

Studying Irregular Migration through Crime Science

Insights into Smuggling and Trafficking on the Central
Mediterranean Route to Europe

Alexandre Georges Bish

A thesis submitted in partial fulfilment of the requirements for the degree of

Doctor of Philosophy

Department of Security and Crime Science

University College London

Declaration page

I, Alexandre Bish, confirm that the work presented in my thesis is my own. Where information has been derived from other sources, I confirm that this has been indicated in the thesis.

Abstract

In this thesis, I investigate irregular migration, smuggling, and related harms involving exploitation and detention on the Central Mediterranean Route, using a crime science approach. The thesis is divided into three main analytical components. First, I deconstruct 71 migration journeys into a directed weighted graph based on interviews with migrants arriving in Malta from Libya. Through scripting, 81 typical activities associated with migration were identified. Each journey was unique, and many were complex and long, involving different sequences of activities and lasting on average 18 months. Two thirds of participants worked during their journeys, another two thirds were detained before Malta, and a quarter were subjected to forced labour.

Second, I analyse the graphed migration system by developing algorithms to identify repeated cycles of activities across participants. Of the 81 activities identified, 70% were repeated by the same participants. For example, the activity ‘wait in detention’ was repeated on 18 journeys, on average three times. A total of 174 distinct cycles of activities were found, 22 of which were shared across several participants, including activity sequences linking anti-smuggling efforts with detention and forced labour. Significantly, identified patterns highlight how migrants can get stuck in cycles of im/mobility on their journeys.

Third, I apply a situational lens to analyse harms linked to detention and forced labour. The results demonstrate new transitions and blurred categories between smuggling and trafficking. Sometimes, the presence of agency in trafficking journeys contrasted with its absence in smuggling journeys.

My findings underscore the urgent need for a reassessment of border control policies and detention practices, emphasising humane treatment, independent oversight, and adherence to

international law. Addressing the systemic issues of repeated cycles of harm requires a multi-faceted approach that prioritises protection and support for vulnerable populations, while also considering the broader ethical implications and potential unintended consequences of interventions.

Impact statement

In this research, I have shed light on the activities that comprise smuggler-facilitated journeys on the CMR, the details of which have mostly remained invisible until now. I have highlighted how cycles of repeated activities were common patterns experienced by 75% of participants and how anti-smuggling and anti-migration interventions could reroute and delay irregular migration and create harms to people travelling. This finding raises questions about both the effectiveness and ethical viability of anti-migration and anti-smuggling interventions. My research highlights the need for policy reforms and research that considers and addresses the real outcomes of interventions rather than their proposed goals.

My findings as to the complexity of journeys also challenges the adequacy of existing frameworks for measuring both harms and movements, which have mostly narrowly focussed on the Sahara Desert and the Mediterranean Sea. New metrics should seek to capture movements that have mostly remained clandestine within and beyond these areas. My findings suggest that temporary recorded declines in migrant arrivals in Europe cannot be interpreted as lasting decreases: many migrants travel in cyclical patterns of mobility within countries of transit and policy changes may lead to abrupt surges in migration. This is especially true when EU migration containment strategies are outsourced and externalised, thus relying on political stability and cooperation in transit countries. This risk is exemplified in Niger, where the new government, which took power after a coup in November 2023, removed legislation criminalising northbound migration to Libya after it had been banned for eight years.

Given that harms can take place at any stage of the migration journey, detecting them can be difficult and many likely go unreported. When assessing exploitation-related harms, it was challenging to determine when they could be classified as trafficking. This difficulty often arose because the notion of 'purpose of exploitation'—one of three criteria in international law

(along with the 'act' and 'means') to qualify an experience as trafficking—is not clearly defined. When legal thresholds for trafficking are met, states have obligations to migrants in terms of the provision of protection and support services. Given the complexity in determining migration experiences as smuggling or trafficking, I argue that protection services should be based on hardships endured rather than binary legal definitions or initial motivations for migration.

Crime science offered useful tools to analyse irregular migration and related harms. Scripting allowed me to make sense of 71 migration narratives (totalling around 150 000 words), stripping them down to essential component migration-related activities and visualising them. Constructing journeys into a directed weighted graph created opportunities that would be inaccessible with other methods (e.g. surveys or ethnographic research), such as analysing common sequences of activities (e.g. cycles of pathways into harm) or analysing temporal and spatial patterns. I found limitations in suggesting situational crime prevention (SCP) interventions due to ethical concerns and the unpredictable nature of displacement effects, which could potentially harm migrants and prove ineffective. Future research should further explore the applicability of SCP to harms related to irregular migration.

Covid-19 Impact

The COVID-19 pandemic prohibited some aspects of the initial PhD plan from being completed. The methodology initially envisaged was modified to remove any fieldwork both because of the COVID-19 pandemic and the inability to obtain ethical approval from a university in Niger to conduct fieldwork there, as required by UCL's Research Ethics Committee after a prolonged ethics application that lasted two years. I eventually conducted fieldwork in Niger and Nigeria, for work with GITOC, but ethical clearance was not granted by UCL for PhD data collection there. As a result, I changed the research focus to rely solely on secondary data obtained from GITOC, which consisted of transcripts of interviews with migrants in Malta. Ethical approval for the research was received on 26 April 2022 see Appendix 1: Ethics certificate). An EPSRC funding extension of five months was granted to accommodate for the change in research focus.

Most of the research for this thesis was completed part-time while I was a researcher for the Global Initiative against Transnational Organized Crime (GITOC), an independent civil-society organisation. I was then an independent researcher and founder of two companies that engage in research, Empirika (peace and security) and MyRA (technology). I was also a visiting scholar at the Yale School of Public Health and a visiting researcher at the Migration Observatory (COMPAS) at the University of Oxford. I also partook in the Université Paris Sciences et Lettres (PSL) – UCL partnership project 'Trafficking and Organised Crime Networks: A Complex Systems Approach'.

During this period, I published seven long form refereed reports, 27 research reports commissioned by the EU, nine opinion articles, and three academic publications on dynamics related to migrant smuggling and trafficking on the CMR. I have spoken at 14 conferences and workshops and have appeared in four podcasts. I have briefed civil servants and diplomats from

the EU, UN, US, and UK on a regular basis. My work has been covered in the news (e.g., BBC, Radio France International) and cited by the UN Security Council several times. A complete list of these contributions is available in my CV. These contributions have significantly enhanced my understanding of migration dynamics, expanded my professional network, and amplified the outreach and impact of my PhD findings.

UCL Research Paper Declaration Form

referencing the doctoral candidate's own published work(s)

Please use this form to declare if parts of your thesis are already available in another format, e.g. if data, text, or figures:

- have been uploaded to a preprint server
- are in submission to a peer-reviewed publication
- have been published in a peer-reviewed publication, e.g. journal, textbook.

This form should be completed as many times as necessary. For instance, if you have seven thesis chapters, two of which containing material that has already been published, you would complete this form twice.

1. For a research manuscript that has already been published (if not yet published, please skip to section 2)

- What is the title of the manuscript?**
- Please include a link to or doi for the work**
- Where was the work published?**
- Who published the work?** (e.g. OUP)
- When was the work published?**
- List the manuscript's authors in the order they appear on the publication**
- Was the work peer reviewed?**
- Have you retained the copyright?**
- Was an earlier form of the manuscript uploaded to a preprint server?** (e.g. medRxiv). If 'Yes', please give a link or doi)

If 'No', please seek permission from the relevant publisher and check the box next to the below statement:

I acknowledge permission of the publisher named under 1d to include in this thesis portions of the publication named as included in 1c.

2. For a research manuscript prepared for publication but that has not yet been published (if already published, please skip to section 3)

- What is the current title of the manuscript?**

Deconstructing migration journeys: A script analysis of irregular migration on the Central Mediterranean Route to Europe

- Has the manuscript been uploaded to a preprint server?** (e.g. medRxiv; if 'Yes', please give a link or doi)

No.

- Where is the work intended to be published?** (e.g. journal names)

Journal of Criminology and Criminal Justice

- List the manuscript's authors in the intended authorship order**

Alexandre Bish, Hervé Borrión, Ella Cockbain, Sonia Toubaline

- Stage of publication** (e.g. in submission)

Accepted pending minor revisions

3. For multi-authored work, please give a statement of contribution covering all authors (if single-author, please skip to section 4)

Alexandre Bish was responsible for writing the manuscript, as well as conducting the underlying research and analysis. Hervé Borrión provided guidance on the research design and contributed to the proofreading and editing of the manuscript. Ella Cockbain was involved in the proofreading

and editing process, ensuring the manuscript's accuracy and coherence. Sonia Toubaline provided initial guidance on how to code the graphs into Python.

4. In which chapter(s) of your thesis can this material be found?

Chapter 5

5. e-Signatures confirming that the information above is accurate (this form should be co-signed by the supervisor/ senior author unless this is not appropriate, e.g. if the paper was a single-author work)

Candidate

Alexandre Bish

Date:

03/04/2024

Supervisor/ Senior Author (where appropriate)

Dr Ella Cockbain

Date

04/04/2024

UCL Research Paper Declaration Form

referencing the doctoral candidate's own published work(s)

Please use this form to declare if parts of your thesis are already available in another format, e.g. if data, text, or figures:

- have been uploaded to a preprint server
- are in submission to a peer-reviewed publication
- have been published in a peer-reviewed publication, e.g. journal, textbook.

This form should be completed as many times as necessary. For instance, if you have seven thesis chapters, two of which containing material that has already been published, you would complete this form twice.

6. For a research manuscript that has already been published (if not yet published, please skip to section 2)

j) What is the title of the manuscript?

Exploring the 'Blurred Boundary': Human Smuggling and Trafficking on the Central Mediterranean Route to Europe

k) Please include a link to or doi for the work

DOI: [10.31389/jied.214](https://doi.org/10.31389/jied.214)

l) Where was the work published?

Journal of Illicit Economies and Development

m) Who published the work? (e.g. OUP)

LSE Press

n) When was the work published?

11 Mar 2024

o) List the manuscript's authors in the order they appear on the publication

Alexandre Bish, Ella Cockbain, Peter William Walsh, Hervé Borrión

p) Was the work peer reviewed?

Yes

q) Have you retained the copyright?

Yes

r) Was an earlier form of the manuscript uploaded to a preprint server? (e.g. medRxiv). If 'Yes', please give a link or doi)

https://discovery.ucl.ac.uk/id/eprint/10188132/1/Cockbain_65eedd67c5c04.pdf

If 'No', please seek permission from the relevant publisher and check the box next to the below statement:

*I acknowledge permission of the publisher named under **1d** to include in this thesis portions of the publication named as included in **1c**.*

7. For a research manuscript prepared for publication but that has not yet been published (if already published, please skip to section 3)

f) What is the current title of the manuscript?

Click or tap here to enter text.

g) Has the manuscript been uploaded to a preprint server? (e.g. medRxiv; if 'Yes', please give a link or doi)

Click or tap here to enter text.

h) Where is the work intended to be published? (e.g. journal names)

Click or tap here to enter text.

i) List the manuscript's authors in the intended authorship order

Click or tap here to enter text.

j) **Stage of publication** (e.g. in submission)

Click or tap here to enter text.

- 8. For multi-authored work, please give a statement of contribution covering all authors** (if single-author, please skip to section 4)

Alexandre Bish was responsible for writing the manuscript, as well as conducting the underlying research and analysis.

Ella Cockbain provided guidance on the research design and contributed to the proofreading and editing of the manuscript.

Peter William Walsh and Hervé Borrión were involved in the proofreading and editing process, ensuring the manuscript's accuracy and coherence.

- 9. In which chapter(s) of your thesis can this material be found?**

Chapter 7

- 10. e-Signatures confirming that the information above is accurate** (this form should be co-signed by the supervisor/ senior author unless this is not appropriate, e.g. if the paper was a single-author work)

Candidate

Alexandre Bish

Date:

03/04/2024

Supervisor/ Senior Author (where appropriate)

Dr Ella Cockbain

Date

04/04/2024

*This thesis is dedicated to Moustapha,
whose numerous journeys on the Central Mediterranean Route have not led to
Europe...*

...just yet.

Acknowledgements

I must, out of a sense of obligation, or perhaps Stockholm syndrome, start by acknowledging my supervisors. Their uncanny ability to turn a draft into a sea of red ink cast me in the role of Moses, which did not help with my messiah complex. Ella and Hervé, you have sculpted me into a better researcher, and I am profoundly grateful. Thank you. You truly are paragons of supervision.

This thesis relied on the data that was shared by people who underwent very harsh and dangerous journeys. I wish to thank them for sharing their stories. I would also like to thank Jessica, Mark, Rupert, Matt, Tuesday & Mark, and my old colleagues at GITOC for trusting me with this study. Finally, I wish to show appreciation to the teams that have supported my projects, at MyRA, Empirika, and previously at GITOC, for bearing with the hustle and bustle. Post-thesis, I vow to be better.

Paid acknowledgements

In line with my entrepreneurial ambitions (do check out [MyRA](#)), I have commodified my acknowledgements. I am very thankful for the full scholarships granted to me by the EPSRC and the Yale-UCL Collaborative. Thank you to the culinary angels in my life: my ever-patient parents, my sister, Pierre, Alex, Elies, Arda, and my poor (successive) girlfriends. Your offerings of sustenance were sometimes the lifelines that tethered me to this biblical coil.

Other people from whom I have managed to cash in a few bucks (surnames are omitted — to protect anonymity and because I have unashamedly taken offerings from complete strangers). I clearly wouldn't have made it without Hannah, Aliai, Rupert, Dylan, William, Olivia,

Rebecca, and Kate. I'd also like to extend my gratitude to Nancy, Aaron, Rachel, Catalina, Isabella, Samuel, Sophie, Ian, Sara, and Margie; thank you for pushing me to do this.

Unwitting paid acknowledgements

To my numerous flatmates, past and present, the other culinary angels in my life: thank you for your unwitting contributions to my midnight foraging expeditions. Each nocturnal raid into the kitchen was a testament to our shared, albeit unknowing, camaraderie. To protect the innocent (and to avoid potential litigation), I shall keep your identities a mystery.

Table of Contents

Declaration page	2
Abstract	3
Impact statement	5
Covid-19 Impact	7
Acknowledgements	14
Table of Contents	16
List of Figures	21
List of Tables	23
Chapter 1 Introduction	24
Chapter 2 Irregular migration on the CMR	29
2.1. Context	29
2.1.1. The emergence of the CMR.....	29
2.1.1.1. Actors involved in facilitating irregular migration	35
2.1.1.2. Harm and exploitation.....	38
2.1.2. Recent shocks and disruption.....	39
2.1.2.1. Overview of government responses to irregular migration	40
2.1.2.2. Effectiveness and harm impact	44
2.2. Gaps and limitations of existing research	54
2.2.1. Data and methodological limitations	54
2.2.2. Knowledge gaps.....	59
Chapter 3 Conceptual frameworks	61
3.1. Conceptualising irregular migration.....	61
3.1.1. Migration as a complex system.....	61
3.1.2. Migration networks and the migration industry.....	63
3.1.3. Migration decision making	64
3.1.4. Other approaches to studying migration	67
3.2. Conceptualising harm and exploitation: the crime science approach	70
3.2.1. Opportunity theories	71
3.2.2. Situational crime prevention	74
3.2.3. Crime scripting.....	78
3.2.4. Displacement.....	82
3.3. Research objectives	84
Chapter 4 Data	86
4.1. Data collection.....	86

4.2.	Sample.....	87
4.3.	Ethics.....	89
4.4.	Data limitations	90
Chapter 5 Deconstructing migration journeys: A script analysis of irregular migration on the CMR to Europe		92
5.1.	Introduction	92
5.2.	Scripting irregular migration, smuggling and trafficking	94
5.3.	Method	96
5.3.1.	Information extraction	96
5.3.1.1.	Creating the baseline script graph.....	96
5.3.1.2.	Coding the transcript.....	97
5.3.1.3.	Reviewing and improving the scripts	98
5.3.2.	Elaboration of the composite script graph	100
5.3.3.	Script visualisation.....	101
5.3.4.	Verification and validation	101
5.4.	Results	105
5.4.1.	Overview of journeys.....	105
5.4.1.1.	Time travelled	105
5.4.1.2.	Zones travelled.....	105
5.4.2.	Macro-level scripts.....	107
5.4.3.	Micro-level scripts	109
5.4.3.1.	Preparing the journey.....	109
5.4.3.2.	Travel	110
5.4.3.3.	Staying and working	111
5.4.3.4.	Detention and exploitation.....	111
5.5.	Discussion	112
5.5.1.	Limitations	114
5.5.2.	Policy implications.....	116
Chapter 6 Stuck in Cycles: Im/mobility without Migration on the CMR to Europe		119
6.1.	Introduction	119
6.2.	‘Im/mobility’ on migration journeys.....	121
6.3.	Cycles in migration systems.....	127
6.4.	Methods.....	131
6.4.1.	Activity-level analysis	131
6.4.2.	Cycles-level analysis.....	132
6.5.	Results	138
6.5.1.	Repeated activities	138

6.5.2.	Cycles.....	145
6.5.3.	The five most travelled cycles	149
6.5.3.1.	Work and travel cycle	149
6.5.3.2.	Detention transfer cycle in northern Libya	154
6.5.3.3.	Arrest and detention while working in northern Libya cycle	157
6.5.3.4.	Forced labour transfer cycle in northern Libya.....	160
6.5.3.5.	Arrest and detention cycle	163
6.5.4.	Other repeated cycles	166
6.5.4.1.	Sea abandonment cycle.....	167
6.5.4.2.	Detention after smuggling cycle in a non-neighbouring country to Libya 169	
6.5.4.3.	Libyan coastguard repeated cycle	171
6.6.	Discussion	174
Chapter 7 Exploring the ‘blurred boundary’: human smuggling and trafficking on the CMR to Europe		179
7.1.	Introduction	179
7.2.	Context	181
7.2.1.	Irregular migration on the CMR from Libya to Europe	181
7.3.	Beyond dichotomies: assessing the fluidity between smuggling, trafficking, and exploitation	184
7.3.1.	Present study	190
7.4.	Methods.....	191
7.4.1.	Data.....	191
7.4.2.	Sample.....	191
7.4.3.	Analysis.....	191
7.5.	Results	192
7.5.1.	Overview of journeys.....	192
7.5.2.	Detention and related abuses	194
7.5.2.1.	Characteristics and conditions of detention centres.....	194
7.5.2.2.	Extortion in detention through torture and beatings: a potential ‘purpose’ in trafficking.....	197
7.5.3.	Forced labour and trafficking in and outside detention centres.....	198
7.5.3.1.	In and around detention centres	199
7.5.3.2.	Outside detention centres	201
7.5.4.	Kidnappings after supposed smuggling journeys	204
7.5.5.	Escaping detention via dangerous smuggling journeys to Europe	207
7.5.6.	Agency and constraint among people on the move	209
7.6.	Discussion	212

7.6.1.	Intersections and overlaps in smuggling and trafficking and the role of exploitation	212
7.6.2.	Continuums of agency, coercion, consent and exploitation	215
7.6.3.	Beyond traditional trafficking: slavery, kidnapping and other extreme abuses 217	
7.6.4.	Human rights support beyond dichotomous definitions of smuggling and trafficking.....	218
Chapter 8	Summary and implications	221
8.1.	Insights from modelling migration.....	221
8.1.1.	Complexity of migration journeys	221
8.1.1.1.	Im/mobility on journeys.....	222
8.1.1.2.	Facilitators of journeys	225
8.1.1.3.	Harms on journeys	226
8.1.2.	Empirical findings on the smuggling and trafficking convergence	227
8.1.3.	Advantages of Network Modelling.....	230
8.1.4.	Overall limitations	234
8.1.4.1.	Internal validity	234
8.1.4.2.	External validity.....	235
8.1.4.3.	Scripting process.....	236
8.2.	Insights into reducing harms to migrants	237
8.2.1.	Beyond traditional metrics: recognising the complexity of journeys	237
8.2.2.	Considering the risks of unintended consequences	238
8.2.3.	Rethinking situational crime prevention for migration.....	244
8.3.	Policy implications.....	248
References		251
Appendices		314
Appendix 1:	Ethics certificate.....	314
Appendix 2:	Definitions.....	315
	Irregular migration	315
	Harm and exploitation.....	319
	Crime.....	323
Appendix 3:	Additional details on script graph elaboration	324
Appendix 4:	Inter-rater reliability assessment	328
Appendix 5:	Definition of identified activities in the micro-level script graph.....	330
Appendix 6:	List of corresponding micro-level activities to their macro-level group	334
Appendix 7:	Baseline and empirical script comparison	337
Appendix 8:	Explanation of methodological approach	340
Appendix 9:	Explanation of algorithms	343

Appendix 10: Reflexivity statement	348
Appendix 11: FEE framework operationalisation	349

List of Figures

Figure 1 Major reported migration routes along the CMR to Europe, based on maps from Micallef et al. (2019, 2021). Created using Matplotlib on Python.	30
Figure 2 Smuggling flows in the Chad–Niger–Libya triangle, August 2021. Reproduced from Bish (2021).	36
Figure 3 Overview of the ‘EU Emergency Trust Fund for stability and addressing root causes of irregular migration and displaced persons in Africa’. Adapted from Oxfam’s (2020) categorisation of EUTF for Africa funding streams	43
Figure 4 Recorded irregular migrant sea arrivals in Italy between 2012 and 2022 (UNHCR, 2022c).....	45
Figure 5 Recorded irregular migrant sea arrivals in Malta between 2012 and 2022 (UNHCR, 2022c)	45
Figure 6 Recorded sea arrivals, deaths and missing migrants in the Central Mediterranean Sea between 2014 and 2021 (UNHCR, 2022c)	48
Figure 7 Multi-level migration system theoretical framework, based on McAlpine (2021).....	62
Figure 8 Kley’s (2011) Rubicon model of planned action applied to migration, reproduced from McAlpine (2021).	65
Figure 9 Migration phases framework, based on Zimmerman, Kiss & Hossain (2011).....	66
Figure 10 Relationship between precipitators and opportunity, based on Wortley (2016)	76
Figure 11 The four possible state-transition journeys in crime scripts, reproduced from (Borrion & Dehghanniri, 2023). ‘S’ represents states, ‘A’ represents Activities, and ‘D’ represents decision-making processes.....	80
Figure 12 Map of participants by reported country of origin (n=71), created using Matplotlib on Python.	88
Figure 13 Micro-level graph of migration journeys pre-grouping (n=71)	103
Figure 14 Macro-level graph of migration journeys post-grouping (n=71).....	104
Figure 15 The shortest script in terms of activities, consisting of 12 steps, travelled by Ahmed (not his real name).	106
Figure 16 Interactions between groups of activities experienced by migrants on the CMR.	108
Figure 17 Three-cycle (a b c).....	133
Figure 18 Examples of simple and compound cycles. Cycles are denoted in a way that the sequence returns to the start without repeating the initial element (a b c) instead of (a b c a).	135
Figure 19 Number of repeated activities in the different zones (n=57).	139

Figure 20 Distribution of participants who experienced a cycle (n=53) across all cycles (n=174) (without repeat cycles). For example, 152 cycles were only experienced by one participant.	146
Figure 21 Distribution of number of distinct cycles travelled by participants (n=71 participants)	147
Figure 22 Distribution of cycles across zones (n=174).	148
Figure 23 Distribution of cycles across zones (n=267, while there were only 174 cycles identified, the cycles that covered more than one zone were counted for each zone they covered).	149
Figure 24 Work and travel in northern Libya cycle. In this diagram and the following ones, dark grey arrows indicate the transition from one activity to another. Squares symbolise static activities, where the participants are not in motion. In contrast, light grey arrows represent mobile activities, denoting movement.	150
Figure 25 Work and travel in neighbouring countries to Libya, shared by five different participants	151
Figure 26 Repeated detention and travel to a detention centre in northern Libya	154
Figure 27 Cycle between work and arrest and detention in northern Libya.....	158
Figure 28 Recursive cycle of forced labour in northern Libya	160
Figure 29 Repeated cycle of arrest and detention in northern Libya.....	163
Figure 30 Repeated cycle in the Mediterranean Sea	167
Figure 31 Repeated arrest and detention after travelling with a smuggler from a non-neighbouring country to Libya.....	170
Figure 32 Cycle of 16 activities that Ibrahim experienced twice involving 16 activities across northern Libya and the Mediterranean Sea.....	172
Figure 33 Map showing migration routes to and from Libya travelled by participants, generated on Python using Matplotlib.....	193
Figure 34 Adjacent cycles to illustrate the NetworkX algorithm's error, which incorrectly identified the travelled cycle 'ABCD' alongside actual travelled cycles, underscoring the need for the development of a tailored algorithm.....	340
Figure 35 Representation of cycles and cyclic permutations identified with algorithms 1 and 2. The cycle ends with the first letter, but it is not represented.	347

List of Tables

Table 1 Clarke’s 25 techniques of SCP, reproduced from the Center for Problem-Oriented Policing (POP center, 2016).....	75
Table 2 Classification of situational precipitators of crime (Wortley, 2016).	77
Table 3 Number of participants by country of origin in decreasing order (n=71). Other includes: the Central African Republic, the Gambia, Ethiopia, Kenya, Nigeria, Syria, Tunisia and Yemen.....	89
Table 4 Results of the inter-rater reliability assessment	99
Table 5 Example of output table for three activities and three participants. Numbers represent the number of times the activity appeared in the sequence.	132
Table 6 Repeated activities by median times repeated in decreasing order (n=57).	139
Table 7 Overview of activities that were never repeated for any of the 71 participants, in chronological order of journeys from non-neighbouring country to Libya to Malta.....	143
Table 8 Results of the inter-rater reliability assessment	329
Table 9 List of activities present in the micro-level script.....	330
Table 10 List of corresponding micro-level activities to their macro-level group.....	334
Table 11 Sample of activities in the potential script that were removed from the empirical scripts.....	337
Table 12 The FEE framework checklist. Note this framework has not been tested or validated.....	349

Chapter 1 Introduction

Irregular migration to Europe has increased over the past decade¹ and has become a central topic in European political spheres (Geddes, 2018; McKeever, 2020). Irregular migration routes to Europe received increased attention from the media, politicians, researchers and the general public after the ‘migrant crisis’, when in 2015, more than one million people travelled to the continent to request asylum. This period was described as the largest refugee crisis since World War II (OECD, 2015; UNHCR, 2022a). Of the three main irregular migration routes to Europe, a key one was the Central Mediterranean Route (CMR), which reaches Europe in Italy and Malta. It conveyed hundreds of thousands of migrants² through war-torn Libya, which had grown increasingly unstable since the fall of its leader, Muammar Qaddafi, in 2011 (Micallef, 2017).

Given continued instability in Libya and the domestic pressures to reduce arrivals of people travelling irregularly to Europe, the European Union (EU) and its member states have invested heavily in research on irregular migration, its facilitation and associated exploitation of migrants since 2015. The EU also bolstered its efforts to reduce the number of people arriving irregularly and to tackle the activities of smugglers facilitating migration and of traffickers

¹ Between 2011 and 2017, ‘migration flows increased by almost 25%, largely due to humanitarian migration to Europe’ (IOM, 2020b)

² I use the term ‘migrant’ in this thesis to designate any person travelling on this route, including asylum seekers and refugees. I use the term ‘migrant’, despite its contentious nature and potential for dehumanisation, due to its specificity and widely understood meaning in scholarly and policy discussions. To compensate for this potential dehumanisation, I alternate between ‘migrants’ and ‘people on the move’, despite acknowledging that this term too has its drawbacks, potentially implying constant mobility — a notion I discuss in Chapter 6. Additionally, I employ pseudonyms for testimonies included in this thesis to serve as a reminder that real people underpin the experiences discussed.

exploiting people on the move (ICG, 2017; Torelli, 2018).³ Measures countering irregular migration, primarily targeting smuggling activities, were adopted through the EU's primary agency responsible for border security, Frontex, and through 'capacity building' investment and diplomacy with both origin and countries that migrants transit on the CMR, including Libya, Niger, Chad, and Sudan (Micallef, Horsley & Bish, 2019).

In the past four years, EU anti-smuggling measures have been at the centre of increased controversy. Several media-led investigations uncovered that Frontex had been involved in dozens of 'pushbacks', whereby hundreds of migrants on boats and rafts in the Mediterranean were informally pushed back while attempting to reach Europe, which is illegal under EU and international law (European Parliament, 2022; Kollias, 2021, 2022; Waters *et al.*, 2020). A Guardian investigation linked these pushbacks to the deaths of over 2,000 people (Tondo, 2021). In April 2022, the director of Frontex resigned following the investigations (Rankin, 2022) and in October 2022, a classified report from the European Anti-Fraud Office was leaked detailing evidence of Frontex covering up human rights abuses (Fallon, 2022).

While EU interventions mostly succeeded in reducing arrivals, they did not stop all irregular migration, as people's movements adapted to these interventions (Micallef *et al.*, 2019). Moreover, they have also had the detrimental consequence of harming people on the move and leading to deaths (Micallef, Horsley & Bish, 2019). Since 2014, the International Organisation for Migration (IOM) has recorded 5,323 deaths in the Sahara Desert and 19,341 deaths in the Central Mediterranean as of April 2022 (IOM, 2022), reportedly making it the deadliest sea crossing in the world (Schöffberger & Rango, 2020, p. 19).

³ See European Council (2022a) for an overview of 'EU action to tackle the Central Mediterranean route'.

Anti-smuggling interventions were pinpointed as a major cause of increasing deaths because of the more dangerous tactics used by smugglers to avoid anti-smuggling measures (Tubiana *et al.*, 2018; Brachet, 2018). Moreover, they were also accused of increasing harms to migrants; the assumption being that rising smuggling prices likely forced people to work longer to fund journeys, often in harsh conditions where they were vulnerable to trafficking for labour exploitation and enslavement (Hayden, 2022). Higher barriers to travel are suspected to have also increased the time migrants spend in transit in Libya and the Sahel, where armed groups targeting them for abduction, detention and extortion have multiplied since the fall of Qaddafi in 2011 (Bish, 2021; Kuschminder & Triandafyllidou, 2020).

A notable increase in research outputs led by non-governmental organisations on irregular migration on the CMR to Europe since the ‘migrant crisis’ has shed important light on some of these harm-related developments, as indeed has ground-breaking journalism in this space (see, e.g., Bish, 2019; Hayden, 2022; Kollias, 2022; Malakooti, 2013; Micallef *et al.*, 2021). There is, however, a clear and unmet need for systematic empirical research into the largely unexplored details of migration journeys and how they can become pathways into trafficking and exploitation (Hüsken, 2021; Murphy-Teixidor *et al.*, 2020).

A recent review of the literature on irregular migration on the CMR suggested there was little knowledge of the factors that influenced journeys, strategies and aspirations of migrants travelling irregularly from Africa to Europe (Tyldum & Lillevik, 2021). Indeed, most existing research that has mapped migration journeys has solely focussed on the geography of migration without going into detail, often merely listing the geographic hubs that migrants have travelled through without looking at the decision-making, situations or activities that they experience (Darne & Benattia, 2017; Kuschminder *et al.*, 2015; Massari, 2015; Nagel, 2020; Squire *et al.*, 2017; UNODC, 2018, 2021; Xchange, 2018).

In other instances, the focus often lies solely on the causes of departure, looking at the background of migrants and their reasons for leaving their country of origin, but not on the decision-making aspects during the journey (McAuliffe & Koser, 2017). However, extant research highlights the diversity of people on the move, casting doubt on the value of attempts to ‘profile’ irregular migrants (see, e.g., Mixed Migration Centre, 2018).

In this research, I shift the focus from the actors involved in the process of irregular migration to the migration-related activities that take place on journeys and which both reflect and affect the decision making of people on the move.⁴ Focusing on situations experienced on journeys could help both to identify the criminal opportunities that are being exploited and the impact of EU-led anti-smuggling interventions on irregular migration. It is vital to improve our understanding of the details of migration journeys, given that events occurring at different points on journeys can significantly affect the safety of people travelling (Kuschminder, 2021). More specifically, this research seeks to answer the following three questions:

- **How does irregular migration take place on the CMR to Europe?**
- **How do detention, exploitation and related harms⁵ to migrants occur on the CMR to Europe?**
- **What are the overlaps and distinctions between human smuggling and human trafficking on smuggler-facilitated migration journeys along the CMR to Europe?**

Much of the previous research on irregular migration and harm on the CMR has either used conceptual approaches drawn from migration studies, or been conducted without robust

⁴ An activity can be understood as a process that facilitates the transition from one distinct state to another, with these states being defined as fixed points in time, akin to snapshots where no movement or change occurs (Borrion & Dehghanniri, 2023).

⁵ Related harms refers to harms experienced as a result of detention or exploitation (see Appendix 2: Definitions) for a definition of both exploitation and harm used in this thesis.

empirical processes, such as without transparent methods. This research seeks to introduce novel conceptual approaches and methods to the study of irregular migration, by using tools drawn from crime science to better understand and help inform harm-reduction efforts.

Crime science is the application of science to the study of crime (Wortley *et al.*, 2018) and holds three main tenets (Cockbain & Laycock, 2017): i) the application of scientific methods; ii) the study of crime and security problems; and iii) the aim of reducing harm. Key within crime science are opportunity theories of crime, which hold that crime is a commonplace aspect of society which does not require a specific disposition or pathology but instead can be explained by the opportunities and precipitating factors found in the routines of contemporary life.

This thesis holds three main studies. First, I use a scripting methodology to deconstruct the journeys of people who travelled on the CMR into sequences of migration-related activities that they experienced on their journeys to Europe (Chapter 5). Then, I analyse the script graph of activities using network analysis to identify key migration patterns on journeys (Chapter 6). Finally, I closely examine detention, exploitation, and related harms to migrants on journeys with a view to analyse the overlaps and differences between experiences of human smuggling and human trafficking (Chapter 7).

Chapter 2 Irregular migration on the CMR

This section gives an overview of the current research on irregular migration on the CMR. First, the current body of knowledge about how irregular migration, harm and exploitation of migrants take place on the CMR is explored, as well as the effectiveness and harm-related impacts of government responses to the ‘migrant crisis’. Then, the current body of knowledge produced on the CMR is critically assessed, with a key focus on its data and methodological limitations as well as the remaining knowledge gaps. A definition of key terms related to irregular migration, harm and exploitation that will be used throughout this thesis is given in Appendix 2: Definitions.

2.1. Context

This section provides background on the CMR and recent disruptions that have been known on the routes. One should note that much of the knowledge production on the CMR has been done using anecdotal evidence, such as small, unrepresentative samples and rarely have methods in reports been transparent. Few studies report peer review or detail the provenance of the data and sampling strategies. Therefore, the information should be treated acknowledging these limitations, which I explore in more depth in the following section.

2.1.1. The emergence of the CMR

The CMR was the main gateway to Europe during the ‘migration crisis’ of 2015, with four principal launching points: in Libya, Egypt, Tunisia and Algeria (Tinti and Reitano, 2017; p. 90). The most used launch point on the CMR during the so-called migration crisis has been Libya (ibid. and Figure 1), chiefly for two reasons. First, the country is close to Italy (see Figure 1). With the Italian island of Lampedusa around 160 nautical miles (or 296 kilometres) from Tripoli, the crossing can reportedly last less than a day in good conditions (Tinti and Reitano,

2017; p. 91). Second, the instability caused by the fall of Qaddafi allowed for the development of a migrant smuggling economy — often described as an ‘industry’ (Micallef, 2017) — dominated by Libyan militias and smuggling networks.



Figure 1 Major reported migration routes along the CMR to Europe, based on maps from Micallef et al. (2019, 2021). Created using Matplotlib on Python.

After the fall of Qaddafi in 2011, Europe ‘lost its most reliable border guard’ (Tinti and Reitano, 2016, p. 105). During his forty-year rule, Qaddafi had reportedly allowed smuggling economies to exist and be controlled by a restricted number of tribal elites in order to tame them politically and avoid rebellions (Tinti & Reitano, 2017). In August 2008, Italian prime minister Berlusconi struck a deal with Qaddafi to control the Libyan coastline (Sarrar, 2008). In exchange for a US\$5 billion Italian infrastructure investment over 20 years, the Libyan government would monitor its coastline and return migrants found on sea patrols before holding them in Libyan detention centres (Ronzitti, 2009). The deal was reportedly effective at reducing arrivals of

people travelling irregularly to Europe, with a 75% decrease in arrivals within one year (Tinti & Reitano, 2016).

After Qaddafi's fall however, this controlled system crumbled and was replaced by an anarchic, decentralised system whereby different non-state armed groups, often aligned over ethnic or tribal lines, jostled for control over resources and smuggling routes (Tinti & Reitano, 2017; Shaw & Mangan, 2014). The smuggling of migrants in Libya became highly organised and has involved criminal groups exhibiting various degree of organisation, either direct smuggling engagement or protection from the militias that emerged across Libya after the revolution (Shaw & Mangan, 2014; Campana, 2018; Micallef, Horsley & Bish, 2019).

The involvement of coastal militias in protecting and profiting from human smuggling activities, has been reported as particularly key to the growth of human smuggling between 2014 and 2017 (Micallef & Reitano, 2017; Micallef *et al.*, 2021; Micallef *et al.*, 2019). Militias reportedly facilitated the smuggling process in several ways: by smuggling migrants themselves, by taxing smugglers for passage through controlled waters and by operating detention centres for migrants captured by local formal or informal policing forces (Micallef & Reitano, 2017). Other smuggling groups operating along the CMR convey the migrants into Libya, and in many cases work in cooperation with the groups active in Libya (Micallef *et al.*, 2019; UNODC, 2021). Smuggling groups are not necessarily vertically structured or transnationally organised, and some research suggests they are rather composed of smugglers who form networks through ad hoc alliances with other money-driven smuggling freelancers (Tinti & Reitano, 2017).

Extant research on the boat crossing from Libya suggests it is usually undertaken through a smuggler who organises the journey (Micallef & Reitano, 2017). Migrants contact either a broker or a smuggler directly who take the migrant to a holding facility, where migrants are

asked to wait (often in difficult conditions) until the smuggler determines that all conditions are met for the crossing (Darne & Benattia, 2017). While all the required conditions are not known, some research suggests they include that sea conditions must be navigable and that there are enough migrants for the boats (reportedly between 60 and 100 migrants, depending on the type of boat) (Tinti & Reitano, 2016). On the day of departure, commonly at night or very early morning, migrants reportedly board rubber dinghies or more solid and reliable wooden or fibre glass boats, and are given basic navigational equipment, as well as very limited water and food supplies (Darne & Benattia, 2017; Tinti & Reitano, 2017). Following basic guidance, a migrant can be designated as a captain to pilot the boat into international waters. A satellite telephone and some coordinates to follow can also be given to this designated captain, as well as a radio to make an SOS distress call when needed (Tinti & Reitano, 2017). In some cases, the smuggler may act as captain for the boat and be picked up by another boat once they reach international waters.

Before search and rescue (SAR) missions, crossings from the shores of Libya to those of Malta and Lampedusa, an Italian island that is geographically closer to north Africa than mainland Europe (Brabant, 2021), would reportedly usually take between one to six days (depending on the boat and sea conditions) but could take up to 10 days if people found themselves lost at sea (Malakooti, 2013). However, this time was shortened after the 2013 introduction of SAR missions by the Italian government, the EU and non-profit organisations patrolling the Mediterranean. SAR missions ultimately reportedly reduced the distance needed to reach Europe: after 4-8 hours of travel, international waters can be reached, and a distress call can be sent in order to be rescued by search and rescue vessels (Deiana *et al.*, 2020).⁶ Therefore, instead of reaching European shores, smugglers would now only need to target the waters

⁶ It is worth noting however that the tenant that SAR operations have constituted a pull factor, thereby attracting more departures from Libya, has been contested by several scholars, see for instance Cusumano & Villa (2020).

covered by SAR missions to deliver the smuggling services requested by migrants. After being rescued, migrants would then be brought back to the closest, open European port by SAR vessels before being processed (Darne & Benattia, 2017). However, despite the presence of these rescue boats and the shorter distance necessary, the crossing usually takes two-to-three days and in rarer cases up to a week (Camarena *et al.*, 2020). Migrants are often transported on old and small boats carrying more than twice their safe capacity, explaining in part the many drowning incidents that have occurred in the Mediterranean Sea (Euro-Med Monitor, 2021).

Before reaching coastal Libya, migrants on the CMR travel through several migrant-smuggling hubs. A key hub in southern Libya, just north of the Sahara Desert, is the city of Sebha. Sebha initially grew to become a migrant hub due to the large number of farms in the city's outskirts, which attracted cyclical labour migration from West Africa, particularly Niger, which neighbours Libya to the south (see Figure 1 and Tinti & Reitano, 2017). A well-established route links Sebha to the city of Agadez in northern Niger (see Figure 2), at the edge of the Sahara Desert, which grew to be the most important hub for trans-Saharan migration (Micallef, Horsley & Bish, 2019). In 2016, there were an estimated 350 people arriving every day in Agadez, where migrants would congregate waiting for a place on the weekly convoy that heads across the Sahara to Libya (Malakooti & Fall, 2020). Over a hundred pickup trucks can compose the convoy (Micallef *et al.*, 2021; Tinti & Reitano, 2017), each holding between twenty-five to thirty-five people, clinging onto wooden poles fixed on the back of the vehicles, to prevent them from falling off during the week-long speedy ride through the desert.

Recent research on migration in the Sahara suggests that two ethnic groups have dominated the smuggling trade there, with a recorded history of the trade dating back to the sixth century (Tinti & Reitano, 2017; Brachet, 2018). The Tuareg dominate trade to the west of the Salvador Pass, a key corridor for drugs and arms trafficking at the intersection of Algeria, Libya and

Niger (Tinti & Westcott, 2016; Bish, 2021). The Tebu dominate to the east, extending far into northern Chad, and controlling the border crossing of Toummo, the main border crossing between Niger and Libya (Bish, 2021; ICG, 2017; Micallef *et al.*, 2021). While both members of both the Tuareg and Tebu communities have reportedly engaged in transporting people across the desert, they have also reportedly been very active in smuggling both licit goods — such as subsidised fuel and foodstuffs from Libya or Algeria to Niger or Mali — and illicit goods — such as cocaine, hashish, tramadol and weapons (Grégoire, 1998; Pellerin, 2018; Tubiana *et al.*, 2018; Bish, 2019, 2021; Micallef *et al.*, 2021).

Neither the Tebu nor the Tuareg seem to have led the smuggling trade around organised hierarchical structures (Tinti & Westcott, 2016). Rather, the trade has involved networks of freelancers and some key stakeholders with more influence and stake in certain illicit economies (Brachet, 2018; Scheele, 2012). While not organised under a formal organisational structure, the communities can unify to become salient political players that can threaten, through rebellions, the political stability of Sahelian states in the region (Micallef *et al.*, 2019). Both the Tuareg and the Tebu have led rebellions in Niger and Chad (Guichaoua, 2012; Tubiana & Gramizzi, 2017), and some attribute the ongoing instability in Mali in part to the return of Tuareg mercenaries employed by Qaddafi to their homeland of Azawad in northern Mali after Qaddafi's fall in 2011 (Tinti & Reitano, 2017).

Agadez is the most northern economic and transportation hub of Niger, a country which sits at the northern edge of the Economic Community of West African States (ECOWAS), a fifteen-member economic bloc, which also ensures freedom of movement to the citizens of its member states (Okunade & Ogunnubi, 2021). Although freedom of movement has not always been implemented fully within the bloc (Zanker *et al.*, 2020), freedom of movement and mobility have been seen as a fundamental aspect of ECOWAS, as remittances sent home by people

travelling within Africa have been a major economic driver and coping mechanism for some communities in the region (Tinti & Reitano, 2017; Malakooti & Fall, 2020; Samuel Hall, 2017). Despite it not always being fully implemented, ECOWAS's freedom of movement has generally been considered to have facilitated the travel of people from across West Africa to Agadez in Niger before the desert crossing (Micallef, Horsley & Bish, 2019; Samuel Hall, 2017; Tubiana *et al.*, 2018).

Routes conveying people on the CMR have not only stemmed from West Africa, however. From East Africa, Ethiopia became a key hub on routes connecting the Horn of Africa and Libya (Campana, 2018). During the 'migrant crisis', overland migrant smuggling routes linking the Horn of Africa through Ethiopia and Sudan to Libya, were already well established because of ongoing conflict in Somalia and a repressive regime in Eritrea (Tinti & Reitano, 2017; p. 93; Campana, 2018). Moreover, smuggling networks have been long-established in Sudan at Libya's southeastern border. Routes transiting the country often traverse Khartoum, before either entering Libya through the southeastern region of Kufra or crossing Chad and the Kouri Bougoudi goldfields that straddle the Libyan border and northeastern Chad, before reaching Sebha in southwestern Libya (see Figure 2 and Bish, 2021; Micallef *et al.*, 2021; Tubiana *et al.*, 2018).

2.1.1.1. Actors involved in facilitating irregular migration

There exists an array of actors that can be involved in facilitating the smuggling of migrants, which seem to vary according to region and smuggling method (Brachet, 2018; UNODC, 2018, 2021, Zhang, 2007). However, the literature on migration often identifies two main types of actors that migrants interact with to further their irregular migration journeys: smugglers and brokers (McAlpine, 2021; UNODC, 2021).

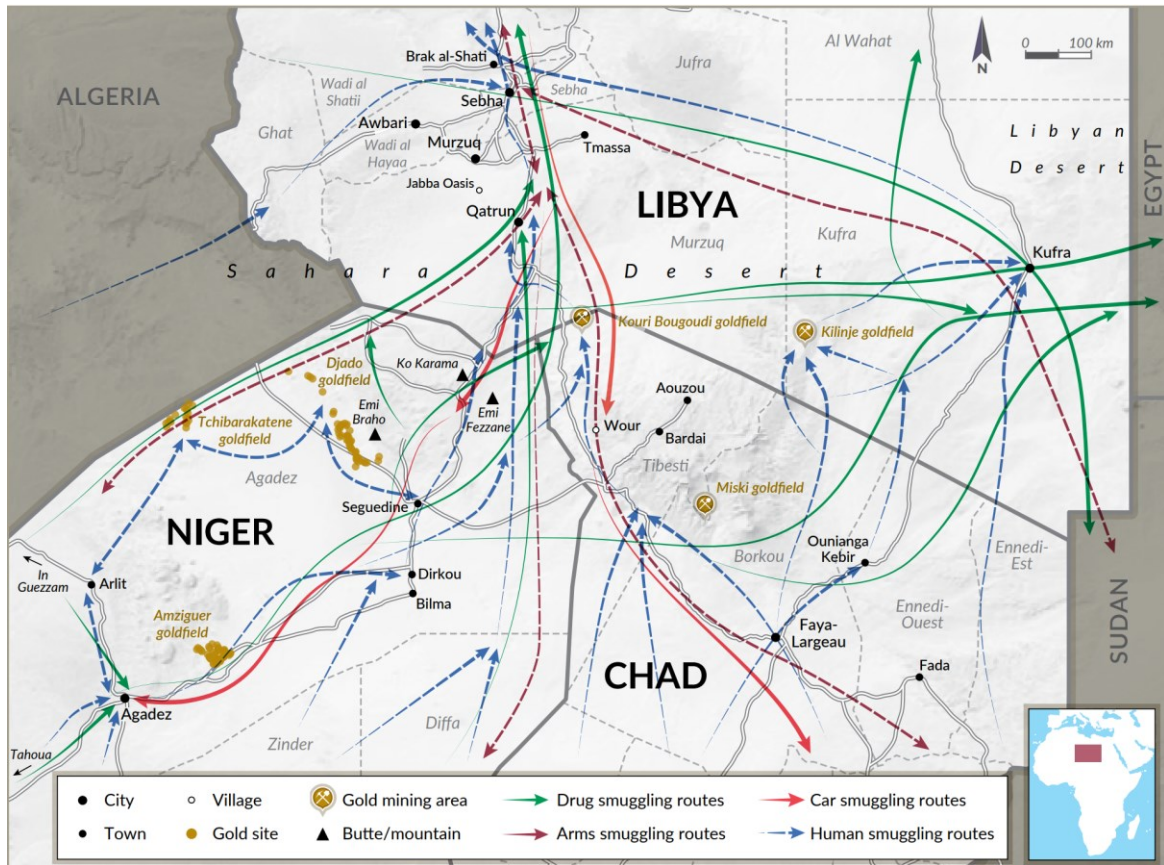


Figure 2 Smuggling flows in the Chad–Niger–Libya triangle, August 2021. Reproduced from Bish (2021).

Smugglers have often been portrayed by governments looking to curtail arrivals of people travelling irregularly as ‘evil’ and part of ‘criminal gangs’ (Al Jazeera, 2011; Home Office, 2022; Smit, 2011; van liempt & Sersli, 2012; Zhang *et al.*, 2018). This narrative helps to justify draconian measures against smugglers which can have the indirect effect of harming migrants (examples of such measures are detailed later). Although some smugglers may commit horrendous actions and be part of criminal gangs, not all are. In fact, many migrants see their smugglers as ‘saviours’, which necessitates a more nuanced understanding of their role (Tinti & Reitano, 2017; van liempt, 2007; van liempt & Sersli, 2012).

The literature on migrant smuggling suggests that there is no stereotypical smuggler profile. Smugglers differ from each other in several ways, including in terms of role, socio-

demographic characteristics, methods, organisation and motive (e.g. Achilli, 2018; Aziani, 2021; Baird & Liempt, 2016; Soudijn & Kleemans, 2009; Zhang, 2006, 2007). Similarly, the relationships between professional smugglers and migrants differ. For instance, migrants can either be well-treated or victimised by smugglers during their travels, e.g. through detention or physical harm (Aziani, 2021).

Drawing on judicial documents of smuggling cases, Aziani (2021) distinguishes between two archetypal types of migrant smugglers: the migration facilitator and the professional smuggler. The *facilitator* is not organised in groups, performs migrant smuggling services on a small scale and on an occasional basis, and is motivated at least partially by empathy rather than financial considerations (Aziani, 2021). The professional smugglers, on the other hand, are organised in small groups, managing larger-scale smuggling services, and are principally financially driven. Aziani (2021) emphasises that a final fundamental distinction lies in the willingness of professional smugglers to victimise migrants to increase their profits. The literature on smugglers on the CMR would suggest that most smugglers fit the profile of professional smugglers, who are principally financially driven and show varying degrees of organisation (Brachet, 2018; Micallef *et al.*, 2021; Tinti & Reitano, 2016).

The other main type of actor that facilitates the journey is the intermediary or the broker. As defined in Appendix 2: Definitions, the broker can be a professional broker, who is primarily financially motivated and draws a profit from arranging contact between the migrant and the smuggler. Alternatively, a broker can be a friend or family member who does not always arrange brokerage for financial motives. Many different types of actors could fit within the category of 'broker' and regional differences underline very different brokerage specialisation (Goss & Lindquist, 1995; Krissman, 2005; Cohen, 2008; Gammeltoft-Hansen & Nyberg,

2013); however, for the purposes of this research I will use the term broker as a catch-all term to designate any person who acts as an intermediary between a migrant and a smuggler.

2.1.1.2. *Harm and exploitation*

People travelling on the CMR have often reported suffering various types of harm on their journeys, including harm of an exploitative nature (meaning as defined in Appendix 2: Definitions), as well as witnessing the deaths of other people travelling.⁷ A 2020 report that analysed 138 published reports by security practitioners, policy makers and civil society organisations identified 177 experienced and perceived threats that migration processes posed to migrants (Bermejo *et al.*, 2020). These threats included death, detention and deportation, discrimination, violence and abuse, ‘modern slavery’, human smuggling and trafficking⁸, corruption, domestic violent extremism, environmental problems, and health challenges (*e.g.*, diseases). More specifically to the CMR, following an investigation into human rights violations in Libya, the OHCHR (2021) described the types of dangers that migrants could face on their journeys along this route as follows:

‘Migrants continue to suffer unimaginable horrors during their journeys to, during their stay in, and when attempting to depart Libya. Before reaching Libya, during their journeys through the remote Sahara Desert across the east, west and south of Libya, migrants routinely face dehydration, starvation, lack of access to medical care, arbitrary detention, kidnapping, trafficking, sexual abuse, and other forms of physical violence at the hands of traffickers and smugglers, as well as criminal gangs, armed groups, State

⁷ Although in some cases irregular migrants can be both perpetrators and victims of crime whilst in transit (Tubiana *et al.*, 2018), this research focusses on migrants as victims of crime.

⁸ Human smuggling and human trafficking are considered together in the report’s classification even though they are different phenomena because according to Bermejo *et al.* (2020; p. 32) ‘they both imply organised crime and criminal networks and the relationships between these two “businesses” is increasing’.

security forces, police, immigration officials and border guards. Once in Libya, they become vulnerable to unlawful killings, slavery and forced labour, torture and ill-treatment, gender based violence, arbitrary detention, extortion, and other human rights violations and abuses by both State and non-State actors, which have been confirmed by an overwhelming amount of evidence and reports, including previous public statements and reporting by OHCHR’ (OHCHR, 2021).

Neither the prevalence nor incidence of the various risks and harms along the CMR is known. A survey conducted by IOM and the UNHCR in 2017 found that of the 921 people surveyed, who had arrived in Italy from Libya, 75% reported they had experienced some form of mistreatment along the route (IOM, 2018; UNHCR, 2019b). Another March 2020 report by Medici per i Diritti Umani (MEDU) based on a (presumably convenience) sample of 50 selected interviews between 2014 and 2020 found that 85% of respondents who had travelled through Libya had suffered from torture and inhuman or degrading treatment (MEDU, 2020).⁹

2.1.2. Recent shocks and disruption

The CMR went through two main transnational disruptive shocks over the past five years, which significantly reduced the number of people arriving in Europe irregularly. The first shock began in 2016 following the ‘migrant crisis’ and the anti-irregular migration¹⁰ interventions that the EU and member states initiated on the CMR to stem irregular migration to Europe (Brachet, 2018; Micallef *et al.*, 2019; Tubiana *et al.*, 2018). Interventions occurred in the Mediterranean, in Libya, in transit countries and in countries of origin (Bøås, 2021;

⁹ The study did not specify the sampling methods.

¹⁰ Anti-irregular migration is used here en lieu of anti-smuggling since the vast array of interventions included ones that would target migrants directly rather than smugglers, for example to dissuade them from leaving their country of origin.

Frontex, 2017; Perkowski & Squire, 2019). Significantly, the retreat of Libyan coastal militias from the migrant smuggling business to law-enforcement roles under the UN-backed Government of National Accord of Tripoli has been credited for being the most significant factor explaining the reduction of arrivals of people travelling irregularly to Europe (Micallef, 2017; Micallef & Reitano, 2017).

The second shock occurred more recently during the COVID-19 pandemic; however, it affected different parts of the CMR differently and for different periods of time (Micallef *et al.*, 2021). The rapidly spreading pandemic led to the implementation of mobility restrictions and border closures in every country along the CMR (Micallef *et al.*, 2021; Schöfberger & Rango, 2020). While these restrictions seem to have had a noticeable short-term impact on reducing arrivals in Europe, their implementation was short lived and borders quickly, at least informally, reopened (Micallef *et al.*, 2021). For example, in research I conducted in Niger, I found that a migrant smuggling economy developed on the Niger river which separates Niger from Benin, after the border crossing between these two countries closed in 2020 (Micallef *et al.*, 2021). While the pandemic initially seemed to reduced arrivals to Libya, the greatest barrier to smuggling operations in Libya during the COVID period was reportedly the outbreak of the war in coastal Libya, with General Khalifa Haftar's (failed) campaign on Western Libya between April 2019 and June 2020 (Micallef *et al.*, 2021).

Although the COVID impact on irregular migration and harm is an interesting factor to explore, this thesis will focus on assessing certain government interventions and their impact on irregular migration and harm.

2.1.2.1. Overview of government responses to irregular migration

Government responses to curtailing irregular migration have mostly been conducted in one of two ways. From a criminal lens, government interventions have often sought to 'disrupt the

business model of the smugglers’ and ‘criminal groups’ or ‘gangs’ who profit from the migrant smuggling business (Achilli & Sanchez, 2017; EEAS, 2017; Nováky, 2018). When interventions have been framed from a harm or ‘human rights’ angle, government interventions have often aimed to reduce overall harm by ‘preventing’ irregular migration (Global Migration Group, 2013; p. 52) or ‘tackling the root causes of [...] forced displacement and irregular migration’ (European Commission, 2015), thereby reducing the demand for smuggling services and the number of migrants vulnerable to migration-related harms (Raty & Shilhav, 2020). The EU has worked towards these objectives through two main channels: by funding projects that meet these objectives and by engaging directly through its main agency for border security, Frontex (Raty & Shilhav, 2020).

The main financial instrument through which the EU has funded projects aimed at reducing irregular migration and tackling smuggling in Africa is the ‘EU Emergency Trust Fund for stability and addressing root causes of irregular migration and displaced persons in Africa’ (EUTF for Africa), which emerged from the Valetta Summit on Migration in November 2015 (Raty & Shilhav, 2020). The Valetta Summit was a summit held in Valetta, Malta, for European and African leaders to discuss the ‘migrant crisis’ and resulted in setting up the EUTF for Africa – worth around €5 billion (European Council, 2022a) – to promote development in Africa in exchange for African states’ cooperation in managing migration. EUTF for Africa projects have been implemented in twenty-six countries across West, Central, East and North Africa.

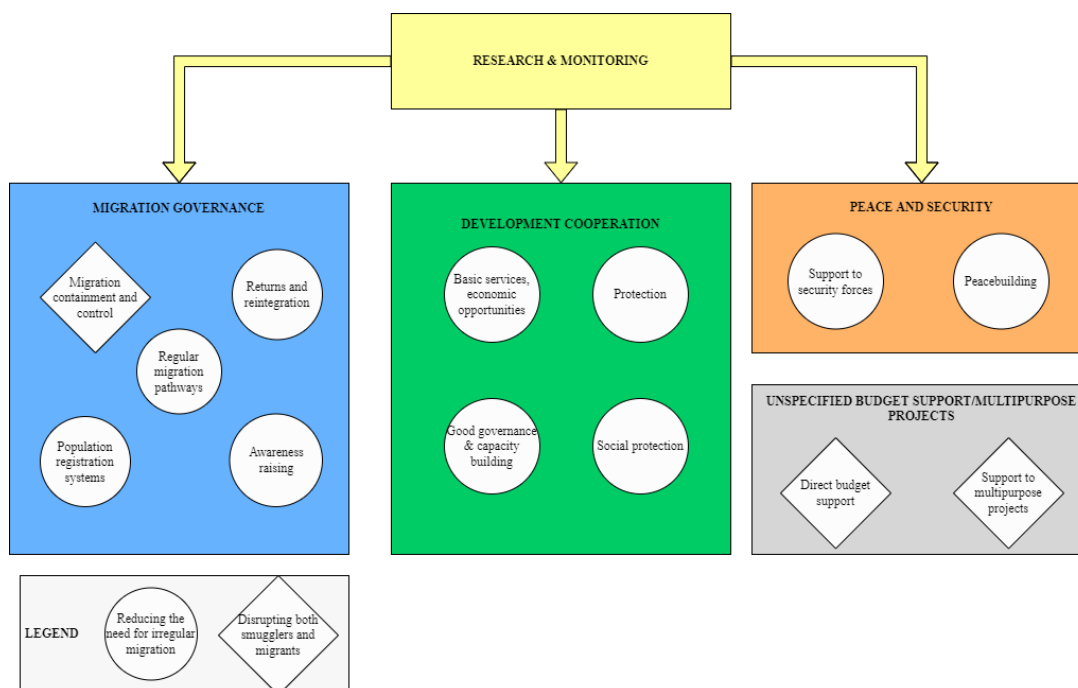
Two studies conducted by Oxfam (Kervyn & Shilhav, 2017; Raty & Shilhav, 2020) analysed the funding of the EUTF for Africa and categorised it into five main categories: ‘Migration Governance’, ‘Peace and Security’, ‘Research and Monitoring’, ‘Development Cooperation’, and ‘Unspecified Budget Support/Multipurpose projects’. An adaptation of this categorisation

is represented below to outline the different EU responses to the ‘migration crisis’ (see **Figure 3**).¹¹ In line with the two main intended objectives of the EU’s funding listed above, I further grouped the interventions into two broad categories: interventions intended to disrupt both smugglers and migrants (such as increased border enforcement), and interventions that intend to reduce the need for irregular migration (such as development projects, see Figure 3).

In addition to funding interventions in Africa, the EU has also engaged in anti-irregular migration interventions in a more direct way, mostly through Frontex. Frontex has led operation ‘Themis’ (formerly ‘Triton’, discussed later), which supports the Italian government¹² with border surveillance and SAR operations of migrant boats in the Mediterranean. Another military operation, Operation Irini, active since 2020, aims to disrupt smugglers through gathering information and patrolling with planes. Operation Irini replaced Operation Sophia (active between May 2015 and March 2020), which had reportedly led to the arrest of 143 suspected migrant smugglers, the destruction of 545 boats and the training of 477 Libyan coastguards (European Council, 2022b).

¹¹ Several reports have attempted to create typologies of interventions that have been used to curb irregular migration and human smuggling and trafficking on the Central Mediterranean Route (Andersson, 2016; Baldwin-Edwards et al., 2019; Bøås, 2021; Collett & Coz, n.d.; Global Migration Group, 2013; Katrien, n.d.; Loschi et al., 2018; Perkowski & Squire, 2019; Raineri & Strazzari, 2021; Salazar, 2017; Torelli, 2018; Tyldum & Lillevik, 2021; Vecsey, 2022; Vermeulen et al., 2019; Wittenberg, 2017). Understanding how EU funds are spent to stop irregular migration is challenging. A collective of journalists who sought to summarise how EU funds were spent to stop irregular migration from Nigeria failed to track much of it, calling their article, ‘Europe spends billions stopping migration. Good luck figuring out where the money actually goes’ (Vermeulen et al., 2019). The journalists eventually called the resultant diagram of funds they had been able to track the ‘EU’s migration spaghetti’. The Italian government has also kept the details of the funding of many migration-related projects a secret (Bish, 2024; Pacciardi and Berndtsson 2022).

¹² Italy signed a Memorandum of Understanding (MoU) with Libya on 2 February 2017, which was renewed without modification three years later. The MoU aimed at keeping migrants from reaching Italian shores by reconstructing the Libyan coastguard and returning people to Libya.



MIGRATION GOVERNANCE	PEACE AND SECURITY	DEVELOPMENT COOPERATION	RESEARCH AND MONITORING	UNSPECIFIED BUDGET SUPPORT/MULTIPURPOSE PROJECTS
1. Migration containment and control - Legislation change for increased migration management and the fight against the smuggling of migrants. - Capacity building, such as border control and police training within a migration context as well as collection of data on migration.	1. Support to security forces - Capacity building or training to support security forces or national or regular security agencies. 2. Peacebuilding - Community-based peacebuilding and social cohesion activities in conflict-affected areas (e.g. to reduce tensions between refugees and host communities)	1. Basic services, economic opportunities - Improving access and delivery of basic services (shelter, water and sanitation, education, etc.) - Strengthening livelihoods and increasing economic opportunities through agricultural support or job creation. - Improving individual and community resilience to disasters.	1. Research - Research into the causes of forced displacement and migration 2. Monitoring - Funding technical cooperation facilities that have the declared aim of monitoring implementation and results, and monitor and evaluate projects aimed at assessing the EUTF for Africa itself.	1. Direct budget support - without specified purpose for which funds are allocated 2. Support to multipurpose projects - Projects that combine purposes without a clear indication of budget lines for specific objectives
2. Returns and reintegration - Policy reforms to facilitate return, readmission and reintegration - Implementation of returns. (excludes projects aimed at creating economic opportunities for returnees)		2. Protection - Improving the protection of people in need against violations of their rights, including by providing access to (informal and formal) justice mechanisms.		
3. Population registration systems - Strengthen civil registration systems - Collection of biometric measurements		3. Good governance and capacity building - Strengthening the ability of governments and local authorities to develop policies and to provide services in an accountable manner.		
4. 'Awareness-raising' - Raising awareness about the dangers of irregular migration and the alternatives to it.		4. Social protection - Focus on local capacities to reduce poverty and vulnerability.		
5. Regular migration pathways - Creating new opportunities for regular migration within Africa or between African countries and Europe.				

Figure 3 Overview of the 'EU Emergency Trust Fund for stability and addressing root causes of irregular migration and displaced persons in Africa'. Adapted from Oxfam's (2020) categorisation of EUTF for Africa funding streams

2.1.2.2. *Effectiveness and harm impact*

In line with the EU's approach to tackle smuggling, the available evidence suggests that irregular migration has considerably reduced since the EU's anti-smuggling and anti-irregular migration interventions (IOM, 2020a; Micallef, *et al.*, 2019; Micallef *et al.*, 2021; Tubiana *et al.*, 2018). Recorded sea arrivals to Italy reduced to a fifth between 2017 and 2018 (see **Figure 4**) and remained relatively low in Malta as compared to Italy (see **Figure 5**). However, while sea arrivals to Italy seem to have reduced as a whole, there have been few robust empirical studies into the specific impact of various interventions meant to reduce irregular migration and smuggling, with few interventions having been evaluated scientifically (Browne, 2015; European Commission, 2012; Millington & Bhardwaj, 2017).

Yet, testing the effectiveness of specific interventions is important, especially since the EU's policies on irregular migration have been accused of being both ineffective and harmful. For example, one of the most controversial projects from the EUTF for Africa has been the funding and training of the Libyan coastguard, both to disrupt smugglers and identify boats at sea to bring migrants back to Libyan shores and eventually to detention centres. This funding took place despite the well-known involvement of at least some coastguards in the smuggling economy in Libya as well as a track record of mistreatment — and alleged killing — of people on the move (Malakooti, 2019; Oxfam, 2020; Tondo, 2021).¹³ Many of the people 'rescued' or intercepted by the coastguard are returned to arbitrary detention in very harsh conditions in

¹³ In 2017, the UN Panel of Experts on Libya identified that the head of the Zawiya sector of the Libyan coastguard, Abdal-Rahman Milad (alias Bija), and other coastguards were involved in shooting at and sinking migrant boats (UNSC, 2017; p. 466; see also Bish, 2024). In 2018, the United Nations Security Council (UNSC) applied sanctions against Bija, banning him from travel and freezing his assets (UNSC, 2022). The coastguard in the west of Libya has also been run by militias (Malakooti, 2019).

Libya (see below), some of which are run using EU funds (European Parliament, 2017; Michael *et al.*, 2021).

