Antiquities Trafficking Elements, Controllers, and Super Controllers.....	146
7.4 Situational Crime Prevention Strategies for Antiquities Trafficking Networks.....	148
7.4.1 Increase Effort.....	149
7.4.2 Increase Risks.....	153
7.4.3 Reduce Rewards.....	158
7.4.4 Reduce Provocation.....	162
7.4.5 Remove Excuses	168
7.5 Criticism of Situational Crime Prevention.....	172
7.6 Discussion	173
7.7 Conclusion.....	175
8. Syria Case Study	178
8.1 Introduction	178
8.2 Historical and Conflict Background.....	179
8.3 The Syria Crime Script.....	181
8.3.1 Syria Looting Phase Script.....	182
8.3.2 Syria Transit Phase Script	187
8.3.3 Syria Market Phase Script.....	189
8.4 The Syrian Crime Script Facilitating Factors or Circumstances	191
8.4.1 Facilitating Factors of the Syrian Looting Phase.....	192
8.4.2 Facilitating Factors of the Syrian Transit Phase.....	196
8.4.3 Facilitating Factors of the Syrian Market Phase	198

8.5 Situational Crime Prevention Strategies for Future Conflict Zones.....	203
8.5.1 Situational Crime Prevention Strategies of the Looting Phase	204
8.5.2 Situational Crime Prevention Strategies of the Transit Phase.....	209
8.5.3 Situational Crime Prevention Strategies of the Market Phase	212
8.6 Discussion	216
9. Conclusion.....	220
9.1 Summary of Findings and Limitations	220
9.2 Practical Applications/Implications	221
9.3 Recommendations for Further Research	223
References	225
Appendix 1: Crime Script Analysis Case Studies	253
Appendix 2: Draft Version of Antiquities Trafficking Network Crime Script	257
Appendix 3: Draft Syria Crime Script.....	262
Appendix 4: Antiquities Trafficking Networks Dataset	266
Appendix 5: Syria Looting Dataset	283
Appendix 6: Syria Transit Dataset.....	289
Appendix 7: Syria Market Dataset	293
Appendix 8: Additional Syria Source Contributions	297
Appendix 9: Antiquities Trafficking Networks Crime Script	299
Appendix 10: Syria Crime Script.....	300
Appendix 11: Syria Search Dataset.....	301

List of Tables

<i>Fig. 2-1: 25 Techniques of SCP for Heritage Crime</i>	31
<i>Fig. 2-2: 'The International Art Market' in 1997</i>	39
<i>Fig. 3-1: 12 Techniques of SCP</i>	53
<i>Fig: 3-2: Successful Case Studies</i>	54
<i>Fig. 3-3: 25 Techniques of SCP</i>	56
<i>Fig. 3-4: Applications of SCP</i>	59
<i>Fig. 3-5: Summary of SCP Case Studies Relevant to Illegal Wildlife Trade</i>	61
<i>Fig. 5-1: Antiquities Trafficking Network Crime Script</i>	98
<i>Fig. 5-2: Looting Phase Crime Script Examples – Salisbury Hoard and Fano Bronze</i> ...	100
<i>Fig. 5-3: The Looting Phase Crime Script of Antiquities Trafficking Networks</i>	102
<i>Fig. 5-4: Middleman/Broker Network Diagram</i>	108
<i>Fig. 5-5: Transit Crime Script (ATNs)</i>	109
<i>Fig. 5-6: Market Crime Script (ATNs)</i>	115
<i>Fig. 7-1: Crime Triangle</i>	139
<i>Fig. 7-2: Super Controller Crime Triangle</i>	142
<i>Fig. 7-3: Typology of Super Controllers</i>	143
<i>Fig. 7-4: Crime in Context of Global Market Systems/Intersecting Super Controllers</i> ...	143
<i>Fig. 7-5: Antiquities Trafficking Crime Triangle</i>	145
<i>Fig. 7-6: 13 SCP Strategies for ATNs</i>	148
<i>Fig. 7-7: SCP Strategies to Restrict Access to Equipment</i>	151
<i>Fig. 7-8: SCP Strategies for Secure Borders</i>	152
<i>Fig. 7-9: SCP Strategies for Identifying Criminal Networks</i>	155
<i>Fig. 7-10: SCP Strategies to Monitor Archaeological Sites</i>	157
<i>Fig. 7-11: SCP Strategies to Assist in Detection of Objects</i>	158
<i>Fig. 7-12: Profit Difference Between Start and End of Market</i>	159
<i>Fig. 7-13: SCP Strategies for Reduce Profit</i>	160
<i>Fig. 7-14: SCP Strategies to Deny Long-Term Investment</i>	162
<i>Fig. 7-15: SCP Strategies to Create Infrastructure</i>	164
<i>Fig. 7-16: SCP Strategies to Reduce Corruption</i>	166
<i>Fig. 7-17: SCP Strategies to Require/Establish Provenance</i>	167
<i>Fig. 7-18: SCP Strategies to Criminalise Antiquities Trafficking Activity</i>	169

<i>Fig. 7-19: SCP Strategies to Address the Nature of Antiquities</i>	<i>171</i>
<i>Fig. 7-20: SCP Strategies for Internet.....</i>	<i>172</i>
<i>Fig. 7-21: Seven Misconceptions of SCP.....</i>	<i>173</i>
<i>Fig. 7-22: Table of the 13 SCP Strategies for ATNs and Type of Controllers</i>	<i>175</i>
<i>Fig. 8-1: Syria Looting Crime Script.....</i>	<i>182</i>
<i>Fig. 8-2: Types of Looting and Labourers Employed.....</i>	<i>184</i>
<i>Fig. 8-3: Example of Specific Looting Crime Script from Syria.....</i>	<i>186</i>
<i>Fig. 8-4: Syria Transit Crime Script.....</i>	<i>187</i>
<i>Fig. 8-5: Syria Market Script.....</i>	<i>190</i>
<i>Fig. 8-6: Site of Apamea in 2011.....</i>	<i>207</i>
<i>Fig. 8-7: SCP Strategies for Potential/Future Conflict Zones.....</i>	<i>218</i>
<i>Fig. 9-1: Table of SCP Strategies.....</i>	<i>222</i>

Acknowledgements

I would like to express my deepest gratitude to my supervisors, of which I have had three; a result of a rather unique situation. The initial guidance and perspective which I received from Neil Brodie has continually helped to shape this thesis and make it a more effective and relevant project. I was extremely lucky to be able to have Sarah Armstrong step into the role of second supervisor, and I can confidently say that this thesis would not been completed without her constant help and support. Finally, I would like to thank Simon Mackenzie for agreeing to be my supervisor in the first place, and helping me to mould a rather vague proposal into the finished document that is here presented. His critiques and notes have helped to shape my work into a stronger and more relevant thesis. I would also like to thank the Trafficking Culture project, and those associated with it, for all the help and guidance they have shared with me throughout this process.

There have been so many people that have helped me throughout this process, and I would like to thank: my siblings, Margaret and Frank Weirich, for continually supporting me and checking in to make sure I stayed sane; to Meg Lambert, for her continued support and advice; to my coach Abigail Johnston and the Barbreck Studio crew, who helped me gain perspective by lifting heavy things; to the Reynolds family for all the cups of tea and bacon sandwiches; my Iowa family for their love and support; to my Nina Louise, whose voice in my head ensured I took breaks, went for walks, and ate my fruits and veggies; and to my partner Anthony, who stayed up late reading multiple chapters, giving advice and comments, and most importantly, ensuring I laughed.

I would like to note that my ability to complete this thesis is a direct result of the many sacrifices that both sets of my grandparents made throughout their lives. As immigrants, they worked hard to provide for, and sustain their families, but above all they considered education to be of the highest value and importance. My only regret is that they are no longer here to see this thesis completed. Lastly, I would like to thank the two most influential individuals in my life – Evelyn and Frank Weirich. They have been constant role models and cheerleaders, and without them this thesis would not have been completed. Through their support, experience, and knowledge, I am constantly reminded of the extreme privilege of being able to complete this thesis and hope to honour the examples they have set in their lives, by working to make the world a little bit better.

Author's Declaration

I declare that, except where explicit reference is made to the contribution of others, that this dissertation is the result of my own work and has not been submitted for any other degree at the University of Glasgow or any other institution.

Printed name: **Christine Acosta Weirich**

Signature: _____

1. Introduction

The State, because historically it has been the greatest secular accumulation of power, has always been the greatest art thief. Its armies, consuls, explorers have been its agents. The Louvre without Napoleon's seizures would be a lesser gallery, the British Museum without Lord Elgin less rich. Hitler's Goering collected through his panzer agents and the Swedish Army in the 17th century served that 'most predatory' collecting Queen Christiana. Recently, Iraq's Saddam Hussein looted Kuwait's museums, and rebels against Saddam looted Iraq's museums. Tibet upon the Chinese invasion was looted, vandalised, repopulated as a matter of national policy, to wipe out a people, destroy their achievements, symbols, community – art is expressive of each. Today, whether in China, Mali, Turkey, Egypt, Peru, Russia, Kuwait, Cambodia or Lebanon, there has been recent or on-going looting on antiquities/art often connived in by local authority, whether provincial, revolutionary or bandit, whether via entrepreneurial bribe, police participation or ministerial directive. (Blum, 1995, p. 150)

Antiquities trafficking has its origins in the long-held custom of wartime looting and the ancient practice of coveting beautiful or important objects of the past. This can be traced throughout a global history, from ancient civilisations such as the Greeks and Romans, emperors and dictators including Napoleon and Hitler, up to present-day instances, which can range from an individual simply trying to survive, to over-zealous antiquities enthusiasts (Ulph et al., 2012).

Antiquities trafficking can be loosely defined as an instance where an illegally excavated archaeological object or cultural object is smuggled or sold illicitly. The occurrence of antiquities trafficking has long been a tradition and custom throughout the world, though it was only in the 19th and 20th centuries that many traditional forms of 'collecting' or 'archaeology' were brought under scrutiny and deemed illicit, as the science of archaeology emerged (Brodie, 2006). The discovery and investigation into prominent antiquities traffickers and networks in the 1990s have helped to highlight the issue, as well as help to promote more research into the field (Polk, 2000; Alder and Polk, 2002; Brodie, 2006; Brodie, 2012). Instability in the Middle East, especially the region of the Cradle of Civilization, and the rise of extremist and terrorist organisations such as the Taliban or the Islamic State alerted a global audience to the serious nature of antiquities looting and trafficking – with the on-going Syrian Civil War in particular highlighting significant cultural heritage and antiquities destruction (Brodie, 2015b; Willett, 2016; Brodie and Sabrine, 2018). The issue of antiquities trafficking represents not just the loss of an object,

but the loss of culture and history. It reflects the potentially permanent destruction of a group's ability to know and to be materially connected to its past. In some cases these objects are still entrenched in a community's history or traditions. The destruction of Palmyra resonated around the world, reminding the global community of the importance of such sites. Raising awareness of this loss of culture is important, but on its own will not prevent future losses.

Despite this burgeoning public awareness, the field of criminology has unfortunately largely overlooked the issue of antiquities looting and trafficking – with little criminological research currently or historically being conducted within the field (Bowman, 2008; Polk, 2009; Polk, 2014; Brodie, 2015a). Criminology, a discipline which has developed powerful tools to predict and prevent crime, has yet to fully embrace the field of heritage harms as part of its core agenda. Of particular note is that – as of yet – there has never been an empirical crime prevention analysis of antiquities trafficking networks on an international scale. This thesis aims to expand the criminological gaze to include this important area of crime by showing how criminological methodologies and tools can impact this field. It aims to provide for the first time, a systematic application of crime prevention perspectives to antiquities trafficking, with particular reference to the fate of antiquities in conflict zones.

1.1 Motivation for the Study

Currently, as noted above there are at most a handful of papers or research studies that focus on antiquities looting or trafficking from the perspective of crime prevention theory. Broadly speaking, crime prevention theory focuses on developing prevention techniques, procedures, or recommendations based upon empirical research and analysis (Lab, 2016). When considering the recent increase and awareness of the looting and trafficking of antiquities, this seems somewhat of an oversight on the part of criminologists and the global community at large. There has been a documented rise of antiquities trafficking, especially conflict antiquities in recent years, which might be in response to the new way in which terrorist groups interact with cultural heritage – either destroying it for propaganda purposes or looting it for profit (Brodie, 2015b; Jesse Casana, 2015; Brodie and Sabrine, 2018). Without further research into preventative measures or techniques, it seems unlikely that this issue will be resolved. When reviewing current and previous

literature on antiquities trafficking, it becomes evident that a large portion of the material focuses on reactionary measures (Brodie, 2015b). This study will attempt to offer a new and needed set of analytic tools and perspective in antiquities trafficking research, and will also seek to identify and present preventative measures for the broader construct of antiquities trafficking networks (ATNs), as well as apply this approach to a specific example. This will be achieved through the consideration of two relevant research questions:

(1) Can Situational Crime Prevention, with the use of Crime Script Analysis, be effectively applied to Antiquities Trafficking Networks?

(2) When applied to case/crime-specific studies, can the application of Situational Crime Prevention and Crime Script Analysis indicate effective preventative measures?

1.2 Aim and Scope of the Study

In order to meet its goals, this thesis will evaluate and apply a particular form of crime prevention, situational crime prevention (SCP), to antiquities trafficking networks (ATNs). This will be accomplished with the use of crime script analysis (CSA) – an analytic tool which scripts the required actions for a crime to occur – in order to help determine the structure and necessary steps for antiquities trafficking to occur on an international level, as well as within highly specific or local examples. In order to effectively evaluate the usefulness of SCP in the study of illicit antiquities trafficking, the thesis will focus on only the most essential and necessary elements of this criminal market. An initial, broadly-based analysis to determine common traits among international antiquities trafficking will be conducted in order to provide a generalised understanding of known instances of antiquities trafficking. The results of this analysis will produce a general crime script intended to be broadly applicable to international antiquities trafficking.

This will then form the basis for a second, more specific analysis to be undertaken of a case study of antiquities trafficking in the Syrian Civil War, as a means of demonstrating the use and applicability of SCP to highly specific forms of crimes. As part of this effort, a crime script will also be generated for the Syria conflict, with the use of journalistic news

articles as a means of source data. The use of this type of data is necessary, as the on-going conflict with Syria has made field research virtually impossible. Moreover, in relation to both the SCP and CSA analyses that will take place, given the language limitations all data provided and used was in English. Despite these limitations, this study does appear to have provided both a broad overview or roadmap on the application and applicability of SCA and CSA to ATNs and the case specific application of these methods to ATNs as related to the Syrian conflict.

1.3 Structure of the Study

The following thesis is intentionally structured in such a way that it may at times appear to have a ‘textbook’ feel, as may be evident in the high volume of tables and figures within the text itself. This structure is quite deliberate, as the content being discussed and presented in this thesis is both complex and multifaceted and therefore required a very detailed, comprehensive and rigorous analytic structure. As one of the intended outcomes of this project is the aim of establishing a basic methodology which can be used to support further research concerning ATNs, such an approach seemed warranted. Furthermore, this study and the text of this thesis has been specifically designed to try and provide the most logical representation of the aims and methods, in order to provide a clear understanding of the complex nature of ATNs, as a step toward the development and implementation of more effective measures and capabilities.

Chapters 1 and 2, begin by introducing the topic and issue of international antiquities trafficking more thoroughly. This includes an examination of the basic structure of antiquities looting and trafficking, common types of actors within networks, and prior research conducted within the field. With a working knowledge of how antiquities trafficking operates and the current status of research and development in this field having been established, chapter 3 will then introduce the theoretical framework used in this thesis: SCP. This chapter will delve into the theoretical underpinnings of SCP, CSA and crime prevention theory in general, so as to help contextualise the importance and significance of what this project aims to achieve, and demonstrate how this thesis has adequately prepared the design and execution of its research methods – which will then be presented in chapter 4. This chapter will detail how SCP and CSA will be used within this project, and will also discuss in detail the methodology of this project. Likewise,

difficulties or limitations faced in the process of conducting this research will also be discussed.

Chapters 5 and 6 are devoted to examining and analysing the operational structure and necessary elements for ATNs to operate. Specifically, chapter 5 focuses on developing a master crime script for the overall area of antiquities trafficking, breaking the script into three separate phases – looting, transit, and market. This crime script will be generated from a source of known examples of ATNs and will represent a universal structure of how these networks operate. The ability to thoroughly break down and analyse each necessary step or process for the crime to occur will provide insight into the most efficient crime prevention techniques.

With a basic understanding of what is necessary for ATNs to operate/occur, chapter 6 will be focused on a study of the factors or circumstances which allows these networks to operate. The examination of what criminal actions these factors not only allow, but also often promote, provides a framework to allow for the consideration of prevention techniques for ATNs. These factors or circumstances help to highlight areas that have helped ATNs to continue to survive and overcome existing policies and regulations which target antiquities looting and trafficking.

The conclusions derived from the facilitating factors are then analysed in chapter 7, where the situational perspective is applied, and preventative measures are considered. This chapter will, in conjunction with the previous two chapters allow for consideration of SCP techniques or procedures that can be recommended for ATNs. The recommendations that are generated in this chapter represent rather broad and generalised options, as they are meant to be relevant on a universal level of ATNs. Essentially, what chapter 7 aims to accomplish is to establish basic situational prevention strategies from which further research can be conducted. As this field is currently lacking in crime prevention research, to establish a structural basis for how antiquities looting and trafficking occurs provides a starting point for future researchers, while also highlighting significant necessary elements within these networks.

Chapter 8 represents the final analysis chapter and applies the broader analytic techniques discussed in the previous analysis chapters (5, 6, and 7) to a specific case study. This

chapter is the crux of the project, as it demonstrates how SCP and CSA can be adapted and used to effectively study ATNs. The Syrian Civil War is examined as a case study of a region which has encountered significant antiquities looting and trafficking during a recent time of conflict. For this purpose, it is examined by the same process that was employed when considering the wider category of ATNs, and a customized crime script for the specific situation is then developed from the broader suite of methods presented earlier. This is followed by the identification of facilitating factors or circumstance unique to this specific case, which then results in a final analysis of the script and factors to determine effective crime prevention methods or techniques for this specific case.

The concluding chapter (9) will consider how effective SCP and CSA have been in helping to better understand ATNs, with the result of then determining potential crime prevention techniques or procedures. A comparison between the crime script and situational analysis of ATNs within the case study will be discussed, with particular attention paid to how effective these tools and methods of analysis were, respectively. Additional consideration will be given to the impact this research might have, as well as future projects that make use of CSA and SCP.

1.4 Significance

As noted earlier, this project seeks to develop and provide a new approach in antiquities trafficking research, as it offers one of the first studies focused explicitly on crime prevention. Not only does it strive to evaluate the suitability and effectiveness of SCP within this field, but it also demonstrates the use of CSA as a potentially vital analysis tool. It is expected that a number of additional outcomes will be achieved in the process, including providing a more thorough and scientific understanding of how international antiquities trafficking occurs through the development of a crime script for ATNs. Similarly, while SCP has become an established framework since its conception in the 1980s, the use of CSA in conjunction was not introduced until well into the 1990s. As such, this combination of approaches is still decidedly in the process of gaining traction in the wider field of crime prevention and crime science, and this thesis aims to contribute to that continuing development.

2. Antiquities Trafficking Networks

2.1 Introduction

The previous chapter sought to introduce the main goals of this thesis, which are focused on exploring and considering the application of CSA and SCP in relation to ATNs. In order to consider the application of crime scripting and SCP to the ATNs, a more comprehensive understanding of how these networks came to be, how they currently function, and any relevant prior studies is necessary. This chapter will focus on reviewing current and relevant studies concerning ATNs as well as the present-day practices and methods employed by these networks. For the purposes of this thesis, the term ATNs will be employed to refer to and encompass the range of actors, objects and relationships that participate in cultural heritage trafficking on a local and international level. This will provide a more complete understanding of how and why the network operates as it does and will ultimately help provide context for the benefits of developing and using a crime script model and SCP strategies for this illicit network.

First, a closer examination of how this illicit market (antiquities trafficking) has developed will be conducted. This will be introduced by looking to the definition of an illicit antiquity – with special consideration to the particular use of the term ‘illicit’ for this network. The phenomenon of antiquities trafficking is the culmination of centuries of casual or aggressive attitudes concerning cultural heritage that has only recently been regulated (Askerud et al., 2000; Brodie, 2006; Gerstenblith, 2007; Ulph et al., 2012; Brodie, 2012b). Once a baseline of understanding has been established for the history and development of antiquities trafficking, there will be discussion about how the illicit and legal antiquities market currently operates. This will focus on, rather broadly, how ATNs operate on a global level, but will also include some specific examples to demonstrate typical methods or techniques that are common within this network. As this project makes use of the ongoing conflict in Syria as a case study, ATNs operating in conflict zones will also be considered. Any previous research or significant studies will also be discussed at this point as well as difficulties faced within this network. The chapter will conclude with a discussion of the context which has been presented and will highlight the importance of the work that is being discussed and developed in the course of this research project.

2.2 Defining the Problem

To begin, a definition of what an antiquity and an illicit antiquity refer to must be established, as these are important terms that are discussed throughout this thesis and are essential in understanding illicit antiquities market and network. Within the field of antiquities trafficking research there are a number of different terms associated with the types of objects trafficked including: cultural heritage, cultural property, archaeological objects, archaeological artefacts, cultural artefacts, art, heritage, or cultural material (Ulph et al., 2012). Neil Brodie, a leading expert within the field of antiquities trafficking, defines an illicit antiquity as: “*Illicit antiquities, archaeological objects that have been illegally excavated or exported from their country of origin for monetary gain.*” (Brodie, 2018). For the purposes of this project, the term ‘antiquity’ or ‘antiquities’ will simply refer to an archaeological or cultural object. The term *illicit antiquity (antiquities)* can then be understood to refer to a cultural or archaeological object whose transfer is legally prohibited or normatively disapproved. This usually means that an object has been removed from its location of origin and traded or sold in an illegal or in a prohibited manner.

This has allowed for a better understanding of the term antiquities trafficking (or illicit antiquities trafficking) which, refers to a variety of illicit actions including “...clandestine excavation or theft, smuggling in transit, and either private sale or mixing with objects in the legitimate market.” (Mackenzie, 2010, p. 141). The trafficking of antiquities or illicit antiquities are terms that has been created to reflect the scope and structure of antiquities trafficking. Within this thesis it can refer to either the entire process of trafficking an antiquity (from ground to market), or individual/pairs of sections of the process. It represents a comprehensive and inclusive term for a complex criminal market, which operates in a diverse and wide-ranging manner (Alder and Polk, 2002). As this chapter will later identify, another important element which is necessary for comprehending the issue of antiquities trafficking, is the antiquities market. The antiquities market operates as a grey network – meaning that the legal and illegal markets overlap in the same space – resulting in the marketplace of antiquities being a conduit for both legal and illegal objects (Polk, 2000; Bowman, 2008; Campbell, 2013; Mackenzie and Yates, 2016b). The antiquities market offers a unique platform by which a large portion of antiquities will eventually be processed – evidenced by the consistent appearance of illicit objects within

the antiquities market (Gill and Tsirogiannis, 2016). Having now defined ATNs, focus can now turn to how such networks were created and developed into the global issue it is today.

2.3 What are Antiquities Trafficking Networks?

ATNs refers to an individual or group of networks that seek to traffic archaeological or cultural objects that have been illegally excavated or exported from their country of origin, for profit. These networks constitute three basic settings: a source of objects, the transportation of objects, and a market for the objects. The legal antiquities market is a long-established market, which has its origins “in sixteenth-century Rome” (Brodie, 2012b, p. 230). Toward the latter end of the twentieth century, large portions of the antiquities market became increasingly illegal in nature, as nations implemented legal protection for archaeological and cultural heritage sites and objects (Alder and Polk, 2005; Brodie, 2012b). The expansion of the art and antiquities market following the end of the Second World War contributed to an increase in demand for archaeological objects – antiquities – resulting in increased instances of looting (Gerstenblith, 2008; Brodie, 2012b). This resulted in the implementation of the 1970 UNESCO Convention on the Means of Prohibiting and Preventing the Illicit Import, Export, and Transfer of Ownership of Cultural Property, which attempted to address troubling practices within the antiquities market – such as the common practice of selling or purchasing an object without a proper provenance (Unesco, 1970; Ulph et al., 2012).

Though the 1970 UNESCO Convention, and the many conventions which followed it, have attempted to tackle the phenomena of illicit antiquities trafficking, it seems that the market in illicit antiquities continues to survive and thrive (UNESCO, 1970). There have been increasing reports of conflict-based looting occurring in regions and nations (including Syria) (Polk, 2014; Brodie, 2015b). While there is no accurate means of measuring the scope or value of this market – as it is illicit – there are estimates that place art and antiquities crime among the rankings of drug and weapons trafficking (UNESCO, 2016). This may be in part because of the high value of the objects being sold but will also additionally constitute large volumes of low to middle-end objects.

2.4 Previous Research

The study of illicit antiquities and antiquities trafficking has primarily been conducted by those in the fields of archaeology, law, museum studies, or journalism (Brodie, 2012b; Brodie et al., 2013; Brodie, 2015a). It was not until the late 1990s that criminologists began to study the issue (Bowman, 2008; Proulx, 2011b). Therefore, the majority of research and literature about this topic has been conducted from an insider's perspective, especially of those either familiar with, or have first-hand experience in the field of art and antiquities.

2.4.1 Establishing the Field

The 1970 UNESCO Convention brought to light the issue of illicit antiquities, but it wasn't until the 1990s that significant research into the field of illicit antiquities trafficking took place (Brodie, 2012b). Clemency Coggins' (1969) article concerning illicit Pre-Columbian antiquities and Karl E. Meyer's book *The Plundered Past* (1973) provided an in-depth look at the art and antiquities market at a time when the amount of academic literature and empirical research regarding illicit antiquities trafficking was rather lacking (Coggins, 1969; Adams, 1971; Heath, 1973; Gonzalez, 1973; Seabrook, 1974; Schneider, 1982; Gutchen, 1983; Rogge, 1989; Szopa, 2004). This changed in the 1990s, when there was a surge of documentation, research, and articles targeting specifically the looting and trafficking of antiquities, including most notably Conklin's book *Art Crime* (1994) which provided an encompassing overview of both art and antiquities crime (McAllister, 1991; Nickens, 1991; Cameron, 1994; Chapman, 1994; Murphy, 1994; Blum, 1995; Rose and Acar, 1996; O'Keefe, 1997; Brodie, 1998; Brodie, 2012b). The 1990s also produced the first quantitative study on the illicit antiquities market and was conducted by Gill and Chippindale (1993) concerning Cycladic figures. This study analysed the market presence and purchasing of Cycladic figurines on the legal antiquities market, and was able to prove that large portions of these sales were likely a result of illicit looting (Gill and Chippindale, 1993).

Much of the research conducted during the 1990s focused on establishing fundamental aspects or evidence of antiquities trafficking. It began by first establishing that illicit antiquities are an issue on an international scale. Research was conducted that studied

antiquities trafficking in a wide array of countries and regions including India (Shankar, 2001; Pachauri, 2003), Tanzania (Mapunda, 2001), Jordan (Bisheh, 2001; Politis, 2002), Cyprus (Hadjisavvas, 2001), Mali (Sidibé, 1996; Panella, 2014), Africa (Brent, 1996; Shyllon, 2011; Abungu, 2016), Argentina (Schávelzon, 2003), and Cambodia (Davis, 2011; Mackenzie and Davis, 2016; Hauser-Schäublin, 2016; Miura, 2016). Further qualitative studies relevant to illicit antiquities that followed sought to approximate the amount of looting occurring within archaeological sites (Gutchen, 1983; Ali and Coningham, 1998; Fernández et al., 2000; Elia, 2001; Luke and Henderson, 2006; Roosevelt and Luke, 2006; Brodie et al., 2013).

A significant amount of time and energy was spent conducting research to firmly establish the existence and prevalence of antiquities trafficking (Brodie, 2006), and in the 2000s much of the research then turned to studying how the market functioned. This included working at times, against the antiquities market, to attempt to prove the illegality of items that appeared on the market. As Brodie states:

I have reviewed this literature about provenance at some length to make the point that over the past decade the archaeological community has taken great pains and with no insider knowledge to establish its case from the study of published sources that are generally accessible to everybody. It contrasts with what follows, where I record the trade community's response, which has been unsystematic and unverifiable. The trade community does not agree that absence of published provenance is proof that an object has been looted, and point out that provenances are often known but not revealed because of a vendor's request for confidentiality, or because of the commercial requirement to keep a source secret. (Brodie, 2006a, p. 7)

Further research worked to identify and examine how the market functioned, and so included a different market analysis of either: the entire market or specific sections (Luke and Henderson, 2006; Kersel, 2006a); the transnational nature of the market, as well as reports of organised crime (McCalister, 2005; Bowman, 2008; Lane et al., 2008; Campbell, 2013); or how the market operates (Kersel, 2006a; Kersel, 2007; Brodie, 2012b).

Further research concerning Hong Kong and Asian countries as upcoming markets in both licit and illicit antiquities has demonstrated that the antiquities market, like any market, is susceptible to changes (Gallagher, 2017; Yates et al., 2017). This is especially relevant when considering how the internet has so drastically changed how communication and

transactions occur in the modern-day setting. There has been initial research concerning how the internet has impacted the market and the manner in which antiquities are trafficked, but this is a field which could still benefit from further research (Chippindale and Gill, 2001; Lidington et al., 2002; Bland, 2009; Fay, 2011; Brodie, 2015c; Paul, 2018). Most recently the use of satellite imaging and other technologies have been explored to provide empirical evidence of looting by providing monitoring or contrasting photographs of sites or regions (Stone, 2008; Contreras, 2010; Brodie and Contreras, 2012; Parcak et al., 2016; Tapete et al., 2016; Cerra et al., 2016; Parcak, 2017; Deroin et al., 2017). In particular, Parcak's (2017) paper considers the ability to determine a likely site or area an object was looted from, based on specific parameters of the object – in this case an Egyptian mummy. With further research – including soil samples and testing – it seems that in the future there may be the possibility of determining from where an object was looted (Parcak, 2017). At the moment, this issue still presents one of the greatest difficulties in identifying and repatriating illicit antiquities. The use of cutting-edge technology has provided a number of potentially exciting opportunities for helping to not only monitor antiquities looting and trafficking as it occurs, but also a consideration for crime prevention or rapid-response opportunities.

2.4.2 Policy

A major contribution of the overall research conducted on antiquities trafficking is in relation to local, national, or international policy. One of the first ways in which authorities may attempt to prevent people from engaging in antiquities trafficking is to create laws making such actions illegal. As stated in the previous section, much of the early research concerning antiquities trafficking was focused on proving that illicit antiquities and antiquities trafficking existed and was a legitimate threat to cultural heritage. A result of this research was the ability to consider or create laws and regulations to combat antiquities trafficking. When considering policy, it is helpful to refer back to the basic three elements of antiquities trafficking: loot (source), transit, and market.

The amount of policy or legislation relating to cultural heritage is vast, as every country defines the meaning and scope of cultural heritage differently according to their customs, laws, and practices (Mackenzie, 2005; Ulph et al., 2012). This section will provide a basic understanding of some of the more important pieces of legislation, but will by no means be

able to provide a full and thorough account of all policy or legislation relevant to the illicit antiquities trade. To understand the regulations that are in place, a fundamental question must first be considered: who owns culture? This represents a difficult and ongoing debate within the field of cultural heritage management (Merryman, 1986). There are those who believe that cultural objects are part of a national identity or culture, and are therefore owned by the state – they are often referred to as nationalists (Seabrook, 1974; Schneider, 1982; Merryman, 1986). In contrast, others argue that cultural objects are part of a global or common heritage, and contribute to a universal culture that should be shared and traded openly – they are often referred to as internationalists. Often, source countries align themselves on the side of the nationalists, as they view their cultural heritage not only as a point of identity, but also as an economic resource (Seabrook, 1974; Schneider, 1982; Francioni and Lenzerini, 2006). Italy is a prime example of just such a source country, with Italy having extensive export regulations in regards to cultural objects (Francioni and Lenzerini, 2006). Most source countries often have at least *basic* legislation detailing the protection of their cultural heritage – with specific reference to the removal of objects from the country of origin (Seabrook, 1974; Polk, 2000; Massy, 2008).

In contrast market, or destination countries are rather lacking in policy or legislation related to the export of cultural objects (Schneider, 1982). Market or destination countries represent countries where large art markets exist, and are therefore concerned more with objects being available for trade or sale (Mackenzie, 2005; B. Hoffman, 2006; Ulph et al., 2012). It is often the market-end of the antiquities market that appreciates an internationalist view of culture (Seabrook, 1974; Schneider, 1982). Museums, auction houses, and galleries all profit or benefit from the free movement and trade of cultural objects, and as a result often express an international or common heritage view (Seabrook, 1974; Schneider, 1982). Many museums are inherently internationalist institutions, as without the trade of cultural objects they would cease to exist – consider the British Museum (Francioni and Lenzerini, 2006; Lewis, 2006). While it adopted a stricter acquisition policy in 1972, many of the objects which currently reside in the British Museum are contested objects – such as the Parthenon Marbles or the Rosetta Stone (Lewis, 2006).

The complexities of this debate become more relevant when the issue of repatriation of objects is discussed, for example by a repatriation claim made for an object that was

historically looted. While the complexities of returning an object will be discussed in further detail in a later section, repatriation refers to the act of returning an object back to a nation or community (Ulph et al., 2012). Restitution, on the other hand can be simply explained as a legal or cultural claim by a nation or community for the return of a cultural artefact that had been taken without the explicit permission of the nation or community (Ulph et al., 2012). Repatriation and restitution claims often prove difficult, mostly in trying to determine the appropriate length of time in which a claim can still be made.

An example that demonstrates the long and complex history of looting and repatriation would be the Triumphal Quadriga, or The Horses of Saint Mark, which are located on the façade of St. Mark's Basilica in Venice (Tompkins, 2011). These four bronze horses are considered to be an iconic part of St. Mark's Square. These statues were so admired that during his conquests, Napoleon removed them from the Basilica in 1797 and had them incorporated into the Arc de Triomphe du Carrousel in Paris (Tompkins, 2011). Following Napoleon's defeat at Waterloo in 1815, the Horses of Saint Mark were removed from Paris and were returned to Saint Mark's Basilica by the Austrian Empire (Tompkins, 2011). While many are aware of the Horses' 'relocation' to Paris and subsequent return to Venice, not many are aware that the Horses themselves were looted from Constantinople during the Fourth Crusade in 1204 (Tompkins, 2011). Originally thought to be a part of the Hippodrome of Constantinople, the Horses were added to the façade of St. Mark's Basilica in 1254, where it became evident that collars had been added to the horses. This addition occurred in 1204, and was used as a means to hide where the heads of the horses had been sawed off – allowing for the transport of the sculptures to Venice (Tompkins, 2011).

Consider, in this example, if the Horses has not been returned to Venice. Modern-day Venetians could claim for repatriation of the Horses, as they were taken during wartime, and according to modern precedent, should be returned. Just as equally, a citizen of Istanbul - the modern-day equivalent of a citizen of Constantinople - could claim the Horses be returned to their original location (Tompkins, 2011). To add a potentially complex layer to this scenario is the fact that at the time that Napoleon looted the Horses of Saint Mark, Venice had been annexed by the Austrian Empire, and so was technically under Austrian rule and control. This brings into consideration the difficulties that would have arisen if Austria had taken the Horses and placed them in Vienna and not Venice (Tompkins, 2011).

These are the types of complexities that are faced when considering regulating the antiquities market: where does ownership begin or end? The difficulty of defining historical looting also presents a difficulty – does the ‘collecting’ which occurred during English and French occupation of many countries around the world count as looting, or spoils of war? These are not topics that will be answered in the course of this research project, but these are questions and issues that are certainly relevant within this field, and specifically in the creation of international regulations as to the protection and preservation of cultural heritage.

There are a number of international measures that have been taken to help define and initiate strategies to reduce to regulate antiquities trafficking (Ulph et al., 2012), including the following UNESCO conventions:

- The Hague Convention, 1954
- The Convention Concerning the Protection of the World Cultural and Natural Heritage, 1972
- The Convention of the means of Prohibiting and Prevention the illicit Import, Export, and Transfer of Ownership of Cultural Property, 1970
- UNIDROIT Convention on Stolen or Illegally Exported Cultural Objects, 1995

The first part of this chapter focused on discussing the issue of who ‘owns’ culture. This is an important issue in relation to cultural heritage policy, as in order to determine international conventions or regulations, the ownership of these objects must first be established. The 1954 Hague convention was concerned with protecting cultural heritage during times of conflict – a direct response to the aftermath of WWII. The 1970 UNESCO Convention was a result of concern with the protection of cultural heritage from the growing issue of illicit antiquities looting and trafficking (Gonzalez, 1973; Ulph et al., 2012). This convention, and the 1972 UNESCO World Heritage Convention also dealt with the complex issue of ownership by placing emphasis on source countries, and the protection of cultural objects. These were the first international conventions to address illicit antiquities looting and trafficking, and the preservation of cultural objects on an international scale (Unesco, 1970; Seabrook, 1974; Ulph et al., 2012). These conventions

sought to promote international regulations by which countries would agree to the terms of the convention and work to protect global heritage. (Unesco, 1970; Seabrook, 1974; Ulph et al., 2012). The 1995 UNESCO Convention works to establish international regulation regarding the restitution and repatriation of objects, while the 1972 Convention also considered protecting natural culture, such as the great barrier reef in Australia (Unesco, 1970; Blake, 2000; Vigneron, 2014).

It is worth noting that the three Conventions so far adopted by UNESCO reflect the political and/or intellectual concerns of the time at which they were developed: the 1954 Convention expressed the powerful post-World War II desire to reduce potential sources of international conflict; the 1970 Convention embodied an approach to cultural property which might be characterised as "nationalist" or "statist" whereby the interest of the State of origin (often in the developing world) should be paramount, mirroring the strong feeling within UNESCO during the 1970's amongst developing nations that the power of the dominant developed States should be counteracted; and the 1972 Convention reflected both the growing concern in environmentalist issues in its integration of the cultural with the natural heritage as well as the concept of a "common heritage of mankind" which had been developing at this time in relation to seabed mineral resources. (Blake, 2000. p. 62)

Of course, when considering the regulation of such an international market, complexities, such as the volume of legislation dedicated to monitoring the movement of illicit antiquities, or preventative measures taken by each nation, must also be considered. However, what these conventions hope to accomplish are an increased awareness of this issue as well as an attempt to have member countries make this issue a priority.

A number of countries have enacted legal frameworks which attempt to regulate illicit antiquities including the UK (Act of 2003), the US, Italy, Switzerland, Germany, India, Cambodia, and Australia. Unfortunately, the majority of international regulation concerning illicit antiquities can be found mostly in source nations, with emphasis placed on attempting to control the export of cultural objects (Seabrook, 1974; Schneider, 1982; Polk, 2000; Massy, 2008; Vigneron, 2014). Targeting source countries has proved to be an ineffective means of regulating ATNs, as these networks are driven by the market (Bland, 2009). As Vigneron puts it, "the burden of regulating the trade of cultural objects cannot exclusively lie on source nations because this trade mostly operates at international level rather than national level." (2014, p. 119)

2.4.3 Antiquities in Conflict

Conflict antiquities are an issue that has become a prominent issue within the fields of archaeology, cultural heritage, and illicit antiquities trafficking (Chapman, 1994; Prott, 2006; Rush, 2010; Farchakh-Bajjal, 2011; Hanson, 2011; Hardy, 2014b; Willett, 2016). This was especially true after the world watched as the Baghdad Museum was looted in 2003 at the start of the Iraq War (Atwood, 2004; Rothfield, 2009). Much has been written regarding this event, and more attention and research has since been focused on other conflict zones (Atwood, 2004; Rothfield, 2008; Farchakh-Bajjal, 2008; Brodie, 2008; Rothfield, 2009; Hanson, 2011; Isakhan, 2013). Research has included conflicts in Croatia, Bosnia, and Hercegovina (Chapman, 1994; Šulc, 2001), the National Museum in Kabul ((Brodie et al., 2006), the Cypriot Civil War (Hardy, 2014b) the 2006 '33 day war' in Lebanon (Farchakh-Bajjal, 2011), Beirut during the Lebanese Civil War (1975-1990) (Sandes, 2013), the Arab Spring in Egypt (Parcak et al., 2016; Fabiani, 2018) and some general research regarding conflict antiquities (Boylan, 2002; Prott, 2006; Urquhart Irvine, 2011; Cerra et al., 2016).

2.4.4 Criminological Research and Contributions

Within the field of illicit antiquities, there was – until the early 2000s – a significant lack of criminological research being conducted or produced (Bowman, 2008; Proulx, 2011b; Brodie, 2015a). Much of the work that was being contributed was from a cultural heritage, museum, legal, or archaeological field and perspective. Criminological research within illicit networks such as ATNs are necessary in order to better understand how the network functions, and to consider effective preventative measures (Alder and Polk, 2002; Tijhuis, 2011; Davis, 2011; Proulx, 2011b; Campbell, 2013; Bichler et al., 2013). Kenneth Polk (2000) introduced a criminological perspective to the field with a number of papers that considered ATNs in comparison to drug networks, and later with Christine Alder examined the antiquities market as a criminal market (Alder and Polk, 2002) and established their function as illicit markets (Alder and Polk, 2005).

Relevant criminological research that followed Alder and Polk includes the work of Simon Mackenzie, whose body of work includes law and policy relevant to antiquities trafficking (Mackenzie, 2005; Green and Mackenzie, 2009) market reduction and regulation strategies

(Mackenzie and Graycar, 2002; Mackenzie, 2011; Mackenzie, 2015), neutralisation techniques of actors within the market (Mackenzie and Green, 2008; Mackenzie, 2011; Mackenzie, 2014; Mackenzie and Yates, 2016a; Mackenzie and Green, 2018) and the study of how the market operates (Mackenzie and Davis, 2016; Mackenzie and Yates, 2016b), A.J.G. Tjihuis's article concerning the 'lock model' for transitioning illicit objects (2011), Blythe Bowman Proulx's research which focuses on organised crime and the grey market of illicit antiquities (Bowman, 2008; Proulx, 2011b), and Usman Ojedokun's (2012) article which examines the trafficking of Nigerian cultural objects via routine activities theory. Kersel (2006) presents a market analysis antiquities trafficking which presents a basic structural model of how the illicit antiquities trade operates. Additional considerations as to organised crime (Proulx, 2011b; Chappell and Polk, 2011; Mackenzie, 2011; Alderman, 2011; Dietzler, 2013; Casey, 2017; Sotiriou, 2018), and white-collar crime within the network are also prominent themes in much of the research within the field (Balcells, 2014).

There has been some criminological consideration as to a study of antiquities trafficking from a network perspective – specifically the analysis of the social networks of antiquities trafficking (Bichler et al., 2013; D'Ippolito, 2014), but this is still a field which would benefit from further study. These studies focus specifically on the use of social network analysis to better understand the scope and organisation of ATNs. This type of research is valuable to constructing a better understanding of how these networks form and operate, though a main issue this type of research faces is availability of necessary data. While the volume of criminological research continues to grow in recent years, the significance of the research that these projects represent indicates the need for greater volume and breadth of similar projects (Bowman, 2008). As discussed in the next section, there is a significant gap in research concerning prevention of antiquities trafficking, as much of the literature within this field currently focuses on reactionary proposals or research. It is evident that there has been a progression in the field, from first establishing the issue of antiquities looting and trafficking, to more in-depth research concerning recording instances and examples of antiquities trafficking. However, currently the field is at a stage where it must consider the specifics of how antiquities trafficking will be researched, and to determine effective means of both preventative, as well as reactionary work.

2.4.5 Crime Prevention/Potential Preventative Systems

In the course of examining the literature and research available on the issue of antiquities trafficking, there is a glaring void of one particular area relevant to combatting the antiquities trafficking. There is little to no empirical research concerning the prevention of antiquities trafficking (Polk, 2009; Polk, 2014; Grove and Pease, 2014). As discussed in the previous section, policy and regulations seem to be the main conduit for attempting to reduce cases of antiquities looting but, as has been documented in various examples policies can actually do more harm than good if not correctly applied or targeted (Alder and Polk, 2002).

Some policies that have been proposed are meant to target specific stages of the antiquities trafficking process – including border controls (Lobay, 2009), embargos on objects (Murphy, 1994), or by proposing a universally accessible form by which an annual report could be generated to provide a more clear understanding of antiquities trafficking – similar to crime victimisation surveys (Grove & Thomas, 2014), or even a global database of antiquities (Levine, 2013). There is also the premise that the creation of a legal antiquities market of commercially or state excavated objects that would be available for sale to the public may help to reduce the criminal market for such objects (Boyce, 1997).

Additional proposals include fingerprinting antiquities to deter or facilitate an easier recovery (Wei, 2017), while Hicks (2000) presents a more practical means of preventative actions by proposing an educational program targeting children, where he considers more attractive means of education, including role-playing or theatre-based learning experiences. This model unfortunately is intended mainly for a US audience (as it is based on data from Archaeological Resources Protection Act (ARPA) and usually assumes that there is a designated site manager (Hicks, 2000).

There is one previous work to the present research concerning ‘heritage crime’ and SCP (Grove & Pease, 2014). Grove and Pease discuss the application of SCP as a means of “reducing the risk of damage to or loss of heritage assets by the use of situational crime prevention” (Grove & Pease, 2014, p. 107). They define heritage crime as “any activity that is prohibited by law that causes loss of, damage to, or other harm to places, monuments or objects considered to be heritage” (Grove & Thomas, 2014, 2014, p. 5).

This definition can include instances such as vandalism or theft, and are bound by legal regulations, though they state that their intended context is within the UK (Grove & Pease, 2014). They present a chart of the 25 techniques of SCP for cultural heritage crime (Figure 2-1).

Increase the effort	Increase the risks	Reduce the rewards	Reduce provocations	Remove excuses
1. Target harden ££ Anti-climb paint. ££ Secure edges of metal plaques or etch stone. ££ Improve locks. ££ Cage external vulnerable fittings. £ Security surveys.	6. Extend guardianship ££ Maintain site. £ Neighbourhood watch-style groups with ring-rounds. £ Stories that site is haunted. £ Free or discounted access to uniformed services.	11. Conceal targets £ Hide any removable valuables. £ Place valuable objects at maximum distance from visitor access. £££ Security lights activated when visitors enter prohibited areas.	16. Reduce frustration and stress £ Frequent guided tours starting at different points to avoid delays. 17. Avoid disputes £ Dated and police-validated photographic record of assets to challenge not guilty pleas or mitigation. £ Anti-social behaviour may be aggravated by confrontations – talk to your community policing team for advice.	21. Set rules £ Display bylaws. £ Keep regulations updated. £ Notices saying that replica items can be purchased in gift shop to avoid theft of original.
2. Control access to facilities ££ Restrict vehicular access. £ Use slopes to make urination stance uncomfortable. £ Grow spiky plants. ££ Restrict access to roof. £££ Locate parking at distance so heavy items hard to remove. £££ Underground cabling.	7. Assist natural surveillance £ Tree thinning, removal of excess undergrowth. £ Encourage use of public buildings and spaces. £££ Security lighting where the site is visible by neighbours. £££ Out of hours proximity alarms issuing audio warnings to stay away.	12. Remove targets £ Take maintenance tools and cash off site overnight. ££ Consider alternatives to lead for roofing replacement. £ Ensure there are no combustibles on site. £ Regular risk surveys across sites to establish common trends.	22. Post instructions £ Erect signage (e.g. no metal detecting, no vehicles). £ Advice on wording for signs may be available from sources such as insurance or police. ££ Instigate hotline for visitors to report incidents.	
3. Screen exits £££ CCTV. ££ Access barriers where appropriate. £ Make random searches of vans a condition of entry.	8. Reduce anonymity ££ £ Timed Automatic Number Plate Recognition (ANPR). £ Develop information sharing policies. £ Greeting visitors reduces feeling of anonymity.	13. Identify property ££ Forensic marking techniques can be used (e.g. SmartWater). ££ Visible marking may be appropriate in some cases. £££ RFID tagging of goods facilitates their recovery.	18. Reduce emotional arousal ££ Play classical music at sites which are hotspots for problem behaviours. £ Sweet-smelling plants in vulnerable places.	23. Alert conscience £ Advertise the cost of replacing valuables after thefts. £ Post stories of people remembered on war memorials. £ Notify local scrap dealers of identifiability of stealable items.
4. Deflect offenders £££ Provide designated spaces for disruptive activities. £ Don't provide seating in vulnerable locations. £ Enforce disabled bay parking. ££ Vary site lighting to move people to where you want them.	9. Utilize place managers ££ Training for staff and volunteers to incorporate crime prevention. £££ Alarms linked to key holders. £ Interior lights on time switches to provide signs of occupancy. £ Attract wildlife and in their wake additional volunteers.	14. Disrupt markets £ Dated and police-validated photographic record of assets. £ Report any suspicious activity at trade and auction sites. ££ Establish common database to determine changes in items vulnerable.	19. Neutralize peer pressure ££ Organize events for local community, engaging with disenfranchised groups. ££ Provide a wall for visitor comments (negative ones weeded).	24. Assist compliance £££ Public lavatories at multiple locations. ££ Products at gift shops in individually sealed bags.
5. Control tools/weapons £ Lock away ladders and tools. £ Alert community to higher crime risk where scaffolding erected. £ Chain up wheelie bins away from access points. £ Do not sell viable or realistic replica weapons in gift shops.	10. Strengthen formal surveillance £££ Onsite accommodation for staff. ££ Maximize staffing at times of greatest risk. £ Consult Secured By Design. £ Give police updates that might help them to target their activity.	15. Deny benefits ££ Remove graffiti quickly. £ Liaise with Art Loss Register and similar organizations to ensure photographs of valuable items are available to those scanning stolen goods markets	20. Discourage imitation £ Remove litter. ££ Quick repair of vandalism. £££ Security lighting around war memorials.	25. Control drugs and alcohol £ Allow onsite only at organized events. ££ Blue lighting in toilets. £ High price on site alcohol sales.

Fig. 2-1: 25 Techniques of SCP for Heritage Crime (Grove & Pease, 2014). Permission to reproduce this figure has been granted by the authors.

This table of situational techniques focuses mainly on protecting or preserving known cultural heritage or art objects, and considered these objects to be in a fairly established setting or area – placing much of the focus on potential managers of areas or sites increase risks of offenders being caught.

2.5 How Antiquities Trafficking Networks Operate

A focus of this research project concerns examining how ATNs operate, and as such only, a broad and simple explanation of this phenomenon will occur at this point. A more detailed and analytic discussion of this network will take place in chapter 5.

As has been discussed, the use of the term ATNs refers not to a specific set of actors and objects but more conceptually to the complete process by which an antiquity is looted, transported, and/or marketed. This section will focus on detailing and explaining how the components that makes up this process, and how the network operates on a macro-scale. These processes can range from a simple process to the complex. In the simplest of terms, the general process can be broken down into a three-step process:

- (1) An item is looted (illegally removed from the ground or cultural site).
- (2) The item is then transported from the original site.
- (3) The item is then sold to a dealer or collector.

This however, only generally outlines the main stages of the process, as a multitude of other factors builds up the complexity of the network in terms of prevention/disruption strategies, including: 1) the range of actors; 2) the source, transit, and market countries; 3) provenance; 4) the grey market; 5) the illicit market network itself; 6) and how demand drives the market; and 7) the importance and relevance of this issue. Each will be discussed in turn.

2.5.1 The Actors

The basic form of ATNs has been established as including looting, transit, and marketing elements. Within each of these areas three very different set of actors operate, at times with varying methods and motivations. While three types of actors that are common elements within ATNs have been discussed, this represents the role they play within the network, and not necessarily the actual number of actors within the network. There are instances where a single individual can be involved in all three stages, or instead multiple individuals for a single stage. These characteristics and an understanding of the overall structure of the network will be discussed in more detail through the analysis of the crime scripts, which will be presented at a further point in this paper. Ultimately, this research project will contemplate the different methods and techniques used in the process of this illicit network, but at this stage, it will examine three different general characteristics of the actors of each stage of the process.

2.5.1.1 Looters

In reference to the individuals who do the physical undertaking of looting object(s) from their original location, there are three categories of looters; subsistence looters, profit looters, and leisure looters. These categories can refer specifically to individuals, multiple individuals – even entire communities in some instances.

Subsistence Looters: Subsistence looting refers to individuals, groups, or a community who partake in looting as a means of survival (Staley, 1993; Matsuda, 1998; Hardy, 2015b). This is typically due to extreme poverty or lack of additional resources/jobs (Kersel, 2007; Hardy, 2015b). When this occurs, looting will take place as a means of providing an income for a family or individual's survival. In recent years subsistence looting has garnered more attention from the archaeological and legal fields. There are a number of studies that document subsistence looting in South America and the Middle East (Matsuda, 1998; Roosevelt, 2008; Yahya, 2008; Contreras, 2010). Research conducted on St. Lawrence Island in the early 1990s provided an in-depth examination of subsistence digging or looting, as it is now know it today (Staley, 1993). Staley discussed how the community of Gambell on St. Lawrence Island engaged in digging not only as a result of monetary need, but as a social, cultural, and educational endeavour (1993). This type of

research demonstrates the complexity of subsistence looting and recognises that it is not necessarily always a simple issue of individuals or communities engaging in illegal looting. Subsistence looting represents a complex issue concerning an ongoing debate of ‘who owns heritage?’ While an important and relevant issue, this thesis will adopt a traditionally legal perspective that cultural heritage belongs to the state or nation in which it resides. This definition will be used for ease of understanding and clarification of national and international preventative measures that may be examined in further chapters. As such, in the context of this thesis, the term subsistence looter(s) will refer specifically to individuals, groups, or communities that engage in (illegal) looting as a means of survival.

Profit Looters: For the purpose of this thesis, the term ‘criminal looter(s)’ refers to any type of gang, or organised group of criminals who systematically loot cultural sites. Tomb raiders, grave robbers, looters, plunderers, gangs, or terrorists are all terms that constitute profit looters (Atwood, 2004). In Italy, there is even a specific term for such an individual – ‘tombaroli’ (Atwood, 2004; Campbell, 2013). These types of looters can be found throughout the world, with the defining feature being that they engage in criminal activities for the purpose of profit. Profit looters typically do the most amount of damage to both the site at large and the antiquities that are present, as they are attempting to find and loot as many objects of value possible (Bowman, 2008). “On closer expectation, one of the boxes in the cupboards was found to contain gold rings *with the finger bones of the dead still attached to them*. Clearly, when the tombs had been looted, the hands and fingers of the long-dead had simply been broken off by the tombaroli to save time” (Watson and Todeschini, 2006, p. 184). Within the body of literature in this field, a significant amount of research has been conducted relating to organised criminal groups within the illicit antiquities field (Chappell and Polk, 2011; Proulx, 2011b; Alderman, 2011). There has been enough significant and relevant research conducted at this time to be able to state that organised crime does play a role in ATNs. This is almost certainly the case in the middle east where there has been evidence that on at least one occasion terrorist organisations such as the Islamic State (Daesh) have profited from ATNs (Daniels and Hanson, 2015). As organised crime, groups constitute an individual or numbers of individuals engage in criminal activity, organised crime will therefore be classified as profit looters. A wide scope of criminals and criminal activity will constitute the term profit looters in the course of this research project.

Leisure Looters: Leisure looters present a somewhat vague category of an individual who is not looting for survival (subsistence looting) but is not associated with a gang or criminal organisation. They can be classified as enthusiasts, collectors, or history buffs, but all share the common trait of having a passion for either the objects they find, or the thrill of the ‘hunt’. A popular type of leisure looter would be metal detectorists, which has become an almost mainstream hobby – a prominent example of its place in public awareness being the BBC television comedy *The Detectorists* (Moss, 2017). While the ultimate motivation of these leisure looters is not necessarily profit, their enthusiasm for searching for and sometimes finding objects can result in as much harm to site or objects as profit looters.

2.5.1.2 Smugglers

Typically, an object is transported from its site or location of origin before being sold or traded, and as such, a smuggler is often required at some point in the process. The role of smuggler can be an individual person or can be taken on by an individual playing multiple roles (Smuggler/Dealer or Looter/Smuggler). This role simply represents an action of illegally or covertly transporting an antiquity. This is a rather traditional role when it comes to illicit networks, as some smugglers engage in the smuggling of many types of objects (weapons, guns, drugs, and people).

2.5.1.3 Middleman

The role of a middleman presents a unique position within the illicit antiquities network. For the purposes of this project, a middleman refers specifically to a criminal actor who helps to connect sellers, buyer, or dealers. Typically, a middleman would be an individual who is familiar with certain types or eras of an object, is well connected within criminal networks. These types of actors are typically involved with contacting looters and brokers, arranging transportation of objects, or selling known illicit objects onto dealers (who willingly engage with illicit antiquities). The middleman represents a vital component of these overall networks as without these types of individuals the bridge between illicit and licit would be broken – or at least more difficult to navigate.

2.5.1.4 Brokers

Arguably one of the most important roles within the network, a broker's main concern is selling (and netting a profit), from antiquities. Brokers represent individuals who specialise in the sale, purchase, or transfer of antiquities. They represent one of the main components of the antiquities market and play an integral role of finding and connecting objects, sellers, and purchasers (Kersel, 2006a; Massy, 2008; Mackenzie and Davis, 2016). They are similar in nature to middlemen although a specific difference is that brokers operate in the grey area of the legal framework of ATNs. When referring to the grey area, this refers to the unregulated aspects of the antiquities market, which allow dubious methods or practices to be considered perfectly normal, and therefore licit. Such practices include purchasing or selling objects without a verified provenance. In Mackenzie and Davis's important study regarding the structure of the illicit antiquities market in Cambodia they described the role of a middleman as the Janus figure (Mackenzie and Davis, 2016). Janus being an Ancient Greek figure who is two-faced, they described the middleman as representing the contrasting sides of the antiquities market (Mackenzie and Davis, 2016). As such, the broker represents an important component of these overall networks as without these types of individuals the bridge between illicit and licit would be broken – or at least more difficult to navigate. While not explicitly illegal in many countries (or even enforced in countries where it is illegal), the market does not regulate itself concerning provenance, and as a result, dealers are able at times to purchase and sell objects sans provenance (Hardy, 2016). Brokers are then able to operate in the legal antiquities market, while (often knowingly) benefiting from objects that are illicit in nature (Mackenzie, 2005; Mackenzie and Green, 2007).

2.5.1.5 Purchasers

Auction Houses: The antiquities market would not be what it is without the presence of auction houses (Ulph et al., 2012; Graham, 2014; C Tsirogiannis, 2016c). From major international houses like Sotheby's, Christie's, and Bonhams, to smaller national or local auction houses these institutions enable antiquities of every type to be sold and purchased in an efficient and profitable manner. Many antiquities in the course of their existence have passed, or will pass through some type of auction house. They account for one of the most common forms of transaction in the antiquities market, besides perhaps antiquities

fairs or online transactions (Hardy, 2016). There are a number of instances where auction houses have (either knowingly or unknowingly) facilitated the sale or purchase of an illicit antiquity (C Tsirogiannis, 2016a).

Collectors: Private collectors are ultimately the one of the main drivers of the antiquities market (Gill and Chippindale, 1993; Mackenzie, 2011; Polk, 2014). As established in an earlier section, most experts now agree that demand drives the illicit antiquities market (and indeed the legal antiquities market). As with any market there are trends within the antiquities market – some types of antiquities at certain times are more popular, resulting in an increase in demand. Collectors help to determine these trends and the success of the antiquities market by the simple act of engaging in purchasing objects. For example, Cycladic figures were highly sought after in the 1990s, which resulted in an increase in Cycladic figures appearing on the antiquities market (Gill and Chippindale, 1995). The market demand of private collectors and their willingness to engage in suspicious or illicit objects are part of what allows ATNs to continue to exist (Alder and Polk, 2005; Chappell and Polk, 2011; Hardy, 2016; Mackenzie and Yates, 2016a).

Museums: The majority of a museum’s collection is unseen. Consider the Metropolitan Museum of Art in New York City. On display at any given time is only a small fraction of their entire collection: “Most museums show between 2 and 4 percent of a collection” (Fabrikant, 2009). Museums usually acquire objects through one of two ways: they either purchase or they are given it – items are bequeathed or donated by museum patrons. Both of these acquisition practices have the potential of supporting ATNs. The Met is a perfect example of a museum that historically has engaged in unethical acquisition practices as they have done so on a number of occasions (Vogel, 1993; Watson and Todeschini, 2006; Felch and Frammolino, 2011; Mashberg and Blumenthal, 2013; Anon, 2018e). Most famously the Met was involved with the purchase of the Euphronios Krater for 1 million dollars in 1972 (Watson and Todeschini, 2006). The krater was proven to have been illegally looted and trafficked following the trial of Giacomo Medici and in 2006 the Euphronios krater was returned to Italy (Watson and Todeschini, 2006). A modern example of donating an illicit antiquity includes the handiwork of Subhash Kapoor, a New York City antiquities dealer who is currently on trial in India for organising the looting and trafficking of statues in the state of Tamil Nadu. Kapoor donated an object to the Honolulu museum that was later found to have been looted; the museum fully cooperated with

authorities to return the object (Kelleher, 2015). Museums have long been central to the issue of illicit antiquities – especially in the context of repatriation of objects – but poor acquisition practices help to keep it relevant in modern discussions.

2.5.2 Source, Transit, and Market Countries

The general process of how the network operates has been established, and now the three phases of the network in the context of the countries that facilitate them will be considered. Within ATNs, the concept of market countries and source countries provide valuable information as to how the antiquities market operates. “It is one of the ironies of the cultural property trade that the financially poor or developing countries are the ‘art rich’, ‘supply’, or ‘source’ countries, while the wealthy, developed countries are most often the ‘art poor’, ‘market’ ‘states’.” (Murphy, 1994, p. 288).

A market country refers to a country in which a large number of antiquities are sold – usually due to a high level of auction houses, galleries, and museums (Merryman, 1986). This would include countries such as the United States, the United Kingdom, Switzerland, France, Germany, Italy, China, Japan, and Australia (Merryman, 1986; Alder and Polk, 2002; Ulph et al., 2012).

A source country refers to countries in which a large portion of antiquities originates (Merryman, 1986; Campbell, 2013). This would include countries which have significant archaeological remains such as the majority of the Middle East (Iran, Iraq, Syria, Egypt, Lebanon etc.), Greece, India, China, Cambodia, Thailand, Peru, Bolivia, and Guatemala (Merryman, 1986; Ulph et al., 2012). Additionally, some countries operate as both a source and market country (Alder & Polk, 2002; Campbell, 2013; Mackenzie, 2005). Australia, the United States, the United Kingdom, and Italy all operate in both capacities, with significant art sales and purchases (Bland, 2009; Mackenzie, 2005)

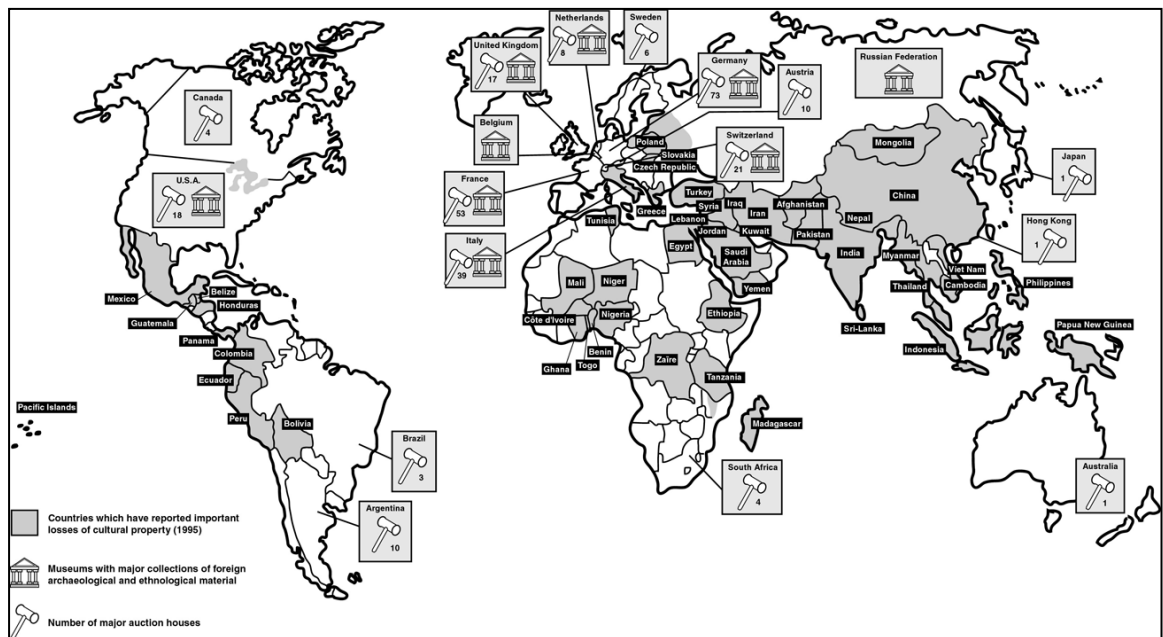


Fig. 2-2: 'The International Art Market' in 1997 (Askerud et al., 2000). Permission to reproduce this figure has been granted by UNESCO.

2.5.2.1 Source Countries

Countries with significant cultural heritage sites or objects constitute source countries. Often this will include areas, regions, or nations which are historically relevant or important in the development of civilisations or populations (Matsuda, 1998; Kersel, 2011; Ulph et al., 2012; Saad El-Gendi, 2012; Hardy, 2015b). Typically, source countries are economically disadvantaged nations (Matsuda, 1998; Kersel, 2011; Saad El-Gendi, 2012; Hardy, 2015b). As a result of volume or importance of their respective cultural heritage, many source countries have legislation or policy to protect objects from leaving the country. Many of these laws date back decades, or even centuries, demonstrating a historical awareness of the importance of these objects, and the demand for them (Gerstenblith, 2008; Ulph et al., 2012).

2.5.2.2 Transit Countries

These countries typically operate in one of two ways: first they either act as a means of quite literally transporting the object from one location to another (via one, or a number of countries), or second: they act as a means of creating a sense of legitimacy or means of transitioning an object from illicit to legal, via being transported through different ports or countries.

Transit countries are countries that operate mainly as a means of transit for these objects. This can have one of two meanings: the first being that the object is quite literally transported through or via this country; the second refers to the use of a transit country as a means of creating or establishing legitimacy for the object. As was discussed in the following section, a large component of antiquities trafficking centres on the transition of an object from being illicit, to a legal antiquity.

2.5.2.3 Market Countries

Market countries are, as the name implies, those countries where the antiquities market is most prominent and active. This usually correlates with wealthy nations as the collecting and purchasing of large volumes or high valued objects is conducted by wealthier individuals:

Nonetheless, the main destination countries are fundamentally the most economically powerful countries. The scale of the illicit market can be assumed to have some correlation with the scale of the ostensibly legal market and 83% of the global art trade is conducted in three countries – the USA (39%), China (22%) and the UK (22%) [TEFAF, 2015]. To be more precise, 83% of the wealth in the market was exchanged in those three trading hubs. The commodities, the sellers and the buyers may be from – and indeed may be – elsewhere. (Hardy, 2016, p. 7)

Market countries represent nations where the art and antiquities market has long been established and prevalent (Kersel, 2006a; Proulx, 2011b; Ulph et al., 2012; Campbell, 2013). The ability to purchase such leisure items has long been a tradition that only the wealthy could afford (Alder and Polk, 2005). This pastime continues to be an activity that those with resources are able to engage in, and as a result, many of the market countries are located in nations that either attract wealthy collectors, or where wealthy collectors reside (Brodie et al., 2006; Ulph et al., 2012; Mackenzie and Yates, 2016a).

2.5.2.4 Combination Countries

These descriptors are used as general categories in which countries fall but are by no means static or set characterisations. Some countries operate as both source *and* market countries, where a nation may have extensive archaeological material as well as a healthy art and antiquities market as part of its economic makeup. The United States, for example,

have large sources of Native or Indigenous American objects or materials as well as one of the largest art and antiquities markets in the world – New York City (Merryman, 1986)

For example, there is a strong market abroad for works of North American Indian cultures, even though Canada and the United States are thought of primarily as market nations. Conversely, there are wealthy collectors of foreign as well as national cultural objects in most source nations.] Demand in the market nation encourages export from source nations. When, as is often (but not always) the case, the source nation is relatively poor and the market nation wealthy, an unrestricted market will encourage the net export of cultural property. (Merryman, 1986, p. 832)

Italy, as both a source and market country, has extremely strict regulations regarding the preservation and protection of cultural heritage. It also provides an excellent example to demonstrate the difficulties that both source and market countries face in working to prevent or reduce the illicit antiquities network. This is because Italy views their culture as a source of revenue. This is not only due to the art and antiquities market, but also because of an extremely important economic resource of tourism. As a source country, Italy takes the preservation of cultural heritage (including antiquities) so seriously that they have their own dedicated force within the Carabinieri, assigned to the theft and looting of art and antiquities. They are considered one of few expert forces in the world in this field. Just recently (2016) they were assigned as the Blue Shield task force, a branch of UNESCO tasked with actively helping to protect UNESCO world heritage sites in times of conflict (UN News Centre, 2016). As a market country, Italy is an excellent example of a country that also places significant value on regulations and restrictions on the movement and purchasing of antiquities within their borders. Italy is one of the few countries that have categorised significant works of art that represent the national heritage of Italy, and as such cannot leave the country. This is to ensure that many of Italy's most famous works of art do not leave their borders. Individuals can purchase and sell these items as long as they remain in Italy. Additionally, Italy has worked hard to repatriate many antiquities that have been proven to be looted (Park, 2002).

2.5.3 Provenance

A fundamental factor for why the antiquities market is unregulated lies in the issue of provenance. Any illicit market is based around an illegal or unethical object or good that is desired or necessary for a particular need or desire. Typically, these goods are either legal

or illegal – either being illicit in nature or representing legal objects that were created or obtained illegally (Alder and Polk, 2005; Brodie, 2006; Massy, 2008). For example, drugs such as heroin or cocaine are universally accepted as illicit goods. Weapons present a more complicated issue, as they can be legal goods (depending upon the use and geographic location) or illicit if owned or created by illicit actors. Antiquities are more similar to the second example involving weapons, except for the crucial fact that antiquities are not man-made objects, but naturally found resources that are discovered (Cameron, 1994; Willett, 2016). The nature of antiquities allows for this market to remain willingly unregulated, as a ‘master-list’ of every antiquity does not exist, nor a complete record of everyone who has owned or purchased an antiquity (Bowman, 2008). This aspect of antiquities allows many illicit antiquities to be claimed as ‘lost treasures’, forgotten objects from distant relatives (Ulph et al., 2012). This does happen on occasion – as with popular shows such as *The Antiques Road Show*, or *Storage Wars* – people stumble upon lost or forgotten masterpieces (Anon, 2017; Reppion, 2018). This also allows individuals to take advantage of the antiquities market by passing off illicit object as simply unprovenanced heirlooms (or something similar) (Renfrew, 2000; Ulph et al., 2012; Hardy, 2016). The result being that the market can continue to operate without requiring or enforcing the need for objects to have a proper or validated provenance (Polk, 2000).

2.5.4 Grey Market

Markets can traditionally be understood to operate in either a legal or an illegal capacity. When purchasing legal goods, it is expected that the items you have bought were legal in origin, and all further exchanges of the goods were conducted according to the laws and regulations of the country. In contrast, when purchasing goods from an illegal or ‘black’ market it is implicit that the items were most likely illegally created or obtained. In other forms of illicit networks, there typically exists both a legal market and an illegal market to obtain items – dual networks that compete to control the goods that enter the market. This explanation may seem overly simple in the field of criminology, but this distinction is important to understanding one of the most significant difficulties in studying the regulation of the antiquities (licit and illicit) market. This is because the illicit antiquities market operates as a grey market; in both a legal and illegal capacity (Mackenzie, 2011; Mackenzie and Yates, 2016b; Casey, 2017) (Polk, 2000; Bowman, 2008; Massy, 2008; Proulx, 2011b; Proulx, 2011a). There is no ‘black’ antiquities market (or at least none of

any significance), but simply the antiquities market – which sells both legal and illegal objects

In a word, the market for antiquities is half illicit, half licit. While the peasant tomb robber in China may be executed by the state for his role in the initial acts which result in the availability of the artefacts on the market, the ultimate purchaser of Tan or Han Dynasty material at Sotheby's or Christie's [...] does so openly and without fear of arrest. (Polk, 2000, p. 3)

The antiquities network represents a network full of contradiction between licit and illicit and somehow manages to present itself to the world with a fairly untarnished appearance... There is illegality at each stage of the [network] (at source, in transit, and in terms of trade and collection in market countries). However, at all stages of transaction there are deviance-normalizing and neutralizing engagements with the issues exercised by the actors and constituencies involved. (Mackenzie & Yates, 2016, pp. 70-86)

As such, the antiquities market can be considered a poorly regulated market (Mackenzie, 2005; Bland, 2009; Kersel, 2011; Manacorda and Chappell, 2011; Gallagher, 2017). This is because it is common practice for illicit antiquities to 'legally' appear in auction houses and galleries. As antiquities are not criminal in nature, the antiquities market offers a perfectly legal marketplace for the selling or purchasing of antiquities (Bowman, 2008). As the marketplace (usually) faced no legal or actively enforced policies, it operates as an unregulated market – allowing illicit objects to enter the market freely, and often without consequences (Mackenzie, 2005; Bland, 2009; Kersel, 2011; Gallagher, 2017). The result is a market that has developed to allow a lack of provenance from deterring people from purchasing an object. Because this is such a common occurrence, it has led to an easy method of disposing looted and trafficked antiquities on the antiquities market. With this standard in place, major auction houses and gallery dealers, who work within the international art market, are then disinclined to regulate the market and demand proper documentation. As these organisations profit from these objects with or without the necessary documentation, they do not feel the need to enforce certification requirements for an object that was obtained illegally.

2.5.5 Illicit Market/Network

The antiquities market has been discussed as a grey market, but this discussion has not gone into great length concerning antiquities trafficking operating as an illicit network or

criminal market. There have been a number of articles which focus on this topic (Polk, 2000; Kersel, 2006b; Alderman, 2011), but Peter Campbell (2013) provides an empirical study of commonalities between the illicit antiquities trade and other criminal networks. He tests his hypothesis that the illicit antiquities trade is a transnational criminal network in his important 2013 paper. By comparing known aspects of the antiquities trade as well as organisational and structural elements to criminal networks, he is able to conclude that the antiquities trade does in fact operate as an illicit network (2013). He also discusses the need for further research into “examining the organisation structure” (Campbell, 2013, p. 138).

2.5.6 Demand Drives the Market

A central theme that can be agreed upon at this point is that demand is the driving factor for this market (Alder and Polk, 2005; Lundén, 2012; Kersel, 2012). With markets (legal or illicit), the market can be driven one of two ways: by supply or by demand (Davis, 2011; Mackenzie, 2011). In the case of antiquities, a supply driven market would mean that the objects would be looted regardless of if there were a demand for them – meaning that the market would accept any or all objects and be able to sell or transfer them. Whereas a demand-driven market indicates that the supply is driven or dictated by the market demand. It is known that the antiquities market operates currently as a demand driven market (Polk, 2000; Kersel, 2007; Chappell and Polk, 2011; Kersel, 2012; Brodie, 2015e; Brodie, 2015b; Gallagher, 2017). This is a result of research that studies market trends in relation to reports of looting, such as Gill and Chippindale’s (1993) important study concerning the market for Cycladic figurines. Further studies include Hardy’s ‘loot-to-order’ paper which examines the reports of objects being looted based on specific requests (2015). The example of Subhash Kapoor’s looting of the Dancing Shiva (which ultimately ended up being purchased by the National Gallery of Australia), was looted as a result of his request regarding a particular style of antiquity that was popular on the market at the time (Felch, 2013a).