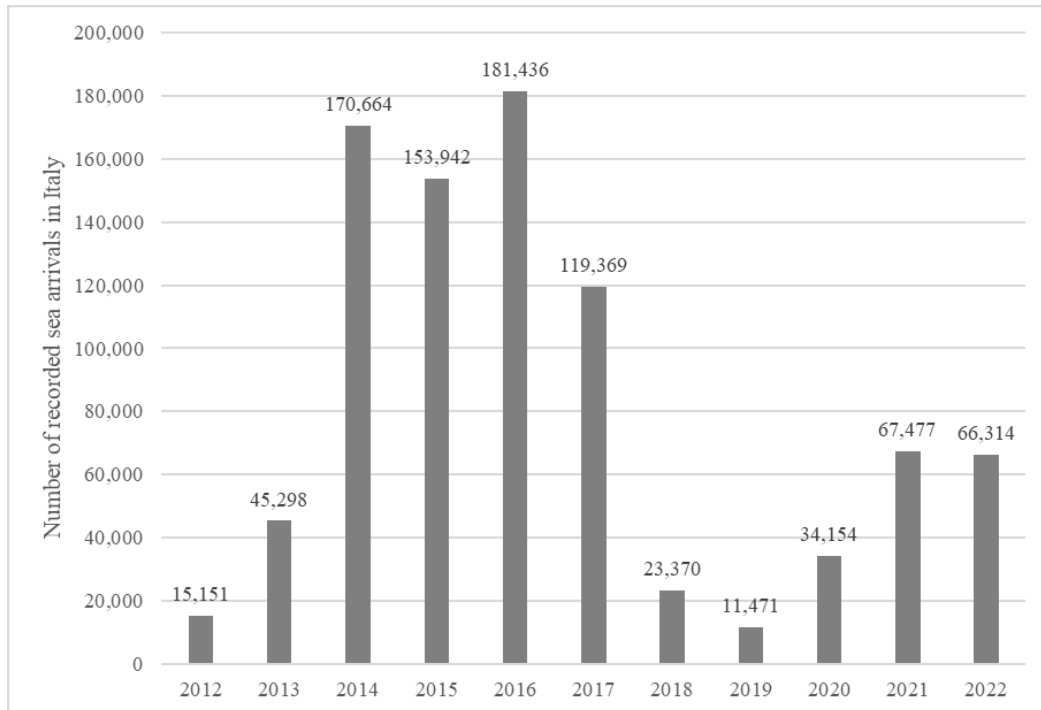


Figure 4 Recorded irregular migrant sea arrivals in Italy between 2012 and 2022 (UNHCR, 2022c)

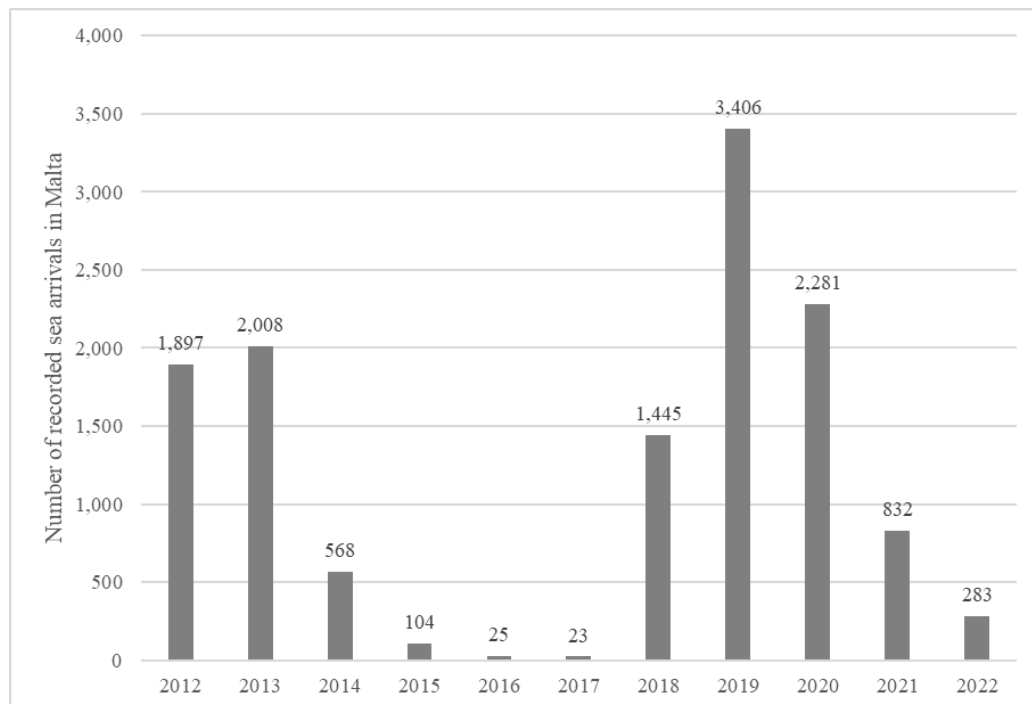


Figure 5 Recorded irregular migrant sea arrivals in Malta between 2012 and 2022 (UNHCR, 2022c)

The rest of this section will explore some of the aforementioned reasons presumed to be behind harm increases following EU interventions, namely: i) that the EU's anti-SAR stance has increased deaths in the Mediterranean, ii) that anti-smuggling interventions have professionalised smugglers and reduced the supply of migrants, making them more likely both to be extorted and to work in transit, often in difficult conditions, to fund higher smuggling prices, iii) that more migrants are being exploited in Libyan detention centres because of the Libyan coastguard's increased capacity to return migrants to Libyan shores.

EU governments' anti-SAR stance has endangered migrants in the Mediterranean

SAR operations in the Mediterranean were initially encouraged by the EU and member states when an €11-million-per-month SAR mission, Operation 'Mare Nostrum', was launched by the Italian navy in October 2013 (Cusumano & Pattison, 2018). The SAR mission was initiated after the highly publicised deaths of 600 migrants when two overloaded smuggling boats sank off the island of Lampedusa (Cusumano & Pattison, 2018). However, after a year the SAR mission was terminated, because of two main reasons. First, there was discontent within the Italian government about the lack of cost sharing with other EU member states (Cusumano & Pattison, 2018; Riddelvolt and Bosilca, 2017). Second, and perhaps more importantly, there was criticism that the mission was a 'pull factor' which increased the number of departures from Libya (Cusumano & Pattison, 2018; Riddelvolt & Bosilca, 2017).¹⁴ In November 2014, a new operation 'Triton' was launched by the EU's border agency, Frontex, for which the primary mission was border control, unlike the SAR mandate of 'Mare Nostrum' (Cusumano & Pattison, 2018). In June 2015, the EU launched operation 'Sophia' and the Italian Navy

¹⁴ For example, British Foreign Office Minister Lady Anelay said that SAR operations were encouraging 'more migrants to attempt the dangerous sea crossing, and thereby leading to more tragic deaths' (Travis, 2014), while German interior minister Thomas de Maiziere described Operation Mare Nostrum as a 'bridge to Europe' (Hasselbach, 2014).

launched Operation ‘Mare Sicuro’. Both missions focussed on disrupting smuggling networks rather than providing SAR (Loschi *et al.*, 2018; Cusumano & Pattison, 2018).

Since 2014 and the desistance of governments from conducting SAR operations, several NGOs have led their own SAR operations in the Mediterranean to compensate for the lack of large-scale state-led SAR missions (Cusumano & Pattison, 2018; Loschi *et al.*, 2018). However, their activities have been affected by EU member states, most likely because of the perceived ‘pull factor’ they constitute and the suspicion that some NGOs collude and cooperate with smugglers in helping smuggle migrants to Europe (Franko & Gabrielsen Jumbert, 2020).¹⁵ NGOs have had vessels seized, staff arrested, legal procedures initiated against them, been forced to remain in port or to spend longer periods transiting to ports for disembarkation or resupply, all of which have affected their ability to conduct SAR operations (EUFRA, 2019; UNHCR, 2019a).

Some researchers have contended that the EU’s choices to reduce SAR operations were ‘misjudged’ and ‘catastrophic’ (Reitano *et al.*, 2017; p. 36), since they wrongly assumed that the dangers at sea would act as a deterrent and stop people travelling (Loschi *et al.*, 2018; Toaldo, 2017). Recorded migrant deaths increased in the years that followed the government SAR withdrawal, from 2,913 in 2015 to 4,578 in 2016 (see **Figure 6**). Although the number of recorded deaths decreased to 2,873 in 2017, UNHCR estimated that one in 47 migrants died — a higher ratio than during the peak of the ‘migrant crisis’ (Loschi *et al.*, 2018; Reitano *et al.*, 2017). The absolute number of deaths reduced in subsequent years, however the ratio of death to departure remains very high (UNHCR, 2022b).

¹⁵ French interior minister said that SAR off the Libyan coast was ‘a real collusion between smugglers and some NGOs’ (Associated Press, 2019)

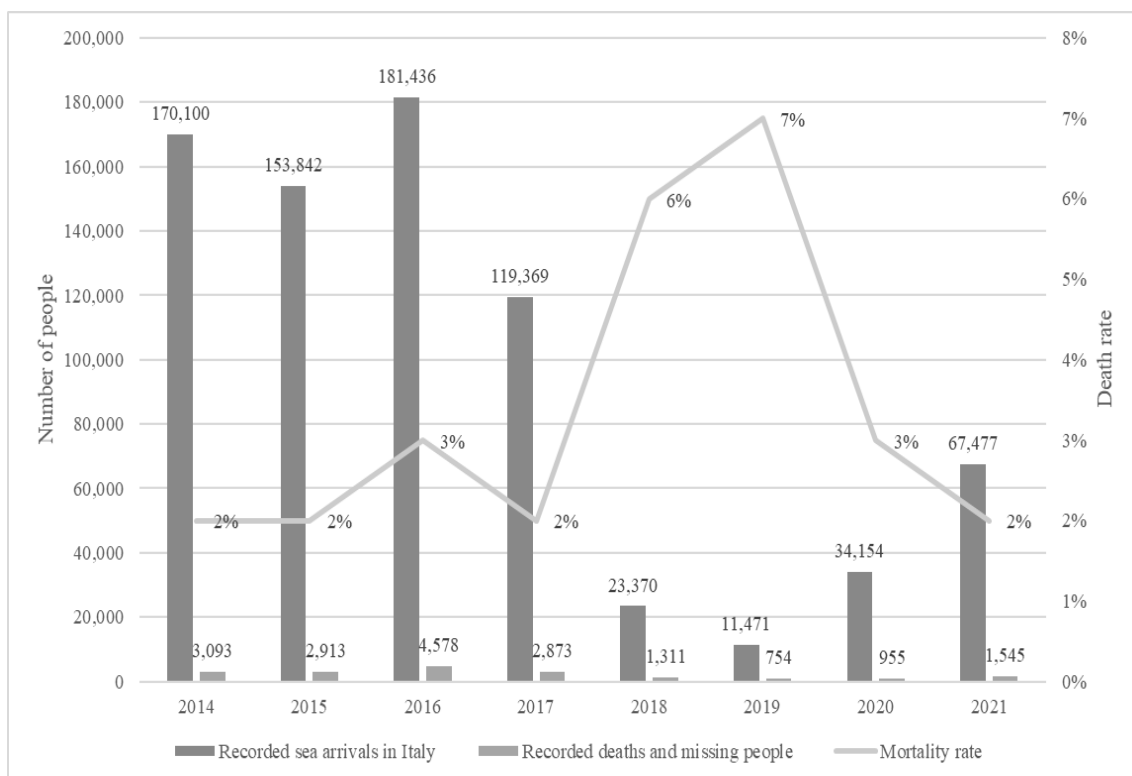


Figure 6 Recorded sea arrivals, deaths and missing migrants in the Central Mediterranean Sea between 2014 and 2021 (UNHCR, 2022c)

Anti-smuggling interventions have professionalised smugglers

The literature on the impact of the EU’s anti-smuggling interventions suggests that they have counterproductively professionalised smugglers instead of eliminating smuggling altogether (Brachet, 2018; Deiana *et al.*, 2020; Micallef, Horsley, *et al.*, 2019). Although the supply of irregular migration services seems to have reduced (Bøås, 2021; Micallef *et al.*, 2021), it is unclear whether the demand for smuggling services has also decreased in origin and transit countries. Available evidence suggests that despite growing awareness of the dangers faced on the Central Mediterranean Route, the prospect of northbound migration remains attractive for many sub-Saharan potential migrants (Raineri *et al.*, 2019). As a result, while tighter border controls seem effective in reducing the provision of smuggling services, the continued demand for mobility is suspected to have simply pushed smuggling services further underground (IOM,

2020; Raineri, 2020). People have travelled irregularly in the region for decades and relied on horizontally structured, highly opportunistic smugglers, since these activities were legitimate and accepted by local authorities (Brachet, 2018; Sanchez, 2017; UNODC, 2011). Anti-smuggling interventions raised the barriers to entry into the smuggling market, which reportedly stimulated the professionalisation of smugglers (Bish, 2019; Micallef *et al.*, 2021; Micallef, Horsley & Bish, 2019; Raineri, 2020). It is believed that in a more securitised and competitive environment, only the more highly organised and transnational networks can survive, since they can rely, for instance, on larger-scale corruption of politicians, tribal authorities, militias and local government security forces (El Kamooni-Janssen, 2017; Stocker, 2017; Raineri, 2018).

In terms of the impact of smuggler professionalisation on harms to migrants, some researchers suggest that the more smuggling becomes professional, and the practice becomes clandestine, the less migrants have the ability to leave potentially vulnerable situations and the less the mutual relationships of trust with the smugglers matter, which may endanger migrants (Raineri, 2020). Further, some research suggests that with more obstacles, smugglers seek to extract more value from migrants — through extortion — to compensate for the fewer migrants travelling or their inability to smuggle migrants as frequently as before (Malakooti, 2019; Raineri, 2020; Stocker, 2017). Migrant smugglers could therefore become human traffickers, as a form of offence displacement.¹⁶ Moreover, extant research suggests restrictive migration policies reduce the legal pathways to migrate for work or flee danger and thus create greater opportunities for traffickers (Koser, 2000; Morrison & Crosland, 2001; Pearson, 2002;

¹⁶ Some research also suggests that in addition to a shift to a more human trafficking stance, some smugglers opted to smuggle licit and illicit commodities rather than people (Micallef, Farrah, Bish & Tanner, 2019; Micallef, Horsley & Bish., 2019).

Zimmerman, 2007). Restricting these legal pathways for migration reportedly pushes migrants into more irregular routes, from which criminal opportunists can profit (Restelli, 2019, 2021).

Although difficult to measure, several studies have anecdotally suggested that human trafficking both for sexual and labour exploitation has increased in prevalence since the widespread crackdown on migrant smuggling activities in the CMR (Boukaré, 2020; Micallef *et al.*, 2021; Tubiana *et al.*, 2018). A suggested increased prevalence of human trafficking — especially debt-bound travel schemes from Central and West Africa to Sahelian gold mines and sex trafficking — has especially been reported in northern Mali, Niger, and Libya (Al-Arabi, 2018; Raineri *et al.*, 2019; Women Refugee Commission, 2019; Bish, 2021). However, the evidence used in these studies is not strong or transparent enough to substantiate claimed increases in prevalence.

A Human Rights Watch report (2019) suggests that smuggling prices also rose because of reportedly higher risks for smugglers¹⁷, which would have pushed migrants to work for longer in transit to fund the next leg of their journeys (see also Malakooti, 2019). The report suggested that rising prices had also made migrants increasingly vulnerable to trafficking for labour and enslavement (Human Rights Watch, 2019). Several reports have suggested that having to spend more time in transit has also increased the vulnerability of migrants to kidnapping and extortion by armed groups, which have proliferated in the Sahel and Libya since the fall of Qaddafi in 2011 (Bish, 2019, 2021; Kuschminder & Triandafyllidou, 2020).

A final reason why anti-smuggling interventions have been unproductive is that completely barring smuggling activities could lead to political and economic destabilisation and ultimately more migration, as people are forced to flee danger (Bøås, 2021; Brachet, 2018; Micallef *et al.*,

¹⁷ Rising smuggling prices on the CMR as a result of anti-smuggling interventions have also been reported (Bish, 2019; Frontex, 2020; Micallef *et al.*, 2021; Micallef *et al.*, 2019).

2019; Molenaar & El Kamouni-Janssen, 2017; Tubiana *et al.*, 2018). Indeed, migrant smuggling economies are said to constitute an essential coping mechanism for some communities with few alternative economic opportunities (Bøås, 2021; Micallef *et al.*, 2021).

Anti-smuggling interventions have increased the number of migrants harmed in detention centres

A critical element suspected of increasing harms to migrants is the reported increase of migrants being detained in Libyan detention centres, as a result of the increased capacity and responsibility of the Libyan coastguard to conduct SAR operations (Amnesty International, 2020, 2021; France-Presse, 2017; Malakooti, 2019). Many detention centres are run by militias who turned to creating and managing detention centres as a means for income generation around 2015 (Malakooti, 2019). As reported by Micallef (2017) and Malakooti (2019), sensing an imminent end to the anarchical status quo, militia leaders reportedly began trying to launder their reputations by reducing their involvement in smuggling migrants and accepting incentives to serve as law enforcement partners instead. Indeed, according to research conducted by Micallef (2017) and Micallef *et al.* (2019; 2021), the gradual retreat of coastal militias from the overt protection of lucrative migrant-smuggling activities to law-enforcement roles has been attributed as a key factor for the post-2018 reduction of departures. The shift from smuggling to law enforcement would ensure the longer-term survival of militias given the increasing perception that smuggling was a criminal economy (*ibid*). However, since the human-smuggling economy remained a vital funding stream for these militia groups, loose and discreet arrangements with smaller smuggling networks were reportedly made, which have meant that reduced, more discreet activities were tolerated (Micallef *et al.*, 2021). The shift from a criminal to a law-enforcement role was reportedly encouraged by the Italian

government, who reportedly sponsored several militias to become coastal guard forces (Cusumano & Pattison, 2018).

Detention centres have often been split into two categories: official detention centres, which are run or accredited by the Libyan Directorate for Combating Illegal Migration (DCIM) and are mostly situated in the north of the country; and unofficial detention centres, which are predominantly run by smugglers in the south and east (Malakooti, 2019). Extortion and forced labour are reportedly almost systemic in unofficial centres but also take place in official centres (Amnesty International, 2021; Malakooti, 2019). The DCIM was created in 2012 to oversee detention centres in the country and integrate militia-run centres into the state system. Given the power and influence of militias in Libya, most detention centres, even the official ones, reportedly need the support of militias to operate (Malakooti, 2019).¹⁸

Armed group involvement in official and unofficial detention centres is reportedly mostly motivated by financial reasons. The business model of detention centres varies slightly but overlaps in both unofficial and official detention centres (Malakooti, 2019). Unofficial centres reportedly mostly draw their profits from extortion, forced labour, forced sex work, selling migrants to Libyans who require workers, to other centres, to smugglers, and armed groups who use migrants for smuggling or security work (Amnesty International, 2021; Bish, 2021; Malakooti, 2019; Euro-Med Monitor, 2021).

¹⁸ In December 2021, Mohamed al-Khoja was appointed as DCIM director, responsible for overseeing 15 migrant detention centres (Urbina, 2021). Al-Khoja is a notorious militia commander who ran one of the most controversial prisons in Libya, the Tariq al-Sikka detention centre in Tripoli, where thousands of migrants have reportedly suffered rape, torture and abuse (Urbina, 2021). Al-Khoja had also used the prison as a base to train his militia and store weapons, which he reportedly forced imprisoned migrants to clean (Human Rights Watch, 2019; Malakooti, 2019).

At the time of writing, no regulations or guidelines that state how long a migrant should be detained as a maximum or how they could be released were found. Based on 160 interviews conducted with migrants and key informants between November 2018 and February 2019 in Niger, Libya, Malta and Italy, Malakooti (2019) distinguishes three ways of being released from a detention centre: i) being released to a Libyan sponsor who requires a worker; ii) paying a ransom; iii) escaping.

Because of the pandemic and heightened conflict in Libya since 2020, some detention centres became unmanageable and were forced to close (Cuttitta, 2021; Micallef *et al.*, 2021). Data about detention centres is very unreliable and have been presented as estimates, which are mostly based on available records and crowd counting (Cuttitta, 2021; IOM, 2017). The estimated number of people held in official detention centres reportedly decreased from 8,672 in July 2018 to 5,695 in June 2019, to ‘more than 3,000’ in January 2020 and ‘roughly 1,500’ in April 2020 (Cuttitta, 2021; p. 1). The number reportedly then rose again to between 2,000 to 3,000 people by the end of 2020 (Cuttitta, 2021; p. 1) and then dropped to 1,500 migrants in official detention centres by March 2022 (Tubiana & Purbrick, 2022). However, some researchers have suggested that as the number of migrants in official detention centres reportedly decreased, the number of migrants in unofficial centres could have increased (Cuttitta, 2021; Tubiana & Purbrick, 2022). This is particularly important since the estimated number of migrants in Libya remains high, with around 600,000 people in November 2021 based on IOM’s estimation (IOM, 2017; Tubiana & Purbrick, 2022).

While all these reports have highlighted the causal impact of government interventions in increasing harm, it has mostly been reported using anecdotal evidence, such as small unrepresentative samples of interviews, and non-transparent methods, with few studies reporting peer review, or detailing the data and its provenance (such as sampling strategy,

search terms, sources, and inclusion parameters). There are few rigorous evaluations of measures to tackle migrant smuggling (Millington & Bhardwaj, 2017). Given their suspected contribution to harms to migrants, there is a clear need to better understand the impact of state-backed anti-smuggling interventions (Millington & Bhardwaj, 2017). As the section below on knowledge gaps and methodological limitations will underline, there is a need for more rigorous research to examine causal links between anti-smuggling interventions and their impact on harm (Hüsken, 2021).

2.2. Gaps and limitations of existing research

2.2.1. Data and methodological limitations

An abundance of evidence on the specific harms that migrants endure has been primarily produced by journalists and international government and non-government organisations researching irregular migration. These contributions have been instrumental in shedding light on dynamics related to harms to migrants on the CMR. However, they present several limitations which are centred around four themes that I will discuss in this sub-section: i) media coverage does not work to the same standards of academic rigour, ii) the work produced in grey literature is not peer-reviewed, iii) the grey literature rarely follows scientific methods, iv) the ethics of these methods can be questionable.

News reporting is here to inform and hold power to account but may also hold agendas and have varying degrees of reliability. It is therefore fundamentally different from research. Moreover, media outputs may sometimes lack the necessary contextualisation to understand the full complexity of a phenomenon, especially when working under tight deadlines. In Woolley's (2015) words: 'some journalism research output is rushed, inadequate, naïve, ill-considered and even inaccurate or misguided'. It should be noted however that some investigative journalism has been very good in uncovering and drawing attention to important

trends, such as in exposing Frontex-related human rights violations (Fallon, 2022). Low financial resources may have contributed to reduced quality in investigative journalism (FPU, 2022).

Second, research products from the grey literature rarely report any peer-review or meet the criteria of peer-reviewed publications (Pappas & Williams, 2011). A peer-review process is important since it subjects the work of an expert to the scrutiny of other experts in the field, becoming the foundation of the scholarly publication system (Kelly *et al.*, 2014). As a result, externally validating work pushes authors to produce higher-quality research that is (in theory, at least) more reliable than non-peer-reviewed work.

A third core limitation of media and grey literature outputs centres around the data and methods employed while researching irregular migration, smuggling and trafficking on the CMR (de Vries & Glawion, 2021). Much of the research produced on the CMR has relied on qualitative methods, employing small unrepresentative samples, and few studies have been transparent in their methods, detailing data provenance and sampling strategies, such as search terms and inclusion parameters (Raineri, 2020; Sanchez, 2019, 2020; Tubiana & Purbrick, 2022).

Hüsken (2021; p. 78) explores data and methodological concerns in the context of conducting research in Libya: ‘when risk, safety, security and securitisation become important issues in fieldwork, fundamental questions are raised about methodology, ethics and the integrity of academic knowledge production’. Indeed, conducting research on people smuggling and human trafficking can be difficult in some countries because such research is both increasingly perceived as a security threat by hostile states and affected by security concerns for both the researcher and their participants (Peter & Strazzari, 2017). Given these logistical and security risks, research on the CMR has often been either i) managed remotely; ii) conducted remotely; iii) outsourced to ‘fixers’; or iv) ‘embedded’ within existing military operations or international

intervention regimes (Hüsken, 2021; Peter & Strazzari, 2017). However, these four ‘workaround’ methods present significant limitations affecting the quality and reliability of the research, which I will analyse in the rest of this section.

The first method is often described as *remotely managed research*, which involves employing local researchers to collect and sometimes process primary data, thereby avoiding local travel for the principal researcher (Peter & Strazzari, 2017). However, these local researchers often receive limited, if any, training, which affects the quality of the data collected. Hüsken (2021) identifies three reasons that drive local researchers who act as ‘knowledge brokers’: i) commitment to science, ii) financial reward, iii) commitment to a political or ideological position. Unfortunately, there is little engagement with reflexivity and the motivations of researchers are rarely reflected in research productions, which instead claim to have unbiased information. In a local context like Libya and the Sahel however, where there are many conflicting parties, information provided may be biased by one of the local researcher’s motivations. For example, the criminality of an ethnic group rival to the local researcher’s may be exaggerated; or information may only emanate from participants within the local researcher’s social network, which may not be representative of a given area. Another limitation to remotely managed research is of an ethical nature: local researchers are seldom acknowledged in final publications, and although the short-term financial compensation of rapid consultancies can be attractive, it is rarely commensurate with the risks taken during the fieldwork (Hüsken, 2021).

The second method that has been used to circumvent challenges conducting research on the CMR, has been *remotely conducting research*. Remote research has been facilitated by the digitalisation of communication and the prevalence of access to social media, whereby research participants can be identified and interviewed through online communication tools (Horst *et*

al., 2016; Hüsken, 2021). However, this often means that principal researchers do not travel locally and are therefore unable to contextualise participants and their local authority, which can cast doubts as to their legitimacy as authentic representatives of grassroots knowledge (Hüsken, 2021). Furthermore, the online transfer of sometimes sensitive information also presents a potential security concern, which can expose local researchers to scrutiny by authorities in their country and place them in danger (Horst *et al.*, 2016).

When principal researchers do conduct fieldwork, it often takes place in one of two setups: either through ‘*hotel journalism*’ (Fisk, 2005) or through research embedded with local or international security forces. ‘Hotel journalism’, which is applicable to both journalists and academic researchers, refers to the process in which researchers rely solely on fixers and research assistants rather than on their own independent research in the country (Fisk, 2005). This practice affects the reliability of the information gathered by the researcher, since it relies on the contacts and social networks that are accessible to the ‘fixer’ which may be heavily constrained, for instance due to religious or tribal affiliations. Moreover, given that fixers are often shared amongst journalists and researchers, the same network of participants — and thus information — is repeated to the different journalists and researchers (Borpujari, 2019). This can give a false sense of information triangulation, even though the same primary sources of information were sampled (Carter *et al.*, 2014).

Embedded research involves the researcher’s participation in military or intelligence operations, or their gaining of access to zones of danger by benefiting from the security system provided by an international organization. This practice is controversial for several reasons: researchers can contribute to the war effort because of their embeddedness with security forces, therefore losing their unbiased positions as external scientific observers. For example, the United States Army Human Terrain System program in Afghanistan and Iraq, which involved

employing academics to better understand and target local populations, was highly contested within the social sciences (McFate & Laurence, 2015).

In addition to the embeddedness within international military operations, intelligence services actively recruit researchers who work in dangerous and conflict zones or study illicit economies such as smuggling or trafficking (Hüsken, 2021). Although researchers may agree to work for these services, including for patriotic, financial, security, or logistical reasons (e.g., help with a visa), the practice effectively ‘draws science into the logics of spying and secrecy, which makes an open and trusting collaboration between researchers and counterparts impossible’ (Hüsken, 2021, p. 85).

When it does not involve international security forces, conducting research locally can involve the use of local security forces for security coverage. However, these forces can be state-friendly local militias or vigilante groups (Kovats-Bernat, 2002). As a result, researchers can become involved in local conflict dynamics, which risks biasing the information provided by participants and affecting exposure to information (Kovats-Bernat, 2002). In other instances, participants may associate the researcher with the international organisation with whom they are embedded, which may affect the veracity of the information given to the researcher because of social desirability bias or because they may believe that the assistance received will depend on the information they provide (van Veldhuizen *et al.*, 2017).

Finally, ethical considerations are not always appropriately considered, especially given the sensitive nature of the study of irregular migration (Phillips, 2019; Spener, 2009b). While university ethics boards have arguably restricted academic research in challenging fields, dubious moral and ethical practices conducted by journalists and non-academic researchers have both affected the quality of research outputs and affected the safety of participants (Hüsken, 2021). In February 2020 for instance, Sadou Yehia was abducted and executed by

jihadists in Mali after appearing in a France24 documentary, supposedly because he was perceived as having collaborated with the ‘West’ (Carayol, 2020).

Considering the limitations of the data, methods and approach to research that has produced much of the available knowledge on the CMR, there is a clear need to establish more knowledge using scientific methods that can establish trends with more rigour (see Objective 1 in the Research objectives). In the following section, I will explore some of the specific gaps that exist and on which I will seek to focus in this thesis.

2.2.2. Knowledge gaps

The previous section has underlined the limitations of much of the literature produced by the media and grey literature on the CMR. However, although their contributions should not always be taken at face value, they should not be ignored. They provide significant insights into the dynamics relevant to the current research, as illustrated throughout the earlier subsections of this chapter. Despite these insights and beyond their methodological limitations, there are two main knowledge gaps this research seeks to fill. **First**, there is limited information as to the details of migration journeys (see Objective 1 and 2 in the Research objectives, in Chapter 3). **Second**, there is limited information as to the specific and overall impact of government interventions on harms to people travelling (see Objective 3 in the Research objectives).

Available evidence particular to the details of migrants’ journeys remains limited (Sanchez, 2020). Few studies have set out to analyse the details of larger migration journeys systematically, and when they have done so, it has mostly taken place on smaller segments of the journey (Kuschminder, 2021; Micallef, 2017). Further, the research often focusses on the geographical routes travelled by migrants rather than the types of activities and states that the

migrants experience. However, understanding commonalities in experiences before exploitation can bring insights as to risks and intervention opportunities for harm-reduction (see section on crime scripts below). Moreover, while the crisis in Libya has increased the focus on the human rights abuses committed there, migration experiences and exploitation occurring before reaching Libya have received comparatively less attention (Kuschminder, 2021).

Several studies seem to suggest that migrants do not necessarily start their journeys with the intention of reaching Europe (Raineri, 2020; Sanchez, 2019, 2020; Tubiana & Purbrick, 2022). Instead, the decision to migrate to Europe reportedly often comes later, typically because of the harmful situations that result from exploitation in destination countries in north Africa, which eventually become transit points as opportunities to emigrate to Europe are presented to them. This finding conforms with many studies suggesting that migration journeys are not necessarily linear and unidirectional movements from origin to destination countries (Collyer, 2010; Crawley & Jones, 2021; Snel *et al.*, 2021). Given the wide array of countries and geographies involved in the migration process, there is a need to study the common activities across geographies that migrants experience on the CMR to Europe.

The reported prevalence of criminalised exploitation,¹⁹ including by criminal networks, on migration journeys calls for a criminological approach to the study of irregular migration. The following section will seek to explain how theories stemming from crime science will help to improve the study of irregular migration and related harms and exploitation.

¹⁹ Forms of exploitation that are explicitly recognised and prohibited by international law.

Chapter 3 Conceptual frameworks

The study of irregular migration and related harms on the CMR has been approached largely through theories and frameworks from the migration literature. There is no doubt that these theories have been beneficial in advancing our understanding of irregular migration. Nonetheless, I believe that an alternative approach, stemming from the field of crime science, will improve our knowledge on how detention, exploitation, and related harms to migrants occur, as a first step to designing policies that tackle these harms. This section begins by giving an overview of the current existing approaches to conceptualising migration before introducing crime science theories and their utility for the study of irregular migration, exploitation and related harms.

3.1. Conceptualising irregular migration

3.1.1. Migration as a complex system

Irregular migration, smuggling, human trafficking, exploitation and related harms are complex phenomena (Aronowitz, 2009; Cockbain *et al.*, 2022; Gallego, 2020; Haas *et al.*, 2019; Leloup, 1996). The complexity of the study of irregular migration results from several intertwining factors: i) the large range of process crimes (people smuggling, human trafficking, detention and exploitation), ii) the wide range of actors involved in both facilitating (e.g. smugglers) and disrupting (e.g. security forces, traffickers) the migration process and harming migrants, and iii) the wide range of contextual (social, economic, cultural) and environmental factors (varying geographies and opportunities *en route*) that affect migratory dynamics (Aronowitz, 2009; Gallego, 2020; de Haas *et al.*, 2019; Leloup, 1996; Cockbain *et al.*, 2022).

This complexity has informed and justified increasing interest in a complex systems approach to the study of irregular migration (Leloup, 1996; van der Watt & van der Westhuizen, 2017). McAlpine (2021) synthesises the relevant migration theories that use a complex system framing after conducting a systematic review of the literature (see **Figure 7**). Migration theories are present at three levels of analysis: micro, meso and macro, whereby each level interacts with each other, making the content of each level change and adapt over time (McAlpine, 2021).

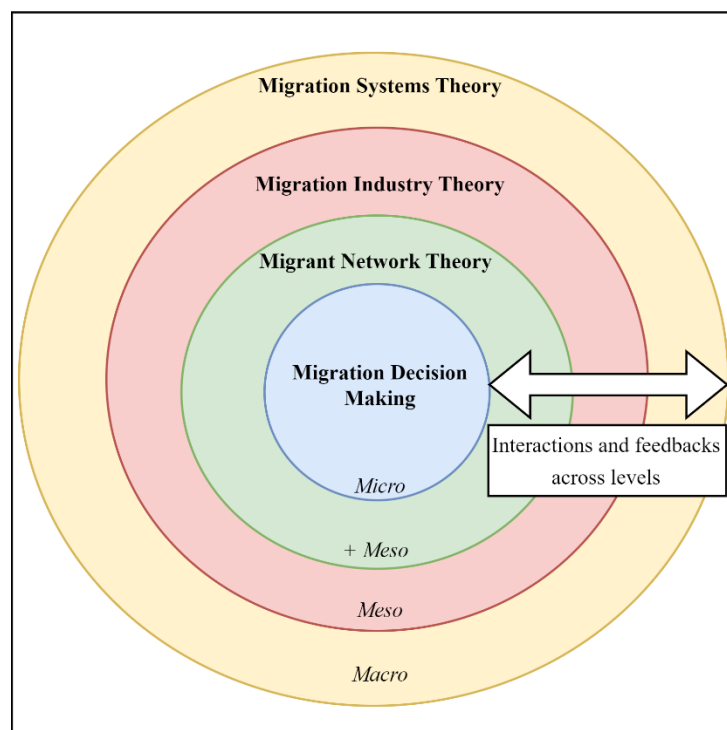


Figure 7 Multi-level migration system theoretical framework, based on McAlpine (2021)

McAlpine (2021) identifies *migration systems theory* as the dominant theory at the macro level. A systems approach to the study of migration was pioneered by Mabogunje (1970) who highlighted the role of information flows in shaping migration systems. De Haas (2010) later defined migration systems as a ‘set of places linked by flows and counter-flows of people, goods, services and information, which tend to facilitate further exchange, including migration,

between the places' (de Haas, 2010). Building on their work, Bakewell (2014, p. 310) defined a migration system as holding two main features:

- 'A set of interacting elements – including flows of people, ideas and goods, institutions ... and strategies as in plans for action by particular actors—which relate to the migration between localities.'
- 'Dynamics governing the way in which the elements change in relation to changes in both these system elements (feedback mechanisms) and in the wider environment.'

3.1.2. Migration networks and the migration industry

At the meso level of the migration system, McAlpine (2021) identified two dominant theories: migration industry theory and migration network theory. A *migration industry* consists of 'employers, travel agents, recruiters, brokers, smugglers, humanitarian organisations, housing agents, immigration lawyers and other intermediaries who have a strong interest in the continuation of migration' (Haas *et al.*, 2019; p. 66). Salt and Stein (1997) further emphasised the idea that actors within this industry profit from it, describing migration as a global business with both legitimate and illegitimate sides. At its core, migration industry theory argues that the commerce of migration — and profit-seeking actors within this commerce — plays a significant part in structuring international human mobility (Hernández-León, 2012).

Migration network theory focuses on the role of social networks in facilitating, sustaining and perpetuating migration (D. S. Massey *et al.*, 1987). Social capital and networks have been repeatedly suggested to facilitate migration (Garip & Asad, 2015; Haug, 2008). Both social networks (such as family, friends, and other migrants) and professional intermediary networks (such as smugglers and brokers) can assist migration (Alpes, 2014; Deshingkar, 2019; McAlpine, 2021).

3.1.3. Migration decision making

The micro level of the migration system seeks to understand the behaviours and decision making of the actors that influence the migration process. Although there is no robust theory on migrant decision making (McAlpine, 2021), several perspectives have been introduced to theorise some aspects of the migration decision-making process.

An individual's migration has often been conceptualised as a 'trajectory' or 'pathway'. Kley (2011) describes four behavioural stages of the migration process, applying the Rubicon model²⁰ of action phases to the study of migration (see Figure 8):

- the *pre-decisional phase*: when the person considers migrating;
- the *pre-actional phase*, when the migrant has decided to migrate and is planning their trajectory;
- the *actional phase*, when the migrant is travelling; and,
- the *post-actional phase*, when the migrant has successfully reached their destination and is living there.

²⁰ The name 'Rubicon' comes from Caesar's crossing of the Rubicon River, a point of no return, exposing his bellicose intentions. Every action includes such a leap whereby a person moves from goal setting to goal striving (Rauber, 2007).

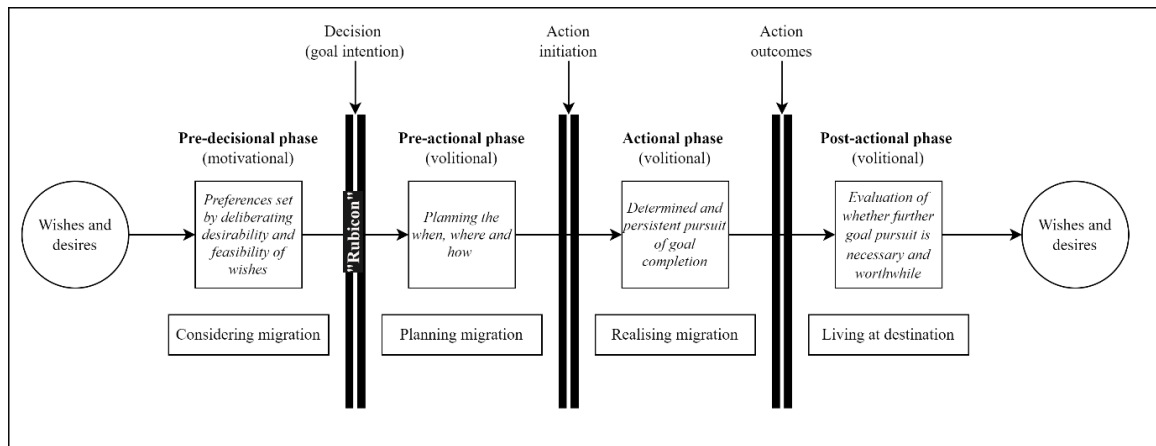


Figure 8 Kley's (2011) Rubicon model of planned action applied to migration, reproduced from McAlpine (2021).

The Rubicon model's division is a useful framework for conceptualising the overall migration process. However, its coverage of the actual journey, which corresponds to the third 'actional phase', does not detail the decision-making process that is made *during* the journey. Yet, the available evidence suggests that migrant decision making occurs at various stages during the journey (Baláž *et al.*, 2016).

Zimmerman, Kiss and Hossain (2011) provide a framework that addresses this limitation and focuses on phases during the journey. They break down the migration process into five phases composed of multiple 'stages', in order to conceptualise the typical actions, opportunities and vulnerabilities that occur during the migration journey. These phases help to underline the complexity of the migration process and acknowledge its non-linearity: 'Contemporary mobility is [...] a multistage cycle that can be entered into multiple times, in various ways, and may occur within or across national borders' (Zimmermann *et al.*, 2011, p. 2). The five phases include 'pre-departure', 'travel', 'destination', 'interception' (reportedly affecting a minority of migrants), and 'return' (see **Figure 9**). By categorising migration trajectories into stages, this framework helps to organise the decision-making of migrants and their consequences across the full migration pathway.

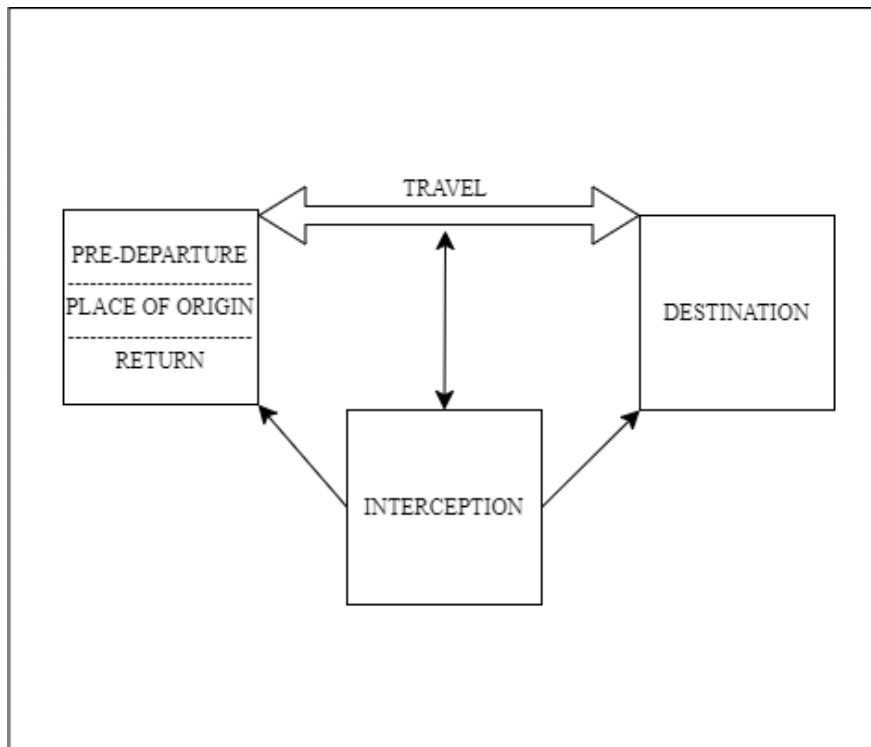


Figure 9 Migration phases framework, based on Zimmerman, Kiss & Hossain (2011)

While it is a very useful framework, several knowledge gaps remain. The categorisation is at a macro-level and does not breakdown the more micro-level actions that are taken by migrants. Further, it omits an important phase of migration journeys, which is ‘work’ in transit countries, yet it has clearly become an integral part of migration journeys around the world (ILO, 2017; Micallef *et al.*, 2019).

A traditional decision-making model for migrant decision making follows a rational choice approach, proposed by Todaro & Maruszko (1987). According to the model, irregular migrants are rational decision makers who weigh the relative perceived benefits (e.g., income and education) and perceived (monetary and other) costs, as well as the probability (or risk) of a perceived successful outcome to happen. Many insights about migrant decision-making are not unlike typical theories used to explain the decision making of economic actors. However, while decisions to migrate can indeed be motivated by economic factors, that is not always the case,

such as self-actualisation (Baláž *et al.*, 2016; Favell & Recchi, 2009; Haug, 2008). Moreover, decisions are not always made at the individual level, but can involve an entire household, and are often made under uncertainty (Baláž *et al.*, 2016; Czaika *et al.*, 2021; O’Connell, 1997).

The interaction between micro (decision) and more meso and macro (systemic) levels is apparent in De Haas’s ‘aspirations-capabilities framework’, which defines migration as a function of people’s capabilities and aspirations to migrate within given sets of perceived geographical opportunity structures’ (de Haas, 2021). In other words, migrant decision making is bounded by the opportunities provided at the macro and meso levels. McAlpine (2021) underlines how looking at the interaction between these various levels of system analysis facilitates the understanding of how processes are influenced by complex interactions, entities, interactions and dynamics at multiple levels. For example, a migrant’s individual decision (micro-level) may lead to the creation of a network (meso level), which over time can create a migration corridor (macro-level), such as the Central Mediterranean Route (McAlpine, 2021). Responses to migration can also be understood using this multi-level analysis. The creation of a new migration corridor, such as the Central Mediterranean Route, can create an EU-wide policy response (macro-level), which can influence the networks (meso level) and the individual decision-makers within it (McAlpine, 2021).

3.1.4. Other approaches to studying migration

One could take McAlpine’s (2021) seminal multi-level categorisation even further by including some theories at the decision-making level that were not included but have been used in studying migration trajectories. Several studies have approached migration journeys through ‘trajectory ethnography’, which would fit at the micro level in the multi-level classification, where migration journeys became the central focus of studies rather than national or regional migration regimes (Schapendonk, 2012, 2015; Schapendonk & Steel, 2014; Schwarz, 2020).

Schwarz (2020; p. 218) explains that trajectory ethnography helps ‘track the continuous and unpredictable paths of those on the move and their dependence on and resistance against migration regimes encountered along these paths’. Schwarz (2020, p. 218) adds that it also ‘allows to shed light on the migratory process itself’ and helps to put in perspective ‘the rationality and linearity of migration processes by gaining direct insights into the multiple and changeable plans, directions, and destinations of migrants’. The idea that migration journeys are not linear is reminiscent of the (macro-level) systems perspective on migration, thereby re-emphasising the interaction between levels.

Earlier versions of trajectory ethnography were introduced by Marcus (1995; p. 106), who recommended to ‘follow the people’ — alluding to the catchphrase ‘follow the money’ — to conduct multi-sited ethnography. Doing so would help to establish the ‘chains, paths, threads, conjunctions or juxtapositions of locations in which the ethnographer establishes some form of literal, physical presence, with an explicit, posited logic of association or connection among sites that define the argument of the ethnography’ (Marcus, 1995; p. 105).

Most recently, social navigation theory (Vigh, 2006, 2009) has been commonly used as an analytical framework to study the complexities of migrant decision making and agency in changing and unstable environments (Kuschminder, 2021; Triandafyllidou, 2019). Social navigation theory posits that individuals can plan and adjust their trajectories in reaction to changing social environments (Denov & Bryan, 2012). As such, it shares many similarities with migration networks theory, and would fit at the meso-level of the multi-level categorisation.

Kuschminder (2021) draws three essential elements from the social navigation framework as necessary to conceptualise migration journeys. First, people emigrating are driven by an unknown future imaginary, which works as an endpoint in the mind of the person travelling

and relates to optimism for a better future and life. Second, information gathering, and processing are essential to inform the decisions and risk assessments that people make, stressing the importance of social networks for information access. Third, people are reactive to rapidly changing situations to survive, ‘taking *opportunities* that arise by chance’ (Kuschminder, 2021, p. 3263). At its core, social navigation theory recognises the critical role that the social environment – and the *opportunities* presented within it — play in shaping individual decision-making.

The use of social navigation theory disrupted conventional wisdom on migrant decision making. Migrants, who had been until then perceived as merely victims on journeys, unable to make decisions, are increasingly seen as capable of agency and as reacting to opportunities within their environment (Kuschminder, 2021). Social navigation theory is one such theory that assumes that migrants have this agency.

While social navigation theory acknowledges the role that opportunities within the social environment play in shaping migrant decision making and trajectories, there is as yet no explicit framework for understanding the role of opportunities and threats that exist in the *physical* environment of migrants in shaping their decision making. This absence occurs despite the acknowledgment that decision making is bounded by the opportunities provided at the macro and meso levels (de Haas 2021, McAlpine 2021). For example, the decision of a government to suddenly close their borders because of a pandemic, may push a migrant to resort to irregular means of migration despite having initially considered regular means. On the other side, the sudden opening of a previously closed border may affect the decision making of a migrant to change their route. Similarly, a person on the move may decide to stay for a longer time in a city that they had not initially anticipated staying in when presented with work opportunities, for instance. As I will explore in the following section, opportunity theories of crime science

can be used to study the role of situations and opportunities in a migration context, which may ultimately affect harms to people on the move.

3.2. Conceptualising harm and exploitation: the crime science approach

‘A full understanding of contemporary migration processes will not be achieved by relying on the tools of one discipline alone or by focusing on a single level of analysis. Rather, their complex, multifaceted nature requires a sophisticated theory that incorporates a variety of perspectives, levels and assumptions.’

Massey *et al.*, 1993, p. 432

As expressed by Massey (1993), sociologist and migration theorist, and colleagues, the study of international migration requires a multi-disciplinary approach given its complex nature. Migration’s interaction with crime, through internationally recognised crimes such as human trafficking or human smuggling, warrants an exploration of how theories used to study crime can help achieve a reduction of migration-related harm. However, in this thesis I do not consider migration or irregular migration as a crime in itself (see Appendix 2: Definitions). Instead, I seek to apply theories that stem from crime science to study the harm and exploitation that migrants undergo on their irregular migration journeys to Europe on the CMR. This section introduces the field of crime science and its main component theories and explores their applicability to the study of irregular migration.

Crime science is the application of science to the study of crime (Wortley *et al.*, 2018). It has three core tenets (Cockbain & Laycock, 2017): i) the application of scientific methods; ii) the study of crime and security problems; and iii) the aim of reducing harm. In addition to these

tenets, some proponents of crime science hold that if the study topic is not useful to crime- or harm-reduction it is not worth being researched, making the discipline's trademark question: 'So What?' (Bouhana, 2013; Laycock, 2012).

Although the term 'crime science' was coined in 2001, the discipline holds its roots in environmental and experimental criminology. In the 1970s, environmental criminology came to revolutionise the field of criminology after the efficacy of offender treatment programmes was questioned (Martinson, 1974; Wortley *et al.*, 2018). Until then, these programmes were seen as the dominant way of reducing crime (Martinson, 1974; Wortley *et al.*, 2018). Instead of focussing on the criminal, environmental criminology focussed on the crime event and the immediate circumstances in which it occurred (Brantingham & Brantingham, 1981; Jeffery, 1971). This focus heavily contrasted with previous approaches which would focus on assumed distal causes for crime, such as the offender's background or childhood. This focus on the so-called 'root causes' of crime was found to be very difficult to act upon and resulted on *responding to* rather than *preventing* crime. Environmental criminology — and crime science — hold their theoretical underpinnings in opportunity theories of crime, which are introduced in the following section.

3.2.1. Opportunity theories

'Opportunity theories' are often used as an umbrella term to designate a family of theories used in environmental criminology, which include rational choice, routine activity, and crime pattern theories (Felson & Clarke, 1998; Natarajan, 2011; Laycock, 2012). The fundamental premise of these theories is that the environment affects crime: changes in the immediate environment create opportunities, and people are more likely to offend where criminal chances are higher.

Until the introduction of the rational choice perspective (Clarke & Cornish, 1985), much of the criminological literature assumed that offenders were criminally disposed to commit a crime due to psychosocial factors linked to their backgrounds (Martinson, 1974; Clarke and Cornish, 1985; Cornish and Clarke, 2017). Clarke & Cornish (1985) suggested that decision making resulted primarily from the immediate environment, with opportunity within this environment affecting the propensity to commit a crime more than psychosocial predispositions. As a result, rational choice helps understand why certain crimes are committed in certain places (Weisburd *et al.*, 2016). Rational choice also contends that crimes are committed with a specific purpose and result from a rational calculation of the costs and benefits of a crime.

However, offenders' rationality is seen as 'bounded' (Simon, 1983) by factors like exposure to limited information, alcohol consumption (Clarke & Cornish, 1985; Cockbain & Laycock, 2017) or emotions (Oullier, 2010). It is also limited by the offender's cognitive abilities; as Bouhana (2013; p. 3) underlines: 'while neo-classical economics would like people to think like Mr. Spock, the average human being is rather closer to Homer Simpson'. Wortley (2013) also underlines that rational choice does not account for the full role of environments in affecting crime, introducing the notion of *precipitators*, which I will explore in more depth below (Wortley, 2013; Wortley & Townsley, 2017, p. 62).

The second key component of opportunity theories is routine activity theory. Routine activity theory (Cohen and Felson, 1979) contends that there must be a motivated offender and a suitable target without a capable guardian for a crime to take place. The theory emerged to explain an increase in certain crimes in the US after World War II, despite the economic upturn. The higher-value items in households and women leaving them unattended as they increasingly entered the workforce meant that day-time burglaries increased (Cohen and Felson, 1979).

According to routine activity theory, people's movements are not random but shaped by routine activities, and both the routine activities of victims and offenders shape the crime event.

The third main component of opportunity theories is crime pattern theory, which builds on the geographic character of how offenders find criminal opportunities as part of their routine activities (Brantingham & Brantingham, 1981; Brantingham & Brantingham, 1993; Sidebottom and Wortley, 2016; p. 162). It defines the places people visit as part of their routine activities (home, work, gym) as nodes and refers to the routes they take between them as *paths*. Nodes and paths that are used frequently become part of the 'awareness space' of the individual. The theory suggests that offenders also engage in non-criminal activities and that these can be studied to understand crime. Offenders take advantage of the opportunities encountered in their 'activity space', or the most frequented places as part of their daily routines, such as during commuting patterns. Outside of their activity space, offenders will have to seek out criminal opportunities and will more likely face uncertain or unforeseeable risks (Tayebi *et al.*, 2014).

There are several teachings from opportunity theories that can be applied to the study of irregular migration. As a whole, opportunity theories help to understand why crime events are not random but more likely to take place at certain locations and times where opportunities exist. The rational choice perspective helps us understand that people weigh the costs and benefits of a crime before committing it. This perspective could indicate that raising the perceived costs and reducing the perceived benefits of harming migrants could help to reduce the incidents of crimes against people on the move. Routine activity theory helps to understand that migrant victimisation and vulnerability to harm is likely to be influenced by their own routine activities and those of people who harm them. Therefore, identifying these activities could help target harm-reduction initiatives. Further, routine activity theory also suggests that

exploitation of migrants will mostly occur where there is an absence of a capable guardian and the presence of a motivated offender. Finally, crime pattern theory helps us compartmentalise these activities into *nodes*, and the routes between them as *paths*, which can help us model and identify vulnerabilities on the entire migration journey. It also suggests that exploitation is more likely to take place in the awareness space of the offender.

In addition to opportunity theories, several frameworks have emerged from crime science that may be useful for the study of irregular migration and related harm. I will explore these frameworks in the following sections.

3.2.2. Situational crime prevention

Situational crime prevention (SCP) is a framework used in crime science to determine effective interventions to help reduce or suppress crime (Clarke, 1995). This framework draws on the opportunity theories described above, with the basic premise that to reduce crime, one should focus on reducing the opportunities that permit crime. This approach contrasts with traditional crime prevention techniques which tend to focus on the criminal (as opposed to the environment) and seek to understand what motivates offenders (Bullock & Condry, 2013).

An initial twelve-criteria technique of SCP was developed by Clarke (1983, 1995; 1980; 1992), around the central categories of ‘increase the effort’, ‘increase the risks’, and ‘reduce the rewards’ for offenders to commit a crime. This framework was then revised to a sixteen-criteria technique, adding ‘remove excuses’ (Clarke, 1997). In 2001, Wortley offered a critique of the sixteen techniques, which ultimately resulted in the addition of ‘reduce provocations’ and the final 25 techniques (see **Table 1**), which are increasingly well known as a practical crime prevention framework.

Table 1 Clarke's 25 techniques of SCP, reproduced from the Center for Problem-Oriented Policing (POP center, 2016)

Increase the Effort	Increase the Risks	Reduce the Rewards	Reduce Provocations	Remove excuses
1. Target harden Steering column locks and immobilisers Anti-robbery screens Tamper-proof packaging	6. Extend guardianship Take routine precautions Encourage people at risk to go out in groups at night, leave signs of occupancy, carry phone "Cocoon" neighborhood watch	11. Conceal targets Off-street parking Gender-neutral phone voices Unmarked bullion trucks	16. Reduce frustrations and stress Efficient queues and polite service Expanded seating Soothing music/muted lights	21. Set rules Rental agreements Harassment codes Hotel registration
2. Control access to facilities Entry phones Electronic card access Baggage screening	7. Assist natural surveillance Improved street lighting Defensible space design Support whistleblowers	12. Remove targets Removable car radio Women's refuges Pre-paid cards for pay phones	17. Avoid disputes Separate enclosures for rival soccer fans Reduce crowding in pubs Fixed cab fares	22. Post instructions "No Parking" "Private Property" "Extinguish campfires"
3. Screen exits Ticket needed for exit Export documents Electronic merchandise tags	8. Reduce anonymity Taxi driver IDs "How's my driving?" decals School uniforms	13. Identify property Property marking Vehicle licensing and parts marking Cattle branding	18. Reduce emotional arousal Controls on violent pornography Enforce good behaviour on soccer field Prohibit racial slurs	23. Alert conscience Roadside speed display boards Signatures for customs declarations "Shoplifting is stealing"
4. Deflect offenders Street closures Separate bathrooms for women Disperse pubs	9. Utilize place managers CCTV for double-deck buses Two clerks for convenience stores Reward vigilance	14. Disrupt markets Monitor pawn shops Controls on classified ads License street vendors	19. Neutralize peer pressure "Idiots drink and drive" "It's OK to say No" Disperse troublemakers at school	24. Assist compliance Easy library checkout Public lavatories Litter bins
5. Control tools/ weapons "Smart" guns Disabling stolen cell phones Restrict spray paint sales to juveniles	10. Strengthen formal surveillance Surveillance cameras Red light cameras Burglar alarms Security guards	15. Deny benefits Ink merchandise tags Graffiti cleaning Speed humps	20. Discourage imitation Rapid repair of vandalism V-chips in TVs Censor details of modus operandi	25. Control drugs and alcohol Breathalyzers in pubs Server intervention Alcohol-free events

Wortley's (2001) critique centred around the thesis that there could be motivations generated in the immediate environment which could *precipitate* the decision to offend (see **Figure 10**).

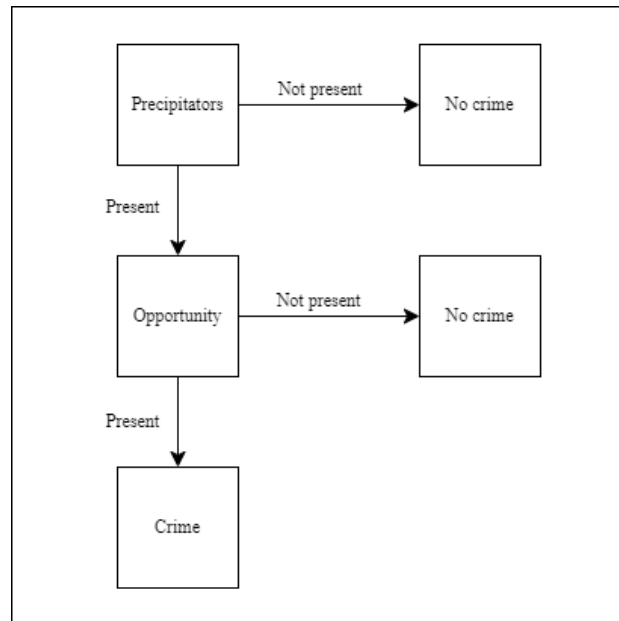


Figure 10 Relationship between precipitators and opportunity, based on Wortley (2016)

Wortley (1998, 2001, 2016) lays out four categories of precipitators (Wortley, 2001; p. 65):

- *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 further lays out a classification for each situational precipitator of crime (see **Table 2**). The five categories of SCP summarise the objective of SCP, which is to create an

environment that deter criminal acts whereby the risks and effort of offending outweigh the rewards. There have been several examples of successful uses of SCP (Guerette, 2009; Smith *et al.*, 2002), which range from simple crimes (such as shoplifting) to more complex, process crimes, such as smuggling of antiquities (Weirich, 2019) and terrorism (Clarke & Newman, 2006). Guerette (2009) found that 75% of the 206 SCP interventions he studied were successful. The rest did not meet crime-reducing expectations or simply resulted in crime displacement (see section on crime displacement below).

Table 2 Classification of situational precipitators of crime (Wortley, 2016).

Prompts	Pressures	Permissions	Provocations
- Triggers: e.g., weapons effect	- Conformity: e.g., gang crime	- Minimising the rule: e.g., culture of corruption	- Frustration: e.g., road rage
- Signals: e.g., ‘gay-bashing’	- Obedience: e.g., following corrupt superiors	- Minimising responsibility: e.g., alcohol-related crime	- Crowding: e.g., nightclub violence
- Imitation: e.g., copycat crime	- Compliance/defiance: e.g., defying security staff	- Minimising consequences: e.g., ‘petty’ theft	- Territoriality: e.g., turf wars
- Expectancies: e.g., pubs with violent reputations	- Anonymity: e.g., lynch mobs	- Minimising the victim: e.g., revenge against employer	- Environmental irritants: e.g., riots in heat waves

Applied to the field of irregular migration, at a first glance, the SCP framework could provide an excellent tool for brainstorming ideas that could be used to make the environment on migration journeys more criminolytic²¹ by removing the opportunities to commit crimes against migrants. There may be several specific benefits to using SCP in the context of reducing harms related to detention and exploitation to irregular migrants travelling on the CMR. First, SCP is applied to the political and social environment in a way that its implementation and effectiveness do not depend on policy changes that happen at a macro level. Second, SCP interventions are mostly sought to be implemented as a preventative tool, reducing the reliance on often securitised responses to catching offenders after the crime event has taken place. Third, SCP techniques are both compatible with policing operations and other non-securitised interventions, thus reducing over-reliance on securitised interventions. For example, signs could be posted warning migrants in key areas of dangers; wells could be dug in the desert in areas that are prone to accidents to avoid people on the move from dying of thirst; the sale of rubber boats in northern Libya could be banned, to encourage transition to safer types of boats.

3.2.3. Crime scripting

As seen in the previous section, situational crime prevention is a criminological approach to reducing crime and security challenges by identifying and targeting the opportunities which influence offender decision making (Clarke, 1997; Newman *et al.*, 1997). To understand these opportunities, Cornish (1994) introduced a script-theoretic approach to the study of crime to organise and generate knowledge on crime. Crime scripts can be developed to model events that lead to and follow a crime event (Goldstein, 1979; Borrión, 2013; Dehghanniri & Borrión, 2021). A script can reveal the necessary sequential states and activities for a crime to occur. As

²¹ From the Greek *lutikos* 'able to loosen', as opposed to *criminogenic*. In medical sciences, *cancerolytic* is commonly used as an antonym for *cancerogenic* (Paulyukopis *et al.*, 1968)

a result, innovative opportunity-reducing interventions against complex and hard-to-disrupt crimes can be developed, inspired by SCP. Hancock and Laycock (2010) introduced the value of crime scripting for organised crime, then applied to trafficking (Brayley, Cockbain & Laycock, 2011), given that they are complex crimes, which are as much dependent on the opportunity and its exploitation as more simple crimes (Hancock & Laycock, 2010). Applied to irregular migration, this approach could mean breaking down the steps taken by a trafficker before, during and after trafficking a migrant.

Recent research has promoted the benefits of scripting the ‘victim’ or ‘survivor’ of a crime instead of the offender (Copes *et al.*, 2012; Leberatto, 2015; Leclerc, 2013; Smith, 2009). A fundamental assumption within victim scripting is that the decision making, and the routine activities of potential crime victims can affect the outcome of a crime (Leberatto, 2015). Applied to irregular migration-related crimes and exploitation, this would involve scripting the journeys of migrants to harm and exploitation.

Borrion and Dehghanniri (2023) set clear guidance on designing crime scripts. They describe three types of crime scripts: *performed* scripts, which focus on crimes that have occurred; *planned* scripts, which represent a crime someone intends to execute; and *potential* scripts, which describe hypothetical crimes. Scripts can be subdivided into *successful* and *failed* criminal attempts (ibid). These scripts can be based on a wide range of data, both primary and secondary sources (Haelterman, 2016, p. 129), including but not limited to interviews or surveys with offenders (Beauregard, Rossmo, *et al.*, 2007), victims (Leukfeldt, 2014; Willison & Backhouse, 2006), and investigative case files (Brayley, Cockbain & Laycock, 2011) amongst other sources of data. The level of uncertainty for each step of the crime script can be further attributed to a traffic light criterion of 1. Based on factual evidence found in the sources

(*known*), 2. Logically derived from the transcript (*inferred*), and 3. Assumed as the most likely possibility (*assumed*).

Borrion and Dehghanniri (2023) further lay out four possible state-transition models for the elaboration of crime scripts: a) states only, b) activities only; c) states and activities, and d) states, decisions, and activities (see **Figure 11**). Each element has a corresponding potential prevention and disruption objective. Each piece fits possible prevention and disruption interventions (Borrion & Dehghanniri, 2023). These activities can further be divided and grouped through category type and represented neatly using different symbols (see, for example, Brayley *et al.*, 2011).

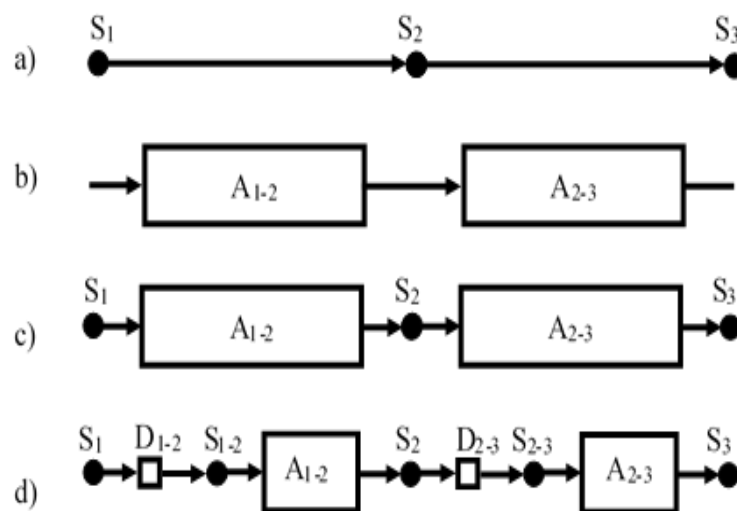


Figure 11 The four possible state-transition journeys in crime scripts, reproduced from (Borrion & Dehghanniri, 2023). ‘S’ represents states, ‘A’ represents Activities, and ‘D’ represents decision-making processes.

Once developed, the quality of the resulting script can be evaluated through both verification and validation (Borrion, 2013; Borrion *et al.*, 2017; Borrion & Dehghanniri, 2023). Verification entails ‘a demonstration that the modelling formalism is correct’ (Fishman & Kiviat, 1968). Validation entails a ‘demonstration that a model within its domain of applicability possesses a

satisfactory range of accuracy consistent with the intended application of the model' (Curry, Feldman, & Deurmeyer, 1989; Sargent, 1984).

Similar concepts to that of scripting have been used in the context of studying irregular migration. Zimmerman *et al.*'s (2011) analysis of the processes behind migration for instance, as described earlier, is reminiscent of scripting. By breaking the journey of migrants into phases, Zimmerman and colleagues allow for the categorisation of the common actions and risks during the journey. However, there are several differences between their approach and the concept of scripting. First, although there is no doubt as to the rigour of their work, the methodology behind Zimmerman and colleagues' (2011) categorisation of key activities was not reported, which motivates the need for a categorisation with transparent methods. Second, their categorisation is at a macro-level and does not breakdown the individual decisions and actions that are taken by migrants, which may overlook some key areas where harm and exploitation may occur. As explained previously, for instance, Zimmerman *et al.* (2011) do not categorise 'labour' or 'work' as a key phase, despite it being found in the literature on labour migration as a key activity conducive to health risks, even when it does not take place in conditions of forced labour (McAlpine, 2021).

Another similar concept to the concept of scripting that has been used to study migration is Kley's (2011) Rubicon model, which I described earlier. Its distinctions between decisions and actions are reminiscent of the breakdown into states, activities and decisions that is encouraged when drafting a script (Borrion & Dehghanniri, 2023). As explained earlier however, Kley's (2011) Rubicon model only considers the decision to migrate prior to the journey and fails to give a framework for considering the decision-making processes that occur during the journey. Yet, decision making occurs at various stages during the journey (Baláž *et al.*, 2016).

Creating an empirical script of migration processes to identify the states, activities, risks and opportunities present on the journeys is therefore key to identify the various decision-making points during the journey and not only before the decision to migrate (Balaz *et al.*, 2016). Further, by focussing on the scripts of migration journeys to Europe, we can then tailor responses, both at a macro level (such as policy responses) and meso or micro levels (such as responses stemming from the field of situational crime prevention), which target the situations and routines that indirectly create criminal opportunities (Borrion, 2013; Ekblom & Gill, 2016; Soon *et al.*, 2019).

3.2.4. Displacement

While most SCP interventions seem to be successful in reducing harm and crime, some simply result in crime displacement (Guerette & Bowers, 2009). Indeed, one of the largest critiques of SCP has concentrated around the theme of displacement (Barr and Pease, 1990; Bowers *et al.*, 2009; Guerette & Bowers, 2009; Hesselning, 1995; Johnson *et al.*, 2014), whereby crime is said simply to displace because situational prevention efforts fail to alter the root causes of crime. One should note however that several studies analysing displacement effects in the context of urban crime prevention have estimated that displacement is generally rare and rarely absolute if it does occur (Johnson *et al.*, 2014; Telep *et al.*, 2014). Reppetto (1976) identified five forms of crime displacement, which may occur individually or in combination (Hesselning, 1995; Reppetto, 1976):

- *Temporal displacement*: offenders change crime-commission timing.
- *Tactical displacement*: offenders change crime-commission methods.
- *Target displacement*: offenders change from one type of target to another.
- *Territorial/spatial displacement*: offenders switch to targets in a different location.
- *Functional/offence displacement*: offenders switch from one form of crime to another.

An additional form of displacement that is sometimes listed is offender/perpetrator displacement, when new offenders take the place of offenders who have stopped offending, because of arrest or desistance (Bowers & Johnson, 2003).

Studying displacement is relevant to the study of the impact of anti-smuggling and anti-irregular migration response to the ‘migration crisis’. Earlier, I analysed how government responses were believed to have been either counter-productive in some cases or to have led to harming people on the move and even to increasing migrant deaths (Micallef *et al.*, 2019). For instance, some anti-smuggling interventions may have led to offence *displacement* where human smugglers may have sought to extract more value from the people they were smuggling, turning their experiences into trafficking (Malakooti, 2019; Raineri, 2020; Stocker, 2017). Thinking about the types of displacement that are possible is useful for designing interventions that take into consideration anticipated potential displacement as well as any negative consequences of anticipated interventions, such as increased harm.