2.5.7 Relevance

When looting occurs, the loss of the context in which an object is found is irreplaceable in an archaeological sense (Brodie, 2006; Lobay, 2009). Without such context, the object’s

purpose or role cannot be fully understood or proven (Brodie, 2006). “Since the middle of the nineteenth century it has been realised that archaeology, the study of the human past through its material remains, permits the reconstruction of the past of humankind in every region on earth” (Renfrew, 2000, p. 19). An archaeologist’s purpose is to gain a better understanding of the history of humanity, through the close research and analysis of the only record that is left: cultural heritage – including human remains, objects, or buildings/monuments. The loss of the object and context represents an additional and perhaps more universally relevant loss: the loss of a non-renewable resource.

For all the publicity that illicit antiquities receive, some may ask why the looting and trafficking of antiquities merits such attention or resources. In contrast to drug or weapons trafficking, it is unlikely that (besides disputes between looting gangs) the actual object of an antiquity is going to directly harm an individual. A similar argument can be made for wildlife crimes – why should anyone care about the death of an animal hundreds of miles removed from where they live? As with the case of wildlife crime, illicit antiquities are a non-renewable resource (Cameron, 1994). Not only are the objects themselves irreplaceable, but both wildlife and antiquities present the possibility of an economic resource for local communities. Subsistence crime – or crime that is committed as a means of survival – are typically a result of poor social-economic conditions within a region. When a local and native resource for the community is then exploited with no regulation, it represents a wasted opportunity for the community (Brodie, 2010; Saad El-Gendi, 2012). “Most buyers of antiquities are not directly involved in the illicit trade, but their demand for objects does stimulate theft, grave-looting, and illegal exportation” (Conklin, 1994, p. 188). Regardless of how the object was looted, the demand for these objects clearly drives the market, and results in the loss of culture and often, a loss of a potential economic resource for individuals or communities.

2.6 Conclusion

This chapter has sought to provide a working understanding of the illicit antiquities network as this term is employed to encompass the stages, actors, processes and settings of ATNs. The field of research concerned with illicit antiquities looting is made up by a wide variety of academics, experts, enthusiasts and members of the market itself, and as such the body of work for this field is quite diverse. What has been lacking though is serious

criminological research, into what is undoubtedly a criminal network or market. Polk (2003) has expressed amazement that the field of criminology has not been more attracted to the issue of illicit antiquities, as it is ripe for criminological research and perspectives. While there has been some criminological work conducted by experts in this field such as Simon Mackenzie, Kenneth Polk, Edgar Tilijhuis, and Blyth Bowman Proulx, there is still much work that needs to be conducted to better understand how this network operates. As this thesis will demonstrate, there is a specific need for crime prevention research, especially targeted at elements of the network; this could prove extremely beneficial to helping combat ATNs. This research project seeks to provide and establish a basic understanding of how these networks operate, but also significant crime prevention strategies to be considered. Attention will now turn to the theoretical framework for this research project, to gain a better understanding and appreciation for how this thesis will accomplish these goals.

3. Theoretical Framework

3.1 Introduction

This chapter introduces the main theoretical frameworks which will be used in analysing ATNs. Principally, and to fill the gap identified in criminological work in this area, it applies crime prevention/disruption theories to ATNs, beginning with Situational Crime Prevention. The SCP framework has its roots as a policing tool, intended to help officers analyse and determine potential crime prevention techniques and ultimately, strategies (Clarke, 1995). It has grown to become a fundamental aspect of crime prevention theory, with a wide field of research to its name (Cornish and Clarke, 2003; Clarke, 2005; Freilich and Newman, 2017). The goal of this research project is to consider and apply SCP to ATNs in order to better understand how antiquities trafficking functions, and to consider potential crime prevention techniques or strategies. In the course of this chapter the evolution of SCP as a framework will be examined while also considering a method of analysis closely associated with SCP – Crime Script Analysis.

The discussion will first consider the original format of SCP, which included sixteen techniques, followed by an analysis of how this framework resulted in the twenty-five techniques of SCP that are currently in use (Clarke, 1995; Cornish and Clarke, 2003). It will then further examine how the framework functions, and consider successful applications of SCP to criminal activities and illicit networks alike. The following section will be focused on CSA, the main method of analysis for this research project, and one that is commonly used in conjunction with SCP. A thorough exploration of how crime scripts operate and are used will be conducted, alongside discussion of prior research which has used CSA. This chapter will ultimately provide the necessary level of understanding and context for both the theory and method of analysis used within this thesis.

3.2 Evolution of Situational Crime Prevention Theory

SCP is a criminological framework for targeting and determining effective interventions or suggestions to help reduce or eliminate specialized types of crime (Clarke, 1995; Smith and Cornish, 2003). This framework draws on theory from Rational Choice Theory, Crime Pattern Theory, and Routine Activities Theory (Clarke, 1997b; Bullock et al., 2013).

The basic premise of SCP is to focus on the opportunities that allow a crime to be committed, and to determine the most effective means of reducing these opportunities (Clarke, 1980; Clarke, 1983; Clarke, 1995; Clarke, 1997b; Clarke, 2009). The SCP framework falls within environmental crime prevention/criminology which is a field of crime prevention that is made up of a number of different theories that place focus not on the criminal, but on the environment or setting of the crime itself (Wortley and Mazerolle, 2008). Traditional crime prevention tends to focus on the criminal and seeks to understand what motivates the offender (Bullock et al., 2013). Environmental criminologists study the circumstances of a crime, and with various theories, attempt to reduce or eliminate the crime from occurring:

Environmental Criminologists look for crime patterns and seek to explain them in terms of environmental influences. From these explanations they derive rules that enable predictions to be made about emerging crime problems, and that ultimately inform the development of strategies that might be employed to prevent crime. (R. Wortley and Mazerolle, 2008, p. 1)

The 1970s was when the first consideration of what is now known to be environmental crime prevention was presented by two separate researchers: C. Ray Jeffery and Oscar Newman (Wortley and Mazerolle, 2008). These authors, a criminologist and architect respectively, considered crime prevention through direct changes to the physical environment where crime takes place (Wortley and Mazerolle, 2008). From this general idea of allowing the physical space to act as preventative measure against crime, a new branch of crime prevention theory developed.

SCP was initially developed from research conducted by the Home Office Research Unit in the 1970s (Clarke, 1995; Clarke, 1997b). Ronald V. Clarke often initially describes SCP as a 'perspective' rather than a theory, as it was originally designed as a framework within which a series of theories (Rational choice, Routine Activities, and Crime Pattern Theory) could operate (Clarke, 1980; Clarke, 1983; Clarke, 1995). It was developed as a means of directly influencing policy and procedure within policing and crime prevention methods (Ronald V. Clarke, 1995, 1997). It was further developed into the framework that it is known as today, and is defined as follows:

Situational prevention comprises opportunity-reducing measures that (1) are directed at highly specific forms of crime, (2) involve the management, design or manipulation of the immediate environment in as systematic and permanent way as possible, (3) make crime more difficult and risky, or less rewarding and excusable as judged by a wide range of offenders (Clarke, 1997b, p. 51).

This chapter will begin by discussing the different theories that influence SCP, and then consider the progression of SCP from its original format that was introduced, to the modern form of the theory that is used today. Only a basic overview of relevant theories will initially take place, as their use within the framework of SCP will be discussed in further detail later.

3.2.1 Framework

SCP was originally created to function as a framework, with the intention of creating a crime prevention framework that was accessible and efficient for police or law enforcement to use to determine effective preventative measures or techniques (Clarke, 1980; Cornish, 1994a; Clarke, 1995; Lee, 2010). As a framework, SCP draws upon three prominent theories, which include rational choice theory, routine activities theory, and crime pattern theory (Clarke, 1992; Clarke, 1995; Bullock et al., 2013).

3.2.1.1 Rational Choice

Rational Choice Theory is founded on the premise that the offender is a rational actor, whose actions and decisions are made to benefit oneself (Fennelly and Kitteringham, 2012). It consists of six core elements:

- Criminal behaviour is purposive
- Criminal behaviour is rational
- Criminal decision-making is crime-specific
- Criminal choices fall into two broad groups: ‘involvement’ and ‘event’ decisions.
- There are separate stages of involvement

- Criminal events unfold in a sequence of stages and decisions
(Cornish & Clarke, 2002, p. 24)

At the time that rational choice theory was proposed it developed and informed, what was described as the ‘situational perspective’, which evolved into SCP (Clarke and Felson, 2004). It was originally developed out of economic theory, which is apparent in the assumption that the criminal actor (as a rational actor) seeks to profit or gain in some capacity.

Rational choice theory also presented the concept of ‘decision making’ or ‘choice’ models, which were precursors to crime scripts – which Cornish would later develop in 1994. The inclusion of choice models was an attempt to demonstrate the inaccurate claim that the situational perspective merely displaced crime instead of preventing or deterring (Clarke and Felson, 2004). The creating of a choice model helped to demonstrate the thought and decision-making process of an offender and provide more analysis into why an actor did or did not engaged in a crime (Ronald V. Clarke & Felson, 2008). As a crime prevention theory, rational choice theory then assumes that an individual will engage in a criminal activity as a means of profiting from a situation or item if a satiable opportunity is present (Ronald V. Clarke & Felson, 2008). A suitable opportunity is individually determined and is dependent on the individual weighing the risks and rewards to the situation. This essentially represents an internal cost-benefit analysis of the situation and attempts to determine if the reward outweighs the risk for the individual actor. The original conception of SCP details prevention techniques that could be implemented to deter or prevent individuals from engaging in criminal activity (Clarke, 1980; Clarke, 1995). Essentially, these crime prevention techniques make it harder to obtain a criminal target, increase the risks associated with gaining a criminal target, and reduce the reward the criminal target will give the offender.

3.2.1.2 Routine Activities Theory

Additionally, SCP theory makes use of routine activity theory within its theoretical framework. Routine activity theory can be considered a sub-theory of rational choice theory, as it operates on the premise that the actor is a rational being who seeks to gain or benefit from his/her actions (Clarke and Felson, 2004). Routine activities theory’s main

premise is that three conditions which must be present for a crime to occur: lack of a suitable guardian, a suitable target, and a likely offender (Clarke and Felson, 2004).

In this context ‘guardian’ refers to an individual or physical preventative measure (i.e. a residence that does not lock the doors or windows, or an unattended store or items). More simply put, a lack of suitable guardian would be the absence of whomever/whatever has guardianship of the target at hand, or any individual if present, who would act as a likely deterrent. A suitable target can refer to either a person or an object. The likely offender is an individual who determines exactly what would constitute ‘suitable’ in this situation. The likely offender is an individual who is likely to take advantage of the lack of a suitable guardian and the suitable target. They make decisions as to the suitability of the target - depending on how the target meets their current needs/wants. This criminological theory states that these three elements are necessary for a crime to occur, and factors significantly into SCP, as it places focus on necessary elements of the crime as a means of preventing or deterring the actor from engaging in the criminal activity.

3.2.1.3 Crime Pattern Theory

Crime pattern theory focuses on determining patterns of crime, through everyday decisions and routines of individuals engaging in criminal activity (Brantingham and Brantingham, 2013). It is largely focused on geographical or physical crime patterns – such as hotspots. This theory is particularly useful in examining displacement or adaptation to crime prevention techniques. It can be applied to individuals, networks of individuals, or aggregations of individuals – with specific guidelines of each level of analysis (Wortley and Mazerolle, 2008). The following demonstrates the different rules that guide crime pattern theory:

- As individuals move through a series of activities, they make decisions. When activities are repeated frequently, the decision process becomes regularized. This regularization creates an abstract guiding template. For decisions to commit a crime this is called a crime template.
- Most people do not function as individuals, but have a network of family, friends, and acquaintances. These linkages have varying attributes and influence the decisions of others in the network.
- When individuals are making their decisions independently, individual decision processes and crime templates can be treated in a summative

fashion, that is, average or typical patterns can be determined by combining the patterns of individuals.

- Individuals or networks of individuals commit crimes when there is a triggering event and a process by which an individual can locate a target or victim that fits within a crime template. Criminal actions change the bank of accumulated experience and alter future actions.
- Individuals have a range of routine daily activities. Usually these occur in different notes of activity such as home, work, school, shopping, entertainment, or time with friends, and along the normal pathways between these nodes.
- People who commit crimes have normal spatio-temporal movement patterns like everyone else. The likely location for a crime is near this normal activity and awareness space.

(Brantingham and Brantingham, 2013, pp. 80-88)

Within SCP, crime pattern theory works in tandem with routine activities theory to highlight opportunities that actors may encounter (Brantingham and Brantingham, 2013). Not only does crime pattern theory relate to physical patterns of crime, it can also be extremely valuable in the context of patterns of social and personal relationships. This aspect will prove to be important when considering ATNs, as an understanding of the individuals and relationships which make up a network will prove valuable to preventing or disrupting a network from operating.

3.2.2 Original Crime Prevention Techniques

The original format and structure of SCP theory placed more focus on the prevention of property crimes. (Clarke, 1980; Clarke, 1983; Clarke, 1992; Clarke, 1995). This is evident when considering the original twelve techniques of situational prevention (see Figure 3-1, below). Following this original format, at what was referred to at the time as the ‘situational perspective’, the use of this perspective was implemented in studies conducted at the UK Home Office, where the perspective developed further. By 1997, Cornish and Clarke presented the now updated sixteen opportunity reducing techniques, which had expanded the situational categories to include: remove excuses (Clarke, 1997b). This indicated a move away from purely property types of crimes and demonstrated the growth and potential depth of these techniques to address a wide variety of crimes.

THE TWELVE TECHNIQUES OF SITUATIONAL PREVENTION		
INCREASING EFFORT	INCREASING RISKS	REDUCING THE REWARDS
<i>Target Hardening</i> Steering locks Bandit screens Slug rejecter device Vandal-proofing Toughened glass Tamper-proof seals	<i>Entry/Exit Screening</i> Border searches Baggage screening Automatic ticket gates Merchandise tags Library tags EPoS	<i>Target Removal</i> Removable car radio Exact change fares Cash reduction Remove coin meters Phonecards Pay by Check
<i>Access Control</i> Locked gates Fenced yards Parking lot barriers Entryphones ID badges PIN numbers	<i>Formal Surveillance</i> Police patrols Security guards Informant hotlines Burglar alarms Red light cameras Curfew decals	<i>Identifying Property</i> Cattle branding Property marking Vehicle licensing Vehicle parts marking PIN for car radios LOJACK
<i>Deflecting Offenders</i> Bus stop placement Tavern location Street closures Graffiti board Litter bins Spittoons	<i>Surveillance by Employees</i> Bus conductors Park attendants Concierges Pay phone location Inventive schemes CCTV systems	<i>Removing Inducements</i> 'Weapons effect' Graffiti cleaning Rapid repair Plywood road signs Gender-neutral phone lists Park Camarro off street
<i>Controlling facilitators</i> Spray-can sales Gun control Credit card photo Ignition interlock Server intervention Caller-ID	<i>Natural Surveillance</i> Pruning hedges "Eyes on the Street" Lighting bank interiors Street lighting Defensible space Neighborhood Watch	<i>Rule Setting</i> Drug-free school zone Public park regulations Customs declaration Income tax returns Hotel registration Library check-out

Fig. 3-1: From 'Situational Crime Prevention: Successful Case Studies, 2nd edition', edited by Ronald V. Clarke. Copyright © 1997 by Lynne Rienner Publishers, Inc. Used with permission of the publisher.

By this point SCP had gained attention as a viable crime prevention perspective, and even had a number of successful case studies to its name (Clarke, 1992). Then, in 2001, Richard Worley offered a critique of these sixteen techniques which ultimately resulted in the twenty-five techniques of SCP framework which most are familiar with today.

SIXTEEN OPPORTUNITY-REDUCING TECHNIQUES

Increasing Perceived Effort	Increasing Perceived Risks	Reducing Anticipated Rewards	Removing Excuses
<p><i>1. Target hardening</i></p> <p>Slug rejecter device Steering locks Bandit screens</p>	<p><i>5. Entry/exit screening</i></p> <p>Automatic ticket gates Baggage screening Merchandise tags</p>	<p><i>9. Target removal</i></p> <p>Removable car radio Women's refuges Phonecard</p>	<p><i>13. Rule setting</i></p> <p>Customs declaration Harassment codes Hotel registration</p>
<p><i>2. Access control</i></p> <p>Parking lot barriers Fenced yards Entry phones</p>	<p><i>6. Formal surveillance</i></p> <p>Red light cameras Burglar alarms Security guards</p>	<p><i>10. Identifying property</i></p> <p>Property marking Vehicle licensing Cattle branding</p>	<p><i>14. Stimulating conscience</i></p> <p>Roadside speedometers "Shoplifting is stealing" "Idiots drink and drive"</p>
<p><i>3. Deflecting offenders</i></p> <p>Bus stop placement Tavern location Street closures</p>	<p><i>7. Surveillance by employees</i></p> <p>Pay phone location Park attendants CCTV systems</p>	<p><i>11. Reducing temptation</i></p> <p>Gender-neutral listings Off-street parking Rapid repair</p>	<p><i>15. Controlling disinhibitors</i></p> <p>Drinking-age laws Ignition interlock V-chip</p>
<p><i>4. Controlling facilitators</i></p> <p>Credit card photo Gun controls Caller-ID</p>	<p><i>8. Natural surveillance</i></p> <p>Defensible space Street lighting Cab driver I.D.</p>	<p><i>12. Denying benefits</i></p> <p>Ink merchandise tags PIN for car radios Graffiti cleaning</p>	<p><i>16. Facilitating compliance</i></p> <p>Easy library checkout Public lavatories Trash bins</p>

Fig: 3-2: From *Situational Crime Prevention: Successful Case Studies*, 2nd edition, edited by Ronald V. Clarke. Copyright © 1997 by Lynne Rienner Publishers, Inc. Used with permission of the publisher.

3.2.3 Wortley's Critique

Richard Wortley's paper *A Classification of Techniques for Controlling Situational Precipitators of Crime* (2001), was a significant critique of SCP, but also provided additional comments and considerations to the theory. His previous paper, *A Two-Stage Model of Situational Crime Prevention* paper outlines what he considered a significant gap in the theoretical approach of SCP and offered his own two-model system on which he places specific emphasis upon precipitating influences on criminal behaviour (Wortley, 1998). His two-model system consists of 'regulating factors' and 'precipitating factors', which are both necessary for a crime to occur. He argues that there can be situationally-generated motivation which can influence an individual's decision to partake in criminal activities and lays out four categories of precipitating influences: prompts, pressures, permissions, and provocations (Wortley, 1998). A later paper built upon previous criticism and considerations, resulting in additional techniques to be considered. (Wortley, 2001)

- Prompts: “Situations may present salient cues to potential offenders that prompt criminal behaviour.”
 - Pressures: “Situations may exert social pressure on individuals to perform inappropriate behaviour.”
 - Permissions: “Situational factors can help distort moral reasoning processes and so permit individuals to engage in normally proscribed behaviour.”
 - Provocations: “Situations can induce stress and provoke an antisocial response, particularly some form of aggression.”
- (Wortley, 2001, pp. 7-23)

Cornish and Clarke response to Wortley’s critique was a renewed format of SCP that included twenty-five crime prevention techniques, including techniques from Worley’s own model (Cornish and Clarke, 2003). This updated version of the techniques of SCP addressed the theoretical difficulties of social and external precipitating influences on the opportunity structure, as well as provided additional methods of analysis to determine the opportunity structures of criminal activities – CSA (Cornish and Clarke, 2003). The popularity and success of SCP is responsible for such a significant shift for the original structure. As many worked to adopt the framework to different types of crime, it became apparent that additional factors must be considered. In their response to Wortley’s critique, the authors discuss the ‘default’ setting of SCP. In this ‘setting’, the framework is most effective for the most common types of crime. They go into further detail on the specifics on tailoring SCP to be more effective for particular types of crime (Cornish and Clarke, 2003).

3.2.4 25 Techniques of Situational Crime Prevention

The modern form of SCP will now be discussed. The current twenty-five crime prevention technique model has been much changed from its original format of sixteen environmental-based crime prevention techniques. Over the past ten years or so, SCP practice has continued to develop within an overall rational choice framework, but some of its specific working assumptions about the nature of crimes and offenders have subtly changed in response to an increase in the range of crimes being tackled and in associated preventive techniques (Wortley, 2001).

TWENTY FIVE TECHNIQUES OF SITUATIONAL PREVENTION				
Increase the Effort	Increase the Risks	Reduce the Rewards	Reduce Provocations	Remove Excuses
1. Target harden <ul style="list-style-type: none"> Steering column locks and immobilisers Anti-robbery screens Tamper-proof packaging 	6. Extend guardianship <ul style="list-style-type: none"> Take routine precautions: go out in group at night, leave signs of occupancy, carry phone "Cocoon" neighborhood watch 	11. Conceal targets <ul style="list-style-type: none"> Off-street parking Gender-neutral phone directories Unmarked bullion trucks 	16. Reduce frustrations and stress <ul style="list-style-type: none"> Efficient queues and polite service Expanded seating Soothing music/muted lights 	21. Set rules <ul style="list-style-type: none"> Rental agreements Harassment codes Hotel registration
2. Control access to facilities <ul style="list-style-type: none"> Entry phones Electronic card access Baggage screening 	7. Assist natural surveillance <ul style="list-style-type: none"> Improved street lighting Defensible space design Support whistleblowers 	12. Remove targets <ul style="list-style-type: none"> Removable car radio Women's refuges Pre-paid cards for pay phones 	17. Avoid disputes <ul style="list-style-type: none"> Separate enclosures for rival soccer fans Reduce crowding in pubs Fixed cab fares 	22. Post instructions <ul style="list-style-type: none"> "No Parking" "Private Property" "Extinguish camp fires"
3. Screen exits <ul style="list-style-type: none"> Ticket needed for exit Export documents Electronic merchandise tags 	8. Reduce anonymity <ul style="list-style-type: none"> Taxi driver IDs "How's my driving?" decals School uniforms 	13. Identify property <ul style="list-style-type: none"> Property marking Vehicle licensing and parts marking Cattle branding 	18. Reduce emotional arousal <ul style="list-style-type: none"> Controls on violent pornography Enforce good behavior on soccer field Prohibit racial slurs 	23. Alert conscience <ul style="list-style-type: none"> Roadside speed display boards Signatures for customs declarations "Shoplifting is stealing"
4. Deflect offenders <ul style="list-style-type: none"> Street closures Separate bathrooms for women Disperse pubs 	9. Utilize place managers <ul style="list-style-type: none"> CCTV for double-deck buses Two clerks for convenience stores Reward vigilance 	14. Disrupt markets <ul style="list-style-type: none"> Monitor pawn shops Controls on classified ads License street vendors 	19. Neutralize peer pressure <ul style="list-style-type: none"> "Idiots drink and drive" "It's OK to say No" Disperse troublemakers at school 	24. Assist compliance <ul style="list-style-type: none"> Easy library checkout Public lavatories Litter bins
5. Control tools/ weapons <ul style="list-style-type: none"> "Smart" guns Disabling stolen cell phones Restrict spray paint sales to juveniles 	10. Strengthen formal surveillance <ul style="list-style-type: none"> Red light cameras Burglar alarms Security guards 	15. Deny benefits <ul style="list-style-type: none"> Ink merchandise tags Graffiti cleaning Speed humps 	20. Discourage imitation <ul style="list-style-type: none"> Rapid repair of vandalism V-chips in TVs Censor details of modus operandi 	25. Control drugs and alcohol <ul style="list-style-type: none"> Breathalyzers in pubs Server intervention Alcohol-free events

Fig. 3-3: 25 Techniques of SCP (Sourced from the Centre for Problem Oriented-Policing, 2018)

This theory was designed to be applicable in many different types of property or specialized types of crime. This is evident when considering its founding principles, which are based on twenty-five general techniques that contribute to the evaluation and examination of the issue at hand. As evident in Figure 3-3, the twenty-five techniques fall into five different categories (Cornish and Clarke, 2003):

- Increasing the Effort
- Increasing the Risks
- Reduce the Rewards
- Reduce Provocation
- Reduce Excuses

These categories summarize the main objective of SCP: to essentially eliminate the situation for a crime to take place, by creating an environment in which the risk and effort expended to commit a crime, outweighs the reward. As the popularity of this framework continues to grow, it seems to appeal to more and more fields of study, and applications. It has now been applied to broader forms of crime, including illicit wildlife and environmental crimes.

3.3 Application of Situational Crime Prevention

SCP theory's ultimate goal is to create an environment or opportunity where the risk outweighs the rewards and will deter criminal acts (Clarke, 1992; Clarke, 1995; Cornish and Clarke, 2003; Clarke, 2005; Clarke, 2009; Bullock et al., 2010). Clarke describes SCP theory as:

Proceeding from an analysis of the circumstances giving rise to specific kinds of crime, it introduces discrete managerial and environmental change to reduce the opportunity for those crimes to occur. Thus, it is focused on the settings for crime, rather than upon those committing criminal acts. (Clarke, 1997b, p. 2)

The nature of SCP theory then allows for variation in its interpretation of any intervention to the situation at hand. Because of its adaptability to different circumstances, SCP theory lends itself to a wide range of different uses in the field of criminology.

3.3.1 How it Functions

The purpose of SCP was to originally provide a perspective, but now operates as a framework by which criminal events and opportunities can be analysed and examined. Clarke describes the methodology of SCP as the following:

1. Focus on very specific categories of crime or disorder
2. Focus on crime concentration
3. Understand how the crime is committed
4. Use an action-research model
5. Consider a variety of solutions

(Clarke, 2009)

Typically, these SCP techniques are applied after an action-research method has been applied to the crime or situation at hand. An action-research method used with SCP includes (1) data collection, (2) analysis of the problem, (3) choice of solution, (4) implementation, (5) evaluation (Clarke, 2005). The fundamental aspect of using SCP is to apply either a specific criminal event or a specific type of crime (Cornish and Clarke, 2003; Clarke, 2005; Clarke, 2009).

In the course of this thesis, the particulars of how SCP will be applied to both highly specific criminal events (Syria) and a specific crime typology (ATNs) will be discussed. As SCP has evolved into a versatile framework, its strength is not in attempting to consider why an offender committed a crime, or other forms of traditional criminology, it simply places the focus on the opportunities which allowed the crime to occur. This allows SCP to be applicable to virtually any crime, as rational choice theory states, the necessary elements for a crime to occur are an actor (offender), a place, and a target (Cornish and Clarke, 2003; Clarke, 2005; Clarke, 2009). With those three elements, SCP can analyse and determine situational measures to techniques that are appropriate to increase risks, increase effort, reduce rewards, remove excuses, and remove provocation (Cornish and Clarke, 2003; Clarke, 2005; Clarke, 2009).

3.3.2 Successful Examples

There are many examples of successful applications of SCP. They offer a wide range and variety of fields of study, from all over the world. Figure 3-4 (below) provides some understanding of the scope of these studies, as well as the volume. This figure not only demonstrates the scope of SCP, but also demonstrates how this framework has expanded from a few significant studies in the early 2000s, to a multitude of research and studies developing through the mid-2000s to recent years. Particular areas which have generated a significant volume of research includes terrorism, wildlife trafficking, sex crimes and environmental crime.

Applications of SCP	
Application	Authors, Year
Disciplinary problems in prisons	Wortley, 2002
Internet Crimes	Newman and Clarke, 2003
Death of illegal immigrants on US/Mexico border	Guerette, 2004
Identity Theft	McNally and Newman, 2008
Crime and incivilities in libraries	Cromwell et al. 2008
Bar-room violence	Graham, 2009
Suicide	Lester, 2009
Disrupting elections in India	Verman, 2009
Crowd violence	Madensen and Knutsson, 2011
Homicide in Brazilian favelas	De Souza and Miller, 2012
Domestic livestock theft in Malawi	Sidebottom, 2012
Church Lead Theft	Price, Sidebottom, and Tilley, 2014
Corruption	Graycar and Sidebottom, 2012
Kerosene attack on young women in India	Natarajan, 2014
Ransom kidnapping in Columbia	Piers et al. 2014
Global piracy	Shane and Magnuson, 2014
Organised crime	Bullock et al. 2010
Public transport crime in El Salvador	Natarajan et al, 2015
Disrupting criminal networks	Bichler and Malm, 2015
Wildlife crime	Kurland, Pires, McFann and Moreto, 2017
Terrorism	Clarke and Newman, 2006 Gruenewald, Allison-Gruenewald and Klein, 2015 Mandala and Freilich, 2017 Lasley and Guffey, 2017.
Wildlife	Lemieux and Clarke, 2009 Shukla and Bartgis, 2010 Piers and Clarke, 2010 Piers and Clarke, 2012 Piers and Guerette, 2014 Petrossian, 2014 Petrossian et al 2015 Clarke et al 2013 Kim et al. 2013 Petrossian and Clarke, 2014 Reuter and Bisschop, 2016 Kurland et al. 2017 Moreto and Lemieux, 2015
Sex Crimes	Wortley and Smallbone, 2006 Terry and Ackerman, 2008 Leclerc, Feakes, and Cale, 2015
Environmental Crime:	Crofts, el al. 2010 Vollard, 2015 Sahramäki and Kankaanranta, 2017

Fig. 3-4: Applications of SCP - adapted from: (Clarke and Bowers, 2017). Permission to reproduce this figure has been granted by Taylor and Francis (Books) Limited UK.

3.3.3 Situational Crime Prevention within Illicit Networks

SCP theory has been employed in a number of international criminal fields, such as wildlife protection, environmental protection, illegal waste disposal, illegal logging, and the trafficking of animals and plants (Pires and Moreto, 2011; Wellsmith, 2012; Ayling, 2013). While SCP theory has been successful on a local scale, as evidenced in localized policing and hotspots these successful applications of the approach have established that SCP theory can be an effective tool in crime prevention on an international level (Clarke, 1997b). In regard to the antiquities looting and trafficking networks, SCP theory offers a unique solution. The nature of antiquities trafficking, difficulties such as availability of data in this field, and the grey market of antiquities sales and auctions contribute to a collective lack of a comprehensive understanding of how these networks function.

With a wide and diverse range of illicit networks that have employed SCP, it seems to be an oversight that those studying antiquities trafficking have not considered SCP. While there are a few instances of researchers identifying SCP as a potential tool, these have been mostly hypothetical consideration. Usman Adekunle Ojedokun considers its merits specifically regarding the issue of the trafficking of Nigerian cultural objects, as well as Louise Grove, in its possibilities within cultural heritage crimes (Ojedokun, 2012; Louise Grove, 2013)

There are a number of cases of illicit markets (operating on an international level) where discussion within articles is purely theoretical, but there are a few exceptions that consider the actual application of the twenty-five techniques (Clarke, 1992; Clarke, 1997a; Tillyer and Kennedy, 2008; Natarajan et al., 2015). Clarke himself discusses the use of an international policy concerning The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), which was introduced in 2009 (Lemieux and Clarke, 2009). In Lemieux and Clarke's article *The International Ban on Ivory Sales And Its Effects On Elephant Poaching In Africa*, the authors focus on the issue of elephant poaching in Africa and prevention techniques implemented by CITES (2009).

In Figure 3-5, the respective authors have provided an overview of case studies of research that applies SCP theory to the illegal wildlife trade (Pires and Moreto, 2011). This table

demonstrates that the majority of techniques employed by these studies generally focused on increasing risks and reducing rewards. These are some of the few instances of SCP theory being implemented to an illicit market and demonstrate the rather simple logic and reasoning behind this theory. While every illicit market faces its own unique issues, the similarities between antiquities trafficking market and the illegal wildlife market demonstrate how this theory can be applied successfully to the specialized crime of illicit markets.

Summary of case studies			
Programme	Location	Response	SCP technique
CASE STUDY 1			
Eco-Tourist Lodge	Peru	Clay-licks in Peru are a favorite destination for Macaws throughout the year. Eco-tourism in such areas can economically exploit the visibility of parrots up-close, while incentivizing locals to abstain from poaching parrots given the ability to create jobs locally.	<i>Increase risks</i> (extend guardianship, strengthen formal surveillance) <i>Reduce rewards</i> (disrupt markets)
CASE STUDY 2			
Snow Leopard Enterprises	Mongolia	Community-based programme that focused on teaching rural community members how to make hand-made woollen goods to increase income. Training and equipment provided only if community agreed and followed protection of snow leopard and prey.	<i>Increase risks</i> (extend guardianship, assist natural surveillance) <i>Reduce provocation</i> (reduce frustrations and stress) <i>Reduce excuses</i> (set rules, assist in compliance)
Traditional Village Homestay	India (Hemis National Park)	Training and support provided to surrounding communities around Hemis National Park to house foreign tourists. Created incentive for protection of snow leopards that inhabit the park by having a vested interest in eco-tourism. Also, erected predator-proof corrals to alleviate herder retribution for livestock killings.	<i>Increase risks</i> (extend guardianship, assist natural surveillance, utilize place managers) <i>Reduce provocation</i> (reduce frustrations and stress) <i>Reduce excuses</i> (set rules, assist compliance)
The Peccary Pelt Certification Project	Peru	Skin certification programme created to certify skins from communities that practice sustainable management. Certification helped increase market value. Enabled local communities to benefit from profitable international sales thus providing economic incentive to locals.	<i>Increase the effort</i> (screen exits) <i>Reduce rewards</i> (identify property, deny benefits)
CASE STUDY 3			
Akido Beach Project	Benin	Incorporated local fishermen in the creation and implementation of a sustainable management programme that promoted the benefits of using two-inch mesh seines rather than one-inch mesh. Reduced unwanted by-catch and generated higher-value fish yields.	<i>Remove excuses</i> (set rules, alert conscience)
Local-level regulatory programme	Senegal	Locally-initiated sustainable management programme based on catch-quotas and centralized sales.	<i>Reduce provocations</i> (reduce frustrations and stress, neutralize peer pressure, discourage imitation) <i>Remove excuses</i> (set rules, alert conscience)
Rights-based catch shares	Port Lincoln, Australia	By privatizing the local lobster industry, lobster fishers were incentivized to catch less lobsters, resulting in a growing lobster population and more profits for licensed fishers.	<i>Increase risks</i> (assist natural surveillance) <i>Increase effort</i> (control access) <i>Remove excuses</i> (set rules)

Fig. 3-5: Summary of SCP Case Studies Relevant to Illegal Wildlife Trade, sourced from: (Pires and Moreto, 2011). Permission to reproduce this figure has been granted from the publisher.

3.4 Crime Script Analysis

The use of crime scripts within illicit markets can work to provide an in-depth understanding and analysis of how a market operates (Cornish, 1994a; Leclerc, 2014; Leclerc, 2017). One of the main difficulties associated with the study and understanding of the illicit antiquities market is a lack of significant data and criminological study (Polk, 2009; Polk, 2014). By creating a detailed, step-by-step breakdown of the process that is taken by the actors involved in the network, better understandings of the best means of intervention can be examined and potentially provide more informed policy decisions.

CSA is a relatively new method of analysis, which focuses on the particular details of how a crime is being committed (Leclerc, 2017). Traditional forms of criminology focus on the motivations behind why an offender commits a crime (Wortley and Mazerolle, 2013). As this project is considering the potential of SCP theory in relation to antiquities trafficking, the use of crime script and social network analysis provides a framework that will allow a focus on the *environment* in which the crime is committed. In previous literature, the use of CSA has been used in both general cases of how an overall market operates, as well as individual cases of specific crimes.

Because there is a lack of significant data in the market of illicit antiquities – and for the purpose of this research project – the use of crime scripts and social network analysis will focus on specific case studies. For the purposes of better demonstrating the way in which the illicit antiquities market generally operates, a crime script will also be generated for how the market operates on a broad and all-inclusive manner.

3.4.1 Previous Research/Literature Review

In the study of illicit networks, new methods of analysis have been employed to help to understand how the networks operates, significant actors within the networks, and the significance of the interactions between actors. While the term ‘illicit networks’ can be applied to many illegal activities, for the purposes of the scope of this paper, illicit networks such as illegal wildlife (i.e. illegal poaching, illegal logging) and green/environmental criminology will be compared to the network structure of the antiquities trafficking. This is because the diverse nature of wildlife crimes are fairly equally paralleled in illicit antiquities crimes – as there is no set type of object or representation of either network. Illegal wildlife activity can include a wide variety of criminal activity which can include but is not limited to; trafficking of endangered species, trafficking of exotic plants/foilage, poaching of endangered species, illegal logging illegal fishing (Schneider, 2008; Pires and Moreto, 2011; Wellsmith, 2012; Lavorgna, 2014; Jun and Pdf, 2014; Moreto and Lemieux, 2015; Reuter and Bisschop, 2016; Kurland et al., 2017; Lavorgna et al., 2018; Petrossian and Pezzella, 2018).

For the purposes of this thesis, antiquities trafficking can include any type of object or monument, which is considered to be culturally or archaeologically important (i.e. pottery,

stonework, textiles, statues, or jewellery). Additionally, both antiquities trafficking and wildlife trafficking represent networks which operate on a global level, and which are not typically manufactured, but are a natural, finite resource (Brodie et al., 2000; Alder and Polk, 2002; Brodie, 2006). It would also seem that demand drives both markets, as is evident in illicit wildlife trafficking by the success of programs such as CITES which specifically targets the market end of the network (Lemieux and Clarke, 2009; Lavorgna et al., 2018). There are similar difficulties in researching both of these illicit networks, as there is a distinct concern regarding collection of data due to dangerous or difficult conditions, and often unknown origins of the respective commodities within the networks. The diversity of the types of criminal activity that can occur within this network provides an appropriate comparison for the illicit antiquities market. Similarities between these two networks also include the international nature of the markets, and the difficulty of displacement of criminal activity. These illicit networks share many similarities and difficulties faced by illicit antiquities.

Keeping in mind the difficulties discussed previously, the use of CSA has the potential to provide professionals and academics with a better understanding of the specifics of how the illicit antiquities market functions. While many experts in this field could explain how the market performs on a general level, in order to create effective policy and regulations to help reduce the looting and trafficking of antiquities, an empirical understanding of network structures are necessary.

CSA has its origins in cognitive science, when Roger Schank and Robert Abelson (1977) first introduced the concept of *scripting* when researching how knowledge structures are created and accessed. Derek Cornish (1994b) introduced the concept of crime scripting or CSA with his paper, *The Procedural Analysis of Offending And Its Relevance For Situational Prevention*. Cornish provided a general format from which crime scripts for specialized types of crimes could be constructed, as well as how they can be used in tandem with SCP theory. This initial format of a crime script has five levels of specificity (from least specific to most specific): universal script, metascript, protoscript, script, and script-track (Cornish, 1994b). Within each category, there is an additional breakdown of the script into stages in which the crime is committed. They include: preparation, entry, pre-condition, instrumental pre-condition, instrumental initiation, instrumental actualization, doing, post-condition, and exit (Cornish, 1994b). In Borrion's 2013 paper,

Quality Assurance in Crime Scripting, he provides a helpful explanation of Cornish's levels of scripting:

Examples of scripts at *track level* include subway mugging, and sexual abuse of male children in a particular institutional setting. At the next level (*script level*), the crime is generalised. The scripts for the above examples become 'robbery from the person', 'sexual abuse of male children', respectively. At the next level, further generalization is conducted, and the scripts become 'sexual abuse against children' and 'robbery'. Finally, reaching the metascript level, only remains the direct subgroups of an offense, with 'theft of property', and 'sexual offending'. (Borrion, 2013, p. 6)

As CSA has developed over the years, it has become a more popular tool for crime prevention and there have been a number of articles that have proposed alternative methods of structuring or organizing the elements of crime script. For example, Borrion's aforementioned (2013) article on quality assurance, likewise Benoit Leclerc and Naidelle Raynal's article discussing the concept of creating an additional track, which focuses on guardianship opportunities within a script (Leclerc and Reynald, 2017). There are additional articles which consider the practicality or feasibility of implementing crime script, such as Moreto and Clarke's (2013) article, *Script Analysis of the Transnational Illegal Market in Endangered Species*. At this point, the discussion will now turn to specific case studies in which CSA has been employed.

3.4.1.1 Crime Script Analysis within Antiquities Trafficking Networks

This method of analysis is still rather a new concept in the field of criminology, and as such the overall literature available for CSA is still relatively limited (Borrion, 2013; Wortley and Mazerolle, 2013; Dehghanniri and Borrion, 2017). When examining existing literature on crime scripts, there is especially limited research concerning the specifics of generating crime scripts (Borrion, 2013; Dehghanniri and Borrion, 2017). This can make it difficult to determine the best means of structuring or formatting a crime script, but at the same time it provides the ability to adapt a crime script from extremely broad levels of crime to highly specific ones. This project seeks to contribute by producing a crime script for both ATNs and the case study of Syria, and in this way demonstrate how this method of

analysis could be implemented within the field of antiquities trafficking, while also providing a breakdown of ATNs for reference and future prevention efforts. This section seeks to present an overview of how past studies have structured and developed crime scripts within illicit networks to provide a reference of how this method has been put into practice. The following section provides an overview of previous literature with specific attention to: (a) the aim of the study, (b) the type of data (combination, questionnaire, police records, etc.), (c) number of participants, (d) level of script, and (e) format of crime script.

3.4.1.2 Case Studies

The case studies that will be examined were specifically chosen because they either created or used a CSA as a method of analysis within an illicit network on an international level (see Appendix 1). It should be noted however, that because of the inherent practical difficulties involved in conducting research on illicit networks, the amount of literature employing this specific method of analysis in this subject area is quite small. While these case studies present a portion of CSA literature, perhaps the largest body of work that has implemented CSA within a body of research has been conducted on sex crimes. There is a significant volume of studies, which have focused on creating scripts of highly specific types of sex crimes, and ultimately work to determine effective methods of intervention through the use of SCP Theory (Beauregard et al., 2007; Deslauriers-Varin and Beauregard, 2010; Leclerc et al., 2010; Brayley et al., 2011; Savona et al., 2013; Li, 2015). While an excellent resource, these studies will not be examined in-depth in this paper, as they focus on more individualistic types of crimes, in which the relationship of the actors within the network typically constitutes offender-victim. In contrast, many of the illicit networks that will be reviewed in this paper relate to individuals who willingly agree to engage in illicit activity (Jacques and Bernasco, 2014).

3.4.1.3 Discussion of Case Studies

With the diversity of ways in which crime scripting can be applied, organized, and formatted there does not yet exist a standardized format that is universally accepted method (Borrion, 2013; Hutchings and Holt, 2015; Dehghanniri and Borrion, 2017). After considering the case studies that are reviewed in this paper, it becomes evident that there are some similarities among the crime scripts that have been generated. First, many of the

crime scripts that were developed for international illicit networks use either (a) a combination of semi-structured or in-depth interviews and police/court records, or (b) data from either online sources or police/court records. As one of the main difficulties facing illicit networks is a lack of available data, this would be appropriate. Many of the studies used a combination of research methods to ensure that there was enough data in order to be able to create a crime script. While many of the studies reviewed made use of questionnaires or interviews, it should be noted that many of these interviews were conducted with experts in the field, and not individuals who were directly involved with the offense.

Only two studies conducted interviews with individuals actively involved with an offense: Lavorgna's study on the online trade in counterfeit pharmaceuticals and Jacques and Bernasco's study on drug dealing in Amsterdam's Red-Light District (Jacques and Bernasco, 2013; Lavorgna, 2015). Lavorgna (2015) conducted 12 interviews with key informants from 30 cases, while Jaques and Bernasco (2013) interviewed 50 drug dealers. This may be partly due to the fact that illicit networks typically try to operate as concealed markets. As such, individuals involved in illicit networks are likely harder to find, and/or unwilling to cooperate with a study.

Second, many of the studies seem in some way to modify the original eleven stages that Cornish developed – they instead ranged from four to six stages. Overall, the studies were a mix of extremely broad to extremely specific examples of crime scripts. This demonstrates the versatility of the use of crimes scripts. For example, in the article *Drug Dealings: Amsterdam's Red-Light District*, the authors created a crime script which displayed both necessary steps (a more generalized drug dealing script) as well as facilitating steps, albeit more specific to Amsterdam's Red-Light District (Jacques and Bernasco, 2013). Additionally, in the article *Wildlife Trafficking in the Internet Age* (Lavorgna, 2014) the author employed Hancock and Laycock's (2013) model for crime script for organized crime, in which an altered form of the original format of crime script is created to allow for considerations of 'three parallel processes' instead of simply the crime actions. This allows for additional information, such as criminal lifestyle and criminal networks, to be taken into consideration when considering specifically how organized crime is structured and occurs.

Third, in Cornish's paper (1994), he discusses a variety of different methods for using crime scripts – such as proposing a crime script of why a crime failed. Some of the case studies evidently took this into consideration and have done something similar. Not only do Leontadis and Hutchings (2015) create a crime script for the illicit online prescription drug trade, but in their crime script they also have the legitimate script for online prescription drug trade. The next section will examine similarities and methodology between illicit networks such as the illicit waste and wildlife networks with the illicit antiquities market.

For the purposes of this paper, the format of crime scripting has been drawn from previous research which provides general crime scripts, which organize a broad range of activities (or variables) into different categories and are then examined more in-depth in the scripting process. This will be discussed in greater detail in the following chapter, but these case studies demonstrate that crime scripting can vary from extremely detailed instances, to also representing broad areas of criminal activity, as in the case of child sex trafficking and drug laboratories (Brayley et al., 2011; Chiu et al., 2011). An example of CSA being used to focus on each step and stage of a criminal process, while providing analysis as to potential points of intervention on an international scale is outlined by Tompson and Chainey (2011), when they focused on illegal waste disposal. The authors use CSA as a means of assessing the amount of data available and documenting the structure and process of international illegal waste disposal.

Additionally, William D. Moreto and Ronald V. Clarke explore the possibility of CSA in their paper *Script Analysis of the Transnational Illegal Market in Endangered Species*. Even while the authors ultimately concluded that a script analysis was not possible for the TIMES (Transnational Illegal Market in Endangered Species), they stress in their paper the importance of script analysis and advocate the effectiveness to the TIMES of a crime script should one ever be created (2013). They stated the market was simply “too diverse, too complex and too dangerous and difficult to study to allow script analysis of the entire process involved in the TIMES...” (Moreto and Clarke, 2013, p. 217). In light of this, one may wonder why then, this research project attempts a similarly difficult feat. The intended use of the crime script that will be generated for antiquities trafficking is to provide a basic format from which further research can be conducted. It is not intended for specific use of policy or procedure, but merely demonstrates the most basic understanding

of how this illicit network operates, and how effectively CSA demonstrates this. This point is further clarified with the deliberate inclusion of the generation of a case-specific crime script in the design of this project. The aim of this thesis is to demonstrate the strength of CSA and SCP for antiquities trafficking. As such, its use within highly specific forms are crimes is necessary, and the Syria case study demonstrates how effective this method of research may be for further research.

3.5 Conclusion

This chapter has sought to provide an overview and examination of the theoretical framework from which this thesis is based. SCP and CSA demonstrate a useful and efficient means of analysis that provides case or crime type specific preventative measure. The volume of successful case studies alone demonstrates the versatility and success that this framework has achieved. With this in mind, it seems to be an appropriate theoretical framework for the specific nature antiquities trafficking. Because of the nature of ATNs, it proves to be a tricky and complex issue to attempt to research or examine in-depth. However, the adaptability of SCP allows for any difficulties to be considered, while CSA provides an efficient manner by which to determine essential components of ATNs. The following chapter will now consider the methods and methodology that will be used in the course of demonstrating the application of SCP to ATNs.

4. Methodology and Research Design

4.1 Introduction

This thesis is concerned with the application of SCP to ATNs, using CSA. The focus of this project is to consider and apply this framework to an illicit network, which is severely lacking in criminological and particularly crime prevention research. In this sense, the purpose of the project is to focus on preventative or proactive measures, as opposed to the main current strategy of responding to trafficking in reactive ways through policies or programs that have the aim of lessening damage to cultural heritage. This chapter will discuss and outline the specifics of the methodology and design of the research while demonstrating the analytical and empirical strength of the SCP framework.

To begin, a broad discussion as to the intended goals of the project will be considered, followed by a more detailed examination of the methodology (4.2), the research design of the project (4.3). It will also include an examination and discussion of how the crime scripts were developed, and the difficulties encountered in this research, as well as limitations of the project (4.4) will be considered. Ultimately, this chapter will help to demonstrate the reasoning behind the use of both SCP and CSA, in an effort to lay the groundwork for the application of the methodology presented in the subsequent chapters.

4.1.1 Purpose of Research

As stated in the introductory chapter, the aim of this thesis is to provide a consideration and analysis of the use of SCP to ATNs. In seeking to accomplish this aim, a number of additional goals will be considered, including a conceptual examination and analysis of how ATNs are structured and operate. This is necessary in order to determine more effective crime prevention measures or techniques specific to the unique nature of ATNs. Within this, the following research questions are proposed:

- (1) Can Situational Crime Prevention, with the use of Crime Script Analysis, be effectively applied to Antiquities Trafficking Networks?**

(2) When applied to case/crime-specific studies, can the application of Situational Crime Prevention and Crime Script Analysis indicate effective preventative measures?

These two research questions help to frame the goal of trying to better understand the structure and elements of ATNs in order to better tackle this issue, and further, the aim of the consideration of SCP to ATNs. This project will attempt to answer these two questions through the creation of crime scripts and SCP analysis of ANTs, primarily in general terms drawing on a range of examples, and developing in a final analytical chapter. the case study of antiquities trafficking within the Syrian civil war. This thesis will present a systematic and thorough analysis of ATNs from a criminological and crime prevention perspective. This is achieved by first analysing and creating a crime script for the concept of ATNs, followed by an examination of the script, which will determine prominent facilitating factors, which allow the network to continue to operate. These elements will then be analysed with the use of SCP, in order to determine the most effective prevention strategies and techniques. Similarly, this model of analysis will also be applied to a case-specific study of antiquities trafficking during the Syrian conflict. These two applications of SCP and CSA will demonstrate the versatility and strength of SCP as a theoretical framework by which an effective study of ATNs can be accomplished. The following section will now examine the methodology that is employed within this thesis: CSA and SCP.

4.2 Methodology

This thesis seeks to examine, apply, and consider the use of a methodology and analysis tool, which has not yet been seriously considered in relation to ATNs. As was mentioned previously, to date there has been only one previous study, which specifically applied SCP in relation to antiquities (Grove and Pease, 2014). This application of SCP targeted heritage crime prevention, and included “damage to or loss of heritage assets” (Grove and Pease, 2014, p. 107). This represented a consideration (including both looting and vandalism) limited to UK sites and not addressing transnational dimensions of trafficking. It also uses SCP in a general sense, with no analytical tool being employed or dataset or sources provided. This thesis, presents a rather different approach, as it seeks to combine

both SCP and CSA in an integrated and comprehensive manner to the entire field of antiquities trafficking-

This section of the chapter (4.2) will be by addressing the following questions: 1) why use SCP?; 2) why use CSA?; 3) why consider organizing the process of illicit trafficking of antiquities in terms of antiquities trafficking ‘networks’?; and 4) why use Syria as the initial test of the application of these methods and approaches? In the next section of this chapter (section 4.3) the focus will turn to the design of this study with special consideration to the methods, type of script to be developed, the data sources that will be employed; data collection and data analysis. Then, section 4.4 will outline the difficulties faced in the study of ATNs; the general lack of documentation, grey markets, the lack of criminal association, and the general nature of the global antiquities market. Finally, in section 4.5 some of the factors that acted as limitations or challenges to the conduct of this study such as; the lack of available data; the challenge of data collection in conflict zones; potential inherent data bias; language issues; limits on what can be accomplished will be discussed.

4.2.1 Why Situational Crime Prevention?

The core ideas suggested by Braithwaite call our attention to the need to have a mix of strategies which combine mostly persuasion aimed at demand reduction (through education, training, negotiation, arbitration, and similar processes) with some attention given to major sanctions for the more outstanding criminal ventures. (Chappell and Polk, 2011, p. 108)

At the beginning of this thesis, consideration was given to the question of how this project and the application of Situational Crime Prevention could contribute to the field of ATNs. In reviewing the literature, it became apparent that there is a gap, concerning preventative research for antiquities trafficking. In trying to determine the most effective way to reduce the damage and loss of culture resulting from antiquities trafficking, the field of crime prevention seemed an obvious option. This project strives to establish a basic understanding of the ATN through the use of CSA, but also to consider the application to ATNs in the framework of SCP, as part of the development of better prevention techniques for this issue. ATNs have grown as an international issue since the initial burst of interest and research in the 1990s (Brodie, 2012b). These networks have also changed dynamically from traditional forms of trafficking evident in the example of Giacomo

Medici, when compared to the more modern equivalent of Subhash Kapoor (Watson and Todeschini, 2006; Felch, 2013a). There is now more documentation and evidence of antiquities trafficking, as chapter 2 established, but what is lacking is a systematic study or understanding concerning specific data or research pertaining to what occurs between the antiquity between being looting and entering the antiquities market. There are many theories and concepts of how this occurs, and a handful of notorious examples (Kapoor, Medici, Swetnam), but there has been little data or research that has allowed us to empirically analyse or study the full process of ATNs (Polk, 2009).

From the outset of this study it appeared that the SCP framework might provide an effective mechanism for the examination of available data, while also providing insight into the most effective measures to help prevent or reduce the occurrence of illicit antiquities looting and trafficking. Considering the isolated and unknown location of many antiquities, not to mention the vast areas in which they may be located, preventative measures are difficult to envision and implement, which explains the lack of preventive work to date but also the urgent need for developing preventive approaches to tackle the issue of illicit antiquities. In the field of criminology, there are many theories of crime prevention, and one of the strengths of SCP is that it draws on multiple theories to create an effective framework (Wortley and Mazerolle, 2008). It also proposes preventative measures that can be enacted, with empirical data to support such measures (Clarke, 1992; Laycock and Tilley, 1995; Coyne and Eck, 2015; Leclerc, 2017; Freilich and Newman, 2017). In many of the case studies which made use of the SCP framework that were previously examined in chapter 3, these proposed preventative techniques focused on both physical adjustments, as well as changes to policy or parts of an overall process (Shukla and Bartgis, 2010; von Lampe, 2011; Pires and Guerette, 2014; Leontiadis and Hutchings, 2015; Shane and Magnuson, 2016; Lavorgna et al., 2018).

Given all of this, it is clear that the SCP framework is an appropriate framework to use for ATNs, as it adapts to the constraints of the network, while still providing valuable insight and prevention measure and techniques for this illicit network.

4.2.1.1: Criticisms and Strengths

Situational Crime Prevention has faced a number of criticisms during the course of its evolution. Ronald Clarke provides a breakdown of the seven most common criticism that situational crime prevention faces in his paper “Seven Misconceptions of Crime Prevention” (Clarke and Bowers, 2017). These criticisms include that situational crime prevention: is simple and atheoretical, displaces crime and often makes it worse, has a conservative/managerial approach to crime, promote a selfish, exclusionary society, diverts attention from the root causes of crime, promotes ‘Big Brother’ culture and restricts personal freedoms, and blames the victim. The following section will address these most common criticisms of situational crime prevention.

(1) It is simple and atheoretical. SCP does not claim to present revolutionary preventative measures for potential crimes. It provides a framework which allows a systematic evaluation for the most effective and practical means of working to prevent a crime. SCP draws from three prominent criminological theories: routine activities, rational choice, and crime pattern theory. The twenty-five techniques of SCP offer relevant categories of major preventative focus, from which traditional or case-specific preventative measures can be taken. More importantly, SCP is designed to be considered and used in highly particular types of crime and is specifically intended to prevent crimes within each certain area or type.

(2) It has not been shown to work, it displaces crime and often makes it worse. There have been many examples of successful uses of SCP (Guerette, 2009; Smith, Clarke and Pease, 2002), many of which did not result in displacement. These range from property crimes such as theft from cars, or shoplifting, to more complex crimes such as terrorism which Clarke and Newman tackled in their book “Outsmarting the Terrorists” (2006). In particular, the study by Guerette produced interesting results, in that in a review of 206 SCP implementations, approximately 75 percent of the examples proved successful, with approximately 25 percent did not meet expectations (Guerette, 2009; Clarke & Bowers, 2017). This criticism of displacement has existed since SCP’s creation, and has, since its creation been able to demonstrate that SCP does not disproportionately displace crime in contrast to other forms of crime prevention.

(3) *It is a conservative, managerial approach to crime and (4) promotes a selfish, exclusionary society.* As SCP was originally developed particularly for use with property crimes, it may be rather understandable that it faces this particular argument. SCP considers crime from the crime triangle perspective (a more thorough explanation of the crime triangle will take place in chapter 7), in which three elements are considered necessary for a crime to occur: a criminological target, an offender, and a particular place (or setting where crime takes place). This triangle has a corresponding outer triangle which demonstrates the elements responsible for governance of the inner elements. These outer elements include the manager (place), the handler (offender), and target/victim (guardian). This does place more responsibility upon the elements of the outer triangle, but this once again can be adapted and developed specifically for the case at hand, with consideration for the economic or social requirements deemed necessary.

Many of the criticisms that SCP seems to face, target the specific methods of implementation or design decisions rather than with the actual framework itself. In the case of a criticism of conservative, managerial approaches to crime prevention, this may be simply a result of specific applications of SCP being conservative or managerial as a result of meeting the needs or requirement of the individuals or community which implemented it. In many cases SCP can offer economically and socially acceptable solutions for crime prevention measures, but it would be responsibility of the implementors to ensure that they kept in line with community or individual's needs and requirements. For example, in the use of conflict zones, it is not expected that every community or area will have the same type of crime prevention measures, and in many cases, prevention may take little to no 'on-the-ground' action, but rather focus efforts of other stages or phases of the trafficking network. This would have to be determined by experts and local/national authorities at the time of implementation.

(5) *It diverts attention from the root causes of crime.* SCP was designed to be used for particular and highly specific types of crimes. It does not present itself as a new criminological theory, but mainly a crime prevention framework from which practical and efficient measures can be derived. It has also been created to be versatile and adaptable for particular situations, and it is up to those implementing preventative measures to determine the scope and range of how SCP is being used. As such, it focuses on a specific type of crime, and seeks to employ crime prevention measures to reduce crime. It does not claim

to solve or eliminate a criminal activity, but simply attempt to prevent or deter a crime from being committed in a particular case. If one's aim is to attempt to understand or eliminate criminal activity, then this framework is not the method by which this should be achieved, and instead a focus on criminological theories of criminality may be better suited.

(6) *It promotes 'Big Brother' culture and restricts personal freedoms.* This particular criticism typically describes SCP as creating a 'fortress' society or environment, however this often results from a lack of understanding of the guiding principles of SCP. Criminology acknowledges that crime could be essentially eliminated, however this would entail a police state, with little to no privacy or personal freedom. What criminologists, and specifically those working within crime prevention have to consider is how this balance of personal freedom/privacy and crime prevention can work effectively. This is something that we are seeing unfold in the field of cyber security and online/social media related laws and regulations. SCP differs from traditional crime prevention theory in that it does not focus on solely on the offender but considers the situation which has allowed the crime to occur.

(7) *It blames the victim.* Traditional crime prevention focuses on why the offender committed a crime and seeks to determine how to stop the offender from offending again. As such, it may be easy to assume that SCP is seeking to place the blame on someone else – perhaps the victim. SCP does not seek to blame the victim but instead focuses its efforts on the many factors which allowed multiple elements to meet, resulting in a crime taking place. It is simply attempting to observe crime prevention from a new perspective, allowing it to focus on a variety of elements or variables which may have impacted an offender's ability to commit a crime. (e.g. weather, lighting, marketability). In the case of ATNs, a more rounded approach is better suited to the complex nature of antiquities trafficking, and as such benefits from the situational approach that SCP offers.

Overall, it seems that many of these criticisms stem from a lack of thorough understanding of the aims and implementation of SCP, which does not offer a solution to crime, or a particularly deep insight into criminal nature, but merely a framework which can help to reduce or deter crimes from occurring. As a result of the adaptable and versatile nature of SCP, it is understandable that it is not fully understood. Considerations as to *how* SCP is

implemented may bear stricter scrutiny, as perhaps one of the dangers in implementing SCP is a lack of understanding of context of the crime and the area in which the crime takes place. Without a thorough understanding of the social, religious, cultural and economic understandings of where a crime takes place, it is unlikely that an outsider could effectively employ SCP. As such, one of the areas that this thesis attempts to stress is that a close working relationship with local communities is vital in order to enact viable and successful prevention measures. The use of CSA helps to more fully understand the criminal script which occurs during the crime, and so ensures a more thorough understanding of the context. With an analytic knowledge of how the crime occurs, more effective – and likely successful – crime prevention measure and tactics can be achieved.

4.2.2 Why Crime Script Analysis?

“Undertaking situational crime prevention involves the analysis of subsets of offences with common opportunity structures with a view to homing in on modifiable conditions that enable or encourage the crime.” (Bullock, Clarke, & N., 2010, p. 1) With the decision to use SCP, Crime Script Analysis appeared to be a natural choice to use in collaboration, as it allows for a close and thorough study of the elements and structure of criminal events and types. As the understanding and examination of the specifics of how ATNs operate is a crucial goal of this project, CSA seemed an obvious method of analysis.

Previous research in the field of ATNs has largely been based in the fields of museum studies, archaeology, law, or art history (Bowman, 2008; Brodie, 2012b; Brodie et al., 2013). As a result of this, there is an increasingly large body of work, which focuses on the objects, which are looted, or the legal aspects and frameworks in which illicit antiquities operate (Brodie, 2012b). This thesis has already addressed the lack in this field of any significant research from the field of criminology, resulting in the lack of a crucial perspective to better understanding how these crimes are being committed. When there is a lack of criminological research, this means there is a lack of research that focuses on the types of individuals committing a crime, the opportunities which allowed the crime to occur, the motivations for committing such crimes, how criminal networks form or develop, and most importantly, the most effective means of preventing such crimes. CSA offers a structured technique to show how these crimes are committed and specifically provides a general tool that can be used by a number of fields of research to understand the

necessary step and elements in order for a crime to occur (Cornish, 1994a; Leclerc, 2017). It does not draw heavily on specific criminological theory in order to be able to use it, but more requires the necessary time, data, and understanding of the network to analyse and form a useful script (Wortley and Mazerolle, 2013). It was originally developed to be used by law enforcement, and such does not require highly technical or an academic background to be able to make use of it (Cornish, 1994a; Hancock and Laycock, 2013; Leclerc, 2017). Its aim is similar to how a detective would try to piece together to breakdown and work through each step of a crime. Except that the crime script does this in reverse. It begins at the point where a criminal decides to commit a crime, and then not only analyses how an offender commits the crime, but also the accompanying thought process (Leclerc, 2017). This then allows for prevention measures or techniques to be considered at each stage of the criminal process (Lab, 2016; Leclerc, 2017).

Criminology is generally focused on *why* crime happens, whereas the field of crime prevention – especially environmental crime – is specifically focused on *how* crimes came to occur, and therefore prevent them (Wortley and Mazerolle, 2013; Lab, 2016). What makes crime scripting so unique and powerful as a method of analysis, is that it considers both the ‘why’ and ‘how’ in tandem. It considers both the physical and mental aspects of the crime, and places those two aspects in context (Schank and Abelson, 1977; Cornish, 1994a). Though it should be noted that the ‘why’ in the case of crime scripts is more relevant to why the criminal actor chose to participate in this specific crime, and not necessarily every criminal act he or she may have committed. Whereas traditional forms of crime prevention tend to emphasize the motivation that drove the actor to commit a crime (Wortley and Mazerolle, 2013). CSA (in the framework of SCP theory) takes into consideration the situation, which allows for the crime to be committed, often including the motivation of the offender (Cornish, 1994a; Leclerc, 2017).

The use of CSA also works well with dark or illicit networks, having been used for a number of these networks including human trafficking, drug manufacturing, terrorism, and wildlife trafficking (Shukla and Bartgis, 2010; Lavorgna, 2014; de Bie et al., 2015; Sytsma and Piza, 2018; Viollaz et al., 2018). CSA has often been used in combination with social network analysis as it can then highlight both the script actions as well as the network of individuals involved in the network (Leclerc et al., 2011; Lavorgna, 2014; Berlusconi, 2017). While social network analysis was considered as a tool to be used in this research

project, ultimately it was concluded that there was simply not enough data concerning actors within the network, as well as requiring significant technical skills to learn and use social network analysis. As ATNs provide specific complications (mainly being that the target objects are not known to exist until they are discovered), it requires a method of analysis that can put the issue in context and provide a meaningful analysis.

4.2.3 Why Antiquities Trafficking Networks?

This section will address the use of the entire concept of Antiquities Trafficking Networks, instead of the much more traditional method of using SCP and CSA with case-specific studies. In chapter 3, Moreto and Clarke's (2013) work concerning an attempt to create a crime script for TIMES was discussed. The authors concluded that they were unable to generate a crime script for this illicit network/because the market was being too diverse, dangerous and, and difficult to be able to effectively develop a script (Moreto and Clarke, 2013). Throughout this thesis, the issue of applying such a highly specific methodology and tool to a rather broad conceptual network will be addressed. In this section though, the aim to demonstrate why a consideration of the entire field of ATNs is attempted, and why this attempt will prove beneficial to the continuing research concerning antiquities trafficking. As has been stated, the aim of this project is to consider the application of SCP and CSA to ATNs. This means the aim of the project is not to produce specific techniques, procedures, or recommendations to combat antiquities trafficking. It is meant to demonstrate a methodology and analysis tool, which when used in the context of antiquities trafficking, will provide efficient and effective results. In the process of examining and considering this methodology, a number of general situational prevention techniques will be considered and discussed, as a means of helping to establish a basic model of how ATNs are structured. Therefore, in the course of striving to meet the aim of this project, a number of similar goals will be achieved – in providing a basic model of ATNs, general preventative recommendations or techniques for ATNs, as well as preventative measures that can be considered for future antiquities looting and trafficking within conflict zones. The crime script and SCP analyses of ATNs presented here will contribute research and knowledge, and have analytically considered this illicit network and case study to determine an effective method and methodology for future researchers.

4.2.4 Why Syria?

The case study that will be used within this project has been selected based on its appropriateness for the consideration of illicit antiquities being looted and trafficked, as well as the availability of data. In present day Syria, the level of disruption is huge, with awareness that there is large scale cultural looting and destruction but with extreme levels of disorder making systematic mapping of this loss impossible. Selecting such a site offers a challenging case for testing the techniques being argued for here. Not only is it worthwhile to attempt to map and anticipate with the hope of preventing future (heritage) losses in Syria, but if it can be done in this situation, it is likely that these techniques hold value for prevention strategy development in far less disrupted areas. The lack of data within this field is a direct result of ATNs being an illicit network – resulting in the difficulty of measuring or study the network (Polk, 2014). In comparison to the many examples of illicit networks given in chapter 3, the development of a crime script for antiquities trafficking proves more complex, as a result of one element. The location or existence of an antiquity is (typically) unknown until such times as it is discovered – in this case, usually when it is being looted (Brodie, 2006a). Whereas in the case of drugs or weapons manufacturing, the origin or creation of objects is clear, and typically requires certain resources (making it easier to target). This means it is difficult to trace an antiquity to its location or origin, or origin of discovery (Brodie, 2006a; Brodie, 2012). The resulting issue is then a lack of data or information concerning how and when objects are looted.

When discussing the lack of data within this this field of research it is important to note the importance that investigative journalism has played in providing and revealing information relevant to antiquities trafficking (Brodie, 2012b; Brodie et al., 2013). In the previous chapter, it was noted how much of the literature that was generated in this field was a result of research conducted by archaeologist, lawyers, museum and cultural heritage experts. However, there is still very much a lack of empirical research being conducted in the form of interviews, surveys, or statistical analysis of relevant data (Brodie, 2012b). Journalists have filled this gap up until now, and at times are able to do so more effectively than law enforcement agencies, as they do not have to work within specific jurisdictions (Brodie, 2012b; Brodie et al., 2013). Two prominent examples of antiquities traffickers Medici and Kapoor (previously mentioned in chapter 2), both had vital stories broken by investigative

journalists (Watson and Todeschini, 2006; Brodie, 2012b; Brodie et al., 2013; Felch, 2013b). This research project is using journalistic articles, as they are one of the few sources of data about the situation on the ground, with direct quotes from individuals involved in the network. With this in mind, using news articles as a data source highlights some challenges of using data that is meant to be consumed by the general public. It cannot be ignored that many of these pieces were written (and any subsequent research conducted) in a snapshot of the overall conflict. The political atmosphere of the time may be reflected in the piece, and unlike academic research, a journalistic article have different requirements that need to be met in order to publish (Brodie, 2012b; Brodie et al., 2013; Brodie, 2015e). While journalists strive to report the news with as little bias or influence, as possible, journalistic standards and aims different from academic (Brodie et al., 2013). Their research and investigations have ultimately, different motives from academia (Brodie et al., 2013). This is not to say that their motives are in any way malicious or inferior, but certainly different from academic motives. With this in mind, in order to try and keep the data as pure and uninfluenced as possible, only direct quotes (or direct paraphrasing) were used when collecting data. Even using only direct quotations from individuals, the researcher is aware that some of these quotes may have been taken out of context or given to the journalist for political or personal reasons. As such, journalistic work provides data from difficult situations, like conflict zones, that are often unattainable for an academic. The result of this then being that this data will be used to construct a general sense of how the specifics of this conflict are facilitating ATNs.

A number of practical reasons have been listed regarding the use of Syria as a case study, but it should be noted that the Syrian conflict has become a prominent issue of both research and discussion within this field. There have been major strides taken in research specific to the documentation and preservation of heritage during conflicts and preservation (Contreras and Brodie, 2010; Casana and Panahipour, 2014; Parcak *et al.*, 2016; Rayne *et al.*, 2017). Additionally, a number of research and interest groups have been created specifically to consider the Syrian conflict (Leckie, Cunliffe and Varoutsikos, 2017). This focus on Syria is likely a result of practical elements, such as availability of data, international interest in the issue, and available funding. As large portions of literature and research being conducted in this field centre on the Syrian conflict, this provides an additional rationale for using Syria as a case study within this research project.

Using Syria as a case study demonstrates the versatility and strength of both CSA and SCP within extremely complex and layered circumstances. If these methods can efficiently operate within a complex environment such as Syria, they can most certainly be used in other areas facing the issue antiquities trafficking.

4.3 Research Design

At this stage, the aim of this research project should be clear. The following section will now provide a detailed discussion of how this project was designed and executed. Specific attention will be paid to the collection of data and construction of the script that will be presented in subsequent chapters. To begin, a discussion of the scope of the research will take place, followed by an overview of the design of this research project. A detailed explanation concerning how the data was collected, the creation of the crime scripts, and a discussion concerning the analysis of the scripts will take place.

4.3.1 Methods

This project involves the creation of crime scripts, for both the entire network of international illicit antiquities, and as well for the case study of the Syria conflict. Once a crime script has been developed, it will be analysed, alongside pertinent data, to determine the most prevalent facilitating factors, which allow each stage of the crime script to occur. This is then followed by an additional analysis and consideration as to effective situational prevention measures or strategies, which could be implemented for either the case-specific or crime-type of network of international illicit antiquities. The development of this project drew upon aspects of previous research projects including those discussed in chapter 2, and in addition made use of Doctoral and Master's theses working with crime scripts to help provide constraints and scope to these efforts (Unal, 2009; Tompson and Chainey, 2011b; Chiu et al., 2011; Jacques and Bernasco, 2013; Gilmour, 2014; Lavorgna, 2014; Hutchings and Holt, 2015; Leontiadis and Hutchings, 2015; Lavorgna, 2015; Fabiani, 2016). Specifically, the structure and format of this thesis drew heavily upon the work of Memhet Unal (2009), and his integration of facilitating factors and development of specific strategies. Additionally, a similar approach to collecting and coding available data was influenced by the work of Michelle Fabiani, which focused on strategic versus opportunistic types of looting within the conflict in Egypt (2016). Within these previous

studies, which used crime scripting, it was evident that their scripts were developed either, after a thorough analysis of the data, or on a rolling basis, with adjustments being made as more data was analysed. This project will employ a combination of both, as it will begin with a simple model of antiquities trafficking using data from well-studied cases, and apply and adapt this model based on the data relating to Syria. With no standard format to inform how the script should appear or operate, the development of the various elements of the script (stages, format, stages) were constructed and adapted as a result of the data (Borrion, 2013; Dehghanniri and Borrion, 2017). For example, in Appendices 2 and 3, initial drafts of the scripts can be seen. This script, when compared to later versions, is much more detailed, and complex, due to the amount of information or variables present. As a result, this script was adjusted, to eventually produce the script that will be presented in the following chapter.

With the digital and technological advances that have been made in the media, our social interaction, and our consumption of news, it is only reasonable to assume that our methods of research would soon follow suit. There have been more and more qualitative studies which are designed around the gathering and analysis of large data-sets relevant to social or digital media (Chang, Kauffman and Kwon, 2014). This project made use of content analysis as a means of analysing secondary open source data (in the form of journalistic articles), aiming to determine relevant articles and then extracting or highlighting significant terms or processes (pertinent to antiquities trafficking) to develop the crime scripts presented in subsequent chapters. The primary source of data for the development of the crime scripts were open-source journalistic articles, which were gathered using public web searches. Traditionally, content analysis is used as a means of analysing sections of texts or documents in order to examine frequency of word use, or specific language (Crowther-Dowey and Fussey, no date; Maxfield and Babbie, 2012). In the case of this project, content analysis was used to determine common words, phrases, or themes associated with antiquities trafficking activities or actions. The scripts that were developed from this analysis then reflected specific types of actions or elements that occurred in the process of a crime being committed, and were present in the text, ultimately informing how the script of antiquities trafficking occurred. As such, the analysis which took place was closely aligned to content analysis but differed subtly from its traditional aims by targeting specific actions or processes rather than word frequency or value.

Typically, the creation of crime scripts has been developed out of data sources such as case files, police records, or interviews (Shukla and Bartgis, 2010; Jacques and Bernasco, 2013; Lavorgna, 2014; Petrossian, 2014; de Bie, de Poot and van Leun, 2015). Due to a lack of data pertaining to antiquities trafficking, these more traditional and rigorous sources were not a viable option for this research project. As such, this project focused on digital media as a data source. As has been mentioned previously in this thesis, investigative journalism has played a large role in gathering data and producing evidence of ATNs. In using digital media as the main source of data for the development of the crime scripts, which in turn were the basis for the SCP measures that were developed, this presented a number of difficulties. Media content is generated with a very different motivation than empirical research, and as a result any content used must be presented in a manner that acknowledges any potential bias.

4.3.1.1 Type of Script

One of the main strengths of crime scripting is its adaptability, and ability to focus on specialized forms of crime. This also creates the challenge of developing a standardized method of creating and using crime scripts. When considering the different ways that previous researchers have developed their crime scripts, many different factors had to be considered. First, the detail quality of the data had to be considered. Depending on how detailed the data was would consequently determine the amount of detail of the crime script. Additionally, it is important to consider that much of the data that was available did not discuss all three stages of ATNs, but portions or snapshots of how the network operated. Generating a crime script out of multiple snapshots could lead to misinterpreting the data or the structure of the market. As such, it was determined that a potential crime script would be the most effective means of interpreting the data in a way so as not to misrepresent the overall structure of ATNs.

A potential crime script is one that displays the various options that a criminal *may* take in order to achieve a crime (Borrion, 2013). It considers all possible routes/options/methods so as to gain a better understanding of how an offender would choose his/her method of choice. In contrast a preformed script is concerned with a script that has already occurred – this would include using historical data or crime scripts to demonstrate the criminal actions and stages that the actor took to achieve their crime (Borrion, 2013). There is also

planned script, which as the name indicated, reflects actions that someone has planned – possibly failed examples can inform such script (Borrion, 2013). By using a predictive crime script, the data is then reflected in the script without losing the overall context of the structure or methods used within ATNs.

4.3.1.2 Data Source (Antiquities Trafficking Networks)

For the generation of an ATNs crime script, the data source will be a large body of case studies in which portions or the entire process of trafficking an antiquity takes place. The data source available for ATNs represents only a sampling of the total amount of case studies relevant to antiquities trafficking. Unfortunately, there does not currently exist a master list or even prominent dataset from which to collect data for research pertaining to antiquities trafficking. There are a few databases that are concerned with art crime, but these often combine both art and antiquities cases together and as such are not relevant for the purposes of this thesis. As such, in order to gain even a sampling of examples of antiquities trafficking, a dataset was created using the Trafficking Culture's Case Studies database, which consists of 128 entries. In order to produce an effective crime script for ATNs, these case studies were used. As such, it is clear that this script will not reflect every case study or example of antiquities looting which has occurred, but that is not its intention. The crime script that has been developed for this project is one that was created with the intention modifying or adjusting in response to new or overlooked data. The case studies provided by the Trafficking Culture project provides a data source that is a good place to begin, as it ultimately yielded 74 case studies that were deemed viable for analysis for the script. This process will be discussed in more detail in section 4.3.2.

4.3.1.3 Data Source (Syria)

To appreciate the methods that will be used within the project, the source and type of data should first be established. There are two scripts that will be developed, the first being a script for ATNs. It has been established that this will be a more complex process and one, which, as evident from the examples given in chapter 2 is not the intended application for which crime scripting was developed. However, crime scripting does not have a standard form or format, as one of its strengths is a versatility to reflect elements relevant to a specific crime (Borrion, 2013; Dehghanniri and Borrion, 2017). The examples of previous studies were able to create crime scripts from interviews and case studies, as that was data

or research that was available in their fields (Chiu et al., 2011; Tompson and Chainey, 2011b; Jacques and Bernasco, 2013; Gilmour, 2014; Lavorgna, 2014; Hutchings and Holt, 2015; Leontiadis and Hutchings, 2015; Lavorgna, 2015). As noted above, in the study of antiquities trafficking, a primary source of data and information are investigative journalists, and journalistic articles (Brodie, 2012b; Brodie et al., 2013).

4.3.2 Data Collection and Script Development

Having now establish the data sources, the method by which the data was collected can be discussed and examined. While ultimately the script for ATNs and the Syria case study proved to be different, the method of collecting the data, and analysing it to develop scripts was similar. These following sections will detail the specifics of each script.

4.3.2.1 Antiquities Trafficking Networks

The data source for this crime script is the Trafficking Culture's list of case studies (available on their website: <https://traffickingculture.org/encyclopedia/case-studies/all/>). Their initial list of case studies presented one hundred and twenty-four entries relating to cultural heritage issue and antiquities trafficking. After reviewing all one hundred and twenty-four entries, fifty-one were determined to be relevant to this study. The case studies that were not used were eliminated based on: (1) a significant lack of data – from which no relevant data for a script could be retrieved; (2) they were not relevant – focusing on human remains, underwater archaeology, or other disqualifying factors; (3) they concerned theft of repatriation cases of art/antiquities – not looting. The fifty-one qualifying entries were entered into a Microsoft Excel worksheet, and were coded based on specific variable. It should be noted that the majority of these entries were paraphrased from news articles, books, or academic research articles. Often, these original sources were checked to see if additional information could be gained. In most cases though, the entry on the Trafficking Culture website reflect the relevant information concerning necessary elements of antiquities trafficking. These variables included: location, full script, phases of script, one instance, multiple instances, individual, group, community, actions, additional notes.

When examining each entry, special consideration was given to explicit details of how the looting, transit, or market of the object occurred. The variables listed above attempt to

identify important elements within each entry such as: how often did this activity occur, how many people were involved, and what actions were taken within the script. The dataset for the ATNs script can be seen in Appendix 4. A preliminary script, consisting simply of looting, transit, and market had initially been established, but modified and adjusted as the data was processed, until the final crime script was developed. This final script reflected the various actions, elements, and stages that was evident within the data.

4.3.2.2 Syria

In collecting data for crime scripts, a search was conducted through Google of all news articles between January 1, 2005 to December 31st, 2016 using these key search terms: antiquities | antiquity | object | artifact | culture | cultural | heritage AND smuggler | smuggling | smuggled | smugglers | route | 'black market' | illegal | illicit AND Syria | Syrian AND dealer | dealers | market | trade | network AND loot | looters | looted | looting | stolen AND trafficked | trafficked | trafficking | traffickers. Specifically, the type of data that was being targeted was direct quotes or particular paraphrasing from individuals involved in ATNs in some way.

The date range of January 2005 to December 2016 was chosen specifically as it included a number of years prior to the beginning of the Syrian Civil War. This was partly to demonstrate the visible increase in articles being generated concerning Syrian cultural heritage and antiquities after the outbreak of fighting, but also to see if any data could be retrieved to establish the type of looting or trafficking of antiquities prior to the outbreak of the civil war. It has been noted that antiquities trafficking did occur prior to the conflict, and the method by which this looting occurred would likely have been different from the types of trafficking that appears in the Syria script. If a direct comparison could have been made, this would have allowed valuable comparisons between a 'before' and 'after' scripts for this region – unfortunately, this was not the case.

These searches were conducted in the autumn of 2016, on the University of Glasgow campus. This is relevant as the result of a search query on Google are often dependent on personal preference and location. Once a complete data-set was collected, the results were entered into Microsoft Excel in order to organise and determine viable data. A similar process was employed for the ATNs script, was also employed for this script. The data

was coded, examined thoroughly, crime scripts were developed based upon the direct quotes, and paraphrasing that existed in the journalistic articles. Viable data was determined by the following criteria: (1) did the article include either direct quotes or paraphrasing from individuals involved in antiquities trafficking; (2) and was there enough data within the article to help inform the crime script. This search compiled a total of four hundred and ninety-two results, of which two-hundred and twenty-six were examined for further data. Two-hundred and sixty-six results that were eliminated at this stage were a result not being directly relevant to the search parameters. Examples of this include non-relevant blogs making note or reference to cultural heritage (by non-experts), reposting of media articles by individuals, or official announcements or reports/press reports by international organizations. Thirty were found to contain direct quotes relevant to the search parameters and were therefore examined and from these articles, crime scripts were generated. A full list of the complete search, with the relevant thirty articles highlighted can be found in Appendix 11.

Script Development: From these thirty articles, once again, a similar process that was used to develop the ATNs script was used with this script. The data and initial individual scripts created at this point can be seen in Appendices 5, 6, and 7. The same set of variables was employed, and each article was examined for specific actions, or direct quotes. When constructing the Syria crime script, the ATNs script was initially used, and then modified to reflect the specific nature of antiquities trafficking during the Syrian conflict. The dataset for this script was different in nature from the ATNs script, resulting in the actual process of creating the script being slightly different. As the ATNs script was largely based on sources, which paraphrased, while much of this dataset had direct or indirect quotes available. Within the Syria data, much of the data represented a more complete perspective of each phase, with articles identifying either individual or multiple stages. So, while initially using the ATNs script as a basis for the Syria script, a new script quickly emerged, which reflected (as accurately as the dataset allowed) the structure of antiquities trafficking during the Syrian conflict.

4.3.3 Data Analysis

Following the creation of these crime scripts, in their relevant chapters, these scripts were analysed to determine facilitating factors for each phase. The data collected, it must be

remembered, was not complete in the sense of containing interviews of all relevant individuals involved in every part of the trafficking process, from looting to final transaction and disposition of an object. This unfortunately also reflects a reality of studying such networks – they are often fragmented and disjointed, with various actors becoming active in the network, or leaving the network, at various stages. This is not always the case, but with specific reference to conflict zones, it seems to be a more disrupted network. The main concern for developing these crime scripts were to demonstrate the most necessary actions that were required for ATNs to occur. These scripts potentially demonstrate when breaking down every example or case study of antiquities looting, the core elements of the crime can be found and scripts developed. The analysis of the script concentrated on points and stages within the script that seemed to offer facilitating circumstances for the offender. These facilitating factors were then considered and after an examination and consideration of the twenty-five techniques of SCP, situational prevention strategies were generated. A similar model was used to determine facilitating factors within the Syria case study, as well as SCP strategies for potential future conflicts.

4.4 Difficulties Faced in the Study of Antiquities Trafficking Networks

Through the information gathered in the process of this project, a more comprehensive understanding of the vulnerabilities within ATNs may become more apparent. The use of CSA will provide a detailed understanding of how the market operates, which will facilitate the possibility of determining more effective strategies of reduction and prevention in this market. Combatting the illicit antiquities market faces a number of difficulties, which have been outlined throughout this paper. In a background paper prepared for a 2009 meeting of the United Nations Office on Drugs and Crime (UNODC) which included the looting and trafficking of antiquities, Simon Mackenzie outlined that significant difficulties were faced:

- (a) A crime problem in poorer ‘source’ countries which provides a source of income for local populations;
- (b) Difficulty in enforcing the relevant laws in source countries due to lack of resources as well as varying levels of corruption;

(c) A ready market for looted objects in rich market countries providing a demand for the international transportation of looted [cultural property];

(d) Difficulty in telling illicit objects from licit ones once they are mixed together in the chain of supply – compounded by a culture of privacy in the antiquities market (buyers are reluctant to ask too many searching questions about provenance);

(e) A conflicted law enforcement and policy response to the issue in some market countries, since market and free trade principles tend to weigh against restrictive control on the cross-border movement of [cultural property];

(f) An existing trade infrastructure (dealers, collectors, museums) which has a history and developed culture of dealing in [cultural property] without necessarily knowing about its provenance or provenience.

(UNODC, 2009, p. 6)

These six difficulties provide an overview of some of the broader issues that the international community faces when attempting to regulate or reduce antiquities trafficking. In this section, some of the more relevant issues will be highlighted in the context of this research project.

4.4.1 Lack of Documentation and Legal Issues

A distinctive characteristic of the illicit antiquities market is the lack of documentation associated with illegal objects (Conklin, 1994; Luke and Henderson, 2006). The very nature of this market provides the first and most difficult issue that is faced in this field: antiquities are unknown to the world (and archaeologists), until they are discovered (Brodie, 2006; Proulx, 2011b). This may seem like an oversimplified and rather evident statement, but the simple fact is that this presents a serious difficulty when attempting to protect these objects from illicit looting or damage. How is one supposed to protect something, when we are not even aware of its existence? Even in cases where the origin of an object may be determined, there is usually no knowledge of when the object was looted, who looted the items, or how it was trafficked (Alder and Polk, 2005; Brodie et al., 2006; Brodie, 2012b; Campbell, 2013; Hardy, 2016).

One could think of the illicit antiquities network as a black box. Often, it is known that an object exists, and was likely looted. It is often known where it turns up but there are few

resources available to determine how or when the object was taken from its original location to then appear in an auction house, or antiquities dealer's showroom (Brodie, 2006; Hanson, 2008; Parcak et al., 2016). Many times, it is only when an object appears on the antiquities market that it becomes apparent (through the diligent efforts of academics and experts) that these items have most likely been looted (Proulx, 2011b). From there it is often a case of working backward to determine where the object originated (Hanson, 2008; Massy, 2008). Archaeologists can sometimes pinpoint which region an item may have originated from, but this is usually only the case in distinctive objects (Brodie, 2009). In order for any legal procedures to take place, there must be definitive proof that an object was illegally taken from the ground of an archaeological site, and then trafficked and sold illegally (Forsyth, 2007; Gerstenblith, 2008; Ulph et al., 2012). Essentially, unless there is documentation of an object existing prior to being looting, there can be no legal case associated with the antiquity (Forsyth, 2007; Ulph et al., 2012). Many of the following difficulties that will be discussed are associated with lack of proper documentation in some way.

Another considerable difficulty that this field faces is proving that an antiquity has been looted. While experts may agree that, an object may have an extremely high chance of having been looted, without definitive proof, there is little that can be done (Forsyth, 2007; Ulph et al., 2012). Even when there is substantial evidence of an object being looted, it can be extremely difficult to win legal cases to return looted objects (Ulph et al., 2012; Gill and Tsirogiannis, 2016; C Tsirogiannis, 2016b). There have been a few instances where objects can be repatriated back to their country of origin, possibly the most famous of them being the case of Giacomo Medici and the Euphronios Krater (Watson and Todeschini, 2006). This case study, which will be discussed later, is a prime example of the methodical organization and international scope that often operates in the illicit antiquities market (Watson and Todeschini, 2006). Most illicit antiquities legal cases fail because it cannot be undeniably proven that an individual or organization purchased (with intent) an antiquity they knew to be acquired illegally.

4.4.2 Grey Market

As this network operates in a grey capacity, it demonstrates a lack of regulation of the illicit antiquities market as a whole (Bowman, 2008; Mackenzie and Yates, 2016b). Many

individual countries attempt to regulate the trade, but antiquities market operates on an international level (Ulph et al., 2012). Strict regulations in specific countries simply displaces criminal activity to other, less-strict regions. The lack of provenance is a central issue for allowing the antiquities market to continue to operate as a grey market. Without a means of regulating the purchase and sales of antiquities – which is implausible without the use of a legitimate provenance – the market will continue to operate as a grey market (Alder and Polk, 2002; Bowman, 2008; Mackenzie and Yates, 2016b). The attitude of the antiquities market contributes to this issue, as it is the actors within the network, which refuse to regulate or abide by the use of legitimate and well researched provenances.

4.4.3 Lack of Criminal Association

An examination of the buyers within the antiquities market demonstrates an evident lack of criminal association for purchasing illicit antiquities (Polk, 2000; Mackenzie and Yates, 2016a). The eventual disposal (whether it be selling, purchasing, or the donation of antiquities) is one that works in a ‘technically’ legal manner (Gerstenblith, 2007; Forsyth, 2007; Gerstenblith, 2008; Mackenzie and Green, 2008; Ulph et al., 2012). Typically, individuals or organizations can assume that any antiquities that are on the market without proper documentation or provenance have a high likelihood of being looted (Brodie and Renfrew, 2005; Brodie, 2006; B.T. Hoffman, 2006; Hardy, 2016). Even with an awareness of this issue, there still exists a strong and profitable market for antiquities on an international level (Brodie, 2012b). This most likely stems from the fact that individuals and organizations that purchase illicit antiquities can presently do so without serious association of a criminal act. This is the case even when an antiquity is known to lack proper provenance or indication of origin.

4.4.4 Nature of the Global Antiquities Market

A lack of a centralized agency that regulates, enforces, or polices the antiquities market provides the last, but still very important difficulty. It is by nature an international market and one, which demands a diversity of items and well as purchasing (Ulph et al., 2012). This might explain why major auction houses such as Sotheby’s and Christie’s have proven to corner the art and antiquities market with such success (Ulph et al., 2012). Both of these companies have auction houses in market and source countries around the world,

and as such, have created an international organization with a huge inventory at their disposal, and can then cater to each individual patron's respective tastes (Ulph et al., 2012; C Tsirogiannis, 2016b; Tremain, 2017).

It is this global aspect of the antiquities market that only proves to make it that much more difficult to regulate (Ulph et al., 2012). Each country has its own regulations regarding transportation and purchasing of art and antiquities, with some, like Geneva in Switzerland, having extremely lax regulations due to status as a Freeport (Ulph et al., 2012). Additionally, while there are UNESCO conventions regarding the protection and preservation of cultural heritage sites, these are simply treaties (Ulph et al., 2012). They are effectively meaningless unless upheld and enforced by all countries that have ratified the convention. A lack of worldwide regulations or enforcement of the illicit antiquities market simply leads to displacement of these criminal activities to countries with more relaxed regulations (Ulph et al., 2012). Because this network operates on a transnational level, it makes it very difficult for policing agencies to work together, or share information, which can lead to a complete understanding of the looting, and trafficking processes, which occur across borders (Polk, 2000; Christiansen and Erik Jørgensen, 2007; Lobay, 2009; Vignal, 2017). One of the most successful cases of uncovering and building a legal case against an individual within the illicit antiquities market was the case of Giacomo Medici (Watson and Todeschini, 2006). The success of this case was only able to occur because three different countries (Italy, Germany, and Switzerland) worked together to build a case against this individual (Watson and Todeschini, 2006). The cooperation of these countries led to one of the discoveries of one of the largest caches of illicit antiquities ever discovered. It was discovered that Medici's warehouse in Switzerland contained approximately 2,000 objects, which took two archaeologists around two years to document and identify (Watson and Todeschini, 2006).

4.5 Limitations

4.5.1 Nature of Antiquities Market

This project has endeavoured to provide a serious piece of academic research that will contribute to the study of antiquities trafficking. However, one of the greatest difficulties faced in this field, and one of the main limitations of this project, is lack of available data

(Polk, 2014). As the illicit antiquities network is a dark/covert network, it inherently seeks to conceal the processes and techniques that make up the illicit antiquities network (Polk, 1999). This makes any data collection extremely difficult. In the case of conflict zones, this difficulty is amplified. As there is already a breakdown of any structure of a governing body, it makes any attempt at regulating or tracking reports of evidence of the illicit antiquities network are virtually impossible.

4.5.2 Conflict Zones

Initially, when considering the use of a case study of a conflict zones that suffered from antiquities trafficking, there were a number of concerns related to the amount of data available, as well as the quality any data that might be gathered or examined. These concerns are valid and make research within conflict zones all the more difficult as an individual's motivations for their statements or actions may not be completely clear to the researcher during the time of the conflict. This is especially so in cases where the conflict is ongoing, there is always the risk that individuals may be giving statements for political reasons, for the safety of their families, friends, or acquaintances, or to demonstrate support for a political or social group. As the data that is being used for this research project is second hand data, the crime scripts that were generated from the data are only being considered in a very general and abstract manner. However, this specific conflict was able to provide something unique – a high volume of media coverage concerning specifically antiquities and cultural heritage. With this media coverage came the possibility of data and increased understanding of events occurring within the conflict zone. The overall purpose of creating these crime scripts is to demonstrate the effectiveness and possible future implications of using this method of analysis within ATNs.

Additionally, something that has become a rather contentious topic in the field of illicit antiquities is the rumour/report that ISIS (Daesh, IS) is being funded by the sale of illicit antiquities (Daniels and Hanson, 2015; Willett, 2016). While there is a photograph which shows a document stating that the holder of the paper is granted the right to loot objects with a specific tax amount being paid to IS (Daniels and Hanson, 2015; Willett, 2016). The result of this photo and additional evidence is that some believe that the illicit antiquities network has funded terrorist organizations such as IS (Daniels and Hanson,

2015; Willett, 2016; Brodie and Sabrine, 2018). This research project will not begin to speculate as to the validity of these statements. In some cases, individuals have reported that IS did loot antiquities in an organized and specific manner, but as this area is still in dispute, with many layers of political and religious influences at hand, this research project will not consider or make any statements about the validity of such statements. The crime scripts have been developed with specific reference to individual statements, but as the conflict has included many areas being lost and recaptured by different groups within this conflict, the crime scripts will simply refer to ‘organized groups’, as it cannot confirm specifically which groups were, or were not responsible for organized looting of antiquities.

An example of this is evident in that there are many journalistic articles detailing the looting of antiquities by IS agents, or those paying a tax to IS (Mulder, 2014; Hunter, 2015; For et al., 2015; Match et al., 2016). While there are multiple instances of IS engaging in the looting of antiquities, there are very few articles which discuss other types of looters – likely a result of the nature of the reporting that was occurring at the time (Brodie and Sabrine, 2018). This potentially demonstrates a bias in western media to highlight only specific aspects of ATNs. When consulting with data from these sources, it is important to take note of the possible political agenda these pieces may serve, or simply the subtle bias that these articles represent.

4.5.3 Inherent Data Bias

When using secondary data, a concern is that the data may be somewhat biased or have different goals from the research for which it is being applied. In the case of using journalistic articles, there runs the risk of political or nationalistic bias. The dataset used to construct the Syria scripts is likely politically biased, as there are a number of international agendas on the table when it comes to the Syrian conflict. The majority of articles that ended up being used to develop crime scripts dated from late 2013 to the end of 2016 from English speaking publications. During these times, there was American and other Western nations’ involvement in Syria, with the US backing the rebels (BBC News, 2018). Airstrikes and aid were being supplied to the rebels, and with the exception of Russia, many western countries were also backing anti-regime forces at this point (BBC News, 2018). As a researcher, it is important to be aware of this bias, but also to draw attention to

the potential bias incorporated into the results of research project as a result of making use of this data. Additionally, there is a media bias as this dataset was created with the intent of media consumption and/or promotion. A journalistic article has very different goals from an academic article, and as such, it can create complications when journalistic articles are used within academic research. A journalist, who is already likely placing themselves in a dangerous situation for the purposes of these articles, is unlikely to be as concerned about potential bias within their interviewees, but are more concerned with finding people who are willing to talk to them. A result of this may be that the journalist is only reporting certain types of individuals – certain types of smugglers or brokers – and the danger (from a research perspective) is that a vitally important aspect has been overlooked.

This research project never intended to produce data-heavy analysis or practical results; it is methodological in nature and seeks to explore and demonstrate the efficiency of a particular method of analysis in relation to antiquities trafficking networks. Rather, the scripts that were developed here were intended to provide a starting point. As the data sources used for the development of these scripts are based in digital media reporting, they cannot be considered as having the same empirical standards as projects which make use of case reports or interviews. However, as has been stated previously, has this project never sought to produce ground-breaking new research to tackle ATNs, but instead provide a framework which allow such research to be developed effectively and efficiently.

4.5.4 Language

As has been stated, the search parameters for the data that were used to construct the crime script were limited to English speaking publications. However, there was a strong attempt to include media and news articles from sources all over the world, the reality of finding and accurately translating foreign news articles proved to be too difficult. In some instances where international media outlets (BBC, Aljazeera, etc.) have stations on an international level, translations of foreign articles would be available, but as this was not the case for every media outlet agency it should be noted that this data considers English based news organizations and articles. A failure to include foreign press will likely result in a political bias when considering the data, though perhaps less significant as the data represents a general understanding how the network operates. Especially different countries and regions, based on how the conflict affects them, will have different

perspectives on the situation, and will likely report or discuss events with a different context or perspective. Because of a language barrier, these perspectives cannot be considered or included in this research project, resulting in a less comprehensive understanding of antiquities trafficking.

4.6 Intended Goal/Consequences

The purpose of this project is to provide better insight into the operational aspects of the illicit antiquities looting and trafficking. Its primary focus is on the use of SCP theory and CSA as an effective method to analyse and extract information concerning the structure and methods of ATNs. Tackling the issue of reducing the looting and trafficking of antiquities is best attempted when there is first a thorough understanding how the network operates. Preventative measures, which operate under inaccurate or misleading information, can prove to do significant damage instead of good. There is always the possibility of creating new networks/routes/method, new crimes, or simply displacing the crimes – consider the United States and Prohibition in the 1920s (Polk, 2000). One of the larger concerns that should be discussed in this field is: what exactly is being accomplished and what are the best ways of going about doing it?

4.7 Conclusion

This chapter has sought to provide a broad outline of the methodology and research design, while also discussing a number of significant factors such as difficulties faced, limitations to the project, and the relevance of this project and its findings. An effort has also been made to articulate why the approach employed in this study is an effort to break new ground in the field of evaluating illicit antiquities. This would provide not only a potentially useful and working analysis of ATNs, but also this methodology and method of analysis could have a positive impact upon both future research in the field of antiquities trafficking, and the broader application of SCP in conjunction with CSA. The following chapter will begin this process by presenting the crime script for ATNs.

5. Using Crime Scripting in Antiquities Trafficking Networks

5.1 Introduction

As was outlined in the introduction to this thesis, the following chapter will focus on introducing and discussing the crime script that has been generated for ATNs and consider the facilitating circumstances and factors that occur within these scripts. Understanding the opportunity structure that allows ATNs to sustain themselves through the framework of CSA and SCP is a main aim of this thesis and will help determine potential preventative techniques or procedures for ATNs. This chapter demonstrates and explains CSA broadly, in the case of ATNs, showing its efficiency in highlighting relevant and necessary components of a crime. It begins by engaging in a detailed examination of the crime script that has been generated for ATNs. To achieve a thorough understanding of this crime script, a consideration of the complete script will occur, during which the versatile nature of the design of the script will be discussed. The focus will then turn to the three distinct phases of the overall script, which is comprised of the looting, transit, and market phases. Special consideration will also be given to how these phases operate, the types of methods employed at each stage, and specific examples will be given to demonstrate the versatility of how the illicit antiquities network operates.

The crime script that has been generated for ATNs additionally operates as a model of how these networks occur (A full version of this script can be seen in Appendix 9). Within this model, these three phases of ATNs can be examined, and its application considered by a variety of fields or expertise including criminological, law enforcement, or policy perspectives – depending on the needs of the user. This allows for more targeted and focused application and analysis of local issues if needed, rather than attempting to consider the network as a whole. So, while a complete master script is presented here, the reality is that countries or local communities will likely only be faced with a particular phase of the overall network and as such each phase of the network is also being considered separately. In short, this script has been designed in such a way that the separate phases can be used independently from the overarching script, allowing for more targeted and local interventions. The use of crime scripting in this chapter is ultimately intended to highlight and demonstrate common and broad opportunity structures which are

evident in ATNs. This analysis will identify and allow for close examination of the factors which ATNs thrive upon and will ultimately assist and help inform the efficient application of SCP in relation to ATNs.

5.1.1 Crime Script/Model of Antiquities Trafficking Networks

The crime script that emerged from this thesis’ analysis of ATNs consists of eleven distinct stages, which in turn make up three phases. Each phase and the corresponding stages will be examined in detail, with examples given of particularly important or relevant stages. To begin, a considering the script in its complete form will take place, followed by an examination and discussion of the elements of the script separately.

Antiquities Trafficking Networks Crime Script				
	LOOTING	TRANSIT	MARKET	
STAGES/ROLES	Subsistence Profit Leisure	Smuggler	Middleman	Broker
ENTRY	Access Site	Obtains Object	Purchases Object	Purchases Illicit Antiquity
INSTRA.INIT. AND ACTUA.	Search and Find Objects	Decides how to transit object	Contacts Buyer	Research/ Assesses Object
DOING	Loot Objects (Remove from location)	Smuggles/Transports object across border	Sells Object to Buyer	Provenance Decision
POST-CONDITION AND EXIT	Transport from Site Dispose of Object	Delivers OR sells object		Sell Object

Fig. 5-1: Antiquities Trafficking Network Crime Script

5.1.2 Antiquities Trafficking Network Crime Script Example

As was discussed above, this script was created as an analysis tool for the looting, transit, and market phases of ATNs. This script model can be applied to individual phases, or the entire process of antiquities trafficking from looting to market. The aim was to allow for a versatile tool which would be able to accurately and efficiently reflect the types of scripts that exist within ATNs. This crime script or ATNs model is intended as a tool for analysis

by academics and those working within or studying the antiquities market. The phases themselves have also been created in such a way that the stages may also be re-arranged and consider previously unprecedented methods or techniques that may be encountered within the network. The type of script presented in this chapter is a situational script – indicating it is scripting the specific situation in which the action occurs (versus a personal or instrumental script), and further, it is a potential script – indicating that it presents a hypothetical scenario, rather than describing an actual case of trafficking (Cornish, 1994b; Borrión, 2013). Mapping a ‘hypothetical’ network allows for the depiction of a broad framework of ATNs, that can account for all aspects of any given network, from sourcing antiquities to selling them.

The crime scripts presented in this thesis will represent the most skeletal and necessary elements that are necessary for the crime to occur. Case specific scripts are presented in chapter 8, and will reflect elements necessary to the specific situation or example of antiquities looting. This broad, master script has been generated to provide an empirical breakdown of the operational structure of ATNs. While a basic understanding of how the networks function has been established, most of this understanding originate from a narrow collection of case studies from a wide time range. This script not only provides a basic premise from which future research can be conducted, but also provides a model which has considered all potential methods or steps necessary.

While traditional models are reactive – using known examples – this model attempts to be predictive, considering all possibilities for future research. The scripts in this chapter are, at the most basic level, applicable to any occurrence of antiquities trafficking. These condensed crime scripts will allow for important points of intervention to be highlighted and discussed in greater detail. It will also demonstrate the importance and the practical use of CSA – especially when later paired with the SCP framework. The following script examples in Figure 5-2 (below) display the looting phase of two separate examples of antiquities looting. The script on the left is for the case of the Salisbury Hoard (discovered in the United Kingdom), while the script on the right demonstrates the complicated case of the Fano (Getty) Bronze (Stead, 1998; Felch and Frammolino, 2011).

LOOTING PHASE	Mini-Shields - Salisbury Hoard	Fano (Getty) Bronze
	United Kingdom	Italy
Stage 1: Access Site	James Garriock & Terry Rossiter are metal detecting enthusiasts	Fisherman access site (ocean) through normal process of their workday.
Stage 2: Find Object	The two discovered an ancient hoard while nighthawking (Feb. 1985) without permission from the landowners.	(1964) Fishermen off Italian Coast catch a bronze statue in their nets while fishing
Stage 3: Source (Loot) Object	Garriock and Rossiter loot the objects	The crew decided: "Rather than turn the figure over to local authorities, they would sell it and divvy up the profits" (Ibid: 10)
Stage 4: Distribution (Looter(s) to Dealer)	Garriock & Rossiter sell the objects to a number of antiquities dealers (in person and at fairs)	The crew sell the bronze to Giacomo Barbetti (local antiquities dealer) for 3.5 million lire (approx. \$4,000 USD).

Fig. 5-2: Looting Phase Crime Script Examples – Salisbury Hoard and Fano Bronze
(Felch & Frammolino, 2011, p.10; Stead, 1998)

5.1.2.1 Salisbury Hoard

The Salisbury Hoard refers to the discovery, excavation and selling off of one of the largest finds of prehistoric metals ever discovered within the United Kingdom (Stead, 1998). This hoard and the network of excavators and dealers involved in its trafficking was only discovered thanks to the work of Ian Stead, deputy keeper in the department of Prehistoric and Romano-British Antiquities at the British Museum. His subsequent book *The Salisbury Hoard* (1998) details the discovery and consequent journey of the hoard, as well as his own (and others) efforts to determine the origin of the objects. The hoard comprised approximately six hundred objects discovered by James Garriock & Terry Rossiter while engaging in illegal metal detecting (Stead, 1998). Without reporting their find to authorities the two sold off pieces of the hoard to various dealers, though the majority was sold to local antiquities dealer John Cummings (Stead, 1998). The objects passed through a number of dealers, but eventually Lord Alistair McApline, and antiquities dealer, came into possession of one. Through a fellow colleague Ian Stead, was introduced to McApline, who thought the he might be interested in such an object for the museum's collection (Stead, 1998). Upon Stead expressing interest in the shield, Lord McApline

brought together (from market) twenty-two mini-shields whereupon they were purchased by British Museum in 1988 for £55,000 – without a provenance (Stead, 1998).

5.1.2.2 Fano (Getty) Bronze

Chasing Aphrodite, written by Jason Felch and Ralph Frammolino (2011) is a book that explores the journey of looted antiquities, including The Fano Bronze (sometimes referred to as the Getty Bronze). This bronze statue was looted off the coast of Italy in 1964 by fishermen (Felch & Frammolino, 2011, p.10). The bronze was taken ashore and was moved to various locations in an attempt to keep it hidden before being sold to Giacomo Barbetti, a local antiquities dealer in Gubbio. Once purchased, Barbetti hid the bronze in a church, with assistance from Father Giovanni Nagni, who disguised the statue (Felch & Frammolino, 2011, p. 11). It was later transported to Brazil though the specifics of this are still unclear. The statue was then stored for three years at a monastery in Brazil before the bronze was sold to an art consortium (Artemis – based in Luxembourg) for \$700,000 in 1970s. Heinz Herzer, a member of Artemis and an antiquities dealer, recognised the value of the statue and after transporting it to Munich, began a long process of restoration (Felch & Frammolino, 2011, p. 11) Herzer sent photographs to Bernard Ashmole (curator of Greek and Roman Art at the British Museum) to appraise the statue. Ashmole then approached J. Paul Getty as a potential buyer (Felch & Frammolino, 2011, p. 11). Ultimately the Getty Museum purchased the Fano Bronze for \$3.95 Million in 1977 (Felch and Frammolino, 2011). The statue did not have a provenance, but an Italian court case in 1968 determined that there was not substantial proof that the fishermen who discovered the statue were in Italian waters (potentially being in international water instead) at the time of the discovery (Felch and Frammolino, 2011), therefore denying the Italian government a claim of ownership and allowing this legal precedent to apply. It is on the precedent of this case that the Getty museum therefore refused to return the statue (Felch and Frammolino, 2011).

Figure 5-2 (above) presents these cases in the format of individual scripts. Only the looting phase has been displayed, in order to concisely and quickly demonstrate the practical and realistic use of this crime script. When comparing the two scripts the order of the initial stages differs, as the Salisbury Hoard is initiated by motivated looters, while the Fano Bronze script is initiated by a chance find of the object (Stead, 1998; Felch and

Frammolino, 2011). The different initiating circumstances of the two examples have distinct crime prevention implications. Effective measures to deter or reduce metal detecting enthusiasts, in comparison to individuals who happen upon antiquities, will vary greatly. The goal of this crime script model which has been developed and examined in this chapter is to provide an efficient and useful tool for analysts that is adaptive and responsive to the many challenges that ATNs poses. The wide variety of methods, techniques, and actors which are represented in this network can be accurately and effectively portrayed in the crime script that has been developed, while also providing a tool that can be used within the framework of SCP.

Having now examined the overarching and complete script, consideration can now turn to individual phases and stages. This comparison between examples has sought to emphasise the purpose and aim of crime scripts. It has demonstrated not only how these networks operates, but also described important and necessary components which could inform crime prevention methods. As the following portion of this chapter will demonstrate, ATNs crime scripts provides a more focused and targeted form of crime prevention analysis than has been previously explored in the field of antiquities trafficking. The script works to highlight facilitating circumstance or opportunity structures which are present within the network, and SCP then provides a framework with which appropriate and effective prevention strategies can be developed.

5.2 Looting Phase

STAGES	Profit, Subsistence, Or Leisure
ENTRY	Access Site (Intentionally, unintentionally)
INSTRA.INIT. AND ACTUA.	Search and Find Objects (Chance, Anticipated, Certain)
DOING	Loot Objects (Remove from location) (Overtly, Clandestinely)
POST-CONDITION & EXIT	Dispose of Object

Fig. 5-3: The Looting Phase Crime Script of Antiquities Trafficking Networks

The looting phase of these networks, as is the most vital and necessary phase of the networks, as without an object, or antiquity, there can be no ATNs. This phase breaks down the looting processes into four necessary stages (as seen in Figure 5-3, above). These include: access site, search and find objects (discovery), loot objects, and dispose of object. As this script has been developed as a potential script – meaning it considers the potential ways in which the crime is committed – the order of the stages is not intended to be rigid or static. The stages can be moved or omitted to accurately reflect the available data or the manner in which the crime occurred.

Each stage of the looting phase is a requirement for the crime to take place, with the end result of the object being looted. The methods employed and ordering of stages can vary depending upon the circumstances of the looting and geographical location of the looting site. Each stage will be dissected and discussed in the following section, with particular focus on the methods employed by actors within ATNs. Additionally, within this phase the roles which actually participate in the looting of objects must be considered. In order to better understand the different ways or methods by which objects are looted, a consideration of who is doing the looting must first be explored. An understanding of the motivation behind this criminal activity will provide insight not only into how the actor views criminal opportunities, but also can help determine the most effective preventative methods to employ.

5.2.1 Types of Looters

In order for looting to occur, there must first be an individual who is motivated to loot. As such, the motivation or driving force behind an individual's action must be examined. The ability to deter or prevent an individual from engaging in a crime is vital component of any crime prevention theory (Lab, 2016). One of the primary concerns of this research project is related to the effective consideration and application of the SCP framework. Therefore, to understand the motive of the looter it is vital to understand the most effective forms the crime prevention strategies or techniques. It is then necessary at this stage, to consider why an individual chooses to engage in the looting of illicit antiquities.

When considering the different types of looters who are commonly found to exist within the illicit antiquities network, three categories can be discerned: subsistence, profit, and

leisure. These terms were defined in chapter 2, but will be briefly reiterated here to ensure a thorough understanding of the types of looters.

- *Subsistence looters*: individuals, groups, or communities which engage in (illegal) looting as a means of survival (Kersel, 2007; Lundén, 2012).
- *Profit looters*: any type of individual, gang, or organised group of criminals who systematically loot cultural sites for a profit (Kersel, 2007; Lundén, 2012).
- *Leisure looters*: describes an individual who engages in looting because of a personal enthusiasm for objects or the processes of discovering them (Kersel, 2007; Lundén, 2012).

While these distinctions have been addressed in various articles or research, few studies have organised or analysed the motivation or types of looters in such detail (Kersel, 2007; Kersel, 2011; Lundén, 2012; Saad El-Gendi, 2012; Fabiani, 2016). This is likely because most previous research is focused specifically on case studies, and not as part of a broader category of networks of a specific criminal type. Determining the type or motivation of the looter for a particular script is a necessary element to consider as an individual has a specific motivation to engage in potentially planning and engaging in the activity of looting. Understanding what has motivated this individual to participate in the activity is necessary to better understand and inform research as to common patterns or trends among similar motivations/types of looters. This in turn will allow for more appropriate forms or types of crime prevention techniques to target offenders effectively. If motives are identified, then correlative preventative measures can be identified. Additionally, being able to understand the process of analysing risk versus reward, and to determine the point, motives, or factors by which the risk becomes too great, the reward too small, is an integral part of SCP. This ties into a primary element of SCP, increasing the risk or effort while reducing the reward, so as to make the activity unattractive to the actor. In understanding an actor's motive this threshold of risk/reward/effort can be better understood and therefore result in more effective crime prevention.

5.2.2 Access Site

Whether deliberate or not, accessing a site or area where cultural heritage may be located is the first necessary step that is required to loot an object. Deliberately accessing a site would most likely include trespassing on either private or national property, unless you are on your own land. Generally, there are two options for how an actor accesses a site: intentionally or unintentionally. Intentionally would refer to deliberately trespassing or accessing a site in order to loot. While unintentionally accessing a site would typically occur when a site was unknown. The relative risks/effort/reward for these options offer contrasting outcomes to intentionally, or deliberately accessing a site indicated criminal intent from the start, whereas unintentionally accessing a site is not necessarily a criminal action. This would indicate that preventative measures for these two options would likely be quite different.

5.2.3 Search and Find (Discovering) Objects

This stage presents one of the most versatile in the entire network script. The discovery of antiquities often occurs in sporadic and unusual ways – rain reveals ancient monuments or fishermen catch an ancient bronze in their net (Felch and Frammolino, 2011; Yates, 2014). This stage is necessary to distinguish the manner by which an object is found, as it will dictate the corresponding crime prevention technique or method. Discovery is not an inherently criminal act, similar to accessing a site. These could simply be construed as activities – unbeknownst to the actor that any additional actions may result in criminal activity (i.e. looting). However, if there is criminal intent, such as when *tombaroli* search graveyards for loot, this stage proves to reveal more (Atwood, 2004; Kersel, 2006a; Panella, 2014). Undoubtedly criminal or not, the discovery of the object is still a necessary stage. It should be noted that crime scripts depict the necessary actions for a crime to occur, but not necessarily every action is criminal. Prior to this stage, there has been no risk associated with any activity. The ultimate motives of the individuals or group are (likely) not known beyond themselves, and there is little-to-no risk for this stage or the previous one.

This project will further detail the most common ways in which antiquities are discovered by classifying them as chance, anticipated, or certain finds. Objects found by chance are

the result of an unexpected discovery of an antiquity. As mentioned previously, this can include instances where heavy rains unearth archaeological objects or monuments – as was the case in Guatemala in 2001 when a six hundred-pound ball court marker was discovered and looted (Yates, 2014). Anticipated finds describe locations with a likely chance of finding objects, including areas known to be culturally rich (graveyards or digging near other cultural monuments). While the looters do not know exactly where to loot, it is probable they will unearth some objects. Certain finds refer to looting in specific locations where known objects or antiquities are looted. This can include looting from current excavations, or from established and popular sites (such as religious temples in India, or Valley of the Kings in Egypt) (Weeks and Hetherington, 2006; Kumar, 2018). This demonstrates a common occurrence expert's face when attempting to excavate. When a community is alerted to the fact that objects of importance or value have been found, the likelihood of looters targeting the site increases (Brodie, 2012b). Analysing the method by which looters find objects and antiquities presents ample opportunity to consider the many crime prevention methods and techniques to find the most effective deterring or preventative measures.

5.2.4 Source Object (Loot)

The looting of an object represents the first stage where a criminal activity actually takes place. Prior stages have been preparatory, with the individual not engaging in a criminal action. Once engaged in this stage, the looters are likely to continue progressing through the script, as the stage with the highest associated risk has already occurred. The looting of the object also represents the stage where, culturally the most damage is inflicted (Mackenzie, 2005; Brodie et al., 2006; Hanson, 2008; Proulx, 2011b; Kersel, 2012). Once the object has left its location of origin, it has lost all cultural and contextual value. As a result, the object is virtually useless to archaeologists or anthropologists who may have been able to understand its importance or use within the context of where it was originally found (Brodie, 2006; Kersel, 2012). The physical action of looting occurs either as: (1) overt looting – which refers to looting that takes place openly, or otherwise in a manner where no precautions are taken to disguise the activity of looting, or (2) clandestine looting in which an attempt to conceal their activity takes place. Overt looting indicates that the looters see no risk or threat to themselves when openly looting. This may be more typical in area where there is a lack of formal infrastructure or conflict zones (Alder and Polk,

2005). Clandestine looting would then be more common for areas where looting is seen as a criminal and punishable offense, with increased levels of risk for the looters (Alder and Polk, 2005). These two methods for looting represent contrasting levels of risk and as such, the ability to identify the method of looting would provide valuable information for prevention measures.

5.2.5 Distribution

There are a wide variety of ways in which the antiquity can proceed through a network at this point. This final stage relates to the initial transfer of the antiquity from the hands of the looter to those who will move it beyond the discovery site and eventually onto a wider market – which will transition the object from the looting phase into the transit phase. It may change hands multiple times, resulting in a complex network of transit and ownership, or result in a simple network with one individual acting as both trafficker and dealer of the object (Stead, 1998; Yates, 2015).

Simply put, some of the more prevalent options include the looter selling the object (or objects) to: a smuggler, a middleman, a broker, a dealer, or buyer/collector (including an institution such as an auction house, gallery, museum, or university) (Fuenzalida V., 1957; Kersel, 2006a; Kersel, 2011; Campbell, 2013; Mackenzie and Davis, 2016). Some likely options which will not be discussed in great detail at this time could include the looters not selling the objects - but keeping them, or the antiquities being forcibly taken from the looters. It is unusual for looters to sell items directly to a museum – examples of this tend to be historical rather than modern day examples (Fuenzalida V., 1957).

For the purposes of this thesis, the distinction between a middleman and a broker actor is necessary, as it indicates two separate entities. These terms tend to be used interchangeably within most literature, and so it is important to review this distinction, so as to better understand the following analyses. A diagram (Figure 5-4, below) has been provided, not only as an aid to understanding the actors being discussed within this section, but also to assist in understanding the following sections.

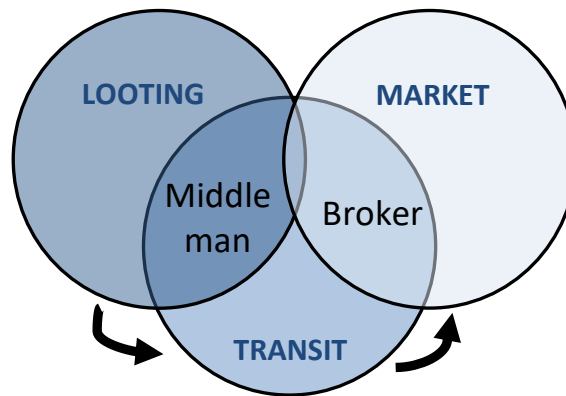


Fig. 5-4: Middleman/Broker Network Diagram

This diagram visually demonstrates the actors of middleman and broker, and their involvement in the market. The middleman, as is apparent typically operates within the looting and transit phases, though he/she may also have contact with the market or a broker. In contrast, the broker figure typically operates within the transit and market phase, though again, he/she may also interact with the looting phase and with middlemen.

This stage may seem to have a myriad of potential options, but it reflects the very real versatility of the network and avenues which looters may take to distribute and sell their illicit antiquities:

- *Looter to Middleman:* the looter sells, barter, or trades their illicit antiquities to a middleman. This type of actor operates as an in-between actor, essentially introducing two entities for a cut of the profit. A middleman would not necessarily be involved in the transit phase but would simply purchase the object as a means of turning it around and selling it onto a dealer, or buyer. Middlemen operate solely within the illicit end of antiquities networks, and do not attempt to operate within the licit network.
- *Looter to Broker:* This indicates that the looter is selling directly to a broker figure, who may or may not work to legitimize the antiquity. Some brokers will operate in the illicit network, selling the illicit object to other dealers or buyers, while others

will work to provide documentation of a history of ownership to then sell a ‘legitimized’ object.

- *Looter to the Market:* When a looter sells an object directly to the market, this usually indicates that they (the buyer) are knowingly purchasing an illicit antiquity. For an institution, this type of transaction tends to be increasingly uncommon, as more often these institutions are at least attempting to demonstrate legal and ethical purchasing standards. But there have been examples where this has occurred, such as the case of the Cerro El Plomo Child and the Museo Nacional de Historia Natural in Santiago, Chile (Fuenzalida V., 1957). A child mummy was illegally excavated by looters in the Chilean Andes during the 1950s, and they ultimately sold the body and objects found with the body to the Museo Nacional de Historia Natural for 45,000 pesos (Fuenzalida V., 1957).

Other considerations that can be made regarding how the object is sold, includes factors such as should be made as how the exchange took place (in person, electronically, etc.), the relationship between the looter and the purchaser (known associate, or new unknown contact) and whether this is a one-time exchange or an ongoing business transaction. This is a complex stage and demonstrates the important interactions and the necessity for the various stages of the script. As this is the final stage within the looting phase, the distribution of the object (or objects) begins to transition to the transit phase, where the object is transported. This provides an opportunity for those analysing the script to consider the phase looting (both in its entirety, and as separate stages) as well as how the object will continue through the other phases of the script.

5.3 Transit Phase

STAGES	Smuggler
ENTRY	Obtains Object
INSTRUMENTAL & ACTUAL INITIATION	Transit Decision
DOING	Smuggles/Transports object across border
POST CON. & EXIT	Delivers OR sells object

Fig. 5-5: Transit Crime Script (ATNs)

The transit phase represents the stage of the script which has the least amount of data or information available concerning the methods and techniques used by the actors within the network (Mackenzie and Davis, 2016). While there is evidence when looting occurs, and evidence of when an object enters the antiquities market, it is much more difficult to determine how these objects progress from their site of origin to the antiquities market (Proulx, 2011b). From previous case studies that document the trafficking aspect of the illicit antiquities market, it seems that the methods employed at this stage can vary depending upon the quantity and intent of the transit actors (McCalister, 2005; Bowman, 2008; Proulx, 2011b). As such, it should be noted that the order of the stages within this phase are not necessarily indicative of the most prevalent form or method of transit, but simply reflect the most logical order. Depending on the specific transit script, these stages may be reorganized to better reflect the activity at hand. The order of the script is largely dependent on if and when the object is purchased, as well as the manner in which the trafficker decides to transport the object. The script also has the ability to repeat various stages or phases, or reorganize itself to better reflect the reality of the situation. An integral part of these decisions will be based upon the object being trafficked either as an illicit object, or with the intent of creating a licit antiquity.

5.3.1 Obtains Object

This stage considers the immediate destination and transit of the antiquity. The scope of travel for the object will have a considerable impact on the method or techniques used to traffic the object. The two main considerations for the transit of the object relates to the destination of the objects and the method of transit that will be used. Moving or transporting objects within a nation's borders would typically present less of a risk, than international travel, but this is dependent on the country. For example, in the case of the smuggler/broker figure of Val Edwards, who successfully smuggled hundreds of objects from Mexico to the United States, and who would sometimes encounter check points within Mexico to target drug trafficking (Honan, 1995). This is a result of international transit typically faces more scrutiny such as border patrols, immigration or passport control, and the need for documentation as a result of needing to pay duty on objects or goods (Schneider, 2008; Lobay, 2009; Vignal, 2017). In transnational regions with open border policies – particularly the European Union – this promotes difficulties in regulating the trafficking of illicit goods, including illicit antiquities (Tijhuis, 2011). International

destinations also present some difficulties, as a technique often used by traffickers is to traffic the object through multiple countries – either as a necessary part of the object reaching its ultimate destination, or as a means of camouflaging or distracting from its true destination (Alder and Polk, 2002; Alder and Polk, 2005).

The transit of an object is a primary concern of the transit phase. In order for ATNs to operate at such a successful level, the ability to move and traffic illicit antiquities is a necessary component (Alder and Polk, 2002). This is especially true on a global level. The market for antiquities centres on specific cities and regions. Typically, these tend to be areas with high levels of wealth, as is necessary for the art and antiquities market to operate (Merryman, 1986; Murphy, 1994; Alder and Polk, 2005). The ability to supply such objects to these markets is vital for the survival of ATNs (Brodie, 1998; Polk, 2000; Kersel, 2006a; Mackenzie and Davis, 2016). Analysis of the transit of illicit antiquities includes the consideration of common routes used by traffickers, as well the type of vehicle that may be used to transport objects. Matters such as the number of countries an object may pass through, or the use of multiple and different types of vehicles are all considerations that must be examined in order to understand how traffickers are able to successfully move illicit antiquities transnationally.

The destination and transit stage is a necessary component of the overall script, as it indicates the scope of the traffickers and highlights potential transit routes. For example, it has been established in the field of illicit antiquities that free ports are commonly used by traffickers as a means of disguising and legitimising illicit antiquities (Alder and Polk, 2005; Rose-Greenland, 2016). This was highlighted after the analysis of prominent examples of illicit antiquities trafficking operations such as the complex network implemented by Giacomo Medici during his years active as an illicit antiquities trafficker (Watson and Todeschini, 2006). The use of free ports such as Geneva, Switzerland served as an important trafficking tool in one of the better known examples of antiquities trafficking – that of Giacomo Medici (Watson and Todeschini, 2006). Medici was responsible for the trafficking of such objects as the Euphronios Krater, and the Fano Bronze (Watson and Todeschini, 2006). His trafficking network was exposed in the early 2000s, when his warehouse in Geneva was raided by authorities and revealed over 2000 illicit antiquities and photographic evidence of looting (Watson and Todeschini, 2006). The analysis and consideration of the particular destination (or destinations) and transit of

objects within ATNs is important in understanding how these networks operate, and therefore is vital to determining the most effective means of preventative measures or initiatives.

5.3.2 Transit Decision

The smuggling or transportation of an antiquity may require the use of a number of techniques in order to successfully deliver the object at its intended destination. These techniques may include concealing, bribing, forging, or falsifying an object. Once again, the intent of the actor – to pass the item off as a legitimate object or to attempt to conceal the object completely - is important in determining which technique will be used. To conceal or smuggle the object might indicate that the antiquity being trafficked is relatively small. Attempting to hide or conceal a large, heavy stela (a large stone or wooden slab, often used as a grave marker) would be impractical, but smaller objects such as pottery or textiles would not prove to be difficult (Alder and Polk, 2002). However, there are cases where larger objects have been broken down into smaller pieces for the sake of transportation (Coggins, 1969). The techniques described in this section detail some of the more common methods employed by traffickers, though these techniques may vary widely depending upon the size, quantity and destination of the object.

- Concealing an antiquity for the means of transit is a more traditional form of trafficking. When concealing an object, the trafficker may actively hide the object in the vehicle or method of transportation, or may not disclose the object at all when questioned as to the contents of the transport.
- Bribing border agents or authority figures is another technique which is fairly traditional for traffickers of any illicit network. This is generally quite effective in certain regions where bribery or corruption is part of the infrastructure of a nation or state (Dietzler, 2013). It could also be effective if the relevant authority figure does not consider the trafficking of antiquities to be a harmful or dangerous type of crime. This is a stigma that ATNs face at all levels and stages of these networks. Generally, people do not consider illicit antiquities to be on the same level of criminality as drug or weapons trafficking (Mackenzie, 2011). This attitude could be exploited by traffickers to facilitate the illicit movement of objects.

- Forging documentation relevant to the object may include creating a false provenance (title of ownership), or forging papers which indicate that the object is legal. As there is no universal system or documentation by which antiquities can be registered or regulated, being able to forge such documentation does not pose as great a hurdle as someone attempting to demonstrate legal ownership of potentially criminal objects such as weapons or vehicles.
- Falsifying the object itself, or documentation pertaining to the object is another technique which may be used by traffickers. There have been examples of the antiquities themselves being altered so that they appear to be something other than an antiquity (Atwood, 2004). An example of this is evident in the case of a significant smuggling ring which was involved with the looting and trafficking of object from Sipan, Peru. This network of traffickers “took the ceramics that Johnson [the buyer] had indicated he liked and sent them to a workshop in Lima, where craftsmen used mud and latex to add a false bottom to each pot, stamping it with the words *Hecho en Bolivia* (Made in Bolivia)” (Atwood, 2004, p. 83). This technique allowed the objects to be disguised as simple local crafts and not the reality of being ancient and precious objects.

This stage represents an important part of the overall network as it has the potential of being one of the main points of intervention for crime prevention techniques and methods. Many illicit antiquities are discovered at border crossings, and with a more targeted form of intervention – as a result of analysis of type of objects, established routes, or common trends of trafficking in geographic areas – there is the potential of creating even more effective detection methods (Brodie, 2010).

5.3.3 Smuggle/Transport

In transporting an antiquity, it can occur at two different points in the process of trafficking an antiquity: either as an illicit object or as having gained some sort of provenance or legitimacy and being transported as a legal object (Polk, 2000; Massy, 2008; Hardy, 2016; Hauser-Schäublin and Prott, 2016; Mackenzie and Yates, 2016b). The previous stage was concerned with determining specifics of *how* the object would be smuggled. This stage is more concerned with *when* the object is in transit. As noted at the beginning of this

chapter, the basic format of the script does not necessarily reflect every method by which an antiquity is trafficked or smuggled. Consider the possibility that an object is looted. A false provenance is created for it, and is then sold and transported to the purchaser. In this instance, the order of the phases would be: looting, market, transit (in contrast to the typical format which is: looting, transit, market). This stage is a necessary component for any market, and is particularly relevant for ATNs. A more thorough understanding of when and how these objects are transported or smuggled can have extensive preventative implications.

5.3.4 Deliver/Sell Object

The sale of the antiquity after transport can potentially represent a transitional moment for the object – depending on the type of sale that takes place. It should be noted that this stage is dependent upon the needs of each specific script, as some scripts will not include a sale of the antiquity at this point in time. For example, some traffickers will have already secured a buyer prior to transporting the object and would therefore not need to include this stage in that particular script. When considering this stage in the context of crime prevention, the distinction of if the object is legal or illicit is important, as it allows for analysis of how and when the object transitions from an illicit antiquity, to a legal antiquity. The main concerns of this script, and its relevance to future preventative measures lies in where the object is sold or delivered. From a research perspective, this is a fundamentally important aspect of a trafficking network, as it presents insight into not only how these objects move, but the complexity of the network (i.e. does it pass through multiple hands, or go directly to a purchaser?).

5.4 Market Phase

This phase is comprised of different roles: that of the middleman and the broker. These two roles are distinctly different, and can operate either in tandem or independently of each other. A most significant difference between the two would be that the middleman deals in illicit antiquities, whereas a broker operates with objects either in transition from illicit to licit or fully licit objects. The goal of both of these roles ultimately, is to sell their products. In the case of antiquities this usually means onto either dealers, or collectors or institutions (Brodie et al., 2006; Proulx, 2011b; Campbell, 2013). In this process, there are

a number of combinations as to the order of the script. What is depicted in Figure 5-6 represents a typical script, but not necessarily a standard one. For instance, the role of the middleman could be completely omitted from the script in the case that a smuggler sold directly to a dealer or broker.

STAGES	Middleman	Broker
ENTRY	Purchases Object	Purchases Illicit Antiquity
INSTRUMENTAL INITIATION	Contacts Buyer	Research/Assesses Object
ACTUAL INITIATION		Provenance Decision
DOING	Sells Object to Buyer	Sell Object

Fig. 5-6: Market Crime Script (ATNs)

5.4.1 Middleman

The role of the middleman represents the final fully criminal actor within the network. This individual manages illicit transactions. Other terms for this role include trafficker – this individual is someone who can connect illicit sellers with illicit buyers, and antiquities with collectors. This role is a driving force behind antiquities trafficking - they often take on the greatest amount of risk, but also the largest profit (Brodie, 1998).

5.4.1.1 Purchase/Hire

Middlemen are not necessarily interested in keeping antiquities, but in selling them onto dealers, collectors, or institutions. They may – as in the case of the Empress Dou figurines – seek out specific objects for a client, but more often it seems that they work more in a manner of trying to obtain objects they know they will have buyers or dealers purchasing (Brodie, 2016). In some respects, this indicates that middlemen are likely to specialise in particular types, regions, or eras of antiquities, as they can then target a particular clientele.

5.4.1.2 Contact Buyer

How does a middleman contact or find a buyer once they've attained an antiquity? A relevant and important question. There seems to be a wide range of possibilities for this, as

middlemen can operate by having a buyer already in place, thereby conforming to market demands and producing objects which are trendy and profitable, or find buyers based on the supply that is available to them (Brodie, 2012a; Yates, 2015; Brodie, 2016). This is highly dependent upon how involved the middleman is in the network. For example, a middleman could operate as simply a link in a chain, organising the movement of an antiquity, or they can manage and operate vast networks of looters and brokers or dealers. While a vital part of how the overall network operates there is limited data concerning purely criminal actors. Brokers are typically more visible as they interact with the legal sector of the market, while middlemen stay within the criminal sector. As such, what can be determined is that the middleman can operate either with a buyer already established, or the need to find a buyer. In both cases, determining how these two individuals became acquainted would provide valuable insight into how these networks function.

5.4.1.3 Sell to Buyer

Once a buyer has been established, the broker then transfers the object to the ownership of another middleman, a dealer, or a collector who knowingly purchases an illicit antiquity. Depending on where the object originated, as well as the type of object, there could potentially be multiple middlemen or brokers in the process of an antiquity reaching a collector or institution. For example in the ground-breaking study conducted by Mackenzie and Davis (2016) on antiquities trafficking in Cambodia, they detail a network of middlemen, who facilitate the progress of an object from the site where it was looted, to eventually reaching collectors in Western and Asian markets. There can be a varying, almost hierarchical levels of middlemen within the network, who operate within different markets (Bowman, 2008; Proulx, 2011b; Mackenzie and Davis, 2016).

5.4.2 Broker

This broker plays the instrumental role of transitioning an object from illicit to licit. It has been established that the antiquities market is a grey (rather than white or black market) and unregulated market, but operates a fully legal market in countries across the globe (Bowman, 2008; Bland, 2009). The antiquities market is an old market, and one that can be rather slow to move with the times. It is an industry built on tradition, history (literally), wealth, and often social status. Brokers (and dealers) traditionally had to rely on personal

or business connections to establish clients. Consider individuals such as Giacomo Medici. As previously mentioned, Medici was notorious antiquities trafficker, who prior to the exposure of his criminal activities, was an individual well known within the antiquities community (Watson and Todeschini, 2006). Medici often operated as a dealer, but on rare occasions also played the role of broker. In the case of the Euphronios Krater, Medici was responsible for purchasing the krater off the Italian looters, transporting it to his warehouse in Geneva, and ultimately selling the krater onto the dealer Robert Hecht (Watson and Todeschini, 2006). Hecht would go on to sell the ‘hot pot’ to the Metropolitan Museum of Art in 1971 for the (at the time) shocking amount of 1 million USD (Watson and Todeschini, 2006). In this example Medici operated as a broker – bridging the gap between looters and dealer (Watson and Todeschini, 2006). Medici was able to do this as a result of his business connections within the antiquities world, and was able to make a significant profit as a result (Watson and Todeschini, 2006).

5.4.2.1 Purchase

The broker will likely come into possession with an antiquity through one of three ways: either directly from the looters, from a middleman, or from another dealer. This is entirely dependent upon the progression of the object from its location of origin, coupled with the working connections and relationships of the dealer.

5.4.2.2 Research/Assess Object

In order for a broker to fully understand the worth of the object, or even any potential legal issues or difficulties, they must assess or research the object (Alder and Polk, 2005). This can be done in a more structured sense – by researching for evidence of an object within the antiquities market, or previous research *in situ* of the object by archaeologists or academics. Alternatively, a broker can independently assess and value the object to determine its potential worth. This stage not only assesses the value of the object, but also provides an opportunity for the broker to evaluate the potential risks that may be undertaken by attempting to sell this object.

5.4.2.3 Provenance Decision

As has been discussed, the antiquities market operates as a grey market, meaning that portions of it are unregulated (Brodie, 2014b). In particular, the use and requirement of provenance is an unregulated aspect of the antiquities market, as there are still many sales and purchases of objects that lack proper provenances (Alder and Polk, 2005). Even when an object has a provenance, it may not have been properly researched to determine the validity of the provenance. As a result of this lack of regulation, the manipulation of provenances is an important aspect that dealers use in ATNs to transition objects from illicit to a seemingly legal object (Alder and Polk, 2005).

Actors within the network will create and establish provenances to lend an illicit antiquity a sense of legitimacy. The case of the Dancing Shiva demonstrates the ease with which a provenance can be created or falsified. In 2013, investigative journalist Jason Felch (Felch, 2013a) broke news of a looted statue which was sold to the National Gallery of Australia (NGA) by New York antiquities dealer Subhash Kapoor. The bronze statue had been looted from a temple in India, and then trafficked to New York, where Kapoor then sold the item for five million dollars (AUS) to the NGA under the guise of having purchased the object from a Washington D.C. diplomat and presented the NGA with an Art Loss Register (ALR) certificate (ALR is a company which operates a database of known looted or stolen objects) stating that according to the ALR, the statue was not looted (Felch, 2013a).

Kapoor provided the museum with a document stating that he had purchased the bronze from a Washington D.C. man in October 2004. He also signed a warranty prepared by the museum that transferred title to the NGA and indemnified the museum in case of a breach (Felch, 2013a). With only this information, the National Gallery of Australia purchased the object (along with a variety of other objects from Kapoor) only for photographic evidence to appear demonstrating that the object had been looted and trafficked (Felch, 2013a). Had it not been for the efforts of individuals within India seeking to protect their cultural heritage, Kapoor's illicit dealings may not have been discovered for some time. Vijar Kumar of the India Pride Project was responsible for alerting authorities to the likelihood that that object had been looted, which resulted in an investigation by the Tamil Nadu police into the issue (Kumar, 2018). This represents just one example of creating a

false sense of legitimacy for an object. Ultimately, the decision to create a provenance is dependent upon the type of sale that the middleman or broker is hoping to achieve. Large institutions (museums, universities, auction houses) may prefer for objects to have provenance, but without clear evidence of an object being looted (such as the photographic evidence provided in the Kapoor case), there is little legal action that can take place (Proulx, 2011a). The use of provenance as a tool to facilitate the illicit antiquities network demonstrates the importance of analysing the frequency of use, type of provenance, and market practices related to provenance in order to determine effective crime prevention interventions.

5.4.2.4 Sell Object

The final stage of the script is concerned with how the antiquity enters the legal and accepted antiquities market. It is assumed that at this stage the antiquity has, through various techniques gained the appearance of legitimacy to the point that it is able to be offered for sale on the antiquities market. The broker has a number of options for actually selling the object. This includes selling it to: an antiquities dealer, a private collector, an institution (museum, university or auction house), or not selling, but donating the object. Once this stage has occurred, the script is complete, as the antiquity is now considered a legal object within the antiquities market.

Without buyers such as internationally renowned museums willing to purchase somewhat questionable items (National Gallery of Australia – Dancing Shiva), or private collectors willing to overlook the origins of an object in order to round out their collection (Yates, 2015) the market for illicit antiquities would not exist. With the sale of the antiquity, the individual who takes the largest cut of the profit will be the actor who operates as a link between the looting and sale of the object (Davis and Mackenzie, 2015). This is typically the middleman or brokering actor, and, as they take on the largest risk (transitioning the object from illicit to licit), they reap the largest reward (Davis and Mackenzie, 2015). As a result of this, the market phase of the script is essentially directly funding the transit phase – meaning it is funding and facilitating ATNs.

By analysing these stages and phases, a better and more specific understanding of how ATNs operates and is structured can be appreciated. The opportunity structure of the

crime is more evident, and the network of individuals and actors within the script become more apparent and understood. This final stage provides the ability to analyse where and by whom these objects ultimately come to settle. Understanding the flow and destination of the market can help determine effective campaigns and strategies to help prevent and reduce ATNs.

5.5 Conclusion: The Value of Crime Script Analysis for Crime Prevention

This chapter has focused on presenting a crime script model for ATNs to allow for further analysis within a SCP framework. CSA requires one to breakdown in quite detailed ways structure and organization that can support development of specific and focused crime prevention strategies. Classic SCP theory gives us the crime triangle, which dictates that in order for a crime to occur, there are three necessary elements: a likely offender (offender), a suitable target, and a time and place (Clarke and Eck, 2016). In parallel to the three necessary elements, there are three controllers which work to prevent the crime from taking place: a handler, a manager, and a guardian (Clarke and Eck, 2016). The scripts discussed here for ATNs, make clear the elements of the crime triangle within the varying stages of each phase. While the crime triangle presents a simple concept for understanding the necessary component for a crime to occur, crime scripting expands upon this concept to create a more detailed and targeted form of crime prevention analysis (Borrion, 2013).

This chapter has demonstrated the convenience and practicality which crime scripts can provide for studying and combating ATNs. The creation of this crime script model will allow for further versatile and efficient analysis of specific case studies of illicit antiquities looting, while providing a framework which easily translates to creating and developing crime preventions strategies (this will be demonstrated in chapters 7 and 8 with an analysis of the case study the antiquities network within the ongoing conflict in Syria). This chapter has sought to highlight the importance and advantageous nature of CSA as it provides a much-needed analysis tool to the study of illicit antiquities.

6. Facilitating Factors of Antiquities Trafficking Networks

6.1 Introduction

Having examined the crime script that was generated for ATNs and considered the various phases and stages that are necessary for these networks to exist, this chapter will offer a critical view of the factors which facilitates the actors and activities within this illicit network. By determining what these factors are, there can be a better understanding of what preventative actions or strategies will be effective. Ultimately, this chapter will provide the necessary components to inform the following chapter, which will consider the appropriate crime prevention techniques and strategies for ATNs. Within this chapter, each phase will be examined in turn, with a final section considering the network as a whole. This will help to highlight important factors for each phase of the network, while still considering broader factors or circumstances which affect all phases of the network. The chapter can be introduced with the simple question: how do looters use or create opportunities which allow them to loot illicit antiquities? After a close study of the crime scripts, along with an examination of the dataset of previous examples of antiquities looting and trafficking, important factors can be derived which helped to ease or allow the criminal action of looting, transit or marketing of illicit antiquities. This will ultimately demonstrate the targeted analysis which crime script allows, while also establishing a framework upon which situational prevention strategies can be considered.

6.2 Facilitating Factors of the Looting Phase

In the process of looting an antiquity, there are four main components which help an individual or group of individuals to (generally) facilitate successful looting of an object. This section will examine the four factors or circumstances which directly help actors to physically remove an object or antiquity from its location of origin. These include a lack of formal infrastructure, known archaeological sites, access to equipment, and the nature of antiquities.

6.2.1 Lack of Formal Infrastructure

Subsistence looting typically occurs in smaller regions or communities, where public services (healthcare, policing, community infrastructure, economic aid/development) are either suspended, non-existent, or failing (Merryman, 1986; Lundén, 2012; Brodie, 2014b). These are usually regions which face extreme poverty or economic distress and as a result, resort to looting illicit antiquities to survive or provide for themselves and/or their families (Merryman, 1986; Lundén, 2012; Brodie, 2014b).

This lack of formal infrastructure can result in less policing or less possibility for the protection or surveillance of archaeological sites (Chappell and Polk, 2011). The lack of a formal infrastructure presents an opportunity for these looters, due to the relative ease with which they can take advantage. Regardless of specific cases, the lack of infrastructure is (usually) not a direct result of any action taken by subsistence looters, but a result of circumstances (Saad El-Gendi, 2012). As a result, this type of situation provides the opportunity for locals to engage in looting antiquities at a lower level of risk and provides them with the opportunity to survive (Merryman, 1986; Lundén, 2012; Campbell, 2013). By engaging in more analysis and examinations of crime scripts developed for specific cases of subsistence looting, a better understanding of how subsistence looting manifests itself in different communities can be gained. Ultimately, this could provide more effective and targeted crime prevention strategies.

6.2.2 Known Archaeological Sites

It might seem counter-intuitive to consider archaeological sites as facilitating circumstances, but not when one considers the geographic area of many sites, an inability to properly enclose or surveil sites, and the fact that the public is well aware of its location and antiquities. Archaeological or cultural heritage sites usually operate as touristic or educational facilities, and act as legitimate economic resources for communities or nations (Brodie, 2010). These public and publicized sites provide significant opportunity for looters to easily find valuable antiquities.

Pompeii in Italy or the Valley of the Kings in Egypt represents significant cultural and archaeological sites which are well known and publicised to the public (Weeks and

Hetherington, 2006; Wallace, 2013). Both areas are expansive and receive thousands of visitors each day (Weeks and Hetherington, 2006; Anon, 2018a). These types of archaeological and cultural sites provide an easy way for looters provide almost a guarantee of finding antiquities. While some of the more prestigious sites may have formal means of surveillance and protection, many sites do not (Alder and Polk, 2002; Alder and Polk, 2005). As such, there is little in the way of formal protection (fences, guards, cameras, etc.), meaning that many of these sites are left relatively insecure to looters (McCalister, 2005). There are also many archaeological and cultural sites which are known to the local community or have been discovered, but lack the appropriate funding to complete a proper excavation – and as such are left unattended (McCalister, 2005; Kersel, 2007; Bowman, 2008; Kersel, 2011). These types of sites are particularly attractive to looters and they face little formal means of surveillance or protection, and thus present an easy and rewarding opportunity.

6.2.3 Access to Equipment

The looting of antiquities can be a relatively simple activity or can be one which includes sophisticated equipment and tools (Bowman, 2008). Situations or sites where specialised equipment for looting – such as bulldozers, heavy digging machinery, and metal detectors – are readily available creates the perfect opportunity for the looting of illicit antiquities. For example, there are times archaeological sites or cultural heritage sites are unearthed and discovered during the course of construction (Povoledo, 2017). Normally, the official process when this occurs would be to notify the appropriate departments or ministries and have trained archaeologists or specialists visit the site and determine if any action need be taken to protect or preserve items of interest (Anon, 2018c). If this normal procedure is not implemented, or if the construction is being done by private individuals they may ignore preservation procedures, and instead choose to make use of the equipment that is readily available and unearth the antiquities or site themselves. Such was the case when General Electric (GE) workers in the United States unearthed archaeological object (Munson et al., 1995). These remains were neither reported to state authorities nor to GE (the landowner) and for three months starting in June 1988, and the GE Mound was looted (Munson et al., 1995). This represents one possible example of how access to specialised types of equipment could act as a facilitating circumstance.

The ability to access such equipment easily poses an important factor, as the ability to move easily large quantities of earth – and potentially find valuable antiquities – demonstrates a low effort and high reward aspect of this network. If an individual has easy and low-risk access to specialized looting equipment, this serves as a facilitating factor for engaging in the looting of antiquities. The actor would likely have access to the equipment regardless of whether the antiquity was discovered – demonstrating that this can be classified as an advantageous factor. This type of situation presents the type of opportunity that allows the individual or group of individuals to very quickly determine the risk, effort, and reward levels, and is therefore relevant for consideration of crime prevention strategies.

6.2.4 Nature of Antiquities

Antiquities have been treated as analogous to natural resources as a non-renewable cultural resource (Cameron, 1994). There exists a finite amount of antiquities in the world, and many of them lay, as of yet, undiscovered (Cameron, 1994). In the case of an archaeological or cultural heritage site that has not been discovered, there is a significant advantage for looters should they find it first. If it is unknown, it cannot be guarded, protected, or identified in any manner, and this also provides the additional difficulty of authorities not being able to prove from where the object originated (McCalister, 2005). These types of opportunities usually occur when someone haphazardly stumbles upon a site or antiquities during the course of construction, general maintenance, farming, or simply from sheer coincidence. In such a case, when an individual comes upon this potential opportunity, there is little to deter him/her from engaging in the activity. Once an antiquity has been removed from its place of origin, it is very hard to prove from where it originated (Alder and Polk, 2002; Alder and Polk, 2005; Brodie, 2014b). While experts may be able to place which region or general area an object originated from, it is highly unlikely that experts could pinpoint the exact location (Brodie, 2006; Brodie et al., 2006; Hanson, 2008; Parcak, 2017). As such, if a looter is confident that experts of authorities would not be able to identify who looted the object, or where it originated from, the risk associated is lowered and therefore facilitates the looting.

6.3 Facilitating Factors of the Transit Phase

This phase is concerned with the transporting or smuggling of an antiquity. It is not uncommon that an antiquity, at some point during its existence, will cross a national border, either as a ‘legal’ object, or as an illegal object. A number of factors contribute to this transnational movement including the use of previously established smuggling/trafficking routes, national borders, the ability to easily disguise or conceal an object, and corrupt actors.

6.3.1 Previously Established Smuggling/Trafficking Routes

The types of individuals who engage in smuggling antiquities are potentially also involved in additional smuggling networks. As it is a smuggler’s or trafficker’s business to know and exploit the weaknesses of borders, border agents, or checkpoints, it would make sense that smugglers would operate within many various networks, as this would provide additional profitable opportunities (Alder and Polk, 2002). Previously established smuggling routes, including weapons or drug networks, could easily translate to the illicit antiquities network (Campbell, 2013). This demonstrates the potential (especially for criminal organisations with expansive networks) to take advantage of already established routes and illicit networks, and simply expand upon them to include illicit antiques (Alder and Polk, 2002; Campbell, 2013). Using these routes would provide a simple way of increasing profit in exchange for little increase in effort. Equally, there would be little to no increase in risk on the part of existing smugglers, and as such represents an ample opportunity for actors.

6.3.2 Easily Disguised/Hidden

A significant difficulty faced when studying ATNs is that unlike other illicit networks, antiquities are not considered inherently illegal (Polk, 2000; Alder and Polk, 2002; Mackenzie and Graycar, 2002; Mackenzie, 2011). Unlike a gun or packet of drugs, a border agent or authority figure may not necessarily suspect the object to be illicit (Proulx, 2011b). This facilitates the actor’s ability to conceal or disguise illicit antiquities as either local handiworks, or legal objects. The size and variety of many antiquities also allows antiquities to be easily concealed (Alder and Polk, 2002). As an antiquity can take shape in almost any form or any material, it is hard to target specifically these objects.

In contrast, there would likely be distinct signs or patterns to identify when attempting to detect weapons (shape, size, ammunition or explosive particles, etc.). Concealing ancient coins or smaller works of pottery among similar but modern objects (often en-masse) would be difficult to identify unless examined by an expert (Alder and Polk, 2002). Additionally, passing off antiquities as a fake, or trinket is an easy method, and one used by a number of smugglers (Alder and Polk, 2002). Many forms of antiquities lend themselves to often being overlooked, concealed, or disguised easily, which in turn allows actors to traffic them without much difficulty.

6.3.3 National Borders

Many countries have expansive borders, which are difficult to patrol or fence. As a result, national borders are rarely completely secure – providing opportunity for traffickers and smugglers to move wares across the weaker sections (Lobay, 2009; Tjihuis, 2011; Vignal, 2017). This is also the case for antiquities looting and trafficking. Many source countries are developing nations, which may lack the necessary resources to adequately protect or police their borders. This allows for antiquities to be smuggled or trafficked with relative ease and low risk. Other borders which facilitate the illicit antiquities network are open borders, such as many countries within the European Union (Benyon, 1994; Christiansen and Erik Jørgensen, 2007; Kersel, 2007). As the EU has an open border policy – meaning that people and vehicles can cross national borders with fewer immigration or custom checks – this also allows for the open movement of illicit objects, including antiquities (Tjihuis, 2011).

6.3.4 Corruption

There are many aspects of preparing an object for transit which are made easier through a network of contacts of illicit actors. Bribery of border officials or other authority figures within the market help to facilitate the trafficking of illicit antiquities (Alder and Polk, 2005; Dietzler, 2013). This can include individuals susceptible to bribery at some point in the journey of the object or be a systemic issue that is an ingrained custom within a nation or region (Alder and Polk, 2005). Corruption of states or individuals pose a significant facilitating circumstance, as it provides actors within the network the ability to remove evidence of an object's transit, or even existence (Dietzler, 2013). This also inducts further

corrupt actors with a stake in the object into the network as, if the object is exposed to someone in the network; it is likely that the corrupt actor may be implicated in the crime as well. Additionally, if these actors do not necessarily view illicit antiquities as a dangerous commodity, or threatening object, they may be more susceptible to ‘looking the other way’.