There has been little standardised empirical work that investigates displacement (Bowers & Johnson, 2003). However, one of the ways in which displacement in crime has been analysed is through agent-based modelling (Asgary *et al.*, 2016; Bosse *et al.*, 2011; Groff *et al.*, 2019; Rosés *et al.*, 2021). Agent-based modelling allows us to simulate the micro, meso and macro level impacts of a given intervention in a complex system that would not necessarily be identified at face value. This type of modelling is very relevant for testing interventions on a migration system, given the complexity and constantly evolving nature of migration (Araujo, 2011; van der Watt & van der Westhuizen, 2017). To do so however, a first necessary step is understanding empirically the behavioural models and processes that underpin migration journeys.

This section outlined the applicability of crime science to the study of harms related to detention and exploitation on migration journeys. The following section outlines more clearly my research objectives.

3.3. Research objectives

Much of the previous research that has looked at irregular migration and harms related to detention and exploitation has been anecdotal, non-transparent in its methods, or has done so using conceptual approaches drawn from migration studies. This research seeks to introduce a novel conceptual approach to the study of irregular migration, by using a crime science approach to better understand migration journeys, identify the criminal opportunities on migration routes and begin to help promote safer migration to Europe.

Informed by an overview of the current knowledge about the CMR (see section 2.1.1) and on recent shocks and disruption to the CMR (see section 2.1.2.), this research seeks to address three key questions:

- **How does irregular migration take place on the CMR to Europe?**
- **How do detention, exploitation and related harms to migrants occur on the CMR to Europe?**
- **What are the overlaps and distinctions between human smuggling and human trafficking on smuggler-facilitated migration journeys along the CMR to Europe?**

Considering these questions and the gaps of the existing literature, this exploratory research has the following objectives:

Objective 1: To map the core migration-related activities that people undergo on their journeys on the CMR, using a scripting methodology (Chapter 5).

Objective 2: To analyse migration patterns on the CMR using network analysis (Chapter 6).

Objective 3: To understand the overlaps and distinctions between human smuggling and human trafficking on smuggler-facilitated migration journeys along the CMR (Chapter 7).

This thesis holds three main studies. First, I use a scripting methodology to deconstruct the journeys of migrants²² who travelled on the CMR into sequences of migration-related activities that they experienced on their journeys to Europe (Chapter 5 and Objective 1). Then, I analyse their deconstructed journeys as a graph, using network analysis, to identify common patterns on participants' trajectories (Chapter 6 and Objective 2). Finally, I explore detention, exploitation, and related harms to migrants, with a particular focus on how smuggling and trafficking journeys can both differ and overlap (Chapter 7 and Objective 3). I discuss the harm-reduction implications of the research in Chapter 8. In the following chapter, I describe the dataset upon which these three studies are based.

²² As a reminder, the term migrant is used here to designate any person travelling on this route, including asylum seekers and refugees.

Chapter 4 Data

The three studies in this thesis are all based on the analysis of a single dataset of interview transcripts with migrants in Malta. While I was initially provided with 78 transcripts, seven were discarded upon examination due to incomplete information (see Chapter 5, section Reviewing and improving the scripts). I focus here on the subset of 71 transcripts that remained, and which was studied in Chapters 5, 6 and 7. In this chapter, I present an overview of the data, how it was collected and its limitations.

4.1. Data collection

The data consisted of transcripts of interviews with migrants aged 18 years or over at the Marsa Initial Reception Centre (IRC) in Malta. The IRC is the first stop for migrants rescued at sea and arriving in Malta's seaports in NGO vessels, with the Armed Forces of Malta or private vessels. The three studies in this thesis use a convenience sample of 78 transcripts, supplied by the Global Initiative against Transnational Organised Crime (GITOC), an independent civil-society organisation, which were collected using purposive sampling. The interviews were conducted over 14 months (July 2018 – Sept. 2019), in a private space of the centre (room or quiet corner) and lasted approximately one hour. They were semi-structured and designed to understand the participant's journey as a narrative from beginning to end, with a particular focus on the routes taken, prices paid and any experiences of smuggling, trafficking, and certain types of harm (e.g. detention).

The main interviewer, a GITOC analyst, had substantial experience in conducting interviews. As a former GITOC employee, I observed four interviews (6%), which gave me insights into the interviews' context and style. The interviews took place in participants' native language. A

professional interpreter translated these discussions from the participant's language into English. Near-verbatim notes in English were typed simultaneously, recording the conversation; however, no audio recording was made due to the sensitive nature of the conversations.²³

4.2. Sample

The studied sample comprised 71 adults: 63 men (89% of the sample), and eight women. The participants ranged in age from 18 to 50 years old at the time of their interview but were generally young: all except one were under 36, and the mean age was 21 (IQR: 6.5 years). It was notable that at least one in five (n=15) participants had likely been children (under 18) upon leaving their country of origin. The participants came from 15 different countries in Africa and two in the Middle East (see **Figure 12**). All participants travelled through Libya and embarked on boats in the Mediterranean from Libya – which was a prerequisite for inclusion. Nine participants (13%) started their journeys in Libya.

²³ While this method might not provide the exact linguistic nuance that verbatim transcripts might offer, it focuses on the substance and essence of the conversations, which is my primary interest here.



Figure 12 Map of participants by reported country of origin ($n=71$), created using Matplotlib on Python.

The sample of 71 participants, which accounts for 1.46% of the 4,851 people rescued and disembarked in Malta in 2018 and 2019, is fairly similar on certain demographic characteristics to this larger group, particularly in terms of gender and nationality (UNHCR, 2020). The sample includes 11% women, compared with 5% among all recorded disembarkations in Malta in 2019 (gender data for 2018 was not published). Furthermore, 44% of the sample reported being Sudanese nationals (see **Table 3**), compared to 35% in the total recorded arrivals in 2018-2019. Eritrean nationals constituted 10% of the sample, compared with 9% observed in the total recorded arrivals (making up the second most common nationality for both). Although this is clearly a convenience sample and I make no claims to generalisability, it is worth noting that it stratifies on relatively similar lines with the larger irregular migration trends in Malta over this period.

Table 3 Number of participants by country of origin in decreasing order (n=71). Other includes: the Central African Republic, the Gambia, Ethiopia, Kenya, Nigeria, Syria, Tunisia and Yemen.

Country	n	%
Sudan	31	44
Eritrea	7	10
Chad	6	8
Egypt	4	6
Libya	4	6
Morocco	4	6
Côte d’Ivoire	3	4
Cameroon	2	3
Somalia	2	3
Other	8	11

4.3. Ethics

In terms of ethics, using secondary data presents both limitations and advantages. When studying populations that are considered vulnerable (such as migrants), there are clear ethical advantages to ‘upcycling’ secondary data — by using it again for different purposes — in that it reduces the burden on respondents (Grinyer, 2009; Tubaro, 2015). It also helps to maximise the value of public investments in data collection (Bishop, 2009; Tubaro, 2015).

The UCL Research Ethics Committee (REC) granted permission for the use of the secondary data in this research, not least because their onward use aligned with the original purpose (reference 15451/001). I have altered all participants’ names to pseudonyms to maintain anonymity and removed other potentially identifying details to ensure confidentiality. Appendix 1: Ethics certificate contains a copy of the Ethics Application and Letter of Approval.

The process of gathering data adhered strictly to the ethical principles and safety guidelines outlined by GITOC (2019). Each participant provided informed verbal consent prior to interview, understanding that the data collected would be used for migration research on the CMR. Assurances were given that participants would remain anonymous. Researchers emphasised to participants that the information they shared would not be used against them or affect their asylum claim in any way. Participants were also made aware that they could reach out to GITOC for further clarification, take breaks during the interview, terminate it at any point, refuse to answer any questions, and that their responses would be translated by impartial professional interpreters who facilitated communication but did not guide the interview. No financial compensation was offered for participation.

4.4. Data limitations

The data used in this study have several limitations. The sample (n=71) is non-random and not representative, making up a convenience sample of less than 2% of the 4,851 people rescued at sea and disembarked in Malta in 2018 and 2019. The data is derived from people who made a successful journey from Libya to Malta, excluding those who migrated elsewhere, started elsewhere, or, who died during the sea crossing. As such, care should be taken to avoid generalising from this sample. Furthermore, the inherent self-selection of participants within this convenience sample might introduce self-selection bias, as those who successfully completed the journey and chose to participate may systematically differ from those who did not or could not participate.

The sample contains proportionally slightly more women than the norm among all those rescued at sea and disembarking in Malta in 2019 (11% of the sample, compared to 5% of total recorded arrivals in Malta in 2019). Nevertheless, their relatively small number in absolute terms (n=8), means I may well capture fewer of the distinct challenges women face on journeys,

such as gender-based violence or sex trafficking, known to be common on these routes (Mai, 2016; Plambech *et al.*, 2021). There is also a possibility for underreporting of sexual exploitation due to social stigmas (Gezie *et al.*, 2019).

Like any research relying on interviews, self-report bias is an issue of concern, which could influence the reported demographics of the sample and details of the journeys disclosed (Althubaiti, 2016). Participants might have intentionally altered or left out certain information due to concerns about their asylum applications. This risk was mitigated by maintaining anonymity and confidentiality, and reassuring participants that their asylum status would not be influenced by the interviews.

Extra care was taken by translators to translate accurately the meaning from participants, however some mistranslations could have occurred, as they often do in cross-language qualitative research (Squires, 2009). Moreover, any nuance linked to how participants expressed their journeys would be lost. While this is a limitation, given that this study is focussed on what happened during journeys, rather than how participants counted their journeys, losing nuance linked to semantics is not likely to be a significant drawback. Nonetheless, information gaps and subjectivity in information interpretation, which can occur from translated information, can constitute a limitation to the data and its analysis.

Despite these limitations, these original interviews with a hard-to-reach group provide crucial insights for in-depth research into the situational conditions around irregular migration and harms related to detention and exploitation people experienced *en route*. In the context of qualitative research, the overall participant pool was large, encompassing 71 individuals.

Chapter 5 Deconstructing migration journeys: A script analysis of irregular migration on the CMR to Europe

A modified version of this chapter has been accepted pending minor revisions in the Journal of Criminology and Criminal Justice.

5.1. Introduction

Increased irregular migration to Europe has made migrant smuggling a central and contentious issue in European political spheres, particularly since the so-called 'migrant crisis' of 2015 (Hutter & Kriesi, 2022). A key route to Europe is the Central Mediterranean Route (CMR), via conflict-affected Libya. In response, the European Union (EU) has invested heavily in research and measures designed to reduce irregular migration, including anti-smuggling and anti-trafficking activities (EU Commission, 2016). A notable increase in research led by non-governmental organisations (NGOs) on irregular migration on the CMR since the 'migrant crisis' has shed important light on some of the harms related to detention and exploitation experienced *en route* (Micallef *et al.*, 2019), as indeed has ground-breaking journalism (Hayden, 2022).

There is, however, a need for systematic empirical research into the largely unexplored details of migration journeys along the CMR and how they can become pathways to human trafficking and exploitation (Murphy-Teixidor *et al.*, 2020). Existing research has focused primarily on the macro-level geographies of migration (*e.g.*, routes and numbers of arrivals) and the causes of departure, often overlooking the micro-geographies, decision-making processes, and logistics (Crawley & Jones, 2021). These logistical geographies (Cowen, 2014), encompassing

physical, social, economic, and political infrastructures are likely to shape migrants' vulnerability to risks related to human trafficking and people smuggling.

While publications on irregular migration and harm on the CMR offer valuable conceptual insights derived from migration studies (Kuschminder & Triandafyllidou, 2020; Massari, 2015), empirical investigations remain scant. Moreover, where empirical work does exist, it occasionally lacks scientific rigour or transparency. Responding to these gaps and limitations, my study aims to map the standard migration-related activities that people undergo on their journeys on the CMR, using script analysis.

While I do not approach irregular migration itself as a 'crime',²⁴ I believe the frameworks and tools from crime science can be leveraged to understand detention, exploitation, and related harms to migrants, many of which are caused by criminals taking advantage of their precarious situations (Micallef *et al.*, 2019). Specifically, I deconstruct the journeys of people who travelled on the CMR into sequences of activities experienced on their way to Europe, situating each in space and time. Known as scripting, this approach helps us unpack how irregular migration takes place and identify factors producing or facilitating harms related to detention and exploitation.

I begin by providing a brief reminder of crime science and crime scripting before presenting the data and methods, findings, and a discussion of the results.

²⁴ Existing legal pathways for migration to the EU remain significantly limited for many individuals from African and Middle Eastern countries. This lack of options frequently necessitates the pursuit of alternative routes to effectively seek asylum and safety, highlighting the critical gaps in accessible migration policies (Tjaden, 2022). Any reference to 'crime' in this research refers only to the exploitation of people on the move and not to their irregular border crossings. Nonetheless, irregular migration, also commonly referred to as illegal migration, can be criminalised; my focus deliberately does not prioritise this aspect. This decision reflects my personal moral stance, which emphasises the importance of human rights over legal categorisations of migration status.

5.2. Scripting irregular migration, smuggling and trafficking

Academic study of irregular migration has been traditionally approached through lenses of migration systems, migration industry, migration network theories, and/or individual decision-making theories (McAlpine, 2021). While such frameworks provide important insights into migration dynamics, they do not necessarily capture the multifaceted nature of migration. In contrast, innovative approaches such as trajectory ethnography and social navigation theory focus instead in detail on individual journeys (Schwarz, 2020).

Given the complexities of international migration, an interdisciplinary approach is key (Massey, 1993). To date, few studies have approached migration from a crime science perspective. I argue, however, that examining people smuggling and human trafficking through this lens can offer useful insights to address migration-related harm. To be clear, I am not conceptualising irregular migration itself as deviant behaviour, but as a phenomenon susceptible to attract criminal activities – see literature on crime generators and crime attractors (Brantingham & Brantingham, 1995). As such, I believe that ecological theories that stem from crime science can help in understanding the systemic and individual elements that contribute to the manifestation of harms along the CMR.

Crime science has its theoretical underpinnings in opportunity theories of crime and environmental criminology (Felson & Clarke, 1998). These theories suggest that crime occurs when a motivated offender identifies a suitable target within a conducive environment, absent of capable guardianship. While acknowledging the influence of broader systems and structures governing irregular migration, I subscribe to the view that a closer focus on the immediate environments within which harms occur on the CMR can help identify key risks, consequences of policy, and inform harm-reduction efforts. Within crime science (Cockbain and Laycock, 2017), crime scripting stands out as a particularly promising approach to understanding harms

on the CMR. Originally proposed by Cornish (1994), it involves breaking down the crime-commission process into a sequence of steps leading to and following a crime. A commonly cited application of crime scripting is the identification of ‘pinch points’ and the development of interventions to remove criminal opportunities. A step in this direction, the paper represents migration journeys as scripts and combines them together into a single graph to reveal where they diverge and converge, and how and where certain harms tend to occur.

Emerging research has highlighted the benefits of extending a traditional focus on scripting offenders’ actions and decisions to cover victims’ experiences too (Copes *et al.*, 2012; Leclerc, 2013; Smith, 2016). Without seeking to blame victims, victim scripts can be used to identify the decisions and routine activities that puts people at greater risk of victimisation, and therefore to inform prevention.

A systematic review by Dehghanniri & Borrión (2021) indicates that scripting approaches have yet to be applied to irregular migration at large or people smuggling specifically, although there have been a few applications to the study of human trafficking (Brayley *et al.*, 2011; Mancuso *et al.*, 2013). Probably the closest conceptual parallel for irregular migration journeys is Zimmerman *et al.*’s (2011) study into migration, which deconstructed the migration process into five phases to conceptualise the typical actions, opportunities and vulnerabilities that occur. While their framework provides a valuable foundation for understanding migration journeys, they do not detail their methodology nor the data upon which it is based. I argue that its comprehensiveness could be significantly enhanced by adopting a more systematic method that incorporates often overlooked yet pivotal experiences migrants face, such as those related to work and work-related exploitation (ILO, 2017). Furthermore, I propose an innovative representation of the scripts through the creation of a composite script graph.

5.3. Method

This study follows the scripting process proposed by Borrion & Dehghanniri (2023) and demonstrates its applicability to migration studies. To facilitate its adoption by others, I detail the various stages in this section: data collection, information extraction, script elaboration, script visualisation and presentation, and script verification and validation. I based this study on the data described in Chapter 4.

5.3.1. Information extraction

5.3.1.1. *Creating the baseline script graph*

To orient my work, I started with the creation of a script graph delineating hypothetical migration journeys. First, the script graph gave me a glimpse into what the empirical script graph might look like; second, it helped me create a codebook defining the type of information I wanted to extract from the transcripts; and third, it served as a baseline against which to compare the empirical script graph.

The baseline script graph was informed by thematic analysis of the existing literature and the first author's previous research experience (see, e.g., Micallef *et al.*, 2019; Micallef *et al.*, 2021). Combining scripts and codebooks was inspired by the work of others who studied drug trafficking and sexual offenses against women (e.g., Chiu & Leclerc, 2021, Morgenthaler and Leclerc, 2023). However, I believe the method I followed to develop the script, based on activities and state transitions (for more details, see Borrion and Dehghanniri, 2023) yields greater structural and syntactic consistency. For example, my script only comprises activities, whereas other scripts can consist of a heterogeneous mix of activities ("getting the goods") and variables ("location of laboratory," "benefits") (ibid).

The baseline script graph included 102 distinct migration-related activities which people might realistically encounter *en route* to Europe, including travelling to a country, meeting a smuggler and meeting a broker. I assigned each activity a consistent codename (*e.g.*, SAS12, LAS2, *etc.*), based on its mobility and duration: SAS (Short Activity Static – less than a day), LAS (Long Activity Static – more than a day), SAM (Short Activity Mobile), and LAM (Long Activity Mobile). Additionally, given the geographical expanse covered by participants, I introduced a geographical component to the baseline script, breaking the journey into six zones: Non-Neighbouring Country to Libya (Zone 1), Neighbouring Country to Libya (Zone 2), Southern Libya (Zone 3), Northern Libya (Zone 4), Mediterranean Sea (Zone 5), and Malta (Zone 6). A detailed explanation is provided in Appendix 3: Additional details on script graph elaboration.

5.3.1.2. *Coding the transcript*

Using the baseline graph as a foundation, I then meticulously read each interview transcript, coding any event or interaction that significantly impacted a person's trajectory during their journey.²⁵ When a passage in the transcript corresponded to one of the activities in the baseline script graph, I assigned the corresponding codename. Through this process, 80 activities in the baseline script graph were corroborated by the transcripts. I also identified one activity that did not feature in the baseline script graph and added it: a mechanical incident with a boat, which forced passengers to return to shore.

I then created a script for each transcript by recording codes in chronological order. If a participant travelled through the same zone more than once, I recorded that accordingly in a spreadsheet. I consulted maps for geographic specificity, particularly when coding areas of uncertainty. For instance, participants reporting work on goldfields straddling the Chad-Libya

²⁵ Determining an event's 'significant impact' is subjective. In this context, I deemed events significantly impactful if they notably altered the route, travel duration, or experiences during the individual's journey.

border were coded as being in Libya, since the activity has been reported to mostly occur on the Libyan side (Bish, 2021).

The coding process also addressed levels of uncertainty in the script production. When a step was obviously missing in a script, I added an activity to produce an uninterrupted sequence. I assigned it the label ‘inferred’ if it was the only plausible preceding activity, and ‘assumed’ otherwise, in which case the most likely path was selected (Borrion, 2013). This process yielded a set of scripts included 8.2% *inferred* and 20.9% *assumed* activities ($n=2634$). The majority (71%) of the events, however, were clearly evidenced in the transcripts; and every activity mentioned in the scripts was empirically justified at a ‘known’ level by at least one participant.

5.3.1.3. *Reviewing and improving the scripts*

A sample of eleven scripts (14%) were randomly selected and recoded by an independent researcher, respecting the classification system incorporated to address uncertainty. The results suggested very good inter-rater reliability (see explanation in Appendix 4: Inter-rater reliability assessment).²⁶ To conduct the assessment, the researcher was given a graph illustrating potential migration paths, a definition of each key node in the graph, an excel sheet with the interview number in the first column (the first row completed to serve as an illustration of how to complete the other rows), three maps showing the main known migrant smuggling routes

²⁶ The IRR was assessed by computing the ‘edit distance’ in Python, a method that counts the minimum number of operations required to convert one sequence into another. I chose that over more traditional measures which require sequences to be of identical length. The results, which were normalised to correspond with the sequence length, suggested very good IRR, with few modifications (med=3, min=1, max=6) needed to transform one sequence into another. The observed discrepancies were mainly due to omissions of certain nodes because of coding errors on part of both coders (such as forgetting to add ‘Travel to broker’ before ‘Meeting broker’), but they did not affect the fundamental aspects of the journey.

and key villages and towns in Libya and neighbouring countries, and several reports on migrant smuggling through Libya to familiarise themselves with the existing literature.

To record the paths, the researcher opened the graph with the potential migration paths in one window, an interview transcript in another and the excel sheet to input the steps associated with their journey. Each step would normally appear on the graph, since the principal researcher had already coded it. However, the independent researcher was asked to add a step and make a note if relevant steps in the interview transcript were not present on the existing graph (no new nodes were identified).

The results suggest that the IRR was very good, with few modifications needed to the sequences to transform in another (max=6) (see Table 1 and explanation in Appendix 4: Inter-rater reliability assessment). The analysis of the nature of differences between raters revealed that most differences were linked to omissions and not fundamental differences in the interpretation of steps in the journey (e.g. not coding a ‘travel to Libya’ instead of a ‘work in Libya’).

Future research could further explore the use of the edit distance as an inter-rater reliability tool and develop thresholds for measurement, for example by comparing the length of sequences with the number of changes needed to transform one into another. This is beyond the remit of this research.

Table 4 Results of the inter-rater reliability assessment

Interview Number	Length Rater 1	Length Rater 2	Edit Distance
1	68	68	2
2	33	31	2
3	33	34	3

4	25	23	4
5	68	68	4
6	28	30	3
7	30	32	3
8	24	26	2
9	50	48	5
10	60	61	1
11	37	35	6

I assessed the quality of the individual scripts (see Borrion, 2013), and consequently removed seven transcripts that contained too many gaps. The percentage of ‘assumed’ steps in the sample thereby decreased from 21% to 14% (now reduced to $n=71$), while ‘known’ nodes rose from 71% to 77%, and ‘inferred’ nodes slightly increased from 8% to 9%. Following this process, I maintained a total of 81 activities across all six zones, comprising 29 unique types of activities (with some recurring across several zones). A definition for each activity is provided in Appendix 5: Definition of identified activities in the micro-level script graph.

5.3.2. Elaboration of the composite script graph

Information was extracted from the 71 scripts to produce a composite script graph: steps were defined as nodes and the connection between those steps as edges. The high level of standardisation used to produce the scripts made the process relatively straightforward.

Owing to its complexity, the composite script graph can be difficult to understand at first. To improve script usability, I sought to produce a less granular script, by merging thematically similar steps into a single activity (see Appendix 6: List of corresponding micro-level activities to their macro-level group). For example, ‘Wait in detention centre’ and ‘Forced labour’ are

grouped into a more general step called: ‘Detained/exploited’. Cornish (1994) uses different names to refer to scripts at different levels of abstraction: track, script, protoscript, metascript, and universal script. In the following, I simply refer to mine as the micro-level (81 steps) and macro-level (21 steps) composite script graphs.

5.3.3. Script visualisation

I represented the two composite script graphs using Python’s NetworkX and Matplotlib libraries. This helped visualise the number of participants moving between activities on the composite scripts (see the weighted arrows in **Figure 13** and **Figure 14**), providing quantitative insights into connectivity between activities in the sample.²⁷ The coding scheme presented earlier (SAS, LAS, SAM and LAM) was used to emphasise time and space and activities were reconfigured spatially and standardised across zones for visualisation. Grouped activities in the macro-level graph have the following colour codes: green represents travel, blue represents activities that facilitate travel, red represents activities that slow travel and are harmful, and orange represents activities that slow travel but are not inherently harmful (**Figure 14**). I do not apply such colour-coding to the micro-level graph (**Figure 13**), to facilitate text legibility.

5.3.4. Verification and validation

Borrion’s (2013) quality criteria informed script development. These included indicating the script type (*i.e.*, performed, meaning they actually happened) and the context within which they occurred, limiting the sample to transcripts that had sufficient information to represent the journeys to Malta without gaps, describing the scripting method to allow its replication (including the way I integrated multiple scripts), applying the scripting method systematically (*e.g.*, coding, merging and visualisation), avoiding extracting information not relevant to my

²⁷ The figures can be found in higher quality resolution in my repository on GitHub: <https://github.com/agbish>

primary purpose (*i.e.* mapping journeys and understanding where they diverge and converge), and indicating the elements that were uncertain in the scripts. I developed two composite script graphs at two levels of abstraction (micro and macro) to support the usability of the scripts for research and policy.

I performed verification to ensure the scripts faithfully represented the information within the transcripts (accuracy, ambiguity and completeness criteria). This involved the double-coding and a final consistency check, whereby I cross-referenced each activity with each narrative to ensure the logical order was respected and to eliminate any redundancies.

Although I endeavoured to rectify potential gaps and oversights in the script, it is possible that some errors persist. I acknowledge that there is inherent subjectivity in my interpretations, which may have influenced the final scripts. Of course, I could not assess the accuracy of the information in the transcripts (*e.g.*, potential self-report bias). This underscores the inherent challenges and complexities of the exercise and serves as a reminder of its limitations (see Discussion section).

Validation: The script graphs fulfilled their primary purpose, which was to identify the stages of migration journeys and the points where they converge and diverge. The ultimate test of their utility remains their applicability in real-world scenarios of informing policy.

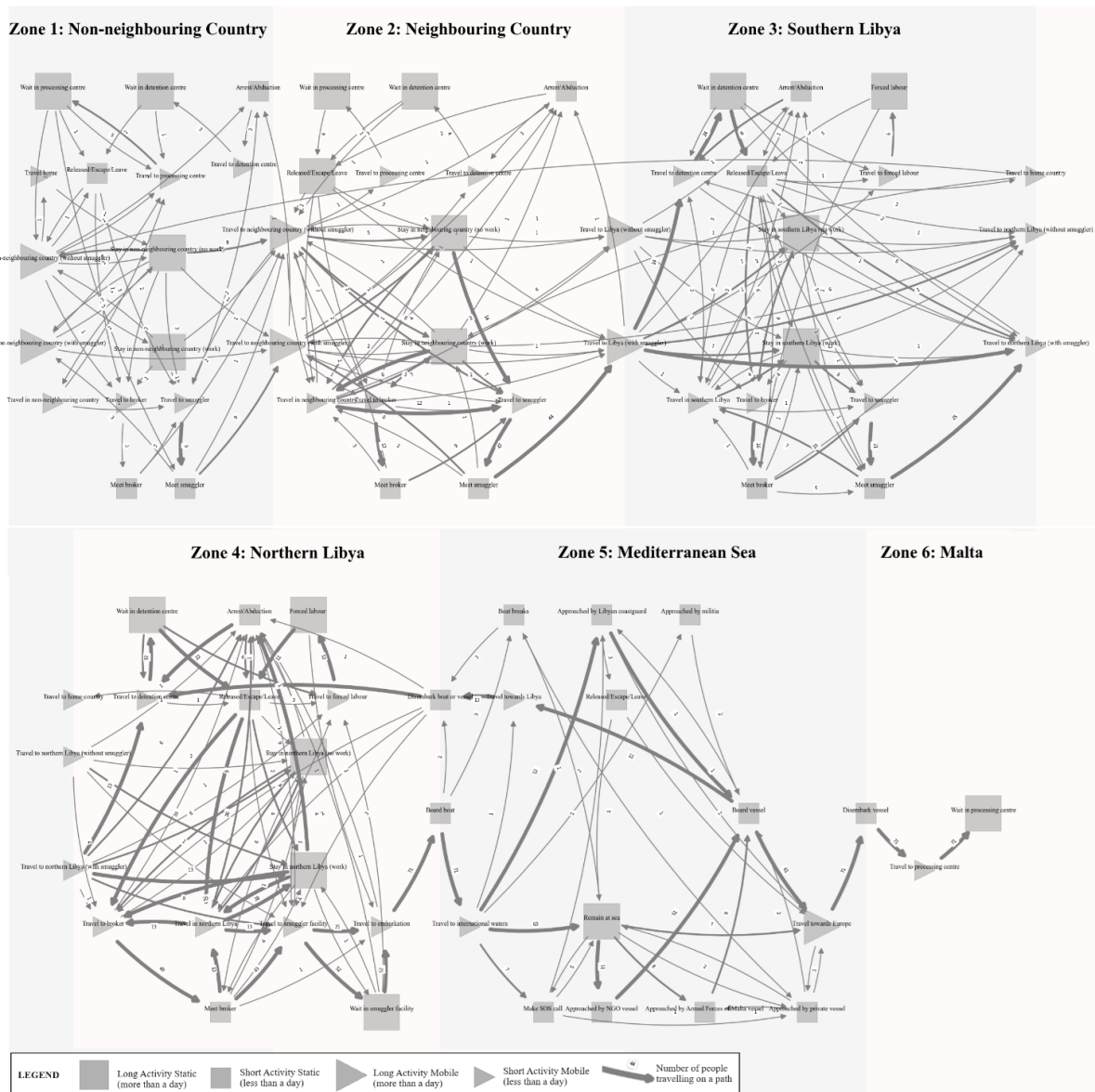


Figure 13 Micro-level graph of migration journeys pre-grouping (n=71)

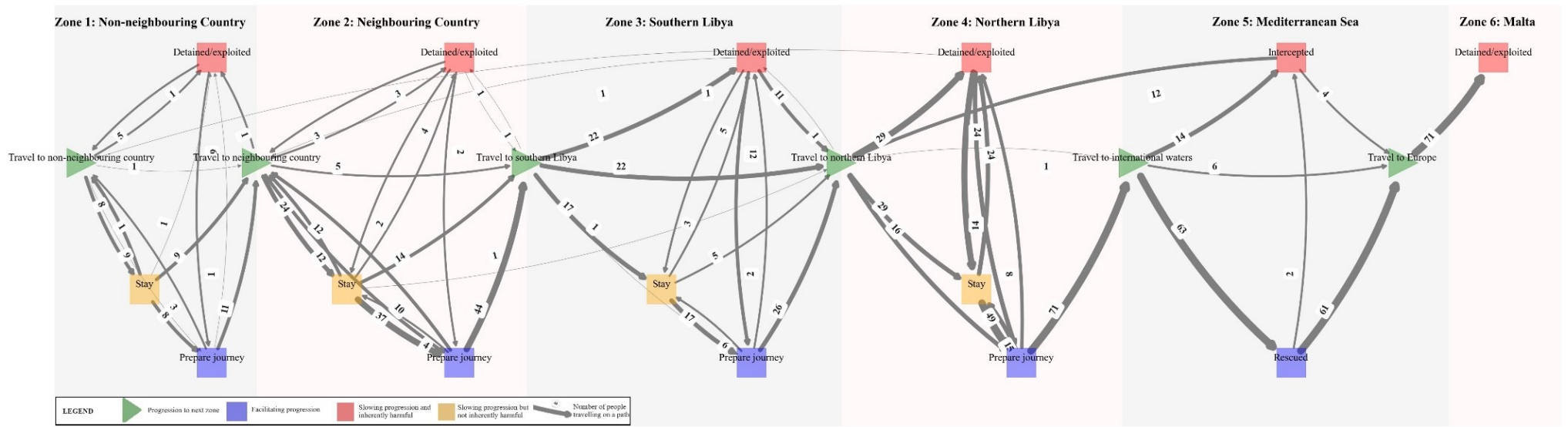


Figure 14 Macro-level graph of migration journeys post-grouping (n=71)

5.4. Results

5.4.1. Overview of journeys

5.4.1.1. *Time travelled*

Journey lengths from self-identified journey start-point to arrival in Malta varied greatly. The median duration of journeys was 18 months (Min=3 days, Max=115 months, IQR=22 months). Two thirds of participants travelled for more than a year ($n=48$). Of the others ($n=23$), only nine travelled for less than three months before reaching Malta. By subtracting the duration of their journey from their age upon arrival in Malta, I deduced that 15 participants (21%) were under 18 when they began their journey.

5.4.1.2. *Zones travelled*

Participants travelled through between three and five zones before reaching the sixth zone, Malta. Twenty-two participants departed from non-neighbouring countries to Libya (Yemen, Somalia, Cote d'Ivoire, Nigeria, Cameroon, the Central African Republic, Morocco, Ethiopia, and the Gambia). In addition, 40 participants (56%) departed from neighbouring countries to Libya (Algeria, Chad, Egypt, Niger, Sudan, and Tunisia) and 9 participants (13%) departed from Libya itself (see the shortest journey script in terms of activities depicted in **Figure 15**). All participants travelled through Libya and embarked on boats in the Mediterranean from Libya.

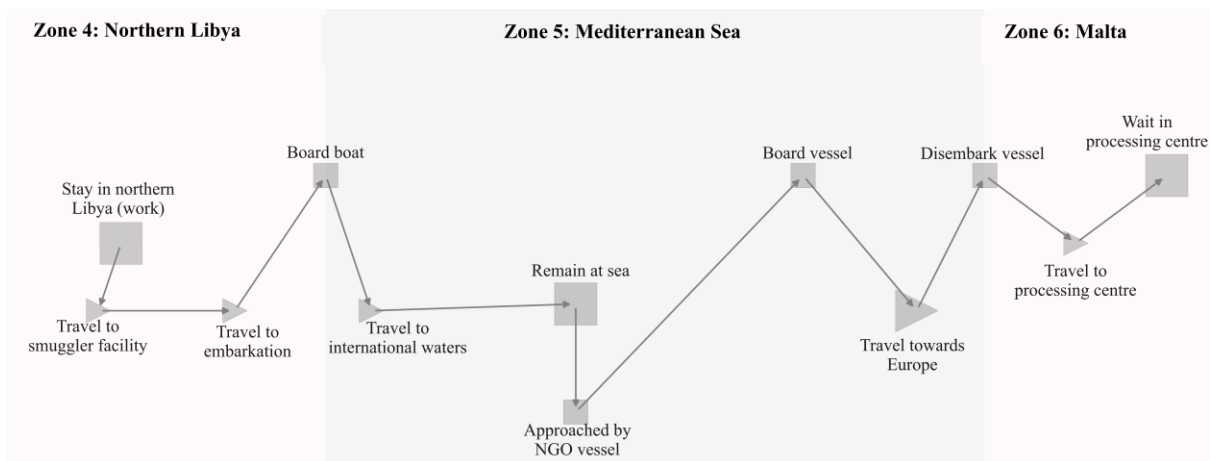


Figure 15 The shortest script in terms of activities, consisting of 12 steps, travelled by Ahmed (not his real name).

An example journey — the shortest script in terms of activities — is illustrated in **Figure 15**, travelled by Ahmed (not his real name). Originally from Sudan, Ahmed spent most of his life in Misrata, a city in northern Libya, where he worked as a tiler. Despite his longstanding residence, he reported facing increasing discrimination and ethnic prejudices because he was from Sudan, which culminated in him being unpaid for his work. In search of a new beginning, Ahmed entrusted LYD 2500 to a smuggler (approximately USD 1825).²⁸ He then spent two days waiting in the smuggler's facility located in Zliten, a town in northern Libya. Following this brief wait, he boarded on a boat and was subsequently rescued at sea by an NGO search and rescue vessel. Ahmed was interviewed three months after his stated departure in the IRC in Malta.

Twenty participants travelled through two neighbouring countries to Libya (combinations of Niger, Chad, Sudan, Algeria, Tunisia, and Egypt). Moreover, fourteen participants travelled through two non-neighbouring countries to Libya before reaching a neighbouring country,

²⁸ I used a historical currency converter for 2018—note, due to currency fluctuations, this may not accurately reflect the exact value at the time.

highlighting the non-linearity of journeys. Two participants travelled through four non-neighbouring countries on their journeys, underlining the considerable duration and geographical distance of their journeys. Travel between zones 1 and 4 (*i.e.*, between a non-neighbouring country to Libya and northern Libya) involved land travel for most participants ($n=66$ or 93%), except for five participants who travelled by plane to Libya: three from Egypt, one from Syria and one from Morocco. Two other participants from Morocco also travelled by plane, but only until Tunisia (Tunis) and Algeria (Algiers) respectively, whereafter they travelled to Libya by road, using a smuggler.

5.4.2. Macro-level scripts

When creating the macro-level composite script graph, I found that participants experienced six broad groups of activities: four in the first four zones and two in the Mediterranean Sea (**Figure 14**). When travelling through the first four zones up to the Mediterranean Sea, all participants experienced at least the first three of the following grouped activities (**Figure 16**):

- Staying in the zone, with or without working;
- Preparing their journey, by going to see a smuggler and/or a broker;
- Travelling to the next zone, with or without a smuggler; and,
- Being detained and/or exploited, following arrest or abduction.

When they were in one of the first four zones, participants reported undergoing two principal grouped activities: either staying in the zone (with or without work), and/or preparing their journey to the next zone by meeting a broker and/or a smuggler. To get to the next zone, participants either travelled with or without a smuggler. All participants used a smuggler for at least one zone transition (see below). While either staying in a zone, preparing their journey,

or travelling, a key obstacle that most participants (68%, $n=48$) encountered was detention and often some (other) form of exploitation, following arrest or abduction.

Participants transitioned between these grouped activities in different sequences until they reached the Mediterranean Sea and Malta (see arrows between grouped activities in **Figures 14 and 16**). For instance, during their travel participants could go from staying in a zone (with or without work) to being detained or preparing their journey (with a smuggler and/or a broker) or travelling (with or without a smuggler).

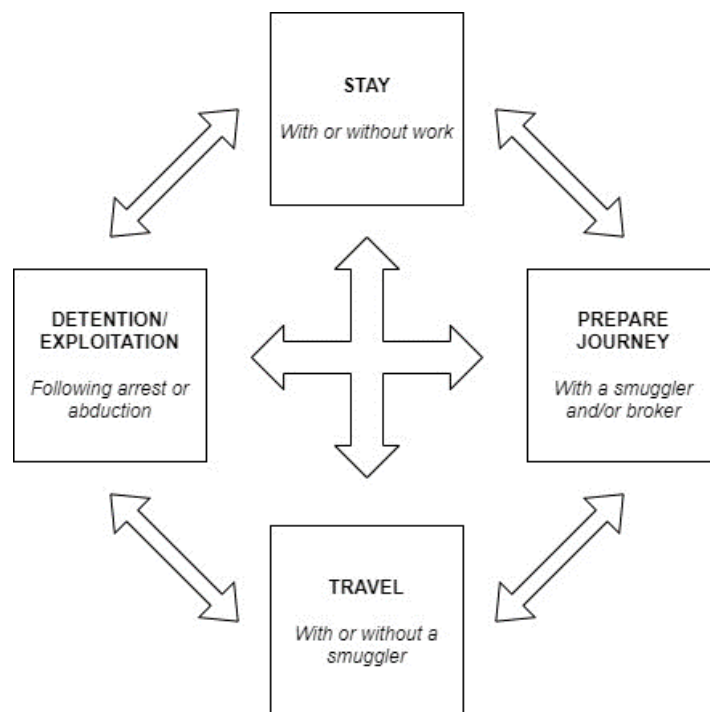


Figure 16 Interactions between groups of activities experienced by migrants on the CMR.

Upon reaching northern Libya (zone 4), all participants boarded a boat to reach international waters in the Mediterranean Sea (zone 5). Once at sea, participants reported one of two situations. They were either intercepted by the Libyan coastguard or a Libyan militia and brought back to Libya ($n=14$, 20%), or they were rescued ($n=71$, 100%)²⁹ by an NGO SAR

²⁹ The total exceeds 100% because some participants attempted several crossings.

vessel, a private vessel (e.g., fishing or cargo boat) or an Armed Forces of Malta vessel and brought to Malta. Finally, upon arriving in Malta, all participants were brought to the Marsa IRC. This final stage was labelled under the category ‘Detention/Exploitation’ because migrants were detained upon arrival ($n=71$, 100%). While no instances of exploitation in detention in Malta were reported by participants, interviews did not specifically focus on this issue. Therefore, its presence cannot be ruled out even for this sample. Notably, a 2020 EU investigation into the Marsa IRC concluded that it was ‘an establishment in disarray, which has allowed a dangerous, and potential fatal, environment for detained migrants and its own staff to develop’ (Council of Europe, 2021).

5.4.3. Micro-level scripts

At the micro-level of abstraction, I found migration scripts involved several types of similar or ‘routine’ activities that participants experienced, albeit in different orders. In addition to travel itself, these included but were not limited to the use of a smuggler; the use of a broker to meet a smuggler; work; forced labour; and detention (**Figure 13**). Each journey was distinct, featuring a unique sequence of micro-level activities. Though some activities were common among participants, as depicted by the graphs’ arrow thickness, the exact sequence of activities varied for each participant from start to finish.

5.4.3.1. *Preparing the journey*

Participants commonly undertook two particular activities before travelling to a new zone: using a smuggler and meeting a broker. All participants used a smuggler at least once on their journey to Europe, highlighting the importance of smugglers in irregular migration on the CMR. Of participants who transited across more than one zone ($n=62$), over half ($n=32$) used a smuggler for all zone transitions, while just 11% ($n=7$) used a smuggler only once. Over three

quarters of participants used smugglers in more than one zone ($n=54$). Of these, two thirds of participants reported using a smuggler in a country neighbouring Libya ($n=47$) while all participants used smuggling services in northern Libya to cross the Mediterranean Sea.

The pervasive use of smugglers across zones, but particularly within Libya, underscores their significance in assisting migrants to complete their journeys to Europe along the CMR. However, the findings indicate that smugglers' importance varied during journeys: being particularly critical in Northern Libya and less so in non-neighbouring countries to Libya. Fewer than half ($n=12$) of participants who departed from a non-neighbouring country to Libya ($n=22$) used a smuggler before reaching Libya.

Sixty-one participants (86%) met a broker who facilitated their travel. A broker was coded as any intermediary who connects a migrant with a smuggler (the person who transports them), whether they be a professional broker, a community member, family, or a friend (Jones & Sha, 2020). Most participants ($n=51$) reported meeting a broker in northern Libya (zone 4). Twenty participants met brokers in more than one zone. Meeting a broker was often in the context of reaching smuggler warehouses, where smugglers house individuals before transporting them for the sea crossing. Northern Libya was also the zone where all participants used a smuggler, suggesting that the importance of brokerage also ties in with the importance of smuggling there.

5.4.3.2. *Travel*

In addition to travelling *between* zones, which all participants did to reach Malta, 49 (69%) participants also reported travelling *within* a given zone. Participants were labelled as travelling within a zone when they had already stayed in the zone for more than one day and travelled to another place within the zone (as opposed to simply travelling directly through it). The zone within which most participants reported travelling was northern Libya ($n=41$).

5.4.3.3. *Staying and working*

Two thirds of participants ($n=48$, 68%) reported working on their journey to Europe. That does not include participants who worked in conditions of forced labour, which I cover below. However, although participants worked voluntarily in exchange for money, their labour conditions were often described as sub-standard or exploitative. Several participants reported working in southern Libya's goldfields, excavating sometimes 30-meter-deep pits through rock layers to unearth gold. Of participants who reported working *en route*, 90% ($n=43$) worked in northern Libya. Twenty-three participants reported working in more than one zone, up to a maximum of four zones. Out of the 31 participants who reported working before reaching northern Libya, most ($n=25$) then also worked in Northern Libya.

A close reading of the transcripts showed the importance of work on migration journeys, both in motivating and facilitating migration. While some participants reported they had travelled to Libya to find work and later decided to leave for Europe, others used work *en route* to fund their onward journeys. Participants usually found work either directly with the person hiring them, or by meeting members of their diaspora who lived in Libya and could act as intermediaries in organising both work and onward travel. The types of work in Libya included construction, hospitality (restaurants), gold mining (southern Libya only), shopkeeping, and farming.

5.4.3.4. *Detention and exploitation*

Over two thirds ($n=48$) of participants reported experiencing detention (defined as the state of being held against one's will) before crossing the Mediterranean Sea. Most such detention events occurred in Libya ($n=56$), with 13 participants reporting being detained more than once during their journey and only seven before Libya: in Sudan ($n=2$), Ethiopia ($n=2$), Egypt ($n=1$), Niger ($n=1$), and Yemen ($n=1$). Interviews did not always specify whether the detention

centre was official (government-run) or unofficial (see the section on context earlier), therefore I coded all under the same ‘detention centre’ label, defined as a facility where migrants are held in custody.

Most of those who were detained prior to arrival in Malta (68% of sample) reported torture or being beaten and asked for a ransom to be released. The median price for the ten participants reporting prices for ransom demands was USD 3,200 (IQR=4,200, Min=800, Max=5,500).

Seventeen participants (24%) reported working in conditions that I labelled as forced labour according to the International Labour Organisation (ILO) (1930) definition.³⁰ All the reported forced labour instances were in Libya.

5.5. Discussion

This study shows the varied and often protracted experiences migrants face on the CMR, supporting more recent findings in the literature (see Crawley & Jones, 2021). My results reflect a different approach into deconstructing these journeys, revealing detailed interactions and reliance on smugglers and brokers, mainly in northern Libya confirming other findings in the literature (Malakooti & Fall, 2020).

Looking at the role of work during migration (most notably in Libya), I uncover a key but often missed part of the migration process that plays a significant role in prolonging CMR journeys (see also Crawley & Jones, 2021). Insights into the conditions of detention and the common use of forced labour in Libya show the uneven risks across the CMR and highlight the need for focused interventions where harms concentrate. These circumstances are exacerbated by EU

³⁰ Defined as, ‘work or service which is exacted from any person under the menace of any penalty and for which the said person has not offered himself voluntarily’ (ILO, 1930). In most cases, the grounds for meeting this definition were not being able to leave their place of work freely.

border control policies, especially the backing of the Libyan coastguard who bring people to detention centres, demonstrating the need for critical policy reassessment (Pacciardi & Berndtsson, 2022).

My research refines and builds on existing models of migration, particularly Zimmerman *et al.*'s (2011), by offering more specific insights into the 'travel' phase they identified, and clearly documenting the nonlinearity of migration pathways along the CMR. The findings, as illustrated by the complexity of the composite script graphs, resonate with calls for a complex systems approach to studying irregular migration (McAlpine *et al.*, 2021). A systems approach views irregular migration as a dynamic, multi-layered system with non-linear interactions, demanding more holistic analytical strategies. In this regard, a close reading of the transcripts also highlighted the importance not only of constraints but of people's agency and decision-making, reacting to opportunities within their environment (see Bish *et al.*, 2024 and Chapter 7). This finding challenges commonplace depictions of irregular migrants as passive victims on their journeys (Kuschminder, 2021).

I hope to have made the case for applying opportunity theories to the study of irregular migration and related harm. These theories suggest that crimes are a product not just of offenders' dispositions but the immediate situational context, and the interaction between the two (Felson & Clarke, 1998). Through the script analysis, I highlighted how 'opportunities' — specific situations and environmental conditions along the CMR — produce conditions that make irregular migrants (already by nature a vulnerable group) prone to harm, including detention and exploitation. My insights underscore that these vulnerabilities are shaped by identifiable environmental factors, aligning with the principles of opportunity theories. Script graphs have proved useful tools for organising the various activities people experienced on the CMR.

Crime scripting has typically been approached from a prevention perspective, but this is not the only ends to which the method can be deployed (Cornish, 1994). Here, I have applied scripting to gain valuable empirical insights into the behavioural aspects of migration, which Cornish (1994; p. 159) highlighted as one of the essential benefits of scripting. Considering a crime prevention intervention model would require an entirely new field of inquiry. I plan to explore this in future research beyond the remit of this thesis through more detailed connected crime scripts from the perspective of the offender to devise harm reduction interventions, mindful of unintended harms (see Chapter 8). Indeed, an intervention model in the field of migration requires cautious deliberation due to potential harm impacts. For example, while aiming to curb smuggling, activities undertaken by the Libyan coastguard increased detentions and abuses of migrants and impeded the movement of people fleeing danger (Bish *et al.*, 2024 and Chapter 7).

Despite my focus on behavioural routines instead of crime prevention, the composite script graph has shed light on instances of displacement, reflected by the diversity of journeys, a key challenge in the field of crime prevention. As such, this behavioural model already provides insights as to potential displacement effects from a prevention perspective.

5.5.1. Limitations

The resulting script graph (n=71) should not be misconstrued as a representative or complete picture of the journeys experienced by the 4,851 irregular migrants recorded as successful sea arrivals in Malta over the 2018-2019 period, let alone generalised to those who departed or arrived elsewhere or, tragically, died on their journeys. As an illustration of this, 22 nodes which had been identified conceptually in the baseline script graph were removed from the empirical script graph, since they were not described as having taken place in participants' journeys (see a detailed comparison of both graphs in Appendix 7: Baseline and empirical

script comparison). Many nodes that had been described in the baseline script graph, such as ‘death’, could not have been experienced by participants. One node that had not been identified conceptually was added to the empirical graphs: while there was no incident of a boat sinking in the Mediterranean Sea during the crossing (node removed from baseline script graph), one incident of a boat breaking was observed, and a node added to reflect this novelty.

As with any interview-based research, self-report bias (Althubaiti, 2016) may affect both socio-demographic data and journey details. Participants may have misrepresented or omitted information due to concerns over their age or desire to strengthen their asylum applications. This risk was minimised by ensuring the interviews were anonymous and confidential and emphasising that interviews would not affect their asylum claims.

Moreover, the research primarily captured accounts of labour exploitation, potentially underreporting sexual exploitation, which is even more stigmatised and sensitive (Gezie *et al.*, 2019). Although there may have been some loss of nuance or error, despite careful translation efforts (Squires, 2009), this limitation is arguably less salient, given my focus on what happened during journeys, rather than how people described their experiences.

Finally, while I hope to have demonstrated the value of scripting in migration studies, my research also highlighted the broader limitations of scripting as a method. The value of scripts and script graphs comes from the ability to deconstruct behaviours into a certain level of abstraction, to enable the cross-comparison of complex sequences of activities. However, this necessary abstraction can remove contextual detail, such as precision in space and time, and introduce some subjectivity, such as what constitutes ‘smuggling’.

5.5.2. Policy implications

While a fuller discussion of the policy implications is beyond the remit of this chapter, the prevalence of detention and exploitation experiences deserves particular attention. That over two-thirds of the sample reported experiences of detention *en route* before Malta raises considerable concerns.

The severity of reported experiences in Libya cannot be understated. Harrowing instances of abuse, arbitrary detention, and human rights violations are rampant, intensified by policies that often deprioritise migrant welfare (Pacciardi & Berndtsson, 2022). This research underscores the need for immediate reform, advocating for policies that realign with human rights principles. Addressing severe systemic problems in Libya and ensuring robust, humane asylum protocols in the EU are imperative steps towards mitigating the harm inflicted on vulnerable populations (see Chapters 6 and 7). Such measures would complement my findings, emphasising swift identification and support for individuals in dire need upon their arrival in Europe.

Crucially, over two-thirds of participants should have benefited from additional protections owing to their past experiences of severe human rights abuses, and yet were detained upon arrival in an IRC. The Maltese government's 'Strategy for the Reception of Asylum Seekers and Irregular Migrants' states that an asylum seeker can be detained for up to 12 months, and an irregular migrant for up to 18 months (Maltese Ministry for Home Affairs and National Security, 2015). However, this detention requirement is waived for people who are 'vulnerable', *i.e.*, 'victims of human trafficking [...] and persons who have been subjected to torture, rape or other serious forms of psychological, physical or sexual violence' (Official Journal of the EU, 2013; Art. 21). While forced labour, as identified in the scripts, is not explicitly mentioned here, it can conceptually overlap with human trafficking, as the

boundaries blur when elements of movement and coercion are introduced (Plant, 2015; see Chapter 7).

As a result, and according to the directive, once released from the IRC, participants who fit this definition should no longer be detained, be accommodated in an 'open centre' and be offered psychological or medical support as required (Maltese Ministry for Home Affairs and National Security, 2015). It is not reasonable to expect affected individuals to be familiar with and able to appeal to legal classifications like those in Directive 2013/33/EU. In any case, the burden of identifying 'vulnerable' people should not rest on the migrants, who may lack the information, capacity or access to legal advice to self-identify as such. This research suggests people in considerable need are under-identified in Malta, which is a considerable concern elsewhere too (see van der Leun & van Schijndel, 2016). Ensuring the timely identification and support of those in particular need in IRCs will likely require staff motivation, capacity, knowledge, and top-down political will. Importantly, the findings reveal that 'vulnerability' upon arrival is shaped by experiences *en route*, not just the initial motivations for leaving, challenging the simplistic 'economic migrant' versus 'trafficking victim' binary.

This research has helped to identify various types of vulnerability that can occur on the CMR and that fit the EU definition. My findings show where and how it can happen, and therefore can help tailor better questions to rapidly identify such vulnerability in migrants arriving. Prompt identification of vulnerability, decisive political will, and tangible operational changes are essential to reduce detention durations and broaden access to necessary support. There are, of course, broader questions about both the morality and impacts of immigration detention in general, which are beyond the current scope.

In this chapter, I have outlined the key migration-related activities observed in the participants' journeys. The following chapter will delve into the connections among these activities, particularly highlighting cyclical patterns within migration trajectories.

Chapter 6 Stuck in Cycles: Im/mobility without Migration on the CMR to Europe

6.1. Introduction

In response to the surge in irregular migration, the European Union implemented an extensive set of measures aimed at both deterring potential migrants from embarking on their journeys in departure countries and erecting barriers in countries people may transit (see Chapter 2). This approach, initiated in 2015 but largely implemented in 2017, coincided with a noticeable reduction in the number of migrants arriving in the EU (Micallef *et al.*, 2019). This association raises questions as to the underlying causal mechanisms behind the reduction in arrivals, as well as to the effectiveness of these interventions.

Researchers are divided on whether the decline was primarily due to the deterrent effect of the policies or other factors (Micallef *et al.*, 2019; Triandafyllidou *et al.*, 2019). Are barriers initiated by EU programmes likely to deter people fleeing conflict or persecution from making desperate quests to safety (Zimmerman & Vernon, 2023)? Triandafyllidou *et al.* (2019) suggest that, while stricter border controls appear to have slowed irregular migration, they have also changed its course. They call for a better understanding of migration decision making in order to inform policy. Have people stopped leaving, or are they still travelling, but elsewhere (e.g. to different destinations or using different routes)?

These questions underscore a fundamental gap in the general understanding of migration dynamics on the Central Mediterranean Route (CMR) to Europe. In Chapter 5, I analysed the frequency and prevalence of routine activities experienced by participants on their journeys to Europe, uncovering a pattern of long, circuitous routes lasting on average 18 months. The

visualisation of these journeys revealed the existence of cycles, characterised as a sequence of activities that start and end with the same activity (see **Figure 13** in Chapter 5). In this chapter, I analyse these repeated activities and cycles to uncover cyclical patterns within migration journeys.

A key aspect of this exploration is contributing to the understanding of the causes of immobility on migration journeys. A suspected causal factor for such immobility highlighted in the literature is the implementation of anti-irregular migration and smuggling policies by governments on the CMR (see Chapter 2). Journalists and NGOs have documented accusations against the Libyan coastguard for example. Their primary concern is the coastguard's role in returning migrants to detention centres in northern Libya, where people can face exploitation.³¹ This situation raises significant ethical concerns, particularly regarding the principle of non-refoulement. This principle, enshrined in international law (Article 33 of the 1951 Refugee Convention) prohibits the return of individuals to countries where they risk facing persecution or serious harm. By examining cycles, my objective is to delve deeper into these issues, aiming to provide detailed empirical evidence. This analysis seeks to uncover not only the explicit factors cited but also any less obvious elements contributing to migrants becoming 'stuck' in cycles during their journeys. In particular, I aim to answer the following research questions: **Where and how do participants encounter immobility in the form of cyclical patterns within their migration journeys? What are the main patterns and characteristics of activities that compose cycles?**

To understand the context within which these cycles occur, it helps to view migration through the lens of complex systems theory. As established in earlier discussions (see Chapter 3),

³¹ As a reminder, a definition of exploitation used in this thesis is provided in Appendix 2: Definitions. I discuss exploitation in both smuggling and trafficking experiences of participants in Chapter 7.

irregular migration, including associated crimes such as smuggling and trafficking, is multifaceted, involving myriad interconnected processes, actors, and contextual factors at various system levels (Aronowitz, 2009; Cockbain *et al.*, 2022; Gallego, 2020; Haas *et al.*, 2019; Leloup, 1996). Given this complexity, an approach that accounts for the interactions and feedback mechanisms within migration systems at various levels (micro, meso and macro) is particularly useful (Bakewell, 2014; de Haas, 2010; Mabogunje, 1970; McAlpine, 2021). This study, therefore, adopts a complex systems perspective to elucidate how these cycles are integral components of a larger, interconnected system of migration.

While the concepts of migration industry and migration networks have been widely applied (see McAlpine, 2021), there remains a scarcity of studies delving into details of cyclical migration at the micro level of individual decision-making. To the best of my knowledge and research, a notable knowledge gap exists concerning the empirical exploration of system dynamics at the activity-specific level that mirrors the decision-making processes of migrants (which are sometimes quite heavily constrained). This research seeks to bridge this gap by offering a detailed examination of the micro-level dynamics that underpin migration, thereby enriching our understanding of these complex processes.

6.2. 'Im/mobility' on migration journeys

The topic of immobility within the context of migration has been relatively underexplored, prompting Schewel (2020) to highlight what he terms a 'mobility bias' within migration studies. This suggests that the prevailing focus in migration research tends to privilege movement over the equally significant phenomena of stagnation and non-movement.

A focus on immobility is particularly relevant in the context of Libya, where Achtnich's (2021) ethnographic research showed that migration journeys were often characterised by prolonged

periods of immobility, often due to detention (see also Malakooti, 2019; Micallef *et al.*, 2019). However, Achtnich (2021) elaborates that such immobility is not solely the result of actions by state and criminal actors seeking to detain migrants; it can also be a voluntary choice by migrants, for instance as they wait for new opportunities to continue their journey.

Achtnich's (2019) work highlights *physical* immobility among migrants in Libya. In research on im/mobility³² however (see Brigden & Mainwaring, 2016; Sheller & Urry, 2006), 'experienced im/mobility is often distinguished from physical im/mobility' (Schapendonk, 2012, p. 580). In other words, even when waiting for onwards journeys to fulfil their broader migration goals, people are not necessarily physically immobile. Based on ethnographic research with sub-Saharan African migrants in Morocco and Turkey, Schapendonk (2012) extends the concept of immobility, by highlighting that people on the move can both be physically mobile and experience periods of 'immobility' within their broader migration journeys. Schapendonk (2012) describes how migrants moved over short or long distances to evade Moroccan and Turkish authorities for example, but also how people could travel across several 'transit' countries to find the best crossing point into the EU. The 'waiting' of people in transit³³, which is often seen as a status of immobility, is not necessarily fixed in space;

³² Some studies around immobility have focussed on why people choose to stay and live in one place (Jonsson 2011; Schewel 2019) and to not migrate, despite facing worsening conditions due to climate change for example (Zickgraf, 2019). This body of literature is not particularly relevant to this study since, I know that the participants arrived in Malta and were therefore not sedentary. The term 'im/mobility' instead of immobility is used here to encompass both mobility and immobility as interconnected phenomena.

³³ The concept of transit migration shifted researchers' focus towards the intermediary stages of migration, emphasising the journey itself rather than just the points of departure and arrival (Collyer, 2007, 2010; Papadopoulou-Kourkoula, 2008; Schapendonk, 2010, 2012). As Schapendonk (2012) recognises himself, the term transit migration has been criticised because it implies that those countries of transit were not countries of intended destination and thus, can in the context of the Mediterranean and its borders, imply adopting a Eurocentric approach (Bredeloup, 2012; Collyer *et al.*, 2012). Internal migration generally refers to people travelling within their own country. Transit migration should not be mistaken with circular migration (Skeldon, 2012) which is defined 'a form of migration in which people repeatedly move back and forth between two or more countries'

migrants that are apparently immobile can in fact be ‘on the move’ (Schapendonk, 2012). Schapendonk (2012) mentions for example, that migrants in Rabat said they never begged for money in the same places in order to avoid problems with local authorities.

Gutekunst *et al.* (2016) later described a similar conceptualisation as ‘bounded mobilities’, to explain how people can become trapped in a state of constant movement, rather than being stuck in one place. Building on this, Wyss (2019) also speaks of migrants becoming ‘stuck in mobility’. Neither Schapendonk (2012), Gutekunst *et al.* (2016) nor Wyss (2019) fully define the concepts they introduce, nor describe their inner workings, such as the various patterns through which this mobility can take place.

Reiter & Frei (2019) seek to explain such inner workings by identifying four possible types of patterns based on an analysis of historical human mobility patterns:

- i. *Non-mobility (a)*, where individuals or groups remain predominantly stationary;
- ii. *Point-to-point mobility (a b)*, characterised by a single, one-way movement from an origin to a destination;
- iii. *Back-and-forth mobility*, involving regular movements between two fixed points;
- iv. *Repeated mobility*, subdivided into *cyclical mobility*, referring to repeated mobility over a specific period between different (but repeated) areas, and *non-cyclical mobility*, or sequential short- and long-term stays in various different places.

Exploring cyclical mobility sheds light on the specific patterns and characteristics that define the repeated activities and cycles in migration, directly correlating with my research questions on identifying the main patterns within these cycles.

according to the IOM (2019) glossary on migration. The EU Commission (2023) defines it as regular migration that is circular. However, circular migration can also be irregular (see, e.g., Lainez, 2019).

A common thread among studies on immobility is the constrained agency of people on the move who experience *involuntary* immobility. This dynamic refers to populations who want to migrate but lack the ability to because they are ‘trapped’ (see e.g. Black & Collyer, 2014) or indeed ‘stuck’ (Chatterji, 2017; R. Cohen & Van Hear, 2017; Jefferson *et al.*, 2019; Shum, 2022; Wyss, 2019).

A seminal study that delved into involuntary immobility was Carling's (2002) study in Cape Verde, introducing the ‘aspirations-ability framework’.³⁴ Carling (2002) highlighted how, despite a culture centred around migration and the desire to leave, poverty restricted people’s ability to migrate. Another study on involuntary immobility by Lubkemann (2008), this time in a conflict setting in Mozambique, further illustrated how war-induced immobility leads to significant life disruptions and a sense of disempowerment.

Several studies on immobility have attempted to explain the causes of observed immobility (whether physical or as an inability to migrate to an intended destination) but few have explained the specific mechanisms that lead to it (Zickgraf, 2019). In a review of the literature, Zickgraf (2019) finds that many potential mechanisms and causes have been underexplored and contends that immobility is multi-causal (see also Carling & Schewel, 2018). Commonly mentioned causes of immobility include financial barriers (Carling, 2002), the lack of opportunities offered by human and social capital to exit immobility (Black and Collyer, 2014), the role of religion (Mortreux & Barnett, 2009), place attachment (Piggott-McKellar *et al.*, 2019) and border regimes (Brigden & Mainwaring, 2016). In the context of environmental migration, (Zickgraf, 2019) highlights the role of political factors in facilitating immobility, including policy interventions.

³⁴ Explains migration as the result of the fusion of both the *aspiration* and *ability* to migrate. The framework was later enhanced by Carling & Schewel (2018).

Without providing a core definition of immobility, Zickgraf's (2019) identifies three of its specific components, which I have summarised as:

- *Dynamic*: mobility and immobility are not fixed and can change over time (see also de Haas, 2014)
- *Relational*: immobility is influenced by various external factors and power dynamics (see also Gutekunst *et al.*, 2016)
- *Complex*: it cannot be simply categorised due to the interplay between mobility and immobility in everyone's life (see also Siraj & Bal, 2017).

While this conceptualisation is useful to think about immobility, a more specific definition seems necessary, at the very least to recognise that immobility cannot solely be equated with physical immobility, as the spatial domains within which mobility or immobility occur are fundamentally different. For instance, an individual may experience what I term im/mobility without migration – they possess the physical ability to move within a confined spatial domain (e.g. within a country) but are unable to achieve mobility across the broader geographical domains necessary for migration (e.g. cross the country's borders). This condition, which can be described as involuntary immobility (Carling, 2002) highlights the discrepancy between the capacity for local movement and the ability to migrate to a new region or country. It does not necessarily imply *physical* immobility (i.e. someone not moving).³⁵

³⁵ The complexity of distinguishing between physical immobility and the inability to migrate is further illustrated by the example of air travel. A person may remain physically stationary in their seat on an airplane, yet they are undergoing a significant movement across vast geographical distances and may be fulfilling their migration goals. This scenario exemplifies how an individual can be physically immobile yet not 'immobile' in the migration sense, as they are successfully changing their geographical context. Therefore, the concept of immobility in migration must be understood as the inability to access migration as a means of changing one's geographical and socio-economic context, rather than a lack of physical movement per se. It concerns the spaces within which we are

Building on the contributions of Schapendonk (2012), Gutekunst *et al.* (2016), and Wyss (2019), I move beyond the concept of *physical* immobility, to empirically demonstrate how immobility in transit can in fact manifest as physical mobility in non-linear and cyclical patterns (see also Etzold & Fechter, 2022). Within this context, I define the phenomenon of *im/mobility without migration* as the condition experienced by people who, despite engaging in physical movement across geographical spaces and having clear aspirations to migrate, find themselves trapped in a state of liminality and stagnation, characterised by continuous or repetitive movements that do not lead to the realisation of their broader migration goals. In contexts such as Libya and my study, *im/mobility without migration* captures the patterns of movement, often cyclical, between temporary stays, internal travel, detention centres, precarious working conditions, instances of exploitation and preparing for smuggling journeys. In this context, involuntary immobility becomes not a predicament based on people's ability to move but on their inability to fulfil their migration ambitions.

In demonstrating the presence of cyclical patterns of im/mobility on migration journeys, I use the definition of cyclical mobility provided in Reiter *et al.*'s (2019; p. 460) typology of human mobility patterns: 'repeated mobility either over a specific period or throughout a lifetime between different (but repeated) areas'. Previous research on circular and cyclical migration³⁶ has mostly focussed on movement between places of origin and destination locations, including more permanent moves and often between countries (see Constant & Zimmermann, 2011).³⁷

allowed or able to be mobile, and the barriers—be they legal, economic, or social—that constrain individuals within certain spatial domains and prevent them from achieving their desired migration goals.

³⁶ Cyclical and circular migration are terms used in the study of human mobility and migration, and they are often used interchangeably. The term 'circular migration' is often used in policy discussions and literature.

³⁷ Circular migration is often seen as regular/legal migration, according to the EU Commission (2023), and defined as 'a form of migration in which people repeatedly move back and forth between two or more countries' according to the IOM (2019) Glossary on Migration.

However, my definition of cyclical migration is mostly between repeated sequences of migration-related activities that may (or not in the case of heavily constrained agency) reflect the decision making of migrants. Thus, this cyclical migration does not necessarily take place between different countries. To the best of my knowledge, no existing empirical study has studied the unique cyclical patterns of migration-related activities (i.e. at a micro-level) that I will analyse in this research.

The discussion of im/mobility, both voluntary and involuntary, has helped ground in the migration literature the exploration of the 'where' and 'how' of cyclical patterns in migration journeys, as outlined in my research questions. The following section will explore how cycles have been examined in the study of migration systems, before presenting the methods for the study.

6.3. Cycles in migration systems

Migration systems (see Chapter 2 for more details) can be described as complex networks connecting various places through the bidirectional flows of people, goods, services, and information, thereby fostering further interactions, including migration, among these locales (see also de Haas, 2010, p. 1593; Fawcett, 1989; Gurak & Caces, 1992; Mabogunje, 1970; Windzio *et al.*, 2021). Building on this notion of systems as networks, I employ a definition of cycles from graph theory, where a cycle is described as a sequence of adjacent nodes that starts and ends at the same node.³⁸ In this study, nodes represent migration-related activities (e.g., Travel to northern Libya) and edges a connection between two activities. Alternative definitions are also helpful to consider here. The Oxford English Dictionary (2020) defines a cycle as ‘a series of events that are regularly repeated in the same order; or move in or follow

³⁸ In graph theory, cycles are known as circuits for directed graphs to represent their directional nature, but I will use the more accessible term ‘cycles’ in this chapter.

a regularly repeated sequence of events'. The Foundation for the Study of Cycles (2024), a non-profit, research organisation for the study of cycles of events and founded by the economist Edward Dewey, adds to the Oxford Dictionary definition that '[t]he longer and more regular the series is repeated, the more predictable it becomes, until it cannot reasonably be considered a coincidence.' This definition reminds us that cycles drive many natural or human-made patterns and that many cycles are caused by one or multiple factors, although they may not always be easy to determine, as Dewey (1967; p. 1)³⁹ suggests:

'Almost everything fluctuates. Many things fluctuate in cycles or waves. Many of these waves are spaced very regularly and have other characteristics that indicate that the spacing cannot reasonably be chance. Non-chance spacing must, by the meaning of words, have a cause. This cause must be internal (dynamic) or interacting (feedback or predator-prey) or external. In any event it must be a force of some sort. In many instances this force cannot reasonably be internal or interacting. Therefore it presumably is external.'