6.4 Facilitating Factors of the Market Phase

The final phase of the network, the market phase, presents many interesting opportunities for those hoping to engage with the illicit antiquities network. Of all the phases, the trade phase poses the most complex in terms of actors operating within the grey area of legal and illegal or illicit within the network (Alder and Polk, 2005). This grey aspect of the network allows for actors to take advantage of specific factors within networks including unnecessary provenance, profit, and long-term investments. This section will focus on examining and discussing how these factors occur within the market, and opportunities they provide.

6.4.1 Provenance Unnecessary

When considering other high-value markets, it is vital to consider the measures that must be taken to sell or purchase an object (such as a car or a house). Paperwork of some sort – usually demonstrating ownership – is usually exchanged or reviewed, and if you attempt to sell or purchase one of these objects without the appropriate paperwork or registrations, it is likely to be considered a slightly suspicious transaction. Within the antiquities market, it is becoming more common for buyers or sellers to attempt to have a provenance (title or history of ownership) for objects, but typically it is not required of objects which had been purchased or owned prior to 1970 (as a result of the 1970 UNESCO Convention) (Brodie, 2006; Ulph et al., 2012; Brodie, 2014a; Hardy, 2016). Additionally, as the 1970 UNESCO resolution is dependent upon each member state enforcing the regulations and practices indicated in the convention, not every state or even auction strictly abides by the convention (Brodie, 2006; Ulph et al., 2012; Hardy, 2016). This casual attitude allows the market to remain unregulated, and as a result, it easily facilitates the selling and purchasing of illicit antiquities.

There are instances within the market whereby individuals claim objects are from ‘an old family collection’ and consequently no receipt or proof of purchase exists (Gill and Chippindale, 1993; Renfrew, 2000; Ulph et al., 2012). This claim is *technically* plausible as it represents one of three possible alternatives for the appearance of an object not legally excavated: “[t]here are essentially three sources for this: the illicit excavation of archaeological sites; the modern creation of objects; and the re-emergence of figures from the obscurity of ‘old collections’ where they had been forgotten” (D. Gill & Chippindale, 1993, p. 10). The validity and ethical nature of the object must be determined with significant research into its acquisition. The market allows such behaviour and practices, as it nevertheless profits from them (Polk, 2009). As the lack of regulation of provenance does not affect the profit or overall market in any particular way, there is little motivation for the market to embrace any regulating policies or mandates.

While some dealers or brokers may choose not to provide a provenance for their object, it is becoming more common to see at least an attempt at inquiring about provenance from auction houses and dealers. This may be a result of the increase in cases from nations or communities requesting illicit objects be returned – as evidenced by the multiple examples of the Getty Museum returning large quantities of items to Italy (Watson and Todeschini, 2006; Brodie, 2012b; Brodie, 2015c). In some cases, efforts to ascertain provenance are cursory at best – such as the National Gallery of Australia’s lack of research when purchasing the Dancing Shiva from Subhash Kapoor in 2013 (Felch, 2013a). Accordingly, ATNs have used this glaring oversight by the market as a means of legitimising their products, using forged or falsified provenance (as evident from famous traffickers such as Medici, Kapoor, Hecht, and Drew and Swetnam) (Kaiser, 1990; Watson and Todeschini, 2006). The case of the Euphronios Krater represents a prominent example of a faked provenance causing controversy in determining the legitimacy and authenticity of an object (Watson and Todeschini, 2006). Robert Hecht was able to provide a legitimate provenance for a Krater that was attributed to Euphronios but was ultimately revealed to belong to a different Krater:

Hoving [director of the Met] resigned from the Metropolitan in 1977, but by 1993 he had come to believe that there were in fact two Euphronios kraters: one that had been illegally excavated in 1971 and subsequently acquired by the Metropolitan, and a second less-well-preserved one that had been in the possession of Sarrafian as claimed and documented, but that had subsequently

turned up the collection of Bunker Hunt (Hoving 1993: 338-9, 2001e). Hecht had simply taken the provenance and documentation from the Sarrafian/Bunker Hunt krater and attached it to the illegally-excavated and better-preserved Sarpedon krater bought by the Metropolitan. (Brodie, 2012b)

This example demonstrates not only the facilitating role a provenance can provide for an illicit antiquity, but also the difficulty in regulating provenances and the market overall. As many antiquities do not have photographic evidence of their existence, let alone their excavation, the ability to create or forge a provenance remains quite easily done. Through the use of transit countries, traffickers can also strengthen the provenance of an object, especially through countries which have free ports (Alder and Polk, 2005; Casey, 2017).

Free ports also provide strategic opportunity for antiquities smugglers, as the risk of objects being detected is small, and the ability to transport objects through multiple countries affords them greater legitimacy – and increasingly less scrutiny as a result (Alder and Polk, 2005; Casey, 2017). Therefore, the manufacturing of provenance for antiquities demonstrates a deliberate factor for actors within the network, and one that helped to cloud the issue of legitimate antiquities. Because of the lack of regulation within the antiquities market, traffickers can use this system to imbue objects with a sense of legitimacy through a process which would ideally seek to combat ATNs.

6.4.2 Profit

While this may seem to be an obvious factor, the largest profit for these objects will be taken by the dealers, or indeed middlemen in this network (Brodie, 1998). These are the individuals who typically work to legitimise an object and can sell it on the open antiquities market (Mackenzie and Davis, 2016). As such, they tend to take on the greatest risk, but also the greatest profit (Brodie, 1998). It must be noted that at some point in this process, these individuals are being significantly rewarded by the market for engaging in illicit activities (Brodie, 1998). The market – and mostly the buyer's end of the market – gives great incentive for dealers to acquire illicit objects and sell them on to buyers who don't thoroughly question their origin (Alder and Polk, 2002; Alder and Polk, 2005; Chappell and Polk, 2011). This is one of the most significant facilitating opportunities in

this network, as the market rewards those who participate in it – and with little consequences for those who may engage in the illicit aspect of the market.

6.4.3 Long-Term Investment

Antiquities, whether illicit or licit, can be considered to be a long-term investment (Alder and Polk, 2005; Lundén, 2012; Graham, 2014). Many wealthy individuals invest in art as it is a safe way of insuring and distributing money as assets (Graham, 2014). This is because antiquities do not (typically) lose value in any significant way; once appraised, their value will remain steady except in circumstances where certain object's market value may increase or decrease slightly depending on purchasing or collecting trends (Alder and Polk, 2005; Graham, 2014). When considering illicit antiquities, actors may take advantage of the ability to store antiquities long-term and bring them to market at a more appropriate time. This is a tactic that was evident in the decades following the looting of archaeological sites during the Gulf War and the Iraq War of 2003 – which also included the looting (theft) of the Baghdad Museum (Brodie, 2008). Neil Brodie (Brodie, 2011) focused on tracking the sales and purchases of unprovenanced cuneiform cylinders:

Between 1997 and 2002, for example, eight cuneiform inscribed clay barrels, dating to about 1900bc and celebrating King Sîn-iddinam's dredging of the River Tigris, appeared for auction. Not one had any indication of provenance. The first to appear was at Sotheby's New York in May 1997. The catalogue entry stated correctly that at the time only three similarly inscribed barrels were known – one each at the Louvre, the Ashmolean Museum, and Chicago's Oriental Institute.... Nor were any questions asked over the following five years when a further seven unprovenanced barrels turned up at auction. It is hardly credible that so many of these barrels should have been in circulation since before 1974, eluding scholarly and public view, only to appear en masse at a time when there was widespread looting of archaeological sites in southern Iraq. A more parsimonious explanation for their sudden appearance is that, in fact, they were looted after 1990 and illegally traded. (Neil Brodie, 2011, p. 120)

This highlights this issue perfectly, while also detailing the facilitating aspects of unprovenanced objects (Brodie et al., 2013; Brodie, 2014b). It demonstrates the ease with which actors within the network can wait to introduce the objects to the market until an advantageous time presents itself. Storing an antiquity, either on a short-term or long-term basis, does not require extensive equipment (Mackenzie, 2011). All that is typically needed is a room or space which remains at a consistent temperature and level of humidity,

to help preserve the object. This may not be the case with all antiquities, as they are made of a number of diverse materials and in many forms and sizes. The ability to store an antiquity (without it losing value) for a significant period of time allows actors within the network to operate on a long-term basis. This helps to facilitate the illicit antiquities network as it increases the window (or timeline) of profit.

6.5 Entire Antiquities Trafficking Networks

There are some factors and circumstances which are applicable to more than one phase, and as such they will be examined in this section. The three factors listed here represent more complex issues than any previously discussed in this chapter. They represent fundamental facilitators which allows ATNs to continually survive.

6.5.1 Criminal Networks (Organised Crime)

Profit motivated looters represent actors choosing to engage in looting as a source of income, or as part of a criminal lifestyle. In such cases, it is highly likely that a criminally motivated looter would be a part of (or is familiar with) other criminal actors. Such a network can be referred to as a criminal infrastructure or network. This criminal infrastructure, in relation to facilitating the looting of antiquities, refers to a network of criminal actors who may provide support or funding, or otherwise encourage the process of antiquities looting. This could include both local and international-scale criminal infrastructures and demonstrates an opportunity structure which facilitates individuals to engage with this criminal activity, but at an acceptable level of risk and effort. With the backing and support of a criminal group, individuals may be more likely to engage in looting – especially if they can trust to be protected by the organisation or offered additional help as a result of the organisation (Polk, 2009). For example, if looters are aware that working for a criminal organisation means that any objects found will be further dealt with by the organisation, resulting in quick profit, the criminal network is providing a low risk and high reward situation.

In this capacity, it is also important to note that criminally motivated type looters typically create facilitating circumstances, by actively seeking out objects or buyers. Criminal networks help to create a criminally facilitating environment by making it easier for looters

to gain access to resources and information regarding antiquities looting. Such an example of effective criminal infrastructures is evident in the looting network that helped to supply the Dancing Shiva statue to Subhash Kapoor in the early 2000s:

Kapoor had travelled to Tamil Nadu and met with Sanjivi Asokan, the alleged head of a ring of idol thieves in the region. Kapoor asked for Chola-era bronzes, which were in high demand on the art market. Over the next several months, Asokan allegedly hired thieves who — for 700,000 rupees, or about USD\$12,000 — broke into the Sivan Temple and stole the eight idols shown below (Shiva at top left.). (Felch, 2013a)

This example demonstrates a type of facilitating circumstance which is a product of an actor's actions from within the network. It seems unlikely that these thieves, or looters, would have engaged in this specific activity if the circumstances had not been facilitated by Asokan's criminal network. Asokan's network represents a rather large and well-organized operation, but a criminal infrastructure can also refer to small, local criminal groups as well. This is not necessarily true for every criminally motivated actor, but criminal infrastructures represent a trend which can be found in many examples of criminal looting (Watson and Todeschini, 2006; Brodie, 2014b).

6.5.1.1 Terrorist Organisations

Terrorist organisations differ from criminal networks in that they are generally bound by an ideological, religious, or political belief (Clarke and Newman, 2006; Rutelli, 2016). In contrast, generally criminal networks are typically profit motivated. As international organisations, terrorist groups have, since the early 21st century, altered the manner by which terrorism is conceptualized. In the Middle East, extremist groups have openly attacked and even destroyed cultural heritage – such as destruction of the Buddhas of Bamiyan by the Taliban in 2001 (Francioni and Lenzerini, 2006; Ulph et al., 2012). The ability for modern terrorist organisations to operate on an international scale has allowed them to engage in antiquities trafficking in a manner never seen before. Following the Iraq War of 2003, there were reports of wide-spread looting, and in the following year it was evident that groups such as Al-Qaida, or the Taliban may have profited for the illicit sales of antiquities (Bogdanos, 2008). This issue will be more thoroughly examined in the case study of Syria and the ongoing civil war.

6.5.2 Non-Criminal Association

This section concerns the common public perception that the trafficking of antiquities looting is not necessarily a damaging or harmful activity. Three factors play into this non-criminal association that most individuals share: the activities of leisure looters, tourist looting, and the lack of a victim or injury.

6.5.2.1 Leisure Looters

Individuals who engage in searching and looting objects as a hobby are a very specific type of looter, here referred to as ‘leisure’ looters. Different regions face this particular type of looting to varying degrees, but what distinguishes these looters from criminally motivated looters is the attitudes associated with the act of looting. For example, while some leisure looters may ultimately sell their objects for a profit, there is usually a special regard for the objects or for the act of discovery (Lundén, 2012). For example, in the United Kingdom there is an extensive culture of ‘night-hawking’ or illegal metal detecting. There have been many campaigns to try to incentivize these individuals to work with archaeologists and researchers to protect and unearth antiquities in an ethical manner (Nighthawk, 2012). However, what makes this particular type of looter able to loot easily and with low risk or effort is the fact that their activities are fairly normalised. If an individual walking outdoors with a metal detector is observed, it is highly unlikely that anyone would consider the person to be engaging in an illegal activity. Indeed, in many cases, simply attempting to find metal objects is not illegal, but when the individual’s agenda is that of trying to find antiquities to loot, this is engaging in illicit looting.

The specifics of this are also dependent on the particular country and the monetary value of the objects. For example, Italy has very strict laws regarding antiquities and essentially any historical or cultural items which are discovered within the country (or its waters) is considered property of the state, while in the UK for example, only objects of a certain value (over £10,000) is considered to be ‘treasure’ and property of the Crown (Polk, 2009). As such, in many countries it is not seen as ‘hard crime’ or particularly illegal for individuals to go and dig or search for antiquities on private or public land (Polk, 2009). This allows this type of looter to operate openly and with little suspicion. With an entire

culture of people behind this activity, it allows an illicit activity to pass as legal, and even at times ‘educational’.

Leisure looters can typically be classified as deliberately engaging in – or creating facilitating factors of – looting antiquities. Though highly dependent upon the country or region where an actor is based, an actor may be able to take advantage of social attitudes regarding looting. Leisure looters can operate in a wide variety of ways, and as such, it is difficult to broadly categorize them as one entity. Nevertheless, broadly speaking, leisure looters represent individuals who engage in these activities for their own pleasure, and as such, they are likely deliberately engaging.

6.5.2.2 Tourist Looting

When presented with an illicit antiquity, one does not immediately identify it as an illicit object. It simply appears to be an object in various states of condition. Taking an arrowhead from an archaeological site or even small stones from a site may seem harmless enough to tourists, but these actions are still acts of antiquities looting (Lundén, 2012). Many of the individuals who engage in this network do not consider it to be a morally or socially objectionable activity in the same way as murder, robbery, or vandalism.

Due to this, if an individual or community does not consider the rules or regulations in place to be necessary (or demonstrate a clear purpose), then they are more likely to ignore such regulations. This is most often seen in cases where tourists will take artefacts or objects (typically objects such as fossils) from important sites as a ‘souvenir’ because they do not feel that this is causing any direct damage (Lundén, 2012). As the site is so large, much of it cannot be monitored. This causal attitude towards antiquities looting represents a crucial facilitating factor, as it allows actors within the illicit antiquities network to take advantage of and operate within a grey space of moral and immoral – and more pivotally – legal and illegal.

6.5.2.3 Lack of a Victim/Injury

Within criminology there are five techniques of neutralisation (or a means of justifying criminal or illicit actions to oneself) as identified by Sykes and Matza (1957). These five techniques includes: denial of responsibility, denial of injury, denial of victim,

condemnation of the condemners, and appeal to higher loyalties (Sykes and Matza, 1957). Antiquities trafficking often faces two of these techniques (denial of injury and denial of victim) when individuals actions or activities within the network are challenged. This is because there are often no clear guardians of the antiquity, resulting in actors within the network being able to justify their looting, trafficking, or marketing of these ‘ownerless’ items (Sykes and Matza, 1957). Mackenzie explores this phenomenon within market dealers in his paper *Psychosocial Balance Sheets: Illicit Purchase Decisions in the Antiquities Market*, where by dealers on the antiquities market are able to sell or trade these objects by wilfully ignoring the suspicious conditions by which they received it (Mackenzie, 2007). A common defence people use is that by purchasing or bringing an antiquity to market, they are actually helping protect and preserve such object. Because illicit antiquities are taken from not from someone, it seems this facilitates people’s ability to rationalise their criminal actions.

6.5.3 Online Antiquities Market

6.5.3.1 Social Media/Messaging Services

Finding and getting in contact with buyers is one of the main difficulties with selling illicit antiquities – as with any illicit network where you are attempting to sell something illegal. However, a facilitating factor for this network is that illicit antiquities are not seen as dangerous or readily associated with violent crime, and are therefore not necessarily a high priority for law enforcement (Chappell and Polk, 2011). This reflects similar attitudes within the general public, and as a result, there is a significant lack of community policing. As such, it is fairly easy for a looter to post photos of illicit objects on auction websites, or social media platforms, and gather attention and potential customers who may be interested in the objects (Brodie, 2015d).

Once a potential buyer has been found, private communication can take place regarding the purchase of the object (Brodie, 2015d). This means that auction sites or social platforms can legitimately claim that no transaction ever occurred on the actual site, despite business relationships being established which might later facilitate the selling of such antiquities. The internet operates as a virtual antiquities marketplace and creates vast facilitating opportunities. This is largely a result of the fact that much of international and even

national law is still being developed when it comes to online purchases, security, and jurisdictional issues (Brodie, 2015d). This provides a relative grey area of international internet regulation and jurisdiction that can provide the perfect amount of ambiguity for looters to display and sell their illicit objects to considerable, global audiences at no cost.

6.5.3.2 Online Auction Sites

The internet facilitates the market standard of buying and selling antiquities without a provenance, as well as allowing buyers and sellers to remain anonymous (Chippindale and Gill, 2001; Lidington et al., 2002; Fay, 2011; Brodie, 2015d). This might be a major factor in why the antiquities market translates to a virtual market so easily. The physical market translates easily to the online market, with the only major differences being: the expertise of the auction houses or galleries provide (versus the mix of expert and amateur sellers online), the experience of shopping (in person, or online), and the ability to physically view and examine an antiquity (as opposed to seeing a picture or photo) (Lidington et al., 2002; Fay, 2011; Brodie, 2015d). In terms of providing more 'authentic' pieces or antiquities, an auction house such as Sotheby's or Christie's is no different from an anonymous seller on eBay when it comes to the details of the auction. An eBay seller can create a profile which is not verified and so can project any type of persona (Brodie, 2015d). Someone wanting to sell an object at an auction at Sotheby's can do so with his or her name listed simply as 'anonymous' (Brodie, 2015d). In both cases, the seller dictates the price, and eBay and Sotheby's take a cut of the margin. The object is then sold to a buyer, who in both cases can be listed publicly as anonymous.

6.6 Conclusion

This chapter has focused on determining factors or circumstances which help to facilitate ATNs, as identified by the crime script developed and examined in chapter 5. In order to comprehend and formulate effective crime prevention strategies for this network, an understanding of the specific opportunities which allow the crimes to occur in the first place must be ascertained. Throughout this chapter there has been a focus on these opportunities and on identifying key factors which not only allow, but facilitate a crime to occur. In total seventeen factors – either for individual phases or relevant to the entire process – were identified as prominent facilitating factors within existing ATNs, which

allow them to continually exist and sustain. With these factors now identified, the following chapter can proceed to the situational analysis of ATNs, and provide a more thorough and empirical understanding of how this network structured and operates.

7. Situational Analysis of Antiquities Trafficking Networks

7.1 Introduction

The two previous chapters have provided a rudimentary conception of the necessary elements for antiquities trafficking to occur, as well as major facilitating aspects of this illicit network. The goal of the crime script generated for ATNs is not only the development of comprehensive understanding of how these networks operate on a broader level, but it is also intended to provide a preliminary script upon which more detailed and specific scripts can be generated. Additionally, the discussion and examination of facilitating factors allows for a more thorough understanding of the opportunities and circumstances which allow these networks to continue to operate.

This chapter will apply the information gained from both the crime script and facilitating factors presented in chapters 5 and 6 and use them to consider and determine a set of potentially effective crime prevention measures. This will also include a demonstration of the potential insight that SCP coupled with the use of CSA can provide into the complex illicit networks found within antiquities trafficking.

This chapter begins by first considering the crime triangle – a concept within routine activity theory, and relevant to the SCP analysis of ATNs. After having briefly discussed this in chapter 5, this chapter will go further, providing a more thorough understanding of the implications of the SCP framework and contextualise the difficulties crime prevention faces within illicit networks. From this, strategies will be formulated and presented within five categories of SCP's techniques. The intended goals of these strategies will be discussed, providing a broader perspective of strategies for the entire network. Further analysis of the influencing factors for these strategies will be considered – specifically the role of controllers and super controllers. These elements of the analysis will be discussed within the context of the application of the crime triangle. Ultimately, this chapter represents the final product of the previous two chapters' efforts and will demonstrate the usefulness, efficiency, and resultant necessity, of the application of the SCP framework to ATNs.

7.2 The Crime Triangle

The crime triangle is based upon integral elements of routine activity theory, wherein a crime is likely to occur when an offender is faced with a place that has a vulnerable target (Cornish, 1994a; Clarke and Felson, 2004; Wortley and Mazerolle, 2013). The crime triangle was originally developed by John Eck, and discusses the need of three elements in order for a crime to occur: a target, an offender, and a place (Cornish, 1994a; Wortley and Mazerolle, 2013). The crime triangle, or problem triangle as it is sometimes referred to, is used to analyse the point where these three elements meet – resulting in a crime occurring (Cornish, 1994a; Wortley and Mazerolle, 2008; Wortley and Mazerolle, 2013).

7.2.1 The Triangle

The crime triangle and its components are shown in Figure 7-1. The inner triangle presents the necessary elements for any crime to occur which includes: target/victim, offender, and place. The centre of the triangle is the criminal act – this represents the space where all three elements meet and a crime takes place (Clarke and Eck, 2016). The outer triangle represents the three actors responsible for the accompanying inner elements: guardian, manager, and handler (Clarke and Eck, 2016). The outer triangle often is the most relevant part in determining crime prevention methods or techniques (Clarke and Eck, 2016). These components will now be examined in more detail.



Fig. 7-1: Crime Triangle (Clarke and Eck, 2016). Sourced with permission from Center for Problem Oriented-Policing.

7.2.1.1 Targets/Guardian

This side of the triangle represent the individual or objects that are the target of the criminal action. The controller for the target/victim would be the guardian (Clarke and Eck, 2016). The guardian is the person responsible for the protection and safety of the target/victim. This typically refers to either individuals or more formal positions such as security guards or the police (Sampson et al., 2010). A simple example of a target could be a bike, with the guardian being the owner of the bike. The guardian is the individual most directly responsible for the target or victim.

7.2.1.2 Place/Manager

This refers to the place where the crime takes place, usually the physical space, though this can refer to virtual crimes as well (Clarke and Eck, 2016). The controller of the place is the manager, which often refers to the individual or establishment which are responsible for the place (Clarke and Eck, 2016). They are often concerned with the management of the space, and as a result are the manager of the place, in the context of the crime triangle. An example of a place and manger could be a store where someone shoplifts or a school principal if a crime occurred within a school.

7.2.1.3 Offender/Handler

Lastly, there is the offender – the individual who is engaging in the criminal act. When referring to the controller for the offender, this is not referring to a specific person meant to control the offender. This usually refers to important or valued relationships. Social ties which could affect an individual's decision to engage in criminal activity – essentially positive peer pressure. Handlers represent the people who the criminal are closest with emotionally (Clarke and Eck, 2016). This can refer to family members, friends, mentors, religious figures, or authority figures in their lives. The term handler does not literally mean that these figures attempt to physically stop an offender from acting, but instead refer to the social pressure they can place upon an individual to not engage in criminal activity (Clarke and Eck, 2016).

7.2.1.4 Crime Prevention

The crime triangle has been discussed at this point in the thesis because it will be used directly with SCP to provide insight into potential crime prevention techniques or recommendations. In the latter part of this chapter, the SCP techniques that are relevant and potentially necessary for ATNs will be discussed, but as these techniques are indicative of a broad, aggregate understanding of ATNs, they do not represent specific, targeted recommendations such as the ones which will be explored and discussed in chapter 8. The purpose of this triangle is to help identify situations or opportunities where these three elements meet, and once identified, work to prevent the crime from taking place (Sampson et al., 2010; Clarke and Eck, 2016). In this respect, the crime triangle allows for an analysis not only of the elements required for the crime, but also the actors and elements that may have contributed to the crime occurring – the controllers. This manner of analysis will provide a more comprehensive analysis of not only SCP measures relevant to the crime elements, but also the controllers and (as will be discussed now), super controllers. From a crime prevention perspective when analysing a criminal act, it would seem logical to target these elements (ideally all three) to help prevent the crime from occurring. Scripts have been developed that take into account the crime triangle, in that they are victim or place-based scripts such as a victim script for carjacking developed by Copes, Hochstetler, and Cherbonneau (Copes et al., 2012). Taking this concept even further Leclerc and Reynald (2017) proposed creating controller-based scripts to consider preventative actions that controllers (guardians, handlers, or managers) might take to deter or prevent a crime for taking place. The main goals of their article were to use script analysis to interventions which could be taken by the guardian in particular crime settings, while also considering SCP measures (Leclerc and Reynald, 2017). They essentially proposed a script that instead of looking at direct interventions to deter the criminal, focused on interventions that could be made specifically by the guardian (Leclerc and Reynald, 2017). This concept is relevant to the SCP analysis of ATNs that will take place in this chapter. Because of the broad nature of this analysis, additional focus will be placed on the guardians and super controllers, as a way of determining institutions and organisations which are likely responsible for implementing the strategies that have been developed in this chapter for ATNs. This following section will examine the role of super controllers, and their relevance and use with CSA and SCP.

7.2.2 Super Controllers

Sampson, Eck, and Dunham introduce the concept of super controllers (2010), whereby the three levels of controllers are further influenced by formal, diffuse and personal types of super controllers.

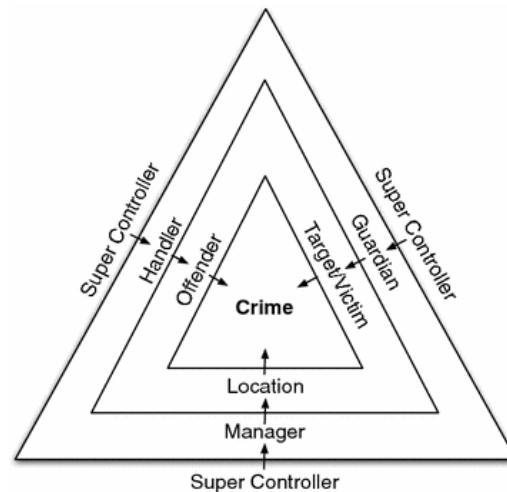


Fig. 7-2: *Super Controller Crime Triangle* (Sampson et al., 2010). Sourced with permission from Center for Problem Oriented-Policing.

“We call the people, organizations and institutions that create the incentives for controllers to prevent or facilitate crime ‘super controllers’ ...” (Sampson, Eck, et al., 2010, p. 40). Through their influence, super controllers are the driving forces behind the controller’s efforts to prevent crimes (Sampson et al., 2010). “Super controllers do not have a direct effect on the necessary conditions for crime, but influence them indirectly through handlers, guardians and managers.” (Sampson et al., 2010, p. 20). The concept of super controllers presents a further level of analysis and practicality to crime prevention, as often the controller’s ability to be effective at being a guardian, manager, or handler is dependent on the influence, finance, motivation, or ability of the super controller.

Super controllers are made of ten types, which are further broken down into three categories: formal, diffuse, and personal (Sampson et al., 2010, p. 20). Formal super controllers are organisations, contractual, financial, regulatory, or the courts. Diffuse are political, markets, and/or media, while personal is made up of groups and family (Sampson et al., 2010).

Category	Type
Formal	• Organisational
	• Contractual
	• Financial
	• Regulatory
	• Courts
Diffuse	• Political
	• Markets
	• Media
Personal	• Groups
	• Family

Fig. 7-3: Typology of Super Controllers (Sampson et al., 2010). Permission to reproduce this figure has been granted from the publisher.

Diffuse and formal super controllers can be influenced and influence each other, as for example, the media may influence a regulation by reporting on controversial changes to the regulation (Sampson et al., 2010). Analysing the influence these super controllers have upon controllers can provide an insight into effective and practical crime prevention strategies. Bichler and Malm (2015) proposed using a specific transnational crime triangle, with targeted super controllers relevant to transnational crime.

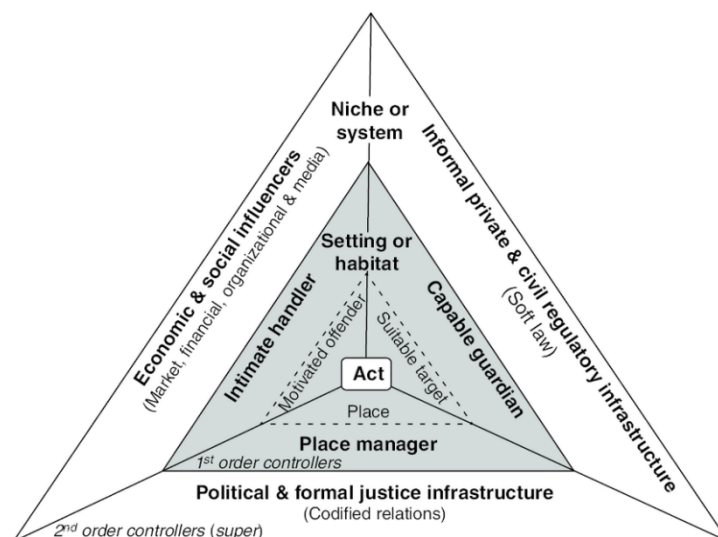


Fig. 7-4: Crime in Context of Global Market Systems and Intersecting Super Controllers (Bichler and Malm, 2015b). Permission to reproduce this figure has been granted from the authors.

Within this crime triangle Bichler and Malm assigned super controllers to specific sides/elements of the triangle (2015b). They indicate in their research that this is still a preliminary understanding of their crime triangle, and may be subject to change (Bichler

and Malm, 2015b). However, this triangle presents the possibilities that the crime triangle, in conjunction with super controllers may have a better understanding of criminal networks.

The strength of considering super controllers is that it takes into account another level of accountability, and considers the feasibility of implementing crime prevention techniques. This is highly useful in the context of ATNs and will provide more realistic recommendations.

7.2.3 CRAVED

It should be noted that a product-based model is often used in conjunction with the crime triangle. While this model will not be used within this thesis, it is helpful to understand the basic concept behind the CRAVED (Concealable, Removable, Available, Valuable, Enjoyable, and Disposable) model, as it often pairs well with both the crime triangle and SCP (Clarke, 1999).

The CRAVED model was a product-based model that was proposed by Ronald Clarke in the early 1990s as a means of better understanding why thieves ‘craved’ certain types of objects/targets (Clarke, 1999). CRAVED was developed out of an initial framework VIVA (Value, Inertia, Visibility, Accessibility), which was proposed by Cohen and Felson (Cohen and Felson, 1979). Often used in conjunction with SCP this model demonstrates the qualities of a target (object) which make it attractive to criminals (Clarke, 1999). Typically, this model is used to either work to make the target less attractive, or to determine which targets will most likely be the target of criminal actors Clarke, 1999).

Further models have been developed from the CRAVED model, with Clarke and Newman (2006) proposing the EVIL DONE (Exposed, Vital, Iconic, Legitimate, Destructible, Occupied, Near, and Easy) model for suitable targets for terrorism. Additional research includes Ekblom and Sidebottom’s (2008) focuses on personal electronic goods, Pires and Clarke’s (2012) analysis on parrot poaching Mexico, Petrossian and Clarke’s (2014) paper on illegal commercial fishing, and Piers’ (Pires, 2015) further study of multiple parrot markets in both Bolivia and Peru. More recently, Moreto and Lemieux (2015) introduced the CAPTURED framework designed specifically for illegal wildlife markets.

CAPTURED (Concealable, Available, Processable, Transferrable, Useable, Removable, Enjoyable, and Desirable) was designed to reflect the specific nature of products of the illegal wildlife markets. The most relevant study concerning product-based model focuses on metal detectorist, and site risks (Grove et al., 2018). This proposes a risk assessment for potential metal detecting site, based upon the model of HOPPER – History, Open, Protection, Publicity, Evasion, and Repeat Victimisation (Grove et al., 2018). For ATNs, the CRAVED model is appropriate, and works well to help analyse the underlying reason behind certain antiquities claiming higher market values or popularity over other antiquities.

7.3 The Antiquities Trafficking Triangle

Now that a basic understanding of the crime triangle has been established, the difficulties of the antiquities trafficking triangle can be better appreciated. In comparison to traditional types of property crime, antiquities looting, and trafficking have always faced a singular and unique difficulty, which is evident in Figure 7-5. The three elements of the crime triangle present difficulties when it comes to antiquities, as for most illicit antiquities their whereabouts are unknown. This has the result of the bottom side of the triangle, consisting of the target, the guardian, and the super controller, being unknown. This in turn, makes it difficult to determine or analyse the central part of the triangle: the criminal act.



Fig. 7-5: Antiquities Trafficking Crime Triangle, modified from: (Sampson et al., 2010). Permission to reproduce this figure has been granted from the publisher.

The ATNs crime triangle depicts a central difficulty for studying ATNs in relation to the recovery, documentation, or prevention of illicit antiquities. These next three sections examine each side or element of the crime triangle in more detail, and discuss the relevance of the crime triangle to SCP.

7.3.1 Antiquities Trafficking Elements, Controllers, and Super Controllers

When considering crime prevention strategies, some thought must be given to the ‘who, what, why, where and how’ of the implementation of any procedures or techniques. Product-based models such as CRAVED demonstrate how objects can be made less desirable to criminals through understanding why these objects were craved (Clarke, 1999). SCP uses all three elements of the crime triangle, to better conceptualize and review the ways by which criminals can be deterred or prevented through increasing risk, increasing effort, reducing reward, removing excuses and reducing provocation (Clarke, 1997b; Clarke and Felson, 2004; von Lampe, 2011) . When one aspect of crime prevention analysis is missing (such as in the case of the antiquities trafficking triangle) it makes crime prevention techniques or strategies all the more difficult to implement or consider.

7.3.1.1 Guardians

An antiquity presents a difficult scenario for the crime triangle, as unlike a car or a house its location, even its existence is often unknown to anyone until such a time as it is discovered. This fundamentally alters the crime triangle, as the target/victim has no guardian. This best describes one of the fundamental issues with antiquities trafficking, as the nature of the crime significantly limits potential crime prevention techniques or strategies. The result then being that any preventative consideration must target the offender/handler or place/manager. The use of the CRAVED model helps provide some insight into what types of objects actors will seek to loot and traffic and helps to provide an additional layer of scrutiny to an aspect of the network which has proven difficult to analyse to research. For example, a large Assyrian relief recently set a new sale record after being sold at a Christie’s New York auction for 31 million USD (Lazarus, 2018).

This sale has now caused those within the antiquities and archaeological fields to worry that this will incite more looting of similar types of objects (Arraf, 2018). This relief was looted historically, during the 1840s by a private individual, Austen Henry Layard, who took the piece (and many others) from Iraq with the permission of the Ottoman Empire, which controlled Iraq at the time (Lazarus, 2018). The worry now, is that as this piece fetched such a high and record breaking price at market, that similar reliefs will also be illegally excavated – as there is clearly a market for such items (Arraf, 2018). This example demonstrates the relevance of models such as CRAVED, and with further study, could be used to help identify specific types of antiquities that are especially at risk of looting or damage. In tandem with SCP, it could help to provide targeted prevention methods or techniques for these CRAVED objects.

7.3.1.2 Place/Managers

The place, or setting in relation to the antiquities trafficking triangle broadly refers to the physical places which an antiquity passes in the process of being trafficking. When looted, this refers to the physical spot where it was removed from its location of origin. Generally, this would include: archaeological sites (both known and unknown), graveyards, active cultural heritage sites, and further unknown location. Then, in the transit phase, the place would shift and could include entry points, methods of transit, and/or shipping/postage. In addition, for the market phase this would entail auction houses, antiquities galleries, museums, and antiquities fairs (Hardy, 2016). The super controllers of many of the managers will likely represent larger institutions or governments, mainly as much of the world's cultural heritage is under the protection or supervision of a Department or Ministry of culture – meaning a branch of the nation's government.

7.3.1.3 Offenders/Handlers

The offenders within the antiquities trafficking triangle refers to actors that were identified in the crime script presented in chapter 5. This includes subsistence diggers, profit and leisure looters, smugglers, middlemen, and brokers. Any individual who is seeking to loot, transport, or market an illicit antiquity would qualify as an offender. Accordingly, the controllers for such actors would include: personal relationships, community figures, the community at large, religious leaders, authoritative figures (such as bosses, leaders), and clubs or societies.

The super controllers for handlers would therefore be employers, or other, more serious criminal actors. As noted this network operates as a grey market, with a mix of offenders committing traditionally criminal activities (looting, smuggling), and others engaging in traditionally white-collar type activities (falsifying documents or laundering).

Now, with a basic understanding of both the crime triangle and the basic concept of super controllers has been discussed, these two elements can now be considered within the framework of SCP. The following section presents the SCP analysis of the ATNs crime script and facilitating factors, to ultimately identify prominent areas where crime prevention techniques or procedures could be implemented.

7.4 Situational Crime Prevention Strategies for Antiquities Trafficking Networks

The following section now focuses on discussing the thirteen SCP strategies which have been developed from the crime script and facilitating factors presented in chapters 5 and 6. As has been noted, typically, SCP techniques and strategies are intended for highly specific types of crime (Clarke, 1995; Clarke, 1997b). As has been established, the focus of this chapter (and the previous two chapters) is on an aggregate perspective of ATNs.

1. Restrict Access to Equipment
2. Secure Borders
3. Identify Criminal Networks
4. Monitor Archaeological Sites
5. Assist in Detection of Objects
6. Reduce Profit
7. Deny Long-term Investments
8. Create infrastructure
9. Reduce Corruption
10. Require/Establish Provenance
11. Criminalise Antiquities Trafficking Activity
12. Address the Nature of Antiquities
13. Internet

Fig. 7-6: 13 SCP Strategies for ATNs

SCP is employed in a manner for which it was not intended, but which will still be effective in demonstrating the potential and value of this framework with ATNs. The following strategies will demonstrate SCP techniques and strategies, focusing on the types

of super controllers which can influence or manipulate the controllers of ATNs. This will help to demonstrate a top-down approach of what types of institutions, organisations, or other elements are necessary to enact and execute effective crime prevention measures.

Each corresponding subsection will consider the strategy presented, discussing possible implementation or techniques that might be employed as part of the strategy, and will evaluate the types of controller and super controllers that may be tasked with the implementation of such a strategy. This will allow crime prevention strategies to be considered in a network comprehensive manner, while still providing insight into preventative, rather than reactionary policies, techniques, or programs. Additionally, it will identify key preventative (not reactionary) strategies for antiquities trafficking, but also identifying contributing factors which can influence the ability to implement such strategies. Taking the key elements from SCP (increase effort, increase risk, reduce rewards, remove excuses, and reduce provocation) as proposed by Sampson, Eck and Dunham (2010) this can be applied to the super controllers as a means of influencing a controller's ability or motivation to implement crime prevention strategies. The following sections are organised by the five SCP categories with each category having the relevant situational techniques proposed by this thesis.

7.4.1 Increase Effort

This category of SCP is made up of five techniques which include target hardening, control access to facilities, screen exits, deflect offenders, control tools/weapons (Cornish and Clarke, 2003). The two strategies that are proposed in this section broadly draw upon all five of these techniques and work to create situations or circumstances which increase the amount of effort that the actor must expend in order to engage in antiquities trafficking.

7.4.1.1 Restrict Access to Equipment (Strategy 1)

While simple equipment can be used to engage in looting, the use of specialized equipment allows ease and increased speed of discovery and removal of objects, as the crime script presented in chapter 5 indicated. This type of looting can prove to be more damaging than individuals engaging in looting with relatively simple tools such as shovels and picks – evidence of this will be discussed in more detail in chapter 8. This is because specialized equipment allows for large areas to be, rather brutally searched or looted for antiquities –

as it the case when bulldozers are employed; or when removing objects from a monument – such as when looters use reciprocating saws to remove large panels or mosaics (Nafziger, 1975; Casana and Panahipour, 2014). Working to regulate access to such types of equipment may provide a way of ensuring that looting on such large levels are reduced. This could be achieved by creating community watch programs to inform authorities when suspicious activity regarding heavy or specialized machinery takes places, as well as regulating the use of such tools to specific times and locations and implementing educational campaigns regarding cultural heritage for individuals who have access to such tools.

Community watch programs could be created in more rural areas, where potential looting may be more isolated. Such programs could be aided by websites or mobile apps, allowing individuals to easily report suspicious activity or alert individuals as to illegal operations taking place locally.

By designating or regulating specific timeframes during which such specialised types of tools could operate, this would aid authorities in tracking and controlling those who have access to these tools and ensure they are not being used for illicit means. While seeming to be rather complicated, it could be easily achieved by simply requiring any operations which require specialized equipment to register with a local authority and obtain a permit to operate the equipment (either at cost, or freely). This would effectively regulate the use of such machinery and allow authorities to easily identify any suspicious operations taking place. For those individuals who have access to specialized equipment, there is also the possibility that they – in the course of normal operations – may uncover cultural objects. This represents an individual actor (or group of individuals) taking advantage of a situation. Requiring a presentation or course on the importance of cultural heritage objects at the time in which they obtain their operating license, may help to educate and alert such individuals as to the importance of cultural heritage and deter them from engaging or considering looting the object. While many operations which make use of specialized equipment in culturally sensitive areas require an archaeologist to inspect the site or be on hand in the case of any discoveries, this is an additional precautionary strategy which may help deter individuals in case the strategies in place fail.

There is currently a lack of data concerning how looters access specialized equipment, and as such, the strategies produced for this facilitating factor are rather broad. With further research into the types of equipment used, the source of such equipment (stolen, accessed through work, rented, etc.), more targeted forms of strategies can be considered. At the moment, the strategies developed represent general steps that can be considered when facing the looting of object with specialized equipment.

Facilitator	SCP Strategy		
Ease of access to specialized equipment which is helpful or necessary for looting.	Community watch programs to alert authorities when specialized equipment is operating at unusual times. Regulate use of specialized equipment or heavy machinery. (GIS, Keyless Start/Stop). Educational Campaigns.		
Controller	Controller Type	Super Controller	Category
Individual/company/organisation that owns the machinery/	Manager	Financial Government (Organisation)	Rewards Risk

Fig. 7-7: Situational Crime Prevention Strategies to Restrict Access to Equipment

Incentives for companies or individuals to engage in such a program could include financial, as well as the personal benefit of being able to track or recover an item if it is stolen or taken. Consider a program such as the one outlined above. In order to help companies or organisations abide by such programs financial incentives could be promoted for those who actively engage and promote the program. Insurance companies could offer lowered rates for those companies who enabled objects to be tracked, or even those who ensure all their workers have the correct permits to operate such machinery. Additionally, tax incentives could be offered by the government to companies/employees who voluntarily take part in such a program. This is clearly an area that would benefit from further research and has the potential of being able to prevent or at least limit the ability of individuals or groups to engage in the mass looting of antiquities.

7.4.1.2 Secure Borders (Strategy 2)

As with many illicit networks, the illicit movement of goods across border is a challenge that is always faced. ATNs is no different, and the ability to smuggle or transport objects

across national borders proves to be a significant difficulty in working to stem the flow of objects from source countries to transit and market countries. As the crime script and facilitating factors from previous chapters identified, borders are a particularly relevant factor the antiquities trafficking. As these networks shares similarities to other illicit networks, it only makes sense that any crime prevention strategies proposed would work in conjunction or alongside existing strategies for stopping or reducing the illicit movement of goods across borders. Three of the strategies that are proposed in this section, are then applicable to any illicit network, or could be used in tandem with existing strategies. They include: determining potential weak points at border crossings, determining the most effective means of strengthening such points, and working to create an anti-corruption environment among border personnel.

Facilitator		Situational Crime Prevention Strategy	
Large and expansive geographic borders make it difficult to police, patrol, or secure all potential border crossings. Open borders allow for less strict scrutiny of persons or objects entering different states Corruption		Determine potential weak points for illegal border crossings. Increase formal surveillance for weak border points. Control for corruption among border personnel	
Controller	Controller Type	Super Controller	Category
Border Agents/Personnel	Manager	Government (Organisation)	Provocation Excuses Effort

Fig. 7-8: Situational Crime Prevention Strategies for Secure Borders

This section cannot provide very detailed strategies, as each border faces its own difficulties, and resources. Generally, the three strategies proposed offer an extremely broad view of the issue of securing borders. As this is already a significant issue of other types of crime, what this section hopes to highlight is the prevalence of corruption in helping objects to illegally cross borders. Corruption was highlighted as a facilitating factor in chapter 6, though within the field it has long been identified as a problematic facilitator. Tackling the issue of corruption within a community or nation poses a difficult task, as if a local or national government's infrastructure has become corrupt, it can be difficult to correct. That being said, a target study of the types of individuals who have

traditionally engaged in antiquities trafficking could offer more specific insight into the specific roles and types of individuals likely to indulge in corrupt actions.

7.4.2 Increase Risks

Seeking to increase the risk for the actor, this category within SCP includes: extend guardianship, assist natural surveillance, reduce anonymity, utilize place managers, and strengthen formal surveillance. There are four strategies presented here, which propose to increase the risk, to the point that the activity is deemed too risky. These include: identifying criminal network, monitoring archaeological sites, monitoring or eliminating smuggling routes, and detection of objects (Cornish and Clarke, 2003). While these four strategies represent difficult and broad issues, these following sections consider relevant SCP techniques which may help to reduce ATNs.

7.4.2.1 Identify Criminal Networks (Strategy 3)

The ATNs crime script identified the issue of criminal networks working either within the confines of one or multiple phases, and the infrastructure provided by such a criminal network can prove to be an important facilitating factor. The main strategy of tackling such criminal infrastructures in any illicit network is first to work to identify the actors who make up the network, and then designate important actors within the network, to determine the more effective means of disabling or dismantling the overall network. For example, social network analysis is a potentially useful tool in analysing such networks, and has been used successfully in a number of illicit markets, including terrorism, illicit drugs, and illicit weapons (Morselli, 2010; Berlusconi, 2017). However, more research could focus on determining effective strategies for specific networks.

Strategies for combating them [dark networks] are poorly documented in the literature, and with one exception (Lempert et al. 2008), little or no research compares alternative strategies with a view of balancing potential gains and costs. Moreover, it appears to be almost an article of faith that once a dark network's structure has been mapped and its key members identified one is supposed to capture and eliminate designated high-value targets. (Everton, 2012, p.32)

Further study could explore a more thorough understanding of the types of individuals who make up these networks, and the most effective means of dismantling them. Social

network analysis could prove to be effective for both, smaller criminal networks and larger international networks.

An additional strategy focuses on deterring such criminal networks, and consequentially criminal infrastructures. Different regions of the world have different types of penalties for crimes associated with illicit antiquities looting (Polk, 2000; B.T. Hoffman, 2006; Ulph et al., 2012). For example, China is famously quite strict about illicit antiquities activities, and has even executed individuals for their involvement in such crimes (Polk, 2000; Greenfield, 2007, p. 275). This is evident in the penalties in relation to source countries and market countries. Source countries tend to exhibit more serious repercussions for individuals engaged in illicit antiquities, while market countries face less serious consequences.

While the peasant tomb robber in China may be executed by the state for his role in the initial acts which result in the availability of the artefacts on the market, the ultimate purchaser of Tang or Han Dynasty material at Sotheby's or Christie's, or even in the venerable premises of Fortnum and Mason (where terracotta objects from China were recently available in their Gift Department) does so openly and without fear of arrest. (Polk, 2000)

This may be a result of the fact that many of the criminal actions which take place in market countries are typically considered to be white-collar crimes, in contrast to the physical looting or smuggling of an object in source countries (B.T. Hoffman, 2006; Mackenzie and Green, 2008; Ulph et al., 2012). By strengthening regulations and policies which target and penalise the entire network – and not simply less important actors, such as the looters – criminal networks may be deterred by the complicated and potentially consequential engagement with illicit antiquities. This is especially relevant for networks which engage in the transit and illicit-to-licit transformation of an object. Once networks or members of networks are identified, there is the ability to increase the risk associated with the activity to the point they reach the risk threshold. Determining that risk threshold is paramount to for crime prevention techniques, and if better understood could help to inform effective crime prevention procedures.

It has long been the practice of law enforcement to attempt to track and reveal the network of criminal organisations. This is evident in studies which focus on organized crime, gangs, and terrorist organisations (de Bie et al., 2015; Lehr and Chamberlin, 2015; Bichler

and Malm, 2015a; Berlusconi, 2017). Typically, “[l]aw enforcement interventions can have two broad types of impact on criminal networks: (1) Network dismantlement and (2) network disruption” (G Bichler and Malm, 2015, p. 68). The aim of analysing criminal networks is to typically determine the network structure of a criminal organisation to achieve either of these ends. In considering which tactic would be more effective – dismantlement or disruption – the role of super controllers has the potential to accomplish either tactic. Consider the disruption of a criminal network. Once the network has been identified, super controller such as financial, regulatory, or organisational institutions could place significant pressure on these networks. For example, Al Capone, one of America’s most famous gangsters, and arguably organised crime syndicates, was taken down for failing to pay his taxes (Papachristos et al., 2013). Besides the obvious action of making arrests, there are at times, more effective ways of dismantling networks, and with less casualties. A closer analysis of not only constructing social networks within ATNs, but also an analysis of the most effective means of ultimately combating these criminal networks could help to reduce the impact of these networks.

Facilitator		SCP Strategy	
Criminal networks allow for the easy organisation, looting, and possible trade of illicit antiquities.		Work to identify actors within criminal networks (reduce anonymity). Implement and enforce strict and consequential sentences for crimes associated with illicit antiquities looting as a form of deterrence.	
Controller	Controller Type	Super Controller	Category
Law Enforcement Border Agencies	Handler	Regulatory Political Media Organisations	Increase Risk Reduce Reward

Fig. 7-9: Situational Crime Prevention Strategies for Identifying Criminal Networks

7.4.2.2 Monitor Archaeological Sites (Strategy 4)

As was discussed in chapter 6, facilitating factors for archaeological sites can be categorized as factors for known and unknown sites resulting in prevention strategies also following such categories. Strategies for known archaeological sites include increasing security and surveillance for the sites, and thoroughly documenting the site and tagging items if possible. Recruiting the public to act as additional security would provide an easy and cost-efficient way to help monitor a site and alert authorities to potential looting occurrences. Providing a mobile app to allow guests to easily and quickly record or

document any suspicious activity would allow for a community watch type of approach to help prevent antiquities looting. A campaign which included such an app, but also provided signage similar to ‘See something, say something’ could make this an effective strategy. Additionally, posting anti-looting signage and information regarding the contextual importance of cultural objects may help to dissuade the casual looter (Gruber, 2013). These are rather abstract concepts, but they have the potential to be customised to the needs/requirements of various sites. Consider the possibility of UNESCO developing such an app, to be used at UNESCO world heritage sites around the world, or even important or at-risk sites on a global level. For known archaeological sites, the ability to have the public self-regulate or police themselves seem to be an effective and cost-effective way by which to help prevent the looting and trafficking of antiquities.

Tagging cultural objects also poses an interesting new strategy for preventing or deterring individuals from looting. Water tagging is a new phenomenon that is currently being explored in this field, and would provide not only a deterrence factor, but an ability to track and recover objects (Amos, 2017). It allows a simple liquid to be applied to the surface of an object and allow it essentially to be tagged – easier to track and identify – using nanotechnology. It is also virtually impossible to remove (Amos, 2017). Again, an abstract concept is presented here, but one that has the potential to provide a means of identifying and recovering looted objects.

Unknown sites or objects pose more of a difficulty. The main strategy for combating this factor requires specific resources and is therefore impractical for certain regions or circumstances. For areas with resources available to them, there is the potential strategy of using satellite or drone technology to document and surveil areas prone to antiquities looting. Neil Brodie and Daniel Contreras explored the feasibility of using Google Earth to monitor and document the extent of looting in their (2012) paper which focused on the site of Bân edh-Dhrâ in Jordan. The resolution of the photos (and availability) from Google Earth at the time that the paper was published was less than optimal. Considerable advances have been made since then, and further research on the potential use of this type of technology has been conducted and the use of satellite imagery has already worked to great effect in document the systematic looting of conflict zones in recent years (Contreras and Brodie, 2010; Brodie and Contreras, 2012; Jesse Casana, 2015; Parcak et al., 2016; Parcak, 2017). Looting pits can be identified from satellite imagery, which has provided

evidence of looting in areas such as Apamea (Syria), and regions in Iraq during the Iraq War of 2003 (Jesse Casana, 2015; Tapete et al., 2016). With the ability to identify looting pits from simple satellite photos, programs could be developed to analyse satellite imagery en-masse, and then be able to detect new or emerging instances of looting pits. The same type of process could also be employed with the use of drone, which can be acquired relatively simply, and be remotely controlled – providing a less risky way in which to surveil sites within conflict zones. Advances in recent technology have allowed for more realistic and practical means of surveillance and documentation of antiquities sites. With technology such as facial recognition, there may even be the ability to pinpoint particular changes to a landscape or site which may indicate antiquities looting, altering authorities to real-time occurrences of looting.

Facilitator		SCP Strategy	
Large geographic areas and/or high volume of visitors.		Documentation or tagging of objects, to aid in identifying or tracking objects if looted.	
The objects or site is unknown to authorities resulting in no preventative or surveillance measures.		Educational and anti-looting campaigns could be implemented to dissuade or deter possible looters.	
		Increase formal and informal surveillance for popular cultural heritage sites.	
		Satellite or drone technology to document and analyse looting ‘hot-spots’.	
Controller	Controller Type	Super Controller	Category
Archaeological Site Managers	Manager	Organisation Group Media Government	Excuses Provocation Risk

Fig. 7-10: Situational Crime Prevention Strategies to Monitor Archaeological Sites

7.4.2.3 Assist in Detection of Objects (Strategy 5)

As illicit antiquities present the difficulty of often being easy to disguise or hide as was highlighted by the ATNs crime script from chapter 5, three strategies are proposed to help either detect such objects, or to educate the public about common practices when concealing illicit antiquities.

...unlike the wildlife trade where it is possible to forge paperwork to make a shipment appear legal, this is not possible in the case of illegal drugs – at least certainly not in the same way. Paperwork can transform some visible commodities such as wildlife or plant species from illegal to legal status and the

items(s) can be physically inspected, whereas illegal drugs cannot be smuggled in any form open to inspection... (South and Wyatt, 2011, p. 545)

For border crossings, making additional resources available to border personnel, such as x-ray machines or relevant technology, would be a first stage towards increasing the detection of illicit antiquities. New antiquities detection methods are being tested at present, including the use of sniffer dogs to detect illicit antiquities. The current program is considering the potential of training dogs to be able to detect specific types of dirt in order to alert handlers to the presence of illicit antiquities (Anon, 2018b). If successful, these dogs would prove to be a valuable asset in detecting illicit antiquities, as at the present, even with the use of relevant technology, illicit antiquities can be difficult to detect. However, this would only be relevant to known areas of looting, as the dogs would likely have to be trained to identify dirt from specific regions. An additional strategy includes providing more specialized training regarding identifying antiquities, which could be made possible by partnerships between local universities or colleges and border agencies (Gruber, 2013). Providing border personnel with the appropriate training to help them detect legitimate objects could prove to be effective in discovering potentially suspicious objects.

Facilitator		Situational Crime Prevention Strategy	
The nature of an antiquity typically lends itself to easy concealment or disguise, as antiquities inherently, are not necessarily criminal objects.		Ensure appropriate equipment is available to border personnel to be able to identify illicit antiquities. Provide specific training or seminars for border personnel to help them identify potential illicit antiquities.	
Controller	Controller Type	Super Controller	Category
Border Law enforcement Authorities	Manager	Government (Organisation)	Risks Effort Excuses

Fig. 7-11: Situational Crime Prevention Strategies to Assist in Detection of Objects

7.4.3 Reduce Rewards

Removing or reducing rewards to the point that the risk outweighs the final pay-out is a fundamental aspect of SCP. It includes the following five techniques: conceal targets, remove targets, identify property, disrupt markets, deny benefits, and there are two relevant

prevention strategies have been identified for ATNs, including reducing profit, and denying long-term investments (Cornish and Clarke, 2003).

7.4.3.1 Reduce Profit (Strategy 6)

These illicit networks could not exist, let alone sustain themselves, if there was not a significant profit to be made at various points along the network. Profit was identified as a facilitating factor in chapter 6, and as such, the elimination of a profit would likely prove effective in preventing further antiquities looting and trafficking. Criminal networks are motivated by profit (in contrast to terrorism which is typically motivated by ideals/beliefs/religions), and criminal aspect of the illicit antiquities market occurs as a result of the profit that can be achieved through these objects. Though antiquities themselves are not inherently criminal (as opposed to illegal drugs), they are made criminal by the actors who engage in the market.

Year	Artifact	Initial Price	Final Price	Time Lapse (Yrs.)	Middle Profit*	References
1980	Achyris (Steinhardt) phiale (Italy)	\$20,000	\$1.2 million	11		Slayman 1998
1979	Morgantina acroliths (Italy)	\$1,100	\$1 million	1	998,900	Robinson 1998
1988	Statue of Marsyas (Turkey)	\$7,400	\$540,000	<6	532,600	Rose and Acar 1995
1971	Euphronios krater (Italy)	\$8,800	\$1 million	1		Slayman 1998
1996	Yongtai head (China)	\$840	\$125,000	1	124,160	Maggio 1998
1991	Amenhotep head (Egypt)	\$6,000	\$1.4 million	<3		Watson 2002, 26; Tokeley 2006, 202
1970	Asteas krater (Italy)	A pig(!)	\$275,000	<10	?	Slayman 2006
1982	Nataraja (India)	£12	£250,000	6	249,988	O'Keefe 1997, 19 n. 35
	Morgantina silver (Italy)	\$27,000	\$3 Million		2,973,000	Watson and Todeschini 2007, 106

Fig. 7-12: Profit Difference Between Start and End of Market - *adapted from (Brodie and Contreras, 2012). Permission to reproduce this figure has been granted from the author.

The table above demonstrates the potential monetary value of objects which motivates actors within this network. This figure represents high-end antiquities, and are therefore not indicative of the overall nature, but demonstrates the potential for top quality objects in

the market. This table originally appeared in the article *The Economics of the Looted Archaeological Site of Bâb edh-Dhaa* by Neil Brodie and Daniel A. Contreras, though the figure below has been altered to include the *Middle Profit* Column (2012).

In considering appropriate strategies for this facilitating factor, a complete market approach must be considered. The simple solution would be to eliminate or reduce the reward, or profit for the criminal actors. However, in order to achieve this, one must essentially eliminate or regulate all ATNs, which is not a practical strategy. Nevertheless, when considering the market from the perspective of the crime triangle, there may a more effective manner. The largest profit, as has been establish previously, is gained by the middleman or broker, usually as a result of a sale from the antiquities market. As such, the place where this transaction is occurring is, essentially both the licit and illicit antiquities market. As the antiquities market operates as a grey market, this means that the managers of such a place would likely be prominent figures within the antiquities market (i.e. auction houses, collectors, and dealers). Super controllers for these individuals and institution could take many forms. Regulatory restrictions clearly indicating the need for a documented and regulated market would likely have a significant impact. Alternatively, providing a financial incentive for the ‘manager’ to cooperate or regulate themselves seem like the most viable option. Creating tax breaks for those auction houses that do abide by ethical practices would provide the financial incentive that could being to regulate the antiquities trade.

Facilitator		Situational Crime Prevention Strategy	
The profit for trafficking actors helps to sustain and encourage the market to allow the illicit antiquities network to continue to exist.		Attempt to reduce the overall profit of an object by devaluing the antiquity within the antiquities market.	
The demand for such objects drives market			
Controller	Controller Type	Super Controller	Category
Actors within Antiquities Market (Auctioneers, dealers, collectors)	Handler	Regulator Financial, Courts Organisation Political Markets Media	Rewards

Fig. 7-13: Situational Crime Prevention Strategies for Reduce Profit

7.4.3.2 Deny Long-Term Investment (Strategy 7)

There is, on a fairly regular basis, occasions when archaeologists or experts in the antiquities or cultural heritage field spot an object that is being advertised for an upcoming sale (Gill and Tsirogiannis, 2016). When this occurs, typically an auction house or dealer will only remove an item from a sale if there is proof that the object was in fact illegally obtained (Gill and Tsirogiannis, 2016). This can cause immense legal issue which sometimes up to a number of years to resolve, as the burden of proof rests upon the nation of origin. One of the facilitating factors that was discussed in the previous chapter was the ability to store an antiquity until such times, as it was not considered as risky of an item to attempt to sell on an open market. The ability to do so is helped by the immense burden of proof set upon those who believe an object has been looted, as well as what strategies might allow such claims to be taken more seriously.

At present, there does not seem to be a formal mechanism by which member of the public, or experts in the field can report either potential looting which is occurring, or objects which they believe have been looted. There is, of course the option of reporting such an instance to local authorities, but often, as the nature of antiquities trafficking is so specialised these instances are categorised as ‘theft’, ‘vandalism’ or some other standard form of crime. This is actually an issue in trying to generate statistics on art and antiquities crime. It is therefore recommended that value strategy for ATNs, would be to create a system by which such reports could be recorded in an official capacity, but also might allow for a formal investigation or halting of the sale. If the government or a regulatory body of some sort where able to enforce a regulation which required that such claims be investigated, this could create somewhat of a hassle for auction houses, dealers, or collectors. Many individuals who work with cultural heritage or antiquities may not report illicit antiquities when they witness it, or their reports are lost in local agencies. In fact, in Simon Mackenzie and Penny Green’s article about the Dealing in Cultural Objects (Offences) Act of 2003 (UK), they indicate that collectors, when faced with known illicit objects, often simply refuse to purchase the object, and do not report such an object to authorities (Mackenzie, 2005; Mackenzie and Green, 2007).

A formal system of reporting – even a website – would facilitate recording and reporting such instances and provide the ability to ensure that manager elements within the network

would have to face these suspicions. Additionally, enforce eliminating the ability for dealers, buyers, or sellers to remain anonymous when participating in the antiquities market.

Facilitator		Situational Crime Prevention Strategy	
Antiquities rarely lose significant value over time, and as such are quite easy to store – allowing illicit objects to run out legal statutes or be forgotten from the public’s memory.		Keep accurate databases of known illicit antiquities or reports of illicit antiquities Update policy and legislation which makes it harder for object to resurface with no provenance Attempt to regulate the market	
Controller	Controller Type	Super Controller	Category
Auction Houses Dealers Collectors	Manager	Media Political Market Groups	Risks Rewards Excuses

Fig. 7-14: Situational Crime Prevention Strategies to Deny Long-Term Investment

7.4.4 Reduce Provocation

This section focuses on reducing individuals or circumstances which may provoke individuals into engaging in criminal activity. This category within SCP consists of five techniques including: reduce frustration and stress, avoid disputes, reduce emotional arousal, neutralise peer pressure, discourage imitation (Cornish and Clarke, 2003). Two of these techniques are not very relevant to the broad perspective of ATNs that is taken in this chapter. Avoiding disputes, and reducing emotional arousal are not considered in this section, and they are not directly relevant to the types of crimes being committed by individuals within ATNs. The other three techniques will instead focus on reducing frustration and stress, neutralising peer pressing, and discouraging imitation. This will be done through the three strategies presented here, and include: create infrastructure, reduce corruption, and require or establish provenance.

7.4.4.1 Create Infrastructure (Strategy 8)

Sada Mire (2011) presents an interesting framework for working with local communities to protect heritage, and help communities sustain themselves in the specific context of Somaliland. She advocates a knowledge-centred approach, and discusses important

elements of a cultural resource governance and development in a post-conflict context, which include: empowering heritage stakeholders, a local education and safeguarding programme, a national inventory list, public education and heritage awareness media programmes, a national museums and cultural-educational centres, locating Somali antiquities collections, repatriation campaigns for looted artefacts, and tourism.

Cultural property in Somaliland is disappearing systematically due to uncontrolled development (new roads and growing cities) and continued severe looting. Severe poverty triggers the latter activities. The solution to the problem needs to be multiple, not only addressing education and awareness but heritage work also must aim to create economic opportunities for local people. (Mire, 2011, p. 82)

This demonstrates a national approach to working to eliminate subsistence looting, while also providing beneficial infrastructure within the nation. The elements that Mire suggests are specific to Somaliland at the time of the article but represent a holistic approach that provide a good basis for other nations or communities.

Looting (including subsistence looting) which occurred in Mali resulted in wide-spread and mass looting of archaeological sites. Numbers indicate anywhere from 45% - 90% of known sites in Mali have been looted, including UNESCO world heritage sites as of 2001 (Hardy, 2015a).

There is some hope: a combination of economic development, community education, political commitment and law enforcement has had remarkable success in reducing illicit digging. Communities have established local museums, and thus protected their cultural patrimony, build community pride and local education, and provided the infrastructure for a sustainable economy of cultural tourism (Hardy, 2015, p.234).

Sam Hardy's article (2015), which focuses on the human rights of subsistence diggers, details a similar structure to the one presented by Mira (2011), which places focus on providing economic alternatives to looting, while also focusing on educating the local community.

In order to achieve an effective alternative to the situation an analysis of the ultimate root cause of a lack of infrastructure must be determined: "Studying the economic conditions in the countries of origin where such subsistence looting occurs is the first step in

understanding why local farmers and villagers are motivated to turn to looting.” (Saad El-Gendi, 2012, p.120) Each case will be specific and dependent on the needs of the community and the nature of the underlying infrastructure issue (political, religious, genocide, etc.). Any type of solution will additionally be dependent upon the reality of any resources that can be provided from either within or outside the state. There are, generally two options available concerning potential resources: funding (provided from the state, or from an independent party) or heritage/cultural tourism.

No matter what strategy is ultimately determined, a most important factor, and one stressed by Mire’s knowledge-based approach, is to ensure that the community has input and is consulted a part of any initiative. “Successfully combating subsistence looting must involve not only educating the local population... but must also demonstrate respect for the local community.” (Saad El-Gendi, 2012, p.124) This strategy provides a framework which allows for the close and contextual consideration of each particular instance of subsistence looting and proposes a method to establish effective outcomes and uses elements of SCP. This strategy is being implemented with consideration as to current practices in cultural sites, as well as potential techniques or strategies employed by other illicit networks. Examples include the Community Markets for Conservation (COMACO) program which operates in Zambia and works to prevent illicit poaching through alternative skills and product training, whose products are then bought by COMACO at higher market price; or Guanacaste National Park in Costa Rica, which through compensation and skills training helped to reduce deforestation, and instead create a tourist resource (Saad El-Gendi, 2012).

Facilitator		SCP Strategy	
A lack of a formal infrastructure on a local or national level results in individuals or communities engaging in subsistence digging as a means of surviving.		Identify areas and characteristic of communities most prone to subsistence looting and determine source of lack of infrastructure. Reduce frustration or stress of communities by working with the community to provide alternative economic solutions for the community.	
Controller	Controller Type	Super Controller	Category
Communities Employment Family Education	Handler	Government (Organisation) Financial Political Media	Effort Excuses Rewards

Fig. 7-15: Situational Crime Prevention Strategies to Create Infrastructure

Mire and Hardy's example demonstrate that these types of initiatives and strategies require funding, organisation, and support from governments. Table 7.15 observes this in the controllers and super controllers, where the controllers in this situation would be the community where the subsistence diggers originate. It can then be concluded that the super controller responsible would be the community's government. With influence from financial, political, and media institutions or outlets, it seems likely that a government (Organisation) would at least consider potential strategies such as enforcing or developing local infrastructures to help reduce the possibility of subsistence digging. This includes increasing the ability (effort) and removing the excuses for the controllers – the community and families – to engage, participate, or organise local infrastructure through funding, as well as increasing the rewards of those that do participate – by providing employment or financial benefits to those that do engage with the strategies.

7.4.4.2 Reduce Corruption (Strategy 9)

ATNs faces the common place issue of corruption, which facilitates and sustains all manner of illicit networks on an international level (Dietzler, 2013). Typically, corruption will occur at some point in the transit phase, but occasionally can occur in the looting and market phase (often evident in bribery of officials for site access or entry to a market) (Dietzler, 2013). Strategies to combat corruption include: reducing corrupt opportunities for actors, providing an infrastructure that inhibits corrupt activities or opportunities, and educating or providing training on anti-corruption. Removing immediate opportunities for engaging in corrupt activities could be prevented by implementing new regulations, such as requiring pairs of individuals to work together, or establishing regular audits or random inspections of employees to ensure no corrupt activity has taken place.

Ensuring that corruption is removed from the infrastructure of an agency could include financial background checks for employees to determine if they may be at risk of engaging in criminal behaviour. Additionally, ensuring that personnel are being paid living wages and provided with adequate benefits could help to lower the risk of corrupt personnel (Gruber, 2013). A final strategy could be to incorporate anti-corruption training, seminars, and campaigns as consistent reminders of the dangers of engaging in corrupt activities. An example, witnessed first-hand by the author, were posters displayed in the reception area of

prisons within Ohio (USA). These posters displayed side-by-side photographs of Correctional Officer's official photos from their first day of work, next to their mug shot. Additional information indicated what their crimes were – and all were relevant to illegal activity within the prison (i.e. smuggling contraband, etc.) This worked to highlight corrupt activities of correctional officers and highlight the consequences of such actions.

Facilitator		Situational Crime Prevention Strategy	
The corruption of either an individual or state allows for increased ability to traffic or smuggle objects into or from nations.		Reduce opportunities for actor to consider corrupt actions. Provide proper infrastructure for personnel. Educate potential corruptors as to danger and harm illicit antiquities poses.	
Controller	Controller Type	Super Controller	Category
Border Agents, antiquities dealers, archaeologists, shipping industry	Handler	Organisations Groups	Provocation Excuses

Fig. 7-16: Situational Crime Prevention Strategies to Reduce Corruption

7.4.4.3 Require/Establish Provenance (Strategy 10)

By far, the largest contributor for the ongoing existence of ATNs centres on issues concerning provenance. If the antiquities market were able to enforce and require the need for a legitimate and authorized provenance for every object sold on the antiquities market, these illicit networks would radically transform from a grey market to a black market. It is because of the lax attitude towards provenance that ATNs is a grey, and not fully illegal market, but instead straddles the border of legal and illegality (Mackenzie, 2005; Alder and Polk, 2005; Bowman, 2008; Campbell, 2013; Mackenzie and Yates, 2016b). All strategies for this factor of ATNs are therefore focused solely on working to regulate the market by creating stricter policies concerning provenance – such as enforcing and requiring a legitimate (and researched) provenance in order for a sale to occur. Another broad, but important strategy to consider would be working *with* the market to regulate itself.

...as long as the trade in antiquities may be conducted openly in the auction houses and dealers' galleries in the market centres, not only will the flow of material out of the poorer source nations continue, there is likely to be the additional social costs that result from the creation of organised criminal activity to carry out the organisation of the supply of material and its smuggling across borders, including the disastrous effects of corruption of the political process in the source environments. (Alder and Polk, 2002, p. 44)

This market has proven to be extremely difficult to research and police as a result of the antiquities market itself being averse to any changes that would ultimately result in a loss of profit for the market. This would usually include many of the policy and legislative actions. Providing a monetary incentive for the market to regulate itself would seem to be the clearest option. In this respect, providing tax cuts or incentives to large auction houses that enforce provenances for sales, and eliminating anonymous buyers, could have a significant impact. Additionally, establishing ‘lending programs’ for collectors or buyers to temporarily ‘rent’ objects from a university or museum’s collection could provide a way in which collectors have access to important items that might otherwise be in storage. The current culture of the antiquities market is an antiquated sentiment from an older age (Lundén, 2012).

In 2007 I posed to these auction houses [Bruun Rasmussen, Ellekilde and Lauritz.com] the same question which I had earlier asked at the Swedish auction houses: whether I could consign Chinese archaeological objects which had left China illegally to their auctions. All three auction houses replied that they had no restrictions against selling recently smuggled objects. (Lundén, 2012, p. 116)

Few courses of art history or museum studies offer classes which discuss the illicit antiquities market or provide classes regarding ethical purchases or collection habits.

Facilitator		Situational Crime Prevention Strategy	
The antiquities market that does not require or enforce the need for proof of authenticity or proper ownership documentation.		Attempt to have the market enact self-regulating habits.	
The ability to (usually quite easily) create a fake provenance, allows an actor to use the fake provenance to then establish a “legitimate” object with which to sell upon the antiquities market.		Encourage and fund more course and training availabilities concerning provenance research and authenticity.	
Controller	Controller Type	Super Controller	Category
Auction Houses, Museums, Universities, Collectors	Handler	Market Political Media Regulatory Financial Organisational	Effort Rewards Excuses

Fig. 7-17: Situational Crime Prevention Strategies to Require/Establish Provenance

A final strategy to combat the current attitudes of the antiquities market is to provide the next generation with a more complete perspective of how the antiquities market operates –

including the illicit antiquities market. “One of the greatest challenges is to involve the art market in developing effective strategies and to convince art dealers and auctioneers to be part of the solution rather than the problem.” (Gruber, 2013, p. 231)

The strategies recommend above, in Figure 7-17 may seem a daunting process, but there are additional ways of considering to regulate the sales (and in some sense the provenance) of auction house sales, and is one that an expert in the field has been attempting to enact. Christos Tsirogiannis is an archaeologist who has been working on recovering the large volume of antiquities which were trafficked by Giacomo Medici throughout the 1980s and 1990s (Gill and Tsirogiannis, 2016). He has proposed that auction houses submit antiquities to relevant governments, so as to allow these governments the ability to determine if any of the item’s origins or provenance are contested (Silver, 2018). Specifically, Tsirogiannis, who is Greek, has in the past worked for the Greek government in working to return cultural items to Greece. However, auction houses hold fast to their insistence that buyers and purchasers remain anonymous within the market. This process which Tsirogiannis proposes would essentially allow for a background check of an object, and would likely be very effective in helping to recover illicit objects – but from the market’s perspective would create a negative atmosphere for such sales. An interesting concept, and one which would benefit from further criminological study, though it should be noted that this could ultimately result in the creation of a black market for such objects, as an alternative to the legal antiquities market. The ability to determine the effect such a process could have upon the market demonstrates why criminological and specifically crime prevention research could prove beneficial to the study of antiquities trafficking.

7.4.5 Remove Excuses

The final category of SCP, removing recuses consists of: set rules, post instructions, alert conscience, assist compliance, control drugs and alcohol (Cornish and Clarke, 2003). Similar to the previous section, it is clear that not all of these techniques will be applicable to ATNs. Specifically, controlling drugs and alcohol is unlikely to have any effect on antiquities looting or trafficking. The three strategies presented in this section use a combination of the remaining four techniques to develop strategies for ATNs. The strategies that examined in this section are: criminalise antiquities trafficking activity, addresses the nature of antiquities, and the internet.

7.4.5.1 Criminalise Antiquities Trafficking Activity (Strategy 11)

Archaeology as a science, is concerned with the excavation of objects in order to better understand the context of the objects or remains, and attempt to extract data concerning the lives, culture, and society of ancient civilizations and peoples (Renfrew, 2000). This has not always been archaeology's focus, and its origins often lie in tomb raiding, treasure hunting, or the theft of cultural object for the purposes of acquiring objects for museums (Renfrew, 2000; Brodie, 2006). Modern day looters who engage in antiquities looting as a hobby tap into a similar vein when searching for objects (Lundén, 2012). There may be a number of reasons behind such as hobby (including greed, profit, or glory), though two main strategies may help to combat leisure looters through both educational campaigns, and community programs.

Working to establish the importance of cultural heritage in varying levels within a community may help to either deter an individual from engaging in such an activity or alert the community as to the risks and damage illicit looting can cause, resulting in looting becoming an anti-social and unacceptable behaviour within the community (Gruber, 2013).