Systems theory traditionally conceptualises cycles within the framework of 'feedback loops', mechanisms through which the outcomes of processes *feed back* into the system to influence subsequent processes (see e.g., de Haas, 2010; Meadows, 2011). These loops are categorised as either positive or negative. Positive feedback loops amplify system outputs, potentially leading to exponential growth or runaway effects. For example, positive feedback loops include network effects: as more people migrate from a particular area to a destination, they establish networks that can provide support to new migrants, such as housing, job opportunities and support. In contrast, negative feedback loops are perceived as serving to stabilise the system,

³⁹ While Dewey (1967) mentions the presence of cycles in migration of animals, he omits mentioning its role in human migration.

reducing flows or promoting equilibrium. For example, stricter immigration policies may make it more challenging for migrants to travel and thus deter future departures. This conceptual framework has been applied in migration systems theory to understand information and remittance flows as well as network effects, and how migration patterns self-perpetuate or self-regulate in response to external and internal stimuli (Gurak & Caces, 1992).

While feedback loops help to conceptualise the *outcomes* of processes within a system, I focus on the *actual* processes themselves and highlight their cyclic composition. Participants underwent a series of repetitive stages, from engaging with smugglers, embarking on boats, facing detention and eventually restarting the process. Krippendorff (1984, p. 21) reminds us that the notion of cyclical or circular patterns is linked to the notion of feedback: ‘Circularity is the essence of the early notion of feedback (circular causality).’ However, I argue that the feedback loop model only explains one aspect of cyclical migration patterns. Cycles may not necessarily strictly result from the amplifying effects of positive feedback or the stabilising influence of negative feedback. Instead, it is likely a reflection of a combination of socio-economic pressures, policy enforcement, opportunities and constraints which influenced choices that were sometimes heavily constrained on journeys, and which traditional feedback loop models may not fully encapsulate. Moreover, feedback loop models are mostly concerned with the patterns of movements of future migrants within macro-level models of migration systems, but they do not consider the cyclical movements of an individual migrant that may be repeated.

When studying circular or cyclical migration, studies on migration that have adopted a systems approach have predominantly done so from a macro-level perspective, examining how global economic disparities, labour demands, and policy frameworks drive migration (see, e.g., Leal & Harder, 2021). While these studies acknowledge the cyclical nature of some migration

processes, there is limited exploration of the micro-level cycles within irregular migration pathways, especially those facilitated by smuggling networks.⁴⁰ The repetitive encounters with smugglers, detention, and attempts to cross borders I will observe in what follows are underexplored in the extant literature to the best of my knowledge and research.⁴¹ This oversight indicates a significant gap in understanding the lived realities of people travelling and the systemic forces driving these cycles.

Leal & Harder (2021) remind us that a key advantage of using a systems approach when studying migration is that any given flow of the system can be examined in the context of the relational structure that exists between other flows (see also, Fawcett, 1989; Windzio *et al.*, 2021). Hence, this approach presupposes the presence of inherent relational dependencies characteristic of any network (Leal & Harder, 2021). It suggests that discernible network structures within the system may significantly explain the empirical relational patterns identified in migration systems. Thus, the study of cycles may help to investigate these relational patterns.

Given the lack of detailed examination of micro-level cyclical mobility, this study aims to analyse cyclical patterns and their characteristics. By focussing on these cycles, I offer new insights into the outcomes of decision-making processes (whether constrained or not) and adaptive strategies employed by people travelling on the CMR to Europe. More specifically, I aim to pinpoint the primary repetitive activities among participants and their geographical occurrences, analyse the variation and frequency of these activities across the sample, and gain

⁴⁰ McAlpine (2021) describes studies of networks within systems at the meso-level and the micro-level being concerned with individual decision making of migrants. This work sits at both micro and meso levels within that classification.

⁴¹ Etzold & Fechter (2022) mention the potential non-linear and circular nature of mobilities but do not describe or explain their mechanisms.

insights into the distinct cyclical patterns that characterise participants' experiences. In doing so, I will also seek to identify and examine the most prevalent cycles of activities, noting how often they occur and the specific contexts that give rise to them.

6.4. Methods

Cycle analysis refers to the study of cycles in a graph (Vasiliauskaite *et al.*, 2022). Here, I analyse the migration journeys at two levels: the activity level, analysing the most repeated nodes (both prevalence across all participants but also repeats for individual participants), and the cycles level, analysing the ordered sequence of migration-related activities that comprise the identified cycles.

I analyse activities at the micro-scale of analysis (see **Figure 13**, Chapter 5) to prioritise the identification of granular patterns within individual migration experiences. However, future research could also analyse cycles at the macro scale, with grouped activities (see **Figure 14**, Chapter 5).

6.4.1. Activity-level analysis

To analyse the instances of repeated activities in migration paths, an initial step involved processing the migration path data. Following the coding process in Chapter 5, I recorded participant journeys as a directed path, i.e., a finite sequence of nodes with all edges in the same direction. I organised these paths into a Python dictionary called *participant_paths*, with each key uniquely identifying a participant and their unique path. I employed the Counter class from Python's collections module to iterate through each participant's path to identify and count activities experienced at least once (from now referred to as repeated activities). These counts were stored in another dictionary, *activity_repetitions*, keyed first by activity and then by

participant, to maintain the repetition count for each repeated activity per participant (see example in **Table 5**).

Table 5 Example of output table for three activities and three participants. Numbers represent the number of times the activity appeared in the sequence.

Repeated activity	Participant 1	Participant 2	Participant 3
Travel in southern Libya	2	0	0
Travel in northern Libya	5	0	0
Stay in neighbouring country (no work)	0	0	2

To represent the data, I compiled in a table the median, minimum and maximum number of times each repeated activity occurred. For each activity, the number of participants who repeated each repeated activity was also specified.

6.4.2 Cycles-level analysis

In my study of cyclic structures within participant journeys, I followed a two-step process: first I uncovered all cyclic permutations in participant paths, then I identified key cycles that serve as models or archetypes — hereon referred to as ‘representative’ cycles — within these permutations.^{42 43} By ‘representative,’ I mean those cycles that capture the core sequence of

⁴² The algorithms used are available in my repository on GitHub: <https://github.com/agbish>. They are explained in detail in Appendix 9.

⁴³ The Oxford Dictionary on Statistics defines a cyclic permutation as a ‘rearrangement of an ordered list in which items from the end of the list are successively moved to the start. For example, the cyclic permutations of the letters UPTON are NUPTO, ONUPT, TONUP, and PTONU, but neither PUTON nor NOTUP’ (Upton & Cook, 2008).

activities shared across different permutations, embodying the common cyclic patterns among participants, despite their differing start and end points. This approach allowed for a concise summary of the permutations to display common patterns. For example, a sequence conventionally recognised as $(a\ b\ c)$ might also appear as $(b\ c\ a)$ or $(c\ a\ b)$, yet all three are permutations of the same *representative 3-cycle* $(a\ b\ c)$ (see **Figure 17**).⁴⁴

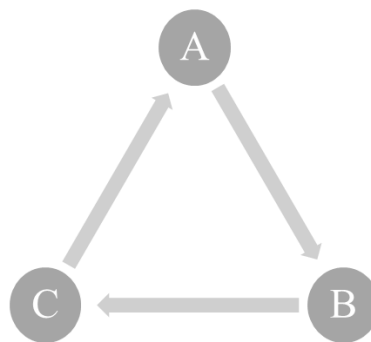


Figure 17 Three-cycle $(a\ b\ c)$

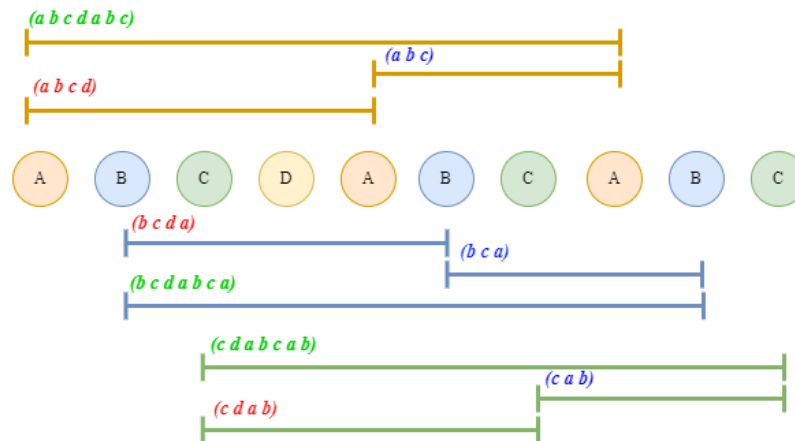
While an advantage of using representative cycles of cyclic permutations is standardising the ordered sequence of nodes that different participants may have experienced, albeit with a different starting point in the cycle, it does not allow us to analyse the ‘entry point’ into the cycle, which is where the activity-level analysis becomes useful.

I developed three algorithms to identify cycles due to limitations I encountered with the existing algorithms within the NetworkX package, which overlooked actual cycles or identified non-existent ones (see detailed explanation in Appendix 8: Explanation of methodological approach). The first algorithm (*Comprehensive Cycles Extractor*, see details in Appendix 9: Explanation of algorithms) was designed to enumerate all the cyclic permutations present in a

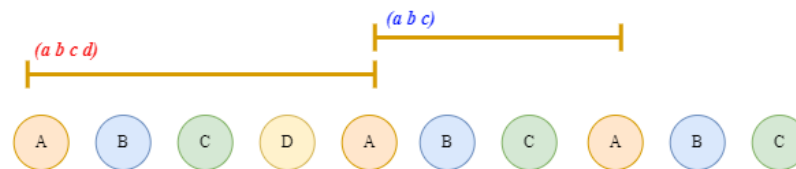
⁴⁴ Cycles are denoted in a way that the sequence returns to the start without repeating the initial element $(a\ b\ c)$ instead of $(a\ b\ c\ a)$.

path, accounting for both simple cycles and compound cycles. A simple cycle is a closed path where no node is repeated except for the first and last node. In contrast, I call a compound cycle, a cycle composed of several simple cycles that share common nodes, effectively creating a larger cycle that encompasses the smaller ones (see **Figure 18**). For instance, within a given path ($a b c d a b c a b c$), the first algorithm would identify nine cyclic permutations representing three representative cycles (see **Figure 18**). Six cycles are simple cycles while three cycles are compound cycles that contain these simple cycles (see **Figure 18**). For example, the cycle ($a b c d a b c$) is a compound cycle, encapsulating four simple cycles.

Algorithm 1



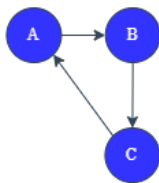
Algorithm 2



Cyclic permutations

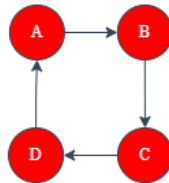
Simple cycle

$(a b c)$
 $(b c a)$
 $(c a b)$



Simple cycle

$(a b c d)$
 $(b c d a)$
 $(c d a b)$
 ...



Compound cycle

$(a b c d a b c)$
 $(b c d a b c a)$
 $(c d a b c a b)$
 ...

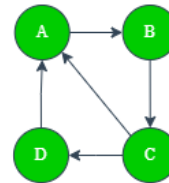


Figure 18 Examples of simple and compound cycles. Cycles are denoted in a way that the sequence returns to the start without repeating the initial element ($a b c$) instead of ($a b c a$).

To enhance the analysis of cyclic permutations within participant journeys, I introduced a second algorithm (*Simple Cycles Extractor*, see Appendix 9) that detects the presence of nested

simple cycles within participant paths, deliberately excluding compound cycles from this analysis. For example, it would include the two simple cycles $(a b c)$ and $(a b c d)$ but not the compound cycle $(a b c d a b c)$ depicted in **Figure 18** (see also **Figure 35** in Appendix 9). The rationale for this distinction is to eliminate redundancy that arises from the analysis of larger compound cycles, which can obscure the more fundamental, unique simple cycles. However, recognising compound cycles remains essential, since they encapsulate the broader more complex cyclical patterns that emerged across participant journeys and that consists of combinations of simple cycles.

After identifying cyclic permutations, I could not find an existing algorithm to identify *representative cycles* for cyclic permutations (or ordered permutations of sequences), which did not require significant computational resources. I therefore developed a third algorithm (*Representative Cycle Identifier*, see Appendix 9) to help identify such representative cycles while minimising computational demand. The third algorithm processed each cycle into its doubled form to then detect within this new doubled sequence all possible cyclic permutations of a given representative cycle. For example, doubling the cycle $(a b c)$ entailed recording it $(a b c a b c)$, within which the $(a b c)$ cycle's variations of the same length $(b c a)$ and $(c a b)$ could be easily identified.

All three algorithms were tested by manually identifying cycles and permutations within five more complex participant paths and checking them against the results of the algorithms to ensure accuracy.

In the results section, I first compute descriptive statistics to analyse the frequency of cycles across participants, then analyse in more depth the five most frequented cycles in terms of the number of participants that travelled through them. I then also analyse the top five other cycles, which were repeated cycles travelled multiple times by the same participant (but were not

among the most travelled across all participants).⁴⁵ Although dozens of cycles could have been analysed in this paper, this method ensured a focus on some of the most recurrent migration cycles identified in the data while ensuring that the study remained focused and insightful.⁴⁶

To illustrate these eight cycles, I use vignettes and direct quotes. As a reminder, all names of participants mentioned have been replaced with pseudonyms to maintain anonymity. Moreover, any potentially identifying detail in the quotes and vignettes have been obscured to ensure confidentiality. In constructing the vignettes from the interview data, I aimed for precision and detail to reflect accurately the experiences and narratives of the participants. This involved distilling each participant's narrative into a concise summary that captured the essence of their experience, focussing on key events and insights while carefully maintaining the integrity and depth of their original accounts.

When constructing these vignettes, I deliberately chose stories from different participants to showcase a broad spectrum of experiences, highlighting both the diversity of circumstances faced by individuals and the common patterns that emerge across different people's narratives. In doing so, I have sought to include as much detail as possible to illustrate a given cycle. However, it is important to note that the level of detail and specificity varied between interviews. For example, this variation included the sum paid for release from detention centres, whether the detention centre was an official or unofficial detention centre, or the exact age of participants upon departure from country of origin. Quotes were included for illustrative

⁴⁵ My initial intention was to analyse the top five cycles. However, two of the top five cycles were already analysed because they figured in the top five most frequented cycles in terms of the number of participants that travelled through them. Consequently, my analysis focused on the remaining three cycles that had not yet been analysed.

⁴⁶ Future research could seek to focus on analysing cycles in a given geography for example in the Mediterranean Sea.

purposes when they provided detailed and concise insights but were omitted in favour of summaries when these offered a clearer or more effective explanation.

This mixed methods approach allowed me to achieve the double objective of identifying common patterns (quantitative approach) and add texture and insights into individual experiences (qualitative approach).

6.5. Results

6.5.1. Repeated activities

Out of all 81 migration-related activities identified in participants' journeys (see Chapter 5), 57 (70%) were repeated at least once in individual participant journeys.⁴⁷ Almost half (n=28) of the 57 repeated activities took place in Libya (see **Figure 19**). Twenty-one (37%) repeated activities occurred before reaching Libya, and the rest were in the Mediterranean Sea itself (see **Figure 19**).

⁴⁷ As a reminder, an activity that is repeated in a sequence constitutes a cycle.

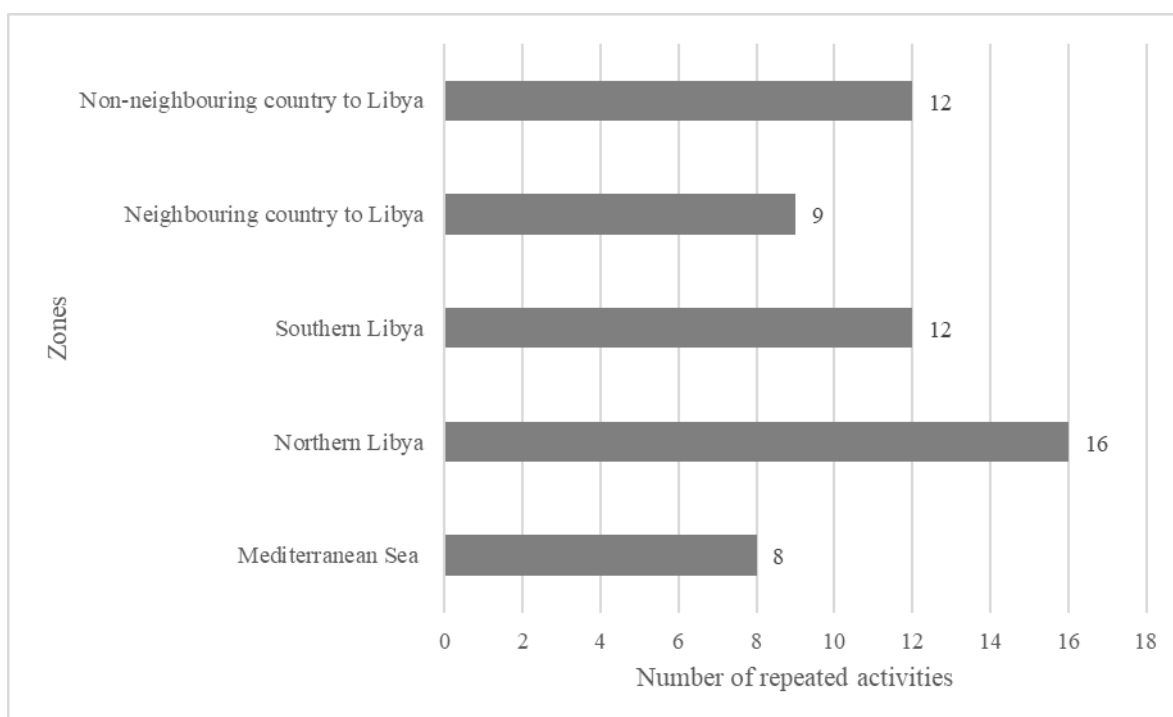


Figure 19 Number of repeated activities in the different zones ($n=57$).

Table 6 contains the list of all identified repeated activities, along with the average number of times (median) the activities occurred in individual journeys. Note: for each activity, only the journeys in which the activity occurred at least twice were considered, which means that the minimum possible median value is 2. Activities that appeared twice are presented in decreasing order by number of participants who repeated an activity. Twenty-two participants (31%) departed from non-neighbouring countries to Libya, 40 participants (56%) departed from neighbouring countries to Libya and 9 participants (13%) departed from Libya itself. Given that only 31% of participants began their journeys in a non-neighbouring country to Libya, repeated activities there are likely to have been experienced by fewer participants.

Table 6 Repeated activities by median times repeated in decreasing order ($n=57$).

Repeated activities	Med	Max	Min	Participants
Travel to detention centre in northern Libya	3	3	2	19
Released/Escape/Leave in northern Libya	3	5	2	19
Wait in detention centre in northern Libya	3	3	2	18

Repeated activities	Med	Max	Min	Participants
Stay in northern Libya (no work)	3	3	3	1
Stay in southern Libya (work)	2.5	3	2	2
Travel towards Libya in the Mediterranean	2.5	3	2	2
Remain at sea in the Mediterranean	2.5	3	2	2
Meet smuggler in non-neighbouring country	2.5	3	2	2
Travel to non-neighbouring country (without smuggler)	2.5	3	2	2
Travel in northern Libya	2	8	2	24
Stay in northern Libya (work)	2	5	2	21
Travel to smuggler facility in northern Libya	2	5	2	17
Wait in smuggler facility in northern Libya	2	3	2	17
Travel to broker in northern Libya	2	5	2	17
Meet broker in northern Libya	2	5	2	16
Travel to embarkation in northern Libya	2	4	2	15
Board boat in northern Libya	2	4	2	15
Travel to international waters in the Mediterranean	2	4	2	13
Board vessel in the Mediterranean	2	4	2	11
Arrest/Abduction in northern Libya	2	3	2	9
Travel to smuggler in neighbouring country	2	3	2	8
Meet smuggler in neighbouring country	2	3	2	8
Stay in neighbouring country (work)	2	4	2	8
Stay in neighbouring country (no work)	2	2	2	7
Travel in neighbouring country	2	3	2	7
Meet smuggler in southern Libya	2	2	2	6
Disembark boat or vessel in northern Libya	2	3	2	5
Stay in non-neighbouring country (no work)	2	3	2	5
Travel to smuggler in southern Libya	2	2	2	4
Travel in southern Libya	2	3	2	3
Travel to Libya (with smuggler) in neighbouring country	2	2	2	3
Travel to detention centre in southern Libya	2	2	2	3
Wait in detention centre in southern Libya	2	2	2	3
Released/Escape/Leave in southern Libya	2	2	2	3
Travel to smuggler in non-neighbouring country	2	3	2	3
Travel to neighbouring country (with smuggler) from non-neighbouring	2	3	2	3
Released/Escape/Leave in neighbouring country	2	2	2	2
Approached by Libyan coastguard in the Mediterranean	2	2	2	2
Meet broker in southern Libya	2	2	2	2
Travel to neighbouring (without smuggler) from non-neighbouring country	2	2	2	2
Travel to broker in neighbouring country	2	2	2	2
Meet broker in neighbouring country	2	2	2	2
Released/Escape/Leave in non-neighbouring country	2	2	2	2
Approached by private vessel in the Mediterranean	2	2	2	2
Stay in southern Libya (no work)	2	2	2	1
Travel to forced labour in northern Libya	2	2	2	1
Forced labour in northern Libya	2	2	2	1
Travel to northern Libya (with smuggler) from southern Libya	2	2	2	1
Travel to broker in southern Libya	2	2	2	1

Repeated activities	Med	Max	Min	Participants
Make SOS call in the Mediterranean	2	2	2	1
Travel to northern Libya (without smuggler) from southern Libya	2	2	2	1
Travel to processing centre in non-neighbouring country to Libya	2	2	2	1
Wait in processing centre in non-neighbouring country	2	2	2	1
Arrest/Abduction in non-neighbouring country	2	2	2	1
Travel to detention centre in non-neighbouring country	2	2	2	1
Wait in detention centre in non-neighbouring country	2	2	2	1
Travel towards Europe in the Mediterranean	2	2	2	1

Note: an activity that appears twice is technically repeated once. Activities that appeared twice are presented in decreasing order by number of participants who repeated an activity. Fifty-three participants repeated activities on their journey while 18 participants did not. Repeated activities with over 20% of the sample of 71 participants are in bold.

While 53 participants repeated activities during their journey, indicating a commonality of cyclical patterns in migration paths, 18 participants did not experience such repetitions, highlighting that not all migration journeys adhere to a cyclical model. This contrast not only reveals the diversity in migration experiences within the sample but also underlines the significant role that repeated patterns play in most participants' journeys.

The first three activities in the table involved detention in northern Libya, they all involve the highest median of three appearances and affected over a quarter of all participants.⁴⁸ Unsurprisingly therefore, detention was conducive to general immobility, with 18 participants repeating the activity 'Wait in detention centre' in northern Libya, on average repeated three times (see **Table 6**). This pattern of repeated travels to and protracted confinements in detention centres not only reflects the physical reality of being detained but also suggests a systemic loop where participants find themselves caught in a cycle of apprehension, release, and re-detention, which I will explore later through cycle analysis.

⁴⁸ 'Travel to detention centre' and 'Released/Escape/Leave' have one more participant than 'Wait in Detention Centre' because one participant had travelled to a detention centre but escaped before being detained.

Another notable pattern is the presence of work-related activities, with 21 participants repeating the activity ‘Stay in northern Libya (work)’. On average (median for all mentions in this section), this activity appeared twice on journeys for participants who repeated this activity (see **Table 6**). In other zones too, work is linked to im/mobility, with participants returning to the activity several times on their journeys (see **Table 6**). This could reflect the economic necessity of securing work to sustain oneself during ones’ travels or the use of work as a temporary or longer-term anchoring point. The data points to a cycle of work-related activities but does not alone provide insights into the reasons for this repetition or its implications for overall mobility or settlement patterns, which I will explore later.

The analysis shows a significant recurrence in activities associated with journey preparation. Specifically, 17 participants repeated ‘Wait at smuggler facility’ in northern Libya (twice on average), while 20 repeated the activity ‘Meet broker’ (including 16 in northern Libya, 2 in a neighbouring country to Libya and 2 in southern Libya), which was repeated twice on average (see **Table 6**). Repeated visits to brokers and smugglers suggest that participants often found themselves in a cycle of preparation and attempt, which may indicate unsuccessful first attempts or the necessity of multiple interactions to arrange their onward journey.

Travel within northern Libya (see **Table 6**) was the most prominent repeated activity across all participants (n=24 participants). The cyclical nature of this repeated pattern highlights that participants were engaged in cyclical travel patterns within Libya, possibly for work or for preparing their onward journey to Europe, which I will explore below when analysing activities composing cycles.

Additionally, the repeated activities of 14 participants included staying without working in either non-neighbouring countries to Libya (n=5), neighbouring countries to Libya (n=7), southern Libya (n=1) and northern Libya (n=1). This dynamic reflects phases of participants’

journeys spent in transit or attempting to establish themselves in new countries. The repetition of such stays not associated with work further points to the series of cycles involving periods of waiting or preparation before moving on that people experience while travelling on the CMR to Europe.

My focus on repeated activities has offered insights into why participants may enter repeated patterns; however, equally important is the finding that 24 activities were not repeated across any participant journeys (see **Table 7**).

Table 7 Overview of activities that were never repeated for any of the 71 participants, in chronological order of journeys from non-neighbouring country to Libya to Malta.

Activity	Zone
Travel to non-neighbouring country (with smuggler)	Non-neighbouring country to Libya
Stay in non-neighbouring country (work)	Non-neighbouring country to Libya
Travel home	Non-neighbouring country to Libya
Travel to broker	Non-neighbouring country to Libya
Meet broker	Non-neighbouring country to Libya
Travel in non-neighbouring country	Non-neighbouring country to Libya
Travel to processing centre	Neighbouring country to Libya
Wait in detention centre	Neighbouring country to Libya
Wait in processing centre	Neighbouring country to Libya
Travel to detention centre	Neighbouring country to Libya
Arrest/Abduction	Neighbouring country to Libya

Activity	Zone
Travel to Libya (without smuggler)	Neighbouring country to Libya
Travel to forced labour	Southern Libya
Arrest/Abduction	Southern Libya
Forced labour	Southern Libya
Travel to home country	Northern Libya
Boat breaks	Mediterranean Sea
Approached by NGO vessel	Mediterranean Sea
Approached by Armed Forces of Malta vessel	Mediterranean Sea
Released/Escape/Leave	Mediterranean Sea
Approached by militia	Mediterranean Sea
Disembark vessel	Malta
Travel to processing centre	Malta
Wait in processing centre	Malta

Six non-repeated activities took place in non-neighbouring countries to Libya, representing over a third (35%) of all activities in that zone. This could suggest that participants may experience fewer repeated activities earlier on their journeys, although the sample is too small to generalise findings both in terms of internal and external validity, especially since only 22 out of all 71 participants departed from a non-neighbouring country to Libya. Other activities, such as those taking place in Malta, or being approached by an NGO vessel were also not repeated, which is less surprising since they are associated with arriving at the destination where people were interviewed. The fact no participant experienced repeated detention in a neighbouring country to Libya is of note. This could be explained by the fact that in some neighbouring countries to Libya, arrested migrants can be deported or expelled at the border, such as in Algeria. It could otherwise highlight the fact that participants had the means to leave

countries following arrest, for example thanks to prominent brokerage and smuggling networks, for example in Niger.

While the analysis of repeated activities is useful to identify which activities participants and people on the move may return to, it does not allow us to understand the detailed cycles of activities that people might repeat on the CMR to Europe. Analysing the entire cycle of migration-related activities, rather than focusing solely on the initial and final repeated activities, offers a more comprehensive understanding of migration journeys. This approach sheds light on the entire cycles and pathways that people navigate, revealing the various stages and challenges they encounter, thus providing deeper insights into the potential harms faced on their journeys. In the following section I analyse these cycles.

6.5.2. Cycles

The first algorithm (*Comprehensive Cycles Extractor*) identified 234 different cyclic permutations that were together travelled by 75% (n=53) of all 71 participants. The remaining 18 participants did not experience any cycles. The second algorithm (*Simple Cycles Extractor*) identified 131 compound cycles and 103 unique simple cycles nested within them.⁴⁹ The third algorithm (Algorithm 3) identified 174 representative cycles within the initial 234 cyclic permutations. For brevity, I will refer to these representative cycles simply as cycles in the rest of the section. This total of 174 cycles are unique cycles and does not include counts of ‘repeated’ cycles (i.e. when a participant travels through the same cycle at least once), which I will explore below. Only eight distinct cycles were identified as being repeated by the same

⁴⁹ As a reminder, a simple cycle is a closed path where no node is repeated except for the first and last node. In contrast, I call a compound cycle, a cycle composed of several simple cycles that share common nodes, effectively creating a larger cycle that encompasses the smaller ones.

participant, and a third of the participants (n=26, 37%) repeated a cycle (travelled through the same cycle twice or more).

Of the 174 identified cycles, 152 (87%) of them (including 66 unique compound cycles and 86 unique simple cycles) were only experienced by one participant (each). In contrast, only 22 unique cycles (including five compound cycles and 17 simple cycles) were shared by more than one participant (see **Figure 20**). As seen in **Figure 21**, 18 participants only experienced one cycle, while one participant travelled on 15 unique cycles (which does not include the repetition of the same cycle). This finding further demonstrates the significant variation in individual experiences, with some participants encountering multiple cycles on their journeys, indicating repeated or circular patterns of im/mobility, while 18 participants remained unexposed to them and had less circuitous routes, characterised by one-way progression without cyclical patterns.

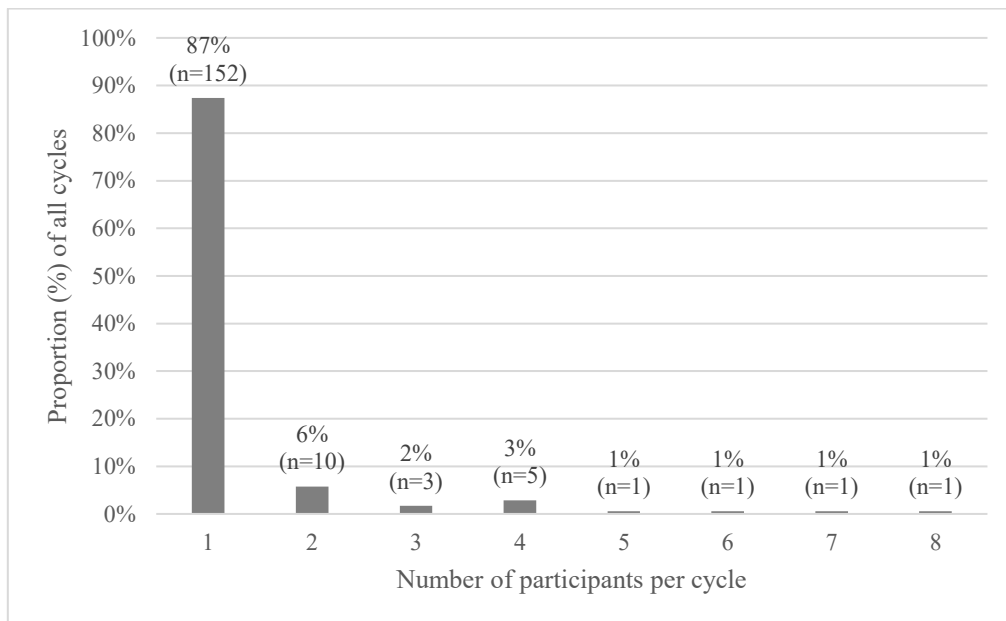


Figure 20 Distribution of participants who experienced a cycle (n=53) across all cycles (n=174) (without repeat cycles). For example, 152 cycles were only experienced by one participant.

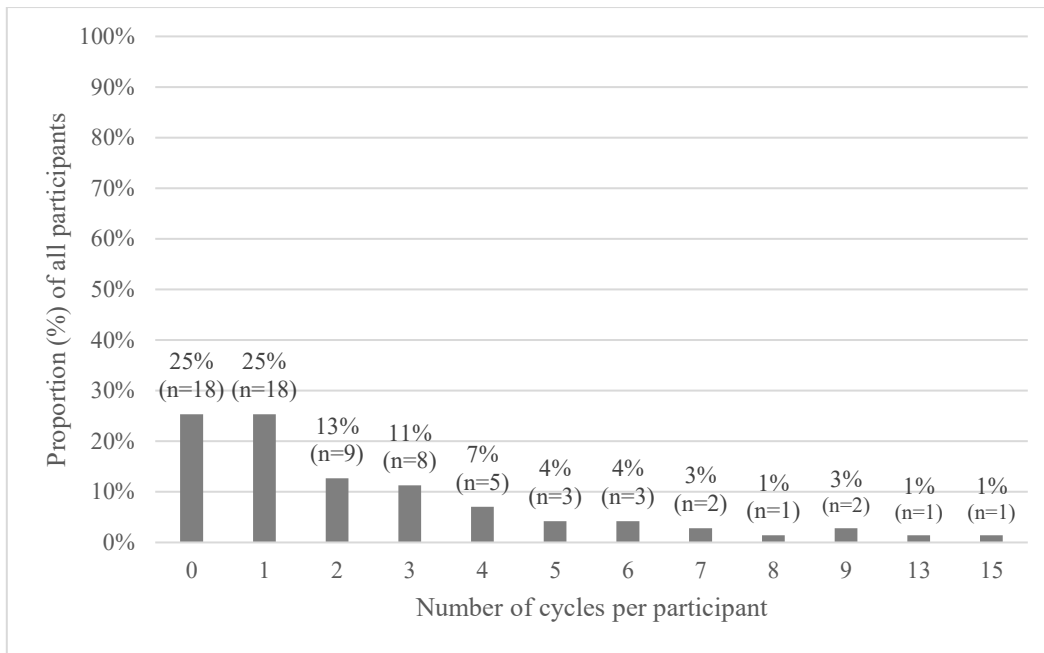


Figure 21 Distribution of number of distinct cycles travelled by participants (n=71 participants)

The majority (57%) of cycles occurred within a single zone (see **Figure 22**), while 39% of cycles spanned activities across two different zones. Inter-zone cycles are particularly noteworthy in this analysis, as they signify instances where participants do not proceed directly towards their ultimate destination, Europe. Instead, these cycles represent a form of regression or detour, as participants navigate across different zones in a manner that symbolically – and in many cases geographically⁵⁰ – distances them from Malta, the destination all participants eventually reached. As more extreme examples of this retracing of steps, eight cycles were identified involving activities that spanned across three to five different zones; for example, due to deportation back to country of origin. Among the cycles distributed across two zones, 75% (n=50) involved both northern Libya and the Mediterranean Sea, whereas 25% (n=17)

⁵⁰ For clarification, the term 'symbolical' is used to describe the action of participants crossing back into previous zones, which is a symbolic departure from their direct path to Malta. This is regardless of the actual physical distance travelled during such a backtrack. For instance, crossing into an earlier zone by a mere one kilometre can represent a symbolic regression, even though it might physically be less significant than a 100-kilometer backtrack within the same zone.

were shared between a non-neighbouring country to Libya and a neighbouring country to Libya.

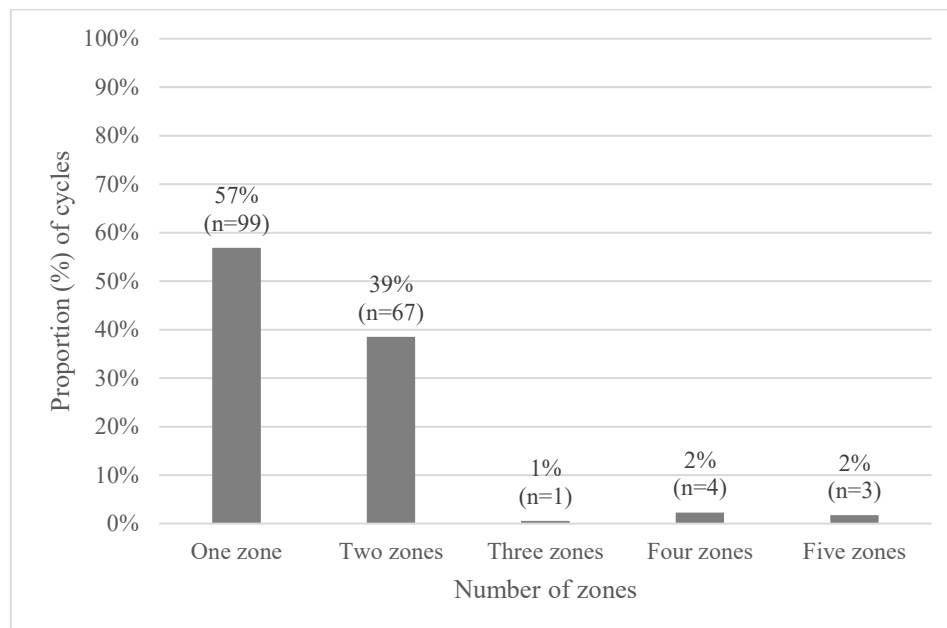


Figure 22 Distribution of cycles across zones (n=174).

As seen in **Figure 23**, 42% of all cycles identified, where participants are stuck in a cycle, took place in northern Libya. The prevalence of cycles in northern Libya, a region that all participants transited, reminds how the region is difficult to navigate for migrants, in turn contributing to longer and more complex journeys.⁵¹

⁵¹ However, it does not necessarily mean that the region is more prone to difficulty than other regions. A larger sample would need to be considered to draw such generalisations, and a null model be computed for the network to create a baseline to compare against.

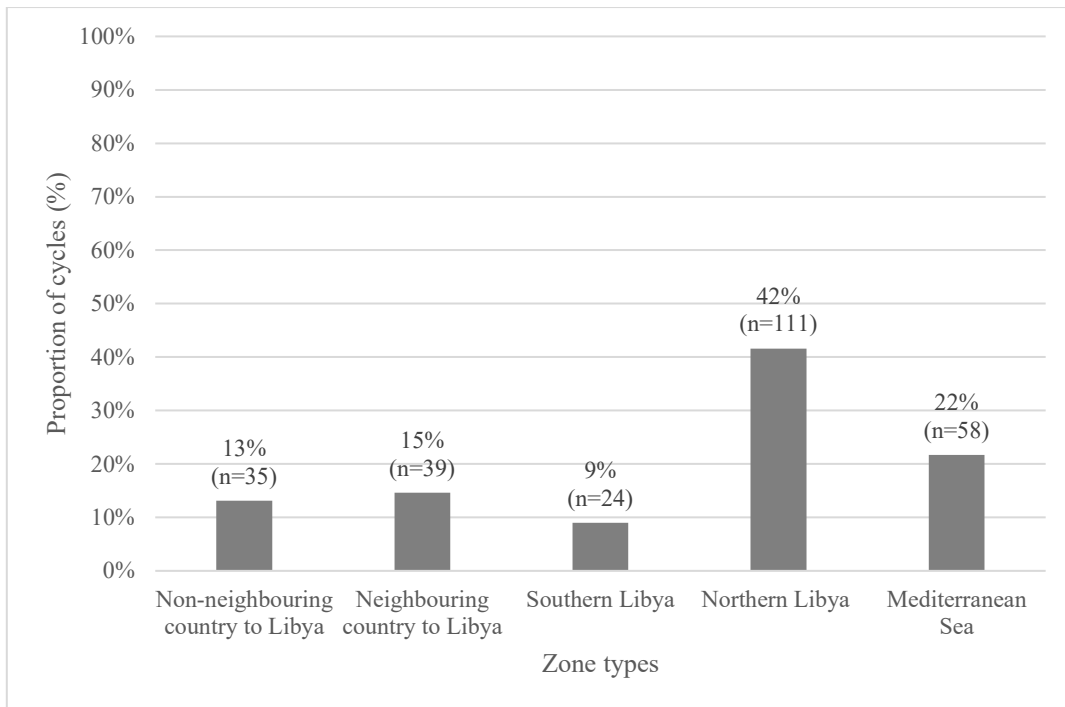


Figure 23 Distribution of cycles across zones (n=267, while there were only 174 cycles identified, the cycles that covered more than one zone were counted for each zone they covered).

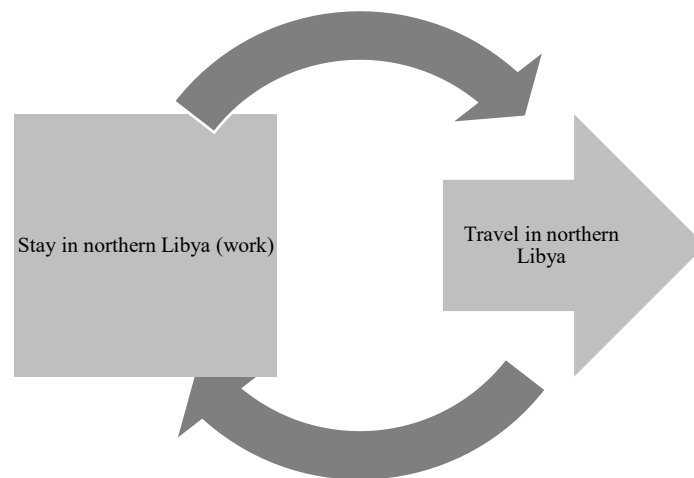
6.5.3. The five most travelled cycles

In this section, I will examine the five most travelled cycles by participants (in decreasing order by number of participants), which all took place in Libya. These cycles provide a better understanding of the common experiences and challenges faced by participants as they navigate their journey on the CMR. The analysis of these cycles will offer insights into the factors influencing migrants' decision-making processes and highlight the areas where policy intervention can make a particular difference.

6.5.3.1. *Work and travel cycle*

The most travelled cycle by participants was the ‘Stay in northern Libya (work)’ and ‘Travel in northern Libya’ cycle (see **Figure 24**). Shared by 15 different participants, this cycle was the most travelled cycle identified. It was also one of the most repeated cycles (see repeated cycles below) with four participants travelling through it at least once: one underwent the cycle

four times, another three times, and two others experienced it twice. The cycle highlights the importance of work and travel within northern Libya and the cyclical nature it can take: migrants may find themselves in a situation where their work is driven by the need to either gather funds to continue their migration journey or to achieve a more secure financial footing. Similarly, five different participants experienced a similar cycle of work and travel in a neighbouring country to Libya, notably in Chad, Sudan, Niger and Egypt (see **Figure 25**).



***Figure 24** Work and travel in northern Libya cycle. In this diagram and the following ones, dark grey arrows indicate the transition from one activity to another. Squares symbolise static activities, where the participants are not in motion. In contrast, light grey arrows represent mobile activities, denoting movement.*

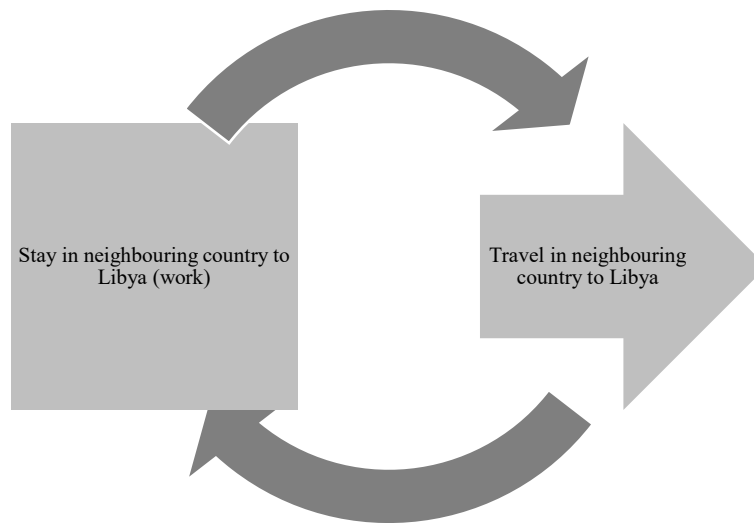


Figure 25 Work and travel in neighbouring countries to Libya, shared by five different participants

Omari's journey

Omari, in his twenties from Darfur, Sudan, grew up in refugee camps due to the war there.⁵² He travelled for free on the back of a truck transporting goods to the main town of al-Fashir (Darfur), where he worked cleaning shoes and regularly sent money back to his family. Later, Omari met his cousin in al-Fashir, who had no immediate family left and suggested that they should save up money to travel to Libya together.

Omari and his cousin travelled to Chad, where Omari worked for two months as a manual labourer in Tina, a town that straddles the Chad-Sudan border. Afterwards, they hired a smuggler to travel for eight days and over 1200 kilometres through the desert to southern Libya, where they eventually joined another cousin and worked for several days as artisanal miners on a goldfield. However, Omari only stayed a few days because the Egyptians and Chadians

⁵² As a reminder, I have used fake names for all mentions in this thesis to maintain anonymity. Moreover, I only give an approximate age at the time of interview, to reduce the chances of identification and maintain confidentiality.

who were running the gold-mining site had too many workers. His cousin helped him fund his trip with a smuggler to Tripoli in northern Libya, where he worked odd jobs with his cousin, including manual labour ‘transporting things on our backs.’ After ten months, they ‘earned enough money to leave.’

Omari and his cousin were eventually caught trying to leave Libya and were taken to a prison in Tajoura, where he was tortured for ransom and forced to work without pay in one of the guard's houses. One day, they took their chance to run away. The guard shot at them as they were escaping and hit Omari's cousin in the leg. Omari continued running and had to leave his cousin behind. He found Sudanese people in Souq al-Ahad, in Tripoli, who helped him arrange his smuggling journey to Europe. Once he reached the smuggler's warehouse, he could only pay LYD 500 (USD 365) of the LYD 1,500 (USD 1,095)⁵³ he owed the smuggler. He spent a month working for the smuggler by herding sheep, before crossing the sea and reaching Malta.

Ehab's journey

Ehab is an Egyptian man in his mid-twenties. He used to work in restaurants and the tourism sector before he travelled from Cairo to Tripoli by plane in 2014 to seek better economic opportunities following Egypt's post-revolution economic crash. Ehab travelled legally, he held a visa and a contract with a Libyan tiles company before travelling. Ehab worked for four years in different jobs across northern Libya before deciding to migrate to Europe, which was not his initial plan. He described his experience below:

‘Most Egyptians would travel to [the] Gulf or Libya for work, especially when the economy crashed. It's because of difficulties in Libya that we decided to leave across the sea. [...]. [In

⁵³ All conversions were made using a historical currency converter for the estimated given year, but given currency fluctuations, they may not always reflect the actual value at the time.

2016], life became much more difficult: expenses were too high, the salary was very low. Before, I sent money to my family in Egypt, now I could barely stay alive.’

Abubakar’s journey

Abubakar is a young man from Darfur in Sudan, who left his primary school to work and save money to travel due to insecurity with the ongoing crisis in Darfur. He travelled alone through Sudan and Chad using public transport and smugglers. He worked at the Kouri Bougoudi gold mines in southern Libya for one month. Later, he worked on a farm close to Bani Walid in Libya as a manual labourer and in a garage in Tripoli. During his journey, he experienced abuse, and torture, and witnessed sexual exploitation. He was captured and detained twice and attempted to cross the sea twice.

Abdu’s journey

Abdu is a young man from Sudan who left his home in September 2018 due to widespread violence. Abdu worked at a coffee shop in northwestern Sudan for three months to make money before continuing his journey and later worked in a sweet factory in Misrata for four months to fund his travels. Abdu was arrested and detained twice on this journey, he was beaten and tortured and released after his family paid for his ransom.

Summary

Overall, these journeys all highlight the importance of work at various stages of the migration process. It also highlights how work serves both to *motivate* and *fund* participants’ onward travel. It also acted as a tool for building social capital and networks with other people travelling.

6.5.3.2. Detention transfer cycle in northern Libya

Four different participants experienced detention and then travel to a different detention centre (see **Figure 26**). Sofia and Amanuel, both from Eritrea, experienced the cycle twice (repeated cycle) and were transferred to new detention centres each time. This highlights the practice of captors transferring participants between detention centres.

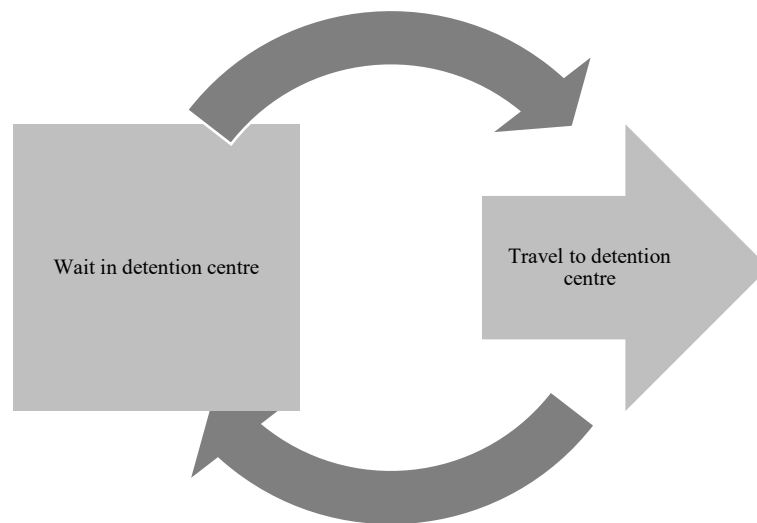


Figure 26 Repeated detention and travel to a detention centre in northern Libya

Lemlem's journey

Lemlem, a young woman from Eritrea, left her home country in early 2016 with a small group of friends, citing prevalent violence and a lack of democracy. Lemlem began her journey on foot from her village (20 km from Ethiopia) to the Ethiopian border, where she was captured and detained by Ethiopian authorities. She then spent one day in one refugee camp and a year in another before finding a smuggler to take her to Khartoum and then Bani Walid, travelling mostly by foot, motorcycle and pickup truck. Once in Bani Walid, she was taken to a warehouse with 90 other people, where they were locked up for six months with little food, water, or

access to phones. Lemlem experienced abuse, torture, and forced labour, and witnessed women being raped. After escaping through a window, Lemlem and her group were caught by the same smuggler who had taken her there. She was then sold with others to a Libyan man in an area isolated in the mountains where smugglers have homes. She told this man she could not pay, and she was sold again to a man in Zillah (around 600 kilometres southeast of Bani Walid), where she said she eventually paid USD 5,200⁵⁴ to be freed and for her onward journey. Lemlem left Libya from Zuwara on a wooden boat with 111 other migrants and was rescued after 12 hours at sea by an NGO search and rescue vessel.

Mohammed's journey

Mohammed, a Sudanese man in his twenties, left his home in the Blue Nile region of Sudan in 2015 due to conflict and persecution. He travelled with a friend to Darfur to earn money for their journey to Libya, where they were picked up by Tebu armed men and held captive in a mountainous area for five days. They were then taken to a warehouse in Rabyana (southeastern Libya) and held for five months, where they were subjected to beatings and forced to call their families for payment. Mohammed was then transported to Ajdabiya (in northeastern Libya), where he was held for 19 days in two different warehouses, tortured, and subjected to forced labour. He was eventually transported to Bani Walid (northwestern Libya), where he spent three months as a forced labourer, working on the construction of one of the guards' houses. In 2017, he travelled to Tripoli and tried to go for a refugee relocation interview but failed to get it. In 2019, he left Libya on a boat from Garabulli to Malta with around 60 other people, which he described as a terrifying experience.

Sofia's journey

⁵⁴ The amount was sometimes mentioned by participants in USD and sometimes in LYD.

Sofia, from Mai Aini in Eritrea, left in 2017 due to security issues related to forced conscription.⁵⁵ She travelled alone and paid for her journey with help from her husband who lives in Germany. During her journey, she experienced repeated detention at various warehouses in Libya, including Bani Walid, Abu Kerim, and Nesmah. She was beaten and forced to work in the warehouses. She was sold to different bosses who demanded more money from her, even though she had already paid. She eventually made it to Europe after her husband reportedly paid USD 5,500 for her release and ongoing sea crossing.

Amanuel's journey

Amanuel is a young man from Eritrea who left his country due to forced conscription. He left in 2016 and travelled with a group of smugglers on foot, motorbike, car, and truck to Khartoum in Sudan. Amanuel experienced instances of repeat detention in northern Libya, where he was transferred between warehouses where he was tortured and starved, and had to wait for six months until his family could finally pay the ransom and he was released. After arriving in Bani Walid in Libya, Amanuel was taken to a warehouse where he was asked to pay for his smuggling journey, which he had already paid for before leaving Khartoum. He eventually crossed the Mediterranean Sea on a wooden boat with 115 other people and was rescued by an NGO vessel.

Summary

⁵⁵ Forced conscription in Eritrea is a critical issue that affects both men and women. The Eritrean government mandates military and national service for all citizens, typically starting at 18 years old. This service is often indefinite, despite legal provisions that limit national service to 18 months. The indefinite nature of conscription has continued since the 1998-2001 border war with Ethiopia, forcing many, including those under 18 and above 40, into military service for extended periods, sometimes spanning years or even decades (Bader, 2019).

The experiences of the four participants who underwent repeated detention and transfer between detention centres in northern Libya illustrate the pervasive nature of this phenomenon. The traumatic experiences that Lemlem, Mohammed, Sofia, and Amanuel experienced during detention include abuse, torture, forced labour, and witnessing sexual violence, underscoring the urgent need for effective measures to protect and support people in transit. Sofia and Amanuel experienced this cycle twice, highlighting the severity and cyclical nature of the issue.

These accounts highlight the need for tailored preventive measures to address the repeated and systematic detention and exploitation of people on the move by detention centre guards. In some instances, as seen in the above testimonies, transfer to a different detention centre can signify sale to different criminals who either specialises in torture for ransom, or can extract some other value from the migrant such as forced labour or forcing people into sexual exploitation. This emphasises the links and existing networks between detention centres and those running them. I will further explore dynamics linked to human trafficking and exploitation in the following chapter.

6.5.3.3. Arrest and detention while working in northern Libya cycle

Seven participants experienced the cycle of arrest and detention after work depicted in **Figure 27**, whereby they were repeatedly detained after being arrested/abducted while working in Libya. Summaries of two participant accounts are recounted below.

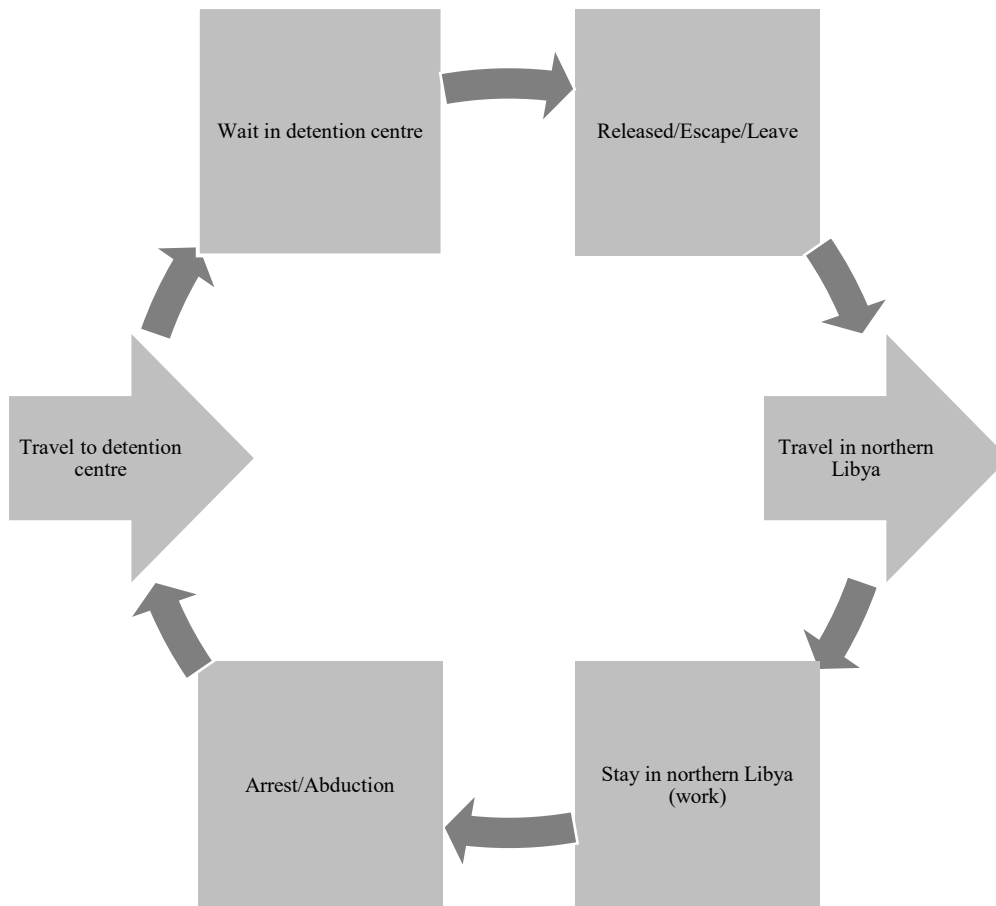


Figure 27 Cycle between work and arrest and detention in northern Libya

Hamid’s journey

Hamid is a young Eritrean man who had been living in Sudan for a few years as a teenager but left for Libya for economic reasons. In Libya, he worked but was repeatedly arrested and tortured for ransom. He eventually left for Europe after deciding that working in Libya was not viable. Initially, Hamid had worked in a gold mining area and in a city in southern Libya before he was abducted by armed men and detained for three months in a warehouse with 30 other people. Hamid paid a ransom to leave the warehouse and moved to Souq al-Ahad in Tripoli, where he worked in woodwork for five months before being caught by the ‘migration police’ and detained at the Triq al-Sikka detention centre. Hamid was released after paying a bribe of

LYD 500 (USD 365), after negotiating the price down. After working in northern Libya for a while, he was mistreated at work and left for Europe from Zleten with a smuggler: ‘I was treated like less than a human, so I decided I needed to find another way. My friend suggested I take the sea and leave’.

Abdullah’s journey

Abdullah, a Sudanese man in his twenties, left his home country in 2017 due to the ongoing conflict and lack of opportunities for work. He travelled through Egypt and into Libya with smugglers. They travelled through difficult terrain and under harsh conditions, witnessing the death of fellow passengers from presumed dehydration on his journey. Abdullah settled in the city of Al Bayda in northeastern Libya, where he worked until he was arrested during a raid in 2018. He was detained for 15 days in Shahat (10 kilometres northeast of Al Bayda) and was asked to pay LYD 500 (USD 365) to renew his resident permit. He was not tortured but detained, kept inside, and only fed canned tomatoes and water. After paying, he was released with the permit. Abdullah then travelled to Zleten, where he paid a smuggler LYD 2,000 (USD 1,460) to board a boat with 95 other people. After two days at sea, they were rescued by the Armed Forces of Malta.

Summary

The experiences of Hamid and Abdullah illustrate the cycles of harm that people can face when attempting to find work in Libya. Despite their efforts to work and support their families, they were repeatedly subjected to detention, exploitation and in Hamid’s case, torture. More specifically, the fact that these abuses occurred while they were working underscores the difficulties that people can face in accessing safe and fair employment in Libya, despite it being a key work destination for both sub-Saharan and north Africans alike. In the following chapter, I will explore the harm-related component of these dynamics further.

6.5.3.4. *Forced labour transfer cycle in northern Libya*

Another notable cycle that was shared by three participants, Ibrahim, Omar and Youssef, and repeated twice for Ibrahim, pertained to forced labour and transfer to a different forced labour site (see **Figure 28**). The following three migration journeys highlight how some victims of forced labour are transported and transferred between locations where forced labour takes place and are repeatedly victimised.

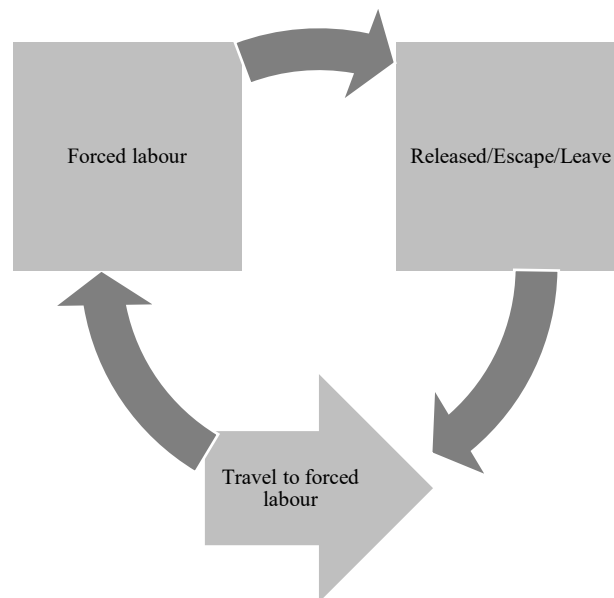


Figure 28 Recursive cycle of forced labour in northern Libya

Omar's journey

Omar is a young man from Darfur who left in 2016, then a teenager, with his brother to work in the goldfields that straddle the Chad-Libya border. They were abducted by their smugglers *en route* to the goldfield and imprisoned in Libya, where they had to pay a ransom to be released. They returned to Sudan, but Omar was forced to flee their home again when it was attacked by government militias. Omar was later captured by armed men during his desert

crossing and sold to another smuggler. He spent three months in detention in an old house in Rabyana, southern Libya, with other Sudanese and Chadian passengers.

‘We were not tortured in Rabyana, but we were tortured at checkpoints on the way to Rabyana. The guards of the checkpoints would light a fire with wood and put off the fire on our skin’.

Omar eventually managed to work for three months in Libya to save up enough money to leave Libya but was caught by the Libyan coastguard and spent over three months in detention in Mitiga. There, he was forced to work in a restaurant during the day without pay until he managed to escape. He described his experience:

‘In those three months, they took me to a place next to the prison where they made me work at a restaurant. During the day I would work like a slave, at night I would return to the prison to sleep. Three months of work and they never paid me anything. I was working like a slave.’

Omar eventually made it to Tripoli and saved up enough money to cross the Mediterranean Sea. He eventually succeeded after another failed attempt.

Youssef’s journey

Youssef, a man in his twenties from Morocco who worked as a painter before deciding to leave his home 80 kilometres northwest of Marrakesh due to poor living conditions. In 2017, he travelled with his cousin and four other people with a taxi and public transport to Marrakesh. A family member then drove them to Casablanca from where they took a plane to Algiers, Algeria. From Algiers, they were smuggled by car through Ouargla (570 kilometres southeast of Algiers) to Debdeb, a town straddling the Libyan border, 600 kilometres to the east of Ouargla where they stayed for two days. From there they crossed into Libya in a Land Rover, driving 520 kilometres without stop to Zuwara and then Sabratha. In Sabratha, they embarked for Italy on a wooden boat with about 100 people but were caught by a militia. Youssef was

taken to an unofficial detention centre in Melita (close to Zuwara) where he stayed for five days and was asked EUR 1,000 for his release. Police officers from Zuwara eventually took them from the unofficial detention centre to the ‘police department for passports’ where he was detained for three months before eventually being deported back to Morocco. Back in Morocco, he worked in a furniture company before deciding to reattempt the journey to Europe. He paid EUR 2,000 to the same smuggler and took the same long route to Zuwara, where he was arrested again and taken to a detention centre. After a week, he was forced to work for the guards for 15 days, building walls and another detention centre. They would take him and other people from the detention site to the construction area every day. He managed to escape through a faulty window that he had built in the new detention centre, in which he himself was eventually kept. He called his smuggler, who picked him up and took him to a house in Zuwara. He then paid another EUR 1,000 to travel by boat to Sabratha and then on to Italy. The boat was small and carried 45 people. They were captured by the Libyan coastguard and taken back to Tripoli, where Youssef was able to escape with the help of his Tripoli-based aunt. He called the smuggler again, who took him out for the sea crossing for free, which was finally successful.

Summary

The lived experiences of Omar and Youssef provide disturbing insights into the harsh realities of forced labour in northern Libya. The recursive cycle of forced labour depicted in **Figure 28** depicts the realities experienced by several participants who were systematically transferred between locations where they were exploited for their labour. Furthermore, their accounts reveal the involvement of numerous actors, including state authorities and local communities, in perpetuating these human rights abuses, which offer insights as to responses. For instance, satellite imagery could target known detention sites to analyse regular movements of vehicles

to nearby construction sites, in order to build the body of evidence to prove that official state-run detention centres are involved in forcing detainees to work and obtain accountability. I will further explore forced labour dynamics in the following chapter.

6.5.3.5. *Arrest and detention cycle*

The cycle depicted in **Figure 29** involves being released from detention in northern Libya, travelling, only to be arrested or abducted and detained again. This cycle was experienced by six participants but Hamza, from Chad, experienced it twice. The presence of these cycles further highlights the potential for repeat victimisation within northern Libya and how dangerous travel within the country is for migrants there.

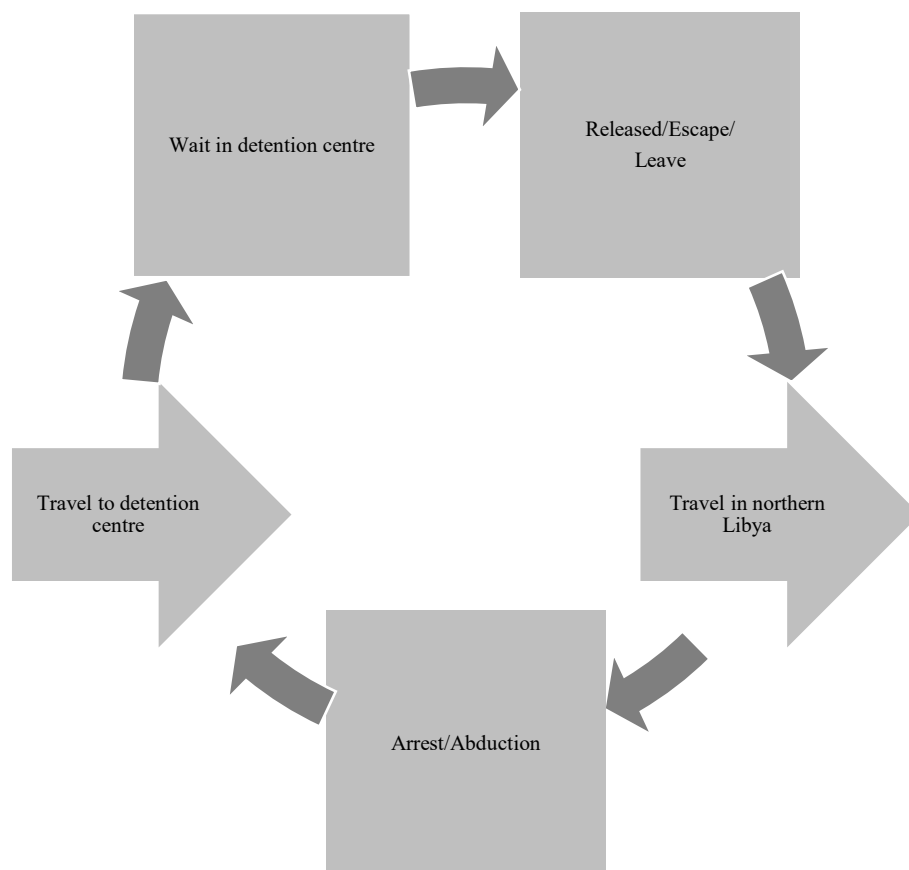


Figure 29 Repeated cycle of arrest and detention in northern Libya

Hamza's journey

Hamza is a young man from Chad, who left in 2016 as a teenager due to a conflict along ethnic lines that had led to him being temporarily imprisoned. Hamza travelled alone through Chad and Libya, working as an artisanal gold miner in southern Libya to pay for his journey. Hamza described his experience as follows:

'I wasn't very strong, so I had to work for two months to cover the expenses. For the entire time, my work was for the person that had transported me there. I had to sieve through the rocks/sand to find the gold.'

He experienced repeated detention and harm during his travels in Libya. Hamza was arrested by armed men from Zintan at a petrol station near his home. Since he did not have any papers to prove his identity, he was taken to a detention centre located in Kremiya, where he was held for a month. He and fellow detainees were given only one loaf of bread and a piece of cheese to share among a large group of people each day. Detainees were beaten and asked to call their families to pay for their release. In a second instance, Hamza was arrested and taken to Tripoli's Triq Al Sikka detention centre after his house was raided by authorities. The raid was in connection with a shop break-in that occurred near his home.