Facilitator		SCP Strategy	
Participating in looting is not seen by the public as an overtly criminal or anti-social act.		Incentivise leisure looters to report any finds to local authorities.	
Lack of education concerning cultural heritage and of criminal or anti-social stigmas concerning illicit antiquities aids individuals in enacting techniques of neutralisation and engage in antiquities looting		Promote ethical standards and educate the general public about the illicit antiquities network (Education campaigns).	
		Reaffirm the state regulations concerning the removal of illicit antiquities in communities and regions susceptible to looting.	
Controller	Controller Type	Super Controller	Category
Friends, Family, Hobby/Club Culture	Handler	Groups Media Regulatory Organisations	Excuses Rewards Effort

Fig. 7-18: SCP Strategies to Criminalise Antiquities Trafficking Activity

An educational campaign could operate as a multi-faceted type of operation, targeting children, teenagers, parents, and retirees. This could be accomplished with programs dedicated to learning and teaching of the importance in cultural heritage in schools of all levels, as well as local programs available at community centres and libraries. Posters,

social media posts, and television or radio announcements would additionally ensure that a wide range of the population was exposed to the campaign. These strategies may prove to be effective in education the community about illicit antiquities looting and help to deter those who engage with it.

7.4.5.2 Address the Nature of Antiquities (Strategy 12)

This matter proves to be one of the more prominent issues when attempting to regulate this illicit market, as unlike other criminal or illicit markets, authorities are often unaware of an antiquities' existence until the moment it is removed from its original location and appears on the market (Alder and Polk, 2005; Brodie, 2009; Hardy, 2016). In comparison, within the drug or weapons networks, there is a clear source of manufacturing necessary in the creation of these illicit goods. Specific materials are needed for these objects, and as a result this makes it somewhat easier for authorities to track/control the allocation or use of specific resources – such as the widespread availability of cough syrup containing pseudoephedrine in the United States, until such time as authorities were made aware that the pseudoephedrine could be used to create methamphetamine, resulting in the regulation of purchases of such cough syrup (McKinley and Fink, 2006).

Because the nature of antiquities makes it impossible to regulate the source of objects, alternatives to prevent the looting of antiquities must be considered. Such strategies include working to document and record known archaeological object or sites, alerting the public and local community as to a region's law and restrictions regarding illicit antiquities, as well as educational campaigns to inform the public about the importance of cultural heritage (Gruber, 2013). One of the few ways to prove an object has been looted is to have photographic or video evidence of the object in situ (its original location). Ensuring that a site is thoroughly documented could potentially deter individuals from looting, but more importantly establish the original location of the object in the case that it is looted.

The development or creation of mobile apps could allow anyone to photograph or video a site and upload it to a central database (Constantinidis, 2016). This could be particularly useful in times of conflict. Additionally, creating online and public campaigns (including television, radio and posters) to alert the public to the specific illegality of antiquities

looting, as well as the importance of cultural heritage, could help create an anti-looting culture within communities (Constantinidis, 2016).

Facilitator	SCP Strategy		
The nature of antiquities is such that a large majority of antiquities are yet unknown, discovered, or lack significant photographic or video documentation.	Work with communities or states to provide ongoing documentation of known antiquities. Alert and inform public as to law and restrictions regarding cultural heritage. Provide educational campaigns to raise awareness for protecting cultural heritage.		
Controller	Controller Type	Super Controller	Category
Communities Site managers	Handlers/Managers	Organisation Groups Media Political Regulatory	Excuses Effort Rewards

Fig. 7-19: Situational Crime Prevention Strategies to Address the Nature of Antiquities

7.4.5.3 Internet (Strategy 13)

The emergence of the internet as an online market has drastically changed how illicit antiquities are sold and bought (Chippindale and Gill, 2001; Fay, 2011; Brodie, 2015c). Recommended strategies to combat this include having websites and platforms impose stricter guidelines or regulations concerning individuals registering and utilising their product. Additionally, international regulation related to online antiquities sales or exchange of information pertaining to illicit antiquities must be more thoroughly explored – especially in relation to jurisdiction as the internet poses the difficult of creating a non-physical marketplace. As the internet has allowed for the middleman or broker type actor to essentially be cut out, this presents a situation where those sourcing illicit antiquities are able to sell directly to buyers or dealers through an online platform or website. Many website or online platforms may have stipulations concerning the sale of illegal goods, but as illicit antiquities often fall into the grey space of not fully illicit or licit, this is often overlooked. Requiring users to verify their identity, and potentially enforce the use of a provenance (verified provenance ideally) in order to sell or purchase objects may be one way in which to tackle this issue.

The issue of international policy and regulation in relation to illicit antiquities is more complex and will require extensive research and politics in order to be achieved. Because of the difficult issue of international jurisdiction that would be necessary to overcome, this

is a strategy that will likely take many years to achieve. Each state may consider the need for specific online legislation or regulations concerning illicit objects such as illicit antiquities. The type of legislation or regulation that is necessary will likely be a result of if the state at hand can be classified as a source, transit, or market country for illicit antiquities. This distinction will likely have a significant impact on the most effective policies that could be implemented. A source country, for example would likely seek to restrict the selling and/or transit on antiquities via an online venue, whereas a market country would seek to restrict the import or purchasing of illicit objects through an online venue. As the internet is still a relatively new phenomenon, the understanding of the ways in which criminal actors engage with it is ever-changing – as are any attempts to prevent them.

Facilitator	Situational Crime Prevention Strategy		
Allows actors complete anonymity during transactions. Allows for a larger audience to be reached with relatively low costs. Allows for the market standard of buying and selling antiquities without a provenance. There exists a lack of national and international regulation in regard to online sales.	Require actors to identify and verify their accounts and themselves. Attempt to regulate/enforce illicit actors by defining and stating illicit actions in the terms of agreements for users. Work to develop national and international regulations concerning purchasing or selling illicit objects in an online venue.		
Controller	Controller Type	Super Controller	Category
Nations Owners of Sites	Manager	Regulatory Financial Courts Organisation Groups Political Media	Effort Risk Rewards Excuses

Fig. 7-20: Situational Crime Prevention Strategies for Internet

7.5 Criticism of Situational Crime Prevention

Throughout its history, SCP has encountered many criticisms or misconceptions. Most prominent for SCP is that it displaces crime instead of preventing or deterring crime (Clarke and Bowers, 2017). This contention demonstrates a lack of understanding as to the underlining focus and premise of SCP, which is to reduce the opportunities that allow a crime to occur by the 5 categories of situational techniques (increase effort, increase risks, reduce rewards, remove excuses, and reduce provocation) (Cornish and Clarke, 2003). By claiming that SCP displaces crime assumes that these techniques are merely gimmicks, and

not formidable preventative strategies that are common efforts of most preventative measure or practices (Clarke and Bowers, 2017).

SCP does not claim to have ‘re-invented the wheel’ so to speak, but merely provided a framework and empirical manner by which common preventative practices can be applied and tested to determine the most effective use. In a recent article by Clarke and Bowman, they efficiently list seven common criticisms that SCP faces.

<i>Criticism</i>	<i>Rebuttal</i>
1 It is simplistic and atheoretical	It is based on three crime opportunity theories: routine activity, crime pattern and rational choice. It also draws on social psychology.
2 It has not been shown to work; it displaces crime and often makes it worse	Many dozens of case studies show that it can reduce crime, usually with little displacement.
3 It diverts attention from the root causes of crime	It benefits society by achieving immediate reductions in crime.
4 It is a conservative, managerial approach to crime	It promises no more than it can deliver. It requires that solutions be economic and socially acceptable.
5 It promotes a selfish, exclusionary society	It provides as much protection to the poor as to the rich.
6 It promotes Big Brother and restricts personal freedoms	The democratic process protects society from these dangers. People are willing to endure inconvenience and small infringements of liberty when these protect them from crime.
7 It blames the victim	It empowers victims by providing them with information about crime risks and how to avoid them.

Fig. 7-21: Seven Misconceptions of SCP (Sourced from Clarke and Bowers, 2017). Permission to reproduce this figure has been granted by Taylor and Francis (Books) Limited UK.

The list of rebuttals which are listed in Figure 7-21 are succinct responses to such criticisms and addresses each concern efficiently. As SCP has evolved over the years, its growing popularity speaks volumes to the issues brought up by these criticisms.

7.6 Discussion

In considering the thirteen strategies that have been presented in this chapter, it is evident that ATNs is a complex and multifaceted network. The strategies presented include: restrict access to equipment, secure borders, identify criminal networks, monitor archaeological sites, assist in the detection of objects, reduce profit, deny long-term investments, create infrastructure, reduce corruption, requires/establish provenance,

criminalise antiquities trafficking activity, address the nature of antiquities, and the internet.

These strategies represent only some of the more prominent challenges that these networks, from an aggregate view, face. The fact that this analysis of ATNs is a broad and wide-reaching investigation of how necessary elements of the overall network has been stressed, in order to better understand the facilitating factors which, allow these networks to continue to operate, and ultimately therefore determine the most effective preventative measures available. Having now discussed and examined these strategies, a consideration of how the super controllers may influence or impact actors within these networks to initiate prevention measures or strategies can now be considered.

Figure 7-22 (below) presents a chart of every strategy that makes use of the specific situational mechanisms, similar to a chart presented in Sampson, John E Eck, et al. (2010). Listed below each mechanism (effort, risk, rewards, excuses, provocations) are the corresponding strategies which could make use of these situational concepts to influence controllers within ATNs. The orange coloured boxes represent those strategies which pertain to manager type controllers, while the blue coloured boxes represent those strategies which pertain to handler type controllers. There is one strategy that is considered to be a combination of both handler and manager (address the nature of antiquities) which is represented by the mauve box. The purpose of this chart is to demonstrate which categories are most likely to be used. As it is stated in Sampson et al. (2010), these mechanisms can be used to influence the controllers in a variety of ways:

- Effort: Influence this by helping to make prevention easier or by making it more difficult for a controller to avoid intervening...
- Risk: Manipulating their risk of penalties for not taking preventative actions...
- Rewards: Change the rewards controllers receive from providing crime prevention...
- Excuses: Controller's excuses for not taking preventive actions can be manipulated by super controllers...
- Provocation: A super controller might act to remove the effects of such [negative] provocation by mandating better training...

(Sampson et al., 2010, pp. 45-47)

From Figure 7-22, it is evident that effort, rewards, and excuses are the most common types of mechanisms that could be used for the strategies presented in this thesis. Additionally, from those three mechanics (effort, rewards, excuses) the strategies are split almost evenly between having controllers be managers and handlers, demonstrating the burden of criminal opportunities in this network are evenly divided between opportunities created by actors, and by circumstances or situations.

EFFORT	RISK	REWARDS	EXCUSES	PROVOCATION
Secure Borders	Restrict Access to Equipment	Restrict Access to Equipment	Secure Borders	Secure Borders
Detection of Objects	Identifying Criminal Networks	Identifying Criminal Networks	Monitor Archaeological Sites	Monitor Archaeological Sites
Deny Long-Term Investment	Monitor Archaeological Sites	Reduce Profit	Detection of Objects	Reduce Corruption
Create/Promote Infrastructure	Detection of Objects	Deny Long-Term Investment	Create/Promote Infrastructure	
Require/Establish Provenance	Deny Long-Term Investment	Create/Promote Infrastructure	Reduce Corruption	
Criminalise AT Activity	Internet Sales & Online Platforms	Require/Establish Provenance	Require/Establish Provenance	
Address the Nature of antiquities		Criminalise AT Activity	Criminalise AT Activity	
Internet Sales & Online Platforms		Address the Nature of Antiquities	Address the Nature of Antiquities	
		Internet Sales & Online Platforms	Internet Sales & Online Platforms	

Fig. 7-22: Table of the 13 SCP Strategies for ATNs and Type of Controllers (NB - orange refers to manager type controllers, while blue refers to handler type controllers)

7.7 Conclusion

This chapter has sought to examine and analyse SCP strategies relevant to ATNs. These strategies were considered and developed in the framework of SCP and thusly focus on increasing effort, increasing risk, reducing reward, removing excuses, and reducing provocation. The strategies presented in this chapter represent some fundamental issues

within ATNs, and some potential areas (from a network perspective) to target. These were not developed or designed as discretely implantable strategies, but do represent major concepts and ideas that must be examined and analysed as part of a discussion concerning ATNs. Chapter 3 referred to a paper written by Marcus Felson (2017) which described criminological theory as lacking a paradigm. Within criminology, he argues, there is no master theory, or basic agreement as to what causes crime (2017). A similar comparison could be made to the field concerned with studying and researching ATNs. In its origins, this field of study agreed on a few aspects of the network – mainly that there was a significant lack of data or empirical evidence concerning the looting, transit, and marketing of antiquities, and that it was occurring on a global scale (Proulx, 2011b; Proulx, 2011a; Campbell, 2013). Additionally, progress has been made within the network including establishing ATNs as a grey market, that often operates as organised crime, and that a necessary factor of regulating the antiquities market lies in the issue of provenance (Brodie, 2006; Brodie et al., 2006; Bowman, 2008; Massy, 2008; Mackenzie, 2011; Ulph et al., 2012; Mackenzie and Yates, 2016a). Where this field is lacking in direction is in respect to issues such as defining cultural heritage, heritage crime, illicit antiquities, effective policies and legislations that have a lasting impact on reducing or preventing antiquities looting or trafficking from occurring. However, of most concern is the ability of this area of study to conduct research within ATNs.

The nature of an illicit network or market is to remain clandestine or unknown, so as to allow the network or market to continue to operate under law enforcement or legal authorities' radars. Nevertheless, where this field is most lacking is in criminological research and methods. The goal of this thesis is to introduce, demonstrate, and initiate the use of a crime prevention theory – SCP – as a constructive and useful method of analysis for ATNs. SCP was developed originally as a tool or framework to be used by law enforcement, and has developed into a framework/perspective which is intended to be used by both academics and law enforcement (Clarke, 1995; Clarke, 1997b; Clarke, 2009). Its ultimate goal is to provide a framework by which criminal actions can be analysed to determine the situations which have allowed crime to occur – and develop effective methods to prevention (Clarke, 1995; Clarke, 1997b; Clarke, 2009). This thesis has demonstrated the ability of SCP to produce a crime script with necessary components accounting for the looting, transit, and marketing of illicit antiquities, while highlighting

significant facilitating factors based upon these scripts – and has provided resultant SCP strategies for ATNs. These methods of analysis will now be seen in action for a specific case of antiquities trafficking, to demonstrate the full scope of SCP. The Syria case study will include all of the elements of analysis that have been examined through chapters 5, 6 and 7, and will ultimately produce SCP measures for potential future ATNs in conflict zones.

8. Syria Case Study

8.1 Introduction

The three previous chapters detailed the rationale behind, and method of applying CSA and SCP to the broader ATNs. This process included creating a crime script, identifying prominent facilitating factors, and then conducting an analysis which resulted in the presentation of thirteen SCP strategies. This method of analysis provided insight into not only the operations and most basic structure of how ATNs function, but also produced crime-specific preventative measures. This chapter will be focused on applying this same method of analysis to a specific case study: The Syrian Civil War. As SCP was intended to be used for specific types of crimes, this case study will help to highlight and demonstrate the precise nature of SCP and the efficient and vigorous analysis which it provides.

This chapter is divided into five analytic sections. The first section (8.2) will consist of a brief overview of the historical context of the Syrian Civil war in an effort to provide a better sense of the scope and details of this conflict. This will provide a better understanding of the complexities faced when examining this case study, while also highlighting the complexities of the multi-layered political, religious, social and economic aspect of this conflict. With a basic understanding of the background to this case study, in the next section (8.3) the specific crime script that has been generated for antiquities trafficking within the Syrian conflict will be presented in terms of the three phases of looting, transit and marketing. In the third analytic section of this chapter (8.4) the crime script for the Syrian conflict will then be subjected to a more detailed analysis – with a focus on the analysis of the script in operation – in an effort to identify those prominent facilitating factors which have allowed antiquities looting and trafficking to occur during the conflict. It will follow the same sequence of discussion, beginning with the looting phase, and then in turn the transit and marketing phase of the process. In the fourth analysis section of this chapter (8.5) the discussion will turn to the question of how this case study can be used to inform and develop SCP measures for future potential conflicts. Finally, in the fifth section of this chapter (8.6) the discussion will turn to an overview of the focus of this chapter, and indeed the goal of this entire thesis to develop and provide methods and strategies that may prove helpful in the prevention of antiquities trafficking. Hopefully, what will become clear in this process is that, especially within conflict zones,

more focus needs to be placed on preventative measures and responses. With the current Syrian conflict underway, there are clearly limits on what can currently be done. However, this case study provides a valuable opportunity to learn from this and other conflicts, and to apply lessons learned to help prevent or lessen potential damage inflicted by future conflicts.

8.2 Historical and Conflict Background

As this project is focusing on the current conflict in Syria, a broad understanding of the conflict itself is necessary to better understand the context of the situation. The following discussion is in no way thorough or encompassing of the full complexity of the conflict at hand.

To begin, it is important to note that the conflict in Syria is also been a long-standing conflict, which is currently still in process with no clear end in sight (Hokayem, 2013; Yassin-Kassab and Al-Shami, 2016). The conflict had its start in the Arab Spring, which took place in the spring of 2011 (Hokayem, 2013; Yassin-Kassab and Al-Shami, 2016). The Arab Spring refers to the Spring of 2011, when a number of nations in the middle east partook in revolutions, led by Egypt and Tunisia which both overthrew their leaders (Hosni Mubarak and Zine El Abidine Ben Ali) (Hokayem, 2013; Yassin-Kassab and Al-Shami, 2016). Numerous revolutions and protests took place as a result of the uprisings in Tunisia and Egypt (Hokayem, 2013; Yassin-Kassab and Al-Shami, 2016). The Syrian outbreak came very much as a surprise to both those within Syria, and to the global community (Hokayem, 2013; Yassin-Kassab and Al-Shami, 2016).

Some of the issues which lead to the outbreak of conflict were based in historical events, and with the fact that President Bashar al-Assad, and many government and military leaders are from a minority religious sect in Syria, the Alawites, whereas the majority of Syria is Sunni Muslim (Hokayem, 2013; Yassin-Kassab and Al-Shami, 2016).

Additionally, Assad's father, Hafez al-Assad, had previously been President of Syria and had forcibly suppressed an uprising of the Muslim Brotherhood (a Sunni Muslim political party) in 1982, and in which there resulted in the deaths of thousands of Syrians (Hokayem, 2013; Yassin-Kassab and Al-Shami, 2016). A number of other factors have also thought to have contributed to the outbreak of the Syrian war, from a severe drought,

Syria was experiencing between 2007-2010, and to general social and economic struggles which may have contributed to the dissatisfaction of Syrians (Hokayem, 2013; Yassin-Kassab and Al-Shami, 2016). In March of 2011, fifteen teenagers were arrested, detained, and some tortured for rebellious graffiti on a school wall (Yassin-Kassab and Al-Shami, 2016). The resulting protests that followed started a cycle of: protesters being fired upon by officials, and the funerals of those killed taking place in the form of protest, which were again fired upon. The protests continued to grow across the country, eventually leading to the outbreak of the civil war (Yassin-Kassab and Al-Shami, 2016).

The Syrian Civil War has continued and has included a number of rebel groups which are fighting against Assad regime forces (Yassin-Kassab and Al-Shami, 2016; Anon, 2018d). The Muslim Brotherhood is one of the more prominent forces but IS has also taken hold in Syria and a number of smaller groups also have attempted to take control of different regions including: The Free Syrian Army, Lebanese fighters (backing the Assad Regime), as well as Kurdish groups also seeking independence in northern Syria (Yassin-Kassab and Al-Shami, 2016; Anon, 2018d). The map of Syria changes almost daily, with some forces gaining ground and others lose ground (Yassin-Kassab and Al-Shami, 2016; Anon, 2018d). As Syria wages a civil war, many countries are throwing their lot behind various groups or forces (Yassin-Kassab and Al-Shami, 2016; Anon, 2018d). This only works to complicate the conflict. With so many nations becoming involved in the conflict, it is further important to remember the religious and national undertones which are at play (Yassin-Kassab and Al-Shami, 2016; Anon, 2018d). Assad's regime represents a minority sect, which is generally backed by Shia Muslims (Countries such as Iran and Iraq are largely Shia), as opposed to Sunni Muslims (Countries such as Turkey, UAE, and Qatar are largely Sunni) who are backing rebel forces (Yassin-Kassab and Al-Shami, 2016; Anon, 2018d). This conflict very much draws lines along religious ties, but also encompasses historical and cultural conflicts or discrepancies (Hokayem, 2013; Yassin-Kassab and Al-Shami, 2016).

A difficulty of the unrest in Syria is that it has also allowed terrorist organizations such as IS to take hold in particular regions (Yassin-Kassab and Al-Shami, 2016; Anon, 2018d). One of the incidents which will be discussed in greater detail in the destruction of Palmyra by IS forces in the summer of 2016 (Bilefsky, 2017). Not only has IS used brutal tactics (such as public executions), destruction of cultural site and objects, but their use of social

media has been used as a recruitment tools with the aim of recruiting new members and spreading their message to neighbouring countries or regions, to recruit new members possibly helped to spread IS to neighbouring countries and regions (Wagner, 2015; Yassin-Kassab and Al-Shami, 2016).

At present, it seems that this conflict does not have an end in sight (Hokayem, 2013; Yassin-Kassab and Al-Shami, 2016). Thousands of Syrians have fled to neighbouring countries or attempted to make their way to Europe. This has resulted in one of the largest refugee crises in modern history (Hokayem, 2013; Yassin-Kassab and Al-Shami, 2016). The city of Aleppo, once a World Heritage Site, has been all but destroyed, with its cultural icon, the Old City Bazaar having been fire bombed (Harkin, 2016). As mentioned before, the ancient city of Palmyra has also suffered extreme destruction and damage (Bilefsky, 2017). Thousands of Syrians have lost their lives as a result of the ongoing conflict, and thousands more are left to try and find their way out and create a new life in a new country (Hokayem, 2013; Yassin-Kassab and Al-Shami, 2016).

8.3 The Syria Crime Script

In chapter 5, the crime script which had been developed as a model for ATN was examined and discussed. As was established, the script that was presented there provided a more abstract and encompassing model for how the network as a whole operates. In contrast, the crime script that will be presented in this chapter follows a more traditional format, as it reflects a more constrained focus on a particular time and place for antiquities trafficking. Crime scripts were intended for this type of analysis and will therefore be efficient in highlighting trends or patterns for a particular type of crime being committed (Cornish, 1994a; Wortley and Mazerolle, 2013). Using the ongoing conflict in Syria as a case study for antiquities looting occurring in conflict can not only determine potential intervention points specifically for antiquities looting in Syria, but may also be able to identify some common techniques or trends for future antiquities in conflict. The script presented in this chapter was developed from journalistic articles and reports concerning the illicit antiquities trade ranging from January 1st, 2005 to December 31st, 2016. It should be noted that these scripts were developed from the only data source available to the author, and as such do not represent a complete or encompassing understanding of the situation. A compilation of the Syrian conflict dataset (hereby referred to simply as the

dataset) can be found in Appendices 5, 6, 7 and 8. This case study was chosen mainly because of the available data concerning illicit antiquities within the conflict as; research of this type would be difficult and dangerous to conduct within a conflict zone. As such, this data represents a snapshot of the most vocal types of looting, trafficking, and marketing within Syria, which presents a valuable research opportunity, regardless of its shortcomings. The script that was developed for Syria was a result of the analysis of a set of journalistic articles which were selected due to their relevance and quantity and quality of data. A full version of the Syria crime script can be seen in Appendix 10, though the individual phases appear in the following sections. This analysis was dependent upon individual scripts being completed with information gathered from the article, with particular attention paid to direct quotations from individuals. As a result, some of the scripts are not fully complete, but help to demonstrate a general idea of how specific instances of looting occur.

8.3.1 Syria Looting Phase Script

The looting script presented in chapter 5, consisted of only four stages: access site, search and find object, loot object, and dispose of object. The script presented in this chapter has expanded upon the original script, to produce a seven-stage crime script for the looting of illicit antiquities in Syria. This detailed script provides a more in-depth analysis of the steps necessary for looters to take in order to source an illicit antiquity.

Subsistence and Profit Looters		
Looting	Stage 1	Select Location <ul style="list-style-type: none"> • Search in culturally rich areas
	Stage 2	Acquire Tools/Labour <ul style="list-style-type: none"> • Simple • Specialized
	Stage 3	Access Site <ul style="list-style-type: none"> • Openly • Clandestinely
	Stage 4	Search & Find Objects <ul style="list-style-type: none"> • Objects are made visible/Random find • Uses advanced knowledge to locate objects
	Stage 5	Loot Objects
	Stage 6	Transport from Site
	Stage 7	Dispose of Object <ul style="list-style-type: none"> • Sell to Buyer • Sell to Broker/Dealer • Smuggle

Fig. 8-1: Syria Looting Crime Script

These seven steps represent the minimum actions required for those engaging in illicit antiquities looting in Syria. These include: select location, acquire tools/labour, access site, search and find objects, loot objects, transport from site, dispose of object. The only distinct difference between a subsistence looter's script and a criminal looter's script is stage two, where the criminal script presents the possibility of acquiring labour. In this section, only three of the seven stages will be examined in detail: acquire tools/labour, access site, and dispose of object. These stages will be examined more thoroughly as a result of representing conditions or scenarios specific to Syria.

8.3.1.1 Subsistence versus Profit Looters

When reviewing the antiquities looting in Syria, a distinction became apparent, demonstrating that two types of looters were participating in finding and looting illicit antiquities: subsistence looters and profit looters. The Syrian conflict has left many without a means of income as a result of the fighting and instability within the country (Hokayem, 2013; Yassin-Kassab and Al-Shami, 2016). It could be argued that all non-profit type looters within Syria are subsistence looters, while some may view the issue as more complex. What is evident from the dataset is that the most prominent perspective of looters was that of looting to survive. “‘They’re probably selling most of it,’ he said. The looting itself usually happens in a matter of days. Much of the digging is probably done by local people who are ‘just trying to feed their families’, Danti said.” (Drennan, 2014) This dataset also reflected a compilation of reports which detail groups of all natures engaging in looting (regime, rebels, terrorists), though many of the journalistic interviews focused on highlighting reports specifically of terrorist organisations:

It’s often difficult to definitively determine who is responsible for an instance of looting. Both the Syrian government and rebel groups have taken part, as have locals in both Syria and Iraq whose livelihoods have been disrupted by the conflict. Satellite images and informants on the ground often can’t keep up with the pace of looting and of the exchange of territory between various groups. Nonetheless, it’s clear that the scale of the Islamic State’s destruction, looting, and profits from antiquities trafficking is “unprecedented,” Danti said. (Drennan, 2014)

As this data is journalistic in nature though, it must be viewed critically, as it may be the case that the journalist chose specific looters or individuals because of the appeal of their

story or based on the availability of individuals willing to be interviewed – and as such this may not necessarily reflect a true account of the reality of the situation. That being said, for the purposes of this crime script, civilian looters will be categorised as engaging in looting to provide resources or money for themselves or their family as subsistence looters and any individual associated with profit looting.

8.3.1.2 Acquire Tools/Labour

There seems to be a rather distinct divide between specialized types of tools (including bulldozers, metal detectors, saws, or drills) and simple tools (shovels, buckets, or pickaxes). This distinction tends to reflect the type of looting that is occurring (subsistence versus profit), but generally reflects the scale of looting occurring – as specialized equipment would typically indicate a large-scale looting effort, while simple tools would indicate a smaller operation or scale of looting. Additionally, as the following quotes indicate, even these profit looters employ subsistence looters as a means of acquiring labour for large-scale lootings.

The group issues licenses to looters to dig in their territory. "If you find an artifact, you take 80 percent and ISIS takes 20 percent," he [Abu Walid, antiquities trafficker] said. Or, if the equipment used to unearth the treasure belongs to ISIS, they take a 40-50 percent cut instead (CBS News, 2015).

Simple Looting	One such digger, a 36 year old Syrian, works near Apamea with permission from a local rebel group, rolling a bulldozer over acres of land to turn up small artifacts or uncover clues that might lead to a greater score, such as an ancient burial cave (Giglio and al-Awad, 2015).
Specialised Looting	The first thing Abu Karim noticed were the machines the extremists owned: metal detectors and treasure hunters that scan the ground for buried objects, like the Golden King Plus, shown above, which retails online for \$5,900. There were also bulldozers, hydraulic diggers, and boxes of dynamite. They don't need an expert like me, Abu Karim recalled thinking (Giglio and al-Awad, 2015).
	"The most recent reports I'm getting is that ISIS is actually engaging itself: They're hiring their own people, they're using a lot of earth-moving equipment — bulldozers, et cetera," Al-Azm said." (Drennan, 2014).
	Using information gathered by local Syrian activists, Al-Azm found that Isis initially levied 20% taxes on those it "licensed" to excavate. In mid-2014, the group began to contract out excavation. But by autumn of that same year, Isis was "starting to hire their own archaeologists, digging teams and machinery – and that's when we saw a peak of looting activity" (Shabi, 2015).

Fig. 8-2: Types of Looting and Labourers Employed

The table above (Figure 8-2) provides some additional and apt examples from the dataset, which discuss the types of looting and labourers which have been employed within the conflict.

8.3.1.3 Access Site

While there have been reports of looting occurring in the open, it also appears that the particular region (or group in control of a region) may have some impact on if looters operate in the open, or in a clandestine fashion. It appears that some groups have outlawed looting, with severe punishment for any caught engaging in such activities (Shabi, 2015).

ISIS allowed civilians with the knowhow to dig on their own, granting them special permission and charging a 20% tax, Abu Karim said. He also said that ISIS employed special teams to target high value sites. Experts and sources on the black market supported both of these ideas. (Giglio and al-Awad, 2015)

There have also been reports that a tax (khums) has been imposed on anyone engaged in looting (Giglio and al-Awad, 2015). This may encourage some to loot clandestinely to evade paying the tax.

8.3.1.4 Disposal of Object

The last stage of this phase (disposal of the object) is concerned with the next destination for the object. A general trend emerged from the data concerning the types of individuals engaging in antiquities looting. Typically, they fell into one of two categories: those looting and selling their objects to international criminal organisations, and those looting and selling onto middlemen or brokers. Either option would likely result in the objects being transported outside Syria, with the looters either selling directly to buyers (typically through the internet or social media/texting platforms), or selling the object onto a broker or dealer (potentially via a smuggler). As was apparent from the script that was developed for the Syria conflict, the most common destination for looted objects seems to be Turkey, though other potential destinations include Lebanon, and Iraq. From this, and additional information gathered from the script, it can be assumed that there is a significant criminal market for antiquities within these border countries, and therefore are likely high number of middlemen and potentially brokers operating in such markets. “The Islamic State profits nearly immediately, selling the goods to middlemen who then smuggle them into

neighboring countries such as Turkey, Jordan, and Lebanon, according to Al-Azm.” (Drennan, 2014) With an understanding of where or how an object is disposed, further insight into the market can be gained, and ultimately help to determine effective prevention measure and techniques.

8.3.1.5 Example

Figure 8-3 demonstrates an example of a specific script that was developed based upon data gathered from a Syria Direct article, published December 8th, 2016. This example is provided to demonstrate a specific example of a script for a looter. While this example does not provide detailed accounts of specific actions, a reasonable amount of data can be derived from the sections of texts displayed in Figure 8-2 (above). It details the specific activities and essentially self-reporting of a 30-year old male, Abdelrahman, who resides near the archaeological site of Apamea. This script provides value information, such as Abdelrahman’s use of metal detector, and a monetary amount for his wares. Additionally, it demonstrates a common trend with subsistence looters, of searching for objects at known archaeological sites.

Syria Direct (December 8, 2016)				
Subsistence Looting				
	Stage	Script	Script Action	Script Example
Looting	Stage 1	Select Location	Search In culturally rich sites	“In the late hours of the night, 30-year-old Abdelrahman wanders the ancient city of Apamea with a metal detector.”
	Stage 2	Acquire Tools/Labour	Specialized Tools	
	Stage 3	Access Site	Clandestinely	“Abdelrahman and his partners to work only at night—hidden from the watchful eye of both the regime and local rebel militias. If caught by the regime, they could face up to 25 years in prison. If caught by an Islamist group, treasure hunters could have their hands cut off”
	Stage 4	Search & Find Objects	Objects are visible/random find	
	Stage 5	Loot Objects		
	Stage 6	Transport from Site	Unknown	Unknown
	Stage 7	Dispose of Object		“When luck is on his side, Abdelrahman can make between \$300 and \$500 a month selling buried artifacts,”

Fig. 8-3: Example of Specific Looting Crime Script from Syria

What this example fails to address are important factors such as where Abdelrahman acquired his metal detector; did he own it previously? If so, was that a result of work, or a hobby, or did he purchase it specifically for looting? Also, how often he engaged in looting, how often he found objects, how he transported them from the site, and ultimately how he disposed of them. While this script helps to provide a snapshot of how looting might be occurring, further structured study of such looting activity could help to provide a more detailed insight into the specifics of how looting is occurring during the conflict in Syria.

8.3.2 Syria Transit Phase Script

Similar to the looting phase, this section will explore only a few stages in detail as a result of limited data. Three stages, consisting of preparation of object, smuggling, and destination of the object, all prove to be the most relevant and important stages of this phase.

Smuggler		
Transit	Stage 1	Entry <ul style="list-style-type: none"> • Contacts seller • Arranges Purchase
	Stage 2	Contact <ul style="list-style-type: none"> • In person • Electronic Device
	Stage 3	Obtains Object <ul style="list-style-type: none"> • Smuggler gets possession of object
	Stage 4	Prepares Object <ul style="list-style-type: none"> • Disguises/conceals • None
	Stage 5	Travels to Border
	Stage 6	Smuggles over Border <ul style="list-style-type: none"> • Openly • Clandestinely • Forced
	Stage 7	Destination of Object <ul style="list-style-type: none"> • Delivers object • Sells object • Stores object
	Stage 8	Obtains Profit <ul style="list-style-type: none"> • Smuggler is paid

Fig. 8-4: Syria Transit Crime Script

8.3.2.1 Prepares Object

The decisions of whether an object needs to be disguised or concealed can be indicative of much of how a smuggler operates, how they are intending to smuggle an object, and the type of object being smuggled. For cases in Syria, there is a lack of those discussing smuggling specifically, but certain deductions may still be determined from the reports that do exist. There have been many cases where antiquities were disguised or concealed in order to transport them, but in regards to Syria, there is a distinct lack of evidence that smugglers are attempting to hide objects (Hardy, 2016). This is most likely a result of less secure borders from the conflict, which in turn has been exasperated by the migration crisis.

8.3.2.2 Smuggles over Border

This phase represents the area of the network(s) that typically has the least amount of data or information. In the case of data available from Syria regarding smuggling, this is also the case, as there were little references to particular details of how objects were smuggled. The few times that references are made to transporting or smuggling an object across a border, it is often phrased as: ““There's three friends in Aleppo we deal with, these people move from Aleppo all the way to the border here and pay a taxi driver to sneak it in.””. (Cox, 2015) It can be assumed that lax border control, as well as corruption of border personnel likely has played a significant role in objects crossing from Syria into other countries. However, some of the terrorist groups implement stricter laws or regulation of antiquities as is evident in the following quote:

The looter said he had lost the busts to ISIS because he'd used a smuggler who flouted the strict rules the militant group imposes on the territory it controls. The smuggler had been smoking a cigarette when he pulled into an ISIS checkpoint outside Aleppo, en route to Lebanon. This caused the militants to become suspicious, since they consider smoking a sin, and they decided to search the car, finding the busts inside (Giglio and al-Awad, 2015).

In the same turn, ““Locals will go out and excavate for antiquities and bring this stuff to Isis and get paid, or they're willing to traffic this stuff and pay Isis a tax to smuggle it into Turkey.”” (Hunter, 2015) It appears that at times these terrorist organisations will encourage or facilitate the smuggling of items out of the country, as long as they can profit from it, and it does not clash with their ideological principles.

8.3.2.3 Destination of Object

The majority of interviews that were conducted by journalists appear to have taken place in Turkey and as a result, Turkey seems to be a transit destination for many of the objects. Some of the data reveals further destinations such as Europe, Saudi Arabia, and Lebanon (Shabi, 2015; Cox, 2015; Meyers and Kulish, 2016; Cornwell, 2016).

‘There appears to be an interesting geographic divide: Pre-Islamic objects go to Europe and North America, while Islamic art goes to countries of the gulf,’ said Markus Hilgert, director of the Museum of the Ancient Near East in Berlin, who is coordinating a research project on the illicit trade. (Meyers and Kulish, 2016)

It seems that Iraq and Lebanon are also transit countries for many objects. As they border Syria, this is a clear path for these objects to travel, especially when considering that Turkey provides easy access to the European Union. There were also many reports of objects being transported among similar routes by which migrants were making their way to Europe (Cox, 2015; Hunter, 2015).

Looted goods are “coming out through Turkey and Beirut and then containered [source typo] to who knows where”. By the time an object gets to London, he [David Gill, professor of archaeological heritage at University Campus Suffolk] says, it “has paperwork, internally, within Europe”. (This a possible scenario for higher-value objects for which a paper trail is more desirable, but undocumented items still turn up in European markets.) (Shabi, 2015).

This demonstrates that objects being looted and smuggled from Syria are destined for varied destinations, making the possibility of documenting or recovering such objects even more difficult.

8.3.3 Syria Market Phase Script

Three of the more prevalent stages within the market phase will be explained, though in a similar fashion to the looting phase, two roles represent the market phase. A middleman and a broker represent two distinct roles within antiquities trafficking. These distinctions will be examined in the following section.

		Middleman	Broker
Market	Stage 1	Notified of Object	Learns of Object
	Stage 2	Assesses Object	Assesses Object
	Stage 3	Purchases Object	Purchases Illicit Antiquity
	Stage 4	Finds Objects	Researches Object
	Stage 5	Meets with Buyer	Provenance Decision <ul style="list-style-type: none"> • Creates false provenance • Does not create false provenance
	Stage 6	Sells object to buyer	Arranges Buyer
	Stage 7	Delivers object to buyer	Sells Object <ul style="list-style-type: none"> • Private Dealer • Auction House • Museum • Dealer
	Stage 8	Obtains profit	

Fig. 8-5: Syria Market Script

8.3.3.1 Middleman versus Broker

As stated previously, the fundamental difference between a middleman and a broker is that a middleman works primarily with objects that are still considered illicit. They operate in a manner traditionally similar to those who engaged in a criminal network or market. In contrast a dealer represents an individual who works or engages with objects that are (at this point in the network) licit objects. They represent the transformative stage of when an object moves into the legitimate market. In the case of Syria, the majority of the dataset reflected the presence of middlemen— individuals who were working in an illegal or illicit capacity.

8.3.3.2 Provenance Decision

Throughout the available data, there was little mention of provenance. This is likely a direct result of many of the participants representing the role of middlemen – not brokers – and as such being able to openly sell illicit objects to other middlemen, brokers, or collectors who willingly purchase illicit antiquities.

8.3.3.3 Arranges Buyer

Many of the news articles described the use of mobile phones as a means of communicating and organizing meetings and transactions in the process of selling objects (Giglio and al-Awad, 2015; Hunter, 2015; Meyers and Kulish, 2016). Not only were

phones used as a means of displaying wares to a wide audience, but it also was a manner by which deals and transactions occurred. Using a mobile phone, while commonplace now, demonstrates a new form of researching potential clients in connection with a sale, or even as a means of presenting or examining an object. While this data, along with other testimonials demonstrate that the use of mobile phones is common among middlemen and broker figures, this leads to the question of how then, these figures are arranging buyers. Traditionally, this would have been done through personal or business relationships, evident in the success of Giacomo Medici, Robert Hecht, and Subhash Kapoor (Watson and Todeschini, 2006; Felch, 2013a). However, with online auction sites, and online communities dedicated to antiquities sales and purchases, this offers a new venue by which looters, middlemen, and brokers can arrange for the sale of their objects (Brodie, 2015c). The method by which middlemen and brokers meet and connect with potential buyers is a crucially important aspect of ATNs, and one which would benefit from further, and more specific study.

8.3.3.4 Sells Object

Much of the data reflected that most of the object that were sold went on to other middleman-like figures and remained illicit antiquities. This was likely a result of the source of the data, as well as the manner by which it was collected, but still provides a valuable insight into parts of ATNs. It is very likely that, in lieu of the current embargo on Syrian objects, many of these objects will at some later point enter the legitimate art market – either having been stored until an appropriate time, or after having been in the collection of a private collector (Brodie, 2015b; Brodie and Sabine, 2018).

8.4 The Syrian Crime Script Facilitating Factors or Circumstances

The following section concerns highlighting relevant and case-specific factors or circumstances which may contribute to the trafficking of illicit antiquities within the conflict in Syria. Each phase comprises prevalent themes relevant to the looting, transit, or marketing of antiquities taking place. These include:

- Looting: Lack of Infrastructure/Conflict Zone and Culturally Rich Region

- Transit: Borders and Criminal Organisations
- Market: Demand Drives the Market, the Internet, and Brokers

In contrast to earlier chapters, the facilitating circumstances presented here centre on a vital factor: that Syria has been engaged in a civil war since 2011. This is especially evident in the looting phase, with an evidenced and documented increase in looting since the outbreak of the civil war (Casana and Panahipour, 2014; Daniels and Hanson, 2015; Jesse Casana, 2015; Brodie, 2015b; Tapete et al., 2016). This section will present some of factors which pose the greatest threat to antiquities, and which also highlight the specific nature and circumstances of this conflict.

8.4.1 Facilitating Factors of the Syrian Looting Phase

As is evident from documented evidence, there was a significant surge in looting directly following the outbreak of the conflict in May, 2011 (Casana and Panahipour, 2014; Daniels and Hanson, 2015; Jesse Casana, 2015; Brodie, 2015b; Tapete et al., 2016). This section will consider some of the facilitating factors which enabled such large-scale looting to occur.

8.4.1.1 Lack of Infrastructure/Conflict Zone

While this is a rather broad section, it is perhaps the main factor for people or communities who engage in subsistence looting. Without a formal infrastructure, communities are vulnerable to factors such as: criminal actors, a lack of emergency services, and economic insecurity including loss of jobs or employment (McAllister, 1991). With the ongoing conflict in Syria, there are parts of Syria where resources are limited due to fighting and it has proven difficult for people to provide for themselves or their families and to survive (CBS News, 2015; Giglio and al-Awad, 2015; Yassin-Kassab and Al-Shami, 2016). The ongoing fighting has affected many normal services and standards of normal life including jobs and business (Yassin-Kassab and Al-Shami, 2016). The nature of the fighting also complicates the issue, as if an extremist group takes control of a region, they may not permit certain normal services or jobs to continue if it fails to adhere to their extremist policies (Yassin-Kassab and Al-Shami, 2016). These factors contribute to this type of

looting as it provides a low risk way an individual or group of individuals may afford the resources they need to survive.

Access to Equipment: There are a number of ways to loot antiquities, but perhaps the most effective includes using powerful tools or equipment. The use of metal detectors, bulldozers, jack saws, and other types of construction related equipment allows fewer individuals to complete jobs fast and more efficiently. The availability of such tools or equipment may be made easier during a time of conflict. As routine construction jobs may be halted as a result of fighting, this leaves useful equipment readily available, and possibly unguarded or closely monitored (McCalister, 2005). Additionally, there is the possibility that various groups involved in the conflict may forcibly take such equipment or tools for their own use. There have additionally been reports of equipment crossing borders in order to help with looting sites in Syria (Specifically reports of items coming from Iraq).

Now with ISIS on the scene, this has become much much worse. ISIS has instituted the concept of khums, the 20% tax, and said to the locals, you can dig on your own land but pay us a fifth of what you make. On public land, they've started licensing crews to come in – Turks, Kurds, Iraqis coming with bulldozers to get at the few bobbles coming out. Most of the stuff coming out is not priceless artifacts. They're pots, a small statue, a tablet or cylinder seals. This stuff is small potatoes economically, so the income is based on bulk more than a significant piece of great value.

JF: What evidence is there to support this?

AA: The evidence comes from locals who we know who I communicate with regularly. They tell us ISIS representatives are at the archaeological sites to make sure the khums is paid. (Felch, 2014)

With this information, it must then consider the possibility that specialised equipment is being brought into Syria - meaning across borders with permission of IS (or terrorist or organised criminal groups). If that were the case, then this would demonstrate a breakdown of normal border procedure, and would also indicate that either lack of enough resources or corruption had led to individuals being allowed to bring equipment freely into Syria. The data has also reflected that in some cases individuals 'rented' specialised equipment from organised crime groups, and as payment these groups would receive a cut

of the profit (CBS News, 2015). It appears that the conflict has facilitated access to specialized equipment by means of a number of methods, allowing large scale looting to take place.

Open and Encouraged Looting: With various groups holding control of certain parts of Syria, there have been reports of some of these groups either taxing locals who engage in looting, or otherwise these groups themselves being involved in the systematic looting of objects. No matter the method used, it cannot be denied that people are openly and widely looting areas within Syria causing an incredible loss of cultural heritage along the way (Brodie, 2015b; Casana, 2015). While looting did occur prior to the outbreak of the conflict in Syria, it was on a much smaller scale (Tapete et al., 2016). The site of Apamea was mentioned in one of the previous sections, and proves an excellent example of this, as there are satellite images of sections of Apamea from prior to the conflict, and after (Tapete et al., 2016). The number of looting pits has clearly increased significantly and is likely a direct result of a lack of oversight either in an official capacity or even on a local level.

Criminal Groups/Terrorism: The local and international levels of criminal organisations have been combined into one grouping, as the facilitating factors used by these groups are similar. Both levels of criminal organisations are able to operate fairly freely and without regulation or restriction as a result of the ongoing conflict within Syria. The ability of these groups to operate at any given time is dependent on their geographic location and/or the area which they control, but generally one would assume that the times when they are engaged in looting are times when they are in control of a region or are in a region in which they are allowed to operate as they wish.

But Sam Hardy, an archaeologist at University College London, who studies the trade in illicit antiquities, notes that insurgents and paramilitaries generally enter the trade in at least one of three ways: by running a trafficking network, facilitating smuggling through offering a service, or levying a tax on traffickers who move looted artefacts through their territory (Pringle, 2014).

A major factor in their ability to systematically loot areas and sites is that they are free to do so without fear of surveillance, police or law enforcement involvement, or repercussions.

8.4.1.2 Culturally Rich Areas

Popular/Known Archaeological Sites: When an archaeological site is known to the public, is a popular destination, or even has the status of a UNESCO World Heritage site, there is an increased risk of objects being looted from the site. This was evident in the targeted attack on Palmyra by IS in the summer of 2014 which focused on the destruction of major parts of the site, as well as the looting of objects (Wagner, 2015; Bilefsky, 2017). As a result of this attack, a well-known archaeologist and cultural heritage expert Khaled al-Assad was murdered by IS for refusing to provide information as to where antiquities were located within the site (Wagner, 2015). While a great portion of antiquities are yet to be discovered or unexcavated, these known sites make it extremely easy for looters, as there is an almost guarantee of finding objects (though the value of the objects may vary significantly). Syria in particular has an incredible amount of archaeological sites, some of which have not been fully excavated (Casana and Panahipour, 2014; Daniels and Hanson, 2015). Apamea was a site that was heavily targeted by looters immediately after the outbreak of the Syrian conflict (Tapete et al., 2016). The number of looting pits after the conflict began in 2011 increased significantly (as can be seen in photograph from satellite imagery) (Tapete et al., 2016). Knowing the location of such sites provides looters with a profitable and easy manner in which to find illicit antiquities.

Form of Currency: While many antiquities are recognized as being of value, some antiquities - such as those made of gold/featuring gold elements, or those which contain precious stones or materials – are more easily identified as valuable. As such, these antiquities can be used as a form of currency and traded or bartered for goods or services, or sold to local traffickers (Kersel, 2007). This is especially important in a case such as Syria, where traditional money may not be accepted by all groups – depending on the region or the group, which controls the region. Antiquities fall into the useful category of (depending on the object) having intrinsic value, and so are able to be traded or bartered practically anywhere, regardless of location (Ulph et al., 2012). They are also virtually untraceable and can be quite small – and therefore easy to transport (Alder and Polk, 2002; McCalister, 2005; Sotiriou, 2018). This means that an individual could hypothetically loot the object, and then be able to take it with them if they chose to flee Syria and migrate – using the object as a means of currency along the way. They could then either save the object for funds to help them settle or use it as payment in order to reach their ultimate

destination. This makes antiquities an extremely valuable form of currency, especially within a conflict zone such as Syria. Though the sale of Syrian antiquities is currently banned, it is clear from the data that those operating purely in an illegal manner are trading in Syrian objects – likely in the hopes of selling to private collectors or storing these objects until such times as they can sell openly.

8.4.2 Facilitating Factors of the Syrian Transit Phase

8.4.2.1 Border

Increase in Migration: The Syrian refugee crisis has played a role in antiquities trafficking, as there have been reports that refugees have transported or sold illicit antiquities as a means to fund their journey out of Syria and to new nations (Hunter, 2015; Giglio and al-Awad, 2015). With so many thousands of people leaving a country, there is always going to be the possibility that objects will be trafficked or sold abroad. After looting an object, looters are looking for ways to sell on their objects, and as an antiquity presents the possibility of universal currency, it is not a far stretch to think that some individuals would have purchased such illicit antiquities to take with them on their journey – especially if the objects were small and easy to transport (Alder and Polk, 2002; McCalister, 2005; Sotiriou, 2018). The mass of people moving across borders also allows objects to be trafficked more easily, and so the possibility of selling illicit antiquities onto middlemen or traffickers is also most likely increased.

Lack of Training: In conjunction with the previous two stages, when border personnel are present, they are not necessarily trained specifically to be able to identify an illicit antiquity. Being able to tell the difference between a local handicraft object that was recently made, and an antiquity requires a significant amount of skill – which border personnel typically lack. As a result, individuals attempting to deceive border patrol can often be successful, as they can claim it to be either a legitimate antiquity, or else a non-antiquity (i.e. replica, fake, modern day object, etc.).

Lack of Border Control: As the border in question is involved with a civil war, there are bound to be criminal opportunities for traffickers and smugglers, and this is equally true for the illicit antiquities network (McAllister, 1991). Not only is the mass refugee crisis having an impact on border control, but the ongoing fighting has also created difficulties,

as different groups have had control of different parts of the border over the course of the fighting since it started in 2011 (Yassin-Kassab and Al-Shami, 2016; Vignal, 2017). From reports in the data, crossing the Syrian border – especially into Turkey can be done rather easily – as evident of the mass of refugees fleeing the country (Cox, 2015; Giglio and al-Awad, 2015; Hunter, 2015; Shabi, 2015; Yassin-Kassab and Al-Shami, 2016).

Considering the scale of people leaving Syria, it seems impractical to attempt to detain every group or individual that is found to be crossing an international border. This lack of a prominent border control contributes to criminal activities such as trafficking and smuggling as there appears to be no consequence for someone crossing the border – especially with such non-threatening objects as an antiquity.

Easy to Transport/Conceal: While antiquities come in many shapes and sizes, often they can be quite transportable – being small pots, coins, statues, or figures (Polk, 2000; Mackenzie, 2011). Therefore, the ability to smuggle an antiquity across a border is a relatively easy feat, and one that poses a low risk of detection or punishment. At worst, it seems likely that the object would be seized from the individual. The situation in Syria has led to a weakened border patrol, and therefore an increased opportunity for people to cross the border, and potentially transport antiquities (or other illicit objects) to neighbouring countries such as Turkey, Lebanon, and Iraq.

8.4.2.2 Criminal Organizations/Networks

A wide-ranging network of criminals allows many illicit objects to be trafficked out of the conflict zone within Syria to neighbouring countries where they can be trafficked to further markets. These networks can be made up of a number of smaller gangs or organisations and stitched together by middlemen or dealers to get objects out of a country (Herbet, 2014). Other times a singular network is effective in being to transport or smuggle an object. There is also the possibility that these networks also traffic other illegal objects (such as weapons, drugs, or humans) and simply take on additional objects in the form of illicit antiquities (Herbet, 2014). No matter what the specifics of the network, it typically includes a group of individuals who take on a particular level of risk in order to move an object across national borders for a profit. These criminal actors may be connected through family relationships, friends, or simply as a means to an end and particular skill set. A network of criminal individuals directly facilitates the illicit antiquities network as

without these actors and the role they play within these networks; illicit antiquities would never be able to enter the market. In reference particularly to Syria, these criminal networks seem to be fairly well-established traffickers – who take advantage of the chaos surrounding the borders in the midst of the refugee crisis and the ongoing conflict. There have been reports of traffickers posing as refugees seeking to flee the country or paying refugees to carry objects across the border, in order to move objects across the border with little hassle (Giglio and al-Awad, 2015; Hunter, 2015). There are also strong ties to other criminal networks in neighbouring countries such as Turkey, where many Syrians have sought refuge.

8.4.3 Facilitating Factors of the Syrian Market Phase

8.4.3.1 Demand Drives the Market

Easy Access to Objects: Obtaining illicit antiquities, for an antiquities dealer, is the most important part of their process, as without the object no further sales can be made. It is clear that for many low-level brokers; the process of getting illicit antiquities is made all the easier by the fact that many of these objects have been freshly looted. They are often purchasing objects directly from looters or smugglers, or other dealers (Giglio and al-Awad, 2015; Shabi, 2015; Hunter, 2015; Cox, 2015). As there is then no previous documentation or even knowledge that these items existed (having been freshly looted), the ability to find and then sell these objects seem to be made all the easier by the conflict within Syria.

Open Criminal Market: Within the illicit antiquities market, there are essentially two types of figures operating: middlemen and brokers. Middlemen, operate in a purely criminal aspect – selling known illicit objects onto collectors, or museums, while brokers may seek to make a criminal object appear legal. This is a major distinction within the network and has implications upon the type of actions or methods brokers and dealers use, and in turn, the most effective means of attempting to prevent such crimes. From many of the reports from the data, it seems that in neighbouring countries, especially Turkey, there exists a market in which dealers openly trade or sell objects that are clearly illicit antiquities. What distinguished these reports from more prominent illicit antiquities cases is that there very much seems to be a physical and virtual network of individuals within a

contained geographic region (Turkey), and are working to sell objects to other dealers, buyers, or collectors further afield (Cox, 2015; Giglio and al-Awad, 2015; Hunter, 2015; Shabi, 2015). This could also be a result of bias within the data, though considering the main route refugees have taken to enter Europe, it may also represent a trend within the market. This open criminal market allows for a more effective market and allows for a higher volume of objects to pass through these dealers and usually onto their ultimate destination.

Expertise of Market: Because these open criminal markets have been established for at least a couple of years, there exist middlemen and brokers who have become self-taught and self-labelled experts of the types of antiquities which are being taken out of Syria. One particular example in the data refers to a specific middleman who is used by other criminal actors in the network (including other dealers) as a reference for determining the validity and possible worth of an object (Giglio and al-Awad, 2015). As with any criminal market, those who operate within the illicit antiquities network are well aware of how the market is valuing objects, and quickly become well acquainted with the expected value of different types of antiquities. This is ultimately determined by the legal antiquities market – as the final retail value of the object will influence its value while still an illicit object. As this object moves through the illicit antiquities network, it will typically gain a sense of legitimacy – and with it a higher price tag. While there are instances where experts or academics have been asked to help value objects, there were not many reports of such experiences in the data that was analysed for this project. One of the main facilitators for this stage seems to be taught or learned knowledge of the antiquities market and the use of messaging services to access such knowledge when not immediately present.

Provenance Decision: An especially important factor for this specific script is that the middlemen do not need to engage with this stage. Because these middlemen are operating in a criminal market, there is no need to create a provenance for these objects – everyone they interact with in the market is aware of the illegality of these objects. This provides a lower risk type situation where the middleman is able to sell their objects with no hassle in creating a provenance, and little chance of being caught out by buyers. In contrast the broker figure would be more inclined to create or establish a false provenance for an object, as they may (depending on the transaction) be attempting to make the object appear to be legitimate (Brodie, 2006; Davis, 2011; Hardy, 2016; Tremain, 2017). If selling to

another criminal actor, this would not be necessary, but when selling to an individual who is seeking to purchase (or have the appearance of purchasing) a legal object, then the broker would likely establish a provenance for the sake of appearing legitimate.

Criminal and Working Relationships: Finding potential buyers, for any type of broker (or indeed dealer), is highly dependent upon the number and breadth of contacts that they have access to, when attempting to sell their wares. This proves to be an important stage in the illicit antiquities network, as it typically is the bridge between the illicit and legal antiquities market. In the case of illicit antiquities networks operating in and surrounding Syria, there is little information or data regarding these bridging sales – most of the data centres on criminal brokers. There are a few instances of buyers coming directly to these markets and purchasing illicit antiquities:

His [a Turkish dealer] best client, in fact, was an American, he said. He described the client as a man of about 50 who visited a few times a year with a translator. The last trip had been a few months before. “He is a really good guy,” the man said, “and he pays a lot of money”. (Giglio and al-Awad, 2015)

This signifies that the criminal open market of illicit antiquities has become so established that buyers have been made aware of its existence, and the ability to directly purchase objects from the source. In the instance of a broker actively finding a buyer, this would be done via working relationships between dealers established in the market. For example, a lower level broker may seek to sell their objects to higher-level dealers with international connections, or with clients seeking specific types of objects. These connections are dependent upon the brokers knowing the market and the players within them.

8.4.3.2 Internet

The internet has been an incredible facilitator for those operating within ATNs to find potential buyers, as it allows them a cheap and low-risk way in which to connect with interested parties. This is especially relevant as it has allowed looters a direct line to buyers, where traditionally their only options included working via middlemen or brokers (Lidington et al., 2002; Fay, 2011; Brodie, 2015c). Through various online sites, social media platforms, or messaging services, actors are able to quickly and efficiently offer prospective clients illicit antiquities. This also allows them to connect with new buyers who are knowingly and actively engaging in the illicit antiquities network – meaning that

the dealers do not have to be as concerned about the criminality of their actions. If for example, a site does require some sort of ‘provenance’ the broker can supply a very flimsy attempt at a provenance, and the requirements of the site are fulfilled, but the buyers who access the page are well aware of the criminality of the objects and are playing along in order to purchase the illicit antiquities.

Messaging/Social Media Services: Why bother arranging for an in-person meeting when a digital snapshot can be just as effective? This is a question that can be applied to many aspects of modern life but is especially relevant when it comes to the sale of illicit antiquities. Giacomo Medici may have used Polaroid photos at the height of his illicit dealing days, but a digital photograph (easily taken on a camera phone) is the modern equivalent. Being able to send a text with photos attached allows dealers to potentially sell objects to buyers from all over the world. All that is needed is a cell phone. The majority of these sales are focused on lower level, or lower valued objects – nothing compared to a Euphonious Krater – and as such photographic evidence seem to be more than enough of a visual assessment for the objects. These services allow brokers to advertise their illicit antiquities by catching the eye of clients – with visual evidence of their ‘products’.

Jurisdiction: Internet regulations are still in their infancy, from a legal perspective. With the internet being only decades old, and constantly evolving, it has caused difficulty in many aspects of law and regulation, but one of the central issue when it comes to internet regulation is in determining jurisdiction (Lidington et al., 2002; Fay, 2011; Brodie, 2015c). This would be similar to white-collar crimes, as the internet offers the possibility of committing a crime without being physically present at the scene. Cybercrimes present issues and difficulties that many nations or states have not had to consider previously (Hunton, 2009). While the looting of an antiquity is physical, and occurs at a specific physical location, the actual act of selling the item or creating (electronically) a false provenance for an object can be done on a mobile phone or computer (Brodie, 2006; Hardy, 2014a; Brodie, 2015b; Hardy, 2016). This creates difficulty in determining the jurisdiction of a crime (Hunton, 2009). As it has taken place in an online format, what is the jurisdiction for an individual who resides in Germany, and is selling an illicit antiquity on an online auction site to someone living in America? The smuggling or transportation of the object would qualify as a traditional form of crime, but the actual sale/purchase of the object would be more complex, especially if Germany and America had different

regulations concerning the transport of antiquities. As was discussed previously, many source nations have stricter regulations regarding the export of cultural objects, while (generally) market nations are comparatively less strict (Ulph et al., 2012). Even in traditional cases of antiquities looting, the transnational aspect of these networks makes tracking or persecuting antiquities traffickers difficult (Brodie et al., 2000; Bowman, 2008; Campbell, 2013; Dietzler, 2013; Mackenzie, 2015). The issue of jurisdiction within online or non-physical crimes has proved to complicate an already complex situation. As a result of this ambiguity concerning internet jurisdiction, it has allowed criminals to take advantage of a lack of regulation to exploit it for their activities (Hunton, 2009).

Auction Sites: The creation of online-auction sites (such as eBay) have drastically changed how markets operate, and allowed for those within ATNs to take advantage of loopholes concerning the sale of antiquities (Lidington et al., 2002; Fay, 2011; Brodie, 2015c). The use of auction sites has allowed lower level individuals in the ATN to connect and supply antiquities directly to buyers and collectors (Lidington et al., 2002; Fay, 2011; Brodie, 2015c). This is evident in examples from the data, where looters have described being able to sell products to European based clients with relative ease (Shabi, 2015).

8.4.3.3 Middleman

This role within the illicit antiquities network specifically poses one of the more fluidic and advantageous roles as the middleman typically has contact with some form of looter and a dealer. They generally are the most profitable, and arguably the network could not operate effectively without their role (Brodie, 1998; Kersel, 2006a; Brodie et al., 2013; Campbell, 2013; Mackenzie and Davis, 2016). They prove to be an especially important part of the network operating around and within Syria. They are the linchpin between different levels of dealers and objects and seem to operate largely as essentially low-level broker in countries surrounding Syria. The term ‘middleman’ is not used as often as ‘broker’ in much of the data, but from the description of their activities and functions are similar to what experts would refer to as a middleman. A middleman works to get an object to a dealer – and this may or may not involve trafficking the object themselves (Kersel, 2006a; Kersel, 2007; Campbell, 2013; Mackenzie and Davis, 2016; Magrans, 2018). They may arrange for the object to be trafficked, and then take on the job of finding a dealer who is interested in purchasing the object (Brodie, 1998; Kersel, 2007; Campbell, 2013;

Mackenzie and Davis, 2016; Magrans, 2018). They essentially, arrange deals. The middlemen in Syria – from the data that was available – seems to have the most important job in working with looters in Syria to find dealers and potential buyers in neighbouring countries (typically Turkey). This role works to perpetuate the illicit antiquities network, as it allows large quantities of antiquities to enter the illicit antiquities market.

8.5 Situational Crime Prevention Strategies for Future Conflict Zones

The conflict in Syria highlighted the issue of cultural heritage destruction and looting to the world in a way that previous instances have not (Rutelli, 2016). While the looting of the Baghdad Museum in 2003 presented a renewed focus on antiquities, it represented the loss of known objects from an established museum (Atwood, 2004; Rothfield, 2009). This is not to say that Iraq did not face widespread looting from archaeological and cultural sites as a result of the Iraq War of 2003, but, in the case of Iraq the main focus was on the theft of objects from the Baghdad Museum, and not the deliberate destruction of a UNESCO world heritage site such as Palmyra (Rothfield, 2009; Rutelli, 2016; Bilefsky, 2017). The Syrian Civil war has made it apparent to the world that conflicts present a heightened danger to the cultural heritage of a nation, on a visual level never quite seen before (Rush, 2016; Rutelli, 2016). The capture and destruction of part of Palmyra, demonstrates the threat such terrorist organizations pose for such objects, while also highlighting the damage they can inflict (Layton et al., 2001; Urquhart Irvine, 2011; Roorda et al., 2013). This section proposes potential prevention strategies for future conflict zones, based on the analysis offered by the Syria conflict. Syria represents a modern perspective on cultural heritage issues – especially in light of how cultural heritage has been used as a propagandistic prop by some militant and terrorist groups (Rush, 2016; Rutelli, 2016). The main focus here is on prevention, not reactionary measures or strategies. Any efforts undertaken to help protect or recover objects or sites in Syria now would be reactionary. Preventative measures are considered, to try to assist in situations where conflicts are likely to break out. These strategies offer a modern perspective on the issue of illicit antiquities, based on the study and analysis of a previous conflict.

8.5.1 Situational Crime Prevention Strategies of the Looting Phase

From a prevention perspective, this represents the most important phase, as if no large-scale looting takes place it is unlikely that the trafficking or marketing of illicit antiquities as a result of a specific conflict would occur. Unfortunately, this phase also represents the most difficult phase for prevention strategies. The analysis of Syria demonstrates that significant contributing factors are a lack of infrastructure, and culturally rich areas/regions. As such, the prevention strategies presented here will focus on increasing infrastructure, where possible, as well as increased monitoring of cultural sites.

8.5.1.1 Culturally Rich Areas

Establish Anti-Looting Culture Prior to Conflict (Reduce Provocation): Within conflict zones, it is likely that normal services will be disrupted. This includes emergency services, law enforcement, and day-to-day infrastructure. This lack of structure and normalcy can lead to a breakdown in traditional behaviours – this is evident from scenes following natural disasters, including looting – and can also encourage people to engage in non-normal activities – such as looting. Without the threat of repercussions or enforcement, coupled with this break from norms, it is likely that communities and individuals will engage in looting (often as a means of survival), as seen in the case of Syria. This phenomenon has been identified as being likely to occur when individuals and communities are faced with conflict or political or social upheaval, and as such, preventative measures should focus on creating an anti-looting culture. This would include working with the community, religious leaders or figures, and especially schools or educational programs to promote and teach about the importance of local culture. Creating a culture of respect and pride of local culture may help to curtail wide spread looting at times, for instances where societal norms are in upheaval. This is not necessarily a strategy, but more of a preventative measure that would likely generally benefit the community and presents the additional benefit of potentially helping to prevent looting from occurring.

8.5.1.2 Conflict Zone

Within a conflict zone there are always going to be many obstacles to face, especially when communities are being broken and destroyed. In reference to antiquities trafficking,

there are a number of strategies which can target specific factors that facilitate the looting, transit, and marketing of illicit antiquities. These factors will be explored in the following section.

Establish/Provide Infrastructure (Reduce Provocation): An obvious solution to a community, region, or state lacking in infrastructure is to provide a more stable infrastructure. However, in a potential conflict zone, this presents a significant difficulty. When thinking of potential future conflicts, two options must be considered – similar to the Syria instances where the conflict occurs rather suddenly. In contrast there are many types of conflicts for which there are warning signs and where preventative actions could take place – prior to unrest. In cases where there might be indications of a future conflict, outreach programs could be initiated – preventative campaigns to not only establish connections with perhaps more rural communities, but also potentially employ these communities to begin documenting known archaeological or cultural sites. Additionally, educational and awareness campaigns directed at local communities, particularly demonstrating the potential economic opportunities or resources these cultural or archaeological sites may pose.

There have been programs to target communities in economic need – such as those discussed in chapter 7 – but there has been little research concerning specifically communities at risk of conflict. Following the Iraq War of 2003, there was much interest in conflict antiquities (or cultural heritage sites), and researchers and academics at the time proposed two contrasting options: providing an alternative means of income (either by paying the community to not loot, or as hiring local communities to act as guards (and providing them with weapons) (Rothfield, 2008; Rush, 2010). Both of these options present difficulties, including where to source funding to pay these communities, and the risk of endangering lives of community guards and/or their families. These options additionally, present reactionary strategies – options for when the conflict has already occurred. Much of the literature available concerning war or conflict zones are written from the perspective of an invader. This has links to the 1954 Hague Convention on the Protection of Cultural Property in the Event of Armed Conflict, regarding correct behaviour of an invading state in relation of the cultural heritage of another state (B.T. Hoffman, 2006; Gerstenblith, 2008; Ulph et al., 2012). It does not consider complex situations such as the annexing of Crimea by the Russian state – an action they deemed not

viable for the 1954 Hague Convention as the territory they annexed was the rightful property of Russia (B.T. Hoffman, 2006; Gerstenblith, 2008; Ulph et al., 2012). The situation in Syria presents a similarly complex scenario of a civil war, with many different religious and political groups fighting for power (Hokayem, 2013; Yassin-Kassab and Al-Shami, 2016). Generally engaging the local community with their local heritage and the cultural value of local sites is always a goal to work toward, but especially in at-risk communities these types of engagements may ultimately deter individuals from engaging in looting. This type of community engagement could be accomplished by community leaders (including academic and cultural specialists), or even via online presence (YouTube, Twitter, Facebook, etc.). While this strategy is rather broad and does not propose specific strategies, it does attempt to highlight an important issue that is prevalent throughout the study of antiquities trafficking – that of placing more focus on preventative, rather than reactionary strategies.

Restrict or Monitor Access to Equipment (Increase Effort): Evidence that large-scale looting occurred in Syria has been produced, with the aid of specialized looting equipment including bulldozers, metal detectors, saws, and drills (Casana and Panahipour, 2014; Drennan, 2014; Giglio and al-Awad, 2015). In a scenario where a conflict is likely to break out, or is just beginning, a number of strategies could be implemented to attempt to remove the ability to use such specialised equipment. The main strategy for this could be to monitor or even attempt to regulate or remove heavy machinery or equipment from a conflict zone prior to the outbreak of a conflict. These include ‘sabotaging’ equipment, removing equipment, or tracking equipment. Sabotaging equipment may include removing key-components which are necessary for the equipment to operate (i.e. distributor cap in a car), or as heavy machinery is often installed with modern technology, create a program or safety mechanism that would override a physical key, and not allow the equipment to work correctly (i.e. car locks). In cases where this is not viable, there is the rather obvious solution of removing the equipment from areas close to cultural heritage sites – such as transporting them to more urban environments. Additionally, machinery can be easily GPS equipped, which could potentially be used to track the machine (Jackson, 2016). A preventative strategy would be to ensure all public (and even private) machinery is GPS equipped, this would allow for remote tracking of such objects, and even the potential for

alerting authorities as to if and/or when looting is occurring – as it might be assumed to be looting if it is located near a cultural site.

Identify/Monitor Criminal/Terrorist Groups which Target Cultural Heritage

(Reduce Rewards): Criminal or terrorist groups engaging in large-scale looting is a familiar issue – especially within conflict zones (Khmer Rouge, Lebanon, and Timbuktu) (Prott, 2006; Urquhart Irvine, 2011; Auwera, 2012; Goods and 2015, 2015; Davis and Mackenzie, 2015). Considering the evidence from the Syrian conflict, it can be assumed that is also unlikely to be the last instance of criminal or terrorist group engaging in antiquities looting. The strategy presented here specifically targets criminal organisations that are taking part in the act of looting of antiquities. The hope is that by demonstrating that these actions will be held accountable by the international (or national) community, this will create a deterrent for the crime. Ultimately, this would result in these criminal groups being denied the benefits of antiquities looting, as they would, instead of receiving a reward, receive punishment.



Fig. 8-6: Site of Apamea in 2011 (left) and 2014 (right) – source: The Atlantic

As evident in Syria, the international community has made use of satellite technology to photograph and document the condition of sites. Examples of this are evident in satellite photos of Apamea, Syria in 2011. Photographic evidence can provide information as to

who might have engaged in the looting - depending on which group or organisation had control of the region at the time. While this may not provide a direct means of stopping the looting from occurring, it can provide a form of deterrence. Though there is consistent fighting occurring within Syria, the movements, gains, and losses of many of the groups involved in the conflict have been documented as well – with the result that often those monitoring the situation are aware of who was in control of which areas (or archaeological or cultural site) at the time when antiquities looting, or destruction occurred. The ability to reasonably determine which groups are responsible for allowing the looting to occur, or even participating the looting, also allows for these actions to be brought to trial, as was the case with the International Criminal Court (ICC) at The Hague when they charged an individual solely with a charge of cultural destruction, as a war crime (Burke, 2016).

The junior civil servant turned Islamic militant leader pleaded guilty last month to the single charge of “intentionally directing” attacks on nine of Timbuktu’s mausoleums and the centuries-old door of its Sidi Yahia mosque in 2012, when the Malian city was occupied by a coalition of militant groups. (Burke, 2016)

This proved to be an important and ground-breaking legal precedent for cultural heritage protection and accountability. This is the first time that any individual was face a singular charge for the destruction of cultural heritage (Burke, 2016).

These long-revered shrines were an immediate target for the hardliners, often from abroad, who followed an extreme variant of literalist doctrines practised in Middle Eastern countries such as Saudi Arabia. Pangalangan said Mahdi had initially opposed militant leaders’ decision to destroy the shrines, saying they should spare them to avoid offending the local community. When his arguments were rejected, Mahdi gave orders to level them and oversaw the operation. (Burke, 2016)

If the international community is willing to consider the destruction and targeted attack of cultural heritage as a criminal offence worthy of conviction, this could serve to provide a deterrent for groups or individuals engaging in such activity. While no one has been convicted by ICC for the looting or trafficking of antiquities, considering the scale and targeted focus that cultural heritage in Syria has faced this may prove to change in the future. This type of international accountability may work to deter individuals or groups if they know they will be held accountable even after the conflict has resolved. Additionally, making these groups aware that the international community is watching, doing surveillance, and taking note of the damage that is being inflicted on the cultural heritage

of a country or specific culture may have some sort of impact. This could help to deter or influence criminal or terrorist groups in future conflicts.

8.5.2 Situational Crime Prevention Strategies of the Transit Phase

Situational prevention techniques and strategies for the transit phase are going to be largely focused on regulation of the border and the general movement of objects. As the phase with the least amount of detailed information concerning how objects are smuggled or transported, these strategies target general smuggling issue, but from a prevention perspective, there are a number of strategies which can be considered.

8.5.2.1 Border

Provide Adequate Training or Resources (Remove Excuses): Providing the appropriate training for border personnel so that they may have a more informed method of detecting or identifying illicit antiquities may prove to be an extremely effective manner in which to prevent the trafficking of illicit antiquities. Additionally, having practices and procedure in place for when border personnel are unsure of the authenticity or origin of an object would help to allow for a structured method by which suspicious objects could be assessed. This might include establishing a relationship with a local university or museum – creating an on-call designation so an assigned individual can be called in for assistance when necessary. If possible, even having an expert on staff, particularly in regions or areas which have a high concentration of cultural objects could prove useful and efficient. As there are often objects which are region specific, particular objects could be highlighted as most likely to be trafficked – and specialised training could then be tailored to each particular region or country.

Increase Access and Border Control (Increase Risks): When a country or region is in conflict, it is likely that border control will be one of the government aspects that is affected by the instability. This would typically mean that that the country sharing the border takes on a greater responsibility during this time. It can also be assumed that during a time of conflict there will be an increase in people and objects both entering and exiting the country. For example, Iraq, Turkey, Israel, Lebanon, and Jordan all share borders with Syria, and have been identified as being relevant to objects (and people) being smuggled and transported. The Syria example is useful to better understand how these bordering

countries have played a role furthering or allowing antiquities trafficking or occur on such a large scale.

Lebanon: Lebanon has faced a situation similar to Syria only a few decades ago. The Lebanese Civil War took place for a number of years ranging from 1975-1990s (Gaub, 2015). During this time Lebanon faced the issue of illicit antiquities and is still working to recover objects which were lost during this period. The current situation in Syria has resulted in thousands of people and objects flooding through Lebanon in the wake of the conflict, and there has been a detectable increase in illicit antiquities being trafficked and sold in the country. The situation has gotten so serious that the Lebanese government's own Bureau of International Theft is now also busy with tracking and recovering Syrian illicit antiquities (Cox, 2015). It is headed by Lt. Col. Nicholas Saad who has given a couple interviews concerning his new position (Cox, 2015). Since the conflict in Syria began, Saad has noticed a significant increase in the smuggling of looted artefacts, and his team has seized hundreds:

...especially from the Islamic parts, Raqqa (the base) of the Islamic State... "We have the archaeology expert that said they're very valuable from the Roman period, from the Greek period, years before Christ," he [Saad] says. "However, there is not a market for them in Lebanon". "Lebanon is a transit station; it's one of the doors that goes to Europe. The real money is made in Europe." (Cox, 2015).

Turkey: In contrast, Turkey has remained relatively closed-mouth about any antiquities which may have been seized as illicit antiquities. They have stated that they have in their possession thousands of objects of Syrian origin but will not return them to Syria until the conflict has been resolved (Cornwell, 2016). It has been previously noted that Turkey was a popular route for trafficking for a variety of objects, as it represents an entry point to the European Union from the Middle East (Hunter, 2015). As is evident from the thousands upon thousands of refugees making their way to Europe via Turkey, this route has been expanded upon since the Syria Civil War began. It also now serves as a transit country for many individuals and objects hoping to sell to buyers and dealers in the EU.

"Some international dealers ... started to come in to Syria but it quickly got too dangerous for them. Now the dealers all hang out across the border in Turkey. Only Turkish dealers come into Syria to meet with locals. They buy and take it back. One of the main centers for the illicit trade is Tell Abiab, on the Syrian

side, across the border from Urfa. There is also lots of smuggling in [the Turkish border town of] Kilis. ... From there, I don't know where it goes," Al-Azm said. (Erciyes, 2014)

Unlike the vast majority of traders, these men are Syrian, not Turkish, and eager to show their wares to a foreigner. Turkish buyers are their staple, the two say, but they don't pay top prices, and so sales were down. (Hunter, 2015)

At this time, Turkey was also facing social unrest, with an attempted and unsuccessful coup occurring in the spring of 2016. That being said, in winter of 2017 Turkey announced a successful anti-smuggling ring bust that resulted in the arrest of 19 individuals and over 25,000 antiquities ranging from Greek, Egyptian, and Angolan (Delzo, 2017). Operation Zeus, as it was called, included four of Turkey's largest cities, and was a result of three months of surveillance by Turkish authorities (Delzo, 2017).

Jordan and Israel: There has not been much data related specifically to these countries, but that does not mean that they should be disregarded as a potential site of trafficking. Israel is an especially interesting case, as the sales of antiquities is widely accepted, and the law regarding antiquities is slightly more lax than other countries. The 1978 Antiquities law states that any object found within Israel belongs to the state - with the exception of any antiquity that was owned by an antiquities dealer prior to that date (Kersel, 2008). This and further legislation enacted by Israel, provides the perfect set of conditions for the laundering and trafficking of illicit antiquities (Kersel, 2008). This loophole provides enough wiggle-room that dealers can present enough doubt so as to evade being accused of illegal activities. This has resulted in many objects being trafficked to Israel, whereby the ability to sell these items (even though they are illicit) is made easier (Kersel, 2008). As such, it may be possible that antiquities are also making their way through the antiquities galleries and dealers of Israel, but there is not much data at this time to support this possibility. There is also the additional complication of Israel being seen as an unwelcome country in the Middle East (Laqueur and Rubin, 2008). As Israel is seen as occupying the Palestinian state by, the majority of states within this region - not to mention that few countries even recognise Israel as an official entity (Laqueur and Rubin, 2008). With this being the case, and with heavy security between Palestine and Israel, this may not seem to be the most viable or appealing option.

There was only once instance of reference of trafficking objects through Jordan, which was given as a general statement by expert Al Azm. “The Islamic State profits nearly immediately, selling the goods to middlemen who then smuggle them into neighbouring countries such as Turkey, Jordan, and Lebanon, according to Al-Azm”. (Drennan, 2014) As Jordan shares a border with both Syria and Saudi Arabia this would seem to be the most logical route of trafficking. There are few examples of proven Syrian objects being trafficked through Jordan, though this instance presents the possibility that this route is being used (Times and Luck, 2013). Additionally, Jordan has historically been used as a means of trafficking objects and as a fairly well-established smuggling route. It would then make sense to take advantage of such a route for illicit antiquities.

This analysis of the interplay and relevance of the bordering countries of Syria has demonstrated the complex and difficult nature of securing borders within conflict zones. This is especially difficult in a region such as the Middle East where large areas are currently facing social and political unrest. When considering border control in a preventative framework it is apparent that the regional context must be understood in order to determine effective strategies. For example, the instability along the Iraq and Syrian border provided a potential – and most likely exploited – route which illicit goods as well as people were likely smuggled or transported. Perhaps the most effective preventative measure would include assessing the weak points of a border in the case of conflict and attempting to create or establish different sorts of controls or regulations in order to help strengthen these areas. Additionally, if this is not possible, then monitoring or surveilling the area could prove useful in providing up-to-date information and data concerning the situation.

8.5.3 Situational Crime Prevention Strategies of the Market Phase

The market aspect of ATNs poses the most complex as it represents both legal and illicit objects. As can be seen from the Syria script and examples, there is certainly a market for conflict antiquities, but one of the more difficult aspects to determine is how and when these conflict antiquities enter the market – as well as what can be done to prevent such an occurrence. This section discusses some of the more prevalent issues for conflict antiquities within the market phase of ATNs.

8.5.3.1 Demand Drives the Market

Identify and Target Potential Market Locations (Reduce Rewards): As was seen from the case study of Syria, Turkey has become a main hub for trafficking Syrian antiquities. This has been acknowledged as a bias in the data in chapter 4, as Turkey at the time presented an opportunity for many reporters to either enter Syria, or interview individuals who often crossed the border (Hunter, 2015). However, there is additional evidence that neighbouring countries often become funnels for conflict nations. This was evident in a study by Simon Mackenzie and Tess David (2014) which examined the structure of the statue trafficking network in Cambodia. Their study included some of the practices that took place during the reign of the Khmer Rouge in the 1980-1990s. They determined that the major route for objects made its way into Thailand, from where the objects could then be sold or transported. From this, one can assume that illicit antiquities markets are likely to be established in areas surrounding conflict zones – especially those which neighbour such culturally rich areas such as Syria. Currently, there is UN Security Resolution 2199 which states that no Syrian objects can be exported or sold during this conflict (United Nations Security Council, 2015). Nevertheless, this resolution targets only those objects which have been declared as Syrian, or (based on expert knowledge) could originate from no other area than Syria. For criminal actors within an ATN, this simply means that they claim Syrian objects as originating from other geographically close or similar countries:

One dealer, an amiable man in a quiet, small store filled with near-eastern objects, told us that he'd acquired some glass fragments very recently, and that they had likely come out of Jordan. Later, Altaweel tells me: "It's obviously not Jordanian, so my suspicion is that it's coming out of Syria." The piece he shows us – a fragment of a cup or glass container, selling for £250 – is, he adds, highly distinctive of the area. "It's very early glass and is concentrated in very few areas," he says. (Shabi, 2015)

This would indicate that preventative measure for future conflicts should focus on creating a hostile environment for any illicit antiquities trade, especially in areas surrounding the conflict. By establishing and enforcing strict policies concerning the sale or transfer of undocumented antiquities following the outbreak of a conflict, this would help to deter individuals from engaging with ATNs.

Require Provenance (Reduce Rewards): During the aftermath of the outbreak of the Iraq War of 2003, the international community put an embargo on any cultural objects

originating from Iraq being sold on the antiquities market with reasonable suspicion of having been illegally obtained (B.T. Hoffman, 2006; Brodie, 2011; Ulph et al., 2012). This was likely a reaction the looting (theft) of objects from the Baghdad museum. The goal of this embargo was to attempt to help eliminate the possibility of selling suspicious objects on the antiquities market. Previous UN resolutions had attempted to address the looting of Iraq objects in the early 1990s but had little effect on the sale of unprovenanced objects on the antiquities market (Brodie, 2011). The lifting of sanction with Iraq via UNSCR 1483 excluded weapons of cultural items, with the result being a massive drop in sales of unprovenanced items specific to Iraq (Brodie, 2011). Neil Brodie (2011) conducted a comprehensive study of the market of cuneiform tablets which are specific to Iraq, and represent an apt object to illustrate the Iraqi antiquities market. This represents an excellent example of when regulatory and media super controllers were able to influence, even if only for a short period of time, a change in procedure regarding provenance within the antiquities market. Similar types of measure could be taken for future conflicts, with focus placed on not only regulatory mechanism (such as embargos or sanctions), but also on public outcry or attitude towards such items being openly sold on the antiquities market. These types of measure would mainly seek to reduce the reward gained from trafficking in illicit antiquities, through the specific disrupting markets and denying benefits techniques. The concept of making it more difficult from criminal actors to profit and succeed in trading these objects is a fundamental premise of SCP – increase risk and effort, and reduce rewards. Further regulations and policy, with more targeted and informed measures could help to significantly disrupt ATNs.

Disrupt Middlemen Figures (Reduce Rewards): Middlemen represent a major contributing factor to ATNs, as they represent a bridging of legal and illicit (Brodie, 1998; Kersel, 2007; Proulx, 2011b; Mackenzie and Davis, 2016). As was apparent from the evidence from Syria, a large portion of the interviewees were operating in the role of middleman. These individuals are helping to supply and funnel objects from Syria to the rest of the world. The strategy for this section is dependent upon other strategies presented in this chapter. Therefore, some of the strategies within this chapter – such as identifying and targeting potential target locations, or working to secure borders, and regulating social media and auction sites are directly relevant to disrupting these middlemen figures. Additionally, it is recommended that more research and resources that focus on studying

and understanding exactly how these actors operate could prove useful to determining future targeted and efficient strategies. This could include research concerning: how they became brokers, how they learned the trade, why specifically they engaged in the trade, and how they conduct business (internet, phone, in person), where these objects are transported, or where they ultimately are destined. These are all important and valuable questions regarding the trafficking of antiquities, and for which there are rarely answers for such questions.

8.5.3.2 Internet

Regulating Social Media/Auction Sites (Remove Excuses): Working with website hosts and social media platforms to create clear and well-defined regulations regarding the sales and posting of illicit antiquities would be an effective step in helping to regulate this market. While creating and publicising such regulations would not directly stop any individuals from engaging in such activity, it would allow law enforcement with clearly criminal actions if someone did break such regulations. At the moment, this is too much uncertainty and lack of regulation when it comes to online sales of illicit antiquities. Consider that most social media are owned and operated by large tech companies. This is a perfect example of examining super controllers. In this instance, the controller would be the tech company, while the super controller would be an institution such as the government, which could regulate or reward those tech companies that made targeting illicit antiquities trafficking a priority. In order for a government, or indeed a tech company, to act upon such issues, it must be seen as being of vital importance – from either a public relations or strategic perspective. As such, further pressure upon government by groups or organisations may have some influence. Consider the issue of Nazi stolen/looted art during the Second World War. Families of victims whose artwork was stolen, or pressured into selling by the Nazis often ended up in major American art museum's collections. The families of these victims were often facing difficulties such as statute of limitations or physical documentation/provenance (Kaye, 2009). In 1998 the Washington Principles were agreed upon to help overcome such issues and work to reinstate works of art to Holocaust victims or their families, and though non-binding, many museums held to the principles laid out, so as to not be seen as taking advantage of Holocaust victims (Kaye, 2009). While the issue of illicit antiquities on social media or auction sites is not the same, the underlying issues are similar. If these institutions view

regulating illicit antiquities as strategic and beneficial to themselves, they are more likely to adhere and enforce such regulations. If the reports of terrorist organisations financially benefitting from such networks were found to be systematically true, regulating online antiquities sales would like be seen as a strategic. Additionally, regulatory measures could be made, which could increase the risk or effort of those who fail to implement preventative measures. Social media is still a new phenomenon and as such, there are still many grey areas of operation. However, with outside influencing factors pressuring these companies, progress could be made.

8.6 Discussion

The goal of this research project was to demonstrate the abilities and benefits of the application of SCP to the issue of antiquities trafficking. By creating and analysing a crime script specific to antiquities trafficking, or ATNs, this project has provided and explored a means by which ATNs can be empirically examined and perhaps develop successful means of enabling in the prevention of antiquities trafficking.

Through a close examination of antiquities looting and trafficking during the Syria conflict, a better understanding of the tactics, and methods used can be gained. This included a crime script and facilitating factors for the Syrian conflict, which helped inform the SCP strategies for future conflicts. These strategies demonstrate the ability of SCP to provide detailed insight into determining and recommending preventative or proactive strategies and solutions of potential conflicts – rather than reactionary responses. It often feels as though the field is simply catching up when it comes to antiquities trafficking, and it may prove helpful to consider prevention tactics and strategies; an ideal concept which has proven rather difficult to execute.

In the previous chapter, the crime triangle, and the three necessary elements consisted of a target - guardian, place-manager, and offender – handler was discussed. A consideration of specifically how antiquities trafficking poses a difficult situation as the target, or antiquity, typically lacks a guardian has also been debated. When considering the Syria script, it is evident that as a result of the civil war the place-manager elements have also broken down, as infrastructure has fractured and broken in some parts of the country (or even been re-assimilated by terrorist or rebel groups at certain points). This has made it

difficult to attempt to conceive practical strategies when one of the fundamental elements – the controller, or even super controller in the form of the government – is relatively ineffective.

When considering the role of super controllers, it can be determined that any type of influence to either (1) deter individuals from engaging in criminal acts, or indeed (2) encourage individuals to actively assist in some crime prevention strategies, must come from either an offender-handler element or from super controllers adjacent to the fighting. The result of this has indicated that potential crime prevention strategies for Syria are dependent upon super controllers such as:

- Regulatory actors – UNESCO embargo on Syrian objects
- Political – pressure from allies or trade partners
- Financial – Trade and embargo on necessary items, or even weapons/equipment
- Courts – International Criminal Court
- Media – International Press bringing attention to the issue

Syria is an ongoing conflict and demonstrates the difficulty in attempting to prevent or reduce antiquities trafficking after the conflict was initiated. Syria was also an unexpected conflict, as prior to the beginning of the civil war in 2011, the country was considered to be relatively stable when compared to surrounding nations (Hokayem, 2013; Yassin-Kassab and Al-Shami, 2016). The analysis of the specific conditions and trends within Syria informed the SCP techniques for future conflict, which may offer potentially useful strategies for future conflict.

In considering the SCP strategies for future conflicts one of the more significant aspects of these strategies as a body of work, is that they are preventative and proactive. They are intended to be considered and implemented by nations or regions which have been identified as unstable or areas of potential violence.

	Increase Effort	Increase Risk	Reduce Reward	Reduce Provocation	Eliminate Excuses
Looting	Restrict or Monitor Access to Equipment	ID/Monitor Criminal Groups Targeting Cultural Heritage		Establish Anti-Looting Culture Establish or Provide Infrastructure	
Transit		Increase Access & Border Control			Adequate Training and Resources
Market			ID and Target Potential Illicit Market Locations Require Provenance Disrupt Broker Figures		Regulating Social Media/Auction Sites

Fig. 8-7: Situational Crime Prevention Strategies for Potential/Future Conflict Zones

Figure 8-7 shows the strategies distributed in their relevant SCP categories and phases. It is evident that large portions of the strategies over all three phases are focused on reducing rewards and eliminating excuses. From a comprehensive perspective, it can be determined that a focus on education, reiterating or establishing rules, and developing ways to allow people to *actively not* engage in criminal activities within ATNs may prove to be effective focus for crime prevention, while also tackling the serious issue of regulating the antiquities market. As SCP is intended for highly specific types of crimes, the use of CSA and SCP may be effective in working to prevent antiquities trafficking for specific at-risk sites. Considering that some of the larger, more prominent sites within Syria were targeted for looting, this would indicate that a specific prevention script could be developed on a site-by-site basis. This would allow for input and considerations from the local community, as well as take into account relevant social and political factors. The crime script, facilitating factors, and SCP techniques and strategies presented for the Syrian (and future) conflict, were more targeted than those presented in chapters 5, 6, and 7, but still

presented a generalised overview of the situation. More importantly, the script that was developed for the Syrian conflict helped to establish a basic understanding of how ATNs can operate within a conflict zone, thus helping to determine significant and relevant strategies for future conflicts. By working to establish a global culture of ethical antiquities practices and incentivising the market to adhere to preventative and regulatory strategies or techniques, it could be possible to significantly reduce antiquities trafficking.

9. Conclusion

Having now examined and discussed the two crime scripts, facilitating factors, and situational prevention strategies that were presented in this thesis, this concluding chapter will consist of a brief review of the aims and goals, provide a summary of important findings, and discuss potential future research for crime prevention techniques and recommendations for ATNs. As noted at the outset of this study, the two prominent research questions for this research project were:

- (1) Can Situational Crime Prevention, with the use of Crime Script Analysis, be effectively applied to Antiquities Trafficking Networks?**
- (2) When applied to case/crime-specific studies, can the application of Situational Crime Prevention and Crime Script Analysis indicate effective preventative measures?**

9.1 Summary of Findings and Limitations

In the first three chapters of this thesis, both the issues of antiquities trafficking and SCP and CSA were introduced in an effort to provide both the context for this research, and also provide a better appreciation of what this project aims to achieve. Chapter 4 focused on discussing the manner in which these aims and goals would be accomplished. Particular attention was given to discussing the data sources and how crime scripts were generated for both the ATNs script and the Syria script.

Chapter 5 was the first analysis chapter, in which the overall ATNs crime script was examined, and discussed. Within this chapter, the broad and comprehensive script that was presented offered a total of thirteen specific stages within the three phases of the operation of ATNs and demonstrated a broad model of ATNs for future research. Chapter 6 then focused on determining facilitating factors presented in the crime script and discussed significant elements that have allowed ATNs to develop and subsist. Some of the more prominent factors which were discussed included: lack of formal infrastructure; known archaeological sites; access to equipment; nature of antiquities; previously established

smuggling routes; easily disguised/hidden; national borders; corruption; provenance unnecessary; profit; and long-term investments.

Taken together, chapters 5 and 6 served to then frame chapter 7, which focused on the application of SCP to ATNs, and the development of specific SCP strategies for antiquities trafficking. The specific strategies presented in chapter 7 included: restrict access to equipment; secure borders; identify criminal networks; monitor archaeological sites; assist in the detection of objects; reduce profit; deny long-term investments; create infrastructure; reduce corruption; requires/establish provenance; criminalise antiquities trafficking activity; address the nature of antiquities and the internet.

Chapter 8 then dealt with an evaluation and application of all three elements (scripts, facilitating factors, and SCP analysis) outlined in chapters 5, 6, and 7 to a specific case study – that of the Syrian civil war. The most significant findings from chapter 8 relate to the identification of a number of SCP strategies potentially applicable not only for this case study but also to future conflict zones. These would include the following goals or activities: establish anti-looting culture; establish or provide infrastructure; restrict or monitor access to equipment; identify or monitor criminal groups; provide adequate training to border personnel; increase access and border controls; identify and target potential market locations; require provenance; disrupt middlemen; and regulate social media and online auction sites.

9.2 Practical Applications/Implications

The situational strategies presented in both chapter 7 and chapter 8 offer a unique perspective on the potential of crime prevention research within the field of antiquities trafficking. These strategies have taken into consideration all stages necessary to loot, transport, and market an illicit antiquity, and have provided relevant preventative techniques and strategies. The thirteen strategies that were discussed in chapter 7 did not offer any particularly revolutionary concepts – in fact, many of them had been suggested or mentioned in previous research. However, the manner by which they were determined, their scope, and the ability of this framework to present them as consolidated and uniform manner demonstrates the strength of the SCP framework. The strategies presented in chapter 8 also demonstrate a new perspective within research concerning ATNs.

	Antiquities Trafficking Networks SCP Strategies	Future Conflict SCP Strategies
1	Restrict Access to Equipment	Establish Anti-Looting Culture
2	Secure Borders	Establish or Provide Infrastructure
3	Identify Criminal Networks	Restrict or Monitor Access to Equipment
4	Monitor Archaeological Sites	Identify or Monitor Criminal Groups
5	Assist in the Detection of Objects	Provide Adequate Training to Border Personnel
6	Reduce Profit	Increase Access and Border Controls
7	Deny Long-Term Investments	Identify and Target Potential Market Locations
8	Create Infrastructure	Require Provenance
9	Reduce Corruption	Disrupt Middlemen
10	Requires/Establish Provenance	Regulate Social Media and Online Auction Sites.
11	Criminalise Antiquities Trafficking Activity	
12	Address the Nature of Antiquities	
13	The Internet	

Fig. 9-1: Table of SCP Strategies

Perhaps the most important and significant product of this thesis was the development of the two overall crime scripts specifically developed for ATNs, and the SCP strategies that were produced for both ATNs and for future conflict zones similar to the case study of the Syrian conflict. The broader ATNs script that was developed in this study can serve as an effective methodology and may provide a set of analysis tools that may be of use to anyone working with or researching ATNs.

This study also constitutes a somewhat novel application of well-established CSA and SCP concepts to ATNs, and provides a new structure from which more complex and case-specific scripts can be developed. In addition, it should be noted that the scripts were designed to operate as individual phases or combinations of phases, this characteristic allows for great application flexibility and therefore it should be versatile enough to be used within various stages of ATNs. The script that was developed specifically for the Syria conflict took the shape of a more traditional crime script format but demonstrates that a fully functional crime script can be successfully generated for crimes unique to ATNs. However, the key value of the Syria script is that it demonstrates the adaptability of crime scripting – in short, the broader ATNs script can be applied to any instance of looting or trafficking of antiquities.

In summary, the approach used in this study and the strategies developed represent one of the first pieces of research to offer a cohesive and concise analysis of a particular type of antiquities trafficking while presenting preventative strategies for all stages of the networks. These strategies are indicative of a wide variety of crime prevention research that if undertaken, could potentially help to influence and reduce ATNs on a global scale. With this in mind, some opportunities for future research will now be examined.

9.3 Recommendations for Further Research

As has been established, the aim of this thesis has never been solely to produce specific or targeted crime prevention recommendations or strategies. The underlying motivation for this study was the process of considering ATNs from a crime prevention perspective. Much of the literature that has focused on ATNs touches on issues or techniques that are used in crime prevention, but this thesis is the first paper to empirically consider and examine crime prevention theories within the context of ATNs.

At the beginning of this thesis, a paper by Marcus Felson was introduced, which discussed the lack of a clear criminological paradigm (2017). It is the position of this thesis that it has demonstrated the possibility of a paradigm specific to crime prevention in ATNs. Now is the time to examine the goals which this field of research hopes to accomplish. It seems there are numerous groups across the world which are seeking to evaluate and study antiquities in conflict, which is evident in the surge of groups or initiatives being established following the Syrian civil war and the cultural heritage crisis which has emerged. However, with the creation of large research bodies, it seems likely such groups are overlapping or conducting similar research. Additionally, as Neil Brodie addresses in his paper concerning policy related to Syria (2015b), the issue of reactive policy interventions is coming under greater scrutiny. He details that general policy for protecting or recovering objects is reacting to the situation, which ultimately leads to its failure (Brodie, 2015b). Part of the issue with reactive policy is that it can take months or years for policies to be enacted, or for claims of damage or looting to be verified (Brodie, 2015b). This thesis offers an alternative.

As of now, the paradigm of ATNs research has focused on establishing the scale and damage of antiquities trafficking, and subsequently retracing steps in order to address said

damage. The resulting policies reflect an attempt to ‘stem the flow’ of illicit objects out of conflict zones or areas being heavily targeted for looting and trafficking. While this is necessary and important work, it overlooks the practical and necessary aspect of preventative measures. This project has sought to provide a prevention perspective to this field, and provide a framework from which further research can be produced. This is demonstrated in the use of the potential script format, from which the ATNs and Syria scripts were developed. These scripts provide a method of formatting and then analysing data to provide results that target specific actions or motivations for antiquities trafficking. This approach provides not only a basic model which can be expanded upon depending on the specific instance, but also a clear path forward for further crime prevention research and prevention focused research. The use of CSA and SCP can provide a basic model that will allow future researchers from all backgrounds – not just criminology – to use and apply to relevant research.

While the results of this work can provide a solid starting point, it is evident that further research concerning crime scripting and SCP strategies is required to provide a more detailed understanding of the various ways in which antiquities trafficking occurs. Future research, for example, could focus on creating individual scripts for a wide variety of case studies, and as more recent cases are exposed. Ideally, this type of research would clearly benefit from fieldwork that focused on interviewing or surveying actors who currently operate within ATNs. This would undoubtedly be very challenging work, considering the ethical, monetary, and safety issues that would have to be overcome. With more research using CSA and SCP, a wider breadth of knowledge can also be established within this field, which would in turn allow for more effective and efficient outcomes. SCP has the potential to allow significant strides to be made to combat antiquities trafficking, however, as this thesis has established, the most significant difficulty the study of antiquities trafficking faces is a lack of data, and any empirical research will always be cherished.

The major contribution this thesis brings to the field, has been in establishing the importance and potential for crime prevention research. It is the author’s hope that this thesis has achieved its aim of considering and demonstrating the potential of the application of specific criminological techniques such as Situational Crime Prevention and Crime Script Analysis may have for Antiquities Trafficking Networks.

References

- Abungu, G. 2016. Illicit Trafficking and Destruction of Cultural Property in Africa: A Continent at a Crossroads *In: Art Crime* [Online]. London: Palgrave Macmillan UK, pp.240–254. [Accessed 1 November 2018]. Available from: http://link.springer.com/10.1007/978-1-137-40757-3_18.
- Adams, R.M. 1971. Illicit International Traffic in Antiquities. *American Antiquity*. **36**(01), ii–iv.
- Adekunle, U. and Candidate, O. 2012. Trafficking in Nigerian Cultural Antiquities: A Criminological Perspective. *African Journal of Criminology and Justice Studies: AJCJS*. **6**, pp.1–2.
- Alder, C. and Polk, K. 2002. Stopping this awful business : the illicit traffic in antiquities examined as a criminal market. *Art, Antiquity, and Law*. **7**(1), pp.35–53.
- Alder, C. and Polk, K. 2005. The illicit traffic in plundered antiquities *In: Handbook of Transnational Crime and Justice*. justice, pp.98–113.
- Alderman, K.L. 2011. Honor amongst Thieves: Organized Crime and the Illicit Antiquities Trade. *Indiana Law Review*. **45**.
- Ali, T. and Coningham, R. 1998. Preliminary report of two seasons of archaeological investigations at the Bala Hisar of Charsadda, NWFP, Pakistan. *Ancient Pakistan.*, pp.1–34.
- Amos, D. 2017. Archaeologists In Syria Use ‘Data Water’ To Confound Antiquities Smugglers. *National Public Radio (NPR)*. [Online]. [Accessed 15 November 2018]. Available from: <https://www.npr.org/2017/03/21/520922468/archaeologists-in-syria-use-data-water-to-confound-antiquities-smugglers>.
- Anon 2018a. Dati Visitatori - Parco Archeologico di Pompei. *Pompeii Parco Archeologico di Pompei*. [Online]. [Accessed 18 November 2018]. Available from: <http://www.pompeisites.org/Sezione.jsp?titolo=Dati+Visitatori&idSezione=9>.
- Anon 2018b. K-9-Artifact-Finders. *Red Arch Cultural Heritage Law & Policy Reserach*. [Online]. [Accessed 18 November 2018]. Available from: <https://www.redarchresearch.org/K-9-Artifact-Finders.html>.
- Anon 2018c. Site Discovery & Evaluation. *NPS Archeology Program*. [Online]. [Accessed 18 November 2018]. Available from: <https://www.nps.gov/archeology/SITES/discovery.HTM>.
- Anon 2018d. Syria’s civil war explained from the beginning. *Jazeera, Al*.
- Anon 2018e. The Metropolitan Museum of Art to Return Sculptures to India. *The Metropolitan Museum of Art*. [Online]. [Accessed 16 November 2018]. Available from: <https://www.metmuseum.org/press/news/2018/return-of-indian-sculptures>.
- Anon 2017. Top 20 finds on the Antiques Roadshow. *BBC Media Center*. [Online].

- [Accessed 18 November 2018]. Available from:
<https://www.bbc.co.uk/mediacentre/mediapacks/antiques-roadshow-40/valuable>.
- Arraf, J. 2018. Record-Setting Sale Of An Ancient Assyrian Stone Relief Sparks Looting Fears In Iraq. *NPR*. [Online]. [Accessed 10 November 2018]. Available from:
<https://www.npr.org/2018/11/04/663372633/record-setting-sale-of-an-ancient-assyrian-stone-relief-sparks-looting-fears-in->.
- Askerud, Pernille, Clément and Etienne 2000. *Preventing the illicit traffic in cultural property: a resource handbook for the implementation of the 1970 UNESCO Convention; 2002* [Online]. [Accessed 31 October 2018]. Available from:
<http://unesdoc.unesco.org/images/0011/001187/118783eo.pdf>.
- Atwood, R. 2004. *Stealing history : tomb raiders, smugglers, and the looting of the ancient world* [Online]. New York : St. Martin's Press. [Accessed 27 October 2018]. Available from:
http://encore.lib.gla.ac.uk/iii/encore/record/C__Rb2973170?lang=eng.
- Auwera, S. van der 2012. Contemporary Conflict, Nationalism, and the Destruction of Cultural Property During Armed Conflict: A Theoretical Framework. *Journal of Conflict Archaeology*. **7**(1), pp.49–65.
- Ayling, J. 2013. What Sustains Wildlife Crime? Rhino Horn Trading and the Resilience of Criminal Networks. *Journal of International Wildlife Law & Policy*. **16**(1), pp.57–80.
- Balcells, M. 2014. Art Crime as White-Collar Crime *In: Cultural Property Crime* [Online]. Brill, pp.96–110. [Accessed 31 October 2018]. Available from:
http://booksandjournals.brillonline.com/content/books/b9789004280540_007.
- BBC News 2018. Syria profile - Timeline. *BBC News*. [Online]. [Accessed 16 November 2018]. Available from: <https://www.bbc.co.uk/news/world-middle-east-14703995>.
- Beauregard, E., Proulx, J., Rossmo, K., Leclerc, B. and Allaire, J.F. 2007. Script analysis of the hunting process of serial sex offenders. *Criminal Justice and Behavior*.
- Benyon, J. 1994. Policing the European Union: the changing basis of cooperation on law enforcement. *International Affairs*. **70**(3), pp.497–517.
- Berlusconi, G. 2017. *Social network analysis and crime prevention*.
- Bichler, G., Bush, S. and Malm, A. 2013. Bad actors and faulty props: Unlocking legal and illicit art trade. *Global Crime*. **14**(4), pp.359–385.
- Bichler, G. and Malm, A. 2015a. *Disrupting Criminal Networks: Network Analysis in Crime Prevention* (A. E, ed.). London: Lynne Rienner Publishers.
- Bichler, G. and Malm, A. 2015b. The routine nature of transnational crime *In: The Criminal Act: The Role and Influence of Routine Activity Theory.*, pp.33–58.
- de Bie, J.L., de Poot, C.J. and van Leun, J.P.D. 2015. Shiftingmodus operandiof jihadist foreign fighters from the Netherlands between 2000 and 2013: A crime script analysis. *Terrorism and Political Violence*.

- Bilefsky, D. 2017. ISIS Destroys Part of Roman Theater in Palmyra, Syria. Available from: <https://www.nytimes.com/2017/01/20/world/middleeast/palmyra-syria-isis-amphitheater.html>.
- Bisheh, G. 2001. One Damn Illicit Excavation After Another: the Destruction of the Archaeological Heritage of Jordan *In*: N. Brodie, J. Doole and C. Renfrew, eds. *Trade in Illicit Antiquities*. Cambridge: Oxbow Books, pp.115–118.
- Blake, J. (2000) 2000. On Defining the Cultural Heritage. *The International and Comparative Law Quarterly*. **49**(1), pp.61–85.
- Bland, R. 2009. Some Problems in Regulating the Market in UK Antiquities and the Challenge of the Internet *In*: S. Mackenzie and P. Green, eds. *Criminology and archaeology: studies in looted antiquities*. Oxford: Hart publishing, pp.83–102.
- Blum, R.H. 1995. Art and Cultural Heritage Loss: A Worthy Priority for International Prevention and Enforcement. *Journal of Financial Crime*. **3**(2), pp.149–152.
- Bogdanos, M. 2008. Thieves of Baghdad: Combating Global Traffic in Stolen Iraqi Antiquities. *Fordham International Law Journal*. **31**(3), pp.725–740.
- Borrion, H. 2013. Quality assurance in crime scripting. *Crime Science*. **2**(1), p.6.
- Bowman, B.A. 2008. Transnational crimes against culture: Looting at archaeological sites and the ‘grey’ market in antiquities. *Journal of Contemporary Criminal Justice*. **24**(3), pp.225–242.
- Boyce, A.M. 1997. A proposal to combat the illegal trafficking of Pre-Columbian artifacts. *Hispanic Law Journal*. **3**, pp.91–130.
- Boylan, P.J. 2002. The Concept of Cultural Protection in Times of Armed Conflict: from the Crusades to the New Millennium | University College London *In*: N. Brodie and K. W. Tubb, eds. *Illicit Antiquities* [Online]. London, pp.43–108. [Accessed 1 November 2018]. Available from: <http://readinglists.ucl.ac.uk/items/0E893B13-1E1B-EAB3-119A-7F0360691B28.html>.
- Brantingham, P. and Brantingham, P. 2013. Crime pattern theory *In*: *Environmental criminology and crime analysis* [Online]. Taylor & Francis, pp.100–116. [Accessed 28 October 2018]. Available from: <https://www.taylorfrancis.com/books/e/9781136308451/chapters/10.4324%2F9780203118214-13>.
- Brayley, H., Cockbain, E. and Laycock, G. 2011. The Value of Crime Scripting: Deconstructing Internal Child Sex Trafficking. *Policing*.
- Brent, M. 1996. A view inside the illicit trade in African antiquities *In*: P. R. Schmidt and R. J. Macintosh, eds. *Plundering Africa's Past* [Online]. Bloomington: Indiana University Press, pp.63–78. [Accessed 1 November 2018]. Available from: https://scholar.google.com/scholar?hl=en&as_sdt=0%2C5&q=A+view+inside+the+illicit+trade+in+African+antiquities&btnG=.

- Brodie, N. 2006. An Archaeologist's View of the Trade in Unprovenanced Antiquities *In*: B. Hoffman, ed. *Art and Cultural Heritage: Law, Policy and Practice* [Online]. Cambridge: Cambridge University Press, pp.52–63. [Accessed 16 November 2018]. Available from: <https://traffickingculture.org/app/uploads/2012/07/Brodie-2006-archaeologists-view.pdf>.
- Brodie, N. 2015a. Archaeological and Criminological Approaches to Studying the Antiquities Trade: A Comparison of the Illicit Antiquities Research Centre and the Trafficking Culture Project". *Cuadernos de Prehistoria y Arqueología*. **25**, pp.99–215.
- Brodie, N. 2010. Archaeological looting and economic justice. *Cultural Heritage Management, Policies and Issues in Global Perspective.*, pp.261–77.
- Brodie, N. 2012a. Ban Chiang. *Trafficking Culture*. [Online]. [Accessed 20 November 2018]. Available from: <https://traffickingculture.org/encyclopedia/case-studies/1046/>.
- Brodie, N. 2009. Consensual Relations? Academic Involvement in the Illegal Trade in Ancient Manuscripts. *Criminology and Archaeology: Studies in Looted Antiquities (Oñati International Series in Law and Society)*. (2009), pp.41–58.
- Brodie, N. 2016. Empress Dou Figurines. *Trafficking Culture*. [Online]. [Accessed 20 November 2018]. Available from: <https://traffickingculture.org/encyclopedia/case-studies/empress-dou-figurines/>.
- Brodie, N. 2018. Illicit antiquities. *Encyclopedia Britannica*. [Online]. [Accessed 1 November 2018]. Available from: <https://www.britannica.com/topic/illicit-antiquities>.
- Brodie, N. 1998. Pity the poor middlemen. . (3), pp.7–9.
- Brodie, N. 2014a. Provenance and Price: Autoregulation of the Antiquities Market? *European Journal on Criminal Policy and Research*.
- Brodie, N. 2015b. Syria and its Regional Neighbors: A Case of Cultural Property Protection Policy Failure? *International Journal of Cultural Property*. **22**, pp.317–335.
- Brodie, N. 2014b. The Antiquities Market: It's All in a Price.
- Brodie, N. 2015c. The Internet Market in Antiquities. Countering Illicit Traffic in Cultural Goods: The Global Challenge of Protecting the World's Heritage. *Countering Illicit Traffic in Cultural Goods: The Global Challenge of Protecting the World's Heritage.*, pp.11–20.
- Brodie, N. 2015d. The internet market in pre-Columbian antiquities. *Heritage and Identity*. **3**, pp.237–262.
- Brodie, N. 2008. The market background to the April 2003 plunder of the Iraq National Museum *In*: P. Stone and J. Farchakh Bajjaly, eds. *The Destruction of Cultural Heritage in Iraq* [Online]. Woodbridge: Boydell, pp.41–54. [Accessed 1 November 2018]. Available from: <https://traffickingculture.org/publications/brodie-n-2008-the->

market-background-to-the-april-2003-plunder-of-the-iraq-national-museum-in-p-stone-and-j-farchakh-bajjalys-eds-the-destruction-of-cultural-heritage-in-ira/.

- Brodie, N. 2011. The Market in Iraqi Antiquities 1980–2009 and Academic Involvement in the Marketing Process *In: Crime in the Art and Antiquities World* [Online]. New York, NY: Springer New York, pp.117–133. [Accessed 1 November 2018]. Available from: http://link.springer.com/10.1007/978-1-4419-7946-9_7.
- Brodie, N. 2012b. Uncovering the Antiquities Market. *The Oxford Handbook of Public Archaeology*. (June 2018), pp.1–27.
- Brodie, N. 2015e. “Why Is No One Talking about Libya’s Cultural Destruction?” *Near Eastern Archaeology*. **78**(3), p.212.
- Brodie, N. and Contreras, D. 2012. The Economics of the Looted Archaeological Site of Bâb edh-Dhrâ’ : A View from Google Earth A. W. Barker, ed. *All The Kings Horses : Essays on the Impact of Looting, Antiquities Trafficking and the Integrity of the Archaeological Record*. **7**, pp.9–25.
- Brodie, N., Dietzler, J. and Mackenzie, S. 2013. Trafficking in Cultural Objects: an Empirical Overview *In:*, pp.19–30.
- Brodie, N., Doole, J.J. and Watson, P. 2000. *Stealing History. The Illicit Trade in Cultural Material* [Online]. McDonald Institute for Archaeological Research. Available from: <http://www2.mcdonald.cam.ac.uk/projects/iarc/culturewithoutcontext/issue6/stealinghistory-report.htm%5Cnhttp://www.worldcat.org/oclc/44579791>.
- Brodie, N., Kersel, M.M., Luke, C. and Tubb, K.W. 2006. Archaeology, Cultural Heritage, and the Antiquities Trade. . (June 2018), pp.1–9.
- Brodie, N. and Renfrew, C. 2005. LOOTING AND THE WORLD’S ARCHAEOLOGICAL HERITAGE: The Inadequate Response. *Annual Review of Anthropology*. **34**(1), pp.343–361.
- Brodie, N. and Sabrine, I. 2018. The Illegal Excavation and Trade of Syrian Cultural Objects: A View from the Ground. *Journal of Field Archaeology*.
- Bullock, K., Clarke, R. V and Tilley, N. 2013. *Situational prevention of organised crimes*.
- Bullock, K., Clarke, R. V and Tilley N 2010. Introduction *In:* R. C. N. Tilley, ed. *Situational Prevention of Organised Crimes*. New York: Routledge, pp.1–16.
- Burke, J. 2016. ICC ruling for Timbuktu destruction ‘should be deterrent for others’ | World news | The Guardian. *The Guardian*. [Online]. [Accessed 17 November 2018]. Available from: <https://www.theguardian.com/world/2016/sep/27/timbuktu-shrines-icc-sentences-islamic-militant-nine-years-destruction-ahmad-al-faqi-al-mahdi>.
- Cameron, C.M. 1994. The destruction of the past: Nonrenewable cultural resources. *Nonrenewable Resources*. **3**(1), pp.6–24.
- Campbell, P.B. 2013. The Illicit Antiquities Trade as a Transnational Criminal Network: Characterizing and Anticipating Trafficking of Cultural Heritage. *International*

- Journal of Cultural Property*. **20**(2), pp.113–153.
- Casana, J. and Panahipour, M. 2014. Satellite-Based Monitoring of Looting and Damage to Archaeological Sites in Syria. *Journal of Eastern Mediterranean Archaeology and Heritage Studies*. **2**(2), p.25.
- Casey, R. 2017. Transit: An analysis of networked criminal groups and criminal opportunities at transit ports. *Cogent Social Sciences*. **3**(1), p.1301182.
- CBS News 2015. ISIS looted Syrian ancient artifacts make it to black market in US and Europe. *CNS News*. [Online]. [Accessed 12 November 2018]. Available from: <https://www.cbsnews.com/news/isis-looted-syrian-ancient-artifacts-black-market-us-and-europe/>.
- Center for Problem-Oriented Policing 2018. Twenty Five Techniques of Situational Prevention.
- Cerra, D., Plank, S., Lysandrou, V. and Tian, J. 2016. Cultural Heritage sites in danger- Towards automatic damage detection from space. *Remote Sensing*. **8**(9), p.781.
- Chang, R. M., Kauffman, R. J. and Kwon, Y. (2014) ‘Understanding the paradigm shift to computational social science in the presence of big data’, *Decision Support Systems*. North-Holland, 63, pp. 67–80. doi: 10.1016/J.DSS.2013.08.008.
- Chapman, J. 1994. Destruction of a common heritage: The archaeology of war in Croatia, Bosnia and Hercegovina. *Antiquity*. **68**(258), pp.120–126.
- Chappell, D. and Polk, K. 2011. Unraveling the cordata: Just how organized is the international traffic in cultural objects? In: *Crime in the Art and Antiquities World: Illegal Trafficking in Cultural Property*. New York, NY: Springer, pp.99–113.
- Chippindale, C. and Gill, D. 2001. “On-line Auctions: A New Venue for the Antiquities Market.” *Culture without Context*. **9**, pp.4–13.
- Chiu, Y.N., Leclerc, B. and Townsley, M. 2011. Crime script analysis of drug manufacturing in clandestine laboratories: Implications for prevention. *British Journal of Criminology*. **51**(2), pp.355–374.
- Christiansen, T. and Erik Jørgensen, K. 2007. Transnational governance ‘above’ and ‘below’ the state: The changing nature of borders in the new Europe.
- Clarke, R. V 1999. Hot products: Understanding, anticipating, and reducing demand for stolen goods. *Policing and Reducing Crime*.
- Clarke, R. V 2005. Seven misconceptions of situational crime prevention. In: N. Tilley, ed. *Handbook of crime prevention and community safety*. Willan.
- Clarke, R. V 1992. *Situational crime prevention : successful case studies* [Online]. New York : Harrow and Heston Publishers. [Accessed 1 November 2018]. Available from: http://encore.lib.gla.ac.uk/iii/encore/record/C__Rb1463866?lang=eng.
- Clarke, R. V 1997a. *Situational crime prevention : successful case studies* 2nd ed. Lynne

Rienner Publishers.

- Clarke, R. V 1983. Situational Crime Prevention: Its Theoretical Basis and Practical Scope. *Crime and Justice*. **4**, pp.225–256.
- Clarke, R. V 2009. Situational Crime Prevention: Theoretical Background and Current Practice. *Handbook on Crime and Deviance*.
- Clarke, R. V 1980. Situational crime prevention: Theory and practice. *British Journal of Criminology*. **20**(2), pp.136–147.
- Clarke, R. V 1995. Situational Crime Prevention. *Crime and Justice*. **19**, pp.91–150.
- Clarke, R. V 1997b. *Situational Crime Prevention* [Online]. Available from: <http://www.jstor.org.ezproxy.lib.gla.ac.uk/stable/1147596>.
- Clarke, R. V and Bowers, K. 2017. Seven misconceptions of situational crime prevention In: N. Tilley, ed. *Handbook of Crime Prevention and Community Safety* [Online]. Routledge, pp.109–142. [Accessed 1 November 2018]. Available from: [https://books.google.com/books?hl=en&lr=&id=2SFZM1DyYeEC&oi=fnd&pg=PA39&dq=Clarke,+R.V.+\(2005\).+Seven+misconceptions+of+situational+crime+prevention.+In+N.+Tilley+\(ed\),+Handbook+of+crime+prevention+and+community+safety,+Cullompton,+UK:+Willan.&ots=yJgJn7h](https://books.google.com/books?hl=en&lr=&id=2SFZM1DyYeEC&oi=fnd&pg=PA39&dq=Clarke,+R.V.+(2005).+Seven+misconceptions+of+situational+crime+prevention.+In+N.+Tilley+(ed),+Handbook+of+crime+prevention+and+community+safety,+Cullompton,+UK:+Willan.&ots=yJgJn7h).
- Clarke, R. V and Eck, J.E. 2016. *Crime Alysis for Problem solvers: In 60 small steps* [Online]. [Accessed 7 November 2018]. Available from: <https://ric-zai-inc.com/Publications/cops-w0047-pub.pdf>.
- Clarke, R. V and Felson, M. 2004. *Routine activity and rational choice* [Online] Second. Transaction Publishers. [Accessed 27 October 2018]. Available from: <http://discovery.lib.harvard.edu/?itemid=%7Clibrary/m/aleph%7C012555038>.
- Clarke, R. V and Newman, G.R. 2006. *Outsmarting the terrorists*. Praeger Security International.
- Coggins, C.C. 1969. Illicit traffic of pre-columbian antiquities. *Art Journal*. **29**(1), pp.94–144.
- Cohen, L.E. and Felson, M. 1979. Social Change and Crime Rate Trends: A Routine Activity Approach. *American Sociological Review*.
- Conklin, J.E. 1994. *Art crime* [Online]. Westport, Conn. : Praeger. [Accessed 27 October 2018]. Available from: http://encore.lib.gla.ac.uk/iii/encore/record/C__Rb3068348?lang=eng.
- Constantinidis, D. 2016. Crowdsourcing culture: Challenges to change In: *Cultural Heritage in a Changing World*. Cham: Springer, pp.215–234.
- Contreras, D.A. 2010. Huaqueros and remote sensing imagery: Assessing looting damage in the Virú Valley, Peru. *Antiquity*. **84**(324), pp.544–555.
- Contreras, D.A. and Brodie, N. 2010. The Utility of Publicly-Available Satellite Imagery

- for Investigating Looting of Archaeological Sites in Jordan. *Journal of Field Archaeology*. **35**(1), pp.101–114.
- Copes, H., Hochstetler, A. and Cherbonneau, M. 2012. Getting the Upper Hand: Scripts for Managing Victim Resistance in Carjackings. *Journal of Research in Crime and Delinquency*.
- Cornish, D.B. 1994a. Crimes as Scripts *In: Proceedings of the International Seminar on Environmental Criminology and Crime Analysis*. Tallahassee, FL.: Florida: Criminal Justice Executive Institute, pp.30–45.
- Cornish, D.B. 1994b. The Procedural Analysis of Offending and Its Relevance for Situational Crime Prevention *In: Crime Prevention Studies. Vol. 3*.
- Cornish, D.B. and Clarke, R. V 2002. Analyzing Organized Crimes. *Rational Choice and Criminal Behavior: Recent Research and Future Challenges*.
- Cornish, D.B. and Clarke, R. V 2003. Opportunities, precipitators and criminal decisions: A reply to Wortley's critique of situational crime prevention. *Crime Prevention Studies*. **16**, pp.41–96.
- Cornwell, T. 2016. Almost 70% of smuggled object seized in Syria and Lebanon are fakes, antiquities chief says. *The Art Newspaper*. (August).
- Cox, S. 2015. The men who smuggle the loot that funds IS. *BBC News*. [Online]. [Accessed 17 November 2018]. Available from: <https://www.bbc.co.uk/news/magazine-31485439>.
- Coyne, M.A. and Eck, J.E. 2015. Situational Choice and Crime Events. *Journal of Contemporary Criminal Justice*. **31**(1), pp.12–29.
- Crowther-Dowey, C. and Fussey, P. (2012) Researching crime : approaches, methods and application.
- D'Ippolito, M. 2014. New Methods of Mapping *In: Social Computing, Behavioral-Cultural Modeling and Prediction SE - 31* [Online]., pp.253–260. Available from: http://dx.doi.org/10.1007/978-3-319-05579-4_31.
- Daniels, B.I. and Hanson, K. 2015. Archaeological Site Looting in Syria and Iraq: A Review of the Evidence *In: Countering Illicit Traffic in Cultural Goods* [Online]. ICOM, p.83. [Accessed 15 November 2018]. Available from: https://www.obs-traffic.museum/sites/default/files/ressources/files/Book_observatory_illicit_traffic_version_issuu.pdf#page=95.
- Davis, T. 2011. Supply and demand: Exposing the illicit trade in Cambodian antiquities through a study of Sotheby's auction house. *Crime, Law and Social Change*. **56**(2), pp.155–174.
- Davis, T. and Mackenzie, S. 2015. Crime and conflict: Temple looting in Cambodia *In: Heritage and Identity*.
- Dehghanniri, H. and Borrion, H. 2017. Toward a more structured crime scripting method

In: Proceedings - 2016 IEEE 24th International Requirements Engineering Conference Workshops, REW 2016.

- Delzo, J. 2017. Thousands of Artifacts From Ancient Egyptian and Greek Civilizations Seized During Smuggling Operation. *Newsweek*. [Online]. [Accessed 17 November 2018]. Available from: <https://www.newsweek.com/thousands-ancient-artifacts-seized-during-smuggling-operation-756262>.
- Derooin, J.P., Bou Kheir, R. and Abdallah, C. 2017. Geoarchaeological remote sensing survey for cultural heritage management. Case study from Byblos (Jbail, Lebanon). *Journal of Cultural Heritage*. **23**, pp.37–43.
- Deslauriers-Varin, N. and Beauregard, E. 2010. Victims' routine activities and sex offenders' target selection scripts: A latent class analysis. *Sexual Abuse: Journal of Research and Treatment*.
- Dietzler, J. 2013. On 'Organized Crime' in the illicit antiquities trade: Moving beyond the definitional debate. *Trends in Organized Crime*. **16**(3), pp.329–342.
- Drennan, J. 2014. The Black-Market Battleground. *Foreign Policy*. [Online]. [Accessed 12 November 2018]. Available from: <https://foreignpolicy.com/2014/10/17/the-black-market-battleground/>.
- Eklblom, 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. Special issue: Design and crime: Proofing electronic products and services against theft. *European Journal on Criminal Policy and Research*. **14**(1), pp.61–87.
- Elia, R. 2001. Analysis of the looting, selling, and collecting of Apulian red-figure vases: a quantitative approach *In: N. Brodie, J. Dooley and C. Renfrew, eds. Trade in illicit antiquities: the destruction of the world's archaeological heritage* [Online]. Cambridge: Oxbow, pp.145–153. [Accessed 1 November 2018]. Available from: https://scholar.google.com/scholar?hl=en&as_sdt=0%2C5&q=Elia+2001+antiquities+%&btnG=#d=gs_cit&p=&u=%2Fscholar%3Fq%3Dinfo%3ACec8EvMFpUJ%3Ascholar.google.com%2F%26output%3Dcite%26scirp%3D0%26hl%3Den.
- Erciyes, C. 2014. Islamic State makes millions from stolen antiquities. *Al-Monitor*. [Online]. [Accessed 21 November 2018]. Available from: <https://www.al-monitor.com/pulse/security/2014/09/turkey-syria-iraq-isis-artifacts-smuggling.html>.
- Fabiani, M. 2018. Disentangling Strategic and Opportunistic Looting: The Relationship between Antiquities Looting and Armed Conflict in Egypt. *Arts*.
- Fabiani, M.R.D. 2016. *Strategic vs. Opportunistic Looting: The Relationship Between Antiquities Looting and Armed Conflict in Egypt*. [Online] University of Maryland. [Accessed 16 November 2018]. Available from: <https://drum.lib.umd.edu/handle/1903/19024>.
- Fabrikant, G. 2009. The Good Stuff in the Back Room. *New York Times*. [Online]. Available from:

<https://www.nytimes.com/2009/03/19/arts/artsspecial/19TROVE.html>.

- Farchakh-Bajjaly, J. 2011. Politicians: Assassins of Lebanese Heritage? Archaeology in Lebanon in Times of Armed Conflict *In*: P. G. Stone, ed. *Cultural heritage, ethics, and the military* [Online]. Woodbridge: Boydell & Brewer Ltd, p.228. [Accessed 1 November 2018]. Available from: https://books.google.co.uk/books?hl=en&lr=&id=_dRnaZS9L3wC&oi=fnd&pg=PA182&dq=Farchakh-Bajjaly+2011++lebanon&ots=zir7lyCNYc&sig=RIOIHECtWLTURjhqaZymEKfviYQ&redir_esc=y#v=onepage&q=Farchakh-Bajjaly+2011+lebanon&f=false.
- Farchakh-Bajjaly, J. 2008. Who are the looters at archaeological sites in Iraq *In*: L. Rothfield, ed. *Antiquities Under Siege: Cultural Heritage Protection After the Iraq War*. AltaMira Press.
- Fay, E. 2011. Virtual Artifacts: eBay, Antiquities, and Authenticity. *Journal of Contemporary Criminal Justice*.
- Felch, J. 2013a. SCOOP: New Evidence Of Stolen Idols at the National Gallery of Australia | CHASING APHRODITE. *Chasing Aphrodite*. [Online]. [Accessed 3 November 2018]. Available from: <https://chasingaphrodite.com/2013/06/04/scoop-new-evidence-of-stolen-idols-at-the-national-gallery-of-australia/>.
- Felch, J. 2014. Twenty Percent: ISIS “Khums” Tax on Archaeological Loot Fuels the Conflicts in Syria and Iraq. *CHASING APHRODITE*. [Online]. [Accessed 11 November 2018]. Available from: <https://chasingaphrodite.com/2014/08/14/twenty-percent-isis-khums-tax-on-archaeological-loot-fuels-the-conflicts-in-syria-and-iraq/>.
- Felch, J. 2013b. UPDATED: Documents Suggest More Stolen Idols at National Gallery of Australia. *CHASING APHRODITE*. [Online]. [Accessed 16 November 2018]. Available from: <https://chasingaphrodite.com/tag/subhash Kapoor/page/3/>.
- Felch, J. and Frammolino, R. 2011. *Chasing Aphrodite : the hunt for looted antiquities at the world’s richest museum* [Online]. Boston, Mass. : Houghton Mifflin Harcourt., [Accessed 27 October 2018]. Available from: http://encore.lib.gla.ac.uk/iii/encore/record/C__Rb2927561?lang=eng.
- Felson, M. 2017. Criminology’s first paradigm.
- Fennelly, L.J. and Kitteringham, G. 2012. Environmental Criminology and Crime Control. *Handbook of Loss Prevention and Crime Prevention.*, pp.110–125.
- Fernández, S., Leonardo, C.& and Sanjuán, G. 2000. Site looting and the illicit trade of archaeological objects in Andalusia, Spain Legal framework. *Context Without Culture*. (7).
- Forsyth, M.P. 2007. International Cultural Property Trusts: One Response to Burden of Proof Challenges in Stolen Antiquities Litigation. *Chicago Journal of International Law*. **8**(1), pp.197–212.
- Francioni, F. and Lenzerini, F. 2006. The obligation to prevent and avoid destruction of

- cultural heritage: from Bamiyan to Iraq *In*: B. Hoffman, ed. *Art and Cultural Heritage: Policy* [Online]. New York: Cambridge University Press, pp.28–40. [Accessed 6 November 2018]. Available from: <https://books.google.com/books?hl=en&lr=&id=yvXTcGC5CwQC&oi=fnd&pg=PA28&dq=francioni++the+obligation+to+prevent+and+avoid&ots=8vnq4NqHdd&sig=N9Yy4x3y4FQkK2tPU-3L0f5ncyM>.
- Freilich, J.D. and Newman, G.R. 2017. *Situational Crime Prevention* [Online]. Oxford University Press. [Accessed 1 November 2018]. Available from: <http://criminology.oxfordre.com/view/10.1093/acrefore/9780190264079.001.0001/acrefore-9780190264079-e-3>.
- Fuenzalida V., H. 1957. 'Historia del Hallazgo', La Momia del Cerro el Plomo. *Boletín del Museo Nacional de Historia Natural*. **Tomo XXVII**(1), pp.3–8.
- Gallagher, S. 2017. Purchased in Hong Kong: Is Hong Kong the best place to buy stolen or looted antiquities? *International Journal of Cultural Property*. **24**(4), pp.479–496.
- Gaub, F. 2015. *Lebanon's civil war: seven lessons forty years on* [Online]. [Accessed 18 November 2018]. Available from: https://www.iss.europa.eu/sites/default/files/EUISSFiles/Alert_21_Lebanon_civil_war.pdf.
- Gerstenblith, P. 2008. *Art, cultural heritage, and the law : cases and materials* [Online]. Durham, N.C. : Carolina Academic Press. [Accessed 27 October 2018]. Available from: http://encore.lib.gla.ac.uk/iii/encore/record/C__Rb2927557?lang=eng.
- Gerstenblith, P. 2007. *Controlling the International Market in Antiquities: Reducing the Harm, Preserving the Past* [Online]. [Accessed 15 November 2018]. Available from: <http://chicagounbound.uchicago.edu/cjil/vol8/iss1/10>.
- Giglio, M. and al-Awad, M. 2015. This Is How Syrian Antiquities Are Being Smuggled And Sold. *Buzzfeed*. [Online]. [Accessed 12 November 2018]. Available from: <https://www.buzzfeednews.com/article/mikegiglio/the-trade-in-stolen-syrian-artifacts>.
- Gill, D. and Chippindale, C. 1993. Material and Intellectual Consequences of Esteem for Cycladic Figures. *Aja*. **97**(4), p.601–59.
- Gill, D.W.J. and Tsirogiannis, C. 2016. Polaroids from the medici dossier: Continued sightings on the market *In*: *Art Crime: Terrorists, Tomb Raiders, Forgers and Thieves*.
- Gilmour, N. 2014. Understanding Money Laundering – A Crime Script Approach. *The European Review of Organised Crime*.
- Gonzalez, M.A. 1973. New Legal Tools to Curb the Illicit Traffic in Pre-Columbian Antiquities. *Columbia Journal of Transnational Law*. **12**(2), pp.316–341.
- Goods, S.H.-C.I.T. in C. and 2015, undefined 2015. *The conflict antiquities trade: A historical overview* [Online]. [Accessed 17 November 2018]. Available from: http://icom.museum/fileadmin/user_upload/pdf/publications/Book_observatory_illicit

_traffic_version_issuu.pdf#page=37.

- Graham, J.L. 2014. Art exchange? How the international art market lacks a clear regulatory framework *In: Art, Cultural Heritage and the Market: Ethical and Legal Issues*. Berlin, Heidelberg: Springer, pp.319–340.
- Green, P. and Mackenzie, S. 2009. *Criminology and archaeology : studies in looted antiquities* [Online]. Oxford : Hart Publishing. [Accessed 27 October 2018]. Available from: http://encore.lib.gla.ac.uk/iii/encore/record/C__Rb2927562?lang=eng.
- Greenfield, J. 2007. *The return of cultural treasures* [Online]. Cambridge : Cambridge University Press. [Accessed 9 November 2018]. Available from: http://encore.lib.gla.ac.uk/iii/encore/record/C__Rb3007524?lang=eng.
- Grove, L. 2013. Heritocide? Defining and Exploring Heritage Crime. *Public Archaeology*. **12**(4), pp.242–254.
- Grove, L., Daubney, A. and Booth, A. 2018. Identifying sites at risk from illicit metal detecting: from CRAVED to HOPPER. *International Journal of Heritage Studies*. **24**(10), pp.1038–1052.
- Grove, L. and Pease, K. 2014. A situational approach to heritage crime prevention *In: Heritage Crime*. London: Palgrave Macmillan, pp.107–127.
- Grove, L. and Thomas, S. 2014. What’s the future for heritage crime research? *In: Heritage Crime: Progress, Prospects and Prevention*. London: Palgrave Macmillan, pp.224–230.
- Gruber, S. 2013. The fight against the illicit trade in asian cultural artefacts: Connecting international agreements, regional co-operation, and domestic strategies. *Asian Journal of International Law*. **3**(2), pp.341–363.
- Gutchen, M. 1983. The destruction of archaeological resources in Beliez, Central America | www.icom.museum. *Journal of Field Archaeology*., pp.217–227.
- Hadjisavvas, S. 2001. The Destruction of the Archaeological Heritage of Cyprus *In: N. Brodie, J. Doole and C. Renfrew, eds. Trade in Illicit Antiquities*. Cambridge: Oxbow Books, pp.133–140.
- Hancock, G. and Laycock, G. 2013. Organised crime and crime scripts: Prospects for disruption *In: Situational Prevention of Organised Crimes*.
- Hanson, K. 2011. Ancient Artefacts and Modern Conflict: A Case Study of Looting and Instability in Iraq *In: P. G. Stone, ed. Cultural Heritage, Ethics, and the Military* [Online]. Woodbridge: Boydell Press, pp.113–128. [Accessed 1 November 2018]. Available from: <https://www.dawsonera.com/readonline/9781846159442/startPage/126/1>.
- Hanson, K. 2008. Why Does Archaeological Context Matter? *In: G. Emberling and K. Hanson, eds. Catastrophe!* [Online]. Oriental Institute Museum Publications, pp.45–49. [Accessed 17 November 2018]. Available from: <http://uruk-warka.dk/news/03->

2015/oimp28.pdf.

- Hardy, S. 2014a. How the West buys ‘conflict antiquities’ from Iraq and Syria (and funds terror). *Reuters*.
- Hardy, S. 2016. Illicit trafficking, provenance research and due diligence: the state of the art. . (March), p.23.
- Hardy, S. 2015a. Is looting-to-order “just a myth”? Open-source analysis of theft-to-order of cultural property. *Cogent Social Sciences*. **1**(1).
- Hardy, S. 2014b. Using Open-Source Data to Identify Participation in the Illicit Antiquities Trade: A Case Study on the Cypriot Civil War. *European Journal on Criminal Policy and Research*. **20**(4), pp.459–474.
- Hardy, S. 2015b. Virtues impracticable and extremely difficult: The human rights of subsistence diggers *In: Ethics and the Archaeology of Violence*. New York, NY: Springer, pp.229–239.
- Harkin, J. 2016. The Race to Save Syria ’ s Archaeological Treasures. *Smithsonian Magazine*2.
- Hauser-Schäublin, B. 2016. Looted, trafficked, donated and returned : The twisted tracks of Cambodian antiquities *In: Hauser-Schaublin and L. V. Prott, eds. Cultural Property and Contested Ownership* [Online]. Londond: Routledge, pp.64–82. [Accessed 1 November 2018]. Available from: <https://www.taylorfrancis.com/books/e/9781317281832/chapters/10.4324%2F9781315642048-5>.
- Hauser-Schäublin, B. and Prott, L. V 2016. *Cultural Property and Contested Ownership: The trafficking of artefacts and the quest for restitution* [Online]. London : Routledge,. [Accessed 27 October 2018]. Available from: http://encore.lib.gla.ac.uk/iii/encore/record/C__Rb3150769?lang=eng.
- Heath, D.B. 1973. Bootleg Archaeology in Costa Rica *In: Archaeology*., pp.217–219.
- Herbet, M. 2014. Partisans, Profiteers, and Criminals: Syria’s Illicit Economy. *Fletcher Forum of World Affairs*. **38**(1), pp.69–86.
- Hicks, R. 2000. Time Crime: Protecting the Past in the United States. *Culture Without Context*. **9**.
- Hoffman, B. 2006. Introduction to Parts II and III: Cultural Rights, Cultural Property, and International Trade *In: Art and Cultural Heritage: Law, Policy, and Practice*. New York: Cambridge University Press, pp.89–93.
- Hoffman, B.T. 2006. *Art and cultural heritage : law, policy, and practice* [Online]. New York : Cambridge University Press,. [Accessed 17 November 2018]. Available from: http://encore.lib.gla.ac.uk/iii/encore/record/C__Rb2735352?lang=eng.
- Hokayem, E. 2013. *Syria’s Uprising and the Fracturing of the Levant* [Online]. London : Routledge for the International Institute for Strategic Studies,. [Accessed 17

- November 2018]. Available from:
http://encore.lib.gla.ac.uk/iii/encore/record/C__Rb3057396?lang=eng.
- Honan, W. 1995. Art for Whose Sake?: Trading in Antiquities. Rare Pre-Columbian Relics, at Any Cost. *The New York Times*.
- Hunter, I. 2015. Syria conflict: The illicit art trade that is a major source of income for today's terror groups is nothing new. *Independent*. [Online]. [Accessed 12 November 2018]. Available from: <https://www.independent.co.uk/news/world/middle-east/syria-conflict-the-illicit-art-trade-that-is-a-major-source-of-income-for-todays-terror-groups-is-10204285.html>.
- Hunton, P. 2009. The growing phenomenon of crime and the internet: A cybercrime execution and analysis model. *Computer Law & Security Review*. **25**(6), pp.528–535.
- Hutchings, A. and Holt, T.J. 2015. A crime script analysis of the online stolen data market. *British Journal of Criminology*. **55**(3), pp.596–614.
- Isakhan, B. 2013. Heritage Destruction and Spikes in Violence: the Case of Iraq *In*: J. D. Kila and J. A. Zeidler, eds. *Cultural Heritage in the Crosshairs*., pp.219–248.
- Jackson, T. 2016. GPS Control for Excavators: How it works and how it can make an operator's life much easier. *Equipment World*. [Online]. [Accessed 17 November 2018]. Available from: <https://www.equipmentworld.com/gps-control-for-excavators-how-it-works-and-how-it-can-make-an-operators-life-much-easier/>.
- Jacques, S. and Bernasco, W. 2013. Drug dealing: Amsterdam's Red Light District *In*: B. Leclerc and R. Wortley, eds. *Cognition and Crime* [Online]. Routledge, pp.144–163. [Accessed 2 November 2018]. Available from: <https://www.taylorfrancis.com/books/e/9781136185359/chapters/10.4324%2F9780203083482-17>.
- Jesse Casana 2015. Satellite Imagery-Based Analysis of Archaeological Looting in Syria. *Near Eastern Archaeology*. **78**(3), p.142.
- Jun, T. and Pdf, H. 2014. The Black Market for Wildlife : Combating Transnational Organized Crime in the Illegal Wildlife Trade. *Vanderbilt Journal of Transnational Law*.
- Kaiser, T. 1990. The Antiquities Market. *Journal of Field Archaeology*. **17**(2), p.205.
- Kaye, L.M. 2009. Recovery of Art Looted During the Holocaust *In*: J. A. Nafziger and A. M. Nicgorski, eds. *Cultural Heritage Issues: The Legacy of Conquest, Colonization and Commerce* [Online]. BRILL, pp.351–270. [Accessed 17 November 2018]. Available from: <https://ebookcentral.proquest.com/lib/gla/reader.action?docID=635069&ppg=373>.
- Kelleher, J.S. 2015. Looted Indian antiquities end up at Honolulu museum. *USA Today*. [Online]. Available from: <https://eu.usatoday.com/story/news/nation/2015/04/02/antiquities-looted-honolulu-museum/70816386/>.

- Kersel, M.M. 2006a. From the Ground to the Buyer A Market Analysis of the Trade in Illegal Antiquities *In*: N. Brodie, M. M. Kersel and K. W. Tubb, eds. *Archaeology, Cultural Heritage, and the Antiquities Trade* [Online]. University Press of Florida, pp.188–205. [Accessed 31 October 2018]. Available from: <http://florida.universitypressscholarship.com/view/10.5744/florida/9780813029726.001.0001/upso-9780813029726-chapter-10>.
- Kersel, M.M. 2006b. License to Sell: The Legal Trade in Antiquities in Israel. *Archaeology*. **Doctoral D.**
- Kersel, M.M. 2008. The Trade in Palestinian Antiquities. *Jerusalem Quarterly.*, p.33.
- Kersel, M.M. 2012. The Value of a Looted Object: Stakeholder Perceptions in the Antiquities Trade *In: The Oxford Handbook of Public Archaeology*. Brill.
- Kersel, M.M. 2007. Transcending borders: Objects on the move. *Archaeologies*. **3**(2), pp.81–98.
- Kersel, M.M. 2011. When Communities Collide: Competing Claims for Archaeological Objects in the Market Place. *Archaeologies-Journal of the World Archaeological Congress*. **7**(3), pp.518–537.
- Kumar, V.S. 2018. *The Idol Thief*. Juggernaut.
- Kurland, J., Pires, S.F., McFann, S.C. and Moreto, W.D. 2017. Wildlife crime: A conceptual integration, literature review, and methodological critique. *Crime Science*. **6**(1), p.4.
- Lab, S.P. 2016. *Crime Prevention. Approaches, Practice and Evaluations* 9th ed.
- von Lampe, K. 2011. The application of the framework of situational crime prevention to ‘organized crime’. *Criminology and Criminal Justice*. **11**(2), pp.145–163.
- Lane, D.C., Bromley, D.G., Hicks, R.D. and Mahoney, J.S. 2008. Time crime: The transnational organization of art and antiquities theft. *Journal of Contemporary Criminal Justice*. **24**(3), pp.243–262.
- Laqueur, W. and Rubin, B.M. 2008. *The Israel-Arab reader : a documentary history of the Middle East conflict* [Online]. New York, N.Y. : Penguin Books. [Accessed 18 November 2018]. Available from: http://encore.lib.gla.ac.uk/iii/encore/record/C__Rb3088545?lang=eng.
- Lavorgna, A. 2015. The online trade in counterfeit pharmaceuticals: New criminal opportunities, trends and challenges. *European Journal of Criminology*. **12**(2), pp.226–241.
- Lavorgna, A. 2014. Wildlife trafficking in the Internet age. *Crime Science*.
- Lavorgna, A., Rutherford, C., Vaglica, V., Smith, M.J. and Sajeve, M. 2018. CITES, wild plants, and opportunities for crime. *European Journal on Criminal Policy and Research*.

- Laycock, G. and Tilley, N. 1995. Implementing Crime Prevention. *Crime and Justice*. **19**, pp.535–584.
- Layton, R., Thomas, J. and Stone, P.G. 2001. *Destruction and conservation of cultural property* [Online]. New York : Routledge. [Accessed 27 October 2018]. Available from: http://encore.lib.gla.ac.uk/iii/encore/record/C__Rb1999028?lang=eng.
- Lazarus, S. 2018. Rare 3,000-year-old sculpture sells for \$31M, smashing record for Assyrian art. *CNN Style*. [Online]. Available from: <https://edition.cnn.com/style/article/assyrian-relief-panel/index.html>.
- Leclerc, B. 2017. Script Analysis and the SCRIPT Acronym *In: Crime Prevention in the 21st Century* [Online]. Cham: Springer International Publishing, pp.49–58. [Accessed 16 November 2018]. Available from: http://link.springer.com/10.1007/978-3-319-27793-6_5.
- Leclerc, B. 2014. Script analysis for crime controllers: Extending the reach of situational crime prevention *In: Organized Crime, Corruption and Crime Prevention: Essays in Honor of Ernesto U. Savona*.
- Leclerc, B. and Reynald, D. 2017. When scripts and guardianship unite: A script model to facilitate intervention of capable guardians in public settings oa. *Security Journal*. **30**(3), pp.793–806.
- 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*.
- Leclerc, B., Wortley, R. and Smallbone, S. 2010. Investigating mobility patterns for repetitive sexual contact in adult child sex offending. *Journal of Criminal Justice*. **38**(4), pp.648–656.
- Lee, D.R. 2010. Understanding and Applying Situational Crime Prevention Strategies. *Criminal Justice Policy Review*. **21**(3), pp.263–268.
- Lehr, D. and Chamberlin, W. 2015. Culture Under Threat: Fighting Terrorist Financing in the Middle East. *The World Post*.
- Lemieux, A.M. and Clarke, R. V 2009. The international ban on ivory sales and its effects on elephant poaching in africa. *British Journal of Criminology*. **49**(4), pp.451–471.
- Leontiadis, N. and Hutchings, A. 2015. Scripting the crime commission process in the illicit online prescription drug trade. *Journal of Cybersecurity*.
- Levine, A. 2013. A Global Database of Antiquities: Some Thoughts on Structure and Implementation. *Archaeologies*. **9**(1), pp.252–266.
- Lewis, G. 2006. The ‘Universal Museum’: a case of special pleading? *In: B. Hoffman, ed. Art and Cultural Heritage: Law, Policy, and Practice* [Online]. New York: Cambridge University Press, pp.379–385. [Accessed 6 November 2018]. Available from:

https://s3.amazonaws.com/academia.edu.documents/45701944/Universal_Museums_1.pdf?AWSAccessKeyId=AKIAIWOWYYGZ2Y53UL3A&Expires=1541545716&Signature=U%2BcctwxdOkYt82nOy6p8fRjHVyI%3D&response-content-disposition=inline%3B filename%3DTHE_UNIVERSAL_MUSEUM_A_C.

- Li, J.C.M. 2015. Adolescent compensated dating in Hong Kong: Choice, script, and dynamics. *International Journal of Offender Therapy and Comparative Criminology*.
- Lidington, H., Publishing, M., Maney, W.S. and Limited, S. 2002. The role of the internet in removing the ' shackles of the saleroom '. *Public archaeology*. **2**(2), pp.67–84.
- Lobay, G. 2009. Border controls in market countries as disincentives to antiquities looting at source? The US-Italy bilateral agreement *In: Criminology and Archaeology: Studies in Looted Antiquities*. Hart Publishing, pp.59–80.
- Luke, C. and Henderson, J.S. 2006. The Plunder of the Ulúa Valley, Honduras, and a Market Analysis for Its Antiquities *In: N. Brodie, M. Kersel, C. Luke and K. Tubb, eds. Archaeology, cultural heritage, and the antiquities trade* [Online]. University of Press of Florida, pp.147–172. [Accessed 1 November 2018]. Available from: https://s3.amazonaws.com/academia.edu.documents/32554966/07_Luke_Henderson_147-172.pdf?AWSAccessKeyId=AKIAIWOWYYGZ2Y53UL3A&Expires=1541088258&Signature=%2BB63pMmGUiQnBk9oG3OMtwWCP2s%3D&response-content-disposition=inline%3B filename%3DLuke_C._and_John_S.
- Lundén, S. 2012. Perspectives on looting, the illicit antiquities trade, art and heritage. *Art Antiquity and Law*. **17**(2), pp.109–135.
- Mackenzie, S. 2014. Conditions for Guilt-Free Consumption in a Transnational Criminal Market. *European Journal on Criminal Policy and Research*. **20**(4), pp.503–515.
- Mackenzie, S. 2005. *Going, going, gone: regulating the market in illicit antiquities* [Online]. Bülth Wells, Powys : Institute of Art and Law. [Accessed 27 October 2018]. Available from: http://encore.lib.gla.ac.uk/iii/encore/record/C__Rb2927568?lang=eng.
- Mackenzie, S. 2007. Psychosocial Balance Sheets: Illicit Purchase Decisions in the Antiquities Market. *Current Issues Crim. Just.* **18**(2), pp.221–240.
- Mackenzie, S. 2011. The market as criminal and criminals in the market: Reducing opportunities for organised crime in the international antiquities market *In: Crime in the Art and Antiquities World: Illegal Trafficking in Cultural Property*. New York, NY: Springer, pp.69–85.
- Mackenzie, S. 2010. Trafficking Antiquities *In: M. Natarajan, ed. International Crime and Justice* [Online]. Cambridge: Cambridge University Press, pp.141–147. [Accessed 31 October 2018]. Available from: https://www.cambridge.org/core/product/identifier/CBO9780511762116A031/type/book_part.
- Mackenzie, S. 2015. Transnational Criminal Markets Do we need a Kimberley Process for

the Illicit Antiquities Trade? Some lessons to learn from a comparative review of transnational criminal markets and their regulation. *Countering Illicit Traffic in Cultural Goods: The Global Challenge of Protecting the World's Heritage* .