Hamza was interrogated about the incident and was detained along with other Chadians and Sudanese who were living in the area. Despite video evidence showing that someone else was responsible for the break-in, the guards at Al Sikka refused to release Hamza and the other migrants. It was only after two months of negotiation that they were collectively able to secure their release by paying a large sum of money. Hamza was arrested and detained a third time after travelling at a checkpoint in a taxi in Tajoura, a suburb of Tripoli. He said there were two types of centres in Tajoura, one for registered Somalis who have the freedom to come and go; the other is a complete detention facility where individuals are not permitted to leave. While he says he received fair treatment there, he spent three days there before he managed to escape

by pretending to be from Somalia. Somali, Eritrean and Ethiopian migrants who were registered in the system were reportedly allowed to go in and out of the detention centre to the port where they would clean and transport weapons. He later paid LYD 1,790 (USD 1,307) for a sea crossing organised by a smuggler that his friend had used but got caught by the Libyan coastguard.

Mahmoud's journey

Mahmoud is a young man from Chad who left his home country and travelled alone, working for a truck driver to reach Sebha in southern Libya. In Sebha, he found a job in construction but later moved north to Misrata on the coast to find better job opportunities. Mahmoud was arrested and detained in difficult conditions in Misrata after being stopped at a checkpoint and found to have no documentation.⁵⁶ Mahmoud and the other detainees ran away after five months when some Sudanese men were able to break open the door. Mahmoud then stayed with the Sudanese community and looked for a Chadian community to join. He found work as a shop assistant and saved money to travel to Europe. During his detention, he was not asked to call family members to get money nor for a bribe to secure his release. This experience contrasts markedly with those of other individuals in the sample, where requesting money from family or bribes for release was a common occurrence.

Summary

The experiences of Hamza and Mahmoud illustrate the repeated cycle of detention, release, travel, and re-arrest/abduction that people on the move can face in northern Libya. Both participants were detained multiple times, despite their efforts to find work and improve their situation, emphasising the systematic dangers and difficulties faced by people on the move in

⁵⁶ Mahmoud did not know whether the detention centre was official or unofficial.

Libya. It also underlines the importance of shared communities that help them once they have escaped detention and the clear gap in terms of shelter provision for vulnerable migrants that have just escaped detention in Libya.

6.5.4. Other repeated cycles

As seen in the section on the most travelled cycles in the dataset, some of the cycles were ‘repeated’ – or travelled multiple times by the same participant. The focus on cycles traversed multiple times by the same participant is aimed at understanding the more extreme cases of cyclical patterns within migration journeys.

Eight such cycles were identified among all the cycles. I have already analysed five of these repeated cycles above since some of them were also the most travelled cycles. Among the 15 participants who shared experiences of the work and travel cycle, one journeyed through it four times, another three times, and a third participant completed this cycle twice. One participant also travelled twice through the cycle of Travel and Staying without work in southern Libya. Hamza from Chad experienced the travel in northern Libya, arrest, and detention cycle twice. Sofia and Amanuel, both from Eritrea, experienced detention transfer cycles in northern Libya. Ibrahim from Sudan also travelled twice through the transfer to forced labour cycle.

The three repeated cycles that were not included in the most travelled cycles are analysed below. They include a repeated sea abandonment cycle (see **Figure 30**), a cycle of repeated arrest and detention after travelling with a smuggler from a non-neighbouring country to Libya (see **Figure 31**), and a repeated cycle of 16 activities that involved being caught at sea by the Libyan coastguard, detention and forced labour (see **Figure 32**).

6.5.4.1. *Sea abandonment cycle*

Two participants, Farrah and Falikou, experienced the cycle of being approached by a private vessel and remaining at sea without being rescued (see **Figure 30**). Falikou experienced this cycle twice. Their experiences are described below.

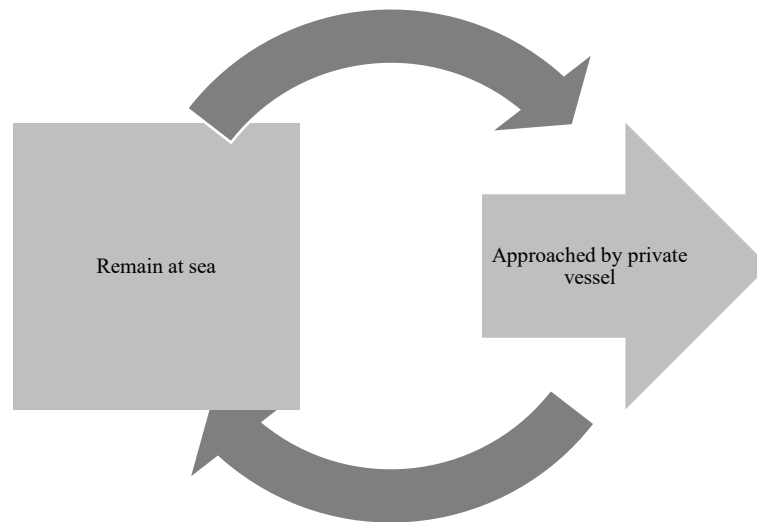


Figure 30 Repeated cycle in the Mediterranean Sea

Falikou's journey

Falikou, is a man in his twenties from Côte d'Ivoire who left in early 2015 to improve his family's economic prospects. After a very difficult journey where he was detained by security forces in Niger and asked to pay for his release, as well as in Libya, where he was tortured by detention centre guards, Falikou eventually left Libya on a wooden boat with 25 other people, spending three days at sea without food before being rescued by an NGO vessel. Before their rescue, they encountered two private vessels, as explained below:

'During our journey, we came across a Tunisian fishing boat and we thought they would help by giving us fuel. But they threatened us, even with a knife, for us to go away. On the third day, we saw a Libyan fishing boat. We asked for help and food. They sent us bottles of water, bread and cheese, but no fuel.'

Farah's journey

Farah is a Libyan young woman who left her home in Misrata with her family in the summer of 2018 due to the war and the ongoing threat of kidnapping. They paid LYD 5,000 (USD 3,650) for a smuggler to take them across the sea from Garabulli. Two other families who also paid backed out at the last minute when they saw the boat and the sea. Farah and her family waited at a mosque before leaving Misrata. The smuggler did not allow them to take any food or medication with them, which they had to leave behind at the beach. Despite being told by the smuggler that the water would be still, there was a lot of wind, and they were afraid they might drown. The engine of the boat also stopped working, closer to Malta, and they had to pour water into it. They encountered a Spanish commercial ship, but they did not receive any help from them, despite asking them for food and fuel. When they called Italian authorities for help, they were repeatedly referred to the Libyan coastguard. The Libyan coastguard took some of the people from the boat and tried to threaten the others with weapons to push them to board their vessel. When they understood that there were children on the boat, they gave them 15 litres of water (half of which was used for the boat's engine) and bread and let them go. Farrah reported that several rescue hotlines they called which claimed to be humanitarian hotlines they found on Facebook were in fact fake and reported them back to the Libyan coastguard. They eventually called the Armed Forces of Malta who rescued them.

Summary

The experiences of Farah and Falikou illustrate the repeated cycles of being in distress at sea and approached by private vessels but not being rescued. Despite asking for help and encountering vessels during their journey, they were left at sea with no assistance. This experience highlights the lack of support and resources available to those attempting to cross the Mediterranean Sea, as well as the dangers and risks associated with relying on smugglers to make the journey.

While this information would need to be corroborated with other accounts, it could underscore a notable enforcement gap within international maritime law. As stipulated in Article 98 of the United Nations Convention on the Law of the Sea (UNCLOS) and Chapter V, Regulation 33, of the International Convention for the Safety of Life at Sea (SOLAS), there is a legal obligation to provide assistance to vessels in distress, irrespective of the nationality of the ship or its occupants. To tackle this issue, heightened advocacy initiatives aimed at private vessels operating in areas with a greater occurrence of migrant boats could not only remind them of their duties under international law but also emphasise the legal ramifications of non-compliance. This approach could contribute to mitigating the problem by reinforcing their awareness of their obligations and the potential consequences of neglecting them. Legal penalties for not rendering assistance to vessels in distress vary by jurisdiction and can include fines, license suspension, and criminal or civil liability. The specific consequences depend on the applicable laws and the circumstances surrounding the failure to provide assistance.

6.5.4.2. Detention after smuggling cycle in a non-neighbouring country to Libya

Tariq from Yemen experienced the series of events described in the cycle below twice, highlighting how the dangers of arrest when travelling with a smuggler can also occur in

countries that do not necessarily neighbour Libya (see **Figure 31**). Tariq's journey is described below.

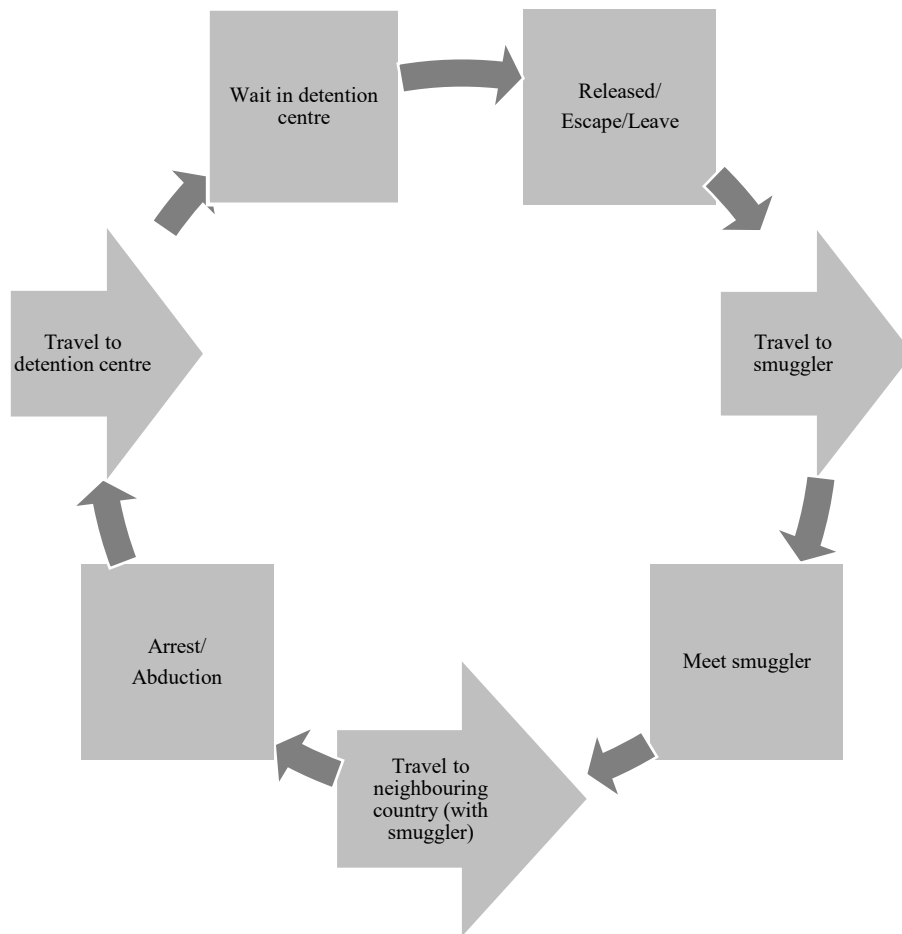


Figure 31 Repeated arrest and detention after travelling with a smuggler from a non-neighbouring country to Libya

Tariq's journey

Tariq a young man from Yemen, experienced repeat detention during his migration journey in search of a better life. After losing his father and having trouble living in Yemen, he attempted to migrate multiple times as a teenager. He was detained and caught several times along the way, including by Somali armed men in Yemen who demanded ransom for his release. He ultimately decided to go to Sudan for better opportunities but found there weren't many. He endured a series of challenges, including working in herding to pay for his journey and being

deceived by smugglers. Despite hearing horror stories about Libya, he decided to try his luck there, only to find that the conditions were worse in Libya, and he was detained several times. His initial goal was to settle in Sudan, but after facing numerous difficulties, he hoped to find safety and a better life anywhere in Europe. The UK was his initial preference due to having Saudi friends there, but after everything he has been through, he said he was willing to settle anywhere in Europe as long as it's safe.

Summary

Tariq's journey reminds us of the great distances that are travelled by some of the people travelling through Libya but also that exploitation of people on the move sometimes begins in the countries of origin, highlighting the need for holistic harm reduction interventions that target the whole length of journeys.

6.5.4.3. Libyan coastguard repeated cycle

Ibrahim from Sudan travelled twice through a cycle across northern Libya and the Mediterranean Sea that involved detention after interception at sea by the Libyan coastguard. The cycle was long, involving 16 different activities (see **Figure 32**). Ibrahim's experience is described below.

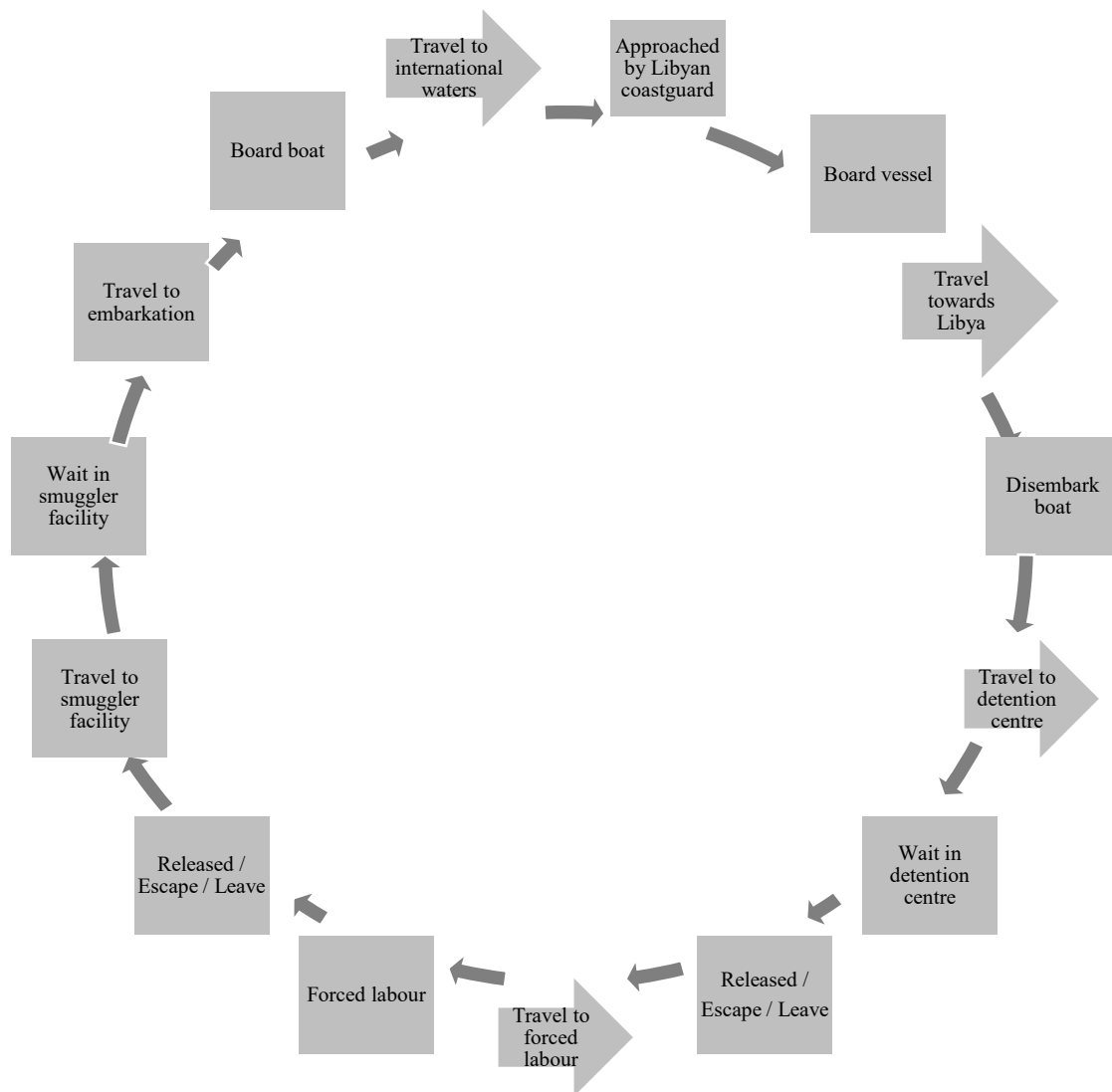


Figure 32 Cycle of 16 activities that Ibrahim experienced twice involving 16 activities across northern Libya and the Mediterranean Sea.

Ibrahim's experience

Ibrahim is a Sudanese man in his early twenties from Darfur who left his home country in 2015. His family's village was burned down, and his brother was killed in 2014. He travelled with strangers into Chad and Libya with smugglers, before working on the Kouri Bougoudi goldfield in southern Libya for a month, digging down holes 30 to 40 meters deep and hitting rocks to find gold. There, he said he was paid in gold, but that others who worked for months never got paid. This experience was reported by several participants, who were forced to work

in these mines for little or no pay. Ibrahim then travelled to Um al Aranib with smugglers and later north to Tripoli, where he worked in various places until he saved enough money to pay smugglers for a sea crossing to Europe. He was caught twice at sea by the Libyan coastguard and taken to detention centres in Zawiyah and Sabratha in northern Libya, where he was beaten, electrocuted, and held with thousands of other migrants. To leave the prison, he had to work on a farm for two and a half months to pay for his release. He said, 'You can work for 10 – 15 days on a farm until you are let go. If they want more money you have to stay longer and work. Sometimes you leave for work, and you never know if you'll come back. [...] The Libyans use migrants for trade, we are a very good currency'. During his time in Libya, he was robbed and exploited by armed men on a quasi-monthly basis.

Summary

The alarming prevalence (64%, n=48) of participants being apprehended and subjected to detention, where they may face torture, is a deeply troubling issue. This situation is particularly concerning due to the evident and the clear causal relationships found in cycles between capture by the Libyan coastguard and abuses in detention centres. It is imperative to enhance the accountability of the Libyan coastguard and those managing detention centres in Northern Libya. This could be a first step towards better addressing human rights violations there.

6.6. Discussion

This chapter set out to explore the cyclical patterns of im/mobility encountered by migrants on their journeys and to identify the predominant characteristics of these cycles. In this analysis, I found that over three quarters of participants experienced at least one cycle and identified 174 distinct representative cycles, underscoring how cycles appear to be a common feature of migration journeys. The widespread occurrence of cyclical migration patterns clearly counters an oversimplified perception of migration as a straightforward, unidirectional process, often inferred from maps and data visualisations, which may suggest a direct path from origin to destination. The uniqueness of many of these cycles, with 152 cycles being exclusive to individual participants, emphasises the deeply personal and heterogeneous nature of migration journeys. Moreover, 18 participants did not experience any cycles further emphasising these differences in experiences. This variability also reflects my methodological choices concerning the level of abstraction in identifying and categorising cycles: I coded cycles on the micro-level, future research could include broader categorisations at the macro-level (see macro-level graph in **Figure 14**, Chapter 5), which may merge unique cycles into more generalised patterns, thereby affecting the composition and frequency of these migration cycles.

I have found that many activities contributed to im/mobility on migration journeys, since they were commonly repeated on individual journeys. Several of these activities entailed immobility within confined or limited spaces, such as work, detention or other activities which entailed waiting (e.g. in a smuggler's facility). Other activities entailed *physical mobility* across space, such as travel, whether within or between zones. Many identified cycles included a combination of both physically mobile and physically immobile activities. These findings all contribute to the literature on im/mobility (see Sheller and Urry 2006; Brigden & Mainwaring, 2016) building the evidence for what I describe as *im/mobility without migration*, or the

condition experienced by people who, despite engaging in physical movement across geographical spaces, find themselves trapped in a state of liminality and stagnation, characterised by continuous or repetitive movements that do not lead to the realisation of their broader migration goals.⁵⁷ To the best of my knowledge, this research is the first to empirically detail the mechanisms behind these cyclical patterns at the micro-level of migration-related activities.

The analysis of cycles revealed the geographic significance of northern Libya, where a substantial 42% of all cycles occurred, which highlights how difficult it is for migrants to navigate this area and may contribute to longer, more complex journeys.⁵⁸ These challenges may arise from navigating complex local and international policies, geographic barriers, and socio-economic conditions (Micallef *et al.*, 2021). The presence of inter-zone cycles (39% of all cycles) is a clear illustration of participants symbolically and in many cases geographically retracing their steps, moving further away from their ultimate, eventual destination, Malta. Importantly, they provide additional empirical grounding to the claim that local and international policies may contribute to creating cycles of harm, as seen through the cycle of arrest, detention and sometimes forced labour linked to the Libyan coastguard.

In addition to the role of the Libyan coastguard in perpetuating cycles in which migrants get ‘stuck’ however, the analysis also highlighted other more systemic factors, linked to the nature of the activities experienced during migration journeys which contributed to people’s immobility. The most travelled cycle of ‘work and travel’, highlights the importance of work

⁵⁷ While participants achieved their broader migration goals by reaching Europe, they only did so when breaking the cycles within which they travelled; hence the use of the term immobility *without* migration instead of *within* migration.

⁵⁸ As a reminder, the findings do not necessarily suggest that the region is more prone to difficulty than other regions on the CMR. A larger sample would need to be considered to draw such generalisations, and a null model be computed for the network to create a baseline to compare against.

on migration journeys, especially in northern Libya. Indeed, by looking at the role of work during migration, I uncover a key, but often missed, part of the migration process that plays a significant role in prolonging CMR journeys (see also Crawley & Jones, 2021). The fact that some cycles involving arrest, detention and exploitation occurred following work in Libya underscores the difficulties that migrants can face in accessing safe and fair employment in Libya, despite it being a key work destination for both sub-Saharan and north Africans alike (Micallef *et al.*, 2021).

The discovery of cycles nested within other cycles and interconnected cycles within migration patterns offers insights into the micro-level complexities of the migration system. This analysis reveals the cyclical nature of migrant experiences, which is often obscured in broader discussions of migration. By highlighting these cycles, the study aligns with complexity theory perspectives (e.g. Leloup, 1996; McAlpine, 2021; van der Watt & van der Westhuizen, 2017), which emphasise the dynamic interplay at different levels of migration systems. It also resonates with the ideas of Mabogunje (1970) and de Haas (2010), who underscore the importance of understanding the detailed, individual elements that drive migration flows. Moreover, these cycles are not merely repetitive patterns; they reveal the nuanced, adaptive strategies and the outcome of decision-making processes, whether constrained or not, of migrants. This echoes Bakewell's (2014) conception of migration systems as networks of interacting elements, underscored by feedback mechanisms that continuously evolve.

However, the findings also highlight the need to reconceptualise cycles beyond the traditional feedback loop paradigm in migration systems literature, which highlights how outcomes of migration processes can feed back into the system to influence subsequent migration. This approach not only enriches the theoretical framework of migration systems theory by highlighting the importance of cycles within actual processes themselves but also underscores

the importance of considering individual agency, structural constraints, and the cumulative impact of policy on migration behaviours. My findings call for a more integrated approach that bridges macro-level systemic analyses with the micro-level dynamics of migration cycles, offering new insights into the complexities of migration systems.

Much of the literature on circular migration underlines economic necessity (see e.g., Constant & Zimmermann, 2011; Skeldon, 2012) and people travelling mostly for work, often between countries, but the findings in this chapter offer alternative explanations for circular migration patterns. Importantly, I find that people's circular mobility patterns can take place involuntarily. While I cannot comment as to the decision making behind each activity of each cycle, I can confidently say that several experienced cyclic patterns (e.g. linked to detention) were involuntary. Importantly, this paves the way for future research on involuntary cycles of mobility within migration processes, as opposed to the traditional macro-level analysis circular migration between countries or regions (see e.g., (Constant & Zimmermann, 2011). Future research could further explore macro-level cycles involving broader regional movements or focus on cycles in particular geographies (e.g. in the Mediterranean Sea). Such an expansive analysis was beyond the scope of this thesis.

The identification of repeated and shared cycles of activities within the dataset suggests that crime science's Routine Activity Theory (RAT) (Cohen & Felson, 1979) may be a useful framework to help improve our understanding of vulnerability and victimisation experienced on migration journeys. The RAT approach to repeat victimisation posits that it stems from the daily routines and activities of potential victims, which generate opportunities for criminal acts and ultimately harm-inducing events (Farrell *et al.*, 2005). The findings highlight shared experiences of vulnerability and victimisation by people travelling on the CMR, underlining their routine nature (see also Culatta *et al.*, 2020; Pratt & Turanovic, 2016).

The practical implications of the findings in this chapter suggest that local and international policymakers should focus on addressing the factors that contribute to longer and more circuitous migration journeys. This includes developing strategies to mitigate the risks associated with work, forced labour, and detention, as well as improving access to information and support services for migrants. By addressing these factors, policymakers can help reduce the hardships faced by migrants during their journeys and promote more humane migration policies.

In addition to uncovering general cyclical patterns, this chapter has revealed instances of recurring harm. Notably, certain harms were exacerbated by measures against irregular migration and smuggling, such as those undertaken by the Libyan coastguard. The subsequent chapter will examine these instances more closely, aiming to understand the specific conditions and the inherent nature of the harms related to exploitation and detention that participants encountered.

Chapter 7 Exploring the ‘blurred boundary’: human smuggling and trafficking on the CMR to Europe

A modified version of this chapter was published in the Journal of Illicit Economies and Development. DOI: <https://doi.org/10.31389/jied.214>

7.1. Introduction

There has been an increase in empirical research on overlaps between smuggling and trafficking in persons in recent years (see e.g. Achilli, 2023; Kuschminder, 2018; Mai 2013; Skilbrei & Tveit, 2008). Yet, the details and nuances of how smuggling of migrants can intersect and overlap with trafficking in persons (hereafter ‘smuggling’ and ‘trafficking’, for concision in this chapter) are still sharply under-researched and insufficiently understood (van der Leun & van Schijndel, 2016).⁵⁹ In political and media discourse, smuggling and trafficking are both routinely conflated and yet also often treated as entirely distinct phenomena (Carling *et al.*, 2015; Murphy, 2018). Through detailed personal narratives of migration trajectories along the Central Mediterranean Route (CMR) to Europe, I examine overlaps and transitions between smuggling and trafficking and consider the conceptual, practical and policy-related implications.

⁵⁹ I use the term ‘migrant’ to refer to individuals who are travelling irregularly on the CMR. This includes those seeking asylum as well as others who do not fall under the conventional definitions of refugees or asylum seekers. While smugglers play a role in facilitating irregular migration, they are not classified as migrants themselves under this definition. The term ‘migrant’ is used for its concision and precision in describing the specific group of people under discussion. While this term can be contentious and has been described as non-neutral (Hamlin, 2022), it is employed here for clarity and specificity.

Both smuggling and trafficking are defined in international law in protocols to the same convention: the United Nations Convention Against Transnational Organized Crime (UN, 2000). As such, the dominant lens for policies and interventions is one of countering organised crime, and responses to both issues have long been tied up with anxieties around irregular migration and political interest in stricter border control (Bird, 2020). Yet, smuggling is generally conceived as a crime against the state (a violation of its borders), wherein individuals are transported across borders consensually. By contrast, human trafficking is generally viewed as a crime against the person (a violation of their human rights), in which people are moved against their will. This simplistic distinction in turn fuels a polarising binary in which people are cast as either ‘helpless, virtuous victims’ if trafficked or ‘foolish or greedy adventurers, complicit in their own misfortune’ if smuggled (Gallagher, 2009; p. 792). In the dominant discourse, not only is the agency of trafficked people routinely understated (see, e.g. Boyden & Howard, 2013; Cockbain *et al.*, 2022), but the constraints and exploitation faced by smuggled people are all too often overlooked. In this article, I argue that rather than treating ‘trafficking victims’ and ‘smuggled migrants’ as two distinct groups, it is important to understand whether and how experiences can overlap, not only in terms of locations, but also in terms of types of harm. To do so, I start from the messiness and complexity of real-world migration journeys.

This study delves into the dynamics of smuggling and trafficking by analysing interviews with 71 people who travelled on boats from Libya, were rescued at sea, and disembarked in Malta in 2018 and 2019. Along with Italy, Malta is one of the two main points for disembarkation for irregular crossings into Europe on the CMR through Libya. By examining their journeys, I reveal how experiences of exploitation meeting international legal definitions of human trafficking are situated within broader migration journeys, at least parts of which are smuggler-facilitated. Taking a situational approach (Clarke, 1997), I consider how, where and when

exploitation occurred and show the complexities around agency and its constraints. My results challenge the simplistic binary construct of ‘smuggled migrants versus trafficking victims’ (Campana & Varese, 2016), aligning with the more nuanced perspectives offered by researchers in recent years (see, e.g. Achilli, 2023; Mainwaring and Brigden 2016; Zhang *et al.*, 2018). I shed light on ways in which experiences of smuggling and trafficking can both overlap and succeed one another in individual journeys, including in some hitherto rarely documented ways (e.g. a trafficking to smuggling transition rather than just vice versa). From a policy perspective, the findings are particularly important in highlighting states’ legal obligations towards supporting migrants who have been severely exploited *en route*. We are currently witnessing the further hardening of Europe’s borders (Grappi & Lucarelli, 2022) and increasingly punitive immigration policy in the UK (Stevens *et al.*, 2023), for example. Amid this context, the findings are an important reminder of the importance of looking at experiences holistically and focussing on how externalised border controls in Libya, for example, can contribute to situations conducive to exploitation and human rights abuses.

7.2. Context

In this section, I introduce the geographical context to the study, the existing evidence base around how smuggling and trafficking intersect, and the theoretical framework.

7.2.1. Irregular migration on the CMR from Libya to Europe

As seen in Chapter 2, the harms associated with irregular migration via the CMR from Libya to Europe have been attracting more attention from researchers in migration studies (Kuschminder & Triandafyllidou, 2020; Kuschminder, 2020) but also in medical studies (Angeletti *et al.*, 2020; Reques *et al.*, 2020). Despite the reporting of these harmful incidents in the news and by academics, they are seldom classified as trafficking. When these issues are

framed as trafficking, there is rarely much written scrutiny of the specific experiences involved and why they are seen to constitute trafficking within international law.

The CMR became a prominent pathway to Europe, primarily through Libya, following the so-called 'migration crisis' in 2015 (Tinti & Reitano, 2017). After the fall of Muammar Qaddafi's regime in 2011 a power vacuum allowed Libyan militias and smuggling networks to profit from the people smuggling economy (Micallef *et al.*, 2019). Militias played a crucial role in facilitating smuggling activities, including smuggling migrants themselves, taxing smugglers, and operating detention centres (Micallef & Reitano, 2017).

Migrants travelling on the CMR pass through various transit hubs, such as Sebha in southern Libya and Agadez in Niger, before reaching coastal Libya (see Figure 1). A second common route (for migrants from across east and central Africa) links Sudan and Chad through the desert to Libya (Tubiana *et al.*, 2018).

The actors involved in facilitating irregular migration – that is, smugglers and brokers (also referred to as agents or handlers) – have commonly been portrayed in simplistic terms as 'criminal gangs' (Home Office, 2022; van Liempt & Sersli, 2012). However, a more nuanced understanding reveals that many migrants in different contexts simply view their smugglers as service providers (Aziani, 2021; Zhang *et al.*, 2018). Nonetheless, migrants on the CMR often report facing various forms of harm and exploitation, including detention,⁶⁰ deportation, violence, abuse, forced labour, trafficking, extortion, poor sanitary conditions, and health issues (Malakooti, 2019). Importantly, while these instances of exploitation are widely recognised, they are rarely labelled as trafficking. Notable exceptions include instances of kidnapping and

⁶⁰ I define 'detention' as the confinement of an individual within a specific facility or area, where their freedom of movement is restricted.

extortion documented by Kuschminder & Triandafyllidou (2020) whose empirical basis focusses exclusively on Eritrean migration through southeastern Libya to Europe.

Detention centres in Libya, both official and non-official, are sites where abuse and violence frequently occur (Malakooti, 2019). Official detention centres are established or recognised by the Libyan government's Directorate for Combating Illegal Migration (DCIM), while non-official centres are run by smugglers, traffickers or armed groups. The prevalence and incidence of these risks and harms along the CMR remain largely unknown, but studies have reported high rates of mistreatment and torture experienced by migrants during their journeys (Micallef *et al.*, 2021; Tubiana & Purbrick, 2022). The European Union's policies on irregular migration have been accused of harming migrants, for example through the funding of the Libyan coastguard and detention centres in Libya (Hayden, 2022). This funding took place despite the well-known involvement of at least some coastguards in the smuggling economy as well as a track record of mistreatment and alleged killing of people in detention (Malakooti, 2019; Tondo, 2021a, 2021b).

While widely reported in the media (Hayden, 2022), the details of harms toward and exploitation of migrants on the CMR have rarely been studied empirically and in detail (Sanchez, 2019). A few recent studies are beginning to fill this gap (Angeletti *et al.*, 2020, Kuschminder & Triandafyllidou, 2020; Kuschminder, 2020; Reques *et al.*, 2020). This paper offers a vital empirical lens by delving into migrants' own narratives on exploitation, thereby bridging the gap between academic discourse and the tangible realities faced by migrants on the CMR. In this study, I analyse individual scenarios through the lens of trafficking and forced labour.

7.3. Beyond dichotomies: assessing the fluidity between smuggling, trafficking, and exploitation

Two of the three ‘Palermo Protocols’, the supplementary protocols to the United Nations Convention Against Transnational Organized Crime (UNTOC), are concerned respectively with smuggling and trafficking, reflecting the salience of these issues to the international policy-making community. These protocols marked the first binding international law on smuggling and trafficking. Situating them within an organised crime framing has substantial implications for state responses, implicitly steering policy and law enforcement approaches towards crime control and punishment, which has influenced and shaped the measures and strategies used in addressing these complex phenomena (Bird 2020; Charnysh *et al.*, 2015).

Over the two decades since UNTOC came into effect, anti-trafficking has become a major and well-funded social movement of the 21st century (Davidson, 2017). Anti-trafficking responses have been heavily criticised for a focus on ‘rescue’ and ‘rehabilitation’ over rights-building and solidarity, and for the ways anti-trafficking can be a smokescreen for immigration control (see, e.g. Kempadoo & Shih, 2022; McGrath & Watson, 2018). Yet, for all the flaws of the dominant anti-trafficking responses, smuggled migrants rarely attract a fraction of the interest and sympathy afforded (even if sometimes only superficially) to trafficked people. Indeed, in the UK, smuggled migrants are sometimes presented as being unworthy of any sympathy: as people who are not genuinely seeking protection from persecution, but as ‘economic migrants’ complicit in breaking immigration laws and who prevent ‘genuine’ refugees from being helped. For example, people crossing the English Channel in small boats have been described by Boris

Johnson, then Prime Minister, as ‘paying people smugglers to queue jump and taking up our capacity to help genuine women and child refugees’ (GOV.UK, 2022).⁶¹

According to the Protocol against the Smuggling of Migrants by Land, Sea and Air (hereafter the Smuggling Protocol), supplementing the UNTOC, smuggling of migrants is defined as:

‘the procurement, in order to obtain, directly or indirectly, a financial or other material benefit, of the illegal entry of a person into a State Party of which the person is not a national or a permanent resident (UN, 2000, Art. 3).

The Protocol to Prevent, Suppress and Punish Trafficking in Persons Especially Women and Children (hereafter the Trafficking Protocol) supplementing the UNTOC defines trafficking in persons as:

‘the recruitment, transportation, transfer, harboring, or receipt of persons, by means of the threat or use of force or other forms of coercion, of abduction, of fraud, of deception, of the abuse of power, or of a position of vulnerability or of the giving or receiving of payments or benefits to achieve the consent of a person having control over another person, for the purpose of exploitation. Exploitation shall include, at a minimum, the exploitation of the prostitution of others or other forms of sexual exploitation, forced labour or services, slavery or practices similar to slavery, servitude or the removal of organs’ (UN, 2000, p. 32).

This definition underpins most national legislation on trafficking. On this view, trafficking has three constituent elements: the ‘act’ (e.g. recruitment), the ‘means’ (e.g. coercion) and the

⁶¹ See also UK Home Secretary Priti Patel’s remarks: ‘The majority of people entering the United Kingdom are young men, not women and children, and they are paying the people smugglers to push those women and children to one side’ (UK Parliament, 2023), and ‘Genuine people are being elbowed aside by those who are paying traffickers to come to our country’.

‘purpose’ (intended or actual exploitation). Children (under 18s) are recognised as particularly vulnerable and are therefore afforded special protection under international law. For adults, consent to exploitation is only considered irrelevant in legal terms when one or more ‘means’ is involved (e.g. coercion, deception, fraud, abuse of power). However, children are seen as incapable of giving informed consent to exploitation under any circumstances, meaning their treatment can be viewed as legally constituting trafficking even without any such means (UNODC, 2015). Therefore, in cases involving children, a situation can be classified as trafficking based only on the act (such as recruitment or transportation) and the purpose (exploitation) without the need to establish the use of coercive means. As such, the boundaries between smuggling and trafficking can blur even more readily where children are concerned, since distinctions focused on ‘voluntariness’ mean little here (Achilli, 2023; Cockbain & Olver, 2019).

The relationship between smuggling and trafficking has been long debated in the scholarly literature (for a review, see, e.g. Campana & Varese, 2016). As Campana & Varese (2016) identified, positions vary, with some scholars arguing that smuggling and trafficking should be combined as concepts, with both seen as part of a broader continuum of exploitation (Salt & Stein, 1997; Skrivankova, 2010), or alternatively incorporated into broader concepts like human rights abuses (Gallagher, 2009).⁶² Others have highlighted how smuggling and trafficking can intersect (see e.g. Achilli, 2023; Kuschminder & Triandafyllidou, 2020; Mai 2013). For instance, Achilli (2023) argues that children can experience both trafficking and smuggling simultaneously, while Mai (2016) and Plambech *et al.* (2021) highlight the fact that people’s exploitation can sometimes help achieve migration aspirations. Despite the notable

⁶² Gallagher (2009) has highlighted both the potential of incorporating trafficking into human rights discussions and the limitations of human rights approaches, pointing out instances where they had failed within a criminal justice approach.

exceptions mentioned here, what remains particularly noteworthy is how rarely these debates are rooted in empirical evidence.

While Campana and Varese's (2016) work is helpful in mapping the conceptual terrain around the smuggling-trafficking nexus, and their overall contributions to smuggling research are considerable, I find several of their contentions to be overly simplified and to have both conceptual and empirical limitations. In arguing, for example, for the continued utility of distinguishing between smuggling and trafficking, Campana & Varese (2016) draw on just a handful of illustrations to propose just one way in which trafficking and smuggling can blur, namely when a smuggling situation transitions into trafficking because of the extreme deprivation of liberty. Yet, their arguments about the 'essential features of two distinct phenomena (control over a human being vs. illegal entry into a country)' (Campana & Varese, 2016; p. 89) are based, I would contend, on a reductive position that oversimplifies the complexities of agency in trafficking and smuggling dynamics, as well as very limited empirical data.

Their focus on 'two distinct states: that of smuggled person with agency to that of trafficked person without agency' (Campana & Varese, 2016; p. 93) sits uncomfortably with the growing literature on the importance (and complexities) of agency within trafficking (see, e.g., Achilli, 2023; Cockbain *et al.*, 2022; Jennings *et al.*, 2022; Kidd, 2020). Thus, people may freely agree to travel and work, but be deceived about the conditions involved⁶³: something which may also

⁶³ When discussing individuals being 'deceived about the conditions involved,' it is crucial to consider the concept of agency within a continuum framework (Bettio *et al.*, 2017; Choi-Fitzpatrick & Watkins-Smith, 2021). Agency, broadly defined, is the capacity of individuals to act independently and make their own free choices. However, this capacity is not absolute and can vary significantly based on circumstances. The continuum of agency (Bettio *et al.*, 2017) recognises that individuals may exercise some level of agency even in constrained situations, but the extent and effectiveness of this agency are significantly influenced by factors such as misinformation, coercion, and external pressures.

play out in smuggling relations. Similarly, their stance that exploitation can often occur in smuggling but as the ‘result of a choice that was made by the migrant’ (Campana & Varese 2016; p. 94) in my view overlooks the extent to which people’s options and decisions can be severely constrained within smuggling situations. The constraints can be individual, physical and social, e.g. arising through their immediate interactions with smugglers, the authorities and others. Moreover, one stated ‘means’ of trafficking is the abuse of a ‘position of vulnerability’ (UN, 2000), which people migrating irregularly could arguably occupy by definition due to their precarious legal status, which can be compounded by harms motivating their migration or experienced *en route*.⁶⁴ To examine whether and how smuggling and trafficking blur, it is important (though difficult) to distinguish between ‘vulnerability’ per se and the strategic leverage of this vulnerability by smugglers and others to enable a particular ‘act’ with a particular exploitative ‘purpose’ (UNODC, 2013).

In presenting their dichotomy of smuggling versus trafficking, Campana & Varese (2016; p. 93) argue that both activities have a specific relationship to exploitation, which they define as ‘the act of treating someone with substantial unfairness in order to benefit from their work’.⁶⁵ In their analysis, exploitation is an inherent and defining element of trafficking, whereas in human smuggling, it is not an intrinsic part of the process. Instead, exploitation in the context of smuggling is seen more as a byproduct of the individuals' vulnerable, undocumented status, rather than a direct consequence (or ‘purpose’) of the smuggling act itself.

⁶⁴ It should be noted that this concept has been criticised for being unclearly defined and too easily co-opted to block the mobility of certain groups by labelling them as inherently vulnerable and thereby justifying stringent migration controls under the guise of protection (e.g. Lima de Pérez, 2016).

⁶⁵ This work-centric perspective of exploitation fails to account for forms of non-labour exploitation, such as organ removal, which fall under the ambit of trafficking, or indeed other issues people may encounter on the CMR (such as non-commercial sexual exploitation).

Further exploring the theme of exploitation, Skrivankova (2010) in the broader trafficking literature posits that the severities of trafficking and ‘modern slavery’ are part of a ‘continuum of exploitation’, which also includes lower-level abuses. Yet, the meaning of exploitation itself is not defined in the Trafficking Protocol (e.g., Chuang, 2014; 2017) leaving considerable vagueness and scope for inconsistency in determining where the thresholds for trafficking lie and creating challenges for measurement (O’Connell Davidson, 2015; Zhang, 2012, 2022).

Rather than try and be the arbiters of what constitutes ‘substantial unfairness’ or *how much* exploitation is enough to merit the trafficking label, I focus my analysis on instances meeting the International Labour Organisation’s (ILO, 1930) definition of forced labour.⁶⁶ I focussed on forced labour because my preliminary examination of the data indicated the presence of forced labour incidents (see Chapter 5) and I noted a significant gap in the existing literature on forced labour in Libya. Moreover, I found that the ILO definition of forced labour provides a more precise and actionable framework for coding my secondary data, compared to trafficking for instance (see Zhang, 2012, 2022). If forced labour is present in the narratives analysed, these instances would easily satisfy the ‘purpose’ element of the Trafficking Protocol. However, it is essential to acknowledge that forced labour and trafficking, while overlapping, are not synonymous: not all forced labour is trafficking, nor is all trafficking forced labour – although the two distinct legal constructs have been increasingly conflated (Chuang, 2014). Consequently, I also delve into whether forced labour behaviours identified could also qualify as trafficking within established legal frameworks (i.e. if they also involved an ‘act’, committed by a ‘means’ (adults only) towards that ‘purpose’).

⁶⁶ The ILO (1930) Forced Labour Convention defines forced labour as ‘all work or service which is exacted from any person under the menace of any penalty and for which the said person has not offered himself voluntarily’.

Delineating the overlaps between trafficking and smuggling is not academic nitpicking over terminology; it has substantial real-world implications for responses to vulnerabilised migrants (Piper *et al.*, 2015). I will explore these implications later in the discussion.

7.3.1. Present study

My study is designed to shed light on the experiences of people moving on the CMR, examining how trafficking occurs within smuggler-facilitated journeys. The primary research question is: What are the overlaps and distinctions between human smuggling and trafficking on smuggler-facilitated migration journeys along the CMR to Europe?

The study employs a situational approach (Clarke, 1997) to analyse the experiences of migrants travelling through Libya to Europe, with a particular focus on forced labour. I also consider here, however, other human rights abuses (e.g. deprivation of liberty) present in the data that fall outside the ILO's definition of forced labour. The situational perspective draws on opportunity theories (Felson & Clarke, 1998) to explain crime or other harmful activities in terms of a consequence of the *interactions* between an individual and their social and physical environment (Clarke, 1997). Therefore, my focus is on the immediate context within which severe abuses occurred: the what, where, when and how. Understanding the opportunity structures around smuggling- and trafficking-related harms is important in building up a fuller, empirically informed picture and helping identify possible pinch-points for intervention (see also Bish *et al.*, forthcoming and Chapter 5; Cockbain, 2018; Cockbain *et al.*, forthcoming).

7.4. Methods

7.4.1. Data

This study examines the same 71 anonymised transcripts from interviews in Malta with people who travelled irregularly across the Mediterranean Sea in 2018 and 2019. I have described the data and its limitations in Chapter 4.

7.4.2. Sample

As a reminder, the study comprised 71 adults: 63 men (89% of the sample), and eight women. The participants ranged in age from 18 to 50 years old at the time of their interview but were generally young: all except one were under 36, and the mean age was 21 (IQR: 6.5 years). It was notable that at least one in five (n=15) participants had likely been children (under 18) upon leaving their country of origin. The participants came from 15 different countries in Africa and two in the Middle East (see Chapter 4). All participants travelled through Libya and embarked on boats in the Mediterranean from Libya – which was a prerequisite for inclusion. Nine participants (13%) started their journeys in Libya.

7.4.3. Analysis

I analysed the contents of the interview records qualitatively, paying particular attention to the situational or environmental (Wortley & Townsley, 2017) context within which exploitation occurred. The situational factors were then compared across the different cases to detect common patterns. This cross-case comparison helped me identify patterns in shared characteristics or situations that recurred around human rights abuses and forced labour. Key findings are illustrated using both anonymised quotes and vignettes from people's experiences. In conducting this analysis, the scripting exercise in Chapter 5 helped to rapidly identify

experiences of interest (e.g. experiences of forced labour or detention) which are studied in more qualitative detail here.

7.5. Results

7.5.1. Overview of journeys

As a reminder, the median duration of journeys was 18 months (Min= 3 days, Max=115 months, IQR=22 months). Ninety-three percent (n=66) of the sample travelled by land and sea for their journey, except for five participants who also travelled by plane for the initial journey to Libya before getting on a boat to cross the Mediterranean Sea (see **Figure 33**). All participants used a smuggler for the sea crossing to Europe. Thirty-two (45%) participants used a smuggler for all border crossings as well as to travel from southern Libya to northern Libya. Only 11% (n=7) used a smuggler only once for their journey, to cross the sea.

Two thirds of participants (n=48) reported working for pay on their journey to Europe, of which 90% (n=43) worked in northern Libya. This does not include participants who worked in conditions of forced labour, dealt with separately in the analysis. Seventeen participants (24%) worked in conditions meeting the ILO (1930) definition of forced labour, all in Libya.

All participants had been detained at least once in their migration journeys by the time of interview: either only in the Malta Initial Reception Centre where they were interviewed, or, more commonly also before reaching Malta (68%, n=48), sometimes multiple times prior to arrival (n=13). Detention upon arrival in Malta aside, most incidents of detention were in Libya

(56 out of 63 detention instances).⁶⁷ In most cases this detention was directly linked to migration journeys but in some cases also acted as a catalyst to further onward migration.

Participants did not always specify or know whether the detention centre(s) where they were held in Libya, defined as a holding facility where migrants are detained, was official (government-run) or unofficial. Many of the participants who were detained in Libya reported being tortured or beaten and were asked for a ransom to be released. The primary focus of the original GITOC research interviews was not on detention conditions within Malta, but instead on the conditions encountered in Libya and during the journey leading up to Libya. Therefore, the current study necessarily also focusses on detention before Malta.



Figure 33 Map showing migration routes to and from Libya travelled by participants, generated on Python using Matplotlib.

⁶⁷ Other reported detention instances were in Sudan (n=2), Ethiopia (n=2), Egypt (n=1), Niger (n=1), and Yemen (n=1).

7.5.2. Detention and related abuses

Examining detention on the CMR is important in better understanding the factors that facilitate and perpetuate exploitative practices, including but not limited to behaviours that could constitute trafficking. The prevalence and conditions of detention documented in the data are also concerns in and of themselves.

Focusing on experiences prior to arrival in Malta, participants' trajectories into detention occurred in one of three ways. Nine participants (13% of total sample of 71 participants) were detained after they were caught by the Libyan coastguard during the sea crossing. Most participants were abducted *en route* by people other than their smugglers, stopped at checkpoints or arrested and detained in southern (n=8, 11%) or northern Libya (n=22, 31%). Participants were commonly arrested at checkpoints because they did not have the right paperwork – a hazard of their irregular status in Libya. Fourteen participants (20%) were abducted by the people whom they believed would smuggle them into southern Libya. Several of these participants reported being sold to detention centre owners who then tortured them to extract money from their families or friends or exploited them for forced labour (see section Forced labour and trafficking in and outside detention centres).

7.5.2.1. Characteristics and conditions of detention centres

From participants' accounts, the physical characteristics of detention centres along the CMR, but most especially in Libya, were varied. While some facilities were described as large, overcrowded spaces accommodating up to 600 individuals, others were smaller, with one participant describing having been detained in a bathroom with four other people. The infrastructure ranged from purpose-built warehouses to makeshift prisons, which participants were sometimes forced to build themselves by guards, who were often armed. This variation

underlines the spectrum between organisation and opportunism under which the captors operate. On the upper end of this spectrum, the level of organisation and economies of scale were clearly reminiscent of organised crime.

Participants described conditions within detention centres as being defined by systematic, pervasive and severe maltreatment of detainees, including physical abuse, severe resource scarcity, and the constant menace of unsanitary conditions and physical hardships. Participants reported being provided meagre rations, often consisting of pasta in water, with quantities so limited that it incited competition among them. One participant noted that food was used as a tool of control and punishment: guards intentionally provided insufficient quantities of food and would physically assault those attempting to access additional servings, effectively transforming mealtimes into a source of fear and increased vulnerability among the detainees.

Participants described extremely limited provision of potable water, leading to instances of dehydration-related deaths among their fellow detainees. They said water was often either salty or contained fuel. Ibrahim⁶⁸, in his twenties from Sudan, also described scorpion infestations: ‘There were a lot of scorpions. Ten people died because of thirst and scorpion bites’.

The dehumanising treatment extended to conditions of sanitation and hygiene, often worsened by overcrowding according to several participants. In one example, a detention facility with 200 occupants reportedly had only three to four toilets. In a small official detention centre run by the Directorate for Combating Illegal Migration (DCIM), migrants were reportedly also detained in very harsh conditions and invited to pay a bribe for their release. Mustafa in his twenties from Darfur, Sudan explained:

⁶⁸ As a reminder, names of participants have been changed to ensure anonymity.

'It was a camp. The department for illegal migrants was in charge. It was a very small place which had iron rods covering it. It was very hot. I stayed there for two days. We were told we would be transported to a larger prison where we would not be able to leave. They told us: "You have the opportunity to pay and leave now before being transported further". They got us a phone to call our family or our smuggler to pay LYD 1,000⁶⁹ (USD 730) and leave.'

Participants reported varying degrees of freedom of movement. Some people were permitted limited freedom, such as leaving for work, while their movement was still restricted due to stringent oversight and separation from wider social interactions. For others, leaving the detention facilities was prohibited.

Experiences of forced labour that took place under detention were also commonly reported. Some participants who were detained reported being forced to work in demanding settings such as construction sites, where physical labour was intense and conditions often hazardous (see section Forced labour and trafficking in and outside detention centres).

Visits by international humanitarian organisations to state-run detention centres were mentioned by some participants but described as being limited, offering little protection from abuse. Participants described facing threats of retaliation from guards if they spoke out against their captors; those who did so said it resulted in no visible change.

Gender-based violence was also reported by several participants who described witnessing women being subjected to sexual violence, which has been documented in other studies (Palillo, 2020; Reques *et al.*, 2020). In instances where it was reported, sexual violence could potentially be understood in various ways simultaneously: a form of control, a component of

⁶⁹ All conversions were made using a historical currency converter for the estimated given year, but given currency fluctuations, they may not always reflect the actual value at the time.

torture, and an exploitative ‘purpose’ as per the Trafficking Protocol – regardless of whether it was commercial or non-commercial in nature. Only one participant in the sample of 71 reported being a victim of sexual violence but did not report forced or coerced sexual labour, which has been documented in other research (Campana, 2016, Micallef *et al.*, 2021). This potential underreporting could be due to the stigma associated with sexual victimisation.

7.5.2.2. Extortion in detention through torture and beatings: a potential ‘purpose’ in trafficking

In several reported cases, detention centre guards used torture as a coercive strategy aimed at extorting payment from the friends and families of people detained. When it happened, it was sometimes reported to be frequent, even daily, and could lead to deaths, as described by Ibrahim, in his twenties from Sudan:

‘After 18 days my friend Ahmed’s legs were tied to the ceiling. They took ten of us out and did the same. They hit us with a hose, ten lashes each. They would heat up wires and put them on his chest. They had tanks where they had toilet dirt. As part of the torture, they would put his head into the tank. Once, after they tortured him, they let go of the rope, he fell on his neck and then he died. Later, they dragged him outside and threw his corpse out. I was calling my family and my friend’s also. Ahmed’s family was [...] selling their house, not knowing that he had already been killed’.

Extortion was often further complicated by the poor telecommunications infrastructure, which hindered participants’ contact with families. Some participants said that unsuccessful attempts to establish such communication sometimes resulted in increased physical violence. In several cases, an individual’s failure to pay resulted in collective punishment for all. Such group punishments, meted out for individual non-compliance, appear to form a part of the control mechanisms within detention centres. Moreover, the extortion tactics employed in detention

centres extended beyond non-state actors, such as smugglers, to include state entities, as seen earlier in Mustafa's experience with DCIM staff.

In considering whether the above scenarios meet the trafficking definition, the 'act' is the physical retention of a person; the 'means' encompass methods such as assault, coercion, or threats; and the 'purpose' is the extraction of money. While extortion or 'torture for ransom' are not explicitly delineated as an exploitative purpose in the Trafficking Protocol, its systematic use here could fit a broader exploitation framework where individuals are not just held against their will but are also used as leverage for financial gain. This scenario aligns with the broader definitions of trafficking, where exploitation does not necessarily have to involve forced labour or sexual exploitation but can also encompass financial exploitation through coercive methods. However, this interpretation raises broader implications, suggesting that any act of kidnapping for the purpose of extortion might potentially be construed as trafficking. Nonetheless, recognising this facet of extortion as a significant 'purpose' of trafficking, particularly in the context of detention centres, aids an appreciation of the full scope of trafficking activities and the various forms they can take.

7.5.3. Forced labour and trafficking in and outside detention centres

Seventeen participants reported conditions that clearly met the International Labour Organization's (1930) definition of forced labour (see Context). Forced labour is both a harm in itself and fulfils the 'purpose' component of the Trafficking Protocol's definition. For trafficking to be evidenced, however, there also needs to be an 'act' (e.g. recruitment, transportation, harbouring) to serve this 'purpose' and, where adults are concerned, a 'means' (e.g. coercion, deception, abuse of a position of vulnerability). To that end, I will examine the circumstances surrounding the forced labour incidents, specifically focusing on environments like detention centres and less confined areas like goldfields.

7.5.3.1. In and around detention centres

Eleven out of all participants reported conditions of forced labour while they were in detention. Rayan, in his twenties from Darfur, described how this took place: ‘During the day I would work like a slave, at night I would return to the prison to sleep. Three months of work and they never paid me anything. I was working like a slave’. Significantly, as illustrated in this quote, participants' own descriptions of forced labour experiences echoed terms such as 'trafficking' and 'slavery', highlighting a keen awareness of their circumstances and the gravity of their situation.

Debt bondage was also observed within a detention context. Debt bondage is understood in international law as a ‘practice akin to slavery’ – or a ‘purpose’ of exploitation in the Trafficking Protocol (UN, 2000). Debt bondage instances involved individuals forced to work by their captors until they could repay a debt. Often, the origin of this debt was either the cost associated with the individual’s journey, which they owe to their smuggler, or the cost paid by a 'debt purchaser' — the person who settled the debt with the smuggler upon the individual’s arrival, hence transferring the debt obligation to themselves. Alternatively, the debt was incurred for their release from detention centres. As such, the combination of debt bondage and forced labour became another means of extracting value from people on the move and served as the ‘purpose’ element as defined in the Trafficking Protocol. Ishmael, in his twenties, from Darfur shared his experience in these terms:

‘In prison we were beaten and tortured, including with electricity. To leave I had to pay LYD 2,500 (USD 1,825). I couldn’t pay myself, so one of them took me with him to take care of his sheep. It was in the middle of nowhere. I stayed 3 months then ran away.’

Ishmael was subject to extortion, which, although not explicitly named in the Trafficking Protocol, could arguably be viewed as a trafficking ‘purpose’ (see section Extortion in

detention through torture and beatings as a potential ‘purpose’ in trafficking). If individuals are unable to pay an extorted fee, this leads to debt bondage. Subsequently, one method to discharge this debt is through labour, which, under the duress of penalty or against the individual's will, constitutes forced labour. In other words, one form of exploitation (or ‘purpose’) can lead to another within a trafficking continuum.

Another participant, Helen, in her twenties from Eritrea, highlighted that she was sold from a detention centre to another one, where she needed to work: ‘I didn’t pay, so I was sold to a new warehouse in Asma. I would need to do some work in the warehouse’.

There are clear grounds to argue that the activity described in these two cases meets the international legal definition of trafficking. Even in these short example quotes alone, various ‘acts’ as listed in the Trafficking Protocol are present, i.e. ‘transportation’, ‘transfer’, ‘receipt’ (Helen only), and ‘harbouring’; the ‘means’ are constituted by physical violence, threats, and the abuse of a position of vulnerability; and the ‘purpose’ of forced labour is explicit. The imposition of debt bondage could be understood as either a ‘means’ (because the debt is what compels the forced labour) or indeed as an interwoven ‘purpose’ in itself (as a ‘practice akin to slavery’).

In other cases, participants reported being compelled to work while in detention, with their access to basic necessities such as food and water contingent upon this work. For example, one participant said that detained people would only be given water and bread if they performed tasks such as cleaning and tidying up the centre.

The labour of detained people was also appropriated for direct financial gain. For example, Ibrahim, from Sudan, explained that he and other detainees were put to work from 4 am to 6 pm to assist in the construction of a house belonging to a guard. They were forced to build the

first and second floors of this private property, all while being subjected to degrading treatment and deprivation of basic necessities.

Overall, my findings suggest that models of forced labour varied. Some instances of exploitation were income-generating for the exploiters, in that they directly produced profit (e.g. hiring people out for work). Others can instead be seen as cost-saving or labour-saving measures, in that the forced labour involved work that would otherwise have to be done by the exploiters themselves or someone else (e.g. cooking, cleaning, or building a new detention facility or a guard's new house).

7.5.3.2. Outside detention centres

Participants also reported dynamics of debt bondage and forced labour outside of detention centres. Here, too, I see clear evidence of one or more 'acts', 'means' and 'purposes' in combination, suggesting that the activities described can constitute trafficking as defined in international law. For several participants, forced labour unconnected to detention centres took place in the context of the gold mines straddling the Chad-Libya border. Participants described working conditions on these gold mines as very difficult, and while participants were not physically constrained inside a building, they were deprived of freedom of movement, as Mustafa, in his twenties from Darfur explained:

'There is no freedom, we were guarded when we were sleeping, we were followed when going around. They were all armed. Sometimes you were not allowed to sleep. When they were not happy with my work, they would threaten me – they would beat us up. They were not using the weapons.... It was very dangerous working conditions in the gold mines. Mines collapsed, people died'.

Indeed, the mines were identified by several participants as sites of forced labour and debt bondage, with Mahamat, in his twenties from Chad explaining: ‘I wasn’t very strong, so I had to work for two months to cover the expenses of my trip. For the entire time my work was for the person who had transported me there.’

Mustafa described his experience of arriving in Kouri Bougoudi, a goldfield twice the size of greater London straddling the Chad-Libya border (Bish, 2021). Thousands of migrants have visited the goldfield at any one time from across central, west and east Africa and it has acted as a key hub on journeys to Europe (Bish, 2021). As Mustafa said:

‘Once you get to Kouri, you will meet the Tebu [...], they informed me that they bought me off from the smuggler and now I need to pay them back this money. They will ask to work different jobs: driving cars, working in gold mines. After I pay off the money, only then will I make my own money.’

Mustafa’s account further underscores the fluidity between smuggling and trafficking operations. Traditionally, smuggling is perceived as a service that concludes after transportation. However, as suggested in this instance, the smuggler profited directly from the ensuing exploitation, extending their role beyond mere transportation. Here, however, Mustafa’s smuggler can be seen to have recruited, transported and sold Mustafa into a forced labour situation, blurring the clear demarcation often assumed to exist between smuggling and trafficking.

While numerous instances of detention and forced labour are identifiable by physical confinement, my findings demonstrate that this was not universal. In some instances, geographical remoteness and the prevailing social dynamics served as the conditions of confinement. This confinement was particularly reported in settings where many sub-Saharan African individuals were in debt bondage arrangements with local inhabitants.

Abbas, in his twenties from Darfur, described his experience in the remote village of Rabyana, located 140 kilometres west of Kufra in southeastern Libya, which illustrates this phenomenon. After being abducted and detained by the smuggler who facilitated his journey, Abbas reported finding himself trapped in a situation where even the local 'council of elders' was aware of his unlawful detention in the village. Despite this awareness, the exploiter's relationship with locals and the implicit recognition of 'ownership' meant that that Abbas received no assistance to escape, leaving him stranded in a condition that effectively amounted to detention. As Abbas stated: 'We were always allowed to go in and out, but we were not able to escape because we were in the middle of the desert. People would always ask 'who are you?', 'who are you with?''.

This example underscores how detention and exploitation can transcend the conventional image of physical confinement and how geographical and social isolation can lead to situations akin to traditional slavery practices. In these instances, individuals are not just physically confined but are also subjected to a form of ownership where their agency is severely compromised. This bears a closer resemblance to historical slavery, where the physical sale of individuals and the recognition of such 'ownership' by local authorities were commonplace (Altaleb, 2015).

Trafficking was also reported in international supply chains, such as manufacturing. For instance, Adam, in his twenties from Darfur, shared his experience of labour exploitation in a manufacturing facility affiliated with a recognisable international brand in Libya. Here, he was exploited in multiple roles, from serving as a doorman to assisting in packaging tasks. Despite the provision of accommodation, the promised remuneration—LYD 25 per day (USD 18)—was not paid after several months of service. Here, the key 'means' that could make his

experience trafficking in legal terms is deception regarding remuneration, with the purpose being the exploitation of his labour.⁷⁰

In other cases, participants who were waiting for the Mediterranean Sea crossing in smugglers' coastal warehouses reported being asked by smugglers to work. These warehouses⁷¹ were often referred to by participants as 'Tourkina', to describe holding facilities run by smugglers before sea embarkation. Several participants reported that they had stayed in a 'Tourkina' that accommodated hundreds of people with durations ranging from days to months. Adam, in his twenties from Darfur, explained how smugglers used migrants to build more warehouses:

'Many smugglers have a number of [warehouses] that are completely built by migrants. The smuggler will take out migrants from the Tourkina and ask them to do work for them. For the entire period at the Tourkina, I would be taken to do such work.'

7.5.4. Kidnappings after supposed smuggling journeys

As seen with Adam's experience, participants' accounts reveal variation in smugglers' behaviour and treatment of migrants. For instance, Samir, in his twenties from Sudan mentioned being treated well and provided with food during his journey with smugglers in Sudan but that conditions and treatment drastically deteriorated under smugglers in Libya: 'They are people with hearts of stone. They have absolutely no mercy towards anyone.' Falikou, in his twenties from Ivory Coast, also highlighted: 'They would never tell you the

⁷⁰ This case could also qualify as forced labour if elements of coercion or significantly oppressive working conditions were present, as these factors are critical in distinguishing forced labour from mere labour exploitation. However, I did not hold enough secondary data from Adam's account to label his experience as forced labour.

⁷¹ In my analysis, I chose not to label these warehouses as detention centres, but rather as crucial staging posts in the smuggling process, distinct from conventional detention facilities. Yet, the accounts of participants, who would sometimes spend months in these warehouses awaiting sea embarkation, suggest these locations effectively functioned as places of detention.

truth. They just want money. Even when you are in trouble, they never help you, they just want cash.’

More severely, the deceptive role of individuals posing as migrant smugglers in Libya, who were in fact leading people into detention, was reported by several participants. Abbas (in his twenties from Darfur) said: ‘On our way to the mines [with a smuggler] we were caught and taken to Libya. There, I was imprisoned together with my brother. After three months, we paid enough money to get free. Together we had to pay a LYD 5,200 [USD 3,800] ransom to get out’.

This scenario reflects a complex interplay of trafficking elements. The experience includes forced movement and harbouring, underlined by an extortion mechanism, thereby constituting a form of exploitation centred on ransom. Notably, even in the absence of labour, these circumstances could potentially be categorised as trafficking due to the presence of the requisite ‘act’, ‘means’, and ‘purpose’. Specifically, if extortion is considered a form of exploitation (and thereby fit the more contentious ‘purpose’ criteria in this scenario), these circumstances might meet the criteria for trafficking due to the presence of these requisite elements. As a result, the smuggler’s behaviour could reasonably be argued to constitute trafficking.

The role of smugglers in explicitly treating people on the move as commodities for financial gain was also highlighted by several other participants. In one case, described by Hamid, in his twenties from Darfur, this manifested in the context of inter-smuggler rivalry: ‘My initial smuggler kidnapped a number of migrants of this smuggler and now he retaliated by stealing the other smuggler’s migrants’. The use of the word ‘stealing’ in this context highlights the perspective of treating people as possessions. Rayan (in his twenties from Darfur) also noted

that he had been sold to another ‘smuggler’⁷², while Abdo in his twenties also from Darfur said he was traded for goods by his smuggler to other smugglers of people and goods. Idriss, in his twenties from Darfur, describing his own experience, noted: ‘the Libyans use migrants as trade, we are a very good currency’. The language of commodification and indeed of slavery employed by participants themselves to describe these transactions emphasises how they explicitly perceived their treatment as dehumanising and commodifying.

Ibrahim (in his twenties from Sudan) described his abduction during his smuggling journey from Chad to Libya, when his convoy was attacked by a Libyan Tebu armed group in the middle of the desert. The Tebu group stopped the first two cars of the three-vehicle convoy and shot at the third vehicle when the smuggler refused to stop, injuring two passengers. They abducted all 25 passengers and took them to a mountain top where for five days they endured intense desert heat with minimal water and food, resulting in the death of two Egyptian passengers. Ibrahim reported that his captors used telescopes to monitor the area and later abducted an additional 50 people to the mountain top. He described how people dug for water and buried themselves partially in the sand to seek shelter from the desert sun, discovering human remains in the process, including skulls and bones. The abductees were subsequently taken to the group's farms in southern Libya where they were forced to work for several months. The captors demanded a payment of LYD 4,000 (USD 2,920) per person for their release, which Ibrahim was unable to provide, resulting in his prolonged captivity. This case is clearly

⁷² The term 'smuggler' is used as it reflects the language of interview participants. However, considering that the 'sale' of the people could be viewed as a 'practice akin to slavery', thus meeting the 'purpose' of exploitation criterion of the Trafficking Protocol, a more accurate classification might be 'trafficker'. Therefore, while I refer to them as a 'smuggler' is used in accordance with how participants phrased it themselves, the word 'trafficker' would arguably be appropriate here too given the actions involved.

constitutive of trafficking, with the captors recruiting their victims through kidnapping, controlling them through violence, and transporting them for labour exploitation in Libya.

The cases in this section highlight the complex and often perilous nature of smugglers' activities. While they are typically viewed as perpetrators, orchestrating the illegal transport of people and sometimes transitioning from facilitation to exploitation, they can also find themselves in precarious situations, subject to attacks that aim to kidnap the people they are transporting. My findings underline that many smugglers *could* be seen in fact to be technically engaged in trafficking (as defined under international law) – whether they *should* be seen that way, the implications of doing so, and whose interests it might (and might not) serve are separate questions (see, e.g. Broad & Gadd, 2022). Nevertheless, this finding highlights a clear role that trafficking can play in facilitating northbound mobility on the CMR to Europe.