- Mackenzie, S. and Davis, T. 2016. Temple looting in cambodia: Anatomy of a statue trafficking network *In: Art Crime: Terrorists, Tomb Raiders, Forgers and Thieves.*, pp.179–199.
- Mackenzie, S. and Graycar, A. 2002. Regulating the Market in Illicit Antiquities in crime and criminal justice.
- Mackenzie, S. and Green, P. 2018. A Context for the Engagement of Criminology and Archaeology. . (2009).
- Mackenzie, S. and Green, P. 2007. *Criminalising the Market in Illicit Antiquities: An Evaluation of the Dealing in Cultural Objects (Offences) Act 2003*.
- Mackenzie, S. and Green, P. 2008. PERFORMATIVE REGULATION A Case Study in How Powerful People Avoid Criminal Labels. . **48**, pp.138–153.
- Mackenzie, S. and Yates, D. 2016a. Collectors on illicit collecting: Higher loyalties and other techniques of neutralization in the unlawful collecting of rare and precious orchids and antiquities. *Theoretical Criminology*. **20**(3), pp.340–357.
- Mackenzie, S. and Yates, D. 2016b. What is Grey about the ‘Grey Market’ in Antiquities? *In: The Architecture of Illegal Markets: Towards an Economic Sociology of Illegality in the Economy.*, pp.70–84.
- Magrans, M.B. 2018. Contemporary Archaeological Looting : A Criminological Analysis of Italian Tomb Robbers.
- Manacorda, S. and Chappell, D. 2011. Crime in the art and antiquities world: Illegal trafficking in cultural property. *Crime in the Art and Antiquities World: Illegal Trafficking in Cultural Property.*, pp.1–453.
- Mapunda, B.B.B. 2001. Destruction of Archaeological Heritage in Tanzania: the Cost of Ignorance *In: N. Brodie, J. Doole and C. Renfrew, eds. Trade in Illicit Antiquities*. Cambridge: Oxbow Books, pp.47–56.
- Mashberg, T. and Blumenthal, R. 2013. The Met Will Return a Pair of Statues to Cambodia - The New York Times. *New York times*. [Online]. [Accessed 16 November 2018]. Available from: <https://www.nytimes.com/2013/05/04/arts/design/the-met-to-return-statues-to-cambodia.html>.
- Massy, L. 2008. The antiquity art market: Between legality and illegality. *International Journal of Social Economics*. **35**(10), pp.729–738.
- Match, P., Match, P. and Match, P. 2016. Brussels Linked to Illicit Antiquities Trade which Funds Terrorism. . (March).
- Matsuda, D. 1998. The Ethics of Archaeology, Subsistence Digging, and Artifact Looting

- in Latin America: Point Muted Counterpoint. *International Journal of Cultural Property*. 7(1), pp.87–97.
- Maxfield, M. G. and Babbie, E. R. (2012) Basics of research methods for criminal justice and criminology. Wadsworth/Cengage Learning.
- McAllister, M. 1991. Looting and vandalism of archaeological resources on federal and Indian lands in the United States *In*: G. S. Smith and J. E. Egrenhard, eds. *Protecting the Past*. Boca Raton, Florida: CRC Press, Inc, pp.93–100.
- McCalister, A. 2005. Organized crime and the theft of Iraqi antiquities. *Trends in Organized Crime*. 9(1), pp.24–37.
- McKinley, S.S. and Fink, J. 2006. Speed Limits: States' approaches to regulating access to methamphetamine chemical precursors with statutes and regulations limiting pseudoephedrine availability. *North Dakota Law Review*. 82(4), pp.1217–1248.
- Merryman, J.H. 1986. Two Ways of Thinking About Cultural Property. *The American Journal of International Law*. 80(4), p.831.
- Meyer, K.E. 1973. *The Plundered Past: The story of the illegal international traffic in works of art*. New York: Atheneum.
- Meyers, S.L. and Kulish, N. 2016. 'Broken System' Allows ISIS to Profit From Looted Antiquities. *New York Times*. [Online]. [Accessed 12 November 2018]. Available from: <https://www.nytimes.com/2016/01/10/world/europe/iraq-syria-antiquities-islamic-state.html>.
- Mire, S. 2011. The Knowledge-Centred Approach to the Somali Cultural Emergency and Heritage Development Assistance in Somaliland. *African Archaeological Review*. 28(1), pp.71–91.
- Miura, K. 2016. Destruction and plunder of Cambodian cultural heritage and their consequences *In*: B. Hauser-Schaublin and L. V. Prott, eds. *Cultural Property and Contested Ownership: The trafficking of artefacts and the quest for restitution* [Online]. London: Routledge, pp.23–44. [Accessed 1 November 2018]. Available from: <https://www.taylorfrancis.com/books/e/9781317281832/chapters/10.4324%2F9781315642048-3>.
- Moreto, W.D. and Clarke, R. V 2013. Script analysis of the transnational illegal market in endangered species: Dream and reality *In*: *Cognition and Crime: Offender Decision Making and Script Analyses*.
- Moreto, W.D. and Lemieux, A.M. 2015. From CRAVED to CAPTURED: Introducing a Product-Based Framework to Examine Illegal Wildlife Markets. *European Journal on Criminal Policy and Research*.
- Morselli, C. 2010. Assessing vulnerable and strategic positions in a criminal network. *Journal of Contemporary Criminal Justice*. 26(4), pp.382–392.

- Moss, S. 2017. Rise of the detectorists: how to hunt for treasure. *The Guardian*. [Online]. [Accessed 16 November 2018]. Available from: <https://www.theguardian.com/lifeandstyle/shortcuts/2017/dec/05/rise-of-detectorists-how-hunt-for-treasure>.
- Mulder, S. 2014. The blood antiquities funding ISIL. *Aljazeera*.
- Munson, C.A., Marjorie, ;, Jones, M. and Fry, R.E. 1995. *The GE Mound: An ARPA Case Study* [Online]. [Accessed 18 November 2018]. Available from: <https://www.unl.edu/rhames/courses/current/readings/munson.pdf>.
- Murphy, J.D. 1994. The People's Republic of China and the Illicit Trade in Cultural Property: Is the Embargo Approach the Answer? *International Journal of Cultural Property*. **3**(02), pp.227–242.
- Nafziger, J.A.R. 1975. Controlling the Northward Flow of Mexican Antiquities. *University of Miami Law School Law. Review*. **68**.
- Natarajan, M., Clarke, R. V, Carcach, C., Ponce, C., de Sanfeliú, M.B., Polanco, D.E., Chávez, M. and Shi, M. 2015. Situational prevention and public transport crime in El Salvador. *Crime Science*. **4**(1), p.29.
- Nickens, P.R. 1991. The destruction of archaeological sites and data *In*: G. S. Smith and J. E. Ehrenhard, eds. *Protecting the Past*. Boca Raton, Florida: CRC Press, Inc, pp.83–92.
- O'Keefe, P.J. 1997. *Trade in antiquities : reducing destruction and theft* [Online]. Paris : UNESCO Pub. [Accessed 27 October 2018]. Available from: http://encore.lib.gla.ac.uk/iii/encore/record/C__Rb1707782?lang=eng.
- Pachauri, S.K. 2003. Plunder of cultural and art treasures – the Indian experience *In*: N. Brodie and K. Tubb, eds. *Illicit Antiquities: The theft of culture and the extinction of archaeology* [Online]. Routledge, pp.280–291. [Accessed 1 November 2018]. Available from: <https://www.taylorfrancis.com/books/e/9781134568239/chapters/10.4324%2F9780203165461-21>.
- Panella, C. 2014. Looters or Heroes? Production of Illegality and Memories of 'Looting' in Mali. *European Journal on Criminal Policy and Research*. **20**(4), pp.487–502.
- Papachristos, A. V., Smith, C.M. and Smith, C.M. 2013. The Embedded and Multiplex Nature of Al Capone *In*: C. Morselli, ed. *Crime and Networks* [Online]. New York: Routledge, pp.109–127. [Accessed 17 November 2018]. Available from: <https://www.taylorfrancis.com/books/e/9781134643325/chapters/10.4324%2F9781315885018-13>.
- Parcak, S. 2017. Moving from space-based to ground-based solutions in remote sensing for archaeological heritage: A case study from Egypt. *Remote Sensing*. **9**(12).
- Parcak, S., Gathings, D., Childs, C., Mumford, G. and Cline, E. 2016. Satellite evidence of archaeological site looting in Egypt: 2002–2013. *Antiquity*. **90**(349), pp.188–205.

- Park, S.J. 2002. Cultural Property Regime in Italy An Industrialized Source Nation's Difficulties in Retaining and Recovering Its Antiquities. *U. Pa. J. Int'l Econ. L.* **23**, p.931.
- Paul, K. 2018. Ancient Artifacts vs. Digital Artifacts: New Tools for Unmasking the Sale of Illicit Antiquities on the Dark Web. *Arts.* **7**(2), p.12.
- Petrossian, G.A. and Clarke, R. V 2014. Explaining and controlling illegal commercial fishing: An application of the craved theft model. *British Journal of Criminology.* **54**(1), pp.73–90.
- Petrossian, G.A. and Pezzella, F.S. 2018. IUU Fishing and Seafood Fraud: Using Crime Script Analysis to Inform Intervention. *Annals of the American Academy of Political and Social Science.* **679**(1), pp.121–139.
- Pires, S.F. 2015. A CRAVED Analysis of Multiple Illicit Parrot Markets in Peru and Bolivia. *European Journal on Criminal Policy and Research.* **21**(3), pp.321–336.
- Pires, S.F. and Clarke, R. V 2012. Are parrots craved? an analysis of parrot poaching in Mexico. *Journal of Research in Crime and Delinquency.*
- Pires, S.F. and Guerette, R.T. 2014. Does opportunity make the poacher? An analysis of neo-tropical illicit parrot markets *In: Situational Prevention of Poaching.*
- Pires, S.F. and Moreto, W. 2011. Preventing Wildlife Crimes: Solutions That Can Overcome the 'Tragedy of the Commons' Burl Poaching in the RSNP View project The illegal parrot trade View project. *Article in European Journal on Criminal Policy and Research.*
- Politis, K.D. 2002. Dealing with the dealers and tomb robbers: the realities of the archaeology of the Ghor es-Safi in Jordan *In: N. Brodie and K. Tubbs, eds. Illicit Antiquities: The Theft of Culture and the Extinction of Archaeology* [Online]. London, p.257. [Accessed 1 November 2018]. Available from: <https://books.google.com/books?hl=en&lr=&id=bJ6BAgAAQBAJ&oi=fnd&pg=PA257&dq=Politis,+K.+D.+2002.+‘Dealing+with+the+Dealers+and+Tomb+Robbers:+The+Realities+of+the+Archaeology+of+the+Ghor+es-Safi+in+Jordan,&ots=yLG1Mj0WJ5&sig=ijiatnAIRDmJGO>.
- Polk, K. 1999. Art Crime and Prevention: Best Practices *In: Protecting Art, Protecting Artists and Protecting Consumers Conference* [Online]. Sydney: Australian Institute of Criminology. [Accessed 18 November 2018]. Available from: https://www.obs-traffic.museum/sites/default/files/ressources/files/Polk_Art_Crime_Prevention.pdf.
- Polk, K. 2000. The antiquities market viewed as a criminal market. *Hong Kong Lawyer.* **82**, pp.2000–2009.
- Polk, K. 2014. The global trade in illicit antiquities: Some new directions? *In: Heritage Crime: Progress, Prospects and Prevention.* Palgrave Macmillan, London, pp.206–223.
- Polk, K. 2009. Whither Criminology in the Study of the Traffic in Illicit Antiquities?

Criminology and Archaeology: Studies in Looted Antiquities (Oñati International Series in Law and Society). (2005), pp.13–26.

- Povoledo, E. 2017. Unearthed in Rome's New Subway: Extinct Elephants and Persian Peach Pits. *The New York Times*. [Online]. [Accessed 18 November 2018]. Available from: <https://www.nytimes.com/2017/12/18/world/europe/rome-subway-archaeology.html>.
- Pringle, H. 2014. ISIS Cashing in on Looted Antiquities to Fuel Iraq Insurgency. *National Geographic*. [Online]. [Accessed 12 November 2018]. Available from: <https://news.nationalgeographic.com/news/2014/06/140626-isis-insurgents-syria-iraq-looting-antiquities-archaeology/>.
- Prott, L. V 2006. Protecting cultural heritage in conflict *In*: N. Brodie, M. Kersel, C. Luke and K. Tubb, eds. *Archaeology, Cultural Heritage, and the Antiquities Trade* [Online]. Gainesville, pp.26–35. [Accessed 1 November 2018]. Available from: https://scholar.google.com/scholar?hl=en&as_sdt=0%2C5&q=Protecting+cultural+heritage+in+conflict+LV+Prott+-+2006&btnG=.
- Proulx, B.B. 2011a. Drugs, arms, and arrowheads: Theft from archaeological sites and the dangers of fieldwork. *Journal of Contemporary Criminal Justice*. **27**(4), pp.500–522.
- Proulx, B.B. 2011b. Organized criminal involvement in the illicit antiquities trade. *Trends in Organized Crime*. **14**(1), pp.1–29.
- Raggi, M. 2015. How ISIS created a terrorist art market. *Fox News*. [Online]. Available from: <https://www.foxnews.com/science/how-isis-created-a-terrorist-art-market>.
- Renfrew, C. 2000. *Loot, legitimacy, and ownership : the ethical crisis in archaeology* [Online]. London : Duckworth. [Accessed 27 October 2018]. Available from: http://encore.lib.gla.ac.uk/iii/encore/record/C__Rb1912069?lang=eng.
- Reppion, J. 2018. 5 most valuable storage locker finds | TV Shows |. *HISTORY.com*. [Online]. [Accessed 18 November 2018]. Available from: <https://www.history.com/shows/storage-wars/articles/5-most-valuable-storage-locker-finds>.
- Reuter, E. and Bisschop, L. 2016. Keeping the Horn on the Rhino: A Study of Balule Nature Reserve *In: The Geography of Environmental Crime*.
- Rogge, A.E. 1989. Fighting Indiana Jones in Arizona. *In: American Society for Conservation Archaeology*.
- Roorda, S., Volunteer, S., Roorda, S., George, D., Vigil, C., Heritage, G., Burnham, A.B., Fund, W.M., Pdf, C., Html, P. and Pdfcrowd, P.D.F.A.P.I. 2013. Syria 's cultural heritage in danger : What can we do ?
- Roosevelt, C. 2008. Looting Lydia The Destruction of an Archaeological Landscape in Western Turkey *In*: N. Brodie, M. Kersel, C. Luke and K. Tubb, eds. *Archaeology, Cultural Heritage, and the Antiquities Trade* [Online]. Gainesville, pp.173–87. [Accessed 1 November 2018]. Available from:

<https://www.researchgate.net/publication/267094846>.

- Roosevelt, C.H. and Luke, C. 2006. Mysterious shepherds and hidden treasures: the culture of looting in Lydia, Western Turkey. *JOURNAL OF FIELD ARCHAEOLOGY*. **31**(2), pp.185–198.
- Rose-Greenland, F. 2016. How much money has ISIS made selling antiquities? More than enough to fund its attacks. *The Washington Post*.
- Rose, M. and Acar, Ö. 1996. Turkey's War on the Illicit Antiquities Trade *In: Archaeological ethics.*, pp.71–89.
- Rothfield, L. 2008. *Antiquities under siege : cultural heritage protection after the Iraq war* [Online]. Plymouth : AltaMira Press. [Accessed 27 October 2018]. Available from: http://encore.lib.gla.ac.uk/iii/encore/record/C__Rb2967650?lang=eng.
- Rothfield, L. 2009. *The rape of Mesopotamia : behind the looting of the Iraq Museum* [Online]. London : University of Chicago Press. [Accessed 27 October 2018]. Available from: http://encore.lib.gla.ac.uk/iii/encore/record/C__Rb2691802?lang=eng.
- Rush, L.W. 2010. *Archaeology, cultural property, and the military* [Online]. Woodbridge, Suffolk : Boydell Press. [Accessed 27 October 2018]. Available from: http://encore.lib.gla.ac.uk/iii/encore/record/C__Rb2967652?lang=eng.
- Rush, L.W. 2016. Looting of Antiquities: Tearing the Fabric of Civil Society *In: Art Crime* [Online]. London: Palgrave Macmillan UK, pp.132–142. [Accessed 1 November 2018]. Available from: http://link.springer.com/10.1007/978-1-137-40757-3_11.
- Rutelli, F. 2016. The Return of Iconoclasm: Barbarian Ideology and Destruction by ISIS as a Challenge for Modern Culture, Not Only for Islam *In: Art Crime* [Online]. London: Palgrave Macmillan UK, pp.143–149. [Accessed 18 November 2018]. Available from: http://link.springer.com/10.1007/978-1-137-40757-3_12.
- Saad El-Gendi, L. 2012. Letting Farmers Be Farmers : Economic Solutions To Subsistence. *The DePaul Journal of Art, Technology & Intellectual Property Law*. **23**(1), pp.111–153.
- Sampson, R., Eck, J.E. and Dunham, J. 2010. Super controllers and crime prevention: A routine activity explanation of crime prevention success and failure. *Security Journal*. **23**(1), pp.37–51.
- Sandes, C.A. 2013. Urban Cultural Heritage and Armed Conflict: The Case of Beirut Central District *In: Cultural Heritage in the Crosshairs: Protecting Cultural Property during Conflict.*, pp.287–314.
- Savona, E.U., Giommoni, L. and Mancuso, M. 2013. Human trafficking for sexual exploitation in Italy *In: Cognition and Crime: Offender Decision Making and Script Analyses*.
- Schank, R.C. and Abelson, R.P. 1977. *Scripts, plans, goals, and understanding : an inquiry*

into human knowledge structures [Online]. Hillsdale, N.J : L. Erlbaum Associates,. [Accessed 2 November 2018]. Available from:
http://encore.lib.gla.ac.uk/iii/encore/record/C__Rb1087910?lang=eng.

- Schávelzon, D. 2003. What's going on around the corner? Illegal trade of art and antiquities in Argentina *In*: N. Brodie and K. W. Tubb, eds. *Illicit Antiquities: The Theft of Culture and the Extinction of Archaeology* [Online]. Routledge, pp.240–246. [Accessed 1 November 2018]. Available from:
<https://www.taylorfrancis.com/books/e/9781134568239/chapters/10.4324%2F9780203165461-16>.
- Schneider, E.C. 1982. Plunder or Excavation ? Observations and Suggestions on the Regulation of Ownership and Trade in the Evidence ... *Syracuse journal of international law and commerce*. **9**(1), pp.1–18.
- Schneider, J.L. 2008. Reducing the illicit trade in endangered wildlife: The market reduction approach. *Journal of Contemporary Criminal Justice*. **24**(3), pp.274–295.
- Seabrook, J.B. 1974. Legal Approaches to the Trade in Stolen Antiquities. *Syracuse J. Int'l L. & Com.* **2**, p.51.
- Shabi, R. 2015. Looted in Syria – and sold in London: the British antiques shops dealing in artefacts smuggled by Isis. *The Guardian*. (July), pp.1–6.
- Shane, J.M. and Magnuson, S. 2016. Successful and Unsuccessful Pirate Attacks Worldwide: A Situational Analysis. *Justice Quarterly*.
- Shankar, A. 2001. The threat to cultural sites in India from illegal excavation *In*: N. Brodie, J. Doole and C. Renfrew, eds. *Trade in Illicit Antiquities*. Cambridge: Oxbow Books, pp.33–36.
- Shukla, R.K. and Bartgis, E. 2010. Responding to clandestine methamphetamine manufacturing: A case study in situational crime prevention. *Criminal Justice Policy Review*. **21**(3), pp.338–362.
- Shyllon, F. 2011. Looting and Illicit Traffic in Antiquities in Africa *In*: *Crime in the Art and Antiquities World* [Online]. New York, NY: Springer New York, pp.135–142. [Accessed 1 November 2018]. Available from: http://link.springer.com/10.1007/978-1-4419-7946-9_8.
- Sidibé, S. 1996. The fight against the plundering of Malian cultural heritage and illicit exportation. National efforts and international cooperation. *In*: P. R. Schmidt and R. J. McIntosh, eds. *Plundering Africa's Past*. Bloomington: Indiana University Press, pp.79–86.
- Silver, V. 2018. If You Steal It, the Art Vigilante Will Find You - Bloomberg. *Bloomberg Businessweek*. [Online]. [Accessed 15 November 2018]. Available from:
<https://www.bloomberg.com/news/features/2018-06-26/if-you-steal-it-the-art-vigilante-will-find-you?fbclid=IwAR0nHFneHmLA-7eVxsCt09C0OjcvGAAO5SXXKW92ff99bVPUkr8HOZaP5KIM>.

- Smith, M. J., Clarke, R. V and Pease, K. (2012) ANTICIPATORY BENEFITS IN CRIME PREVENTION. Available at: <https://pdfs.semanticscholar.org/f10d/64704a427b890f06b35192d3d7f7f835091c.pdf> (Accessed: 25 March 2019).
- Smith, M.J. and Cornish, D.B. 2003. Theory for practice in situational prevention *In: Anticipating the displacement of crime using the principles of environmental criminology*. Criminal Justice Press, pp.119–148.
- Sotiriou, K.-O. 2018. The F Words: Frauds, Forgeries, and Fakes in Antiquities Smuggling and the Role of Organized Crime. *International Journal of Cultural Property*. **25**(02), pp.223–236.
- South, N. and Wyatt, T. 2011. Comparing illicit trades in wildlife and drugs: An exploratory study. *Deviant Behavior*. **32**(6), pp.538–561.
- Staley, D.P. 1993. St. Lawrence Island's Subsistence Diggers: A New Perspective on Human Effects on Archaeological Sites. *Journal of Field Archaeology*. **20**(3), pp.347–355.
- Stead, I.M. (Ian M. 1998. *The Salisbury hoard*. Tempus.
- Stone, E.C. 2008. Patterns of looting in southern Iraq. *Antiquity*. **82**(315), pp.125–138.
- ŠULC, B. 2001. The protection of Croatia's cultural heritage during war 1991-95 *In: Destruction and Conservation of Cultural Property - 2001, Page v | Online Research Library: Questia* [Online]., pp.157–167. [Accessed 1 November 2018]. Available from: <https://www.questia.com/read/107333877/destruction-and-conservation-of-cultural-property>.
- Sykes, G.M. and Matza, D. 1957. Techniques of Neutralization: A Theory of Delinquency. *American Sociological Review*. **22**(6), p.664.
- Sytsma, V.A. and Piza, E.L. 2018. Script Analysis of Open-air Drug Selling: A Systematic Social Observation of CCTV Footage. *Journal of Research in Crime and Delinquency*. **55**(1), pp.78–102.
- Szopa, A. 2004. Hoarding history: a survey of antiquity looting and black market trade. *U. Miami Bus. L. Rev.* **55**, pp.56–89.
- Tapete, D., Cigna, F. and Donoghue, D.N.M. 2016. 'Looting marks' in space-borne SAR imagery: Measuring rates of archaeological looting in Apamea (Syria) with TerraSAR-X Staring Spotlight. *Remote Sensing of Environment*. **178**, pp.42–58.
- Tiersky, R. 2015. Blood Artifacts : How ISIS Profits from Trafficking Antiquities. *Huffington Post*.
- Tijhuis, A.J.G. 2011. The trafficking problem: A criminological perspective *In: Crime in the Art and Antiquities World: Illegal Trafficking in Cultural Property*. New York, NY: Springer, pp.87–97.
- Tillyer, M.S. and Kennedy, D.M. 2008. Locating focused deterrence approaches within a

- situational crime prevention framework. *Crime Prevention and Community Safety*. **10**(2), pp.75–84.
- Times, J. and Luck, T. 2013. Police seize large cache of Syrian artefacts. *Culture in Development*. [Online]. [Accessed 17 November 2018]. Available from: http://www.cultureindevelopment.nl/Culture_in_Development/News/Common_News/1755/Police_seize_large_cache_of_Syrian_artefacts.
- Tompkins, A. 2011. The Four Horses Rest Inside St. Mark's Basilica in Venice after Being Plundered from Constantinople in the 13th century ~ ARCAblog. *Association for Research into Crimes Against Art Blog*.
- Tompson, L. and Chainey, S. 2011a. Profiling Illegal Waste Activity: Using Crime Scripts as a Data Collection and Analytical Strategy. *European Journal on Criminal Policy and Research*. **17**(3), pp.179–201.
- Tompson, L. and Chainey, S. 2011b. Profiling Illegal Waste Activity: Using Crime Scripts as a Data Collection and Analytical Strategy. *European Journal on Criminal Policy and Research*.
- Tremain, C.G. 2017. Fifty Years of Collecting: The Sale of Ancient Maya Antiquities at Sotheby's. *International Journal of Cultural Property*. **24**(2), pp.187–219.
- Tsirogiannis, C. 2016a. Mapping the supply: usual suspects and identified antiquities in 'reputable' auction houses in 2013. *Cuadernos de Prehistoria y Arqueología*. **25**, pp.105–142.
- Tsirogiannis, C. 2016b. Reasons to Doubt: Misleading Assertions in the London Antiquities Market. *Journal of Art Crime*. **15**, pp.67–72.
- Tsirogiannis, C. 2016c. Something Is Confidential in the State of Christie's *In: Art Crime* [Online]. London: Palgrave Macmillan UK, pp.200–228. [Accessed 1 November 2018]. Available from: http://link.springer.com/10.1007/978-1-137-40757-3_16.
- Ulph, J., Smith, I. (Barrister) and Tugendhat, M. 2012. *The illicit trade in art and antiquities : international recovery and criminal and civil liability* [Online]. Oxford : Hart, Pub. [Accessed 27 October 2018]. Available from: http://encore.lib.gla.ac.uk/iii/encore/record/C__Rb2969643?lang=eng.
- Unal, M. 2009. Application of Situational Crime Prevention to Cross-Border Heroin Trafficking in Turkey.
- Unesco 1970. *Convention on the Means of Prohibiting and Preventing the Illicit Import, Export and Transfer of Ownership of Cultural Property Adopted by the General Conference at Its Sixteenth Session, Paris, 14 November 1970* [Online]. [Accessed 31 October 2018]. Available from: https://scholar.google.com/scholar?hl=en&as_sdt=0%2C5&q=1970+UNESCO+Convention+on+the+Means+of+Prohibiting+and+Preventing+the+Illicit+Import%2C+Export+and+Transfer+of+Ownership+of+Cultural+Property&btnG=#d=gs_cit&p=&u=%252Fscholar%253Fq%253Dinfo%253Aontbc.

- UNESCO 2016. *The Globalisation of Cultural Trade: A Shift in Consumption: International Flows of Cultural Goods and Services 2004–2013*.
- United Nations Security Council 2015. *United Nations Security Council, Resolution 2199(2015)* [Online]. [Accessed 11 November 2018]. Available from: [http://undocs.org/S/RES/2199\(2015\)](http://undocs.org/S/RES/2199(2015)).
- UNODC 2009. *Protection against trafficking in cultural property* [Online]. [Accessed 16 November 2018]. Available from: https://www.unodc.org/documents/organized-crime/trafficking_in_cultural/CCPCJ_EG_1_2009_CRP_1/V0987314E.pdf.
- Urquhart Irvine, O. 2011. Responding to Culture in Conflict *In*: P. G. Stone, ed. *Cultural heritage, ethics, and the military* [Online]. Woodbridge: Boydell, p.228. [Accessed 11 November 2018]. Available from: https://books.google.co.uk/books?hl=en&lr=&id=_dRnaZS9L3wC&oi=fnd&pg=PA70&dq=Urquhart+Irvine,+2011+antiquities&ots=zir7lyCQZe&sig=U-cGZSNME8W2ZyVbW00hfiuIa7A&redir_esc=y#v=onepage&q&f=false.
- Vignal, L. 2017. The changing borders and borderlands of Syria in a time of conflict. *International Affairs*. **93**(4), pp.809–827.
- Vigneron, S. 2014. Protecting cultural objects: Enforcing the illicit export of foreign cultural objects *In*: *Art, Cultural Heritage and the Market: Ethical and Legal Issues*. Berlin, Heidelberg: Springer, pp.117–139.
- Viollaz, J., Graham, J. and Lantsman, L. 2018. Using script analysis to understand the financial crimes involved in wildlife trafficking. *Crime, Law and Social Change*. **69**(5), pp.595–614.
- Vogel, C. 1993. Metropolitan Museum to Return Turkish Art. *New York Times*.
- Wagner, L. 2015. ISIS Beheads 81-Year-Old Scholar Who Tried To Protect Antiquities. *NPR*. [Online]. [Accessed 17 November 2018]. Available from: <https://www.npr.org/sections/thetwo-way/2015/08/19/432920140/isis-beheads-81-year-old-scholar-who-wouldnt-give-up-antiquities>.
- Wallace, A. 2013. Presenting Pompeii: Steps towards Reconciling Conservation and Tourism at an Ancient Site. *Papers from the Institute of Archaeology*. **22**(0), p.115.
- Watson, P. and Todeschini, C. 2006. *The Medici conspiracy : the illicit journey of looted antiquities, from Italy's tomb raiders to the world's greatest museums* [Online]. New York : BBS PublicAffairs. [Accessed 27 October 2018]. Available from: http://encore.lib.gla.ac.uk/iii/encore/record/C__Rb2841114?lang=eng.
- Weeks, K.R. and Hetherington, N.J. 2006. *The Valley of the Kings, Luxor, Egypt Site Management Masterplan* [Online]. [Accessed 18 November 2018]. Available from: <http://mail.thebanmappingproject.com/about/KVMasterplan/Foreword.pdf>.
- Wei, X. 2017. *Design of college English classroom activities based on the theory of multiple intelligences*.

- Wellsmith, M. 2012. Preventing wildlife crime. *Criminal Justice Matters*. **90**(1), pp.18–19.
- Willett, H.D. 2016. Ill-Gotten Gains: A Response to the Islamic State's Profits from the Illicit Antiquities Market. *Arizona Law Review*. **58**(3), pp.831–866.
- Wortley, R. 2001. A Classification of Techniques for Controlling Situational Precipitators of Crime. *Security Journal*.
- Wortley, R. 1998. A two-stage model of situational crime prevention. *Studies on Crime and Crime Prevention*.
- Wortley, R. and Mazerolle, L. 2013. Environmental criminology and crime analysis: situating the theory, analytic approach and application *In: Environmental criminology and crime analysis* [Online]. Willan, p.18. [Accessed 16 November 2018]. Available from: <https://www.taylorfrancis.com/books/e/9781136308451/chapters/10.4324%2F9780203118214-12>.
- Wortley, R. and Mazerolle, L.G. 2008. *Environmental criminology and crime analysis* [Online]. Portland, OR : Willan Pub. [Accessed 27 October 2018]. Available from: http://encore.lib.gla.ac.uk/iii/encore/record/C__Rb2652257?lang=eng.
- Yahya, A. 2008. Looting and 'Salvaging': How the Wall, illegal digging and the antiquities trade are ravaging Palestinian cultural heritage. *Jerusalem Quarterly*. **33**, p.39.
- Yassin-Kassab, R. and Al-Shami, L. 2016. Burning country : Syrians in revolution and war. , p.262.
- Yates, D. 2014. Displacement, deforestation, and drugs: antiquities trafficking and the narcotics support economies of Guatemala *In: J. D. Kila and M. Balcells, eds. Cultural property crimes: an overview and analysis* [Online]. Leiden : Brill, pp.23–36. [Accessed 7 November 2018]. Available from: <https://books.google.com/books?hl=en&lr=&id=SwkSBQAAQBAJ&oi=fnd&pg=PA23&dq=Displacement,+deforestation,+and+drugs:+antiquities+trafficking+and+the+narcotics+support+economies+of+Guatemala&ots=Mty8VPuucR&sig=fwg0eqUicDwnjWD48rwsJ-NJci4>.
- Yates, D. 2015. Placeres Stucco Temple Facade. *Trafficking Culture*. [Online]. [Accessed 20 November 2018]. Available from: <https://traffickingculture.org/encyclopedia/case-studies/placeres-stucco-temple-facade/>.
- Yates, D. 2015. Reality and Practicality: Challenges to Effective Cultural Property Policy on the Ground in Latin America. *International Journal of Cultural Property*. **22**(2–3), pp.337–356.
- Yates, D., Mackenzie, S. and Smith, E. 2017. The cultural capitalists: Notes on the ongoing reconfiguration of trafficking culture in Asia. *Crime, Media, Culture*. **13**(2), pp.245–254.

Appendix 1: Crime Script Analysis Case Studies

Understanding Money Laundering – A Crime Script Approach: Gilmour (2014)

Aim of Study: To discuss the suitability of crime scripts for improving understanding in relation for specific methods of money laundering (ML – through case intensive businesses, and ML through purchasing of high value portable commodities).				
Type of Data: 170 questionnaire responses and 12 in-depth interviews with AML experts and practitioners from across 11 professional AML backgrounds.			Number of Participants: 170 questionnaires and 12 interviews.	
Format of Crime Script: Stage 1: Identification of suitable business from which to purchase the high value portable commodity or commodities.	Stage 2: Placement stage within which the commodity or commodities are purchased using illicit cash.	Stage 3: Further preparatory work.	Stage 4: Layering stage in which the illicit commodity or commodities sell legitimately.	Stage 5: Integration stage when money is used to make purchases.

Crime Script Analysis of the Online Stolen Data Market: Hutchings and Holt (2015)

Aim of Study: To better understand the online black-market economy, specifically relating to stolen data, using crime script analysis.	
Type of Data: 1,889 exchanges between buyers and sellers from a sample of 13 web forums where financial and personal information are bought sold and traded.	Number of Participants: 13 web forums
Format of Crime Script:	
<ul style="list-style-type: none"> • Preparation: setting up necessary client software and creating accounts, steps towards anonymity and security, marketplace location, learning specialist knowledge • Entry: learning workplace language and rules, pre-condition (obtaining and manufacturing products to sell) • Instrumental pre-condition: advertising products and services, undergoing verification procedures for products and services • Instrumental initiation: exchanging law enforcement information, negotiating and communicating • Doing: packing goods, transporting • Post-condition: reputation management, exchanging currency • Exit scenes: laundering proceeds 	

Scripting the Crime Commission Process in the illicit online prescription drug trade: Leontadis and Hutchings (2015)

Aim of Study: to examine the process of the illicit online prescription trade that allows this trade to be profitable through crime script analysis.	
Type of Data: data used was from previous study Measuring and analysing search-redirection attacks in the illicit online prescription drug trade (Leontiadis et al., 2011). Pharmacy related online search terms were conducted every day for nine months.	Number of Participants: 256 unlicensed online pharmacies from which data was collected over a nine-month period.
Format of Crime Script Illicit advertising: <ul style="list-style-type: none"> • Identify vulnerable website, compromise vulnerable websites • manipulate search engines • hijack acquired web traffic • redirect traffic • receive web traffic • process payments • ship merchandise 	Pharmacy operation: <ul style="list-style-type: none"> • identify drug suppliers • select drugs for sale • define pricing strategy • deploy pharmacy website • receive web traffic • process payments • ship merchandise

The Online trade in counterfeit pharmaceuticals: New Criminal opportunities, trends and challenges: Lavorgna (2015)

Aim of Study: To consider how the Internet is used to facilitate the trade in counterfeit pharmaceuticals.	
Type of Data: Case studies were drawn from law enforcement operations identified through keyword searches in Italian and English media sources. As well as 12 semi-structured interviews with key informants. 30 case studies (Italy, UK and US) were chosen for the study.	Number of Participants: 30 cases
Format of Crime Script Stage 0: Preparatory activities antecedent to the trade in counterfeit pharmaceutical Stage 1: Production of pharmaceuticals 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	

Wildlife Trafficking in the Internet Age: Lavorgna (2014)

Aim of Study: To consider how the Internet facilitates wildlife trafficking, as well as how a script scheme is used to highlight the opportunity structure the Internet offers to carry out wildlife trafficking.

<p>Type of Data: Law enforcement operations where Internet played major role. Primary document sources: judicial transcripts and records from police investigations, as well as face-to-face, semi-structured interviews with Italian law enforcement officers and acknowledged experts.</p>	<p>Primary document sources: Judicial transcripts and records from police investigations, as well as face-to-face, semi-structured interviews with Italian law enforcement officers and acknowledged experts.</p> <p>Number of Participants: 25 cases</p>
---	---

Format of Crime Script:

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 intermediaries/the domestic market

Stage 3: Passage through regional intermediaries/international traders

Stage 4: Intermediate passage through local intermediaries/the domestic market

Stage 5: Distribution of the animal/plant/product

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

Drug Dealing: Amsterdam's Red Light District: Scott Jacques and Wim Bernasco (2014)

Aim of Study: to address three questions (1) what are the general actions involved in drug dealing. (2) how does street dealing in Amsterdam's RLD unfold. (3) what opportunities does this afford prevention oriented formal control.

<p>Type of Data: data from a study of quantitatively oriented interviews with 50 drug dealers and qualitatively oriented independent observations of the scene. Interviews consisted of a on a fixed-choice survey type item.</p>	<p>Number of Participants: 50 drug dealers</p>
--	---

Format of Crime Script:

Necessary steps:

(1) Agreeing on trade terms

(2) making an exchange

Facilitating steps:

(A) searching for a customer,

(B) soliciting, and (C) arrange time and place

Profiling Illegal Waste Activity: Using crime scripts as a data collection and analytical strategy: Tompson and Chainey (2011)

Aim of Study: Use CSA to help identify data requirements as well as illustrate the utility of this methodology to ultimately provide a more objective assessment and understanding of illegal waste activity.

Type of Data: “This analysis was carried out using our expertise and experience into real world examples of illegal waste activity. That is, it draws from our knowledge of illegal waste activity across many incidents rather than a particular investigation...”	Number of Participants: NA
--	--------------------------------------

Format of Crime Script:

(1) Creation (2) Storage (3) Collection (4) Transport (5) Treatment (6) Disposal

Crime Script Analysis of Drug Manufacturing in Clandestine Laboratories: Chiu, Leclerc and Townsley (2011)

Aim of Study: To better understand the crime commission process of clandestine drug laboratories and identify significant points for intervention by using crime scripts.

Type of Data: Content analysis of 25 court transcripts of cases of drug manufacturing in clandestine labs in Australia	Number of Participants: 25 court cases from Australian government
---	--

Format of Script:

- Location of laboratory (Home, shed)
- Getting the goods (legal purchase, illegal purchase, social network)
- Storage of goods (laboratory, rental sheds, storage facilities)
- Cooking drug (test cooks, Chemist experts)
- Packing drug

Appendix 2: Draft Version of Antiquities Trafficking Network Crime Script

Looting Scripts

Stage 1: Motivation for Looting

- Subsistence
- Criminal/Profit
- Interest/Hobby
- Preservation/Safeguarding Looting
- Ideological

Stage 2: Type of Looter

- Individual
 - Working for criminal organisation
 - Working for themselves
 - Pays/seeks permission off criminal group/organisation to loot
- Groups or pairs of individuals
 - Working for themselves (more than 1 person)
 - Working for themselves
 - Pays/seeks permission off criminal group/organisation to loot
- Criminal Organisation
 - Local criminal organisation
 - International criminal organisation

Stage 3: Location

- Already knows where items to loot can be found (previous first-hand knowledge)
- Searches randomly for loot in hope of finding object
- Gets information of where to loot from other sources (friends, rumours, criminal organisation)
- Object(s) has been made visible/discovered randomly by individual
- Searches for loot in known archaeological site

Stage 4: Research

- Consider specifications of sites (through first-hand knowledge) – type of security, types of tools necessary
- Consider specifications of sites via second-hand knowledge (including photographs and video)
- Scouts out specific site – actually visits site prior to looting to determine specifics of looting operation
- Considers specific of site (either through first or second-hand knowledge) as well as physically visits site to determine specifics of looting
- Does not consider site specifics or visit site prior to looting

Stage 5: Equipment

- Has specialised looting equipment (tech, bulldozer, hacksaws, drills)
 - Gained through payment to criminal organisation
 - Obtained through ownership
 - Owned by Criminal organisation
- Has simple looting equipment (shovels, picks)

Stage 6: Looting

- Loot object in secret
- Loot object openly

Stage 7: Transportation from site of Origin:

- Transport objects directly from site to further movement towards border
- Transports object(s) to looters home OR storage facility
- Transport objects to criminally organised storage facility

Stage 8: Storage

- Objects are stored on a long-term basis
- Objects are stored on a short-term basis
- Objects are not stored, but transported directly out of country

Stage 9: Selling

- Looter keeps item for him/herself (self-interest or “safety of object”)
- Looter does not sell object
- Objects are not sold, but destroyed
- Looter sells object at border of Country of Origin
- Objects are forcibly taken from looters
- Looter sells object to middleman/smuggler
- Looter sells object to dealer
 - International
 - In person
 - Via social media/electronic device
 - Local
 - In person
 - Via social media/electronic device
- Looter sells object to buyer
 - International
 - In person
 - Via social media/electronic device
 - Local (Country of Origin)
 - In person
 - Via social media/electronic device
 - Looter sells object(s) to local/international auction house, gallery, or museum
 - Local or international
 - Auction house
 - In person
 - Via social media/electronic device
 - Museum
 - In person
 - Via social media/electronic device
 - Gallery
 - In person
 - Via social media/electronic device

Transit Phase

Stage 10: Smuggling Actors

- Middleman smuggles object out of country (individual)
- Smuggling network gets object out of country
- International criminal organisation
 - Tied to looting forces individuals to smuggle items out of country (blackmail, coercion, threats)
 - Tied to looting smuggled objects out within own organisation
 - Independent from looting forces individuals to smuggle items out of country (blackmail, cohesion, threats)
 - Independent from looting, smuggles object out itself
- Looter
 - Smuggles items out of county him/herself
 - Pays other criminal actors to smuggle item out of country
 - Forces individual to smuggle item out of country
- Dealer
 - Smuggles items out of county him/herself
 - Pays other criminal actors to smuggle item out of country
 - Forces individual to smuggle item out of country

Stage 11: Smuggler Decides on Smuggling Technique

- Smuggler conceals object(s) from authorities'/border checks
- Smuggler falsifies papers concerning object from authorities'/border checks
- Smuggler does not conceal object, faces no authorities or border checks
- Smuggler declares object(s) as incorrect object to authorities or at border check
- Smuggler bribes authorities/border check personnel
- Unknown

Stage 12: Preparation

- Smuggler creates false documentation for objects to cross border
- Smuggler actively hides/disguises object(s) for transport
- Smuggler arranges bribery (prior to event)
- Smuggler does not make any preparations
- Unknown

Stage 13: Mode of Transport

- Objects are transported via car/bus/lorry
- Objects are transported via airplane
- Objects are transported via shipping/boat
- Objects are transported via railways
 - Objects are transported via all methods of transport (car, plane, ship, rail)
 - Objects are transported via a combination/pair of methods such as plane, ship, car, or rail
- Objects are transported via other method (bulldozer, bike, etc.)
- Objects are transported on person (on foot)
- Unknown

Stage 14: Transport to Country of Purchase

- Object(s) are smuggled to purchase country via multiple countries
 - Listed as incorrect objects (Decorations)

- Undeclared object (Hidden)
- With false papers
- o Objects(s) are smuggled directly to purchase country
 - As undeclared object (Hidden)
 - With false papers (fraudulent provenance)
 - As incorrect objects (Decoration)
- o Objects are transported directly to purchaser (in-country purchase, no need to smuggle)
- o Unknown

Market Phase

Stage 15: Type of Dealer

- o Local
- o International
- o Both

Stage 16: Obtaining of Objects

- o Dealer buys object(s) off an individual smuggler
- o Dealers purchase objects from other dealers
- o Dealers purchase objects off local organised smuggling/criminal operation
- o Dealers purchase objects from international organised criminal organisation
- o Dealer is given object as part of criminal organisation
- o Unknown

Stage 17: Assessment

- o Dealers assesses object in person to determine value/authenticity of object
- o Dealer assesses object via photograph or video (second-hand viewing)
- o Dealer does not assess object, but purchases without viewing/assessment
- o Unknown

Stage 18: Storage

- o Dealer stores object(s) on a short-term basis
- o Dealer stores object(s) on a long-term basis
- o Dealer does not store object
- o Unknown

Stage 19: Provenance

- o Dealer does not attempt to create false provenance
- o Dealer creates false provenance for object(s)
- o Dealer does not specify provenance for object(s)
- o Unknown

Stage 20: Potential Buyers

- o Dealer shows illicit object(s) to potential buyers in person
- o Dealer shows illicit object(s) to potential buyers via social media/electronic device
- o Dealer shows 'legal' object(s) to buyers in person
- o Dealer shows 'legal' object(s) to potential buyer via social media/electronic device
- o Dealers do not show objects to buyers
- o Unknown

Stage 21: Purchase

- o Dealer sells object(s) to other local dealers

- Dealer sells object(s) to other local dealers via social media/electronic device
- Dealer sells object(s) to other local dealers in person
- o Dealer sells object(s) to other international dealers
 - o Dealer sells object(s) to other international dealers via social media/electronic device
 - o Dealer sells object(s) to other international dealers in person
- o Dealer sells object(s) directly to buyer
 - Dealer sells object(s) directly to buyer, in person (Locally)
 - Dealer sells object(s) directly to buyer, via social media/electronic device (Locally)
 - Dealer sells object(s) directly to buyer, in person (Internationally)
 - Dealer sells object(s) directly to buyer, via social media/electronic device (Internationally)
- o Dealer sells object(s) to auction house
 - Dealer sells object(s) to auction house in person
 - Dealer sells object(s) to auction house via social media/electronic device
- o Dealer sells object(s) to gallery
 - Dealer sells object(s) to gallery in person
 - Dealer sells object(s) to gallery via social media/electronic device
- o Dealer sells object(s) to museum
 - o Dealer sells object(s) to museum in person
 - o Dealer sells object(s) to museum via social media/electronic device
- o Dealer does not sell object
- o Dealer does not sell object(s) – third-party country storage
- o Unknown

Appendix 3: Draft Syria Crime Script

Looting Phase

Stage 1: Type of Looters

- Criminal/Profit
 - Individual OR Groups/ pairs of individuals
 - Working for criminal organisation
 - Working for themselves
 - Pays/seek permission off criminal group/organisation to loot
 - Criminal Organisation
 - International criminal organisation
- Subsistence
 - Individual OR Groups/ pairs of individuals
 - Working for criminal organisation
 - Working for themselves
 - Pays/seek permission off criminal group/organisation to loot
 - Criminal Organisation
 - International criminal organisation
- Iconoclast
 - Individual OR Groups/ pairs of individuals
 - Working for criminal organisation
 - Working for themselves
 - Pays/seek permission off criminal group/organisation to loot
 - Criminal Organisation
 - International criminal organisation

Stage 2: Location/Object

- Already knows where items to loot can be found (previous first-hand knowledge)
- Searches randomly for loot in hope of finding object
- Gets information of where to loot from other sources (friends, rumours, criminal organisation)
- Object/Archaeological site is publicly known/visible (famous sites)
- Object(s) has been made visible/discovered randomly by individual
- Searches for loot in known archaeological site

Stage 3: Equipment

- Has specialised looting equipment (tech, bulldozer, hacksaws, drills)
 - Gained through payment to criminal organisation
 - Obtained through ownership
 - Owned by Criminal organisation
- Has simple looting equipment (shovels, picks)

Stage 4: Looting

- Loot object in secret
- Loot object openly

Stage 5: Transportation from site of Origin:

- Transport objects directly from site to further movement towards border
- Transports object(s) to looters home OR storage facility
- Transport objects to criminally organised storage facility

Stage 6: Storage

- Objects are stored on a long-term basis
- Objects are stored on a short-term basis
- Objects are not stored, but transported directly out of country

Stage 7: Selling

- Looter keeps item for him/herself (self-interest or “safety of object”)
- Looter does not sell object
- Objects are not sold, but destroyed
- Looter sells object at border of Country of Origin
- Objects are forcibly taken from looters
- Looter sells object to middleman/smuggler
- Looter sells object to dealer
 - International
 - In person
 - Via social media/electronic device
 - Local
 - In person
 - Via social media/electronic device
- Looter sells object to buyer
 - International
 - In person
 - Via social media/electronic device
 - Local (Country of Origin)
 - In person
 - Via social media/electronic device
- Looter sells object(s) to local/international auction house, gallery, or museum
 - Local or international
 - Auction house
 - In person
 - Via social media/electronic device
 - Museum
 - In person
 - Via social media/electronic device
 - Gallery
 - In person
 - Via social media/electronic device

Trafficking Phase**Stage 8: Smuggling Actors**

- Middleman smuggles object out of country (individual)
- Smuggling network gets object out of country
- International criminal organization
 - Tied to looting forces individuals to smuggle items out of country (blackmail, coercion, threats)
 - Tied to looting smuggled objects out within own organization

- Independent from looting forces individuals to smuggle items out of country (blackmail, cohesion, threats)
- Independent from looting, smuggles object out itself
- Looter
 - Smuggles items out of county him/herself
 - Pays other criminal actors to smuggle item out of country
 - Forces individual to smuggle item out of country
- Dealer
 - Smuggles items out of county him/herself
 - Pays other criminal actors to smuggle item out of country
 - Forces individual to smuggle item out of country

Stage 9: Smuggling Technique

- Hides/Disguises objects
 - Smuggler conceals objects from border patrol
 - Smuggler disguises objects as non-antiquities from border patrol
- Forges or Falsifies travel documents pertaining to objects
 - Smuggler falsifies papers concerning object from authority's/border checks
 - Misrepresents objects as non-antiquities
- Openly transports antiquities as illicit objects
 - Smuggler does not conceal object, faces no authorities or border checks
 - Smuggler bribes authorities/border check personnel

Stage 10: Mode of Transport

- Objects are transported via car/bus/lorry
- Objects are transported via airplane
- Objects are transported via shipping/boat
- Objects are transported via railways
- Objects are transported via all methods of transport (car, plane, ship, rail)
- Objects are transported via a combination/pair of methods such as plane, ship, car, or rail
- Objects are transported via other method (bulldozer, bike, etc.)
- Objects are transported on person (on foot)
- Unknown

Trade Phase

Stage 11: Type and Intent of Dealer

- Local Criminal Dealer
- International Criminal Dealer

Stage 12: Obtaining of Objects

- Dealer buys object(s) off an individual smuggler
- Dealers purchase objects from other dealers
- Unknown

Stage 13: Assessment

- Dealers find independent expert to assesses object in person to determine value/authenticity of object
- Dealer finds independent expert to assess via photograph or video

- Dealer does not assess object, but purchases without viewing/assessment
- Dealer uses source/contact within network to assess object in person
- Dealer uses source/contact within network to assess object via photograph or video
- Dealer (Him/herself) assess object
- Unknown

Stage 14: Storage

- Dealer stores object(s) on a short-term basis

Stage 15: Provenance

- Dealer does not attempt to create false provenance
- Dealer does not specify provenance for object(s)
- Unknown

Stage 16: Dealer Lines Up Buyers:

- Dealer already has established relationship with purchaser via prior experience/business
- Dealer find purchaser through friend/contact
- Dealer finds purchaser via internet
- Dealer find purchaser via in-person encounter
- Dealer find purchaser via another random occurrence

Stage 17: Potential Buyers

- Dealer shows illicit object(s) to potential buyers in person
- Dealer shows illicit object(s) to potential buyers via social media/electronic device
- Dealers do not show objects to buyers
- Unknown

Stage 18: Purchase

- Dealer sells object(s) to other local dealers
 - Dealer sells object(s) to other local dealers via social media/electronic device
 - Dealer sells object(s) to other local dealers in person
- Dealer sells object(s) to other international dealers
 - Dealer sells object(s) to other international dealers via social media/electronic device
 - Dealer sells object(s) to other international dealers in person
- Dealer sells object(s) directly to buyer
 - Dealer sells object(s) directly to buyer, in person (Locally)
 - Dealer sells object(s) directly to buyer, via social media/electronic device (Locally)
 - Dealer sells object(s) directly to buyer, in person (Internationally)
 - Dealer sells object(s) directly to buyer, via social media/electronic device (Internationally)
- Dealer does not sell object
- Dealer does not sell object(s) – third-party country storage
- Unknown

Appendix 4: Antiquities Trafficking Networks Dataset

Case Study	Aidonia Treasure	Ban Chiang	Batán Grande
Viable?	YES	YES	YES
Link	https://traffickingculture.org/encyclopedia/case-1970s	https://traffickingculture.org/encyclopedia/case-1970s	https://traffickingculture.org/encyclopedia/case-1930s-1960s
Date	1970s	Start: 1970s	1930s-1960s
Location	Greece	Thailand	Peru
Full Script?	No	No	No
Phase(s)?	Looting	Looting	Looting
One Instance	No	No	No
Multiple Occurances	Yes	yes	Yes
Individual	No	No	No
Group	Yes	No	Yes
Community	No	Yes	Yes
Common Elements	Local criminal gang Corruption among local Smuggled out of country Disguised	Local Community Known Site Demand fueled Objects smuggled through airbase Subsistence Looting	Community/gang looting specialised Equipment

Case Study	Cancuén Ballcourt Marker	Cancuén Panel	Cara Sucia
Viable?	YES	YES	YES
Link	https://traffickingculture.org/encyclopedia/case-studies/cancuen-ballcourt-2001	https://traffickingculture.org/encyclopedia/case-1981	https://traffickingculture.org/encyclopedia/c-1980
Date	2001	1981	1980
Location	Guatemala	Guatemala	El Salvador
Full Script?	Yes	No	No
Phase(s)?	Looting	Looting	Looting
One Instance	Yes	Yes	No
Multiple Occurrences	No	No	Yes
Individual	No	NA	No
Group	Yes	NA	Yes
Community	No	NA	Yes
Common Elements	<p>Chance find</p> <p>Local looter removed from site of origin by boat</p> <p>Photo used to sell object</p> <p>dispute over object between looters</p> <p>Drug traffickers attempted to steal</p> <p>Object was moved to border, then transported back to original town</p> <p>locals informed authorities of object</p> <p>object was recovered by authorities</p>	<p>Looted</p> <p>Transported from site by boat</p> <p>object was lost when sunk in river</p>	<p>Group of looters targeted looting (jade)</p> <p>Large scale looting</p>

Case Study	Cerro El Plomo Child	Dacian Gold Bracelets	Dos Cabezas
Viable?	YES	YES	YES
Link	https://traffickingculture.org/encyclopedia/case-studies/cerro-1945	https://traffickingculture.org/encyclopedia/case-studies/dacian-1999-2001	https://traffickingculture.org/encyclopedia/case-studies/dos-2009
Date	1945	1999-2001	2009
Location	Chile	Romania	Peru
Full Script?	Yes	No	No
Phase(s)?	All	Looting	Looting
One Instance	Yes	No	No
Multiple Occurrences	No	Yes	Yes
Individual	No	No	NA
Group	Yes	Yes	NA
Community	No	No	NA
Common Elements	<p>Group of looters</p> <p>Search for objects at known structures</p> <p>Looters hid object while seeking buyer</p> <p>Met with Museum to attempt to sell</p> <p>Sold to National museum of natural history</p>	<p>Criminal Looters</p> <p>Objects smuggled to other countries</p> <p>Object was recovered at border in possession of criminal</p> <p>Object was recovered after being placed on sale by authorities</p>	<p>Multiple instances of looting</p> <p>criminal gangs of looters</p> <p>Objects appeared on market pieces recovered on flight by customs</p> <p>forged invoiced stated objects purchased prior to 1960</p>

Case Study	El Zotz	El Zotz Lintel 1	Empress Dou Figurines
Viable?	YES	YES	YES
Link	https://traffickingculture.org/en/cyclopedia/case-studies/el-	https://traffickingculture.org/en/cyclopedia/case-studies/el-zotz-	https://traffickingculture.org/en/cyclopedia/case-
Date	1960s-1970s	1960s-1970s	2001
Location	Guatemala	Guatemala	China
Full Script?	No	No	No
Phase(s)?	Looting	Looting Market	Looting
One Instance	No	Yes	No
Multiple Occurrences	Yes	No	Yes
Individual	Na	No	No
Group	Na	Yes	Yes
Community	Na	No	No
Common Elements	Large scale looting	group of looters object was damaged in removal trafficking to US appeared in gallery years later object sold to law firm firm donated object to museum	Loot to order five farmers blasted with dynamite and shovels three people caught other instances of looting occurred looting gang multiple visits to tomb objects smuggled to Hong Kong (hid in trucks)

Case Study	Euphronios (Sarpedon) Krater	Fano Bronze	Garland Sarcophagus
Viable?	YES	YES	YES
Link	https://traffickingculture.org/en/cyclopedia/case-	https://traffickingculture.org/en/cyclopedia/case-studies/fano-	https://traffickingculture.org/en/cyclopedia/case-
Date	1971	1964	1987
Location	Italy	Italy	Turkey
Full Script?	Yes	Yes	Yes
Phase(s)?	All	All	All
One Instance	Yes	Yes	Yes
Multiple Occurances	No	No	No
Individual	No	No	No
Group	Yes	Yes	Yes
Community	No		No
Common Elements	Looting gang Anticipated find (cemetary) Sold to Medici (broker) object smuggled to switzerland sold to broker (Hecht) object restored by expert in Zurich Hecht prompt Met with object (Letter) Hecht provides false provenance for krater (attached prov of similar object) Sold to MET	Chance find group of fishermen sold object to local antiquities dealer(Broker) hid object in local site object smuggled out of country object restored by expert object marketed to museum/collector	Object discovered by looters buried (stored) for safekeeping object was smuggled out of country bought by collector lent to museum discovered to be trafficked

Case Study	GE Mound	Getty Aphrodite	Ixkun Stela 5
Viable?	YES	YES	YES
Link	https://traffickingculture.org/en/cyclopedia/case-studies/ge-	https://traffickingculture.org/en/cyclopedia/case-studies/1059/	https://traffickingculture.org/en/cyclopedia/case-studies/ixkun-
Date	1988	1977-1978	1972
Location	USA	Italy	Guatemala
Full Script?	No	Yes	No
Phase(s)?	Looting	All	Looting
One Instance	Yes	Yes	Yes
Multiple Occurrences	No	No	No
Individual	No	NA	No
Group	No	NA	Yes
Community	No	NA	No
Common Elements	objects found during construction specialised equipment group of individuals	object looted pass through hands of antiquities broker broker (symes) bought it with false provenance false provenance - old family object item broken to allow for easier transit Broker sold to Museum	object looted object damaged - broken into pieces

Case Study	J Paul Getty Museum Returns to Italy (1999)	J Paul Getty Museum Returns to Italy (2005)	J Paul Getty Returns to Italy (2013)
Viable?	YES	YES	YES
Link	https://traffickingculture.org/en/cyclopedia/case-studies/j-paul-	https://traffickingculture.org/en/cyclopedia/case-studies/j-paul-	https://traffickingculture.org/en/cyclopedia/case-studies/j-paul-
Date	1980	1970	1970
Location	Italy	Italy	Italy
Full Script?	No	Yes	No
Phase(s)?	Market	All	Looting Market
One Instance	No	Yes	Yes
Multiple Occurrences	Yes	No	No
Individual	No	Yes	Yes
Group	No	No	No
Community	No	No	No
Common Elements	false provenance (fake collection established)	object discovered by chance (individual) object was bartered object purchased by broker object sold to museum	Object looted from sanctuary(anticipated) Broker had possession of object sold to collector sold to museum

Case Study	Jiroft	La Amelia Stela 1	La Mina
Viable?	YES	YES	YES
Link	https://traffickingculture.org/en/cyclopedia/case-studies/jiroft/	https://traffickingculture.org/en/cyclopedia/case-studies/la-	https://traffickingculture.org/en/cyclopedia/case-
Date	2001	1965	1989
Location	Iran	Guatemala	Peru
Full Script?	No	Yes	No
Phase(s)?	Looting	All	Looting
One Instance	No	Yes	No
Multiple Occurrences	Yes	No	Yes
Individual	No	No	No
Group	No	Yes	Yes
Community	Yes	No	Yes
Common Elements	community looting/groups of locals mass scale looting two looters executed for participation subsistence looting	group/gang of looters object was cut into pieces (transit) object smuggled to other country Sold to antiquities dealer (non illicit) object bought by collector - taken to Switzerland	individual (looter) discovered material while digging looter continually looted mound when in need of \$ antiquities dealer contacted archaeologist to alert to looting

Case Study	Machaquilá Stela 2	Malagana	Maya antiquities sold at Sotheby's in 1995
Viable?	YES	YES	YES
Link	https://traffickingculture.org/en/cyclopedia/case-	https://traffickingculture.org/en/cyclopedia/case-	https://traffickingculture.org/en/cyclopedia/case-studies/maya-
Date	1971	1992	1995
Location	Guatemala	Columbia	Mexico Guatemala
Full Script?	Yes	Yes	Yes
Phase(s)?	All	Looting Market	All
One Instance	Yes	No	No
Multiple Occurances	No	Yes	Yes
Individual	No	No	Yes
Group	Yes	No	Yes
Community	No	Yes	No
Common Elements	object looted by gang object cut into pieces by looters broker purchased object sold to three individuals object stored for time objects smuggled with shrimp object was restored object was smuggled to NYC Object was offered to museum and dealers obejct was transported all over USA sold to restorer	Farmer discovered site (accidental) farmer removed objects large scale looting resulted museum purchased objects to keep them within country	objects were looted broker smuggled objects broker disguised and hid objects - false reason for travel smuggler would bring other minor illegal obejct to distract from objects objects smuggled to border smuggler flew with object into USA

Case Study	Mimbres Pottery	Morgantina Silver	Mosaic Maya Mask
Viable?	YES	YES	YES
Link	https://traffickingculture.org/en/cyclopedia/case-1960s	https://traffickingculture.org/en/cyclopedia/case-1970-1980s	https://traffickingculture.org/en/cyclopedia/case-studies/mosaic-1960s
Date	1960s	1970-1980s	1960s
Location	United States	Italy	Mexico
Full Script?	No	Yes	Yes
Phase(s)?	Looting	All	All
One Instance	No	Yes	Yes
Multiple Occurances	Yes	No	No
Individual	No	No	No
Group	Yes	Yes	Yes
Community	No	No	Yes
Common Elements	looter used heavy machiney resulted in much destrucion	specialised equipment Looters (gang of local looters) sold to middleman in switzerland sold to Hecht (broker) Hecht (broker) sold objects to Museum	antiquities dealers (broker) told to fly to Mexica taken to unknown location to view objects purchsed objects object was sold through other dealer purchased by other dealer objects smuggled to USA

Case Study	Motunui Panels	Nok Terracottas	Ocucaje Cemeteries
Viable?	YES	YES	YES
Link	https://traffickingculture.org/en/cyclopedia/case-	https://traffickingculture.org/en/cyclopedia/case-studies/nok-	https://traffickingculture.org/en/cyclopedia/case-
Date	1972	1994	1941
Location	New Zealand	Nigeria	Peru
Full Script?	Yes	No	No
Phase(s)?	All	Looting Transit	Looting
One Instance	Yes	No	No
Multiple Occurances	No	Yes	Yes
Individual	Yes	No	No
Group	No	Yes	Yes
Community	No	Yes	No
Common Elements	chance find individual discovered brought back to home broker came and viewed in person broker removed objects to other country broker falsifies provenance Broker sells to collector	large scale looting team looters wide variety of means of selling internet trafficking galleries	anticipated finds (cemetary) large scale looting clandestine looting

Case Study	Paracas Textiles	Peruvian Antiquities Seized at Dulles Airport (1981)	Piedras Negras
Viable?	YES	YES	YES
Link	https://traffickingculture.org/en/cyclopedia/case-	https://traffickingculture.org/en/cyclopedia/case-	https://traffickingculture.org/en/cyclopedia/case-
Date	1930	1981	1960s
Location	Peru	United States Peru	Guatemala
Full Script?	No	No	No
Phase(s)?	Looting	Transit	Looting
One Instance	No	Yes	No
Multiple Occurrences	Yes	No	Yes
Individual	No	Yes	No
Group	Yes	No	Yes
Community	Yes	No	No
Common Elements	local looting gangs objects smuggled large scale looting large amounts entered international market	broker found to be carrying illicit objects at customs broker claimed object were legal and rightfully his	groups or gangs of looters objects were sawed into pieces and carried across border objects sold to multiple countries objects were 'thinned' for transport - parts of back taken off

Case Study	Placeres Stucco Temple Facade	Río Azul	Slack Farm
Viable?	YES	YES	YES
Link	https://traffickingculture.org/en/cyclopedia/case-	https://traffickingculture.org/en/cyclopedia/case-studies/rio-	https://traffickingculture.org/en/cyclopedia/case-studies/slack-
Date	1968	1976	1987
Location	Mexico	Guatemala	United States
Full Script?	Yes	No	No
Phase(s)?	All	Looting Transit	Looting
One Instance	Yes	No	No
Multiple Occurrences	No	Yes	Yes
Individual	No	No	No
Group	Yes	Yes	Yes
Community	No	No	No
Common Elements	loot to order looters alerted brokers and middleman to object broker ordered looting object looted object sawed into pieces object smuggled by plane to USA object offered to museum	site targeted specifically collector targeted site funded groups of looters local helped organise looting groups Possible that objects smuggled by plane (remote landing strip) possible dark archaeologist advised	looters paid land owners to loot on land Large scale looting (650 pits) speacialised machinery was used law allowed looting, but not disrupting human remains. Looters claimed no HR, but clearly evident

Case Study	Toledo Museum of Art Return to Italy (2013)	Ubina Hoard	Valdivia Figurines
Viable?	YES	YES	YES
Link	https://traffickingculture.org/en/cyclopedia/case-studies/toledo-1981	https://traffickingculture.org/en/cyclopedia/case-studies/ubina-2005	https://traffickingculture.org/en/cyclopedia/case-1970
Date	1981	2005	1970
Location	Italy	Estonia	Ecuador
Full Script?	No	No	No
Phase(s)?	Transit Market	Looting	Looting
One Instance	Yes	Yes	No
Multiple Occurrences	No	No	Yes
Individual	Yes	No	No
Group	No	Yes	Yes
Community	No	No	Yes
Common Elements	object smuggled out of country Medici (Middleman) took object to Switzerland Medici (MiddleMan) sold object to Becchina (Broker) Broker created false provenance Broker sold object to museum with false provenance Provenance was piece of paper (typewriter) indicating previous owner had inherited object from father - who purchased in 1935	looting of existing archaeological site use of specialised equipment targeted specific areas marked by archaeologists car seen circling the site, left when spotted by archaeologists	Looters discovered objects long before archaeologists large scale looting

Case Study	Vibia Sabina Statue	Wang Chuzhi Tomb Panel	Giacomo Medici
Viable?	YES	YES	SMUGGLER
Link	https://traffickingculture.org/en/cyclopedia/case-studies/vibia-1974	https://traffickingculture.org/en/cyclopedia/case-studies/wang-1994	https://traffickingculture.org/en/cyclopedia/case-NA
Date	1974	1994	NA
Location	Germany/Italy	China	Italy, Switzerland
Full Script?	No	No	No
Phase(s)?	Transit Market	Looting	Transit Market
One Instance	Yes	Yes	No
Multiple Occurances	No	No	Yes
Individual	Yes	No	Yes
Group	No	Yes	No
Community	No	No	No
Common Elements	dealer made aware of object about to appear on market object stored in warehouse of dealer in Munich Medici (on behalf of dealer) asked to view object object purchased by Hecht (Broker) Broker sold to museum via conservator" covervator acted as "front" for broker	looters used dynamite to enter tomb lotoed large panels panel appeared on market in NYC correct provenance - listed the tomb as site of origin consigned by gallery from Hong Kong	used multiple (own) companies to generate provenance one company sells, other purchases created false demand in market laundered objects to make licit

Case Study	Incirlik smuggling network, Turkey (1998)	Operation Andromeda	South California Museum Raids (2008)
Viable?	SMUGGLER	SMUGGLER	SMUGGLER
Link	https://traffickingculture.org/en/cyclopedia/case-studies/incirlik-1997	https://traffickingculture.org/en/cyclopedia/case-1980s	https://traffickingculture.org/en/cyclopedia/case-studies/south-2008
Date	1997	1980s	2008
Location	Turkey/USA	Tokyo	USA
Full Script?	Yes	No	No
Phase(s)?	All	Transit Market	Transit Market
One Instance	No	No	No
Multiple Occurrences	Yes	Yes	Yes
Individual	Yes	Yes	Yes
Group	Yes	No	No
Community	No	No	No
Common Elements	smuggling network individual at US airforce base ordered looting, was then smuggling individual sold objects to collectors individual sold object to dealers	obtained objects from Bacchina (middlemen/broker) acted as agent for Museum (purchasing)	tax-deductable donation to museums broker - provided objects to collectors and dealers produced a catalogue of exhibition, increased demand Mis-label or Mis-describe objects for transport Bribe customs officials disguise objects as modern

Case Study	Swetnam, Drew, Kelly Smuggling Ring of Objects	Vaman Ghiya
Viable?	SMUGGLER	SMUGGLER
Link	https://traffickingculture.org/en/cyclopedia/case-	https://traffickingculture.org/en/cyclopedia/case-studies/vaman-
Date	1987	2003
Location	Peru	India
Full Script?	Yes	Yes
Phase(s)?	All	All
One Instance	No	No
Multiple Occurances	Yes	Yes
Individual	No	Yes
Group	Yes	No
Community	No	No
Common Elements	group of smugglers/middlemen bribeing of border agents smuggling agents to transport object via plane disgusied objects (mud cover bottom) souvenir transported via multiple countries looters stored objects until investigation stoppped dealers made contact with local dealer organised purchase of objects and transort false provenance agent claimed object came of family collection - false	three front compaies three companies could transact material - laundering sold to deals and collectors network of looters and middlemen/dealers operated as a broker/smuggler

Appendix 5: Syria Looting Dataset

Syria Direct: *Artifact trafficking and the battle to stop it: 'It's open season'*

<https://syriadirect.org/news/artifact-trafficking-and-the-battle-to-stop-it-its-open-season/>

In the late hours of the night, 30-year-old Abdelrahman wanders the ancient city of Apamea with a metal detector. Built by Selucid kings 2,300 years ago, Apamea was once a repository for the wealth of their empire, which spread from ancient Anatolia to modern-day Pakistan. Over the past two millennia, the ancient city, located in today's northwestern Syria on a frontline between government and opposition forces, passed through Roman and Byzantine hands, among others. Now, the tourists are gone and the site has fallen into disrepair, the land pock-marked with holes dug by treasure hunters such as Abdelrahman. When luck is on his side, Abdelrahman can make between \$300 and \$500 a month selling buried artifacts, a decent living in the opposition-controlled province of Idlib northwest Syria, where monthly salaries rarely exceed \$75. Apamea lies on the border between opposition-held Idlib and government-controlled Hama province, pushing Abdelrahman and his partners to work only at night—hidden from the watchful eye of both the regime and local rebel militias. If caught by the regime, they could face up to 25 years in prison. If caught by an Islamist group, treasure hunters could have their hands cut off. The reward, says Abdelrahman, is worth the risk. “Once, I sold a single ancient coin for \$500,” he tells Syria Direct. “But it’s not always this way. We can dig for weeks and weeks without finding anything.” The fruitless digging can make Abdelrahman feel “hopeless,” but he and his partners continue searching until they find a piece they can sell. “Of course, I feel guilty whenever I sell a piece of my country’s history,” he says. “But I feel more guilty when I see my kids go hungry.” Abdelrahman is a small part of a larger picture: Dealers and middlemen, with ties to both opposition fighters and regime officials, purchase the objects he finds. They then smuggle them to Turkey or Lebanon. From there, the relics join a vast black market frequented by wealthy buyers from Europe, the United States and the Arab Gulf states. But as this vast network of treasure hunters, smugglers and art dealers seeks to profit from the destruction of Syria’s historical sites, an equally diverse group of activists, archeologists and United Nations officials has mobilized to protect it. It is unclear whether this law or similar ones are in fact curbing the pillaging of ancient sites. While one Victory Army official told Syria Direct that a group of looters was recently arrested, a Victory Army judge told the Syrian Voice last month that trading in antiquities is permitted—provided a cut of profits was given to the local government. Antiquities broker Abu Tariq says that his business hasn’t been affected. “We work with a dealer in Lebanon, and we smuggle relics to him via Turkey,” he explains. “From Lebanon, they’re sold to museums and collectors in Europe.”

Stage 1: Motivation for Looting

- Substance

Stage 2: Type of Looter

- Group or pair of individuals
- Working for themselves

Stage 3: Location

- Searches for loot in known archeological site

Stage 4: Research

- Unknown

Stage 5: Equipment

- Has specialized looting equipment (Tech, bulldozer, hacksaws, drills, metal detector)

Stage 6: Looting

- Loot object in secret

Stage 7: Transportation from site of Origin:

- Transports object(s) to looters home OR storage facility

Stage 8: Storage

- Objects are not stored, but transported directly out of country

Stage 9: Selling

- Looter sells object to middleman/smuggler
- Looter sells object to dealer
- Local

Syria Untold: *The Long Walk to Protect Syrian Artifacts*

<http://syriauntold.com/2016/11/protect-syrian-artifacts-dr-ali-cheikhmous/>

Inside Syria, smugglers of antiquities and residents of nearby villages do the excavations. When they stumble upon artifacts, they either sell them to local merchants or smuggle them directly into neighboring countries to be sold there. In some cases, the excavation first needs to be authorized by the military force in control of the region, like Daesh [Arabic derogative acronym for the self declared Islamic State (IS)] in the countryside of Dayr az-Zawr and Raqqa. That way, they can get a piece of the cake. In every military faction, including the regime's army, you find a group involved in facilitating excavations and smuggling operations. Before the Palmyra site fell in the hands of Daesh, for instance, numerous smuggling operations were organized under the regime's eyes. The same goes for Apamea; where there's a checkpoint called Hajez al-Athar (the Antiquities Checkpoint), and excavations take place in broad daylight without any intervention from officers or soldiers. In terms of facilitating smuggling operations, everyone knows that Hezbollah and the Syrian Army control the borders between Syria and Lebanon. Nonetheless, there are often news of the Lebanese authorities arresting smugglers and traffickers and confiscating Syrian antiquities. The question is: how did these artifacts reach Lebanon in the first place? Syrian Army and Hezbollah officers undoubtedly have something to do with this.

Stage 1: Motivation for Looting

- Substance
- **Stage 2: Type of Looter**
- Individual
 - Working for themselves
 - Pays/seeks permission off criminal group/organization to loot
- Group or pair of individuals
 - Working for themselves
 - Pays/seeks permission off criminal group/organization to loot

Stage 3: Location

- Searches randomly for loot in hope of finding object
- Object(s) has been made visible/discovered randomly by individual

Stage 5: Equipment

- Has simple looting equipment (Shovels, picks)

Stage 6: Looting

- Loot object openly

Stage 7: Transportation from site of Origin:

- Unknown

Stage 8: Storage

- Objects are not stored, but transported directly out of country

Stage 9: Selling

- Looter sells object to middleman/smuggler
- Looter sells object to buyer

Local (Country of Origin)

In person

Foreign Policy: *The Black-Market Battleground*

<https://foreignpolicy.com/2014/10/17/the-black-market-battleground/>

When Islamic State fighters capture an archaeological site, they're faced with a series of choices. Do they destroy it or sell its artifacts? If they decide it's idolatrous, do they extort protection money for it from the Shiite, Sufi, Yazidi, or other religious minority group that values it? Or do they demolish it right away and feature the demolition in their propaganda? If they loot it, do they ransack the place themselves or do they hire others to do it? Or do they tax the opportunistic looters who show up? Actually, all of the above is going on. How the self-proclaimed Islamic State militant group approaches each site depends on a range of factors, including the area's land ownership system and the payoff of plundering the site, says Michael Danti, one of the archaeologists leading a U.S. government-funded effort to document the destruction and looting of the cultural heritage of Iraq and Syria. At first, the Islamic State simply asked anyone who chose to loot areas it controlled for khums, a tax on the spoils of war paid in Islamic tradition to the government. But by this summer, Al-Azm said, ISIS started taking a more deliberate approach, actively employing contractors to do the excavation. These contractors take some of the profits, and the rest goes to the Islamic State. "It's part of a growing escalation," he said. "The most recent reports I'm getting is that ISIS is actually engaging itself. They're hiring their own people, they're using a lot of earth-moving equipment — bulldozers, et cetera," Al-Azm said. "So what I can tell you is they're making enough to make it worth their while." The Islamic State profits nearly immediately, selling the goods to middlemen who then smuggle them into neighboring countries such as Turkey, Jordan, and Lebanon, according to Al-Azm. Some middlemen belong to organized crime syndicates that smuggle a range of things — electronics, people, antiquities — and have done so since long before the rise of the Islamic State. That traffic, along with the illegal arms flowing in the opposite direction, is a large part of why control of border locales such as Kobani is so strategically important. But the murkiness around what happens to artifacts once they leave Syria or Iraq makes these international agreements harder to implement. In the short term, they may cause middlemen to hold onto the artifacts until the furor has died down — which generally takes several years. Most of what was plundered from Iraq between 2003 and 2005 is only now appearing in aboveground international markets, the main exception being when a particular collector has a request out for a specific kind of artifact, Al-Azm and Danti said. "The material is gradually, incrementally laundered in the world-antiquities market, and it becomes very difficult to establish when, where, who, what, why at that point in time," Danti said. "So we've got to chronicle everything we can now so we can try to determine what was stolen by whom and even try to get the slightest inclination as to where they're going."