7.5.5. Escaping detention via dangerous smuggling journeys to Europe

I found extensive evidence of smugglers extracting significant sums of money from participants for unreliable and dangerous sea crossings, indicating another notable form of exploitation on the CMR. Not everything that is exploitative, of course, could or should be conceptualised as trafficking. Nevertheless, I did identify evidence of behaviours around the crossings themselves that could be argued to meet the ‘act’, ‘means’ and ‘purpose’ elements of the Trafficking Protocol, which speaks in itself to its conceptually vague boundaries and need for greater precision and consistency in how and where the label is applied.

In addition to the unpredictability and dangers of sea crossings, several participants described how smugglers forced migrants onto boats – sometimes at gunpoint — despite expressing apprehension due to dangerous sea conditions. As Omari (in his twenties from Darfur), described it:

'They used to whip some migrants who were scared to go up, so everyone went up; a lot of people got really scared when they saw the sea. But the armed guards would force people to board the gumba [boat]'.

The forced embarkation of individuals onto boats in treacherous waters certainly reveals exploitative practices and highlights the power imbalance inherent in smuggling operations. More research with smugglers is required, but by forcing people onto boats, smugglers may seek to avoid authorities and remove evidence of their activities. It is important to note that smuggling can be non-consensual and non-consensual smuggling does not automatically equate to trafficking and could be outside the standard scope of either phenomenon. Situations can exist outside the defined parameters of both phenomena.

Some participants held in detention centres in northern Libya secured their freedom via people smuggling networks extending to Europe, a process typically requiring substantial payment from detained people's families and friends to a broker, which provides evidence of collusion between detention centres and smugglers. In other words, I encountered several unique cases of trafficking that became smuggling with the same actors involved.

For instance, Faheem, in his twenties from Darfur, reported that he had negotiated an agreement with his captor that required him to either pay LYD 4,000 (USD 2,920) or undertake eight months of labour in Libya to facilitate his release and return to Sudan. Yet, in a surprising turn of events, he reported finding himself being transported towards the sea crossing instead, without reporting to have paid. Such experiences suggest that the terms of agreements with those controlling people's mobility can be subject to abrupt and unexplained changes.

This observation subverts traditional perceptions of smuggling as a voluntary or service-led transaction. It also shows how those embarking on what appear to be smuggled journeys might be acting under coercion or without the genuine intention to take a journey. These situations

challenge our standard understanding of smuggling and trafficking, while pointing to the complexity and multifaceted nature of migration journeys.

Another example of the smuggling/trafficking ambiguity is the case of Omari, in his twenties from Darfur who faced financial constraints when attempting to pay the smuggler for the journey. The smuggler initially requested LYD 1,500 (USD 1,095), but Omari had only LYD 500 (USD 365). In response, the smuggler accepted the available amount and allowed Omari to work with him in exchange for the opportunity to join a boat if space became available.

This scenario raises questions about the nature of the arrangement between the migrant and the smuggler. While it may not seem to necessarily fit the traditional definition of forced labour, as Omari was not apparently coerced into labour against his will, it does highlight the complexities of agency and constraint within the context of migration. Moreover, it is crucial to acknowledge that the smuggler exploited Omari's position of vulnerability, driven by a desperate need to move. As such, this situation could be described as labour trafficking, given the presence of exploitation and abuse of vulnerability, without necessarily involving forced labour.

7.5.6. Agency and constraint among people on the move

The conditions reported by participants during their experience on the CMR were unquestionably severe. They were also often exploitative, encompassing a spectrum of abusive conditions, ranging from detention in harsh conditions to torture. Yet, despite all this, participants' accounts also point to degrees of negotiation and bargaining as well as remarkable resilience and innovative approaches to navigating their complex situations within oppressive environments. Still, it is crucial to frame these expressions of agency within the significant constraints imposed by their circumstances to avoid downplaying the challenges they face.

One of the clearest expressions of agency was in participants' attempts to escape situations of detention and forced labour. Some participants relied on acts of resistance (e.g. building a faulty window in the detention centre they were asked to build and eventually detained in), luck (e.g. a guard left the gate open) or negotiation (e.g. around the terms of their release). For example, Mahamat, from Chad, managed to establish a positive rapport with the guards and subsequently brokered a deal to secure the release of the whole group of people he was with. The compromise initially involved arranging payment of LYD 2,500 (USD 1,825) per person, achieved by contacting friends and family using a phone provided by the guards. However, the negotiated amounts were lower and varied among the participants who were detained, with some paying LYD 1,500 (USD 1,095), and others LYD 1,300 – 1,400 (USD 950 – 1,020).

Another example of negotiation involved Samir's (in his twenties from Sudan), who was also presented with the opportunity to purchase his freedom and a sea crossing from a situation of forced labour:

'I was transferred [from a detention centre] for forced work in Khoms. I was working in a cement place. I was asked to pay USD 2,000 to be free. I was told "I paid USD 2,000 for you so you need to pay that to me". In the morning, I was asked to work, in the evening I was put into a hangar with other migrants. Then I was no longer willing to work nor willing to pay USD 2,000 and would only pay USD 2,000 if I was taken to the sea. Then my employer said he worked to bring people across the sea and would do it for USD 2,000. Most other migrants in the hangar wanted to cross the sea as well. After two months I said I would call my uncle and ask for the money. If he hadn't paid, I would have stayed longer and worked. My uncle eventually paid the money.'

Samir's experience highlights how smuggling situations can be opportunities to escape trafficking or other exploitation. While such experiences highlight the power of negotiation

within oppressive situations, other instances of severe brutality described by participants are a stark reminder of the constraints on migrants' agency. For example, Abdo (in his twenties from Sudan) described how two people from Guinea-Conakry who were forced to work on a construction site he was also working on staged a lock-in protest due to the lack of food provision. Their actions, an assertion of agency in a desperate attempt to improve conditions, were met with severe retaliation: they were crucified. Another person who was detained and reportedly shot in the leg during the protest was denied medical aid and left to die outside of the detention centre.

The realities that detained people face, including unpredictable work conditions and the risk of unpaid labour, highlights their limited options and the significant power imbalances they endure. In this context, work often served as a means for people to fund their ongoing journey. Hence, refusing job offers was typically not a viable option.

For instance, after spending three months in detention, Mustafa, in his twenties from Darfur, was offered the opportunity to work outside the prison, albeit without a specified salary. The person in question, an external contact of the guards, explicitly stated that payment might or might not be made for the services rendered. Despite these ambiguous terms, Mustafa agreed to work, which involved labour-intensive tasks such as moving and packing items into trucks, with the daily compensation reportedly ranging from small amounts of food to a meagre LYD 20 (USD 18). Coerced into working under ambiguous terms and minimal payment, Mustafa's work without fair compensation in a detention setting and lacking genuine voluntariness, could be framed as trafficking for forced labour.

Interestingly, 'normal' work outside of detention was not necessarily associated with better pay or conditions. For instance, after escaping detention Mustafa subsequently secured a job in a metal sorting company with a monthly wage of LYD 800 (USD 585) – while there was more

security here in terms of expecting to be paid, the actual sums received were only a marginal improvement from the uncertain compensation associated with their prior work under forced labour conditions.

Having money offered some participants some protection from worse treatment than others with them. For example, at the Toummo border crossing between Niger and Libya, several participants described that those who were able to pay border guards were granted privileges such as access to showers, while those unable to pay faced physical abuse and confinement. The separation between those who paid and those who could not, highlighted the stark disparities in treatment based on financial means, emphasising the heterogeneity of people's experiences and the protective power of financial resources against some of the gravest abuses, even on such notoriously dangerous routes.

7.6. Discussion

My conclusions in this study are based on the experiences of a select group of people; I make no claims to generalisability. As such, further research is needed to understand the breadth and depth of experiences across various migration routes and demographics. Nevertheless, my findings represent a critical step towards deconstructing the 'blurred boundary' (Skilbrei & Tveit, 2008) between smuggling and trafficking on this important migration route and add to more nuanced and empirically grounded understanding of these complex issues.

7.6.1. Intersections and overlaps in smuggling and trafficking and the role of exploitation

My findings show a variety of ways in which smuggling and trafficking can intertwine, including progressions not only from smuggling to trafficking (as Campana & Varese, 2016

contend), but also from trafficking to smuggling. This order occurred when trafficked individuals in detention were offered a chance to pay for a smuggling journey as a means to secure their release. This finding highlights how people rescued at sea and disembarked in Europe can in fact have been forced onto boats or trafficked immediately prior to their smuggling journeys.

However, while many of the situations described in these interviews fall squarely within the UNTOC's (UN, 2000) definitions of smuggling or trafficking, many more resisted easy categorisation. This finding shows that not only are the conceptual boundaries around trafficking themselves 'blurry' but so too are the boundaries around 'smuggling' (see also Achilli, 2023; Kuschminder, 2018; Mai 2013; O'Connell Davidson, 2015; Skilbrei & Tveit, 2008).

The empirical evidence presented in this study illustrates widespread abuses and harms on the CMR, many of which show overlaps between the supposedly dichotomous categories of smuggled migrant and trafficking victim (Campana & Varese, 2016). I have found that beyond trafficking, any one individual's experiences can readily encompass both smuggling and a whole range of human rights abuses, including arbitrary detention, kidnapping, extortion, torture and forced labour (Kuschminder & Triandafyllidou, 2020; OHCHR, 2023).

My research highlights cases of torture for ransom and extortion in detention that could clearly be seen as a 'purpose of exploitation', as well as much forced labour that is explicitly recognised in the UN Trafficking Protocol as one of the non-exhaustive forms of exploitation that constitute the 'purpose' in trafficking. The importance of ransom and extortion in detention here suggests a need for broader recognition of these practices within the global discourse on trafficking (Kuschminder & Triandafyllidou, 2020; van der Leun & van Schijndel, 2016). The Trafficking Protocol's lack of a clearly bounded definition of exploitation poses challenges in

categorising such cases, with a difficult (perhaps impossible) balance to be struck between inclusivity and avoiding the construct becoming so diffuse as to be very unhelpful (see, e.g. Chuang, 2014). My findings also reveal a spectrum of exploitation models, from cost-saving measures to profit-oriented labour practices, some of which bear hallmarks of organised crime (Malakooti, 2019). This diversity highlights the ambiguity in applying the Trafficking Protocol's criteria, particularly the 'purpose' of exploitation. Considering this, it is also essential to recognise the paradoxical simultaneous expansiveness and selectivity of the dominant discourse around trafficking. While it encompasses a huge range of highly disparate issues, certain forms of exploitation, such as exploitative labour in prison, mandatory military service, grooming and recruitment into terrorism, are routinely excluded (Muraszkiewicz, 2020; Kempadoo & Shih, 2022). This narrow lens underlines the political dimensions of trafficking discourse, reflecting conscious choices of what is included or excluded.

The complex dual role of exploitation—as both the 'purpose' of trafficking and an aggravating factor in smuggling⁷³—complicates analysis. I also found several examples of exploitation that resulted directly from the smuggling process, highlighting the significantly limited agency of those being smuggled and raising further questions about the stance that exploitation occurs not from the smuggling per se but 'as a result of a choice that was made by the migrant' (Campana & Varese, 2016; p. 94). The harrowing accounts of forced embarkations onto precarious vessels in the Mediterranean, coupled with the extortion of substantial fees for unreliable transport, clearly demonstrate the smugglers' exploitative behaviours, irrespective of the migrants' initial willingness to leave (see also Crawley, 2010).

⁷³ The Smuggling Protocol describes aggravating circumstances such as those 'that entail inhuman or degrading treatment, including for exploitation of migrants' Article 6(3)(b) of the Smuggling Protocol.

My findings reveal a transformation in the smuggler's role evolving from a perceived helper to a trafficker, in some cases engaging in the direct sale of people during the journey, supporting other research findings (see e.g. Bilger *et al.*, 2006; Kyle & Dale, 2001; Spener, 2009). This finding highlights the role that people who could well be considered traffickers play in facilitating northbound mobility on the CMR to Europe, echoing other findings on the role of trafficking in facilitating migration (e.g. Mai, 2016; Plambech *et al.*, 2021). These scenarios not only reveal a severe power imbalance but also highlight the constrained choices available to migrants, who are often forced to accept uncertain work and inconsistent remuneration. Among the various 'means' of trafficking outlined in the Trafficking Protocol, the 'abuse of a position of vulnerability' arguably remains the most ambiguous (Chuang, 2014; UNODC, 2013). The participants' experiences epitomise this vulnerability: individuals, sometimes minors, fleeing danger or economic ruin, and traversing perilous routes. This analysis overturns traditional views of smuggling as a consensual, service-based transaction. It brings to light the possibility of coercion and lack of genuine intent from migrants in what might initially appear as voluntary journeys. These findings compel a re-evaluation of our conventional understanding of smuggling and trafficking, emphasising the complex nature of migration.

7.6.2. Continuums of agency, coercion, consent and exploitation

My findings reveal that agency and constraint play crucial roles in both smuggling and trafficking experiences, lending support to empirical findings in the literature that emphasise migrant agency (Kuschminder & Triandafyllidou, 2020; Kuschminder, 2020). However, contrary to other findings (see, e.g., Campana & Varese, 2016; p. 94), I find that the existence

of agency does not fundamentally distinguish trafficking from smuggling.⁷⁴ Instead, my findings align with research by Bettio *et al.* (2017) and Choi-Fitzpatrick & Watkins-Smith (2021) suggesting that agency in migration journeys is not a binary: people's ability to influence their own situations can change during their journeys. Moreover, I find that agency is not an absolute in situations of smuggling nor necessarily absent in situations of forced labour or trafficking (see Achilli, 2023; Cockbain *et al.*, 2022; Mai, 2016; van Meeteren & Wiering, 2019). Just as recognising the fluidity and messiness of agency is important, so too is acknowledging the considerable constraints faced by people on the move. Severely exploitative situations may be tolerated as the 'least bad' option available, regarded instrumentally as a necessary risk to (potentially) facilitate onward travel, or be the result of extreme force, threats and intimidation (Mai, 2016; Plambech *et al.*, 2021).

The distinction between smuggling and trafficking can be conceptually useful. However, I believe, based on the empirical observations outlined earlier, that it would be a misstep to delineate between the two strictly through the lens of agency. Instead, my analysis supports the argument that smuggling and trafficking should be seen as separate but interconnected phenomena within a broader landscape of exploitation (Gallagher, 2009). Such an approach would better reflect the complexities of migrant experiences and could guide the development of policy responses that provide appropriate protection and support for all individuals involved in irregular migration. Again, this landscape is likely one of a 'continuum of exploitation' (Skrivankova, 2010), in which people may move in and out of more or less exploitative situations, and migration experiences can encompass both smuggling and trafficking and in

⁷⁴ Campana & Varese (2016; p. 93) argue that trafficking and smuggling represent 'two distinct states: that of smuggled person with agency to that of trafficked person without agency'. Campana & Varese (2016; p. 94) then stipulate 'in the case of trafficking, agency is non-existent by definition'.

unexpected orders. That speaks to the complexities of these issues and the need for nuance in both analysis and intervention.

7.6.3. Beyond traditional trafficking: slavery, kidnapping and other extreme abuses

Some of the actions and control mechanisms observed in this study reveal a higher degree of extremity than those typically associated with trafficking in other settings. For instance, kidnapping, which is commonly stereotyped as a modus operandi of human traffickers, often does not hold true across various instances of trafficking where ‘softer’ forms of manipulation such as deception and threats can be more common (see Raby & Chazal, 2022; Cockbain *et al.*, 2022). However, kidnapping was a feature of several participants’ experiences in this study. While it is unclear how representative these accounts are, the presence of extreme abuses such as kidnapping, ransoms, and trading of migrants between smugglers, signal a systemic commodification of people in the Libyan context of the CMR. It was also notable that some participants actively used the language of slavery to describe their own experiences and clearly recognised the financial value that their bodies and labour represented to their abusers. This choice of language underscores the depth of exploitation but also highlights the need to align terminologies with the lived experiences of survivors, ensuring that the language used in policies, laws, and interventions accurately reflects the realities of those affected.

My findings highlight the intersections of forced labour and debt bondage within the broader context of the Trafficking Protocol. While the Protocol explicitly lists forms of exploitation such as forced labour, slavery, and practices similar to slavery, it does not specifically mention debt bondage (UNODC, 2015). However, I found that debt bondage often shared characteristics with these listed forms, particularly 'practices similar to slavery.' Therefore, in cases where debt bondage exhibits attributes akin to slavery or servitude, it aligns with the

types of exploitation outlined in the Protocol. This interpretation allows us to consider instances of debt bondage as potentially falling under the umbrella of trafficking, especially when they are part of a broader context of forced labour or similar practices.

My research identifies labour exploitation within international supply chains in Libya, highlighting the critical role of global industries and market forces in shaping labour conditions on the ground. These forces not only affect employment practices but also create business models that determine the availability of decent work. As LeBaron (2021) points out, the dynamics of supply chains significantly affect broader employment trends which in turn contribute to the emergence of poor working conditions and forced labour. The findings specifically in low-wage sectors indicate that workers frequently transition between forced labour and conditions that meet international labour standards, underscoring the fluid nature of labour exploitation within these global supply chains.

7.6.4. Human rights support beyond dichotomous definitions of smuggling and trafficking

Issues surrounding terminologies and labelling extend beyond academic discourse, having significant real-world consequences for the safety of migrants in the EU (McAdam, 2015; Piper *et al.*, 2015). These terminologies not only shape our understanding of exploitation but also influence legal and advocacy responses. The misalignment in applying and operationalising these labels directly affects institutional responses to victims, thereby influencing the responsibilities and actions required from stakeholders such as states, NGOs, international organisations, and corporations. In the context of the Netherlands, van der Leun & van Schijndel (2016; p. 26) highlight a critical disparity: '[w]hereas a victim of trafficking can appeal for legal protection, a smuggled irregular migrant (worker) overall has little rights

because of the formal absence of the exploitation element, and is most likely to be expelled and criminalised’.

My findings recognise the challenges in distinguishing smuggling from trafficking under international law but also reveal that many migration experiences are likely to meet international legal thresholds for trafficking if properly investigated. However, I do not advocate for redefining these terms beyond providing a better definition of exploitation, nor do I call for the labelling of all smuggling cases as trafficking. Instead, I echo recent calls (Guidi *et al.*, 2023) for the need to provide protection services based on experienced hardships endured, not based on legal categorisations of experiences or initial motivations for migration. Even if people are lucky enough to avoid forced labour and trafficking, the broader conditions described in this study (detention, torture, other human rights abuses) imply considerable potential for harm and traumatisation. I also recognise here that re-casting smugglers as traffickers could carry potential harms, attracting even stronger criminal justice responses on an already marginalised population (see also Broad and Gadd, 2022). That said, it is also important to acknowledge the harms their actions can cause, as documented here.

In the context of the UK, new research suggests that among the more than 26,500 people formally identified as having potentially been trafficked from 2009-19, the most commonly recorded overseas location of exploitation was Libya (Cockbain *et al.*, forthcoming). Yet despite (or perhaps because of) the substantial proportion of people identified in the UK as potential victims of trafficking whose exploitation was recorded as taking place abroad, the UK Government has recently taken draconian steps to curb access to ‘modern slavery’ protections (Mullan-Feroze *et al.*, 2023). Those steps, which have been heavily criticised by NGOs, scholars and others, include the introduction of a new evidential threshold, which was later struck down as unlawful (Matrix Chambers, 2023), and the attempt to block access (via

the Illegal Migration Act 2023) to the UK's modern slavery system (known as the National Referral Mechanism, or NRM) for anyone who reaches the UK via irregular means. Such measures disproportionately affect those in the most vulnerable situations, including people exploited in countries like Libya who may struggle to provide suitable 'evidence'. It is unclear how EU countries are currently responding to trafficking experienced by smuggled people *en route* to safety, which in itself represents a potential gap in services as well as a clear research priority. The fact that people who had been so severely exploited were themselves detained upon arrival in Malta is concerning and goes against Malta's own obligations vis-à-vis vulnerable groups.

To reiterate, my intention is not to assert that the label of 'trafficking' is always more advantageous for those affected, or to suggest that every instance of smuggling should be automatically reclassified as trafficking. However, I believe it is crucial to acknowledge the presence of elements strongly suggestive of trafficking or human rights violations within the experiences of those who would otherwise be viewed as 'smuggled migrants', a characterisation that can strip migrants of rights and protections they should receive (Donald & Grogan, 2023).

Chapter 8 Summary and implications

This discussion is divided in two sections. In the first section, I outline the main findings in this thesis in terms of improving understanding of migration journeys on the CMR. I analyse my findings as to the complexity of migration journeys, my empirical findings on smuggling and trafficking convergence, the advantages and disadvantages of the approach that I adopted, and finally the overall limitations of the study.

In the second section, I discuss the implications of the study in terms of reducing harms to migrants on journeys. I first analyse how my findings have underscored the need to go beyond measuring flows at entry and exit points as well as deaths, to encompass more activities – and transit points – where migrants may transit and where harms can occur. I then analyse existing academic situational crime prevention approaches to migration and highlight the inherent risk of so-called ‘unintended consequences’ and ethical dilemmas they pose. Given these ethical tensions and risks of harms, I call for the need for a different approach to situational crime prevention in the field of migration, which focuses more on a situational prevention of harm rather than of crime.

8.1. Insights from modelling migration

8.1.1. Complexity of migration journeys

To the best of my knowledge at the time of writing, this work represents the first scientific in-depth analysis of a sizeable sample of migration journeys along the CMR to Europe. Previously, the detailed migration-related activities occurring on these journeys, along with their connections and sequences, have largely remained unknown.

Through this analysis of 71 lived journeys, I have highlighted the complexity, heterogeneity, non-linearity and often protracted nature of migration along this route. Migration processes emerged not as simple trajectories but in many cases as long, winding routes, with diverse experiences, challenges, and decisions, which supports more recent findings in empirical research on migration journeys as to the non-linearity of movements (see, e.g., Crawley & Jones, 2021). Not a single individual journey included the same sequence of activities: all journeys were unique. The median duration of journeys was 18 months (Min=3 days, Max=115 months, IQR=22 months). Two thirds of participants travelled for more than a year (n=48).

Given the complexity of migration trajectories, my findings support the adoption of a complex systems approach to the study of migration, which advocates for a more holistic understanding that accounts for the dynamic interplay of various factors and forces shaping migration processes (see McAlpine *et al.*, 2021 for a review).

My findings also confirm other findings (Pacciardi & Berndtsson, 2022) on how macro-level international policies targeting migration governance can affect the activities of people on the move as well as harm them. For example, the EU's support for the Libyan coastguard in intercepting boats carrying individuals attempting to reach Europe exemplifies the complex interaction between different system levels (in this case, the macro-level impact on micro-level dynamics), exacerbating the challenges encountered by those intercepted.

8.1.1.1. Im/mobility on journeys

By highlighting the length and complexity of journeys to Europe, I have also shed light on where and how migrants can experience im/mobility. Certain activities played important roles in creating this im/mobility. Two thirds of participants (n=48, 68%) reported working on their journey. All participants were detained in Malta, but two thirds (n=48) of participants reported experiencing detention before crossing the Mediterranean Sea.

Im/mobility on journeys was also manifested through cyclic patterns of movement, where participants repeated activities that they had already undertaken on their journeys in a given transit zone or across multiple zones. Out of all 81 migration-related activities identified in participants' journeys (see Chapter 5), 57 (70%) were repeated at least once in individual participant journeys. Significantly, the activity 'Wait in Detention' was repeated by 18 participants, on average three times (Med=3, Min=2, Max=3).

Overall, 174 different types of cycles were identified across the 71 journeys in the micro-level composite script graph. Of these, 22 unique cycles were shared by several participants, while the rest were only experienced by one participant. The five most travelled cycles included the work and travel cycle in northern Libya, the detention transfer cycle in northern Libya, the arrest and detention while working cycle in northern Libya, the forced labour transfer cycle in northern Libya and the arrest and detention cycle in northern Libya. A third of the participants (n=26, 37%) travelled through the same cycle twice. There were only eight types of cycles that were repeated by the same participant more than once. These cycles included the five cycles described above as well as a repeated sea abandonment cycle, a cycle of repeated arrest and detention after travelling with a smuggler from a non-neighbouring country to Libya, and a repeated long cycle of 16 activities that involved being caught at sea by the Libyan coastguard, detention and forced labour.

My findings as to cycles on journeys first highlight the necessity of considering cyclic realities of migration when crafting interventions that seek to reduce harms to migrants on journeys. By exposing these cycles, I have highlighted some of the most important series of activities that participants experienced, sometimes several times on journeys. Future interventions (see the rest of this discussion) could seek to break the more harmful cycles.

Importantly, this research into im/mobility has highlighted the complex and sometimes so-called ‘unintended consequences’ of migration control measures. They underscore that such interventions that target migration movements at multiple stages of the journey (e.g. the activities ‘arrest/abduction’ or ‘interception by the Libyan coastguard’) do not necessarily halt or disrupt migration flows but can merely redirect (or delay) them instead. This resilience, as demonstrated by all the participants in this study who ultimately reached Europe, highlights the limitations of policies aimed at deterring migration and halting the arrival of irregular migrants to Europe.⁷⁵ Not only were they in the cases studied here ineffective in halting movements, but they also created harms, as exemplified by the links between arrests and interceptions and detention in the sample. More specifically, the EU’s policy of supporting the Libyan coastguard has exacerbated harms of people on the move, underscoring the urgent need for a critical reassessment of migration governance (see also, Pacciardi & Berndtsson, 2022). Policy interventions, in my view, should be designed to break harmful cycles on migration journeys rather than perpetuate them (see section ‘Insights on reducing harms to migrants’).

Given that some interventions can merely reroute movement elsewhere, it is crucial to recognise that a temporary decline in irregular arrivals at Europe’s borders does not necessarily indicate a sustained long-term decrease in irregular migration to Europe. The journey of many, currently within areas that could be described as ‘transit zones’ such as Libya or elsewhere in Africa on the CMR, remains mostly invisible and therefore more difficult to predict. As the number of people rerouted grows, the likelihood of unforeseen surges in EU-bound migration increases, particularly when containment strategies hinge on the political stability and agreements with transit countries. This point was exemplified when the EU’s arrangement with Niger to curb migration flows to Libya was undermined by a coup, revealing the fragility of

⁷⁵ Naturally, this resilience cannot be generalised to all migration journeys and may only reflect the experiences in this sample, since the participants in this study only included migrants who arrived in Malta.

such agreements (referenced in Chapter 6). The efficacy of Mediterranean containment deals is thus intrinsically tied to the fluctuating political landscapes of coastal states in North Africa.

8.1.1.2. Facilitators of journeys

While individual experiences were shaped by macro-level policies targeting migration governance and systems, they were also affected by the critical roles played by intermediaries, such as smugglers and brokers, confirming other empirical findings (see, e.g., Malakooti & Fall, 2020).

All participants used a smuggler at least once on their journey to Europe. Of participants who transited across more than one zone ($n=62$), over half ($n=32$) used a smuggler for all zone transitions, while just 11% ($n=7$) used a smuggler only once. Over three quarters of participants used smugglers in more than one zone ($n=54$). Of these, two thirds of participants reported using a smuggler in a country neighbouring Libya ($n=47$) while all participants used smuggling services in northern Libya to cross the Mediterranean Sea. These findings highlight how, while migrants are not always dependent on smugglers for all zone crossings, they are essential facilitators of journeys on the CMR. While smugglers facilitated journeys, in some cases, they also contributed to the detention and related harms of participants (I explore this in the section on Harms below).

Sixty-one participants (86%) met a broker who facilitated their travel. A broker was coded as any intermediary who connects a migrant with a smuggler (the person who transports them), whether they be a professional broker, a community member, family, or a friend (Jones & Sha, 2020). Most participants ($n=51$) reported meeting a broker in northern Libya (zone 4). Twenty participants met brokers in more than one zone. Meeting a broker was often in the context of reaching smuggler warehouses, where smugglers house individuals before transporting them

for the sea crossing. Northern Libya was also the zone where all participants used a smuggler, suggesting that the importance of brokerage also ties in with the importance of smuggling there.

The role of work along journeys also presented this duality of both contributing to im/mobility (see earlier) and facilitating journeys, by helping to fund them and sometimes motivating them (e.g. travelling to Libya to find work there). Work has been an often-overlooked dimension of migration on the CMR that strongly influenced the duration and nature of migration journeys experienced by participants in the sample. While not always overtly or severely exploitative, work often included circumstances ranging from difficult working conditions to clear instances of forced labour (see Harms section below), calling for the need to consider these ‘hidden’ harms that can be overlooked (see Chapters 6 and 7).

8.1.1.3. Harms on journeys

By focusing on identified detention, exploitation and related harms, this research has underlined dangers associated with journeys, providing more empirical detail to complement prior research in this field (Kuschminder & Triandafyllidou 2020; Massari, 2015; McMahon & Sigona, 2018; OHCHR 2023; Tjaden, 2022). Participants reported a large range of human rights abuses, including arbitrary detention, kidnapping, extortion, torture, and forced labour (see Chapter 7).

Some of the actions and control mechanisms observed in this study reveal a higher degree of extremity than those typically associated with trafficking in other settings. For instance, kidnapping, which is commonly stereotyped as a *modus operandi* of human traffickers, often does not hold true across various instances of trafficking where ‘softer’ forms of manipulation such as deception and threats can be more common (see Raby & Chazal 2022; Cockbain *et al.* 2022). However, kidnapping was a feature of several participants’ experiences in this study. While it is unclear how representative these accounts are, the presence of extreme abuses such

as kidnapping, ransoms, and trading of migrants between smugglers, signal a systemic commodification of people in the Libyan context of the CMR. It was also notable that some participants actively used the language of slavery to describe their own experiences and clearly recognised the financial value that their bodies and labour represented to their abusers.

Fourteen participants (20%) were abducted by the people whom they believed would smuggle them into southern Libya. Several of these participants reported being sold to detention centre owners who then tortured them to extract money from their families or friends or exploited them for forced labour (see Chapter 7). However, it should be noted that smugglers were not only perpetrators in participant journeys, conducting the illegal transport of people and sometimes transitioning from facilitation to exploitation. They also found themselves in precarious situations, subject to attacks that were designed to kidnap the people they are transporting.

8.1.2. Empirical findings on the smuggling and trafficking convergence

In this thesis, I sought to ground many of the debates around the convergence of smuggling and trafficking in actual data. As noted in Chapter 7, the scholarly debate around the overlap and distinctions between smuggling and trafficking has been ongoing, with diverse perspectives presented in the literature (Campana & Varese, 2016 provide an overview). Some researchers, like Salt and Stein (1997) and Skrivankova (2010), suggest that smuggling and trafficking should be seen as part of a continuum of exploitation, or even framed within wider issues of human rights abuses (Gallagher, 2009). Others point out the ways in which smuggling and trafficking may intersect, with Achilli (2023) noting that children can simultaneously be victims of both, and Mai (2016) along with Plambech *et al.* (2021) observing that exploitation can paradoxically facilitate migration goals. However, it's important to note that these

discussions often lack a foundation in empirical evidence, apart from the few key studies mentioned here.

By deconstructing these journeys and analysing instances of forced labour exploitation and detention, I found clear overlaps and crossovers between smuggling of migrants, forced labour, debt bondage, extortion, kidnapping and human trafficking. My findings show a variety of ways in which smuggling and trafficking can intersect, including progressions not only from smuggling to trafficking (as Campana & Varese 2016 contend), but also from trafficking to smuggling. This order occurred when trafficked individuals in detention were offered a chance to pay for a smuggling journey in order to secure their release. This finding is significant since it highlights how some people rescued at sea and disembarked in Europe may in fact have been forced onto boats or trafficked immediately prior to the sea crossing.

I also found that although many of the situations fell squarely within the UNTOC's (UN 2000) definitions of smuggling or trafficking, many others were difficult to categorise. This was particularly the case when attempting to assess whether some cases met the 'purpose of exploitation' criteria necessary to qualify a case as trafficking, and which is not clearly defined in international law. For example, instances where individuals were coerced onto boats by armed men could be considered trafficking, should extortion through the extraction of significant sums of money for dangerous sea crossings be recognised as a 'purpose of exploitation'. This finding shows that not only are the conceptual boundaries around trafficking themselves 'blurry' but so too are the boundaries around 'smuggling' (see also Achilli 2023; Kuschminder and Triandafyllidou 2020; Mai 2013; O'Connell Davidson 2015; Skilbrei & Tveit 2008).

In my investigation into conditions of detention during these journeys, I argued that the deliberate use of torture for ransom, forced labour and extortion in certain facilities meets the

‘purpose’ criteria for exploitation, meaning migrants subjected to these conditions could reasonably be considered to have been trafficked.

Building on this, the finding that many smugglers could be seen in fact to be technically engaged in trafficking (as defined under international law) – whether they should be seen that way, the implications of doing so, and whose interests it might (and might not) serve are separate questions (see, e.g., Broad & Gadd 2022). Nevertheless, this finding highlights a clear role that trafficking can play in facilitating northbound mobility on the CMR to Europe, building on findings by Mai (2016) and Plambech *et al.* (2021).

The findings in this thesis also prompted a rethinking of the role of individual agency and decision-making within the migration process, which challenges the binary perception of smuggled migrants with agency and trafficking victims without agency. Contrary to other findings (see, e.g., Campana & Varese, 2016; p. 94), I found that the existence of agency did not fundamentally distinguish trafficking from smuggling. In many cases, people on the move actively navigated their journeys, responding to the opportunities and constraints they encountered, confirming other findings on the CMR (see Kuschminder & Triandafyllidou 2020; Kuschminder 2020). While acknowledging the many constraints and dangers migrants face, future research could explore how the agency of migrants can better supported and how the constraints they face can be addressed.

Given the challenges in neatly categorising some experiences as either smuggling or trafficking under international law, the detailed information required of someone’s journey, and the time needed to assess this information, assistance to people in need should be reconsidered to be provided based on the hardships that people experienced *en route*, rather than on dichotomous legal categorisations (i.e. smuggling or trafficking) or on their initial motivations for leaving.

8.1.3. Advantages of Network Modelling

This thesis has demonstrated how a crime science approach can complement existing approaches to exploring irregular migration and its associated harms.⁷⁶ By employing script analysis, I shed light on how certain opportunities — distinct scenarios and environmental elements found along the CMR — created situations that made irregular migrants, whose irregular status makes them inherently precarious, more vulnerable to harms like detention and exploitation. The use of scripting provided a structured approach to analyse and categorise 71 journeys, a relatively substantial source of qualitative data. I have sought to lay groundwork for future research on how such environments might be altered to mitigate risks and enhance safety of people (see section Insights on reducing harms to migrants).

A scientific approach to the study of crime and in the case of this thesis, migration-related harms and exploitation, carves out a distinct niche within the field of migration research on the CMR by juxtaposing its findings against the predominantly qualitative and ethnographic landscapes painted by scholars like Kuschminder (2021), Tinti & Reitano (2017), and Sanchez (2019). Their seminal contributions offer deep, narrative-rich explorations of migration experiences, which I have complemented by introducing novel methodological dimensions.

In addition to the qualitative emphasis on personal narratives and lived experiences, I leveraged a mixed-methods framework, combining quantitative methods to capture general trends across a large sample of 71 participants. This approach addressed a gap left by predominantly ethnographic work to allow for a broader, more system-wide understanding of journey dynamics, extending beyond individual stories to capture overarching patterns and trends.

⁷⁶ Opportunity theories propose that criminal acts result from both the offenders' inherent tendencies and the specific circumstances they encounter (Felson and Clarke, 1998).

For example, the largest study of migrants at the time of writing, conducted by Kuschminder (2021), involved interviewing 69 Eritrean and Nigerian migrants, a comparable sample of participants to the one studied in this thesis (n=71). However, despite the extensive data collection, Kuschminder's (2021) study does not demonstrate the adoption of a scientific approach or use descriptive statistics to quantify observed trends (e.g., indicating the prevalence of a theme with 'n=x'). This lack of transparency undermines the ability to discern the significance or representativeness of observed phenomena even within the sample (i.e. linked to questions of internal validity). This methodological limitation, which can be observed in many existing studies on the CMR, limits the interpretability of the study's findings, as it remains uncertain whether identified themes are anecdotal or indicative of broader patterns within a studied sample (see also section on Gaps and limitations of existing research in Chapter 2).

Through my systematic deconstruction of the migration process, by dissecting and categorising the myriad interactions between activities that composed migration journeys, and most especially by quantifying them, I have sought to offer novel insights into the micro-level mechanisms behind migration trajectories and associated harms experienced *en route*.

Nonetheless, the integration of ethnographic elements within this systematic analysis was instrumental in adding narrative depth to our understanding of migration as a complex system. The qualitative material gleaned from the data provided deep insights into the lives of participants, capturing lived realities that numbers and models alone could not convey (e.g. the in-depth descriptions of conditions in detention centres).

Although scripting and network analysis have been used together in several studies (Bellotti *et al.*, 2020, 2022; Bright *et al.*, 2021; Diviák *et al.*, 2021; Duijn *et al.*, 2015), I found no published studies analysing scripts themselves as complex networks. Indeed, a script can be described as

a sequence of events or a path. In this formulation, a script is a network of events represented by nodes. When overlaying scripts into a network, the resulting analysis of the network's properties reveals characteristics about those scripts.

In this study, modelling migration scripts as a network is an important methodological innovation. It provided novel insights by conceptualising key migration-related activities as nodes within the network, and the movement between these nodes as the pathways that migrants navigate. This approach allowed for the detailed mapping of migrant pathways, highlighting points of harm, as well as pathways that some travelled more than others. It helped to visualise complex migration narratives and made visible the often-invisible processes that guided the decision-making and resulting activities of people on the move.

While I encountered limitations in applying network-linked analyses of the model, which I have outlined in Appendix 8: Explanation of methodological approach the modelling of migration as a composite script, shed novel light on migration processes. The analysis of scripts as a network revealed the often-overlooked cyclical nature of migrant experiences, aligning with complexity theory highlighting the dynamic interactions within migration systems (e.g., Leloup, 1996; McAlpine, 2021; van der Watt & van der Westhuisen, 2017). The findings bring empirical detail for complexity theorists like Mabogunje (1970) and de Haas (2010), who stress the need to understand the components and drivers of migration flows at a granular level. These cycles reveal the adaptive strategies and decision-making of migrants, resonating with Bakewell's (2014) view of migration systems as evolving networks of interconnected elements.

In summary, the adoption of a network-based model in this study has laid some of the groundwork for a more sophisticated understanding of migration, one that recognises the complex, interconnected nature of migration activities and the strategic navigation of journeys by migrants. Future research could transform the static empirical model created here into a

dynamic model (e.g. an agent-based model), for instance to test the impact of policy interventions on lived realities of migrants (see, e.g., McAlpine, 2021). A dynamic model could provide a safer environment to enhance our grasp of the complexities of migration and hopefully inform more effective, responsive migration policy and intervention strategies (see below). While such an approach would hold limitations and entail assumptions that go beyond the evidence analysed in this thesis, it could be a useful testing ground for policies and their consequences.

Future research could also add more data into the static model I have developed or be designed to collect primary data that would easily feed into the model. This could allow for the comparison between journeys across gender, nationality and age groups for example, which could be made with a more substantial dataset. Algorithmic solutions could be developed to structure findings from interviews and alleviate the time needed in the coding process, although these would need to account for potential biases that may arise (Eusebi *et al.*, 2022).

Nodes could also be analysed to reflect the more precise amount of time that participants spent in certain activities, which was not always available in this dataset, and pricing comparisons could also be made across a larger sample. Future research could also develop more specific mini scripts or connected scripts, for example from the smuggler's point of view. Moreover, I constructed scripts from migration between 2018 and 2019, which followed the bolstering of the Libyan coastguard (see Chapter 2). Future research could compare scripts over time (pre and post given interventions) to analyse the impact of anti-smuggling and anti-migration interventions on journeys.

8.1.4. Overall limitations

In this section I present the overall limitations of the research. Some of these limitations have been mentioned in the data specific limitations but are included here too for completeness.

8.1.4.1. Internal validity

I performed verification to ensure the scripts faithfully represented the information within the transcripts (accuracy, ambiguity and completeness criteria). This involved the double-coding and a final consistency check, whereby I cross-referenced each activity with each narrative to ensure the logical order was respected and to eliminate any redundancies. Although I endeavoured to rectify potential gaps and oversights in the script, it is possible that some errors persist. I acknowledge that there is inherent subjectivity in my interpretations, which may have influenced the final scripts. Of course, I could not assess the accuracy of the information in the transcripts. This underscores the inherent challenges and complexities of the exercise and serves as a reminder of its limitations. Interview-based studies like this one are susceptible to self-report bias (Althubaiti, 2016), which can impact the accuracy of socio-demographic information and journey narratives. Participants might have altered or left out details, possibly due to age-related concerns or in an attempt to bolster their asylum claims. These risks were reduced (although not necessarily eliminated) by interviewers guaranteeing anonymity and confidentiality in interviews and emphasising that their participation and input would have no influence on their asylum applications.

Validation of the script, specifically in its capacity to identify actionable pinch-points for intervention, falls outside this study's scope. The primary intention behind the scripting was to illuminate the intricacies and nuanced stages of migration journeys, and in this sense, it acted

as a useful tool for understanding behaviours. However, the ultimate test of a script's utility arguably is its applicability in real-world scenarios of informing policy (Cornish, 1994).

8.1.4.2. External validity

The sample size of 71 participants is modest in quantitative terms (although substantial in qualitative terms) and was not randomly selected, which means the scripts I developed are not necessarily representative of the experiences of the 4,851 irregular migrants who successfully reached Malta by sea in 2018-2019. This limits the generalisability of the findings. The findings may also not be reflective of current or post-COVID dynamics (see Micallef *et al.*, 2021 on the impact of the COVID-19 pandemic on migration on the CMR). It would be incorrect to extend these findings to cover all those who embarked on similar journeys, including those who did not survive, or those who disembarked in Italy instead. Deaths along the journey could have taken place at any stage of the scripts I have depicted, not just in the Mediterranean Sea.

The sample contains proportionally slightly more women than the norm among all those rescued at sea and disembarking in Malta in 2019 (11% of the sample, compared to 5% of total recorded arrivals in Malta in 2019). The proportion of women has been similar to that included in other studies of migration on the CMR (e.g. Kuschminder 2021). Nevertheless, their relatively small number in absolute terms ($n = 8$), means I may well have captured fewer of the distinct challenges women face on journeys, such as gender-based violence or sex trafficking, known to be common on these routes (Mai 2016; Plambech *et al.*, 2021).

This research primarily recorded instances of forced labour, possibly leading to an underestimation of sexual exploitation incidents, which are often more stigmatised and therefore less reported (Gezie *et al.*, 2019). For example, levels of sexual exploitation have been reportedly high for Nigerian women travelling on the CMR (Plambech *et al.*, 2021). Despite meticulous translation efforts, some subtle meanings or errors might have been

introduced (Squires, 2009). Nevertheless, this shortcoming might be less significant since my emphasis was on the events that occurred during the journeys rather than the precise wording used by the participants to describe their experiences.

8.1.4.3. Scripting process

There were inherent limitations in attempting to analyse 71 journeys through migration scripts, which I wish to note for researchers attempting to create or analyse composite scripts in the future. First, creating a composite script allows for the dissection of complex behaviours and processes into more manageable, abstract patterns, facilitating comparison across different scenarios. However, this abstraction process inevitably leads to a loss of certain contextual details, such as specific timings and locations, and introduces an element of subjectivity, for instance in defining what constitutes 'smuggling'. To counter this limitation, every effort was made to analyse the data as transparently and systematically as possible, as outlined in the methods section.

Second, the time taken to code the journeys (2-3 hours per interview transcript) and construct the graph on Python, also reduces the accessibility and democratisation of scripting as a tool for better understanding migration journeys, especially for practitioners. As mentioned earlier, algorithmic solutions combined with the new potential offered by ethical uses of generative artificial intelligence in qualitative analysis may help address this limitation, while acknowledging that these are vulnerable to biases and hallucinations (Eusebi et al., 2022). Verifying random samples may be used to verify some of the AI generated analysis.

8.2. Insights into reducing harms to migrants

8.2.1. Beyond traditional metrics: recognising the complexity of journeys

The findings from this thesis advance beyond the conventional metrics that institutions like the IOM and UNHCR typically use to assess migration dynamics and the effects of policy interventions. These traditional methods mainly focus on counting the number of migrants at specific locations and tracking the number of deaths (IOM, 2020a). My findings identify two significant shortcomings in these approaches.

First, the findings highlight the need to acknowledge the diverse and complex experiences migrants face, which disrupt the traditional, linear perception of migration. Migrants are involved in various activities, including work, encounters with brokers and smugglers, detention, arrests, and abductions. These experiences can strongly affect the length and nature of their journeys, often leading to non-linear, cyclical migration patterns. This observation is particularly pertinent to the Central Mediterranean Route, indicating the necessity for more comprehensive measurement methods that encompass the entire spectrum of activities migrants can undertake for a more accurate representation of migration dynamics.

As mentioned in the previous section of this discussion, a mere decline in irregular arrivals in Europe may not accurately reflect changes in the number of individuals moving within transit zones such as Libya. The documented experiences of migrants provide insights into potential indicators that could more accurately signal the movements of people before reaching Europe. For example, increased instances of detention or the emergence of new smuggling networks in neighbouring countries to Libya could serve as precursors to changes in migration flows towards Europe, rather than simply data on arrivals in Europe.

Second, the findings point to the limitations of using the number of people dying in the Mediterranean or in the Sahara (see IOM, 2020a) as the sole indicators of the dangers and harms migrants face. First, I have pointed to several other areas where migrants can die on journeys (e.g. in detention centres). Second, migrants encounter many other types of harm and exploitation as found in this research, in many cases because of policies aimed at stopping smuggling or migration. Therefore, future evaluations should attempt to encapsulate a broader range of harms to migrants, beyond just fatalities, when measuring the negative impact of such measures. In Chapter 7, I also analysed how the identification of certain harms upon arrival in Europe may have significant implications on state obligations towards them.

By adopting a situational approach to studying journeys, I have been able to identify various forms of severe exploitation and other harms, along with common pathways to these adverse experiences and the conditions under which they occur. This approach not only highlights the immediate impacts of migration policies but also calls for an enhancement of the methods used to measure migration dynamics and policy effectiveness, advocating for more comprehensive and inclusive measurement techniques.

8.2.2. Considering the risks of unintended consequences

While my thesis has helped to identify harms related to detention and exploitation on migration journeys, a prescriptive list of recommendations as to policies that might reduce harms to migrants is beyond the scope of this research. As I will detail in the remainder of this section, without further research that specifically analyses and attempts to account for the potential unintended consequences of interventions as well as the ethics of certain interventions, any suggested recommendations could have the opposite effect of reducing harm. While I have sought to highlight the potential benefits of crime science as a whole in studying migration,

further research is thus needed to better understand the potential of situational crime prevention (SCP), a core component to reduce crimes in crime science, in addressing harms to migrants.

Indeed, my findings as to the identified harms related to detention and exploitation indicated causal links between anti-irregular migration interventions, such as the Libyan coastguard operations and detention and related harms, supporting other findings in grey literature and journalistic investigations (e.g. Hayden, 2022). In addition to these harms identified, the Libyan coastguard has also been accused of directly causing the deaths of migrants, for example by shooting at inflatable boats transporting migrants (Hayden, 2022). These experiences were not reflected in the sample of participants, given that they were all rescued at sea and transported to Malta.

The negative consequence of such a border control intervention has been commonly coined an ‘unintended consequence’ in the literature on migration and smuggling (McAuliffe & Koser, 2015). Whether these consequences are genuinely unintended or not, harmful consequences do not appear to be the *principal* objective of intervention. The primary intended objective of intercepting migrants at sea and bringing them back to Libya is to reduce arrivals in Europe and dissuade future departures; not to kill or harm migrants, despite that having been a documented negative consequence of such an intervention. Naturally, the EU may indirectly benefit from harms taking place as a consequence of interventions, given that they could be conceivably thought of as potentially discouraging future EU-bound migration, for fear of experiencing harm (i.e. a potential deterrence effect).

The potential for unintended consequences of interventions targeting migration-related activities clearly raises questions as to the applicability of SCP interventions to the field of migration. I only found one study linking SCP to the study of reducing harms to migrants. The study was the PhD thesis of Robert Guerette (2004), on preventing migrant deaths at the US-

Mexico border and who has made seminal contribution to the field of crime science, SCP and displacement (see e.g., Bowers *et al.*, 2009; Bowers & Guerette, 2014; Guerette, 2006, 2009; Johnson *et al.*, 2014b). Guerette's thesis stands out not only for its subject matter but also for its academic lineage, as Guerette's thesis was supervised by Ronald Clarke, the pioneer of SCP (Clarke, 1997).

Guerette (2004, p. 158) generated SCP interventions with the goal of 'reducing the occurrence of death among unauthorised border crossers along the U.S. and Mexico border'. To present these interventions, Guerette merged the SCP framework with the Haddon matrix (Barnett *et al.*, 2005)⁷⁷, a commonly used paradigm in the injury prevention field, to account for the temporary nature of the crime event (pre, during, post event). In devising interventions, Guerette describes a crime triangle, which positions the migrant as a victim, the smuggler (in his case called coyote/guide) as the offender, and the environment as the place. Guerette (2004; p. 158) summarises identified opportunities, which can be targeted pre-, during or post-border crossing. These include Guerette (2004; p. 158):

- 'Increase awareness among female migrants about the dangers of crossing the desert.
- Implement an alert system for hazardous conditions for migrants and coyotes.
- Target problematic times and places.
- Erect barricades at persistent risky crossing points.
- Post visible signs in risky areas.
- Post/distribute instructions for migrants in staging towns to follow in events of distress.
- Warn guides/coyotes of increased punishment in the event of migrant death.

⁷⁷ The Haddon matrix is a grid with four columns representing different influencing factors (host, agent/vehicle, physical environment, social environment) and three rows representing different phases of an injury (pre-event, event, and post event) (Barnett *et al.*, 2005).

- Implement a "report a migrant" campaign.
- Expand BORSTAR (Border Patrol Search, Trauma, and Rescue).⁷⁸
- Create a task force to prosecute coyote/guide when death occurs.
- Implement a desert marking system.’

Guerette (2004; p. 158) then stipulates that ‘if the deaths are to be prevented: i) increase the efficiency of detection of all unauthorised border crossings so that migrants may be apprehended and removed from hazardous conditions; or ii) selectively prevent crossings in times, places, and by groups which are at greatest risk.’ In other words, the rationale behind the proposed SCP interventions is that reducing irregular migration altogether would naturally reduce the number of deaths or harms. This ‘solution’ raises strong ethical questions, especially when considering international asylum and refugee law. One must question whether an SCP strategy aimed at minimising harm by preventing border crossings merely shifts the experienced harms from the border back to the place of origin, where individuals initially fled to escape harm; or indeed makes conditions at the border more dangerous for people trying to cross.

To achieve this objective of reducing irregular migration, another recommendation included implementing a local ‘report a migrant’ campaign, suggesting that “‘report a migrant” stickers and pins could be dispersed to citizens and truckers (and other commercial establishments) providing an easy-to-dial phone number to the U.S. Border Patrol’ (Guerette, 2004; p 164).⁷⁹

Reporting the presence of a person crossing the border irregularly may indeed help reduce

⁷⁸ BORSTAR is a specialised unit of the United States Border Patrol trained in emergency search and rescue and medical response

⁷⁹ Guerette (2004; p. 166) adds: ‘During one border site visit the author observed at least 7 probable illegal migrants walking along the road side. Had such a pin been located on the visor, authorities could have quickly and easily been notified of their location. When mention of the sited migrants was made to Border Patrol authorities during subsequent discussions, it was indicated that such events were commonplace.’

migrant deaths. However, some would argue that it could lead to a displacement that would further increase the dangers to migrants because of the use of more dangerous routes that are less on the beaten path. Once more, this proposed intervention creates a strong ethical dilemma, which the SCP framework does not help analysts or researchers consider. Moreover, it could also increase dangers and harms that people on the move face from the state once intercepted, particularly in the context of harsh detention conditions. I personally do not believe this intervention idea is ethically sound.

Other interventions recommended by Guerette may not hold any obvious immediate harms at face value, such as: ‘Increase awareness among female migrants about the dangers of crossing the desert.’ However, while these interventions may seem feasible and ethical, they may not be effective. A systematic review of 60 relevant evaluations of information campaigns that targeted potential migrants and traffickers found little evidence that they were effective in deterring migration (Tjaden et al., 2018).⁸⁰

As with most interventions specifically aimed at addressing irregular migration and smuggling that researchers suggest, few have been tested properly and systematically or undergone a rigorous evaluation, such as with the EMMIE framework (Johnson *et al.*, 2015).⁸¹ Therefore, the potential negative consequences from an intervention may outweigh their intended benefits. Rescuing migrants at sea and saving them from drowning but bringing them back to Libyan shores could have a very strong negative impact in terms of human suffering when people are

⁸⁰ This was also due to the fact that most of the evaluations examined offered relatively scant evidence regarding the impact of information campaigns. Although numerous evaluations detailed the number and profiles of campaign beneficiaries, they did not directly measure impact (i.e. a change in outcome that can be directly attributed to the program, excluding any other factors).

⁸¹ The UK College of Policing has used the EMMIE framework to evaluate crime prevention interventions as part of their What Works Centre for Crime Reduction (Hunter et al., 2017). EMMIE stands for Effectiveness, Mechanisms, Moderators, Implementation, and Economics.

brought back to detention centres (see Chapters 6 and 7). Yet, this intervention could easily emerge from the SCP framework to ‘reduce the rewards’ of purchasing a smuggling journey. It also raises ethical and legal concerns of blocking asylum seekers from seeking refuge in Europe.

Given how harmful proposed interventions in this field can be, as mentioned earlier, I will not seek to provide any definitive recommendations as a result of this PhD research.

Future research should help develop a framework that can consider these unintended consequences and ethical dilemmas that may arise from situational crime prevention when devising recommendations, not just feasibility and cost. Bowers and Johnson (forthcoming) have recently proposed a related framework (CRIMEFACE) which touches upon some of these elements for the adoption of technology in policing. For example, a simple framework that focuses on the Feasibility, Effectiveness and Ethics of interventions (the FEE of an intervention), could be a useful, rapid-assessment tool for analysts and researchers to evaluate SCP or policy intervention ideas at the conceptual stage. The FEE framework distinctively integrates three critical dimensions:

- Feasibility: Evaluating the practicality, resource availability, acceptability to the relevant stakeholders, and logistical considerations of implementing an intervention.
- Effectiveness: Assessing the anticipated impact and outcome of the intervention in achieving its crime and harm reduction objectives.
- Ethics: Examining the ethical implications and potential harmful consequences of the intervention, as well as the ethical implications of the intervention and its objectives.

This should ideally include engagement with affected populations.

I have attached an example of what a FEE framework operationalisation could look like in Appendix 11 for future research to build upon.

8.2.3. Rethinking situational crime prevention for migration

The issue of unintended consequences brings into question the objectives of crime science and whether there needs to be a shift in its approach or stance.⁸² The ultimate goal of crime science is harm reduction (Cockbain & Laycock, 2017), yet by adopting a crime-reduction approach in a migration context, my findings note that one can increase harm as a consequence. This goal could prompt a reassessment of objectives from crime reduction to harm minimisation for several reasons. First, it ensures that the focus on reducing crime does not inadvertently neglect or exacerbate harm. Second, the concept of crime is inherently variable, shaped by societal norms and laws (Lacey, 2007). Harm, on the other hand, encompasses a broader spectrum of negative impacts, including social, economic, psychological, and environmental damages, which could offer a more stable and objective framework for analysis (Hillyard & Tombs, 2007).

Hillyard and Tombs (2007) have critically examined this issue within the field of criminology and questioned the conventional definition of 'crime'. They advocate for a 'social harm' approach as a more inclusive framework that captures a broader spectrum of human suffering and environmental damage, beyond the traditional focus on 'crime' and 'criminals'. Their critique extends to mainstream criminology's reliance on state-defined notions of crime, suggesting that a focus on social harm can offer a more comprehensive understanding of the various adversities impacting individuals and societies, acknowledging the role of state and corporate entities, ideologies, and social institutions. While acknowledging the challenges in defining 'social harm', they propose its operationalisation based on experiences and

⁸² Merton (1936) popularised the concept of unintended consequences to describe outcomes of purposeful actions that are not intended or foreseen. His analysis included the identification of factors like ignorance and errors in analysis, which lead to (negative or positive) consequences that are not anticipated by those initiating the actions.

observations of harm, making it a potentially more adaptable and relevant concept than the legally constrained notion of 'crime'.

The legally constrained notion of crime is particularly relevant in the field of migration and harms related to detention and exploitation. Under international law, the UN Smuggling Protocol (UN, 2000) smuggling of migrants is a crime. However, the way states incorporate this protocol into their national legislation can vary significantly (Schloenhardt & Macdonald, 2017; UNODC.org, 2024). These national laws can also change over time, which emphasises the earlier argument of 'what constitutes a crime?'. In Niger for example, neighbouring Libya to the south and one of the key transit countries on the CMR to Europe, the transportation of people to Libya was legal and had been practised for centuries until an EU-backed law introduced in 2015 labelled this transportation as smuggling and criminalised the practice (Bish, 2019; Micallef *et al.*, 2019). In 2017, the law was implemented by law enforcement in Agadez, the major hub before the desert crossing to Libya and overnight, what had been common practice became criminal, reduced recorded irregular migration flows drastically, while smaller-scale clandestine smuggling operations nevertheless continued (see Bish, 2019; Micallef *et al.*, 2019). In July 2023, a coup d'état took place in Niger, overturning President Mohamed Bazoum, who had worked with the EU to stem EU-bound irregular migration through the country (Raube, 2023). In November 2023, General Abdourahamane Tchiani, the coup leader, overturned the eight-year-old law to allow for migration to Libya to take place again (BBC, 2023).⁸³ Overnight, a practise that had been criminalised for eight years became legal again.

⁸³ Given that people travelling to Libya often enter the country on the CMR without the required documentation (Micallef *et al.*, 2019), it can still be considered irregular migration despite the regularisation within northern Niger.

Considering the potential for subjectivity in defining what constitutes a crime and the potential to mask harmful practices under the guise of crime-reduction, I argue that the goals of SCP should be re-evaluated to ensure they are ethically and morally sound, to reach the crime science goal of harm reduction (Cockbain & Laycock, 2017) in addition to crime prevention. In this sense, instead of thinking of situational *crime* prevention, one may want to start thinking of situational *harm* prevention as a more suitable approach, which may (or may not) entail the prevention of crime when applied to irregular migration.

A review by Logan & Marlatt (2010) highlights the range of existing harm reduction frameworks and interventions across several fields,⁸⁴ showcasing a range of strategies from individual-focused methods like motivational interviewing to broader, systemic approaches such as policy reforms aimed at reducing the harms of substance use (see also Hawk *et al.*, 2017; Marlatt *et al.*, 2011). Similarly, Ritter and Cameron (2006) provide an extensive analysis of harm reduction strategies, categorising them into various frameworks that span from direct interventions like needle exchange programs to more encompassing policy-driven initiatives designed to mitigate the broader social and health-related consequences of substance use (Ritter & Cameron, 2006). These comprehensive reviews underline the diversity of harm reduction frameworks, illustrating how they can be tailored to address the complexities of substance use and its associated harms across different contexts and populations.

The Risk Environment framework (Rhodes, 2002) represents the closest parallel to the concept of situational harm prevention that I have identified within the existing literature. Developed primarily in the context of drug-related harm, particularly in mitigating the spread of HIV among people who use drugs by injection, the Risk Environment framework emphasises the multifaceted environmental and situational factors that influence risky behaviours. This

⁸⁴ These fields include public health, addiction studies, clinical psychology, social work, and medicine.

approach underscores the significance of physical, social, economic, and policy environments in shaping individual behaviours and outcomes. By focusing on altering these environmental and situational aspects, the Risk Environment framework seeks to reduce harm in a comprehensive manner, aligning with the principles of what I would propose as situational harm prevention that would prioritise context-specific interventions.

Building upon the foundation laid by the Risk Environment framework, situational harm prevention could offer enhancements by introducing more granular, targeted strategies tailored to specific contexts and events. While the Risk Environment framework provides a broad approach to addressing environmental factors, situational harm prevention could refine this perspective by focusing on immediate, localised interventions designed to mitigate specific risks in particular settings. For example, in the context of migration, situational harm prevention might involve the development of targeted safety protocols and support systems within transit routes and temporary shelters to protect migrants from exploitation and other related harms. By integrating such focused, context-sensitive interventions, situational harm prevention could complement and expand the scope of the Risk Environment framework, offering nuanced solutions to complex harm-related challenges. Future research could explore what forms such a situational harm prevention framework would take, building on the existing harm-reduction literature and the need to consider social harms rather than crimes. A key principle for the development of a situational harm prevention framework should be the formulation of strategies in direct consultation with the individuals most impacted by these issues, ensuring their insights and needs shape future interventions (see Quirk, 2023).

The need for situational harm prevention is particularly evident in the realm of irregular migration, underscoring the necessity for more targeted and context-sensitive strategies that safeguard vulnerable populations on the move. However, the potential applicability of such

approaches may well extend beyond this domain. Other contexts such as sex work for example, where the criminalisation and associated stigmatisation present distinct challenges, could benefit from a harm-prevention perspective. Ultimately however, the adoption of such harm-prevention strategies hinges not just on their evidential support but also on the alignment of political and other priorities to enact change.

8.3. Policy implications

While any changes to the migration system must be thoroughly researched and tested to document unintended negative impacts, this section highlights areas needing urgent improvement that I hope, at least at face value, will not increase harm. My findings as to the conditions in Libyan detention centres and the use of forced labour there show the need for urgent action. EU border control policies, particularly the support of the Libyan coastguard who return people to detention centres, worsen these conditions. A policy reassessment in line with the human rights principles held by the EU is clearly needed, including possibly to stop the funding of detention centres that do not meet human rights standards. However, it must also include measures to prevent these centres from seeking alternative funding methods that could exploit or harm migrants further. This could involve improving independent monitoring of conditions inside detention centres.

Robust and humane asylum protocols in the EU are crucial for reducing harm to vulnerable populations. These measures should include swift identification of vulnerable people and support for those in need upon their arrival in Europe. While my findings highlight how distinguishing smuggling from trafficking under international law is challenging, many migration experiences likely meet the legal criteria for trafficking. I do not advocate for redefining these terms but support better defining exploitation and providing protection based on hardships endured, not legal categories or initial migration motivations. Additionally, it is

crucial that these protections respect and uphold existing commitments under anti-trafficking laws. Even those who avoid forced labour and trafficking face considerable harm and trauma and also deserve support, as described in this thesis.

In the short term, independent oversight of detention centres in Libya, ideally managed by international organisations rather than Libyan authorities, could mitigate some harms. Long-term policies must address the broader ethical issues of immigration detention and clarify length of detention and the future of detained individuals, ultimately aiming to minimise or eliminate the use of detention.

Solutions should aim to break the cycles of harm identified in migrant journeys. For example, transfers between detention centres and forced labour sites offer opportunities for intervention. Satellite imagery could monitor known detention sites and track vehicle movements to nearby construction sites, providing evidence of forced labour practices and holding perpetrators accountable. This approach could be similar to the investigative work conducted by the [Yale Humanitarian Lab](#) on war crimes in Ukraine.

Cycles of repeated detentions of migrants who were working in Libya highlight the challenges of accessing safe and fair employment there. Acknowledging the precarious situation and broader poor conditions, encouraging employers to protect workers and raising community awareness are still critical steps towards incremental improvements in reducing exploitation.

My findings highlight cycles where migrants who escape from detention in northern Libya face re-arrest or abduction and detention. International organisations should provide safe shelters for migrants throughout their journey to protect them from harm.

The experience of migrants being left at sea without rescue underscores a significant gap in enforcing international maritime law, which mandates assisting vessels in distress.⁸⁵ Reminding vessels of their legal obligations and consequences for non-compliance is essential.⁸⁶

Some harm-reducing measures may inadvertently increase irregular migration and demand for smuggling services. For instance, creating shelters on migration routes to protect migrants might also attract more people to use these routes to reach Europe, creating a ‘positive feedback loop’ (see Chapter 6). Increased footfall may create other harms in the long term, such as conflicts over resources with local populations.

There are many actors with conflicting objectives in this migration system—states aim to reduce smuggling and migration, while NGOs and civil society focus on reducing harms and deaths. It appears that efforts to reduce smuggling can increase harm and deaths, and vice versa. Future research should explore whether reducing harm and curbing irregular migration are contradictory goals.

⁸⁵ As stipulated in Article 98 of the United Nations Convention on the Law of the Sea (UNCLOS) and Chapter V, Regulation 33, of the International Convention for the Safety of Life at Sea (SOLAS).

⁸⁶ Legal penalties for not rendering assistance to vessels in distress vary by jurisdiction and can include fines, license suspension, and criminal or civil liability.

References

- Achilli (2023) 'Protection' on my own terms: human smuggling and unaccompanied Syrian minors, *Journal of Ethnic and Migration Studies*, 49:13, 3289-3307, <https://doi.org/10.1080/1369183X.2022.2085083>
- Achilli, L. (2018). The “Good” Smuggler: The Ethics and Morals of Human Smuggling among Syrians. *The ANNALS of the American Academy of Political and Social Science*, 676(1), 77–96. <https://doi.org/10.1177/0002716217746641>
- Achilli, L., & Sanchez, G. (2017). *What does it mean to disrupt the business models of people smugglers?* <https://doi.org/10.2870/141395>
- Achtnich, M. (2021). Immobility and crisis: Rethinking migrants' journeys through Libya to Europe. *Libyan Studies*, 52, 154–158. <https://doi.org/10.1017/lis.2021.12>
- Al Jazeera. (2011, April 4). *People smugglers aren't all bad*. <https://www.aljazeera.com/features/2011/4/4/why-people-smugglers-arent-all-bad>
- Al-Arabi, A. (2018). *Local specificities of migration in Libya: Challenges and solutions*. <https://doi.org/10.2870/301531>
- Albeverio, S., Koshmanenko, V., & Samoilenko, I. (2008). The conflict interaction between two complex systems: Cyclic migration. *Journal of Interdisciplinary Mathematics*, 11(2), 163–185. <https://doi.org/10.1080/09720502.2008.10700552>
- Alpes, M. J. (2014, December 15). Why aspiring migrants continue using brokers. *International Migration Institute*. <https://www.migrationinstitute.org/imi-archive/news/why-aspiring-migrants-continue-using-brokers>

- Altaleb, A. M. (2015). The social and economic history of slavery in Libya (1800-1950) [doctoral thesis, University of Manchester]. Retrieved from https://pure.manchester.ac.uk/ws/portalfiles/portal/54580088/FULL_TEXT.PDF
- Althubaiti, A. (2016). Information bias in health research: Definition, pitfalls, and adjustment methods. *Journal of Multidisciplinary Healthcare*, 9, 211–217.
- Amnesty International. (2020, January 30). *Libya: Renewal of migration deal confirms Italy's complicity in torture of migrants and refugees*. <https://www.amnesty.org/en/latest/news/2020/01/libya-renewal-of-migration-deal-confirms-italys-complicity-in-torture-of-migrants-and-refugees/>
- Amnesty International. (2021). Libya: 'No one will look for you': Forcibly returned from sea to abusive detention in Libya. *Amnesty International*, 52.
- Andersson, R. (2016). Europe's failed 'fight' against irregular migration: Ethnographic notes on a counterproductive industry. *Journal of Ethnic and Migration Studies*, 42(7), 1055–1075. <https://doi.org/10.1080/1369183X.2016.1139446>
- Andrijasevic, R., & Mai, N. (2016). Trafficking (in) Representations: Understanding the recurring appeal of victimhood and slavery in neoliberal times. *Anti-Trafficking Review*, 7, Article 7. <https://doi.org/10.14197/atr.20121771>
- Angeletti S., Ceccarelli, G., Bazzardi, R., Fogolari, M., Vita, S., Antonelli, F., Florio, L. D., Khazrai, Y. M., Noia, V. D., Lopalco, M., Alagia, D., Pedone, C., Lauri, G., Aronica, R., Riva, E., Demir, A. B., Abacioglu, H., & Ciccozzi, M. (2020). Migrants rescued on the Mediterranean Sea route: Nutritional, psychological status and infectious disease control. *Journal of Infection in Developing Countries*, 14(5), 454–462. <https://doi.org/10.3855/jidc.11918>

- APA Dictionary of Psychology. (2022). *Definition of victimisation*. <https://dictionary.apa.org/>
- Aronowitz, A. A. (2009). *Human trafficking, human misery: The global trade in human beings*. Praeger.
- Asgary, A., Solis, A., Longo, F., Nosedal, J., Curinga, M., & Alessio, L. (2016). *An agent-based modeling and simulation tool for estimation of forced population displacement flows in Iraq*.
- Aziani, A. (2021). The heterogeneity of human smugglers: A reflection on the use of concepts in studies on the smuggling of migrants. *Trends in Organized Crime*. <https://doi.org/10.1007/s12117-021-09435-w>
- Bader, L. (2019). "They Are Making Us into Slaves, Not Educating Us." *Human Rights Watch*. <https://www.hrw.org/report/2019/08/09/they-are-making-us-slaves-not-educating-us/how-indefinite-conscription-restricts>
- Baird, T., & Liempt, I. van. (2016). Scrutinising the double disadvantage: Knowledge production in the messy field of migrant smuggling. *Journal of Ethnic and Migration Studies*, 42(3), 400–417. <https://doi.org/10.1080/1369183X.2015.1103172>
- Bakewell, O. (2014). Relaunching migration systems. *Migration Studies*, 2(3), 300–318. <https://doi.org/10.1093/migration/mnt023>
- Baláž, V., Williams, A. M., & Fifeková, E. (2016). Migration Decision Making as Complex Choice: Eliciting Decision Weights Under Conditions of Imperfect and Complex Information Through Experimental Methods. *Population, Space and Place*, 22(1), 36–53. <https://doi.org/10.1002/psp.1858>

- Baldwin-Edwards, M., Blitz, B. K., & Crawley, H. (2019). The politics of evidence-based policy in Europe's 'migration crisis'. *Journal of Ethnic and Migration Studies*, 45(12), 2139–2155. <https://doi.org/10.1080/1369183X.2018.1468307>
- Barnett, D. J., Balicer, R. D., Blodgett, D., Fews, A. L., Parker, C. L., & Links, J. M. (2005). The Application of the Haddon Matrix to Public Health Readiness and Response Planning. *Environmental Health Perspectives*, 113(5), 561–566. <https://doi.org/10.1289/ehp.7491>
- Bartram, D., Poros, M. V., & Monforte, P. (2014). Migration Stocks and Flows. In *Key Concepts in Migration* (pp. 100–102). SAGE Publications, Inc. <https://doi.org/10.4135/9781473921061>
- BBC. (2023, November 28). Niger coup leaders repeal law against migrant smuggling. BBC News. <https://www.bbc.com/news/world-africa-67550481>
- Beck, T. L., Le, T.-K., Henry-Okafor, Q., & Shah, M. K. (2019). Medical Care for Undocumented Immigrants: National and International Issues. *Physician Assistant Clinics*, 4(1), 33–45. <https://doi.org/10.1016/j.cpha.2018.08.002>
- Bermejo, R., Bazaga, I., Tamayo, M., Sinoga, M. A., & Romero, I. (2020). *Understand The Impact Of Novel Technologies, Social Media, And Perceptions In Countries Abroad On Migration Flows And The Security Of The Eu & Provide Validated Counter Approaches, Tools And Practices*. Perceptions Project, <https://project.perceptions.eu/wp-content/uploads/sites/24/2020/07/PERCEPTIONS-D2.4-Collection-of-threats-and-security-issues.pdf>

- Bettio, F., Della Giusta, M., & Di Tommaso, M. L. (2017). Sex work and trafficking: Moving beyond dichotomies. *Feminist Economics*, 23(3), 1-22.
<https://doi.org/10.1080/13545701.2017.1330547>
- Bhabha, J., & Zard, M. (2006). *Smuggled or trafficked?* | *Forced Migration Review*.
<https://www.fmreview.org/peopletrafficking/bhabha-zard>
- Bilger, V., Hofmann, M., & Jandl, M. (2006). Human Smuggling as a Transnational Service Industry: Evidence from Austria. *International Migration*, 44(4), 59–93.
<https://doi.org/10.1111/j.1468-2435.2006.00380.x>
- Bird, L. (2020). *Human Smuggling in Africa - The creation of a new criminalised economy?* ENACT, *Continental Report 04*. <https://enact-africa.s3.amazonaws.com/site/uploads/2021-05-20-continent-report-stripped-version.pdf>
- Bird, L. (2020). SMUGGLING IN THE TIME OF COVID-19 The impact of the pandemic on human-smuggling dynamics and migrant-protection risks. *Global Initiative Against Transnational Organized Crime*.
- Bish, A. (2019, September 4). *Niger: Has Securitisation Stopped Traffickers?* ISPI. Retrieved from <https://www.ispionline.it/it/pubblicazione/niger-has-securitisation-stopped-traffickers-23838>
- Bish, A. (2021, December). *Soldiers of fortune: The future of Chadian fighters after the Libyan ceasefire*. Global Initiative against Transnational Organized Crime.
<https://globalinitiative.net/analysis/chadian-fighters-libyan-ceasefire/>

- Bish, A. (2022). A Review of the Routledge Handbook on Smuggling. *Journal of Illicit Economies and Development*, 4(1), pp. 97–101. DOI: <https://doi.org/10.31389/jied.153>
- Bish, A. (2024). Migration proxy warfare: Exploring the role of non-state armed actors in Libya’s refugee rentierism. In M. Lynch & G. Tsourapas (Eds.), *The Politics of Migration and Refugee Rentierism in the Middle East* (POMEPS Studies, 50). <https://pomeps.org/migration-proxy-warfare-exploring-the-role-of-non-state-armed-actors-in-libyas-refugee-rentierism>
- Black, R., & Collyer, M. (2014). *Populations ‘trapped’ at times of crisis | Forced Migration Review* [Forced Migration Review]. <https://www.fmreview.org/crisis/black-collyer>
- Bøås, M. (2021). EU migration management in the Sahel: Unintended consequences on the ground in Niger? *Third World Quarterly*, 42(1), 52–67. <https://doi.org/10.1080/01436597.2020.1784002>
- Borpujari, P. (2019). *The Problem with ‘Fixers’*. *Columbia Journalism Review*. https://www.cjr.org/special_report/fixers.php/
- Borrion, H. (2013). Quality assurance in crime scripting. *Crime Science*, 2(1), 6. <https://doi.org/10.1186/2193-7680-2-6>
- Borrion, H., & Dehghanniri, H. (2023). Crime Scripting. In (Eds.) Elizabeth Groff and Cory P. Haberman, *Understanding crime and place: A methods handbook*. Temple University Press.

- Borrion, H., Dehghanniri, H., & Li, Y. (2017). Comparative analysis of crime scripts: One CCTV footage—twenty-one scripts. In *2017 European Intelligence and Security Informatics Conference* (pp. 115-122).
- Bosse, T., Gerritsen, C., Hoogendoorn, M., Jaffry, S. W., & Treur, J. (2011). Agent-based vs. population-based simulation of displacement of crime: A comparative study. *Web Intelligence and Agent Systems*, 9, 147–160. <https://doi.org/10.3233/WIA-2011-0212>
- Bouhana, N. (2013). The reasoning criminal vs. Homer Simpson: Conceptual challenges for crime science. *Frontiers in Human Neuroscience*, 7.
<https://www.frontiersin.org/article/10.3389/fnhum.2013.00682>
- Boukaré, B. (2020). The development impact of “gold rushes” in Mali and Burkina Faso: The multifaceted effects of migration on artisanal gold mining sites. *MIGRATION AND DEVELOPMENT*, 11.
- Bowers, K. J., & Johnson, S. D. (2003). Measuring the Geographical Displacement and Diffusion of Benefit Effects of Crime Prevention Activity. *Journal of Quantitative Criminology*, 19(3), 275–301. <https://doi.org/10.1023/A:1024909009240>
- Bowers, K. J., & Johnson, S. D. (forthcoming). Facing the Future of Crime: A Framework for Police Use of Technology. *Political Quarterly*.
- Bowers, K., Johnson, S., Guerette, R. T., (2009) Submitted to The National Policing Improvement Agency and The Center for Evidence-based Crime Policy, & Policing, I. consideration of the C. S. R. on C. A. of. (2009). Protocol: Spatial Displacement and Diffusion of Benefits Among Geographically Focused Policing Initiatives. *Campbell Systematic Reviews*, 5(1), 1–24. <https://doi.org/10.1002/CL2.53>

- Bowers, K. J., & Guerette, R. T. (2014). Effectiveness of Situational Crime Prevention. In G. Bruinsma & D. Weisburd (Eds.), *Encyclopedia of Criminology and Criminal Justice* (pp. 1318–1329). Springer. https://doi.org/10.1007/978-1-4614-5690-2_553
- Bowers, K., Johnson, S., Guerette, R. T., Submitted to The National Policing Improvement Agency and The Center for Evidence-based Crime Policy, & Policing, I. consideration of the C. S. R. on C. A. of. (2009). Protocol: Spatial Displacement and Diffusion of Benefits Among Geographically Focused Policing Initiatives. *Campbell Systematic Reviews*, 5(1), 1–24. <https://doi.org/10.1002/CL2.53>
- Boyden, J., & Howard, N. (2013). Why does child trafficking policy need to be reformed? The moral economy of children’s movement in Benin and Ethiopia. *Children’s Geographies*, 11(3), 354–368. <https://doi.org/10.1080/14733285.2013.817661>
- Brabant, M. (2021, September 1). *Tensions rise in Lampedusa, a small Italian island, over swell of economic migrants | PBS NewsHour*. <https://www.pbs.org/newshour/show/tensions-rise-in-lampedusa-a-small-italian-island-over-swell-of-economic-migrants>
- Brachet, J. (2018). Manufacturing Smugglers: From Irregular to Clandestine Mobility in the Sahara. *The ANNALS of the American Academy of Political and Social Science*, 676(1), 16–35. <https://doi.org/10.1177/0002716217744529>
- Brantingham, P. J., & Brantingham, P. L. (1981). *Environmental criminology*. Sage Publications Beverly Hills, CA.
- BRANTINGHAM, P. L. B. A. P. J. (2010). Environment, Routine, and Situation: Toward a Pattern Theory of Crime (1993). In *Classics in Environmental Criminology*. Routledge.

- Brantingham, P., Brantingham, P. Criminality of place. *European Journal on Criminal Policy and Research*, 3, 5–26 (1995)
- Brayley, H., Cockbain, E., & Laycock, G. (2011). The Value of Crime Scripting: Deconstructing Internal Child Sex Trafficking. *Policing: A Journal of Policy and Practice*, 5(2), 132–143. <https://doi.org/10.1093/police/par024>
- Bredeloup, S. (2012). Sahara transit: Times, spaces, people. *Population, Space and Place*, 18(4), 457–467. <https://doi.org/10.1002/psp.634>
- Brigden, N., & Mainwaring, C. (2016). Matryoshka Journeys: Im/mobility During Migration. *Geopolitics*, 21(2), 407–434. <https://doi.org/10.1080/14650045.2015.1122592>
- Broad, R., & Gadd, D. (2022). *Demystifying Modern Slavery*. Routledge.
<https://doi.org/10.4324/9780429053986>
- Browne, E. (2015). Impact of communication campaigns to deter irregular migration. *GSDRC*, 9.
- Bullock, K., & Condry, R. (2013). Responding to denial, minimization and blame in correctional settings: The ‘real world’ implications of offender neutralizations. *European Journal of Criminology*, 10(5), 572–590.
<https://doi.org/10.1177/1477370813475391>
- Camarena, K. R., Claudy, S., Wang, J., & Wright, A. L. (2020). Political and environmental risks influence migration and human smuggling across the Mediterranean Sea. *PLOS ONE*, 15(7), e0236646. <https://doi.org/10.1371/journal.pone.0236646>
- Cambridge Dictionary. (2022). *Harm definition*.
<https://dictionary.cambridge.org/dictionary/english/harm>

- Campana, P. (2016). The Structure of Human Trafficking: Lifting the Bonnet on a Nigerian Transnational Network. *The British Journal of Criminology*, 56(1), 68–86.
<https://doi.org/10.1093/bjc/azv027>
- Campana, P. (2018). Out of Africa: The organization of migrant smuggling across the Mediterranean. *European Journal of Criminology*, 15(4), 481–502.
<https://doi.org/10.1177/1477370817749179>
- Campana, P., & Varese, F. (2016). Exploitation in Human Trafficking and Smuggling. *European Journal on Criminal Policy and Research*, 22(1), 89–105.
<https://doi.org/10.1007/s10610-015-9286-6>
- Carayol, R. (2020, February 26). *Mali: TV Can Kill*. Orient XXI.
<https://orientxxi.info/magazine/mali-tv-can-kill,3666>
- Carling, J. (2002). Migration in the age of involuntary immobility: Theoretical reflections and Cape Verdean experiences. *Journal of Ethnic and Migration Studies*, 28(1), 5–42.
<https://doi.org/10.1080/13691830120103912>
- Carling, J., & Schewel, K. (2018). Revisiting aspiration and ability in international migration. *Journal of Ethnic and Migration Studies*, 44(6), 945–963.
<https://doi.org/10.1080/1369183X.2017.1384146>
- Carling, J., Gallagher, A. T., & Horwood, C. M. (2015). Beyond Definitions: Global Migration and the Smuggling-Trafficking Nexus (SSRN Scholarly Paper 3014244). Retrieved from <https://papers.ssrn.com/abstract=3014244>

- Carter, N., Bryant-Lukosius, D., DiCenso, A., Blythe, J., & Neville, A. J. (2014). The use of triangulation in qualitative research. *Oncology Nursing Forum*, *41*(5), 545–547.
<https://doi.org/10.1188/14.ONF.545-547>
- Charnysh, V., Lloyd, P., & Simmons, B. A. (2015). Frames and consensus formation in international relations: The case of trafficking in persons. *European Journal of International Relations*, *21*(2), 323–351. <https://doi.org/10.1177/1354066114530173>
- Chatterji, J. (2017). On Being Stuck in Bengal: Immobility in the ‘age of migration.’ *Modern Asian Studies*, *51*(2), 511–541. <https://doi.org/10.1017/S0026749X16000664>
- Chin, K., & Chin, A. P. D. of C. J. K.-L. (1999). *Smuggled Chinese: Clandestine Immigration to the United States*. Temple University Press.
- Choi-Fitzpatrick, A., & Watkins-Smith, A. (2021). Agency Continuum? A Non-Binary Approach to Agency Among Human Rights Victims and Violators. *Human Rights Quarterly*, *43*(4), 714–735.
- Chuang J.A. (2014). Exploitation Creep and the Unmaking of Human Trafficking Law. *The American Journal of International Law*, *108*(4), 609–649.
<https://doi.org/10.5305/amerjintelaw.108.4.0609>
- Chuang J.A. (2017). Using Global Migration Law to Prevent Human Trafficking. *AJIL Unbound*. 2017; 111:147-152. <https://doi:10.1017/aju.2017.40>
- Clarke, R. V. (1983). Situational Crime Prevention: Its Theoretical Basis and Practical Scope. *Crime and Justice*, *4*, 225–256.
- Clarke, R. V. (1995). Situational Crime Prevention. *Crime and Justice*, *19*, 91–150.

- Clarke, R. V. (Ed.). (1997). *Situational crime prevention: Successful case studies* (2. ed).
Criminal Justice Press.
- Clarke, R. V. (1980). "SITUATIONAL" CRIME PREVENTION: THEORY AND
PRACTICE. *The British Journal of Criminology*, 20(2), 136–147.
<https://doi.org/10.1093/oxfordjournals.bjc.a047153>
- Clarke, R. V. (1992). *Situational crime prevention: Successful case studies*. Harrow and
Heston Publishers.
- Clarke, R. V., & Newman, G. (2006). *Outsmarting the Terrorists*. Praeger.
- Clarke, R., & Cornish, D. B. (1985). Modeling Offenders' Decisions: A Framework for
Research and Policy. *Crime and Justice*, 6, 147–185.
- CNN. (2018, January 25). *Shocking video shows migrants tortured in Libya—CNN Video*.
[https://edition.cnn.com/videos/world/2018/01/25/libya-torture-sudanese-migrants-
mkd-lon-orig.cnn](https://edition.cnn.com/videos/world/2018/01/25/libya-torture-sudanese-migrants-mkd-lon-orig.cnn)
- Cockbain, E. (2018) *Offender and victim networks in human trafficking*, Abingdon:
Routledge
- Cockbain, E. and Laycock, G. (2017). Crime Science. In: H. Pontell and S. Lab (eds.),
Oxford Research Encyclopaedia of Criminology and Criminal Justice, Oxford
University Press.
- Cockbain, E., & Olver, K. (2019). Chapter 6 - Child Trafficking: Characteristics,
Complexities, and Challenges. In I. Bryce, Y. Robinson, & W. Petherick (Eds.), *Child
Abuse and Neglect* (pp. 95–116). Academic Press. [https://doi.org/10.1016/B978-0-12-
815344-4.00006-4](https://doi.org/10.1016/B978-0-12-815344-4.00006-4)

Cockbain, E., Ashby, M., Bowers, K. and Zhang, S. X. (forthcoming). Concentrations of harm: geographic and demographic patterning in human trafficking and related victimisation, *Criminology & Criminal Justice*.

Cockbain, E., Bowers, K., & Hutt, O. (2022). Examining the geographies of human trafficking: Methodological challenges in mapping trafficking's complexities and connectivities. *Applied Geography*, 139, 102643.
<https://doi.org/10.1016/j.apgeog.2022.102643>

Cohen, L. E., & Felson, M. (1979). Social Change and Crime Rate Trends: A Routine Activity Approach. *American Sociological Review*, 44(4), 588–608.
<https://doi.org/10.2307/2094589>

Cohen, R. (2008). *Global Diasporas: An Introduction*. Routledge & CRC Press.
<https://www.routledge.com/Global-Diasporas-An-Introduction/Cohen/p/book/9780415435512>

Cohen, R., & Van Hear, N. (2017). Visions of Refugia: Territorial and transnational solutions to mass displacement. *Planning Theory & Practice*, 18(3), 494–504.
<https://doi.org/10.1080/14649357.2017.1330233>

Collett, E., & Coz, C. L. (n.d.). *After the Storm: Learning from the EU Response to the Migration Crisis*. 67.

Collyer, M. (2007). In-Between Places: Trans-Saharan Transit Migrants in Morocco and the Fragmented Journey to Europe. *Antipode*, 39(4), 668–690.
<https://doi.org/10.1111/j.1467-8330.2007.00546.x>

- Collyer, M. (2010). Stranded Migrants and the Fragmented Journey. *Journal of Refugee Studies*, 23(3), 273–293. <https://doi.org/10.1093/jrs/feq026>
- Collyer, M., Düvell, F., & de Haas, H. (2012). Critical approaches to transit migration. *Population, Space and Place*, 18(4), 407–414. <https://doi.org/10.1002/psp.630>
- Constant, A. F., & Zimmermann, K. F. (2011). Circular and Repeat Migration: Counts of Exits and Years Away from the Host Country. *Population Research and Policy Review*, 30(4), 495–515.
- Copes, H., Hochstetler, A., & Cherbonneau, M. (2012). Getting the Upper Hand: Scripts for Managing Victim Resistance in Carjackings. *Journal of Research in Crime and Delinquency*, 49(2), 249–268.
- Cornish, D. (1994). *The Procedural Analysis of Offending And Its Relevance For Situational Prevention*. In Clarke R. V. (Ed.), *Crime prevention studies: Vol. 3* (pp. 151–196). Monsey, NY: Criminal Justice Press.
- Council of Europe. (2021). Report to the Maltese Government on the visit to Malta carried out by the European Committee for the Prevention of Torture and Inhuman or Degrading Treatment or Punishment (CPT) from 17 to 22 September 2020. <https://rm.coe.int/1680a1b877>
- Cowen, D. (2014). *The deadly life of logistics: Mapping violence in global trade*. University of Minnesota Press.
- Crawley, H. (2010). *Chance or Choice? Understanding Why Asylum Seekers Come to the UK*. Refugee Council. Retrieved from <https://www.refugeecouncil.org.uk/wp-content/uploads/2010/04/Chance-or-choice-2010.pdf>

- Crawley, H., & Jones, K. (2021). Beyond here and there: (Re)conceptualising migrant journeys and the ‘in-between’. *Journal of Ethnic and Migration Studies*, 47(14), 3226–3242. <https://doi.org/10.1080/1369183X.2020.1804190>
- Crime Opportunity Theories: Routine Activity, Rational Choice and their Variants*. (n.d.). Routledge & CRC Press. Retrieved 6 July 2022, from <https://www.routledge.com/Crime-Opportunity-Theories-Routine-Activity-Rational-Choice-and-their/Natarajan/p/book/9780754629702>
- Culatta, E., Clay-Warner, J., Boyle, K. M., & Oshri, A. (2020). Sexual Revictimization: A Routine Activity Theory Explanation. *Journal of Interpersonal Violence*, 35(15–16), 2800–2824. <https://doi.org/10.1177/0886260517704962>
- Cusumano, E., & Pattison, J. (2018). The non-governmental provision of search and rescue in the Mediterranean and the abdication of state responsibility. *Cambridge Review of International Affairs*, 31(1), 53–75. <https://doi.org/10.1080/09557571.2018.1477118>
- Cusumano, E., & Villa, M. (2020). From “Angels” to “Vice Smugglers”: The Criminalization of Sea Rescue NGOs in Italy. *European Journal on Criminal Policy and Research*. <https://doi.org/10.1007/s10610-020-09464-1>
- Cuttitta, P. (2021, March 3). *Libya’s Figures About Detained Migrants and Detention Centres: Reasons for Recent Fluctuations*. Oxford University Border Criminologies. <https://blogs.law.ox.ac.uk/research-subject-groups/centre-criminology/centreborder-criminologies/blog/2021/03/libyas-figures>
- Czaika, M., Bijak, J., & Prike, T. (2021). Migration Decision-Making and Its Key Dimensions. *The ANNALS of the American Academy of Political and Social Science*, 697(1), 15–31. <https://doi.org/10.1177/00027162211052233>

- Darme, M., & Benattia, T. (2017). *Mixed Migration Trends in Libya: Changing Dynamics and Protection Challenges*. Tripoli, Libya. Altai Consulting for UNHCR Libya.
<http://www.altaiconsulting.com/wp-content/uploads/2017/07/LIB-HCR-MAS-Final-Report.pdf>.
- David, F. (2015). Debate: When it Comes to Modern Slavery, do Definitions Matter? *Anti-Trafficking Review*, 5, 5. <https://doi.org/10.14197/atr.201215510>
- David, F., Bryant, K., & Larsen, J. J. (2019). *Migrants and their vulnerability to human trafficking, modern slavery and forced labour*. IOM.
https://publications.iom.int/system/files/pdf/migrants_and_their_vulnerability.pdf
- Davidson, J. O. (2017). Editorial: The Presence of the Past: Lessons of history for anti-trafficking work. *Anti-Trafficking Review*, 9, Article 9.
<https://doi.org/10.14197/atr.20121791>
- de Haas, H. (2010). The Internal Dynamics of Migration Processes: A Theoretical Inquiry. *Journal of Ethnic and Migration Studies*, 36(10), 1587–1617.
<https://doi.org/10.1080/1369183X.2010.489361>
- de Haas, H. (2014). Migration Theory: Quo Vadis? *IMI Working Paper Series*, 100.
<https://www.migrationinstitute.org/publications/wp-100-14>
- de Vries, L., & Glawion, T. (2021). Studying insecurity from relative safety—Dealing with methodological blind spots. *Qualitative Research*, 14687941211061060.
<https://doi.org/10.1177/14687941211061061>
- Dehghanniri, H., & Borrion, H. (2021). Crime scripting: A systematic review. *European Journal of Criminology*, 18(4), 504-525.

- Deiana, C., Maheshri, V., & Mastrobuoni, G. (2020). *Migrants at Sea: Unintended Consequences of Search and Rescue Operations*. 55.
- Denov, M., & Bryan, C. (2012). Tactical maneuvering and calculated risks: Independent child migrants and the complex terrain of flight. *New Directions for Child and Adolescent Development*, 2012(136), 13–27. <https://doi.org/10.1002/cad.20008>
- Deshingkar, P. (2019). *Migration, Brokerage, Precarity and Agency*. <https://opendocs.ids.ac.uk/opendocs/handle/20.500.12413/14949>
- Dobler, G. (2021). Localising smuggling. In *The Routledge Handbook of Smuggling*. Routledge.
- Donald, A., & Grogan, J. (2023, July 12). *The Illegal Migration Bill*. UK in a Changing Europe. Retrieved from <https://ukandeu.ac.uk/explainers/the-illegal-migration-bill/>
- EEAS. (2017). *European Union Naval Force – Mediterranean Operation Sophia*. European External Action Service. https://www.eeas.europa.eu/sites/default/files/eunavfor_med_-_mission_31_march_2017_en.pdf
- Eklblom, P., & Gill, M. (2016). Rewriting the Script: Cross-Disciplinary Exploration and Conceptual Consolidation of the Procedural Analysis of Crime. *European Journal on Criminal Policy and Research*, 22(2), 319–339. <https://doi.org/10.1007/s10610-015-9291-9>
- El Kamooni-Janssen, F. (2017). *‘Only God Can Stop the Smugglers:’ Understanding Human Smuggling Networks in Libya*. Clingendael; Human Trafficking Search.

<https://humantraffickingsearch.org/resource/only-god-can-stop-the-smugglers-understanding-human-smuggling-networks-in-libya/>

Etzold, B., & Fechter, A.-M. (2022). Unsettling protracted displacement: Connectivity and mobility beyond 'Limbo.' *Journal of Ethnic and Migration Studies*, 48(18), 4295–4312. <https://doi.org/10.1080/1369183X.2022.2090153>

EU Agency for Fundamental Rights. (2016). *Criminalisation of migrants in an irregular situation and of persons engaging with them* [Data set]. Koninklijke Brill NV. https://doi.org/10.1163/2210-7975_HRD-9992-2014009

EU Commission. (2016, February 8). *Migration and mobility*. https://research-and-innovation.ec.europa.eu/research-area/social-sciences-and-humanities/migration-and-mobility_en

EUFRA. (2019, June). *2019 update—NGO ships involved in search and rescue in the Mediterranean and criminal investigations*. European Union Agency for Fundamental Rights. <https://fra.europa.eu/en/publication/2019/2019-update-ngo-ships-involved-search-and-rescue-mediterranean-and-criminal>

Euro-Med Monitor. (2021, December). *Complex persecution: Report documents shocking accounts of Libyan Coast Guard's involvement in migrant killing, kidnapping [EN/AR] - Libya | ReliefWeb*. <https://reliefweb.int/report/libya/complex-persecution-report-documents-shocking-accounts-libyan-coast-guard-s-involvement>

European Commission. (2012). *Practical measures to reduce irregular migration*. (Directorate General for Home Affairs.). Publications Office. <https://data.europa.eu/doi/10.2837/803>

European Commission. (2015). *Agreement Establishing the European Union Emergency Trust Fund for Stability and Addressing Root Causes of Irregular Migration and Displaced Persons in Africa, and its Internal Rules*. Brussels. 20 October 2015 (p. 8). https://ec.europa.eu/trustfundforafrica/sites/default/files/original_constitutive_agreement_en_with_signatures.pdf

European Commission. (2019). *Irregular migration definition*. https://ec.europa.eu/home-affairs/pages/glossary/irregular-migration_en

European Council. (2022a, March 24). *Migration flows in the central Mediterranean route*. <https://www.consilium.europa.eu/en/policies/eu-migration-policy/central-mediterranean-route/>

European Council. (2022b, July 8). *Saving lives at sea and targeting criminal networks*. <https://www.consilium.europa.eu/en/policies/eu-migration-policy/saving-lives-at-sea/>

European Parliament. (2017, June 27). *ICC investigation into Libyan detention centres funded by the EU*. https://www.europarl.europa.eu/doceo/document/E-8-2017-004251_EN.html

European Parliament. (2022, May 4). *Discharge: MEPs delay signing off on accounts of Frontex* | News | European Parliament. <https://www.europarl.europa.eu/news/en/press-room/20220429IPR28235/discharge-meps-delay-signing-off-on-accounts-of-frontex>

Eusebi, A., Vasek, M., Cockbain, E., & Mariconti, E. (2022). The Ethics of Going Deep: Challenges in Machine Learning for Sensitive Security Domains. *2022 IEEE European Symposium on Security and Privacy Workshops (EuroS&PW)*, 533–537. <https://doi.org/10.1109/EuroSPW55150.2022.00063>

- Fallon, K. (2022, October 14). EU border agency accused of serious rights violations in leaked report. *The Guardian*. <https://www.theguardian.com/global-development/2022/oct/14/eu-border-agency-frontex-human-rights-violations-report>
- Farrell, G., Clark, K., Ellingworth, D., & Pease, K. (2005). *Of targets and supertargets: A routine activity theory of high crime rates*. https://repository.lboro.ac.uk/articles/journal_contribution/Of_targets_and_supertargets_a_routine_activity_theory_of_high_crime_rates/9580793/1
- Favell, A., & Recchi, E. (2009). Pioneers of European integration. Citizenship and mobility in the EU – European Sources Online. *Edward Elgar*. <https://www.europeansources.info/record/pioneers-of-european-integration-citizenship-and-mobility-in-the-eu/>
- Fawcett, J. T. (1989). Networks, Linkages, and Migration Systems. *The International Migration Review*, 23(3), 671–680. <https://doi.org/10.2307/2546434>
- Febrey, A. (2014, June). *Human Trafficking and Migrant Smuggling: How They Differ*. Human Rights First. <https://www.humanrightsfirst.org/resource/human-trafficking-and-migrant-smuggling-how-they-differ>
- Felson, M., & Clarke, R. V. (1998). *Opportunity makes the thief: Practical theory for crime prevention*. Home office, Policing and Reducing Crime Unit.
- Fisk, R. (2005, January 17). *Hotel journalism gives American troops a free hand as the press*. The Independent. <https://www.independent.co.uk/voices/commentators/fisk/hotel-journalism-gives-american-troops-a-free-hand-as-the-press-shelters-indoors-5344745.html>

Foundation for the Study of Cycles. (2024). *Cycles. The Foundation for the Study of Cycles.*

<https://cycles.org/cycles/>

FPU. (2022). *Lack of financial resources – Free Press Unlimited (FPU) Knowledge &*

Quality. <https://kq.freepressunlimited.org/themes/media-and-conflict/lack-of-financial-resources/>

France-Presse, A. (2017, November 14). EU's policy of helping Libya intercept migrants is

'inhuman', says UN. *The Guardian.*

<https://www.theguardian.com/world/2017/nov/14/eu-libya-coastguard-detention-centres-migration-mediterranean-un-zeid-raad-al-hussein>

Franko, K., & Gabrielsen Jumbert, M. (2020, March 23). *The controversial lifesavers: NGO search and rescue in the Mediterranean.* Oxford Law Faculty.

<https://www.law.ox.ac.uk/research-subject-groups/centre-criminology/centreborder-criminologies/blog/2020/03/controversial>

Frontex. (2017). *Africa-Frontex Intelligence Community joint report 2016. European Agency for the Management of Operational Cooperation at the External Borders of the Member States of the European Union.* Publications Office.

<https://data.europa.eu/doi/10.2819/606438>

Frontex. (2020). *After the money: Prices for people smuggling on Central and Western Mediterranean routes.* [https://frontex.europa.eu/media-centre/news/news-](https://frontex.europa.eu/media-centre/news/news-release/after-the-money-prices-for-people-smuggling-on-central-and-western-mediterranean-routes-EHdfJg)

[release/after-the-money-prices-for-people-smuggling-on-central-and-western-mediterranean-routes-EHdfJg](https://frontex.europa.eu/media-centre/news/news-release/after-the-money-prices-for-people-smuggling-on-central-and-western-mediterranean-routes-EHdfJg)

- Gallagher, A. T. (2009). Human Rights and Human Trafficking: Quagmire or Firm Ground? A Response to James Hathaway, *Virginia Journal of International Law*, 49(4), 2009, <https://papers.ssrn.com/abstract=1409816>
- Gallego, E. K. Y. and C. G. (2020). *Out of the Shadows: Shining a Light on Irregular Migration*. Rowman & Littlefield Publishers.
- Gambino, L. (2015, December 6). ‘No human being is illegal’: Linguists argue against mislabeling of immigrants. *The Guardian*. <https://www.theguardian.com/us-news/2015/dec/06/illegal-immigrant-label-offensive-wrong-activists-say>
- Gammeltoft-Hansen, T., & Nyberg, N. (2013). *The Migration Industry and the Commercialization of International Migration*. Routledge & CRC Press. <https://www.routledge.com/The-Migration-Industry-and-the-Commercialization-of-International-Migration/Gammeltoft-Hansen-Sorensen/p/book/9780415623797>
- Garip, F., & Asad, A. L. (2015). Migrant Networks. In R. A. Scott & S. M. Kosslyn (Eds.), *Emerging Trends in the Social and Behavioral Sciences* (1st ed., pp. 1–13). Wiley. <https://doi.org/10.1002/9781118900772.etrds0220>
- Gerritsen, C. (2015). Agent-based modelling as a research tool for criminological research. *Crime Science*, 4(1), 2. <https://doi.org/10.1186/s40163-014-0014-1>
- Gezie, L. D., Worku, A., Kebede, Y., & Gebeyehu, A. (2019). Sexual violence at each stage of human trafficking cycle and associated factors: A retrospective cohort study on Ethiopian female returnees via three major trafficking corridors. *BMJ Open*, 9(7), e024515.

- GITOC. (2019). Code of Ethics and Standards. Global Initiative against Transnational Organized crime (GITOC). Retrieved from <https://gi-ops.net/about/code-of-ethics/>
- Global Migration Group. (2013). *Exploitation and abuse of international migrants, particularly those in an irregular situation: A human rights approach*. 89.
- Goldstein, H. (1979). Improving Policing: A Problem-Oriented Approach. *Crime & Delinquency*, 25(2), 236–258. <https://doi.org/10.1177/001112877902500207>
- Goss, J., & Lindquist, B. (1995). Conceptualizing International Labor Migration: A Structuration Perspective. *The International Migration Review*, 29(2), 317–351. <https://doi.org/10.2307/2546784>
- GOV.UK. (2022, April 14). PM speech on action to tackle illegal migration: 14 April 2022. GOV.UK. <https://www.gov.uk/government/speeches/pm-speech-on-action-to-tackle-illegal-migration-14-april-2022>
- Grappi, G., & Lucarelli, S. (2022). Bordering power Europe? The mobility-bordering nexus in and by the European Union. *Journal of Contemporary European Studies*, 30(2), 207–219. <https://doi.org/10.1080/14782804.2021.1997728>
- Grégoire, E. (1998). *Sahara nigérien : Terre d'échanges*. Éditions de l'Aube, ORSTOM. https://horizon.documentation.ird.fr/exl-doc/pleins_textes/pleins_textes_7/autrepart/010014753.pdf
- Grinyer, A. (2009). *The ethics of the secondary analysis and further use of qualitative data* (p. 56). <https://sru.soc.surrey.ac.uk/SRU56.pdf>

- Groff, E. R., Johnson, S. D., & Thornton, A. (2019). State of the Art in Agent-Based Modeling of Urban Crime: An Overview. *Journal of Quantitative Criminology*, 35(1), 155–193. <https://doi.org/10.1007/s10940-018-9376-y>
- Guerette, R. T. (2006). Preventing Migrant Deaths: A Possible Role for Situational Crime Prevention. In *Migration, Culture Conflict, Crime and Terrorism*. Routledge.
- Guerette, R. T. (2009). *Analyzing Crime Displacement and Diffusion*. 74.
- Guerette, R. T., & Bowers, K. J. (2009). Assessing the Extent of Crime Displacement and Diffusion of Benefits: A Review of Situational Crime Prevention Evaluations*. *Criminology*, 47(4), 1331–1368. <https://doi.org/10.1111/j.1745-9125.2009.00177.x>
- Guichaoua, Y. (2012). Circumstantial Alliances and Loose Loyalties in Rebellion Making: The Case of Tuareg Insurgency in Northern Niger (2007–2009). In Y. Guichaoua (Ed.), *Understanding Collective Political Violence* (pp. 246–266). Palgrave Macmillan UK. https://doi.org/10.1057/9780230348318_12
- Guidi, C. F., Triandafyllidou, A., & Kuschminder, K. (2023). Extreme hardship, care ethics, and humanitarian protection: Lessons from Libya and Italy. *Mediterranean Politics*, 1–25. <https://doi.org/10.1080/13629395.2023.2283659>
- Gurak, D., & Caces, F. (1992). *Migration networks and the shaping of migration systems*. <https://www.semanticscholar.org/paper/Migration-networks-and-the-shaping-of-migration-Gurak-Caces/819f94fdbe3ecb82618f53cde69c0ad65deee3b5>
- Gutekunst, M., Hackl, A., Leoncini, S., Schwarz, J. S., & Götz, I. (Eds.). (2016). *Bounded Mobilities: Ethnographic Perspectives on Social Hierarchies and Global Inequalities* (p. 296 Pages). transcript publishing.

- Haas, H. de, Castles, S., & Miller, M. J. (2019). *The Age of Migration: International Population Movements in the Modern World*. Bloomsbury Publishing.
- Hamlin, R. (2022). 'Migrants'? 'Refugees'? Terminology Is Contested, Powerful, and Evolving. Migrationpolicy.org. March 18, 2022. Retrieved from <https://www.migrationpolicy.org/article/terminology-migrants-refugees-illegal-undocumented-evolving>
- Hasselbach, C. (2014, October 28). *Opinion: Is refugee rescue attracting more?* | DW | 28.10.2014. DW.COM. <https://www.dw.com/en/opinion-is-refugee-rescue-attracting-more/a-18026378>
- Haug, S. (2008). Migration Networks and Migration Decision-Making. *Journal of Ethnic and Migration Studies*, 34(4), 585–605. <https://doi.org/10.1080/13691830801961605>
- Hawk, M., Coulter, R. W. S., Egan, J. E., Fisk, S., Reuel Friedman, M., Tula, M., & Kinsky, S. (2017). Harm reduction principles for healthcare settings. *Harm Reduction Journal*, 14(1), 70. <https://doi.org/10.1186/s12954-017-0196-4>
- Hayden, S. (2022). *My Fourth Time, We Drowned by Sally Hayden* | Waterstones. <https://www.waterstones.com/book/my-fourth-time-we-drowned/sally-hayden/9780008445577>
- Heisterkamp, L. (2016, October 12). *Tortured for ransom: Extortion on migrant routes*. OpenDemocracy. <https://www.opendemocracy.net/en/beyond-trafficking-and-slavery/tortured-for-ransom-extortion-on-migrant-routes/>

- Hernández-León, R. (2012). Conceptualizing the migration industry. In *The Migration Industry and the Commercialization of International Migration* (pp. 24–44). Routledge. <https://doi.org/10.4324/9780203082737-2>
- Hesseling, R. B. P. (1995). Displacement: A Review of the Empirical Literature. *Crime Prevention Studies*.
- HG Legal Resources. (2022). *What is the Difference Between Abduction and Kidnapping?* - *HG.org*. <https://www.hg.org/legal-articles/what-is-the-difference-between-abduction-and-kidnapping-40587>
- Hillyard, P., & Tombs, S. (2007). From ‘crime’ to social harm? *Crime, Law and Social Change*, 48(1), 9–25. <https://doi.org/10.1007/s10611-007-9079-z>
- Home Office. (2022, April 14). *Home Secretary’s speech on UK and Rwanda Migration and Economic Development Partnership*. GOV.UK. Retrieved from <https://www.gov.uk/government/speeches/home-secretarys-speech-on-uk-and-rwanda-migration-and-economic-development-partnership>
- Horst, H., Pink, S., Postill, J., Hjorth, L., Lewis, T., & Tacchi, J. (2016). *Ethnography in a Digital World*. In *Digital Ethnography: Principles and Practices*.
- Human Rights Watch. (2019). Libya: Detained Migrants at Risk in Tripoli Clashes. *Human Rights Watch*. <https://www.hrw.org/news/2019/04/25/libya-detained-migrants-risk-tripoli-clashes>
- Hunter, G., May, T., & Hough, M. (2017). An Evaluation of the ‘What Works Centre for Crime Reduction’ Final Report. Birkbeck University of London & Institute for Criminal Policy Research. <https://core.ac.uk/download/pdf/157768177.pdf>

Hüsken, T. (2021). Research in dangerous fields: Ethics, morals, and practices in the study of smuggling. In *The Routledge Handbook of Smuggling*. Routledge.

Hutter, S., & Kriesi, H. (2022). Politicising immigration in times of crisis. *Journal of Ethnic and Migration Studies*, 48(2), 341–365.

ICG. (2017, July 31). *How Libya's Fezzan Became Europe's New Border* | Crisis Group.

International Crisis Group. <https://www.crisisgroup.org/middle-east-north-africa/north-africa/libya/179-how-libyas-fezzan-became-europes-new-border>

Illicit Trafficking and Libya's Transition: Profits and Losses | United States Institute of

Peace. (n.d.). Retrieved 20 June 2022, from

<https://www.usip.org/publications/2014/02/illicit-trafficking-and-libyas-transition-profits-and-losses>

ILO. (1930). Convention C029—Forced Labour Convention, 1930 (No. 29). Retrieved from

https://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100_IL O_CODE:C029

ILO. (1957). *Convention C105—Abolition of Forced Labour Convention, 1957 (No. 105)*.

https://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100_IL O_CODE:C105

ILO. (1999). Convention C182—Worst Forms of Child Labour Convention, 1999 (No. 182).

Retrieved from

https://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100_IL O_CODE:C182

ILO. (2017). *Global Estimates of Modern Slavery: Forced Labour and Forced Marriage* [Report].

ILO. (2017). *Global Estimates of Modern Slavery: Forced Labour and Forced Marriage* [Report]. http://www.ilo.org/global/publications/books/WCMS_575479/lang-en/index.htm

IOM. (2017). *DTM Libya—Flow Monitoring Methodology | DTM*.
<https://dtm.iom.int/reports/dtm-libya-flow-monitoring-methodology>

IOM. (2018). *Flow Monitoring Surveys: The Human Trafficking and other Exploitative Practices Indication Survey*. https://www.iom.int/sites/default/files/dtm/Mediterranean_DTM_201801.pdf

IOM. (2019). *Glossary on Migration*.
https://publications.iom.int/system/files/pdf/iml_34_glossary.pdf

IOM. (2020a). *Migration in West and North Africa and across the Mediterranean trends, risks, development and governance* (International Organization for Migration).
<https://publications.iom.int/system/files/pdf/migration-in-west-and-north-africa-and-across-the-mediterranean.pdf>

IOM. (2020b, September 24). *International migration flows, Migration Data Portal*. Migration Data Portal. <https://www.migrationdataportal.org/themes/international-migration-flows>

Jefferson, A., Turner, S., & Jensen, S. (2019). Introduction: On Stuckness and Sites of Confinement. *Ethnos*, 84(1), 1–13. <https://doi.org/10.1080/00141844.2018.1544917>

- Jeffery, R. (1971). *Crime Prevention Through Environmental Design*.
<https://journals.sagepub.com/doi/abs/10.1177/000276427101400409>
- Jennings, B., Cree, V. E., & Kirkwood, S. (2022). Agency and exploitation: Two sides of one coin? Women's experiences of selling sex and engaging with NGOs in Dhaka. *International Social Work*, 65(4), 761–772.
<https://doi.org/10.1177/0020872820959371>
- Johnson, S. D., Guerette, R. T., & Bowers, K. (2014). Crime displacement: What we know, what we don't know, and what it means for crime reduction. *Journal of Experimental Criminology*, 10(4), 549–571. <https://doi.org/10.1007/s11292-014-9209-4>
- Johnson, S. D., Tilley, N., & Bowers, K. J. (2015). Introducing EMMIE: An evidence rating scale to encourage mixed-method crime prevention synthesis reviews. *Journal of Experimental Criminology*, 11(3), 459–473. <https://doi.org/10.1007/s11292-015-9238-7>
- Jones, K., & Sha, H. (2020). Mediated migration: A literature review of migration intermediaries. MIDEQ.
- Katrien, L. (n.d.). *Understanding EU action against migrant smuggling*. 12.
- Kelly, J., Sadeghieh, T., & Adeli, K. (2014). Peer Review in Scientific Publications: Benefits, Critiques, & A Survival Guide. *EJIFCC*, 25(3), 227–243.
- Kempadoo, K., & Shih, E. (2022). *White supremacy, racism, and the coloniality of anti-trafficking*. Routledge
- Kervyn, E., & Shilhav, R. (2017, November). *An Emergency for Whom? The EU Emergency Trust Fund for Africa - migratory routes and development aid in Africa*. Oxfam

- Policy & Practice. <https://policy-practice.oxfam.org/resources/an-emergency-for-whom-the-eu-emergency-trust-fund-for-africa-migratory-routes-620380/>
- Kichling, M. (2016). Migrants as victims: Victimological perspectives of human smuggling and human trafficking. *F3magazine.Unicri.It*.
- Kley, S. (2011). Explaining the Stages of Migration within a Life-course Framework. *European Sociological Review*, 27(4), 469–486. <https://doi.org/10.1093/esr/jcq020>
- Kollias, F. (2021, April 29). Frontex in the Central Mediterranean. *Lighthouse Reports*. <https://www.lighthousereports.nl/investigation/frontex-in-the-central-mediterranean/>
- Kollias, F. (2022, May 6). Frontex, the EU Pushback Agency. *Lighthouse Reports*. <https://www.lighthousereports.nl/investigation/frontex-the-eu-pushback-agency/>
- Koser, K. (2000). Asylum Policies, Trafficking and Vulnerability. *International Migration*, 38(3), 91–111. <https://doi.org/10.1111/1468-2435.00116>
- Koser, K. (n.d.). *Irregular Migration, State Security and Human Security*. 33.
- Kovats-Bernat, J. C. (2002). Negotiating Dangerous Fields: Pragmatic Strategies for Fieldwork amid Violence and Terror. *American Anthropologist*, 104(1), 208–222. <https://doi.org/10.1525/aa.2002.104.1.208>
- Krippendorff, K. (1984). An Epistemological Foundation for Communication. *Journal of Communication*, 34(3), 21–36. <https://doi.org/10.1111/j.1460-2466.1984.tb02171.x>
- Krissman, F. (2005). Sin Coyote Ni Patrón: Why the ‘Migrant Network’ Fails to Explain International Migration. *The International Migration Review*, 39(1), 4–44.

- Kuschminder, K. (2020). Before disembarkation: Eritrean and Nigerian migrants journeys within Africa. *Journal of Ethnic and Migration Studies*, 47(14), 3260–3275.
<https://doi.org/10.1080/1369183X.2020.1804192>
- Kuschminder, K. (2021). Before disembarkation: Eritrean and Nigerian migrants journeys within Africa. *Journal of Ethnic and Migration Studies*, 47(14), 3260–3275.
<https://doi.org/10.1080/1369183X.2020.1804192>
- Kuschminder, K., & Triandafyllidou, A. (2020). Smuggling, Trafficking, and Extortion: New Conceptual and Policy Challenges on the Libyan Route to Europe. *Antipode*, 52(1), 206–226. <https://doi.org/10.1111/anti.12579>
- Kuschminder, K., de Bresser, J., & Siegel, M. (2015). *Irregular Migration Routes to Europe and Factors Influencing Migrants' Destination Choices—UNU Migration Network*. <https://migration.unu.edu/publications/reports/irregular-migration-routes-to-europe-and-factors-influencing-migrants-destination-choices.html>
- Kyle, D., and Dale, J. 2001. “Smuggling the State Back in: Agents of Human Smuggling Reconsidered.” In *Global Human Smuggling: Comparative Perspectives*, edited by David Kyle and Rey Koslowsky, 29–45. Baltimore: Johns Hopkins University Press.
- Lacey, N. (2007). Legal constructions of crime (M. Maguire, R. Morgan, & R. Reiner, Eds.; pp. 179–200). Oxford University Press. <http://www.oup.co.uk/>
- Lainez, N. (2019). Social structure, relationships and reproduction in quasi-family networks: Brokering circular migration of Vietnamese sex workers to Singapore. *Journal of Ethnic and Migration Studies*, 45(9), 1631–1649.
<https://doi.org/10.1080/1369183X.2017.1417028>

- Laycock, G. (2012). Editorial introduction to ‘Opportunity makes the thief. Really? And so what?’ *Crime Science*, 1(1), 2. <https://doi.org/10.1186/2193-7680-1-2>
- League of Nations. (1926). *1926 Slavery Convention or the Convention to Suppress the Slave Trade and Slavery*. <https://www.ohchr.org/sites/default/files/slaverytrade.pdf>
- Leal, D. F., & Harder, N. L. (2021). Global dynamics of international migration systems across South–South, North–North, and North–South flows, 1990–2015. *Applied Network Science*, 6(1), Article 1. <https://doi.org/10.1007/s41109-020-00322-x>
- LeBaron, G. (2021). The Role of Supply Chains in the Global Business of Forced Labour. *Journal of Supply Chain Management*, 57(2), 29–42. <https://doi.org/10.1111/jscm.12258>
- Leclerc, B. (2013). New developments in script analysis for situational crime prevention: Moving beyond offender scripts. In Leclerc, B., & Wortley, R. (Eds.). (2013). *Cognition and crime: Offender decision making and script analyses*. Routledge.
- Leloup, F. (1996). Migration, a complex phenomenon. *International Journal of Anthropology*, 11(2), 101–115. <https://doi.org/10.1007/BF02441416>
- Lima De Perez, J. (2016). A criminological reading of the concept of vulnerability: A case study of Brazilian trafficking victims. *Social & Legal Studies*, 25(1), Article 1. <https://doi.org/10.1177/0964663915593411>
- Logan, D. E., & Marlatt, G. A. (2010). Harm Reduction Therapy: A Practice-Friendly Review of Research. *Journal of Clinical Psychology*, 66(2), 201–214. <https://doi.org/10.1002/jclp.20669>

- Loschi, C., Raineri, L., & Strazzari, F. (2018). *The implementation of EU Crisis Response in Libya: Bridging theory and practice*. 31.
- Lubkemann, S. C. (2008). Involuntary Immobility: On a Theoretical Invisibility in Forced Migration Studies. *Journal of Refugee Studies*, 21(4), 454–475.
<https://doi.org/10.1093/jrs/fen043>
- Lynch, C., & Roper, C. (2011). The Transit Phase of Migration: Circulation of Malaria and Its Multidrug-Resistant Forms in Africa. *PLOS Medicine*, 8(5), e1001040.
<https://doi.org/10.1371/journal.pmed.1001040>
- Mabogunje, A. L. (1970). Systems Approach to a Theory of Rural-Urban Migration. *Geographical Analysis*, 2(1), 1–18. <https://doi.org/10.1111/j.1538-4632.1970.tb00140.x>
- Mai, N. (2013) Embodied cosmopolitanisms: the subjective mobility of migrants working in the global sex industry, *Gender, Place & Culture*, 20:1, 107-124, DOI: 10.1080/0966369X.2011.649350
- Mai, N. (2016). ‘Too Much Suffering’: Understanding the Interplay between Migration, Bounded Exploitation and Trafficking through Nigerian Sex Workers’ Experiences. *Sociological Research Online*, 21(4), 159–172. <https://doi.org/10.5153/sro.4158>
- Mainwaring, Ć., & Brigden, N. (2016). Beyond the Border: Clandestine Migration Journeys. *Geopolitics*, 21(2), 243–262. <https://doi.org/10.1080/14650045.2016.1165575>
- Malakooti, A. (2013). *Mixed Migration: Libya at the Crossroads—Mapping of migration routes from Africa to Europe and drivers of migration in post-revolution Libya*. Altai

Consulting for UNHCR. <http://www.alticonsulting.com/insights/mixed-migration-libya-at-the-crossroads/>

Malakooti, A. (2019). *The Political Economy of Migrant Detention in Libya: Understanding the players and the business models*. GITOC.

Malakooti, A. (2020). *The Intersection of Irregular Migration and Trafficking in West Africa and the Sahel—Understanding the Patterns of Vulnerability*. Global Initiative against Transnational Organized Crime. <https://globalinitiative.net/analysis/smuggling-trafficking-westafrica-sahel/>

Malakooti, A., & Fall, C. (2020). *Migration Trends Across the Mediterranean*. GITOC.

Maltese Ministry for Home Affairs and National Security. (2015). *STRATEGY FOR THE RECEPTION OF ASYLUM SEEKERS AND IRREGULAR MIGRANTS*. 28.

Marcus, G. E. (1995). Ethnography in/of the World System: The Emergence of Multi-Sited Ethnography. *Annual Review of Anthropology*, 24(1), 95–117.
<https://doi.org/10.1146/annurev.an.24.100195.000523>

Marlatt, G. A., Larimer, M. E., & Witkiewitz, K. (2011). *Harm Reduction, Second Edition: Pragmatic Strategies for Managing High-Risk Behaviors*. Guilford Press.

Martinson, R. (n.d.). What works? - Questions and answers about prison reform. *The Public Interest*, 33.

Massari, M. (2015). At the Edge of Europe: The Phenomenon of Irregular Migration from Libya to Italy. In S. Massey & R. Coluccello (Eds.), *Eurafrican Migration: Legal, Economic and Social Responses to Irregular Migration* (pp. 12–37). Palgrave Macmillan UK.

- Massey, D. S., Alarcon, R., Durand, J., & Gonzalez, H. (1987). *Return to Aztlan: The Social Process of International Migration from Western Mexico: 1* (Reprint edition). University of California Press.
- Massey, D. S., Arango, J., Hugo, G., Kouaouci, A., Pellegrino, A., & Taylor, J. E. (1993). Theories of International Migration: A Review and Appraisal. *Population and Development Review*, 19(3), 431–466. <https://doi.org/10.2307/2938462>
- Matrix Chambers. (2023, June 27). *SSHD withdraws new evidential test for 'Reasonable Grounds' decisions in Modern Slavery Statutory Guidance*. Matrix Chambers. Retrieved from <https://www.matrixlaw.co.uk/news/sshd-withdraws-new-evidential-test-for-reasonable-grounds-decisions-in-modern-slavery-statutory-guidance/>
- McAdam, M. (2013). *Exploitation and Abuse of International Migrants, Particularly Those in an Irregular Situation: A Human Rights Approach.*: https://www.unodc.org/documents/human-trafficking/2013/2013_GMG_Thematic_Paper.pdf
- McAdam, M. (2015). What's in a Name? Victim Naming and Blaming in Rights-Based Distinctions between Human Trafficking and Migrant Smuggling. *International Human Rights Law Review*, 4(1), 1–32. <https://doi.org/10.1163/22131035-00401003>
- McAlpine, A., Kiss, L., Zimmerman, C., & Chalabi, Z. (2021). Agent-based modeling for migration and modern slavery research: A systematic review. *Journal of Computational Social Science*, 4(1), 243–332.
- McAlpine. (2021). *Mediated labour migration in the Myanmar-Thailand corridor and precarious outcomes: A mixed methods social network analysis and agent-based*

model [Doctoral, London School of Hygiene & Tropical Medicine].

<https://doi.org/10.17037/PUBS.04664161>

McAuliffe, M. and Koser, K. (2015) Unintended consequences: How Migrant Smugglers are Exploiting the International Protection System,' *Advance*, Australian National University, Winter 2015

McAuliffe, M., & Koser, K. (Eds.). (2017). *A Long Way to Go: Irregular Migration Patterns, Processes, Drivers and Decision-making* (1st ed.). ANU Press.

<https://doi.org/10.22459/LWG.12.2017>

McFate, M., & Laurence, J. H. (2015). *Social Science Goes to War: The Human Terrain System in Iraq and Afghanistan*. Oxford University Press.

McGrath, S., & Watson, S. (2018). Anti-slavery as development: A global politics of rescue. *Geoforum*, 93, 22–31. <https://doi.org/10.1016/j.geoforum.2018.04.013>

McMahon, S., & Sigona, N. (2018). Navigating the Central Mediterranean in a Time of 'Crisis': Disentangling Migration Governance and Migrant Journeys. *Sociology*, 52(3), 497–514. <https://doi.org/10.1177/0038038518762082>

Meadows, D. H. (2011). *Thinking in systems: A primer* (Nachdr.). Chelsea Green Pub.

MEDU. (2020, March). The torture factory -Report on Human Rights Violations Against Migrants and Refugees in Libya (2014-2020). *Medici per i Diritti Umani* (MEDU).

Merton, R. K. (1936). The Unanticipated Consequences of Purposive Social Action. *American Sociological Review*, 1(6), 894–904. <https://doi.org/10.2307/2084615>

- Micallef, M. (2017). *The Human Conveyor Belt: Trends in human trafficking and smuggling in post-revolution Libya*. GITOC.
- Micallef, M., & Reitano, T. (2017). *The anti-human smuggling business and Libya's political end game, North Africa Report 2*. GI-TOC and Institute for Security Studies.
- Micallef, M., Farrah, R., Bish, A., & Tanner, V. (2019). *After the storm: Organized crime across the Sahel-Sahara following upheaval in Libya and Mali*. Global Initiative. <https://globalinitiative.net/analysis/after-the-storm/>
- Micallef, M., Herbert, M., Horsley, R., Bish, A., Fereday, A., & Tinti, P. (2021). *Conflict, Coping and Covid: Changing human smuggling and trafficking dynamics in North Africa and the Sahel in 2019 and 2020*. Global Initiative. <https://globalinitiative.net/analysis/smuggling-trafficking-sahel-2020/>
- Micallef, M., Horsley, R., & Bish, A. (2019). *The human conveyor belt broken - assessing the collapse of the human-smuggling industry in Libya and the central Sahel*. The Global Initiative Against Transnational Organized Crime. <https://globalinitiative.net/the-humanconveyor-belt-broken-2/>.
- Michael, M., Hinnant, L., & Brito, R. (2021, April 28). *Making misery pay: Libya militias take EU funds for migrants*. AP NEWS. <https://apnews.com/article/united-nations-tripoli-ap-top-news-international-news-immigration-9d9e8d668ae4b73a336a636a86bdf27f>
- Millington, K., & Bhardwaj, M. (2017). *Effectiveness of programmes supporting migrants in Africa—World | ReliefWeb*. Liverpool School of Tropical Medicine. <https://reliefweb.int/report/world/effectiveness-programmes-supporting-migrants-africa>

- Molenaar, F., & El Kamouni-Janssen, F. (2017). *Turning the tide*.
https://www.clingendael.org/pub/2017/turning_the_tide/
- Morgenthaler E. & Leclerc, B. (2023) Crime script analysis of drug importation into Australia facilitated by the dark net, *Global Crime*, 24:3, 169-194,
- Morrison, J., & Crosland, B. (2001, April). *The trafficking and smuggling of refugees: The end game in European asylum policy?* UNHCR.
<https://www.unhcr.org/research/working/3af66c9b4/trafficking-smuggling-refugees-end-game-european-asylum-policy-john-morrison.html>
- Mortreux, C., & Barnett, J. (2009). Climate change, migration and adaptation in Funafuti, Tuvalu. *Global Environmental Change*, 19(1), 105–112.
<https://doi.org/10.1016/j.gloenvcha.2008.09.006>
- Mullan-Feroze, B., Dorling, K., & He, D. (2023). *Leave in limbo: survivors of trafficking with uncertain immigration status*. Helen Bamber Foundation. Retrieved from <https://www.helenbamber.org/resources/reportsbriefings/leave-limbo-survivors-trafficking-uncertain-immigration-status>
- Muraszkiewicz, J. (2020). Applying the Non-punishment Principle to Returnees from Terrorist Organisations. In J. Muraszkievicz, T. Fenton, & H. Watson (Eds.), *Human Trafficking in Conflict: Context, Causes and the Military* (pp. 215–232). Springer International Publishing. https://doi.org/10.1007/978-3-030-40838-1_11
- Murphy, C. (2018) ‘Rivers of Blood, Sea of bodies: An analysis of media coverage of migration and trafficking on the High Seas’ in Hackett, J. & Harrington, S. (eds.) *Beasts of the Deep: Sea Creatures and Popular Culture*, John Libbey Publishing Ltd.

- Murphy-Teixidor, A.-M., Bonfiglio, A., Leigh, V., Zakoska-Todorovska, I., Jusselme, D., & Rossi, L. (2020). *Importance of data-driven responses along the Central and Western Mediterranean Routes in Migration In West And North Africa And Across The Mediterranean: Trends, Risks, Development And Governance*. IOM.
- Murphy-Teixidor, A.-M., Bonfiglio, A., Leigh, V., Zakoska-Todorovska, I., Jusselme, D., & Rossi, L. (2020). *Importance of data-driven responses along the Central and Western Mediterranean Routes in IOM, Migration In West And North Africa And Across The Mediterranean: Trends, Risks, Development And Governance*.
- Nagel, M. T. (2020). Mapping Migrant Journeys. *The Journeys Project*.
<https://sites.tufts.edu/journeysproject/maps2/>
- Newman, G. R., Clarke, R. V. G., & Shoham, S. G. (1997). *Rational Choice and Situational Crime Prevention: Theoretical Foundations*. Dartmouth.
- Nováky, N. (2018). The road to Sophia: Explaining the EU's naval operation in the Mediterranean. *European View*, 17(2), 197–209.
<https://doi.org/10.1177/1781685818810359>
- O'Connell Davidson, J. (2015). *Modern Slavery*. Palgrave Macmillan UK.
<https://doi.org/10.1057/9781137297297>
- O'Connell, P. G. J. (1997). Migration Under Uncertainty: “Try Your Luck” or “Wait and See”. *Journal of Regional Science*, 37(2), 331–347. <https://doi.org/10.1111/0022-4146.00057>
- OECD. (2015). *Is this humanitarian migration crisis different?* (Migration Policy Debates No 7). <https://www.oecd.org/migration/Is-this-refugee-crisis-different.pdf>

Official Journal of the EU. (2013). Directive 2013/33/EU of the European Parliament and of the Council of 26 June 2013 laying down standards for the reception of applicants for international protection L 180/96.

Official Journal of the European Union. (2013). *DIRECTIVE 2013/33/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 26 June 2013 laying down standards for the reception of applicants for international protection (recast)*L 180/96 *Official Journal of the European Union* 29.6.2013. <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32013L0033&from=EN>

OHCHR. (2021). “*Lethal Disregard*” *Search and rescue and the protection of migrants in the central Mediterranean Sea*. United Nations High Commissioner for Human Rights (OHCHR). <https://www.ohchr.org/sites/default/files/Documents/Issues/Migration/OHCHR-thematic-report-SAR-protection-at-sea.pdf>

OHCHR. (2022). *The criminalisation of irregular migration*. UN Human Rights Office. <https://www.ohchr.org/sites/default/files/Documents/Issues/Migration/GlobalCompactMigration/CriminalisationIrregularImmigration.pdf>

OHCHR. (2023). About arbitrary detention. Office of the United Nations High Commissioner for Human Rights (OHCHR). Retrieved from <https://www.ohchr.org/en/about-arbitrary-detention>

Okunade, S. K., & Ogunnubi, O. (2021). A “Schengen” Agreement in Africa? African Agency and the ECOWAS Protocol on Free Movement. *Journal of Borderlands Studies*, 36(1), 119–137. <https://doi.org/10.1080/08865655.2018.1530128>

- Onarheim, K., Egli-Gany, D., & Aftab, W. (2019, December). *Occupational health outcomes among international migrant workers*. *The Lancet Global Health* 7(12).
https://www.researchgate.net/publication/337665126_Occupational_health_outcomes_among_international_migrant_workers
- Oxfam. (2020). *The EU Trust Fund for Africa: Trapped between aid policy and migration politics*. Oxfam Policy & Practice. <https://policy-practice.oxfam.org/resources/the-eu-trust-fund-for-africa-trapped-between-aid-policy-and-migration-politics-620936/>
- Pacciardi, A., & Berndtsson, J. (2022). EU border externalisation and security outsourcing: Exploring the migration industry in Libya. *Journal of Ethnic and Migration Studies*, 48(17), 4010–4028. <https://doi.org/10.1080/1369183X.2022.2061930>
- Palillo, M. (2020). He must be a man'. Uncovering the gendered vulnerabilities of young Sub-Saharan African men in their journeys to and in Libya. *Journal of Ethnic & Migration Studies*. <https://doi.org/10.1080/1369183X.2020.1816813>
- Papadopoulou-Kourkoula, A. (2008). *Transit Migration*. Palgrave Macmillan UK.
<https://doi.org/10.1057/9780230583801>
- Pappas, C., & Williams, I. (2011). Grey Literature: Its Emerging Importance. *Journal of Hospital Librarianship*, 11(3), 228–234.
<https://doi.org/10.1080/15323269.2011.587100>
- Paulyukopis, A. A. B., Karpavichyus, K. I., Kil'disheva, O. V., & Knunyants, I. L. (1968). Cancerolytic peptides. *Bulletin of the Academy of Sciences of the USSR, Division of Chemical Science*, 17(12), 2625–2627. <https://doi.org/10.1007/BF00907787>

- Pearson, E. (2002). *Human traffic, human rights: Redefining victim protection*. Anti-Slavery International.
- Pellerin, M. (2018). *The Niger-Libya Border: Securing It without Stabilising It?* Notes de l'Ifri, Ifri.
https://www.ifri.org/sites/default/files/atoms/files/pellerin_niger_libya_2018.pdf
- Perkowski, N., & Squire, V. (2019). The anti-policy of European anti-smuggling as a site of contestation in the Mediterranean migration 'crisis'. *Journal of Ethnic and Migration Studies*, 45(12), 2167–2184. <https://doi.org/10.1080/1369183X.2018.1468315>
- Peter, M., & Strazzari, F. (2017). Securitisation of research: Fieldwork under new restrictions in Darfur and Mali. *Third World Quarterly*, 38(7), 1531–1550.
<https://doi.org/10.1080/01436597.2016.1256766>
- Phillips, J. (2019). *Working with Detained Populations in Greece and Libya: A Comparative Study of the Ethical Challenges Facing The International Rescue Committee*. The International Rescue Committee In Partnership With Stichting Vluchteling.
<https://www.rescue.org/sites/default/files/document/3932/ethicalchallengesofworkingwithpopulationsindetention-revisedjune2019.pdf>
- Piggott-McKellar, A. E., McNamara, K. E., Nunn, P. D., & Sekinini, S. T. (2019). Moving People in a Changing Climate: Lessons from Two Case Studies in Fiji. *Social Sciences*, 8(5), Article 5. <https://doi.org/10.3390/socsci8050133>
- Piper, N., Segrave, M., & Napier-Moore, R. (2015). Editorial: What's in a Name? Distinguishing forced labour, trafficking and slavery. *Anti-Trafficking Review*, 5, Article 5. <https://doi.org/10.14197/atr.20121551>

- Plambech, S., Chemlali, A., & Cerio, M. C. (2021). Women on the move: Trafficking, sex work and reproductive health among West African migrant women (Research Report 2022:01). DIIS Report. <https://www.econstor.eu/handle/10419/272803>
- Plant, R. (2015). Debate: Forced Labour, Slavery and Human Trafficking: When do definitions matter? *Anti-Trafficking Review*, 5, 5. <https://doi.org/10.14197/atr.201215511>
- POP center. (2016, September 27). *25 Techniques of SCP*. ASU Center for Problem-Oriented Policing. <https://popcenter.asu.edu/content/25-techniques-0>
- Pratt, T. C., & Turanovic, J. J. (2016). Lifestyle and Routine Activity Theories Revisited: The Importance of “Risk” to the Study of Victimization. *Victims & Offenders*, 11(3), 335–354. <https://doi.org/10.1080/15564886.2015.1057351>
- Profiles and reasons for departure. (n.d.). *Mixed Migration Centre*. Retrieved 30 May 2022, from <https://mixedmigration.org/resource/4mi-trend-report-west-africa-september-2018/>
- Prpic, M. (2023). Understanding EU action against human trafficking. European Parliamentary Research Service. Retrieved from [https://www.europarl.europa.eu/RegData/etudes/BRIE/2021/690616/EPRS_BRI\(2021\)690616_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/BRIE/2021/690616/EPRS_BRI(2021)690616_EN.pdf)
- Quirk, J. (2023, June 5). Human trafficking and the politics of survivor engagement. openDemocracy. Retrieved April 7, 2024, from <https://www.opendemocracy.net/en/beyond-trafficking-and-slavery/trafficking-survivors-arent-just-stories-to-be-sold/>

- Raby, K., & Chazal, N. (2022). The Myth of the ‘Ideal Offender’: Challenging persistent human trafficking stereotypes through emerging Australian cases. *Anti-Trafficking Review*, 18(18). <https://doi.org/10.14197/atr.201222182>
- Raineri, L. (2018). Human smuggling across Niger: State-sponsored protection rackets and contradictory security imperatives. *The Journal of Modern African Studies*, 56(1), 63–86. <https://doi.org/10.1017/S0022278X17000520>
- Raineri, L. (2020). *The collateral damage of the war on smugglers along the Central Mediterranean Route*. 5.
- Raineri, L., & Strazzari, F. (2021). Dissecting the EU response to the ‘migration crisis’. In *The EU and crisis response* (pp. 201–226). Manchester University Press. <https://www.manchesteropenhive.com/view/9781526148346/9781526148346.00015.xml>
- Raineri, L., Golovka, E., Diall, Y., Bello, A., & Tall, M. (2019, November). *Navigating borderlands in the Sahel Border security governance and mixed migration in Liptako-Gourma*. Mixed Migration Centre. <https://reliefweb.int/report/mali/navigating-borderlands-sahel-border-security-governance-and-mixed-migration-liptako>
- Raty, T., & Shilhav, R. (2020). *The EU Trust Fund for Africa: Trapped between aid policy and migration politics*. Oxfam. <https://doi.org/10.21201/2020.5532>
- Raube, S. (2023). Anticipatory consent to military intervention: Analysis in the wake of the coup d’état in Niger in 2023*. *Journal on the Use of Force and International Law*, 10(2), 201–251. <https://doi.org/10.1080/20531702.2023.2270283>

- Rauber, M. (2007). *Noncognitive Skills and Success in Life: The Importance of Motivation and Self-Regulation*. 32.
- Reitano, T., Tinti, P., Shaw, M., & Bird, L. (2017). *Integrated Responses to Human Smuggling from the Horn of Africa to Europe*. The Global Initiative against Transnational Organized Crime. <https://globalinitiative.net/wp-content/uploads/2017/05/global-initiative-human-smuggling-from-the-horn-of-africa-may-2017-web.pdf>
- Reiter, S. S., & Frei, K. M. (2019). Interpreting Past Human Mobility Patterns: A Model. *European Journal of Archaeology*, 22(4), 454–469. <https://doi.org/10.1017/ea.2019.35>
- Repetto, T. A. (1976). Crime Prevention and the Displacement Phenomenon. *Crime & Delinquency*, 22(2), 166–177. <https://doi.org/10.1177/001112877602200204>
- Reques L., Aranda-Fernandez, E., Rolland, C., Gripon, A., Fallet, N., Reboul, C., Godard, N., & Luhmann, N. (2020). Episodes of violence suffered by migrants transiting through Libya: A cross-sectional study in “Médecins du Monde’s” reception and healthcare centre in Seine-Saint-Denis, France. *Conflict and Health*, 14(12). <https://doi.org/10.1186/s13031-020-0256-3> 24C.
- Rhodes, T. (2002). The ‘risk environment’: A framework for understanding and reducing drug-related harm. *International Journal of Drug Policy*, 13(2), 85–94. [https://doi.org/10.1016/S0955-3959\(02\)00007-5](https://doi.org/10.1016/S0955-3959(02)00007-5)
- Ritter, A., & Cameron, J. (2006). A review of the efficacy and effectiveness of harm reduction strategies for alcohol, tobacco and illicit drugs. *Drug and Alcohol Review*, 25(6), 611–624. <https://doi.org/10.1080/09595230600944529>

- Roks, R. A., Kruisbergen, E. W., & Kleemans, E. R. (2022). Walls of silence and organized crime: A theoretical and empirical exploration into the shielding of criminal activities from authorities. *Trends in Organized Crime*. <https://doi.org/10.1007/s12117-022-09447-0>
- Ronzitti, N. (2009). *The Treaty on Friendship, Partnership and Cooperation between Italy and Libya: New Prospects for Cooperation in the Mediterranean?* 9.
- Rosés, R., Kadar, C., & Malleson, N. (2021). A data-driven agent-based simulation to predict crime patterns in an urban environment. *Computers, Environment and Urban Systems*, 89, 101660. <https://doi.org/10.1016/j.compenvurbsys.2021.101660>
- Salazar, J. (2017). *The EU's Internal and External Responses to the European Immigration Crisis*. 5, 21.
- Salt, J., & Stein, J. (1997). Migration as a Business: The Case of Trafficking. *International Migration*, 35(4), 467–494. <https://doi.org/10.1111/1468-2435.00023>
- Samuel Hall. (2017, January). *Selling Sand in the Desert, The Economic Impact of Migration in Agadez—Niger* | ReliefWeb. <https://reliefweb.int/report/niger/selling-sand-desert-economic-impact-migration-agadez>
- Sanchez, G. (2017). Critical Perspectives on Clandestine Migration Facilitation: An Overview of Migrant Smuggling Research. *Journal on Migration and Human Security*, 5(1), 9–27. <https://doi.org/10.1177/233150241700500102>
- Sanchez, G. (2019). *Beyond militias and tribes: The facilitation of migration in Libya* Working Paper, EUI RSCAS, 2020/09, Migration Policy Centre. Retrieved from

<https://migrationpolicycentre.eu/docs/trainings/tunisia/Facilitation%20-Migration-Libya.pdf>

Sanchez, G. (2020). *Migrant smuggling in the Libyan context: Re-examining the evidence*.