Stage 1: Motivation for Looting

- Criminal/Profit

Stage 2: Type of Looter

- Criminal Organization
 - International criminal organization

Stage 3: Location

- Searches randomly for loot in hope of finding object

Stage 4: Research

- Unknown

Stage 5: Equipment

- Has specialized looting equipment (Tech, bulldozer, hacksaws, drills)

Stage 6: Looting

- Loot object openly

Stage 7: Transportation from site of Origin:

- Unknown

Stage 8: Storage

- Objects are not stored, but transported directly out of country

Stage 9: Selling

- Middleman/Smuggler

Chasing Aphrodite: Inside the ISIS Looting Operation: U.S. Lawsuit Reveals Terror Group's Brutal Bureaucracy of Plunder

<https://chasingaphrodite.com/2016/12/15/inside-the-isis-looting-operation-u-s-lawsuit-reveals-terror-groups-brutal-bureaucracy-of-plunder/>

In 2013, seven women from the village of al-Duwayr spent eight months digging with pick axes in the al-Salihyyah archaeological site outside Damascus. (There are two locations named al-Salihyyah in Syria, but as Paul Barford notes in the comments below, given the context this likely refers to the site outside Deir ez-Zor, where Abu Sayyaf was based.) During the illicit dig they found a cache of gold and other ancient relics. The women asked a male relative, whose name is redacted, to sell the finds, but he could not reach an agreed upon price with local merchants, who offered up to \$180,000. (It is not clear what currency is being discussed, but elsewhere the records note many deals were transacted in U.S. dollars.) Abu Sayyaf's deputy, Abu Layth, learned of the find and came to collect the ISIS Khums tax, 20% of the discovery's value. He put the value of their discovery at just \$70,000 and offered to buy it all. When the looters refused the low ball price, Abu Layth attempted to take one-fifth of the find in lieu of the tax. That too was refused by the women. Days later, Layth and five members of the Islamic State arrived at the house of one of the looters in masks and toting guns. Abu Layth, brandishing a pistol, demanded to know where the gold was. The women said it had already been taken to Turkey. At that point one of the ISIS men grabbed a 15-year-old boy. Abu Layth stated, "I will take the boy to al-Raqqah and I will not bring him back until you bring the gold." The boy testified about his abduction, saying he was blindfolded, beaten in the back of the vehicle, threatened with a pistol to his head and then held for 15-days in al-Raqqah. In his own testimony, Abu Layth acknowledged he had no experience with antiquities. He had worked for the ministry of natural resources for nine months, and had previously sold clothes and food. Abu Layth testified that he was given \$130,000 to purchase the relics but offered only \$70,000 to the looters. Merchants in Turkey, who he communicated with "via mediators," said the finds could be worth as much as \$200,000. He said he had arrested the boy at the order of his boss, Abu Sayyaf. Having heard the testimony, the Islamic State's General Supervising Committee issued its ruling: Abu Sayyaf should fire Abu Layth, hire own responsible men, and apologize to the family for arresting the boy without justification.

Stage 1: Motivation for Looting

- Substance

Stage 2: Type of Looter

- Group or pair of individuals
 - Pays/seeks permission off criminal group/organization to loot

Stage 3: Location

- Searches for loot in known archeological site

Stage 4: Research

- unknown

Stage 5: Equipment

- Has simple looting equipment (Shovels, picks)

Stage 6: Looting

- Loot object openly

Stage 7: Transportation from site of Origin:

- Transports object(s) to looters home OR storage facility

Stage 8: Storage

- Objects are stored on a long-term basis

Stage 9: Selling

- Looter sells object to buyer

Local (Country of Origin)

In person

Chasing Aphrodite: Twenty Percent: ISIS “Khums” Tax on Archaeological Loot Fuels the Conflicts in Syria and Iraq

<https://chasingaphrodite.com/tag/amr-al-azm/>

AA: It's very widespread... just about everybody is doing it. Its happening all over. Especially in the Eastern areas, along Euphrates, there are thousands upon thousands of Archaeological sites. They're destroying many many layers of history and culture that we'll never recover. It's so systematic right now, huge chunks of our history is disappearing. Now with ISIS on the scene, this has become much much worse. ISIS has instituted the concept of khums, the 20% tax, and said to the locals, you can dig on your own land but pay us a fifth of what you make. On public land, they've started licensing crews to come in – Turks, Kurds, Iraqis coming with bulldozers to get at the few bobbles coming out. Most of the stuff coming out is not priceless artifacts. They're pots, a small statue, a tablet or cylinder seals. This stuff is small potatoes economically, so the income is based on bulk more than a significant piece of great value.

JF: What evidence is there to support this?

AA: The evidence comes from locals who we know who I communicate with regularly. They tell is ISIS representatives are at the archaeological sites to make sure the khums is paid.

JF: What are the trafficking networks that move the objects out of the country to the market?

AA: My sources tell me a lot of this stuff ends up crossing the Turkish border. Some international dealers, non- Turks, started to come in to Syria but it quickly got too dangerous for them. Now the dealers all hang out across the border in Turkey. Only Turkish dealers come into Syria to meet with locals. They buy and take it back. One of the main centers for the illicit trade is Tell Abiab, on the Syrian side, across the border from Urfa. There is also lots of smuggling in Kilis, some of it archaeology. From there, I don't know where it goes. There is also evidence of some looting to order by wealthy private collectors. For example, in Palmyra, which is under regime control, there is a famous Roman tomb called the Brothers Tomb. I've been told the Tomb of the Three Brothers has been looted and sold off. My suspicion is that it's looting to order for a collector. Something that well known and important won't show up on the market.

Stage 1: Motivation for Looting

- Substance
- Criminal/Profit

Stage 2: Type of Looter

- Group or pair of individuals
 - Pays/seeks permission off criminal group/organization to loot

Stage 3: Location

- Unknown

Stage 4: Research

- Unknown

Stage 5: Equipment

- Has specialized looting equipment (Tech, bulldozer, hacksaws, drills)

Stage 6: Looting

- Loot object openly

Stage 7: Transportation from site of Origin:

- Unknown

Stage 8: Storage

- Objects are not stored, but transported directly out of country
- unknown

Stage 9: Selling

- Looter sells object to middleman/smuggler
- Looter sells object to dealer
 - International
 - In person

Buzzfeed: *This Is How Syrian Antiquities Are Being Smuggled And Sold*

<https://www.buzzfeednews.com/article/mikegiglio/the-trade-in-stolen-syrian-artifacts>

In order for traders to sell antiquities, diggers around Syria work daily to pull them from the ground. The digs range from backyard affairs by heavy-handed amateurs to skilled excavations.

One such digger, a 36-year-old Syrian, works near Apamea with permission from a local rebel group, rolling a bulldozer over acres of land to turn up small artifacts or uncover clues that might lead to a greater score, such as an ancient burial cave. Inching through the chambers and reaching into tombs can be exhilarating as he wonders what he'll find. He might discover jewels that wealthy citizens of past empires took to the grave. Often, he said, "there are only bones." On a warm evening in June, he and a colleague sat on the floor of a living room near the border and served tea as they waited out the last hour of the Ramadan fast. The two men are part of a team of six that splits any money they make. They can go for weeks without a payday, sweating "for nothing" in the sun, the digger said. "We feel bad because we are stealing our history and selling it for a cheap price," his colleague said. "But we have become homeless and jobless, so we don't care."

Stage 1: Motivation for Looting

- Substance

Stage 2: Type of Looter

- Group or pair of individuals
 - Pays/seeks permission off criminal group/organization to loot

Stage 3: Location

- Searches randomly for loot in hope of finding object

Stage 4: Research

- Unknown

Stage 5: Equipment

- Has specialized looting equipment (Tech, bulldozer, hacksaws, drills)

Stage 6: Looting

- Loot object openly

Stage 7: Transportation from site of Origin:

- Unknown

Stage 8: Storage

- unknown

Stage 9: Selling

- Unknown

Appendix 6: Syria Transit Dataset

BuzzFeed: *This Is How Syrian Antiquities Are Being Smuggled And Sold*

“He asked me not to photograph the bust, since it was on the market, but texted me photos of several others he said he had picked up during the same raid. He had already sold those busts to a friend, he said, and then conspired to smuggle them from Turkey back through Syria and on to Lebanon, a common path because Turkish authorities are far more diligent about cracking down on the trade than their counterparts in Lebanon.”

Looters found the mosaic in Syria, in the floor of an ancient villa buried underground. First they covered it with elastic glue and, using a rubber hammer, tapped the pieces into place. When the glue set they peeled the mosaic from the floor. Then they rolled it into the carpet and smuggled it across the border into Turkey, where Mohamed, a black-market antiquities dealer in his mid-thirties, hid it in his home.

BBC: *The man who smuggles the loot that funds IS*

To sell looted antiquities you need a middle-man, like "Ahmed". Originally from eastern Syria, he is based in a town in southern Turkey - he doesn't want me to specify which one as he doesn't want the police to know. As a Turkish-speaker he is popular with Syrian smugglers, who ask if he can move goods on to local dealers. When I speak to him via Skype he shows me a blanket next to him filled with artefacts - statues of animals and human figures, glasses, vases and coins.

The main trade is in stoneworks, statues and gold, and it can be extremely lucrative. "I have seen one piece sold for \$1.1m," he says. "It was a piece from the year 8500BC." He gently handles each artefact as he brings it closer to the webcam to give me a better view. He has had to pay a sizeable bond to the smugglers to get this material and he doesn't want to lose any of it. The final destination is Western Europe, he says.

If it was only a small mosaic I wanted, I could take the chance and try to smuggle it out myself but he warns it's a serious decision, as I could get caught. For a fee he can have them shipped to the UK but it will cost me many thousands of pounds. We shake hands as I leave and he gives me his business card. It has only taken 10 minutes to be offered illicit antiquities.

Independent: *Syria Conflict: The illicit art trade that is a major source of income for today's terror group is nothing new*

Once brought to Turkey, Syrian artefacts travel out of Turkey's big coastal ports – Mersin, Antalya or Izmir – alongside smuggled Syrian refugees desperate to reach European shores. Once they arrive in Europe, usually via Cyprus, Italy, Greece or Portugal, a dealer will concoct false papers for the artefact.

The burden is mostly falling on Turkey however, which is under continuing pressure to tighten its long and porous border. It's not only foreign jihadis that are taking advantage of lax border spots to join Isis, but artefacts are just as easily smuggled into the country to be picked up by organised crime gangs, as well as amateurs.

"People are trying to make a living," Dr Danti says. "The biggest culprits in all of this have to be the refugee crisis, the humanitarian crisis and the issue of poverty – right now that's really contributing to property crime. "Locals will go out and excavate for antiquities and bring this stuff to Isis and get paid, or they're willing to traffic this stuff and pay Isis a tax to smuggle it into Turkey."

"It's like a business," they reassure me, albeit one that's replete with a network of diggers, smugglers and dealers. "Anything you want, we can get for you. Just look at the pictures and tell us what you like.

DW: *Germany attracts trade in looted artifacts*

Day in and day out, go-betweens smuggle looted art from the war zones in the Middle East first to Turkey or Lebanon, and then on to, for instance, the Dubai foreign trade zone. Here, the artifacts can either be purchased on the spot, or they are shipped to antiques dealers and auction houses in Europe and the US, complete with export documents supplied by the intermediary.

National Geographic: *ISIS Cashing in on Looted Antiquities to Fuel Iraq Insurgency*

But Sam Hardy, an archaeologist at University College London, who studies the trade in illicit antiquities, notes that insurgents and paramilitaries generally enter the trade in at least one of three ways: by running a trafficking network, facilitating smuggling through offering a service, or levying a tax on traffickers who move looted artifacts through their territory.

New York Times: *Looting Antiquities, A Fundamental Part Of ISIS' Revenue Stream*

After antiquities leave the Islamic State's territory, experts say they fall into the hands of existing smuggling and criminal networks that are practiced at trafficking people, drugs or other contraband from Syria and Iraq. "Once they hit these networks, they go everywhere, and they're very hard to track," said Brent Easter, a customs special agent in New York who investigates art smuggling.

Pulitzer Centre: *Stealing Syria's Past*

Amer's new business, I discovered, was a lean, multinational enterprise. Small teams armed with metal detectors or brushes began by spreading out and searching an area. Some were skilled in archaeological excavation before the revolt, others had learned on the job. Another group of specialists was charged with certifying the authenticity of anything found, after which the objects were passed to polishers who'd get them ready to be sold. Then they were passed to the smugglers who moved them into Turkey. Only then would they make it to Amer

Al-Monitor: *Islamic State makes millions from stolen antiquities*

As a result, many smugglers, among them Turks, have rushed in — virtually "with bulldozers." Judging by Al-Azm's account, Turkey and Turkish nationals play a leading role in this disgraceful affair. The smugglers' highway is passing through Turkey. All artifacts are funneled to the world via Turkey.

Foreign Policy: *A How-To Guide To Buying Artifacts Looted by the Islamic State*

It begins with the Islamic State looter, who actually steals the piece from inside Iraq or Syria. Then, this looter would contact a smuggler, who would pay the finder a tax as high as 50 percent of the artifact's suspected price and use existing rat lines to get it out of the country. It would most likely end up in Turkey, according to Amr Al-Azm, an archaeologist at Shawnee State University in Ohio who is also leading efforts to document Islamic State looting through satellite imaging.

New Yorker: *The Real Value of the ISIS Antiquities Trade*

The Apamea looters were free from the ideological and territorial constraints that limit ISIS profits: statues and idols are fair game, collectible, and apparently seeping into the international black market through established smuggling routes that predate Syria's war. The archeologist Michael Danti, who spoke at the Met, recently told me in a phone call from Iraq that he has seen looted antiquities marketed directly to potential buyers via social networks, including Facebook, WhatsApp, and Snapchat.

Appendix 7: Syria Market Dataset

CBS: Following the trail of Syria's looted history

<https://www.cbsnews.com/news/isis-looted-syrian-ancient-artifacts-black-market-us-and-europe/>

To get a firsthand look at this underground world, Ward's producer Jennifer Janisch posed as a buyer and made contact with Omar, a Syrian living in Turkey who offers looted artifacts to international buyers. He sent us images of coins and statuettes, jewelry and ancient books -- likely a mixture of real and fake items, experts told CBS News. Omar claimed to have mosaics freshly ripped out of the ground in Syria. Janisch and Ward met him in Istanbul and recorded the meeting on hidden cameras. Archaeologist Amr al-Azm joined the CBS News undercover team to help authenticate the mosaic. Two nervous young Syrians took us to a run-down apartment on the outskirts of town, and there it was; a beautiful roman mosaic, nearly 2,000 years old and, as we learned later, potentially worth \$100,000. They said it was taken out of Syria only recently -- one of seven mosaics they had dug up in the ancient city of Apamea, one of Syria's most significant archaeological sites. Satellite photos show the ground around Apamea pockmarked with the telltale holes left by looters. Ward and Janisch then moved to their waiting van, where they were also offered Roman glass stolen from a tomb. There the negotiating began: \$200,000 for the mosaic, they said, but that quickly dropped to \$60,000. They were eager to get the illegal piece off their hands. "Clearly this is part of the tragedy of the war in Syria," said al-Azm, the archaeologist. "The fact that they feel that this is the only way they can essentially survive and feed their families... Syria has such a rich history, rich cultural heritage." A history al-Azm said is being "totally pillaged and destroyed... Syria's cultural heritage has become a casualty of war." In Gaziantep, Turkey, near the Syrian border, we met Abu Walid, who told us he felt he had no choice but to loot and sell artifacts. "There is no more work in Syria," he said, explaining that people have to sell artifacts or join an armed group, obliged to either fight or steal. ISIS is the primary beneficiary, making tens of millions of dollars through the illegal trade. The group issues licenses to looters to dig in their territory. "If you find an artifact, you take 80 percent and ISIS takes 20 percent," he said. Or, if the equipment used to unearth the treasure belongs to ISIS, they take a 40-50 percent cut instead. "The illegal traffic in looted antiquities is buying the bombs and the bullets that are killing so many," U.S. Marine Col. Matthew Bogdanos, who led the investigation into the 2003 looting of the National Museum of Iraq, told CBS News. Now he prosecutes antiquities cases as an assistant district attorney in the U.S. "In a surprisingly small number of steps, you can go from the looter in ISIS controlled territory to the smuggler who gets it out of the country... to a gallery owner who provides forged documentation... and ultimately getting a buyer making its way to the four destination points of New York, London, Paris and Tokyo," Bogdanos said. He said he and his colleagues have seen evidence of artifacts "looted by ISIS or under the authority of ISIS" ending up on the markets in London and even New York.

Stage 5: Obtaining of Objects

- Unknown

Stage 6: Assessment

- Unknown

Stage 7: Storage

- Dealer store object(s) in on a short-term basis

Stage 8: Provenance

- Dealer does not attempt to create false provenance

Stage 9: Potential Buyers

- Dealer show illicit object(s) to potential buyers in person

Stage 10: Purchase

- Dealer sells object(s) directly to buyer
- Dealer sells object(s) directly to buyer, in person

Bloomberg: *Islamic State Is Selling Looted Art Online for Needed Cash*

<https://www.bloomberg.com/news/articles/2015-06-28/isis-has-new-cash-cow-art-loot-it-s-peddling-on-ebay-facebook>

The Whatsapp message appeared on his iPhone: photos of an ancient Mesopotamian vase worth \$250,000, part of a highlyvalued set that is waiting to be extracted. The recipient, Amr Al Azm, replied that he was interested. How to proceed? A message from a different account followed. The vase could be smuggled through Lebanon. Al Azm, an anthropology professor in Ohio, was faking it, as he does when photos of looted antiquities are sent to him in the belief that he is a collector or dealer. He is a detective - - self-appointed -- hoping to save some of mankind's rarest and most vulnerable artifacts by tracking the burgeoning antiquities trade of Islamic State in Iraq and Syria. Al Azm, who teaches at Shawnee State University and is chair of the Syrian opposition's Syrian Heritage Task Force, says that in recent months the group has set up a government branch, chillingly known as the archaeological administration, in the Syrian city of Manbij near the Turkish border, which manages loots and sales. "They bring in their own trucks, their own bulldozers, hire their own work crews and pay them salaries," he said. Islamic State acts as a supplier for a complex chain involving at least five brokers and dealers, said Michael Danti, an adviser to the U.S. State Department on plundered antiquities from Iraq and Syria. The extremists are closely linked to Turkish crime networks in the border towns of Gaziantep or Akcakale, he said. Once the artifacts are smuggled into Turkey, a broker will cash them for resale to dealers who have pockets deep enough to pay for storage and wait up to 15 years to sell, when law enforcement is less focused on them. "Shady dealers sit on smuggled items for years to launder the provenance before trying to sell them for lump sums," McAndrew said. "There's enough awareness among major auction houses such as Sotheby's and Christie's to avoid handling any antiquity believed to be from Iraq or Syria. "But the challenge is monitoring private sales, which are driving the global antiquities market," McAndrew said. "I'm pretty confident those pieces from Iraq and Syria are being sold to locals in the region -- wealthy Saudis, Emiratis, Iranians." One concern is that the items may end up in freeports, which are tax-free storage spaces at international airports that do not require passage through customs. "The best way to stop this is by intercepting the items before they end up in the freeports," said Daniel Brazier of Homeland Security, adding that freeport search warrants are near impossible to obtain.

Stage 5: Obtaining of Objects

Dealer buys object(s) off an individual smuggler

Stage 6: Assessment

Unknown

Stage 7: Storage

Dealer store object(s) in on a short-term basis

Stage 8: Provenance

Dealer does not specify provenance for object(s)

Stage 9: Potential Buyers

Dealers do not show objects to buyers

Stage 10: Purchase

Dealer does not sell object(s) - Third party country storage (i.e. Freeport)

Buzzfeed: *This Is How Syrian Antiquities Are Being Smuggled And Sold*

<https://www.buzzfeednews.com/article/mikegiglio/the-trade-in-stolen-syrian-artifacts>

Looters found the mosaic in Syria, in the floor of an ancient villa buried underground. First they covered it with elastic glue and, using a rubber hammer, tapped the pieces into place. When the glue set they peeled the mosaic from the floor. Then they rolled it into the carpet and smuggled it across the border into Turkey, where Mohamed, a black-market antiquities dealer in his mid-thirties, hid it in his home. Tall and athletic with intense brown eyes, Mohamed crouched down to scoop up some stones that had come loose from the mosaic, dropping them into a plastic bag. When he began trading stolen antiquities, in 2003, he was hoping to make a better living under a dictatorship with few options for ambitious men with no ties to the ruling elite. Now he is a veteran of a trade that has exploded with the chaos of a brutal civil war, using the money to support his extended family living in Turkey as refugees. The work relies on secrecy — to avoid arrest and to hide the illicit origins of the artifacts, so they can adorn homes and galleries worldwide — so Mohamed asked to use only his first name. Four years into a conflict that has killed more than 200,000 and displaced millions, Syria’s immense history is being sold off on en masse as looters descend on ruins across the country. An untold number of people have joined Mohamed in a black market that helps to fund armed groups from ISIS to Western-backed rebels to the Syrian regime. Many of the newcomers have no interest other than making money, but Mohamed is enamored with the history of the ancient objects in which he trades. Known among his colleagues for having an expert eye, his phone buzzes endlessly as he receives photos via WhatsApp from sellers trying to catch his interest and fellow traders wanting advice. People ask him to come and “talk” with their artifacts. “Falso,” he says, his voice rising, when he sees a forgery. If he likes a piece, he calls it “fantastic.” The mosaic was looted from Apamea, a city in northwest Syria with vast ruins that are under rebel control. Mohamed bought it for \$21,000 from a dealer in Syria and hoped to sell it for \$30,000. He guessed the mosaic might change hands once or twice more from there — and that its final destination, like its original one in ancient times, would be a rich person’s villa. Wherever it ends up, the mosaic, still stuck to its elastic sheet, will be set again inside a wall or on a floor. Then the elastic will be peeled back, revealing the front of the mosaic once more, the colors much deeper than on the flip side that Mohamed showed me in the bedroom near the border. By this point, he will be a forgotten part of the mosaic’s long history. “I’m invisible,” he said. Over the course of a month, I traveled along Turkey’s 565-mile-long border with Syria to meet more than a dozen people involved in this illegal trade, from the grave robbers and excavators who steal the artifacts to the middlemen and dealers who sell them. They showed me photos and videos of items for sale and let me view in person three high-value objects, including the mosaic, that are normally kept hidden from anyone who isn’t part of this underground world. For the same reasons as Mohamed, all requested anonymity. Convinced that their artifacts were destined for Western buyers, these sources opened a window onto the extent of the looting and the guile and professionalism with which their trade is carried out. They also spoke to the desperation that fuels the pillage. “We have been living in a war for more than four years, and people will do anything to feed their kids,” said one middleman on the border, guilt-ridden over his role in bleeding Syria’s history. “I don’t care if the artifact is coming from [rebels] or from ISIS. I just want to sell it.” Mohamed, the dealer, was excited — there was a new item on the market that he badly wanted to see. It had fallen into the hands of a Turkish dealer higher up the food chain who often dealt in Syrian antiquities more expensive than Mohamed could afford. Mohamed was paying him a visit and invited me to join. We left Antakya early in the morning in a beat-up van, driving northeast through the mountains along the border until we reached the city of Gaziantep. The Turkish dealer — a gruff and stocky man in a pink polo shirt and jeans — then joined us in the van. He directed us to the outskirts of the city and beyond as his partner tailed us in a white sedan. The man didn’t seem to believe I was a journalist, but he was happy to have an American along for the ride. His best client, in fact, was an American, he said. He described the client as a man of about 50 who visited a few times a year with a translator. The last trip had been a few months before. “He is a really good guy,” the man said, “and he pays a lot of money.” He took on the tone of a salesman at Istanbul’s Grand Bazaar, claiming he’d never sell a fake to an American because it was against Islam. He said that the item we were headed to see was beautiful, and repeated one of the few English words he knew several times, “Guarantee.” He added, in Turkish, “I swear on Obama’s life.” We rolled for miles down a road with nothing but brown grass on either side, arriving finally at an isolated villa. The man and his partner led us inside. Mohamed sat on the floor of an airy den with windows that looked onto a mountainside. Then the man’s partner brought in a small bundle covered in a white sheet. Mohamed unwrapped it eagerly. “Slowly, slowly,” the partner said. Inside was a copper statue about 18 inches in height. It showed what appeared to be a deity from ancient Greece, with laurels in his hair and

winged sandals on his feet. Mohamed traced his finger over veins that ran down either arm. It was the kind of classical artifact that can be found in Syria and across the region, a remnant of a time long before today's borders were drawn. In this case, the Turkish man claimed it had been dug up illegally in Turkey, near the Aegean Sea. This blurring of boundaries can help traders say their objects came from any number of ancient sites outside Syria. Whatever the statue's origins, it was another item sucked up into a black market that grows with the unrest across the Middle East. One reason Syrian items sell so easily is that this global exchange predated the war; dealers with international connections have often simply folded the new Syrian artifacts into their businesses. The Turkish man said the price for the statue was \$250,000, a bargaining position he'd likely bring down significantly. Mohamed held the statue in his hands as if it were an infant, and then he brought it to his face, pressing his nose against its stomach and inhaling deeply. He was trying to sense the integrity of the patina — the green coating that comes from age — smelling for traces of paint that would tell him it was fake. Satisfied and glowing with a quiet intensity, he pulled a magnifying glass from his pocket and moved it over the statue inch by inch, his right eye pressed against the lens. The room was silent. Later, on the ride home, Mohamed said he thought the statue was authentic — and a "fantastic" find. He had in mind a buyer who lived in Turkey, he said, and if the price came down he could likely arrange a sale. I asked what would happen to the statue if it ended up in his buyer's hands. "Direct to Europe," he said. After four years of war, Mohamed said, Syria "will never be like it was before." There have been too many lives and too much history lost. "It's a different country now," he said. Wearing loafers and a button-down shirt, he had come to Istanbul to meet potential buyers, and we sat drinking coffee at a downtown brasserie. His Android phone suddenly erupted as a barrage of photos of artifacts arrived. Scrolling through the new images, he stopped on one that showed an Egyptian coin from the age of Ptolemy, between the first and second centuries A.D., that a contact had uncovered in Syria. It was corroded and nearly worthless, he said, but he seemed happy to have it saved on his phone. "It's history," he said. "And not everyone has the chance to learn the past." He daydreamed for a minute about finding a way to work legally with antiquities one day, maybe for a museum in Syria if democracy ever came, or even for a legitimate dealer in the West. "Maybe after everything — after everything — I will make this a real job," he said. He whistled at the idea, shaking his head.

Stage 5: Obtaining of Objects

Dealers purchase objects from other dealers

Stage 6: Assessment

Dealers assesses object in person to determine value/authenticity of object

Stage 7: Storage

Dealer store object(s) in on a short-term basis

Stage 8: Provenance

Dealer does not attempt to create false provenance

Stage 9: Potential Buyers

Dealer show illicit object(s) to potential buyers in person

Dealer show illicit object(s) to potential buyers via social media/electronic device

Stage 10: Purchase

Dealer sells object(s) to other international dealers

Dealer sells object(s) to other international dealers via social media/electronic device

Dealer sells object(s) to other international dealers in person

Appendix 8: Additional Syria Source Contributions

The Independent: *Syria Conflict: The illicit art trade that is a major source of income for today's terror group is nothing new*

<https://www.independent.co.uk/news/world/middle-east/syria-conflict-the-illicit-art-trade-that-is-a-major-source-of-income-for-todays-terror-groups-is-10204285.html>

The Guardian: *Looted in Syria – and sold in London: the British antiques shops dealing in artefacts smuggled by Isis*

<https://www.theguardian.com/world/2015/jul/03/antiquities-looted-by-isis-end-up-in-london-shops>

BBC Radio 4: *ISIS: LOOTING FOR TERROR*

http://news.bbc.co.uk/1/shared/bsp/hi/pdfs/17_02_15_fo4_lootingforterror.pdf

BBC: *The man who smuggles the loot that funds IS*

<https://www.bbc.co.uk/news/magazine-31485439>

Wall Street Journal: *Syrian 'Monuments Men' Race to Protect Antiquities as Looting Bankrolls Terror*

<https://www.wsj.com/articles/syrian-monuments-men-race-to-protect-antiquities-as-looting-bankrolls-terror-1423615241>

DW: *Germany attracts trade in looted artifacts*

<https://www.dw.com/en/germany-attracts-trade-in-looted-artifacts/a-18019083>

National Geographic: *ISIS Cashing in on Looted Antiquities to Fuel Iraq Insurgency*

<https://news.nationalgeographic.com/news/2014/06/140626-isis-insurgents-syria-iraq-looting-antiquities-archaeology/>

The Art Newspaper: *What Do We Really Know About the Islamic State's Role in Illicit Antiquities Trade?*

http://ukblueshield.org.uk/wp-content/uploads/2016/01/What-do-we-really-know-about-Islamic-State%E2%80%99s-role-in-illicit-antiquities-trade_.pdf

National Public Radio: *Looting Antiquities, A Fundamental Part Of ISIS' Revenue Stream*

<https://www.npr.org/2014/09/29/352538352/looting-antiquities-a-fundamental-part-of-isis-revenue-stream?t=1542656172441>

New York Times: *Looting Antiquities, A Fundamental Part Of ISIS' Revenue Stream*

<https://www.nytimes.com/2016/01/10/world/europe/iraq-syria-antiquities-islamic-state.html>

Pulitzer Center: *Stealing Syria's Past*

<https://pulitzercenter.org/reporting/stealing-syrias-past>

Al-Monitor: *Islamic State makes millions from stolen antiquities*

<https://www.al-monitor.com/pulse/security/2014/09/turkey-syria-iraq-isis-artifacts-smuggling.html>

Foreign Policy: *A How-To Guide To Buying Artifacts Looted by the Islamic State*

<https://foreignpolicy.com/2015/05/28/a-how-to-guide-to-buying-artifacts-looted-by-the-islamic-state/>

Al-Monitor: *Turkey major conduit for Syrian 'blood antiquities'*

<https://www.al-monitor.com/pulse/originals/2015/09/turkey-syria-cultural-heritage-turns-into-blood-antiquities.html>

The New Yorker: *The Real Value of the ISIS Antiquities Trade*

<https://www.newyorker.com/news/news-desk/the-real-value-of-the-isis-antiquities-trade>

Appendix 9: Antiquities Trafficking Networks Crime Script

Antiquities Trafficking Networks Crime Script			
Looting Phase	STAGES	Profit, Subsistence, Or Leisure	
	ENTRY	Access Site (Intentionally, unintentionally)	
	INSTRA.INIT. & ACTUA.	Search and Find Objects (Chance, Anticipated, Certain)	
	DOING	Loot Objects (Remove from location) (Overtly, Clandestinely)	
	POST- CONDITION & EXIT	Dispose of Object	
Transit Phase	STAGES	Smuggler	
	ENTRY	Obtains Object	
	INSTRA.INIT. & ACTUA.	Transit Decision	
	DOING	Smuggles/Transports object across border	
	POST- CONDITION & EXIT	Delivers OR sells object	
Market Phase	STAGES	Middleman	Broker
	ENTRY	Purchases Object	Purchases Illicit Antiquity
	INSTRA.INIT. & ACTUA.	Contacts Buyer	Research/ Assesses Object
	DOING	Sells Object to Buyer	Provenance Decision
	POST- CONDITION & EXIT		Sell Object

Appendix 10: Syria Crime Script

Syria Crime Script			
Looting		Subsistence or Profit Looter	
	Stage 1	Select Location	
	Stage 2	Acquire Tools/Labour	
	Stage 3	Access Site	
	Stage 4	Search & Find Objects	
	Stage 5	Loot Objects	
	Stage 6	Transport from Site	
	Stage 7	Dispose of Object	
Transit		Smuggler	
	Stage 8	Entry	
	Stage 9	Contact	
	Stage 10	Obtains Object	
	Stage 11	Prepares Object	
	Stage 12	Travels to Border	
	Stage 13	Smuggles over Border	
	Stage 14	Destination of Object	
	Stage 15	Obtains Profit	
Market		Middleman	Broker
	Stage 16	Notified of Object	Learns of Object
	Stage 17	Assesses Object	Assesses Object
	Stage 18	Purchases Object	Purchases Illicit Antiquity
	Stage 19	Finds Objects	Researches Object
	Stage 20	Meets with Buyer	Provenance Decision <ul style="list-style-type: none"> – Creates false provenance – Does not create false provenance
	Stage 21	Sells object to buyer	Arranges Buyer
	Stage 22	Delivers object to buyer	Sells Object <ul style="list-style-type: none"> – Private Dealer – Auction House – Museum – Dealer
	Stage 23	Obtains profit	

Appendix 11: Syria Search Dataset

1	Y	Looted in Syria – and sold in London: the British antiques shops ...	/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=0ahUKEwiL8uKur9bTAhWIDMAKHaiZQAQ4QFggnMAA&url=https%3A%2F%2Fwww.theguardian.com%2Fworld%2F2015%2Fjul%2F03%2Fantiquities-looted-by-isis-end-up-in-london-shops&usg=AFQjCNH4gWrWqmkDftoBU8oBNmvZjAS6g&sig2=BjLjIwOdDayIDoChSxZyrg
2	Y	ISIS' Looting Economy: Financial and Cultural Implications St ...	http://foreignaffairsreview.co.uk/2015/10/isis-looting-economy-financial-and-cultural-implications/
3	Y	ISIS and illicit trafficking in cultural property: Funding terrorism through ...	http://f3magazine.unicri.it/?p=1098
4	Y	Looters find path to export antiquities via Lebanon - Al-Monitor	http://www.al-monitor.com/pulse/security/2015/07/middle-east-smuggling-antiquities-lebanon.html
5	Y	Inside ISIS' looted antiquities trade - The Conversation	http://theconversation.com/inside-isis-looted-antiquities-trade-59287
6	Y	Syria conflict: The illicit art trade that is a major source of income for ...	http://www.independent.co.uk/news/world/middle-east/syria-conflict-the-illicit-art-trade-that-is-a-major-source-of-income-for-todays-terror-groups-is-10204285.html
7	Y	Almost 70% of smuggled objects seized in Syria and Lebanon are ...	http://theartnewspaper.com/news/almost-70-of-smuggled-objects-seized-in-syria-and-lebanon-are-fakes-antiquities-chief-says/
8	Y	UN Targets Illegal Trafficking of Antiquities - artnet News	https://news.artnet.com/art-world/un-bans-export-of-antiquities-to-target-islamic-state-revenue-255058
9	Y	ISIL and Antiquities Trafficking — FBI	https://www.fbi.gov/news/stories/isil-and-antiquities-trafficking
10	Y	Islamic State makes millions from stolen antiquities - Al-Monitor	http://www.al-monitor.com/pulse/security/2014/09/turkey-syria-iraq-isis-artifacts-smuggling.html
11	Y	Syrian 'Monuments Men' Race to Protect Antiquities as Looting ...	http://www.wsj.com/articles/syrian-monuments-men-race-to-protect-antiquities-as-looting-bankrolls-terror-1423615241
12	Y	The Greatest Threat to Cultural Heritage in Syria - Counterpunch	http://www.counterpunch.org/2014/12/26/the-greatest-threat-to-cultural-heritage-in-syria/
13	Y	ISIS, Blood Antiquities, and the International Black Market - Human ...	http://www.hscentre.org/policy-unit/isis-blood-antiquities-international-black-market/
14	Y	'Broken System' Allows ISIS to Profit From Looted Antiquities - The ...	https://www.nytimes.com/2016/01/10/world/europe/iraq-syria-antiquities-islamic-state.html
15	Y	ISIS Cashing in on Looted Antiquities to Fuel Iraq Insurgency	http://news.nationalgeographic.com/news/2014/06/140626-isis-insurgents-syria-iraq-looting-antiquities-archaeology/
16	Y	ISIS Is Making Millions From The Art Market. Here's How Congress ...	http://www.huffingtonpost.com/entry/islamic-state-smuggling-bill_us_56324969e4b0c66bae5b5c4d
17	Y	Looting Is the Greatest Threat to Our Cultural Heritage in Syria ...	https://www.foreignpolicyjournal.com/2014/12/29/looting-is-the-greatest-threat-to-our-cultural-heritage-in-syria/

18	Y	Instability in the Middle East Is Fueling an Illicit Antiquities Trade - Muftah	http://muftah.org/instability-in-the-middle-east-is-fueling-an-illicit-antiquities-trade/
19	Y	The Real Value of the ISIS Antiquities Trade - The New Yorker	http://www.newyorker.com/news/news-desk/the-real-value-of-the-isis-antiquities-trade
20	Y	This Is How Syrian Antiquities Are Being Smuggled And Sold ...	http://www.buzzfeed.com/mikegiglio/the-trade-in-stolen-syrian-artifacts
21	Y	Confronting 'Looting to Order' and 'Cultural Racketeering' in Syria	http://www.counterpunch.org/2015/10/02/confronting-looting-to-order-and-cultural-racketeering-in-syria/
22	Y	Legislators call for US Treasury sanctions against dealers of looted ...	https://www.rt.com/usa/245669-treasury-sanctions-syrian-artifacts/
23	Y	Trafficking in Antiquities The Cipher Brief	https://www.thecipherbrief.com/article/trafficking-antiquities
24	Y	Where Do ISIS-Looted Antiquities Go? - Motherboard	https://motherboard.vice.com/en_us/article/where-do-isis-looted-antiquities-go
25	Y	How Tomb Raiders Are Stealing Our History - National Geographic	http://www.nationalgeographic.com/magazine/2016/06/looting-ancient-blood-antiquities/
26	Y	Syrian rebels loot artifacts to raise money for fight against Assad - The ...	https://www.washingtonpost.com/world/middle_east/syrian-rebels-loot-artifacts-to-raise-money-for-fight-against-assad/2013/02/12/ae0cf01e-6ede-11e2-8b8d-e0b59a1b8e2a_story.html
27	Y	Antiquities, looted from Syria's Palmyra Museum, seized while for sale ...	https://conflictantiquities.wordpress.com/2015/11/29/syria-palmyra-museum-turkey-elazig-harput-refugee-subsistence-trafficking/
28	Y	Iraq/Syria: ISIL/ISIS fundraising by antiquities trafficking conflict ...	https://conflictantiquities.wordpress.com/2014/06/16/iraq-syria-isil-isis-antiquities-trafficking-fundraising/
29	Y	Syria/Lebanon: Syrian-Lebanese antiquities-for-arms trade conflict ...	https://conflictantiquities.wordpress.com/2013/05/12/syria-conflict-funding-lebanon-illicit-antiquities-trade/
30	Y	Turkey major conduit for Syrian 'blood antiquities' - Al-Monitor	http://www.al-monitor.com/pulse/originals/2015/09/turkey-syria-cultural-heritage-turns-into-blood-antiquities.html
31	Y	The antiquities looting crisis in the Middle East - Al Jazeera English	http://www.aljazeera.com/indepth/opinion/2016/03/antiquities-looting-crisis-middle-east-160310093409472.html
32	Y	The Greatest Threat to Cultural Heritage in Syria	http://mwcnews.net/focus/analysis/48722-cultural-heritage-in-syria.html
33	Y	Private collectors fuel demand for looted Mideast antiquities - Al-Monitor	http://www.al-monitor.com/pulse/originals/2016/04/syria-egypt-yemen-antiquities-smuggling-illegal-collectors.html
34	Y	policy Market of Mass Destruction	http://www.marketmassdestruction.com/tag/policy/
35	Y	Trafficking out of Syria Market of Mass Destruction	http://www.marketmassdestruction.com/trafficking-out-of-syria/
36	Y	Trafficking Culture History Today	http://www.historytoday.com/donna-yates/trafficking-culture
37	Y	ISIL Making Millions From Looted Antiquities The Huffington Post	http://www.huffingtonpost.co.uk/katy-gregory/isil-making-millions-from_b_7480792.html
38	Y	U.S. stopping black market trafficking in Syria ShareAmerica	https://share.america.gov/u-s-stopping-black-market-trafficking-in-syria/

39	Y	BBC - Culture - Islamic State and the 'blood antique' trade	http://www.bbc.com/culture/story/20150402-is-and-the-blood-antique-trade
40	Y	Was the plaque in Finland sold on the French market with an accurate ...	https://conflictantiquities.wordpress.com/2015/06/07/syria-finland-russia-iran-france-trafficking-policing-capacity/
41	Y	the 'first material proof' that Islamic State is trafficking antiquities ...	https://conflictantiquities.wordpress.com/2015/07/15/syria-iraq-islamic-state-conflict-antiquities-trafficking-forensic-evidence-mosul-museum/
42	Y	Just what is Isil looting in Syria? - The Art Newspaper	http://theartnewspaper.com/news/conservation/just-what-is-isil-looting-in-syria/
43	Y	How to buy antiquities - Financial Times	https://www.ft.com/content/d0784c78-50b0-11e5-b029-b9d50a74fd14
44	Y	Senate Votes to Ban Imports of Syrian Art and Antiquities - The New ...	https://www.nytimes.com/2016/04/14/world/middle-east/senate-votes-to-ban-imports-of-syrian-art-and-antiquities.html
45	Y	Syria's cultural heritage in danger: What can we do? - SAFE/Saving ...	http://savingantiquities.org/syriasculturalheritageindangerwhatcanwedo/
46	Y	United Nations News Centre - Security Council approves resolution ...	http://www.un.org/apps/news/story.asp?NewsID=50067
47	Y	Italian Mob Trades Weapons for Looted Art From ISIS in Libya	http://www.thedailybeast.com/articles/2016/10/18/italian-mob-trades-weapons-with-looted-art-from-isis-in-libya.html
48	Y	The Black-Market Battleground Foreign Policy	http://foreignpolicy.com/2014/10/17/the-black-market-battleground/
49	Y	West Seeks Tighter Curbs on Trade in Antiquities Looted by Islamic ...	http://www.wsj.com/articles/west-seeks-tighter-curbs-on-trade-in-looted-antiquities-1427761561
50	Y	Crime Doesn't Pay (as much as it used to) - FBI Cracks Down on Trade ...	http://www.artlawgallery.com/2015/09/articles/artists/crime-doesnt-pay-as-much-as-it-used-to-fbi-cracks-down-on-trade-of-looted-syrian-and-iraqi-cultural-artifacts/
51	Y	How much money has ISIS made selling antiquities? More than ...	https://www.washingtonpost.com/posteverything/wp/2016/06/03/how-much-money-has-isis-made-selling-antiquities-more-than-enough-to-fund-its-attacks/
52	Y	Culture Under Threat: the Fight to Save the Middle East's Antiquities ...	http://www.newsweek.com/syria-antiquities-trafficking-threat-isis-376338
53	Y	To Fight ISIS, Art Dealers & Archaeologists Join Forces - Creators	https://creators.vice.com/en_uk/article/art-dealers-archaeologists-join-fight-against-isis
54	Y	What do we really know about Islamic State's role in illicit antiquities ...	http://theartnewspaper.com/news/what-do-we-really-know-about-islamic-state-s-role-in-illicit-antiquities-trade/
55	Y	How can we stop ISIS and the trafficking of our cultural heritage ...	https://www.weforum.org/agenda/2015/08/isis-trafficking-cultural-heritage/
56	Y	ISIS' antiquities looting causing cultural destruction - Business Insider	http://www.businessinsider.com/isis-antiquities-destroyed-smuggling-2016-1
57	Y	Congress deals blow to IS looting in Syria - Al-Monitor	http://www.al-monitor.com/pulse/originals/2015/06/congress-illegal-isis-looting-syria-artifacts.html
58	Y	Can This New Law Stop ISIS Profiting from Looted Antiquities? - Artsy	https://www.artsy.net/article/artsy-editorial-can-this-new-law-stop-isis-profiting-from-looted-antiquities
59	Y	Artifact trafficking and the battle to stop it: 'It's open season' - Syria Direct	http://syriadirect.org/news/artifact-trafficking-and-the-battle-to-stop-it-its-open-season/

60	Y	Afghanistan's Looted Heritage and the Evolving Illicit Trade in Antiquities	http://www.theheritagist.com/2013/08/afghanistans-looted-heritage-and.html
61	Y	Islamic State Is Selling Looted Art Online for Needed Cash - Bloomberg	https://www.bloomberg.com/news/articles/2015-06-28/isis-has-new-cash-cow-art-loot-it-s-peddling-on-ebay-facebook
62	Y	New Documents Prove ISIS Heavily Involved in Antiquities Trafficking ...	https://gatesofnineveh.wordpress.com/2015/09/30/new-documents-prove-isis-heavily-involved-in-antiquities-trafficking/
63	Y	Stopping the trade in 'blood antiquities' - Ahram Weekly	http://weekly.ahram.org.eg/News/12330.aspx
64	Y	Mark Vlasic: Illicit trade in looted antiquities helps finance ISIS terror ...	http://news.nationalpost.com/full-comment/mark-vlasic-illicit-trade-in-looted-antiquities-helps-finance-isis-terror-network
65	Y	EU states urge action against ISIS trade in antiques – EURACTIV.com	http://www.euractiv.com/section/global-europe/news/eu-states-urge-action-against-isis-trade-in-antiques/
66	Y	The illegal antiquities trade funded the Iraqi insurgency. Now it's ...	https://www.washingtonpost.com/posteverything/wp/2015/03/09/how-shady-art-dealers-help-fund-the-islamic-states-violent-insurgency/
67	Y	Smugglers Thrive On Syria's Chaos, Looting Cultural Treasures - NPR	http://www.npr.org/sections/parallels/2014/05/27/316329859/smugglers-thrive-on-syrias-chaos-looting-cultural-treasures
68	Y	Gaziantep, Land of Antiquities and a Whole Lot More ~ ARCAblog	http://art-crime.blogspot.com/2015/04/gaziantep-land-of-antiquities-and-whole.html
69	Y	Fighting Cultural Cleansing: Harnessing the Law to Preserve Cultural ...	http://hir.harvard.edu/fighting-cultural-cleansing-harnessing-the-law-to-preserve-cultural-heritage/
70	Y	How Much Money is ISIS Making from Antiquities Looting? Gates of ...	https://gatesofnineveh.wordpress.com/2016/01/12/how-much-money-is-isis-making-from-antiquities-looting/
71	Y	UN unable to stop IS relic-smuggling from Iraq and Syria	http://www.middleeasteye.net/news/un-unable-stop-relic-smuggling-iraq-and-syria-2015625246
72	Y	Islamic State cultural racketeering: looting, smuggling, taxation of ...	https://conflictantiquities.wordpress.com/2014/09/03/iraq-syria-cultural-racketeering-looting-smuggling-taxation/
73	Y	ISIS and the missing treasures, the missing ... - Conflict Antiquities	https://conflictantiquities.wordpress.com/2016/04/28/iraq-syria-uk-islamic-state-antiquities-market-evidence-interpretation-explanation/
74	Y	The Mafia, Looted Antiquities, and the KGB Gates of Nineveh: An ...	https://gatesofnineveh.wordpress.com/2016/10/19/the-mafia-looted-antiquities-and-the-kgb/
75	Y	US-Syria Cultural Heritage Cooperation? - Counterpunch	http://www.counterpunch.org/2015/03/24/us-syria-cultural-heritage-cooperation/
76	Y	Syrian and international experts agree on emergency ... - Unite4Heritage	http://www.unite4heritage.org/en/news/syrian-and-international-experts-agree-on-emergency-measures-to-safeguard-syria-s-heritage
77	Y	Twenty Percent: ISIS “Khums” Tax on Archaeological Loot Fuels the ...	https://chasingaphrodite.com/2014/08/14/twenty-percent-isis-khums-tax-on-archaeological-loot-fuels-the-conflicts-in-syria-and-iraq/
78	Y	FBI Warns Against ISIS-Smuggled Antiquities - artnet News	https://news.artnet.com/market/fbi-isis-smuggled-antiquities-328732
79	Y	Opinion: How ISIS Funds Terror Through Black Market Antiquities Trade	https://news.usni.org/2014/10/27/isis-funds-terror-black-market-antiquities-trade
80	Y	Expert Panel Urges Passage of Bill Protecting Syrian Antiquities - AAAS	https://www.aaas.org/news/expert-panel-urges-passage-bill-protecting-syrian-antiquities

81	Y	Looting of heritage sites stealing history from Syria and Iraq The ...	http://www.thenational.ae/arts-lifestyle/the-review/stealing-from-history-the-looting-and-destruction-of-iraqi-and-syrian-heritage-concern-us-all
82	Y	Brussels Linked to Illicit Antiquities Trade which Funds Terrorism ...	https://theantiquitiescoalition.org/blog-posts/brussels-linked-to-illicit-antiquities-trade-which-funds-terrorism/
83	Y	Free Ports Bound to Cultural Property Trafficking Ties - SAFE/Saving ...	http://savingantiquities.org/free-ports-bound-cultural-property-trafficking-ties/
84	Y	The Islamic State Obtains Financing From The Illicit International ...	http://www.gjil.org/2015/12/the-islamic-state-obtains-financing.html
85	Y	House Homeland Security Committee Releases Report on ISIS ...	https://gatesofnineveh.wordpress.com/2016/10/14/house-homeland-security-committee-releases-report-on-isis-financing/
86	Y	Daesh and Its Looted Antiquities Trade Via Turkey Global Research ...	http://www.globalresearch.ca/daesh-and-its-looted-antiquities-trade-via-turkey/5517684
87	Y	Metropolitan Museum Event: Conflict Antiquities, Panel 1	https://committeeforculturalpolicy.org/metropolitan-museum-event-conflict-antiquities-panel-1/
88	Y	#CultureUnderThreat Task Force Unveils Recommendations to ...	http://www.mei.edu/content/cultureunderthreat-task-force-unveils-recommendations-combat-antiquities-trafficking
89	Y	bellingcat - Smuggled Antiquities Fund ISIL's Campaigns - bellingcat	https://www.bellingcat.com/news/mena/2014/12/06/smuggled-antiquities-fund-isils-campaigns/
90	Y	How the West buys 'conflict antiquities' from Iraq and Syria (and funds ...	http://blogs.reuters.com/great-debate/2014/10/27/how-the-west-buys-conflict-antiquities-from-iraq-and-syria-and-funds-terror/
91	Y	Inside ISIS's Looted Antiquities Trade - The Wire	https://thewire.in/41557/inside-isis-looted-antiquities-trade/
92	Y	Conflict antiquities from Apamea do not finance the Islamic State ...	https://conflictantiquities.wordpress.com/2015/03/18/syria-apamea-ebay-islamic-state-assad-regime/
93	Y	Reassessing the balance of antiquities and forgeries in Abu Sayyaf's ...	https://conflictantiquities.wordpress.com/2015/07/17/syria-iraq-islamic-state-conflict-antiquities-trafficking-coin-count-imagej-analysis/
94	Y	Syrian rebels loot artifacts to raise money for fight against Assad ...	http://www.cultureindevelopment.nl/Culture_in_Development/News/Common_News/1752/_Syrian_rebels_loot_artifacts_to_raise_money_for_fight_against_Assad
95	Y	How ISIS Is Making A Fortune On The Black Market For Ancient Artifacts	https://thinkprogress.org/how-isis-is-making-a-fortune-on-the-black-market-for-ancient-artifacts-4d9168805ef7
96	Y	Cultural Heritage Lawyer Rick St. Hilaire: Russian Ambassador's Short ...	http://culturalheritagelawyer.blogspot.com/2016/04/russian-ambassadors-short-letter-makes.html
97	Y	Stop the destruction', UN officials urge in plea to save Syria's cultural	http://www.un.org/apps/news/story.asp?NewsID=47340
98	Y	UN Security Council Takes Aim at ISIS Antiquities Trafficking	http://hyperallergic.com/183201/un-security-council-takes-aim-at-isis-antiquities-trafficking/
99	Y	Palmyra: looting under the rebels, the Assad ... - Conflict Antiquities	https://conflictantiquities.wordpress.com/2015/07/03/palmyra-looting-rebels-regime-islamic-state-propaganda/
100	Y	IS looting provokes call for global response - BBC News	http://www.bbc.co.uk/news/magazine-32329681
101	Y	Russian Intelligence report on Daesh's smuggling of antiquities	http://www.voltairenet.org/article191880.html

102	Y	Expert recommendations - Fighting the looting of Syria's cultural ...	http://www.niku.no/en/international/conferences/Expert+recommendations+-+Fighting+the+looting+of+Syria%C2%B4s+cultural+heritage.9UFRDWZF.ips
103	Y	Digital map seeks to document 'trail of destruction' of Mideast antiquities	http://www.al-monitor.com/pulse/originals/2016/06/egypt-cultural-heritage-destruction-antiquities-digital-map.html
104	Y	Why don't dealers in London keep records as detailed as traffickers in ...	https://conflictantiquities.wordpress.com/2015/07/16/iraq-syria-islamic-state-conflict-antiquities-trafficking-forgery/
105	Y	illicit antiquities trading in Nigeria: boutique smuggling, cultural ...	https://conflictantiquities.wordpress.com/2013/10/23/nigeria-illicit-antiquities-trade-cultural-racketeering/
106	Y	Germany attracts trade in looted artifacts Culture DW.COM 24.10 ...	http://www.dw.com/en/germany-attracts-trade-in-looted-artifacts/a-18019083
107	Y	Turkey's Gaziantep is main ISIS trade hub of antiques hauled in Syria ...	https://www.rt.com/news/338705-turkey-syria-artifacts-trade-churkin/
108	Y	Where culture meets terrorism: art and the ongoing fight to save history ...	http://www.huffingtonpost.com/mark-v-vlasic/where-culture-meets-terro_b_9935542.html
109	Y	A new agenda for U.S. cultural policy: Stopping the trade of looted ...	https://medium.com/uchicago/a-new-agenda-for-u-s-cultural-policy-stopping-the-trade-of-looted-artifacts-35d3ef9fea33
110	Y	Protecting Cultural Heritage, One Act at a Time HuffPost	http://www.huffingtonpost.com/deborah-lehr/protecting-cultural-herit_b_9889182.html
111	Y	Monumental Fight: Countering the Islamic State's Antiquities Trafficking	http://www.defenddemocracy.org/media-hit/yaya-j-fanusie-monumental-fight-countering-the-islamic-states-antiquities-trafficking/
	Y	The Antiquities Coalition Site	https://theantiquitiescoalition.org/
113	Y	The blood antiquities funding ISIL - Al Jazeera English	http://www.aljazeera.com/indepth/opinion/2014/11/blood-antiquities-funding-isil-2014119113948461658.html
114	Y	BBC - Culture - Art looting and smuggling: A deadly business	/url?sa=t&rct=j&q=&esrc=s&source=web&cd=201&cad=rja&uact=8&ved=0ahUKEwirmfJr9bTAhVFBMAKHc18D-44yAEQFggmMAA&url=http%3A%2F%2Fwww.bbc.co.uk%2Fculture%2Fstory%2F20140415-arts-most-deadly-deal-making&usg=AFQjCNHDxBltYee4zqWTFJR5mkVL7hQ07Q&sig2=DGIFCaqFQWPfK9d2zk122w
115	Y	Congress Deals Blow to Islamic State Group Looting in Syria US News	https://www.usnews.com/news/articles/2015/06/02/congress-deals-blow-to-islamic-state-group-looting-in-syria?int=news-rec
116	Y	Looting and Trafficking of Antiquities in the Middle East Wilson Center	https://www.wilsoncenter.org/event/looting-and-trafficking-antiquities-the-middle-east
117	Y	Why are many countries in Africa vulnerable to looting, and how can ...	https://conflictantiquities.wordpress.com/2012/03/24/africa-illicit-antiquities-trade-problems-solutions/
118	Y	Column: Why should we care about saving Syria's antiquities?	http://www.troyrecord.com/article/TR/20131216/NEWS/131219553
119	Y	United Nations Ban on Trade in Syrian Antiquities Urged by Scholars	http://www.newsweek.com/united-nations-ban-trade-syrian-antiquities-urged-scholars-273711

120	Y	The Looting of Syria's Archaeological Treasures - The Atlantic	https://www.theatlantic.com/photo/2016/02/the-looting-of-syrias-archaeological-treasures/459996/
121	Y	Governments Address Antiquities Smuggling - artnet News	https://news.artnet.com/art-world/increase-in-antiquities-smuggling-busts-amidst-government-crackdown-235536
122	Y	ISIS looted Syrian ancient artifacts make it to black market in US and ...	http://www.cbsnews.com/news/isis-looted-syrian-ancient-artifacts-black-market-us-and-europe/
123	Y	State arms-for-antiquities trafficking between Turkey and Syria ...	https://conflictantiquities.wordpress.com/2015/02/27/turkey-state-crime-arms-for-antiquities-trafficking-syria/
124	Y	Looted in Syria – and Sold in London: The British Antiques Shops ...	http://www.iraqicivilsociety.org/archives/4437
125	Y	The Race to Save Syria's Archaeological Treasures History ...	http://www.smithsonianmag.com/history/race-save-syrias-archaeological-treasures-180958097/
126	Y	Looting? \$283 Million Flow of Artifacts to US Revealed - Live Science	http://www.livescience.com/56141-looting-artifacts-from-syria-to-us.html
127	Y	Khums: an un-Islamic tax for an Islamic antiquities market? conflict ...	https://conflictantiquities.wordpress.com/2014/08/17/syria-iraq-islamic-antiquities-trafficking-tax/
128	Y	In Iraq, Syria, Battling to Preserve Cultural Heritage Under Siege	http://www.voanews.com/a/2663070.html
129	Y	Cultural Racketeering and Why it Matters: Robbing the World of ...	http://www.huffingtonpost.com/deborah-lehr/cultural-racketeering-and_b_4025586.html
130	Y	How ISIS created a terrorist art market Fox News	http://www.foxnews.com/science/2015/04/16/isis-terrorist-art-market.html
131	Y	The Art World Fights the Islamic State's Stolen Antiquities Industry ...	http://isnblog.ethz.ch/culture/the-art-world-fights-the-islamic-states-stolen-antiquities-industry
132	Y	The Problem of Organized Crime IllicitAntiquities.com	http://www.illicitantiquities.com/prevention/organized-crime/
133	Y	Learning from Iraq: Illicit Antiquities Trade and the Syrian Conflict ...	http://newswire.kulmun.be/practice_edition/learning-iraq-illicit-antiquities-trade-conflict-syrian-conflict/
134	Y	Antiquities market on alert for looted Syrian spoils - ARCHAEOLOGY	http://www.hurriyetaidailynews.com/antiquities-market-on-alert-for-looted-syrian-spoils-.aspx?pageID=238&nID=81180&NewsCatID=375
135	Y	An affront to humanity: Syria's cultural heritage under fire The McGill ...	http://mcgilltribune.com/an-affront-to-humanity-syria-isis/
136	Y	looting, the subsistence digging economy in Mali ... - Conflict Antiquities	https://conflictantiquities.wordpress.com/2012/04/03/mali-looting-export-usa-import/
137	Y	Heritage Crisis in Syria: a call for a moratorium on the antiquities trade ...	http://savingantiquities.org/heritage-crisis-syria-call-temporary-moratorium-trade/
138	Y	looting – Ancient Art	https://ancientart.as.ua.edu/tag/looting/
139	Y	Isil antiques 'sold to western collectors' warns French finance minister ...	http://www.telegraph.co.uk/news/worldnews/europe/france/12034421/Isil-antiques-sold-to-western-collectors-warns-French-finance-minister.html
140	Y	The Link Between the Islamic State and the Western Art Trade ...	http://freebeacon.com/culture/the-link-between-the-islamic-state-and-the-western-art-trade/
141	Y	Jihadi black market: ISIS smuggles 'blood artifacts' out of Syria to ...	https://www.rt.com/viral/340731-jihadi-isis-syria-artifacts/
142	Y	Islamic State sells 'blood antiquities' from Iraq and Syria to raise money	https://www.washingtonpost.com/opinions/islamic-state-sells-blood-antiquities-from-iraq-and-syria-to-raise-money/2014/09/14/49663c98-3a7e-11e4-9c9f-ebb47272e40e_story.html

143	Y	the antiquities trade in Nigeria: looting in the midst of economic ...	https://conflictantiquities.wordpress.com/2012/10/24/nigeria-antiquities-trade-crisis/
144	Y	Smugglers Thrive On Syria's Chaos, Looting Cultural Treasures ...	http://digital.vpr.net/post/smugglers-thrive-syrias-choas-looting-cultural-treasures
145	Y	Cultural Heritage Lawyer Rick St. Hilaire: "Antiques" from Syria: U.S. ...	http://culturalheritagelawyer.blogspot.com/2015/12/antiques-from-syria-us-cultural.html
146	Y	Bulgaria busts international antiquities trafficking ring The Sofia Globe	http://sofiaglobe.com/2015/01/30/bulgaria-busts-international-antiquities-trafficking-ring/
147	Y	Looted Art Helps Fund Jihadists in Europe - WSJ	http://www.wsj.com/articles/looted-art-helps-fund-jihadists-in-europe-1472164857
148	Y	Is there significant evidence of paramilitary funding from the illicit ...	https://conflictantiquities.wordpress.com/2014/06/21/illicit-antiquities-trade-paramilitary-funding-evidence/
149	Y	Where's the corporate responsibility for blood antiquities? OECD ...	http://oecdinsights.org/2016/05/09/wheres-the-corporate-responsibility-for-blood-antiquities/
150	Y	Interpol steps up search for ancient artifacts stolen in Syria, Iraq Fox ...	http://www.foxnews.com/world/2015/04/28/interpol-steps-up-search-for-ancient-artifacts-stolen-in-syria-iraq.html
151	Y	The Long Walk to Protect Syrian Artifacts SyriaUntold حكاية ما انحككت	http://www.syriauntold.com/en/2016/11/protect-syrian-artifacts-dr-ali-cheikhmous/
152	Y	FBI Warns Art Dealers About Islamic State-Stolen Antiquities From ...	http://www.ibtimes.com/isis-artifacts-trafficking-fbi-warns-art-dealers-about-islamic-state-stolen-2073205
153	Y	Conflict and the Heritage Trade: Rise in U.S. Imports of Middle East ...	http://culturalheritagelawyer.blogspot.com/2014/10/conflict-and-heritage-trade-rise-in-us.html
154	Y	Culture Under Threat: Fighting Terrorist Financing in the Middle East ...	http://www.mei.edu/content/at/culture-under-threat-fighting-terrorist-financing-middle-east
155	Y	The New Frontier of Cultural Property Protections: When Acquiring ...	https://itsartlaw.com/2015/09/02/ata-offers-cultural-property-protection/
156	Y	Syria's Aleppo: Civil War Has Destroyed What Was Once The Cultural ...	http://www.mintpressnews.com/syrias-aleppo-civil-war-destroyed-cultural-jewel-middle-east/175739/
157	Y	Tomb Raiding Is a Growing Problem in the Middle East - Vice	https://www.vice.com/en_us/article/egypts-tomb-raiders
158	Y	Islamic State doesn't destroy all antiquities -- it saves some to sell on ...	http://www.latimes.com/world/middleeast/la-fg-islamic-state-ancient-temple-20150824-story.html
159	Y	How much money is ISIS actually making from looted art? - Big Story AP	http://bigstory.ap.org/article/120ce5a7ee9047f59c22e91c860ad3c9/how-much-money-isis-actually-making-looted-art
160	Y	Looted in Syria – and sold in London: the British antiques shops ...	https://medmakblog.wordpress.com/2015/07/06/looted-in-syria-and-sold-in-london-the-british-antiques-shops-dealing-in-artefacts-smuggled-by-isis/
161	Y	Escalating the War on Looting - The New York Times	https://www.nytimes.com/2016/03/12/arts/international/escalating-the-war-on-looting.html
162	Y	German Media Corroborates \$36M Islamic State Antiquities Trafficking	https://hyperallergic.com/165537/german-media-corroborates-36m-islamic-state-antiquities-trafficking/
163	Y	Syria: Hundreds of Archaeological Sites Ruined and Looted	http://syrianobserver.com/EN/Features/28828/Syria_Hundreds_Archaeological_Sites_Ruined_Looted
164	Y	Stealing Syria's Past Pulitzer Center	http://pulitzercenter.org/reporting/stealing-syrias-past

165	Y	Danti's Inference: The Known Unknowns Of ISIS and Antiquities Looting	https://chasingaphrodite.com/2014/11/18/dantis-inference-the-known-unknowns-of-isis-and-antiquities-looting/
166	Y	The Mummy returns: How Egypt is waging war against the smugglers	http://www.middleeasteye.net/in-depth/features/treasure-hunt-egyptian-authorities-retrieve-stolen-antiquities-battle-against
167	Y	Human Trafficking Route Looks Like Antiquities ... - Paul Barford Blog	http://paul-barford.blogspot.com/2015/08/human-trafficking-route-looks-like.html
168	Y	Inside ISIS' looted antiquities trade – The GeoStrategists	http://geostrategists.com/inside-isis-looted-antiquities-trade/
169	Y	Syrian agency fights to save country's archaeological heritage - News ...	https://www.stripes.com/news/syrian-agency-fights-to-save-country-s-archaeological-heritage-1.409413
170	Y	How two artists in Texas are fighting black market sale of Syria's ...	http://www.middleeasteye.net/in-depth/features/saving-syrias-antiquities-two-texans-elevate-value-syrian-culture-2094478411
171	Y	How We Can Prevent ISIS From Pillaging Palmyra - Newsweek	http://www.newsweek.com/how-we-can-prevent-isis-pillaging-palmyra-342348
172	Y	Cultural Heritage Center for Art Law	https://itsartlaw.com/category/cultural-heritage/
173	Y	US government sues for 4 Syrian artifacts it says ISIS trafficked ...	http://www.businessinsider.com/r-us-sues-to-recover-ancient-syrian-artifacts-looted-by-islamic-state-2016-12
174	Y	Stolen artifacts, ISIS money and a New Orleanian on the case NOLA ...	http://www.nola.com/crime/index.ssf/2015/10/stolen_artifacts_isis_money_and_a_new_orleanian_on_the_case.html
175	Y	FBI Warns of ISIS-Looted Artifacts Hitting the US Market - Hyperallergic	https://hyperallergic.com/232531/fbi-warns-of-isis-looted-artifacts-hitting-the-us-market/
176	Y	Save Statues, Save Lives Foreign Policy	http://foreignpolicy.com/2015/06/02/save-statues-save-lives-isis-palmyra-antiquities-syria-iraq-trafficking/
177	Y	The Billion-Dollar Caliphate Foreign Policy	http://foreignpolicy.com/2015/12/15/the-billion-dollar-caliphate/
178	Y	Syrian Antiquities Trade on BBC Radio Four - Paul Barford Blog	http://paul-barford.blogspot.com/2015/02/syrian-antiquities-trade-on-bbc-radio.html
179	Y	Lebanon as Corridor for Smuggling Syrian Antiquities	http://paul-barford.blogspot.com/2015/08/lebanon-as-corridor-for-smuggling.html
180	Y	Human Rights Day Highlights Scientific Contributions to Prevent ...	https://www.aaas.org/news/human-rights-day-highlights-scientific-contributions-prevent-cultural-heritage-destruction
181	Y	Using Social Media to Predict When Precious Antiquities Are ... - Slate	http://www.slate.com/blogs/future_tense/2016/01/26/using_social_media_to_predict_when_isis_and_other_groups_threaten_antiquities.html
182	Y	U.S. sues to recover ancient Syrian artifacts looted by Islamic State ...	http://www.reuters.com/article/us-usa-antiquities-idUSKBN14422I
183	Y	Iran and Russia Join the Global Alliance to Preserve Syria's ...	http://www.counterpunch.org/2016/04/13/iran-and-russia-join-the-global-alliance-to-preserve-syrias-endangered-heritage/
184	Y	Meet the lonely online warriors leading the fight against looted art	http://fusion.net/meet-the-lonely-online-warriors-leading-the-fight-again-1793853131
185	Y	The Destruction of Art and Antiquities: Acts of Terrorism - Medium	https://medium.com/homeland-security/the-destruction-of-art-and-antiquities-acts-of-terrorism-135b70152a84

186	Y	How ISIS Pillages, Traffics And Sells Ancient Artifacts On Global Black ...	http://www.ibtimes.com/how-isis-pillages-traffics-sells-ancient-artifacts-global-black-market-1605044
187	Y	Blood Artifacts: How ISIS Profits from Trafficking Antiquities The ...	http://www.huffingtonpost.com/ronald-tiersky/blood-artifacts-isis_b_8204590.html
188	Y	Syria official warns of trafficking in antiquities - Al Arabiya	http://english.alarabiya.net/articles/2013/02/13/266076.html
189	Y	ISIS and the corrupt art trade: We know cultural crimes fund terrorism ...	http://www.salon.com/2015/04/12/isis_and_the_corrupt_art_trade_we_know_cultural_crimes_fund_terrorism_now_what/
190	Y	What Central Africa's War on Poaching Can Teach Us About Fighting ...	https://hyperallergic.com/303561/what-central-africas-war-on-poaching-can-teach-us-about-fighting-the-plunder-of-antiquities/
191	Y	Newspaper: ISIS Trading Antiquities For Russian Weapons From Mafia	http://thefederalist.com/2016/10/24/italian-newspaper-isis-trading-antiquities-russian-weapons-mafia/
192	Y	Portable Antiquity Collecting and Heritage Issues: Syrian Artefacts in ...	http://paul-barford.blogspot.com/2016/04/syrian-artefacts-in-london.html
193	Y	How Terrorists Tap a Black Market Fueled by Stolen Antiquities - NBC ...	http://www.nbcnews.com/storyline/iraq-turmoil/how-terrorists-tap-black-market-fueled-stolen-antiquities-n137016
194	Y	Politics, Power, and Preventive Action Guest Post: Preventing Cultural ...	http://blogs.cfr.org/zenko/2015/03/06/guest-post-preventing-cultural-destruction-by-isis/
195	Y	Was most of the looting at the most extensively looted site in Syria ...	https://conflictantiquities.wordpress.com/2015/03/12/syria-islamic-state-free-syrian-army-paramilitary-funding-dura-europos/
196	Y	Artifacts destroyed by Islamic State were not fakes, says ... - NRT English	http://www.nrttv.com/EN/Details.aspx?Jimare=2591
197	Y	Isis: People trafficking, smuggling and punitive taxes boost Islamic ...	http://www.ibtimes.co.uk/isis-people-trafficking-smuggling-punitive-taxes-boost-islamic-state-economy-1506473
198	Y	A How-To Guide To Buying Artifacts Looted by the Islamic State ...	http://foreignpolicy.com/2015/05/28/a-how-to-guide-to-buying-artifacts-looted-by-the-islamic-state/
199	Y	Bulgaria Is Transit Country for Trafficking in Cultural Goods from Syria ...	http://www.novinite.com/articles/170858/Bulgaria+Is+Transit+Country+for+Trafficking+in+Cultural+Goods+from+Syria+-+Minister
200	Y	Call for UK to take tougher action to save antiquities from Isis The ...	http://www.independent.co.uk/news/science/archaeology/call-for-uk-to-take-tougher-action-to-save-antiquities-from-isis-10039793.html
201	Y	Were these 'Palmyrene statues' recently ... - Conflict Antiquities	https://conflictantiquities.wordpress.com/2016/04/13/syria-palmyra-raqa-islamic-state-isis-isil-auction-evidence/
202	Y	Inside ISIS' looted antiquities trade – HeritageDaily – Heritage ...	http://www.heritagedaily.com/2016/06/inside-isis-looted-antiquities-trade/111614
203	Y	Syrian official warns of trafficking in antiquities, urges UN to protect ...	http://www.foxnews.com/world/2013/02/13/syrian-official-warns-trafficking-in-antiquities-urges-un-to-protect-country-2020103208.html
204	Y	Culture Under Threat: the Fight to Save the Middle East's Antiquities ...	https://theantiquitiescoalition.org/ac-news/culture-under-threat-the-fight-to-save-the-middle-east-s-antiquities-from-terrorism/
205	Y	Emergency Red List of Syrian Cultural Objects at Risk Released	http://hyperallergic.com/86201/emergency-red-list-of-syrian-cultural-objects-at-risk-released/

206	Y	Gates of Nineveh: An Experiment in Blogging Assyriology Page 3	https://gatesofnineveh.wordpress.com/page/3/
207	Y	Looting Antiquities, A Fundamental Part Of ISIS' Revenue Stream : NPR	http://www.npr.org/2014/09/29/352538352/looting-antiquities-a-fundamental-part-of-isis-revenue-stream
208	Y	conflict antiquities, from Libya to Italy and from Syria to Belgium, and ...	https://conflictantiquities.wordpress.com/2016/10/31/conflict-antiquities-libya-italy-syria-belgium-due-diligence/
209	Y	How to beat Islamic State? Crack down on cigarette smuggling ...	https://www.theguardian.com/commentisfree/2015/nov/27/isis-cigarette-smuggling-isis-middle-east
210	Y	Islamic State Committing 'Cultural Genocide' Selling Antiques - Breitbart	http://www.breitbart.com/national-security/2016/04/20/islamic-state-committing-cultural-genocide-selling-priceless-antiques-westerners/
211	Y	How Does ISIS Fund Its Reign of Terror? - Newsweek	http://www.newsweek.com/2014/11/14/how-does-isis-fund-its-reign-terror-282607.html
212	Y	Bulgarian Antiquities Bust in news Again - Not ISIL Loot	http://paul-barford.blogspot.com/2015/08/bulgarian-antiquities-bust-in-news.html
213	Y	Syria CHASING APHRODITE	https://chasingaphrodite.com/tag/syria/
214	Y	Syria's Historical Artifacts Aren't Just Being Destroyed By ISIS, They're ...	http://www.huffingtonpost.co.uk/2015/03/13/isis-artifacts-looting_n_6857550.html
215	Y	Syria's archaeological heritage falls prey to war - Al Arabiya	https://english.alarabiya.net/articles/2012/09/24/239894.html
216	Y	Amr Al-Azm CHASING APHRODITE	https://chasingaphrodite.com/tag/amr-al-azm/
217	Y	To defeat ISIS, study the antiquity trade: ex-CIA-commentary	http://www.cnn.com/2016/01/25/to-defeat-isis-study-the-antiquity-trade-ex-cia-commentary.html
218	Y	Inside ISIS' looted antiquities trade - The Archaeology News Network	https://archaeologynewsnetwork.blogspot.com/2016/06/inside-isis-looted-antiquities-trade.html
219	Y	Syrian Conflict Antiquities Coming onto the European Market	http://paul-barford.blogspot.com/2013/09/syrian-conflict-antiquities-coming.html
220	Y	Canada's Royal Ontario Museum Has Ties To Alleged Antiquities ...	https://chasingaphrodite.com/2012/10/23/canadas-royal-ontario-museum-has-ties-to-alleged-antiquities-trafficker-subhash-kapoor/
221	Y	A Bridge Too Far – Using IS to End the Trade in Art	https://committeeforculturalpolicy.org/a-bridge-too-far-using-is-to-end-the-trade-in-art/
222	Y	Does Timbuktu have lessons for Palmyra: ISIS and the long arm of ...	https://www.weforum.org/agenda/2015/10/why-we-need-to-bring-the-perpetrators-of-cultural-destruction-to-justice/
223	Y	Almost 70% of smuggled objects seized in Syria and Lebanon are ...	http://theartnewspaper.com/news/archeology/almost-70-of-smuggled-objects-seized-in-syria-and-lebanon-are-fakes-antiquities-chief-says/
224	Y	Geneva authorities report the confiscation of 9 artifacts from Palmyra ...	http://art-crime.blogspot.com/2016/12/geneva-authorities-report-confiscation.html
225	Y	The men who smuggle the loot that funds IS - BBC News	http://www.bbc.co.uk/news/magazine-31485439
226	Y	It's Not Too Late to Save Syria's Cultural Heritage- Al Manar TV ...	http://archive.almanar.com.lb/english/article.php?id=175514