International Organization for Migration. <https://hdl.handle.net/1814/68575>

Sarrar, S. (2008, August 30). Gaddafi and Berlusconi sign accord worth billions. *Reuters*.

<https://www.reuters.com/article/uk-libya-italy-idUKLU1618820080830>

Schapendonk, J. (2010). Staying put in moving sands. The stepwise migration process of sub-Saharan African migrants heading north. *138*.

<https://repository.ubn.ru.nl/handle/2066/86982>

Schapendonk, J. (2012). Migrants' Im/Mobilities on Their Way to the EU: Lost in Transit?

Tijdschrift Voor Economische En Sociale Geografie, *103*(5), 577–583.

<https://doi.org/10.1111/j.1467-9663.2012.00735.x>

Schapendonk, J. (2015). What if Networks Move? Dynamic Social Networking in the

Context of African Migration to Europe. *Population, Space and Place*, *21*(8), 809–

819. <https://doi.org/10.1002/psp.1860>

Schapendonk, J., & Steel, G. (2014). Following Migrant Trajectories: The Im/Mobility of

Sub-Saharan Africans en Route to the European Union. *Annals of the Association of American Geographers*, *104*(2), 262–270.

<https://doi.org/10.1080/00045608.2013.862135>

Scheele, J. (2012). *Smugglers and Saints of the Sahara: Regional Connectivity in the*

Twentieth Century. Cambridge University Press.

<https://doi.org/10.1017/CBO9781139135412>

- Schewel, K. (2020). Understanding Immobility: Moving Beyond the Mobility Bias in Migration Studies. *International Migration Review*, 54(2), 328–355.
<https://doi.org/10.1177/0197918319831952>
- Schloenhardt, A., & Macdonald, H. (2017). Barriers to Ratification of the United Nations Protocol Against the Smuggling of Migrants. *Asian Journal of International Law*, 7(1), 13–38. <https://doi.org/10.1017/S2044251315000211>
- Schöffberger, I., & Rango, M. (2020). *COVID-19 and migration in West and North Africa and across the Mediterranean*. 13.
- Schwarz, I. (2020). Migrants moving through mobility regimes: The trajectory approach as a tool to reveal migratory processes. *Geoforum*, 116, 217–225.
<https://doi.org/10.1016/j.geoforum.2018.03.007>
- Sheller, M., & Urry, J. (2006). The New Mobilities Paradigm. *Environment and Planning A: Economy and Space*, 38(2), 207–226. <https://doi.org/10.1068/a37268>
- Shelley, L. (2010). *Human Trafficking: A Global Perspective*. Cambridge University Press.
<https://doi.org/10.1017/CBO9780511760433>
- Shum, T. C. T. (2022). Stuck in transit: Asylum-seeking habitus and onward migration aspirations of Sri Lankan Tamil asylum-seekers in Bangkok. *Migration and Development*, 11(3), 974–993. <https://doi.org/10.1080/21632324.2020.1851491>
- Simon, H. A. (1983). *Reason in Human Affairs*. Stanford University Press.
- Siraj, N., & Bal, E. (2017). ‘Hunger has brought us into this jungle’: Understanding mobility and immobility of Bengali immigrants in the Chittagong Hills of Bangladesh. *Social Identities*, 23(4), 396–412. <https://doi.org/10.1080/13504630.2017.1281443>

- Skeldon, R. (2012). Going Round in Circles: Circular Migration, Poverty Alleviation and Marginality. *International Migration*, 50(3), 43–60. <https://doi.org/10.1111/j.1468-2435.2012.00751.x>
- Skilbrei, M.-L., & Tveit, M. (2008). Defining Trafficking through Empirical Work: Blurred Boundaries and their Consequences. *Gender, Technology and Development*, 12(1), 9–30. <https://doi.org/10.1177/097185240701200103>
- Skrivankova, K. (2010, November 23). *Between decent work and forced labour: Examining the continuum of exploitation*. Joseph Rowntree Foundation. <https://www.jrf.org.uk/report/between-decent-work-and-forced-labour-examining-continuum-exploitation>
- Smit, J. (2011). *The political origins and development of Australia's people smuggling legislation: Evil smugglers or extreme rhetoric?* https://www.academia.edu/70512391/The_political_origins_and_development_of_Australia_s_people_smuggling_legislation_Evil_smugglers_or_extreme_rhetoric
- Smith, M. J. (2017). Expanding the Script Analytic Approach Using Victim Narratives: Learning About Robberies of Taxi Drivers from the Drivers Themselves. In B. LeClerc & E. U. Savona (Eds.), *Crime Prevention in the 21st Century: Insightful Approaches for Crime Prevention Initiatives* (pp. 77–98). Springer International Publishing.
- Smith, M. J., Clarke, R. V., & Pease, K. (2002). *ANTICIPATORY BENEFITS IN CRIME PREVENTION*. 18.

- Snel, E., Bilgili, Ö., & Staring, R. (2021). Migration trajectories and transnational support within and beyond Europe. *Journal of Ethnic and Migration Studies*, 47(14), 3209–3225. <https://doi.org/10.1080/1369183X.2020.1804189>
- Soon, J. M., Manning, L., & Smith, R. (2019). Advancing understanding of pinch-points and crime prevention in the food supply chain. *Crime Prevention and Community Safety*, 21. <https://doi.org/10.1057/s41300-019-00059-5>
- Soudijn, M., & Kleemans, E. R. (2009). Chinese organized crime and situational context: Comparing human smuggling and synthetic drugs trafficking. *Crime, Law and Social Change*, 52. <https://doi.org/10.1007/s10611-009-9203-3>
- Spener, D. (2009a). *Some Critical Reflections on the Migration Industry Concept*. 42.
- Spener, D. (2009b, November 25). *Clandestine Crossings: Migrants and Coyotes on the Texas-Mexico Border*. <https://www.amazon.co.uk/Clandestine-Crossings-Migrants-Coyotes-Texas-Mexico/dp/0801475899>
- Squire, V., Dimitriadi, N., Perkowski, N., Pisani, M., Stevens, D., & Vaughan-Williams, N. (2017). *Crossing the Mediterranean Sea by Boat Mapping and Documenting Migratory Journeys and Experiences—Final Project Report*. https://warwick.ac.uk/fac/soc/pais/research/projects/crossingthemed/ctm_final_report_4may2017.pdf%20Crossing%20the%20Mediterranean%20Sea%20by%20Boat%20Mapping%20and%20Documenting%20Migratory%20Journeys%20and%20Experiences%20Final%20Project%20Report
- Squires, A. (2009). Methodological Challenges in Cross-Language Qualitative Research: A Research Review. *International Journal of Nursing Studies*, 46(2), 277–287. <https://doi.org/10.1016/j.ijnurstu.2008.08.006>

- Stevens, A., Kingdon, C., & Devakumar, D. (2023). The UK Illegal Migration Bill: A child rights violation and safeguarding catastrophe. *The Lancet Child & Adolescent Health*, 7(7), 445–447. [https://doi.org/10.1016/S2352-4642\(23\)00104-9](https://doi.org/10.1016/S2352-4642(23)00104-9)
- Stocker, V. (2017). *A Rapid Assessment of Municipalities of Departure of Migrants in Libya*. Altai Consulting. <https://www.altaiconsulting.com/insights/a-rapid-assessment-of-municipalities-of-departure-of-migrants-in-libya->
- Such, E., Laurent, C., & Salway, S. (2017, December 7). *Modern slavery and public health*. GOV.UK. <https://www.gov.uk/government/publications/modern-slavery-and-public-health/modern-slavery-and-public-health>
- Tayebi, M. A., Ester, M., Glässer, U., & Brantingham, P. L. (2014). CRIMETRACER: Activity space-based crime location prediction. *2014 IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining (ASONAM 2014)*, 472–480. <https://doi.org/10.1109/ASONAM.2014.6921628>
- Telep, C.W., Weisburd, D., Gill, C.E., Vitter Z. & Teichman, D. (2014) Displacement of crime and diffusion of crime control benefits in large-scale geographic areas: a systematic review. *J Exp Criminol* 10, 515–548. <https://doi.org/10.1007/s11292-014-9208-5>
- The Associated Press. (2019, April 5). *The Latest: France says some aid groups help smugglers*. ABC News. <https://abcnews.go.com/International/wireStory/latest-protesting-migrants-block-athens-train-station-62193932>
- Tinti, P., & Reitano, T. (2017). *Migrant, Refugee, Smuggler, Saviour* | Hurst Publishers. HURST. <https://www.hurstpublishers.com/book/migrant-refugee-smuggler-saviour/>

- Tinti, P., & Westcott, T. (2016). *The Niger-Libya corridor: Smugglers' perspectives*. Institute for Security Studies and the Global Initiative against Transnational Organized Crime. Retrieved from https://issafrica.s3.amazonaws.com/site/uploads/paper299_2.pdf
- Tjaden J., Morgenstern, S., & Laczko, F. (2018). Evaluating the impact of information campaigns in the field of migration: A systematic review of the evidence, and practical guidance. IOM's Global Migration Data Analysis Centre. Retrieved from: https://gmdac.iom.int/sites/g/files/tmzbd11416/files/documents/evaluating_the_impact.pdf
- Tjaden, J. (2022). Risky journeys – Risk and decision-making among potential irregular migrants in Senegal and Guinea. *International Migration*, n/a(n/a). <https://doi.org/10.1111/imig.13003>
- Toaldo, M. (2017, June 15). Don't close borders, manage them: How to improve EU policy on migration through Libya – European Council on Foreign Relations. *ECFR*. https://ecfr.eu/publication/dont_close_borders_manage_them_7297/
- Todaro, M. P., & Maruszko, L. (1987). Illegal Migration and US Immigration Reform: A Conceptual Framework. *Population and Development Review*, 13(1), 101–114. <https://doi.org/10.2307/1972122>
- Tondo, L. (2021a, April 13). Libya releases man described as one of world's most wanted human traffickers. *The Guardian*. Retrieved from <https://www.theguardian.com/world/2021/apr/13/libya-releases-most-wanted-human-trafficker-bija>

- Tondo, L. (2021b, May 5). Revealed: 2,000 refugee deaths linked to illegal EU pushbacks. *The Guardian*. Retrieved from <https://www.theguardian.com/global-development/2021/may/05/revealed-2000-refugee-deaths-linked-to-eu-pushbacks>
- Torelli, S. M. (2018, April 17). Migration through the Mediterranean: Mapping the EU response – European Council on Foreign Relations. *ECFR*.
https://ecfr.eu/special/mapping_migration/
- Travis, A. (2014, October 27). UK axes support for Mediterranean migrant rescue operation. *The Guardian*. <https://www.theguardian.com/politics/2014/oct/27/uk-mediterranean-migrant-rescue-plan>
- Triandafyllidou, A. (2019). The Migration Archipelago: Social Navigation and Migrant Agency. *International Migration*, 57(1), 5–19. <https://doi.org/10.1111/imig.12512>
- Triandafyllidou, A., Bartolini, L., & Guidi, C. F. (2019). *Exploring the links between enhancing regular pathways and discouraging irregular migration: A discussion paper to inform future policy deliberations* [Working Paper].
<https://cadmus.eui.eu/handle/1814/61251>
- Tubaro, P. (2015, October 18). Research ethics in secondary data: What issues? *Data Big and Small*. <https://databigandsmall.com/2015/10/18/research-ethics-in-secondary-data-what-issues/>
- Tubiana, J., & Gramizzi, C. (2017). *Tubu trouble: State and statelessness in the Chad-Sudan-Libya triangle*. Small arms Survey. https://www.acaps.org/sites/acaps/files/key-documents/files/tubu_troubles_-_state_and_statelessness_in_the_chad-sudan-libya_triangle.pdf

- Tubiana, J., & Purbrick, S. (2022). *Out of Libya Opening Safe Pathways for Vulnerable Migrants Stuck in Libya*. Médecins Sans Frontières (MSF). Retrieved from <https://www.msf.org/out-libya-opening-safe-pathways-migrants-stuck-libya>
- Tubiana, J., Warin, C., & Saeneen, G. M. (2018). *Multilateral Damage: The impact of EU migration policies on central Saharan routes*. Clingendael Institute. <https://www.clingendael.org/pub/2018/multilateral-damage/>
- Tyldum, G., & Lillevik, R. (2021). *Migration policies and irregular migration into Europe. A review of the current knowledge base*. Fafo Paper. <https://www.faf.no/images/pub/2021/10339.pdf>
- UK Parliament. (2023, October 9). Nationality and Borders Bill—Hansard—UK Parliament. Nationality and Borders Bill Volume 699: Debated on Monday 19 July 2021. Retrieved from <https://hansard.parliament.uk/commons/2021-07-19/debates/FC19E458-F75D-480D-A20D-CD1E7ADC937E/NationalityAndBordersBill>
- UN General Assembly. (2000). *UNITED NATIONS CONVENTION AGAINST TRANSNATIONAL ORGANIZED CRIME AND THE PROTOCOLS THERETO*. 92.
- UN. (2000). United Nations Convention Against Transnational Organized Crime (UNTOC) and the Protocols Thereto. Retrieved from <https://www.unodc.org/unodc/en/organized-crime/intro/UNTOC.html>
- UNHCR. (2019). Eritrean, Guinean and Sudanese Refugees and Migrants in Italy. www.refworld.org/docid/5c667ab84.html;

UNHCR. (2019a). *DESPERATE JOURNEYS - Refugees and migrants arriving in Europe and at Europe's borders—JANUARY – DECEMBER 2018—UNHCR*. Desperate Journeys - UNHCR. <https://www.unhcr.org/desperatejourneys/>

UNHCR. (2019b). *Eritrean, Guinean and Sudanese Refugees and Migrants in Italy*. www.refworld.org/docid/5c667ab84.html;

UNHCR. (2020). Malta Sea Arrivals and Asylum Statistics 2018-2019. https://www.unhcr.org/mt/wp-content/uploads/sites/54/2020/05/Malta-Sea-Arrivals-and-Asylum-Statistics_2019_UNHCRFactsheet_allyear.pdf

UNHCR. (2022a). *Refugee Crisis in Europe: Aid, Statistics and News | USA for UNHCR*. <https://www.unrefugees.org/emergencies/refugee-crisis-in-europe/>

UNHCR. (2022b, June 11). *No end in sight*. ArcGIS StoryMaps. <https://storymaps.arcgis.com/stories/07502a24ce0646bb9703ce96630b15fa>

UNHCR. (2022c, September). *Mediterranean Situation—Data*. <https://data.unhcr.org/en/situations/mediterranean/location/5205>

UNODC. (2011). *The role of organized crime in the smuggling of migrants from West Africa to the European Union*. United Nations: Office on Drugs and Crime. [//www.unodc.org/unodc/en/human-trafficking/migrant-smuggling/the-role-of-organized-crime-in-the-smuggling-of-migrants-from-west-africa-to-the-european-union.html](http://www.unodc.org/unodc/en/human-trafficking/migrant-smuggling/the-role-of-organized-crime-in-the-smuggling-of-migrants-from-west-africa-to-the-european-union.html)

UNODC. (2013). Abuse of a position of vulnerability and other “means” within the definition of trafficking in persons. Issue Paper, United Nations Office on Drugs and Crime (UNODC). Retrieved from <https://www.unodc.org/documents/human->

trafficking/2012/UNODC_2012_Issue_Paper_-_Abuse_of_a_Position_of_Vulnerability.pdf

UNODC. (2015). *The concept of exploitation in the trafficking in persons protocol*.

UNODC. (2015). *The concept of exploitation in the trafficking in persons protocol*. Issue Paper, United Nations Office on Drugs and Crime (UNODC). Retrieved from https://www.unodc.org/documents/congress/background-information/Human_Trafficking/UNODC_2015_Issue_Paper_Exploitation.pdf

UNODC. (2018). *Global Study on Smuggling of Migrants*.

https://www.unodc.org/documents/data-and-analysis/glosom/GLOSOM_2018_web_small.pdf

UNODC. (2021, May 24). *WEST AFRICA, NORTH AFRICA AND THE CENTRAL MEDITERRANEAN Key Findings on the Characteristics of Migrant Smuggling in West Africa, North Africa and the Central Mediterranean*. UNODC Observatory on Smuggling of Migrants.

<https://storymaps.arcgis.com/stories/9b5bd3d4d6624d44b5ddae6aa5af1da3>

UNODC.org. (2024). The Protocol for Migrant Smuggling. United Nations: Office on Drugs and Crime. [//www.unodc.org/unodc/en/human-trafficking/migrant-smuggling/protocol.html](https://www.unodc.org/unodc/en/human-trafficking/migrant-smuggling/protocol.html)

UNSC. (2017). *S/2017/466*.

<https://www.undocs.org/Home/Mobile?FinalSymbol=S%2F2017%2F466&Language=E&DeviceType=Desktop&LangRequested=False>

- UNSC. (2022). *ABD AL RAHMAN AL-MILAD* | *United Nations Security Council*.
<https://www.un.org/securitycouncil/sanctions/1970/materials/summaries/individual/abd-al-rahman-al-milad>
- UNTC. (1956). *Supplementary Convention on the Abolition of Slavery, the Slave Trade, and Institutions and Practices Similar to Slavery Geneva, 7 September 1956*. United Nations Treaty Collection.
https://treaties.un.org/pages/ViewDetailsIII.aspx?src=TREATY&mtdsg_no=XVIII-4&chapter=18&Temp=mtdsg3&clang=_en
- Upton, G., & Cook, I. (2008). A Dictionary of Statistics. In *A Dictionary of Statistics*. Oxford University Press.
<https://www.oxfordreference.com/display/10.1093/acref/9780199541454.001.0001/acref-9780199541454>
- Urbina, I. (2021, December 22). *Despite Calls for Reform, Libya Appoints Notorious Militia Leader to Handle Migrants | The Secretive Prisons That Keep Migrants Out of Europe*. <https://www.theoutlawocean.com/investigations/the-secretive-prisons-that-keep-migrants-out-of-europe/subsequent-coverage/despite-calls-for-reform-libya-appoints-notorious-militia-leader-to-handle-migrants/>
- van der Leun, J., & van Schijndel, A. (2016). Emerging from the shadows or pushed into the dark? The relation between the combat against trafficking in human beings and migration control. *International Journal of Law, Crime and Justice*, 44, 26–42.
<https://doi.org/10.1016/j.ijlcj.2015.04.001>

- van der Watt, M., & van der Westhuizen, A. (2017). (Re)configuring the criminal justice response to human trafficking: A complex-systems perspective. *Police Practice and Research, 18*(3), 218–229. <https://doi.org/10.1080/15614263.2017.1291560>
- van Liempt, I. (2007). Navigating borders: Inside perspectives on the process of human smuggling into the Netherlands. *Bibliovault OAI Repository, the University of Chicago Press*. <https://doi.org/10.5117/9789053569306>
- van Liempt, I., & Sersli, S. (2012). State Responses and Migrant Experiences with Human Smuggling: A Reality Check. *Antipode, 45*, 1029–1046. <https://doi.org/10.1111/j.1467-8330.2012.01027.x>
- van Meeteren, M., & Wiering, E. (2019). Labour trafficking in Chinese restaurants in the Netherlands and the role of Dutch immigration policies. A qualitative analysis of investigative case files. *Crime, Law and Social Change, 72*(1), 107–124. <https://doi.org/10.1007/s10611-019-09853-6>
- van Veldhuizen, T. S., Horselenberg, R., Landström, S., Granhag, P. A., & van Koppen, P. J. (2017). Interviewing asylum seekers: A vignette study on the questions asked to assess credibility of claims about origin and persecution. *Journal of Investigative Psychology and Offender Profiling, 14*(1), 3–22. <https://doi.org/10.1002/jip.1472>
- Vasiliauskaite, V., Evans, T. S., & Expert, P. (2022). Cycle analysis of Directed Acyclic Graphs. *Physica A: Statistical Mechanics and Its Applications, 596*, 127097. <https://doi.org/10.1016/j.physa.2022.127097>
- Vecsey, M. (2022). From West Africa to the Central Mediterranean Route, European Union and Member States' Responses to Handle the Migration Crisis. *Doctoral (PhD)*

Dissertation, NATIONAL UNIVERSITY OF PUBLIC SERVICE Doctoral School of Military Sciences, 285.

Vermeulen, M., Amzat, A., & Zandonini, G. (2019, December 9). *Europe spends billions stopping migration. Good luck figuring out where the money actually goes.* The Correspondent. <https://thecorrespondent.com/154/europe-spends-billions-stopping-migration-good-luck-figuring-out-where-the-money-actually-goes>

Vigh, H. (2006). *Navigating terrains of war: Youth and soldiering in Guinea-Bissau.* Berghahn Books.

Vigh, H. (2009). *Motion squared: A second look at the concept of social navigation.* <https://journals.sagepub.com/doi/10.1177/1463499609356044>

Wagner, L. (2021). *The Ecosystem of Illegal Gold Mining.* Florida International University. Retrieved from https://digitalcommons.fiu.edu/cgi/viewcontent.cgi?article=1042&context=jgi_research

Waters, N., Freudenthal, E., & Williams, L. (2020, October 23). *Frontex at Fault: European Border Force Complicit in 'Illegal' Pushbacks.* Bellingcat. <https://www.bellingcat.com/news/2020/10/23/frontex-at-fault-european-border-force-complicit-in-illegal-pushbacks/>

Weirich, C. A. (2019). *Situational Crime Prevention of Antiquities Trafficking: A Crime Script Analysis.* 312.

Weisburd, D., Eck, J., Braga, A., Telep, C., Cave, B., Bowers, K., Bruinsma, G., Gill, C., Groff, E., Hibdon, J., Hinkle, J., Johnson, S., Lawton, B., Lum, C., Ratcliffe, J.,

- Rengert, G., Taniguchi, T., & Yang, S.-M. (2016). Place Matters: Criminology for the Twenty-First Century. In *Place Matters: Criminology for the Twenty-First Century*. <https://doi.org/10.1017/CBO9781139342087>
- Windzio, M., Teney, C., & Lenkewitz, S. (2021). A network analysis of intra-EU migration flows: How regulatory policies, economic inequalities and the network-topology shape the intra-EU migration space. *Journal of Ethnic and Migration Studies*. <https://www.tandfonline.com/doi/full/10.1080/1369183X.2019.1643229>
- Wittenberg, L. (2017). Managing Mixed Migration: The Central Mediterranean Route to Europe. *International Peace Institute*, 24.
- Women Refugee Commission. (2019). “More Than One Million Pains”: Sexual Violence Against Men and Boys on the Central Mediterranean Route to Italy - Italy | *ReliefWeb*. <https://reliefweb.int/report/italy/more-one-million-pains-sexual-violence-against-men-and-boys-central-mediterranean-route>
- Woolley, B. (2015). Recognizing the Limitations of Journalism as Academic Research while Arguing for Change. *Asia Pacific Media Educator*, 25(1), 33–40. <https://doi.org/10.1177/1326365X15575568>
- Words Matter: No Human Being is Illegal* | *Immigration and Human Rights Law Review*. (2019, May 20). <https://lawblogs.uc.edu/ihr/r/2019/05/20/words-matter-no-human-being-is-illegal/>
- Wortley, R. (2001). A Classification of Techniques for Controlling Situational Precipitators of Crime. *Security Journal*, 14(4), 63–82. <https://doi.org/10.1057/palgrave.sj.8340098>

- Wortley, R. (2013). *Rational Choice and Offender Decision Making: Lessons from the Cognitive Sciences*.
- Wortley, R., & Townsley, M. (Eds.). (2017). *Environmental criminology and crime analysis* (Second Edition). Routledge, Taylor & Francis Group.
- Wortley, R., Sidebottom, A., Tilley, N., & Laycock, G. (2018). What is crime science? In R. Wortley, A. Sidebottom, N. Tilley, & G. Laycock (Eds.), *Routledge Handbook of Crime Science* (1st ed., pp. 1–30). Routledge.
<https://doi.org/10.4324/9780203431405-1>
- Wyss, A. (2019). Stuck in Mobility? Interrupted Journeys of Migrants With Precarious Legal Status in Europe. *Journal of Immigrant & Refugee Studies*, 17(1), 77–93.
<https://doi.org/10.1080/15562948.2018.1514091>
- Xchange. (2018, June 19). *Central Mediterranean Survey: Mapping Migration Routes & Incidents*. Xchange. <http://xchange.org/reports/cmsurvey.html>
- Zanker, F., Arhin-Sam, K., Bisong, A., & Jegen, L. (2020). *Free movement in West Africa: Juxtapositions and Divergent Interests*. 20.
- Zanker, F., Arhin-Sam, K., Bisong, A., & Jegen, L. (2020). *Free movement in West Africa: Juxtapositions and Divergent Interests*. Policy Brief, MEDAM, June 2020.
- Zhang, S., & Chin, K.-L. (2002). Enter the Dragon: Inside Chinese Human Smuggling Organizations*. *Criminology*, 40(4), 737–768. <https://doi.org/10.1111/j.1745-9125.2002.tb00972.x>
- Zhang, S. X. (2007). *Smuggling and Trafficking in Human Beings: All Roads Lead to America* (Westport, Connecticut, Praeger).

- Zhang, S. X. (2012). Measuring labor trafficking: A research note. *Crime, Law and Social Change*, 58(4), 469–482. <https://doi.org/10.1007/s10611-012-9393-y>
- Zhang, S. X. (2022). Progress and Challenges in Human Trafficking Research: Two Decades after the Palermo Protocol. *Journal of Human Trafficking*, 8(1), 4–12. <https://doi.org/10.1080/23322705.2021.2019528>
- Zhang, S. X., Sanchez, G. E., & Achilli, L. (2018). Crimes of Solidarity in Mobility: Alternative Views on Migrant Smuggling. *The ANNALS of the American Academy of Political and Social Science*, 676(1), 6-15. <https://doi.org/10.1177/0002716217746908>
- Zickgraf, C. (2019). Keeping People in Place: Political Factors of (Im)mobility and Climate Change. *Social Sciences*, 8(8), Article 8. <https://doi.org/10.3390/socsci8080228>
- Zimmerman, C., Kiss, L., & Hossain, M. (2011). Migration and Health: A Framework for 21st Century Policy-Making. *PLOS Medicine*, 8(5), e1001034.
- Zimmerman, K. F., & Vernon, V. (2023). *Fortress Europe won't solve the migration crisis – this will*. openDemocracy. <https://www.opendemocracy.net/en/podcasts/podcast-borders-belonging/europe-migration-crisis-fortress-wall/>

Appendices

Appendix 1: Ethics certificate

12/10/2022, 11:59

Email - Bish, Alexandre - Outlook

APPROVED Re-submitted Ethics Application 15451/001

VPRO.Ethics <ethics@ucl.ac.uk>

Tue 26/04/2022 15:46

To: Bish, Alexandre <a.bish.17@ucl.ac.uk>

Cc: Cockbain, Ella <e.cockbain@ucl.ac.uk>

 2 attachments (1 MB)

NEW amendment_request_form_april_2021_BISH EC signed.pdf; Alexandre Bish High Risk Application-Form 23-03-2022 AMENDMENT.pdf;

Dear Alex

Your attached amendment request has now been approved. Please take this email as confirmation of that approval.

IMPORTANT: For projects collecting personal data only.

You should inform the Data Protection (DP) Team – data-protection@ucl.ac.uk of your proposed amendments, including requests to extend ethics approval for an additional period. Please ensure that you quote your DP registration number when you correspond with the Team.

Best wishes for your ongoing research, Helen

Helen Dougal
UCL Research Ethics Co-ordinator
Office of the Vice-Provost (Research, Innovation and Global Engagement)
University College London
2 Taviton Street, London, WC1H 0BT
Email: ethics@ucl.ac.uk

Appendix 2: Definitions

Defining and distinguishing between some of the key terms related to irregular migration, harm and exploitation has been the subject of several research outputs, most of which outline the conceptual difficulties in doing so (Campana & Varese, 2016; Kuschminder & Triandafyllidou, 2020; UNODC, 2015). The rhetorical debate on exploitation terminology can be perceived as overly and unnecessarily focussing on semantics. However, there are legal, political and protection-related implications to term use and labelling (David, 2015; Plant, 2015). Unravelling these concepts beyond the following definitions and participating to the semantical conceptual debate is beyond the scope of this thesis. As such, this research will not seek to provide new definitions for key terms but outline the working definitions that will be employed throughout the thesis. The International Organisation for Migration (IOM) Glossary for migration (2019) will be used as a key reference tool for these definitions.

Irregular migration

The following section explores key terms linked to irregular migration that are used throughout the thesis including: ‘irregular migration’ and ‘migration’; ‘migrant’, ‘irregular migrant’, ‘asylum seeker’ and ‘refugee’; and ‘migrant smuggling’, ‘smuggler’ and ‘broker/intermediary’.

Irregular migration: According to the IOM, irregular migration is fundamentally different from regular migration (IOM, 2019). The 2019 IOM Glossary on Migration defines irregular migration as the ‘[m]ovement of persons that takes place outside the laws, regulations, or international agreements governing the entry into or exit from the State of origin, transit or destination’. The notes that accompany the definition underline that ‘there is [...] a tendency to restrict the use of the term to cases of smuggling of migrants and trafficking in human

beings'. The definition of irregular migration has been subject to much debate and the appellations 'illegal', clandestine' have interchangeably been used to designate it (Rosés *et al.*, 2021; Todaro & Maruszko, 1987). Due to its association with criminality however, the term 'illegal migration' will be avoided in this thesis, since most irregular migrants are not criminals and that the trivialised term can deny the humanity of the migrant and threaten their asylum claims (Koser, 2005). Being in a country without the required papers is, for most countries, not a crime but an administrative infringement (European Commission, 2019). The concept of irregular migration generally tries to capture both the 'migrant flows', or people moving across borders irregularly, and the stocks, the number of people in irregular situations already within the borders (Bartram *et al.*, 2014). Considering both 'flows' and 'stock' allows to focus on all aspects of the migration journey, both movement and stay (or work) in transit countries. In this thesis, irregular migration shall be defined as the 'stock' of people in a country who arrived irregularly and the 'flow' of people moving irregularly across borders – whether alone, with the help of a smuggler or trafficked for exploitation (see definitions for these terms below).

Migration: The IOM (2019) defines migration as 'the movement of a person or a group of persons, either across an international border, or within a State. It is a population movement, encompassing any kind of movement of people, whatever its length, composition and causes; it includes migration of refugees, displaced persons, economic migrants, and persons moving for other purposes, including family reunification.'

Migrant: The IOM (2019) defines a migrant as 'an umbrella term, not defined under international law, reflecting the common lay understanding of a person who moves away from his or her place of usual residence, whether within a country or across an international border, temporarily or permanently, and for a variety of reasons. The term includes a number of well-defined legal categories of people, such as migrant workers; persons whose particular types of

movements are legally defined, such as smuggled migrants; as well as those whose status or means of movement are not specifically defined under international law, such as international students'. There are several types of migrants, which are either distinguished due to their status or their reason to migrate. Economic migrants migrate to better their economic opportunities in a new country. Asylum seekers are migrants who leave their country of origin due to political or insecurity reasons and seek to become a refugee in another country (see full definition below). An asylum seeker only becomes a refugee once they are granted refugee status.

Irregular migrant: The 2019 IOM Glossary on Migration defines a migrant in an irregular situation as 'a person who moves or has moved across an international border and is not authorized to enter or to stay in a State pursuant to the law of that State and to international agreements to which that State is a party'. Both under Human Rights law and the UN Convention on Transnational Organised Crime (UNTOC) (UN General Assembly, 2000), it is the smuggler's provision of services that fall into illegality and not the migrant who is illegal, since 'no human being is illegal' (Gambino, 2015).

Asylum seeker: The 2019 IOM Glossary on Migration defines an asylum seeker as 'an individual who is seeking international protection. In countries with individualized procedures, an asylum seeker is someone whose claim has not yet been finally decided on by the country in which he or she has submitted it'. Not every asylum seeker will ultimately be recognized as a refugee, but every recognized refugee is initially an asylum seeker.

Refugee: The 2019 IOM Glossary on Migration defines a refugee as 'persons recognized as refugees, by a State or the United Nations High Commissioner for Refugees, on the basis of objective criteria related to the circumstances in their country of origin, which justify a presumption that they meet the criteria of the applicable refugee definition'.

Migrant smuggling: The 2019 IOM Glossary on Migration defines smuggling of migrants as ‘the procurement, in order to obtain, directly or indirectly, a financial or other material benefit, of the irregular entry of a person into a State Party of which the person is not a national or a permanent resident’. The definition is adapted from the UN Protocol against the Smuggling of Migrants by Land, Sea and Air, which supplemented the 2000 UNTOC (UN General Assembly, 2000). Migrant smuggling often implies a consensual agreement between the migrant and the smuggler and should not be confused with human trafficking (defined below) (Tinti & Reitano, 2016). Nonetheless, the boundaries between trafficking and smuggling have been found to be often blurred (Campana & Varese, 2016; Kuschminder, 2021; Kuschminder & Triandafyllidou, 2020; Bhabha & Zard, 2006). Smuggling can result in trafficking and vice versa, yet the labelling of a person as being smuggled or trafficked may have considerable influence on their access to support services and can affect their right to stay in countries of arrival.

Smuggler: The 2019 IOM Glossary on Migration defines a smuggler as ‘an intermediary who moves a person by agreement with that person, in order to transport him/her in an unauthorized manner across an internationally recognized state border.’ A smuggler is not to be confused with a trafficker (defined below), even though the lines between trafficking and smuggling can be blurry (Kuschminder & Triandafyllidou, 2020). A smuggling experience can be transformed into a trafficking one, and a perceived smuggler can become a trafficker (Tinti & Reitano, 2016).

Broker/intermediary: The word broker is often used interchangeably with *intermediary* in the context of migration. Reviewing the literature on intermediaries, Jones and Sha (2020, p. 15) define an intermediary as follows:

‘an actor or institution that fosters, facilitates or sustains human mobility. The mediating or brokerage process is relational and often involves interactions of multiple actors operating within complex local-global, socio-economic, cultural and political environments. The practices of intermediaries often blur the boundaries between commercial and non-commercial, private and public, state and market, formal and informal, legal and illegal due to the complex nature and conditions in which this ‘middle-space’ exists.’

Many researchers have framed brokers as traffickers or smugglers (Aronowitz, 2009; Chin & Chin, 1999; Salt & Stein, 1997). However, they can also be family or friends with no ‘professional’ stake in the smuggling or trafficking business (Goss & Lindquist, 1995; Krissman, 2005; Cohen, 2008; Gammeltoft-Hansen & Nyberg, 2013). In this research, I consider a broker to be any actor that fosters, facilitates, or sustains migration, in line with Jones & Sha’s (2020) definition, whether they be a professional broker or friends or family, by placing a migrant in contact with a smuggler. As such, this research focusses on what intermediaries *do* rather than who they *are* (Spener, 2009a). However, I consider brokers in this thesis as a category distinct from the main smuggler or trafficker, involved in the actual organisation of the transportation to the next zone.

Now that I have defined critical terms linked to irregular migration, the following section will seek to define key notions linked to harm and exploitation in the context of irregular migration.

Harm and exploitation

The following section seeks to define key terms linked to harm and exploitation in a migration context that are used throughout this thesis, including: ‘harm’, ‘exploitation’, ‘vulnerability’

and ‘victimisation’; ‘modern slavery’, ‘human trafficking’, ‘trafficker’, ‘forced labour’, ‘slavery’, ‘kidnapping and abduction’, and ‘torture’.

Harm: The Cambridge Dictionary (2022) defines harm as ‘physical or other injury or damage’. In a context of migration, harm can be linked to occupational- or travel-related health risks, or more targeted exploitation (see definition below) that occurs on their journeys. In this thesis, my primary focus is on harms associated with identified cases of exploitation and detention. I do not aim to categorise all possible harms encountered on the Central Mediterranean Route to Europe, but rather to delve deeply into these specific cases.

Vulnerability: In the context of migration, the 2019 IOM Glossary on Migration defines vulnerability as ‘the limited capacity to avoid, resist, cope with, or recover from harm. This limited capacity is the result of the unique interaction of individual, household, community, and structural characteristics and conditions.’

Exploitation: There is no legal definition of exploitation (McAdam, 2013). The 2019 IOM Glossary on Migration definitions defines exploitation as: ‘The act of taking advantage of something or someone, in particular the act of taking unjust advantage of another for one’s own benefit’. It lists a few examples of forms of exploitation including, sexual exploitation, forced labour or services, slavery or practices similar to slavery, servitude or the removal of organs. These are considered crimes under the UNTOC (UN General Assembly, 2000). This research uses the term ‘exploitation’ to refer to IOM Glossary’s examples, but also trafficking, i.e. the extreme ends of what is often referred to as a ‘continuum of exploitation’ (Skrivankova, 2010). Contrary to the work-centric view of exploitation outlined by Campana & Varese (2016, p. 93), my understanding extends beyond labour-related injustices to encompass non-labour forms of exploitation, such as the removal of organs, which does not involve labour in the traditional sense. While smugglers have been found to exploit migrants’ hopes and aspirations to make a

financial profit, for the purposes of this research I do not consider simply using a smuggler as being exploited (Febrey, 2014). In this thesis, detention itself is not classified as exploitation; however, it is acknowledged that exploitation can occur within detention settings through unjust practices or conditions imposed on detainees (see Chapter 7).

Victimisation: the APA Dictionary of Psychology defines victimisation as the act or process of singling someone out for cruel or unfair treatment, typically through physical or emotional abuse (APA Dictionary of Psychology, 2022). Several other typologies of victimisation exist but will not be considered for the purpose of this research (Kichling, 2016).

Modern slavery: The UK government defines modern slavery as ‘the recruitment, movement, harbouring or receiving of children, women or men through the use of force, coercion, abuse of vulnerability, deception or other means for the purpose of exploitation’ (Such *et al.*, 2017). The term modern slavery is increasingly used as a catch-all term to encompass forced labour, human trafficking and child sexual exploitation, which are defined below (McAlpine, 2021).

Human trafficking: Human trafficking is a process defined in the UN Trafficking in Persons Protocol (UNTOC, 2000; David *et al.*, 2019) as comprising:

1. Recruitment, transportation, transfer, harbouring or receipt of persons [the act].
2. By means of threat or use of force or other forms of coercion, of abduction, of fraud, of deception, of the abuse of power or of a position of vulnerability, or of the giving or receiving of payments or benefits to achieve the consent of a person having control over another person [the means].
3. With the intent of exploiting that person through prostitution of others, sexual exploitation, forced labour, slavery (or similar practices), servitude and removal of organs [the purpose].

As children are concerned, the ‘means’ are not necessary to be considered trafficking if the other elements are met (Cockbain & Olver, 2019).

Trafficker: The 2019 IOM Glossary on Migration defines a trafficker as ‘an intermediary who is involved in the movement of person in order to obtain an economic or other profit by means of deception, physical or psychological coercion for the purpose of exploitation. The intent ab initio on the part of the trafficker is to exploit the person and gain profit or advantage from the exploitation’.

Forced Labour: The UN International Labour Organization (ILO, 1930) Forced Labour Convention defines forced labour as “all work or service which is exacted from any person under the menace of any penalty and for which the said person has not offered himself voluntarily.” This definition excludes compulsory military service, normal civil obligations, penalties imposed by a court, action taken in an emergency, and minor communal services (David *et al.*, 2019; ILO, 1957).

Slavery: Defined in The Slavery Convention (League of Nations, 1926) as the status or condition of a person over whom any or all of the powers attaching to the right of ownership are exercised. In a later treaty (UNTC, 1956), States agreed that there are also certain “slavery-like practices”: debt bondage, forced or servile marriage, sale or exploitation of children (including in armed conflict), and descent-based slavery (David *et al.*, 2019).

Kidnapping and abduction: The 2019 IOM Glossary on Migration defines kidnapping as the ‘crime of seizing and taking away a person by force or fraud, often with a demand for ransom’. Abduction is defined as ‘the act of taking someone away by force, fraud or persuasion’. The 2019 IOM Glossary on Migration does not explain the distinction between abduction and kidnapping; however, other sources say it lies in the fact that kidnapping often involves ransom for monetary or other gain (HG Legal Resources, 2022). The word abduction will be used in the thesis since its meaning is broader and does not make any assumptions as to ransom or anticipated monetary gains, information for which may not always be available.

Torture: The 2019 IOM Glossary on Migration defines torture as: ‘Any act by which severe pain or suffering, whether physical or mental, is intentionally inflicted on a person for such purposes as obtaining from him [or her] or a third person information or a confession, punishing him [or her] for an act he [or she] or a third person has committed or is suspected of having committed, or intimidating or coercing him [or her] or a third person, or for any reason based on discrimination of any kind, when such pain or suffering is inflicted by or at the instigation of or with the consent or acquiescence of a public official or other person acting in an official capacity. It does not include pain or suffering arising only from, inherent in or incidental to lawful sanctions.’. In the context of the migration on the CMR, the expression ‘torture for ransom’ has been used to describe the process by which migrants are tortured in detention centres in order to extort as much money as possible from them or their families for their release (Heisterkamp, 2016; CNN, 2018).

Crime

This section seeks to define two notions linked to crime that will be used in this thesis: the notion of an ‘organized criminal group’ and what this thesis will consider a ‘crime’ in the context of irregular migration.

Organised criminal group: The UNTOC defines an organised criminal group as ‘a structured group of three or more persons, existing for a period of time and acting in concert with the aim of committing one or more serious crimes or offences, in order to obtain, directly or indirectly, a financial or other material benefit’ (UN General Assembly, 2000). It is worth noting that the definition of what constitutes an organized crime is a contested concept with several contested definitions (Roks *et al.*, 2022).

A final definitional clarification that should be made pertains to the concept of **crime** around irregular migration. This research follows the stance on irregular migration of the Office of the United Nations High Commissioner for Human Rights (OHCHR) (OHCHR, 2022), which does not consider irregular migration to be a crime (EU Agency for Fundamental Rights, 2016). There are few legal migration channels available to the European Union for most people from African and Middle Eastern countries, making irregular channels often the only viable routes for people who have legitimate asylum claims (Tjaden, 2022). As such, especially since migration can be used as a legitimate tool to survive, it should not be criminalised. Although the UN Protocol against the Smuggling of Migrants by Land, Sea and Air criminalises the practice of smuggling, it does not criminalise migrants (UN General Assembly, 2000).⁸⁷ Any reference to ‘crime’ in this research refers to the exploitation of people on the move and not to the actions undertaken by the migrants themselves.

Appendix 3: Additional details on script graph elaboration

While most existing crime scripts describe relatively short periods, irregular migration is a process that can last for years, and due to the script’s length, a further distinction was made between short (less than 24 hours) and long activities (more than 24 hours). Each activity was given codenames and graphed:

- Short Activity Static (SAS) + number (e.g., SAS12), represented by a small square in the graph, if it would generally last for less than a day (24 hours) and did not involve movement.

⁸⁷ Article 5 of the Protocol states that migrants should not be liable for criminal prosecution for the simple fact of having been smuggled.

- Long Activity Static (LAS) + number (e.g. LAS2), represented by a large square in the graph, if it would generally last for more than a day (24 hours) and did not involve movement.
- Short Activity Mobile (SAM) + number (e.g., SAM22), represented by a small triangle in the graph, if it would generally last for less than a day (24 hours) and involved movement.
- Long Activity Mobile (LAM) + number (e.g., LAM14), represented by a large triangle in the graph, if it would generally last for more than a day (24 hours) and involved movement.

The number in the codename refers to a new type of activity, which may be shared by one or several migration journeys.

Given that the geographical distance that migrants cover often spans thousands of kilometres, the script was further given a geographical component and activities were compartmentalised into six different zones that at least some of the migrants travelling on the CMR travel through:

- **Zone 1:** Non-Neighbouring Country to Libya; these include countries that are not direct neighbours to Libya, such as Yemen, Somalia, Cote d'Ivoire, Nigeria, Cameroon, The Central African Republic, Morocco, Ethiopia, The Gambia, etc.
- **Zone 2:** Neighbouring Country to Libya, these include Algeria, Tunisia, Niger, Chad, Sudan and Egypt.
- **Zone 3:** Southern Libya (if closer to the southern borders with Niger, Chad or Sudan than to the Mediterranean Sea)⁸⁸;
- **Zone 4:** Northern Libya (if closer to the Mediterranean Sea than to Niger or Chad);

⁸⁸ The distance was measured using the 'measure distance' feature on Google Maps.

- **Zone 5:** Mediterranean Sea; and,
- **Zone 6:** Europe (which, in the case of this sample, is Malta, where the participants were interviewed).

The zones Non-Neighbouring Country and Neighbouring Country were not given any specific country names given the many countries that people depart from and transit through in the sample. All participants interviewed transited through Libya and the Mediterranean Sea, however, before reaching Malta.

If the participant travelled through two or more non-neighbouring (zone 1) or neighbouring (zone 2) countries to Libya, they would travel through the zone again, which resulted in some participants travelling through the same zone twice or more. Given the number of small cities and villages and the uncertainty around which zone some of these transit points were located, three detailed maps from publications on migrant smuggling on the CMR were used to locate areas, as well as Google Maps (Micallef *et al.*, 2019). This is a limitation to consider when analysing cycles in non-neighbouring countries and neighbouring countries to Libya in the elaboration of cycles analysis (see Chapter 6): repeated activities may actually symbolise repeated activities between neighbouring countries rather than within the same one.

Some geographical mapping decisions were taken to standardise the coding. For instance, migrants who had reported working on goldfields that straddle the Chad-Libya border were coded as having taken place in Libya, not in Chad. Research on the goldfields in northern Chad suggests that the most active goldfields are in fact on the Libyan side of the border, whereas the Chadian side of the border is more vulnerable to government crackdowns (Bish, 2021; Micallef, Horsley, *et al.*, 2019; Tubiana & Gramizzi, 2017). Participants did not always specify whether they were on the Libyan or Chadian side of the border, which is understandable given the porosity of borders in this region.

Similarly, journeys tended to be more abstract at sea, with few participants describing the exact turn of events once in the Mediterranean; this despite constituting the most recent leg of their journey. Under-reporting details at sea could be because participants may have been asked by the smuggler not to share much information about their recent crossing, or that they felt more inclined to not reveal any information that would disrupt the journey of other participants whom they might have met in Libya. This under-reporting might have also been because traumatic events are easier shared after some time has passed, as suggested by some studies on trauma (Balderrama-Durbin *et al.*, 2013; Ullman *et al.*, 2010). A final reason could have been that the initial interviews may not have been that interested in the process once at sea, which could have influenced the direction of the interviews.

To record the level of certainty of the coded data from transcript to spreadsheet, the coding reflected whether the activity was *reported*, *inferred* or *assumed*; if an activity was not explicitly mentioned in the interview transcript. Two alternative fonts for the cells were used to reflect these two degrees of uncertainty. A cell would be labelled as *inferred* (change cell font to *italics*) if only one possible path was available from a known activity. In other words, if it is the only reasonable activity that could have followed. A cell would be labelled as *assumed* (changed cell font to **bold**) when the information in the transcript was incomplete/missing, in which case the most likely path was chosen until the information was available.⁸⁹ I later reduce the number of assumed nodes by removing seven interviews containing a high number of assumed nodes.

⁸⁹ Although using educated guesses to link parts of a migration journey is far from ideal, it was the only solution found to allow the retention of information-rich interviews with fluctuating levels of detail on journeys.

Appendix 4: Inter-rater reliability assessment

While the greatest care was taken in relaying the information as accurately as possible, information gaps and subjectivity in the interpretation of information can constitute a limitation to this exercise. To mitigate subjectivity in interpretation, reduce coding bias and overcome challenges of inter-rater reliability (IRR) in the dataset, a codebook with guidance was developed. An independent coder was then asked to code the dataset to check the IRR indicators. The coder was a master's student from the Security and Crime Science Department at University College London who coded 11 transcripts (14% of the sample) in 30 hours (almost three hours per transcript).

IRR was assessed using the edit distance, by counting the minimum number of operations that are required to transform a sequence into another.⁹⁰ The edit distance was computed in Python

⁹⁰ IRR, also called inter-rater agreement, is more commonly computed using Cohen's (1968) kappa for two raters. The IRR was computed on Python for two coded paths that had the same length. However, this was not possible for the remaining paths, which did not hold the same length. While the Kappa's coefficient is a commonly used measure for IRR, given the complex nature of the sequence data presented here, several of the assumptions held in traditional IRR equations are violated and lead to erroneous calculations. IRR measurements traditionally focus on discrete, nominal and ordinal datasets; however this data is continuous, sequence data (Tinsley & Weiss, 1975). Factors limiting the applicability of traditional IRR measures to this data include: i) a disagreement in one item will disrupt the entire chain, despite that fact that the rest of the chain may be similar; ii) links between activities are important and some activities can be dependent on prior activities in sequence data; iii) some items in the sequence can occur at any point in the sequence; iv) some items in the sequence can reoccur in the sequence; v) some sequences have different lengths.

Two alternative and more representative measures that could be used to evaluate the IRR for this type of data were identified. The Hamming distance, which looks at two strings of equal length and returns the number of positions at which the corresponding numbers are different. Unfortunately, the Hamming distance could not be computed for two sequences of unequal length. Instead, the edit distance measure was chosen as an indicator of the IRR on this sequence data. In computer science, the edit distance is a way of describing how dissimilar two sequences are to one another by counting the minimum number of operations required to transform one sequence into the other.

to compare the two raters' sequences, given that most were not of the same length. The results suggest that the IRR was good, with few modifications needed to the sequences to transform in another (max=6) (see **Table 8**).

The principal observed differences between the raters resided in omissions of certain nodes due to coding errors on both coders part (for instance, forgetting to add 'Travel to broker' before 'meeting broker') but did not rely on fundamental aspects of the journey.

Table 8 Results of the inter-rater reliability assessment

Interview Number	Length Rater 1	Length Rater 2	Edit Distance
1	68	68	2
2	33	31	2
3	33	34	3
4	25	23	4
5	68	68	4
6	28	30	3
7	30	32	3
8	24	26	2
9	50	48	5
10	60	61	1
11	37	35	6

Appendix 5: Definition of identified activities in the micro-level script graph

29 unique types of activities were identified (see description in **Table 9**). Some of these activities were repeated in several zones, adding up to a total of 81 activities across all the six zones. The activities are broadly presented in **Table 9** in the order that the people travelling get closer to Europe.

Table 9 List of activities present in the micro-level script

Micro-level activity	Definition
Stay without work	When a participant stayed in the country for more than one day, without reporting work.
Stay with work	When a participant stayed in the country for more than one day and reported working. Although work can involve late or non-payments and abuse, work was only labelled as forced labour/exploitation if the participant was forced to stay against their will. This would happen, for instance, with the confiscation of their passport or being physically detained.
Wait in processing centre	When a participant waited in a processing centre. Also called reception centres, these are either, open or semi-open centres, where migrants are processed and where asylum applications can be considered. They are often run by UN organisations or international NGOs. Refugee camps are also considered here.
Travel to processing centre	When a participant travels to a processing centre.
Meet broker	When a participant met a broker. A broker is considered to be any actor that fosters, facilitates, or sustains migration, in line with Jones & Sha's (2020) definition. Brokers can be professional brokers, friends, family, or community members who connect migrants with people who transport them (Jones & Sha, 2020). Any time a 'samsara' ⁹¹ was mentioned, it was labelled as broker. Note: in northern Libya, taxi drivers who collect migrants to bring them to smuggler warehouses before embarkation were labelled as brokers, given that they place the migrant in liaison with the main smuggler. The lines between brokers and smugglers can be blurry given that functions within a smuggling network are not always clearly defined.
Travel to broker	When the participant travelled to a broker who facilitated their migration journey.

⁹¹ A 'samsara' is an intermediary, often a former migrant, who is present in the main smuggling hubs within or *en route* to Libya. They can either organise journeys or link migrants with transporters (Darne & Benattia, 2017).

Micro-level activity	Definition
Meet smuggler	When a participant met with the smuggler. A smuggler is defined in this research as the person directly involved in the transportation of a person by agreement with that person across a barrier in an unauthorized manner. While this barrier can be an international border, it can also be a natural (e.g. the Sahara Desert) or other barriers (e.g. Libyan militia checkpoints), which is why smugglers can be necessary for transportation within Libya, especially for south-north movements.
Travel to smuggler	When a participant travelled to a smuggler.
Travel to next zone (without smuggler)	When a participant travelled to the next zone, as defined earlier, without a smuggler. Note: the definition of what constitutes smuggling can be difficult to establish. For example, if the migrant travelled with a truck driver who asked for help with offloading goods in exchange for the journey, this activity was not labelled as smuggling.
Travel to next zone (with smuggler)	When the migrants travelled to the next zone with a smuggler.
Arrest/Abduction	When a participant was arrested or abducted by either government security forces, acting security forces, or a criminal group looking to profit from their exploitation.
Wait in detention centre	When the participant is detained in a detention centre or prison. These detention centres can be either official or unofficial (see more about official vs unofficial detention centres for Libya in section 2.1.2.2). Processing centres, such as refugee camps, are not covered by this definition.
Travel to detention centre	When the migrant travels to a detention centre. In all cases they were transported there and did not go of their own accord.
Released/Escape/Leave	When a participant was either released, escaped or left either after arrest/abduction, after waiting in a detention centre, after waiting in a processing centre or after forced labour. In the Mediterranean Sea for instance, this involves when the boat escapes or is released after interception by either the Libyan coastguard or a Libyan militia seeking to take them back to Libya.
Travel to non-neighbouring country (without smuggler)	When a participant travelled to a non-neighbouring country to Libya without a smuggler. This can be either from a non-neighbouring country to Libya or from Libya because they are returning to their home country.
Travel to non-neighbouring country (with smuggler)	When a participant travelled to a non-neighbouring country to Libya with a smuggler.

Micro-level activity	Definition
Forced labour ⁹²	When a participant worked in conditions that fit the ILO definition for forced labour, i.e. 'work or service which is exacted from any person under the menace of any penalty and for which the said person has not offered himself voluntarily'.
Travel to forced labour	When a participant travelled to the location where the forced labour takes place.
Wait in smuggler facility	When a participant waited in the smuggler's Libyan coastal facility. The participants do not necessarily meet the main smuggler in the facility. In many reported cases the facility was a warehouse close to the sea, also known as 'Tourkina', where migrants can stay months until they are eventually sent on a boat to Europe. Conditions in these warehouses can be very difficult and resemble those of detention centres.
Travel to smuggler facility	When a participant travelled to the Libyan coastal smuggler facility. In Libya, this is often done by boarding a taxi that takes the migrant directly to the smuggler's facility.
Travel to embarkation	When a participant travelled to the embarkation of the boat that they will board for Europe. This journey usually starts at the smuggler's coastal facility and can take place both in a vehicle or on foot.
Board boat	When a participant boarded the boat that will take them to international waters. This is either a rubber boat, often referred to as a 'gumba', or in rarer cases more solid wooden, or fibre glass boats.
Disembark boat/vessel	When a participant disembarked the vessel in Libya. This can either be the boat that they initially boarded or the Libyan coastguard or Libyan militia vessel that they boarded following interception.
Boat breaks	When the boat a participant was travelling on broke at sea. This either forced migrants to return to shore, or in other cases they waited to be rescued. Participants reported that the boats broke because they were overpopulated.
Travel to international waters	When a participant travelled from Libyan waters to international waters.
Approached by Libyan coastguard	When a participant was approached by the Libyan coastguard, which will generally lead to travelling back to Libya.
Approached by militia	When a participant was approached by a vessel that was not the official Libyan coastguard but a Libyan militia acting as a coastguard.
Travel towards Libya	When a participant at sea travelled back towards Libyan shores, either aboard the initial boat they had boarded or aboard a Libyan coastguard or militia vessel taking them back to Libyan shores.
Board vessel	When a participant boarded either a coastguard, militia, NGO, Armed Forces of Malta, or private vessel in the Mediterranean Sea.

⁹² Only forced labour was considered for this model, as it was the only one explicitly specified. Other types of exploitation such as sexual exploitation also occurs *en route* to Europe, however this was not explicitly stated by the participants.

Micro-level activity	Definition
Make SOS call	When a participant reported that someone on their boat made a call to either the Italian or Maltese governments, or to an NGO, often calling for help and reporting their location for rescue.
Remain at sea	When a participant either waited at sea – often because the boat ran out of fuel – after travelling towards international waters or continued to travel towards European waters.
Approached by NGO vessel	When a participant was approached by an NGO-operated SAR vessel.
Approached by Armed Forces of Malta vessel	When a participant was approached by a security vessel of the Armed Forces of Malta.
Approached by private vessel	When a participant was approached by a private vessel, e.g. a fishing boat or cargo ship.
Travel towards Europe	When a participant travelled towards Europe, in most cases aboard the vessel that rescued them. When a participant did not specify in the interview transcript whether they had been rescued (n=7) they were labelled as travelling towards Europe directly. It is likely however that they were rescued, either by an NGO, private or Armed Forces of Malta vessel, since few boats make it all the way to Malta independently during the 2018-2019 period.
Disembark vessel in Malta	When a participant disembarked in Malta.
Travel in zone	When a participant travelled within a given zone, and not to a different zone. Participants were labelled as travelling within the zone when they had already stayed in the zone for more than one day and travelled to another place within the zone.
Travel home	When a participant travelled back to their home country, defined as where they reported to be based before their travels.

Appendix 6: List of corresponding micro-level activities to their macro-level group

The macro-level script was composed of six groups comprising 21 steps. The six groups are detailed in Chapter 5. A full list of corresponding micro-level activities to their macro-level category can be found in **Table 10**.

Table 10 List of corresponding micro-level activities to their macro-level group

Micro-level activity	Macro-level category	Code name	Zones
Stay without work	Stay (with or without work)	LAS1, LAS3, LAS21, LAS11	1, 2, 3, 4
Stay with work	Stay (with or without work)	LAS6, LAS4, LAS8, LAS10	1, 2, 3, 4
Travel home	Travel to non-neighbouring country ⁹³	SAM29, SAM30	1
Wait in processing centre	Detained/exploited	LAS16, LAS17, LAS5	1, 2
Travel to broker	Prepare journey	SAM1, SAM6, SAM8, SAM16	1, 2, 3, 4
Meet broker	Prepare journey	SAS1, SAS35, SAS10, SAS15	1, 2, 3, 4
Travel to smuggler	Prepare journey	SAM12, SAM7, SAM14	1, 2, 3
Meet smuggler	Prepare journey	SAS13, SAS5, SAS14	1, 2, 3
Travel to next zone (without smuggler)	Travel to next zone (with or without smuggler)	LAM1, LAM2, SAM15	1, 2, 3
Travel to next zone (with smuggler)	Travel to next zone (with or without smuggler)	LAM6, LAM7, SAM18	1, 2, 3
Arrest/Abduction	Detained/exploited	SAS2, SAS4, SAS12, SAS16	1, 2, 3, 4
Wait in detention centre	Detained/exploited	LAS2, LAS18, LAS7, LAS12	1, 2, 3, 4
Released/Escape/Leave	Detained/exploited	SAS3, SAS6, SAS11, SAS9, SAS36	1, 2, 3, 4, 5
Travel to non-neighbouring country (without smuggler)	Travel to non-neighbouring country (with or without smuggler)	LAM3	2,4

⁹³ There was only one participant and they travelled to a non-neighbouring country to Libya.

Micro-level activity	Macro-level category	Code name	Zones
Travel to non-neighbouring country (with smuggler)	Travel to non-neighbouring country (with or without smuggler)	LAM4	2
Travel to processing centre	Detained/exploited	SAM5, SAM26	1, 2
Travel to detention centre	Detained/exploited	SAM31, SAM11, SAM22	2, 3, 4
Travel to forced labour	Detained/exploited	SAM9, SAM33	3, 4
Forced labour	Detained/exploited	LAS9, LAS20	3, 4
Travel to smuggler facility	Prepare journey	SAM17	4
Wait in smuggler facility	Prepare journey	LAS13	4
Travel to embarkation	Prepare journey	SAM19	4
Board boat	Prepare journey	SAS17	4
Disembark boat/ship	Travel (with or without smuggler)	SAS18	4
Boat breaks	Travel (with or without smuggler)	SAS34	5
Travel to international waters	Travel (with or without smuggler)	SAM3	5
Travel towards Libya	Travel (with or without smuggler)	SAM23	5
Board ship/vessel	Travel (with or without smuggler)	SAS20, SAS29, SAS30, SAS32	5
Approached by coastguard	Intercepted	SAS21	5
Make SOS call	Travel to next zone (with or without smuggler)	SAS22	5
Remain at sea	Travel to next zone (with or without smuggler)	LAS14	5
Approached by NGO vessel	Rescued	SAS28	5
Approached by Armed Forces of Malta vessel	Rescued	SAS27	5
Approached by private vessel	Rescued	SAS25	5
Approached by militia	Intercepted	SAS37	5
Travel towards Europe	Travel (with or without smuggler)	LAM5	5
Disembark boat/ship	Travel (with or without smuggler)	SAS33	6

Micro-level activity	Macro-level category	Code name	Zones
Travel in zone	Travel (with or without smuggler)	SAM24, SAM25, SAM27, SAM21	1, 2, 3, 4

Appendix 7: Baseline and empirical script comparison

As described in the methods section, an initial baseline script was developed as a basis for recording the empirical data provided by the interview transcripts. After this process, 22 nodes which had been identified conceptually were removed from the empirical graphs, since they were not described as having taken place in participants' journeys (see **Table 11**). One node that had not been identified conceptually was added to the empirical graphs: while there was no incident of a boat sinking in the Mediterranean Sea during the crossing, one incident of a boat breaking was observed, and a node added to reflect this novelty. A final change to the graph concerns the nomenclature of some of the activities. Some of the titles were relabelled in order to standardise the activities across zones.

There are several reasons why some of the conceptual activities were not reported by the participants. While the conceptual graph was designed with no specific migrant population in mind, the sample of participants that was used represented a very specific pool of migrants. Participants were all interviewed in Malta after having successfully completed the Mediterranean Sea crossing from Libya. As such, many activities that had been described in the conceptual graph, such as 'death', could not have been experienced. Nonetheless, a novel attempt could seek to model all *witnessed* activities, in which instances such as 'death' would have been coded, since they were reported as having been witnessed by several participants. Another reason for which some of the conceptual nodes were not reported in the interview transcripts could also stem from reporting bias. Participants could have omitted to describe some of the events that took place during their journeys. Finally, given the high number of possible activities that can take place on these journeys, it is also likely that the sample of 78 participants was too small to have experienced all of the conceived scenarios.

Table 11 Sample of activities in the potential script that were removed from the empirical scripts

Code	Label	Zone	Justification
SAM2	Travel home	Sub-Saharan Africa/Home country	There were no reported instances in the dataset where the migrant travelled home after having initially left while still in their home country.
LAM6	Travel back to neighbouring country to Libya	Neighbouring country to Libya	This node was conceptualised based on a refoulement of migrants that occurred on the Libya-Niger border in March 2021, linked to covid restrictions enforced at the border (Bird, 2020).
SAM18	Travel to neighbouring country to Libya	Northern Libya	No reported instances of travelling to a neighbouring country to Libya. Initially conceptualised to represent instances of cyclical migration (for example seasonal migration of Nigerien workers between Niger and Libya).
SAS19	Boat sinks	Mediterranean Sea	There were no incidents reported where the participants' boat sank.
DEA1	Death	Mediterranean Sea	No death because participants reached Malta.
LAS15	Wait in Libyan waters	Mediterranean Sea	Deleted because of lacking information in the interviews as to location within the Mediterranean Sea.
SAM25	Travel towards Libya	Mediterranean Sea	Deleted because of lacking information in the interviews as to location within the Mediterranean Sea.
SAM24	Towing of boat towards Libyan waters	Mediterranean Sea	No reported instances encountered in the interviews. Conceptualised from media reports.
SAS24	Set up of towing lines by security vessel	Mediterranean Sea	No reported instances encountered in the interviews. Conceptualised from media reports.

Code	Label	Zone	Justification
SAM27	Travel to neighbouring country processing centre	Europe	No cases of participants who were transferred back to their home country from Malta. This is because participants were interviewed in the processing centre in Malta having just arrived in Europe.
SAM34	Travel to forced labour in neighbouring country to Libya	Neighbouring country to Libya	No reported instances of forced labour in neighbouring country to Libya in the sample.
LAS23	Forced labour in neighbouring country to Libya	Neighbouring country to Libya	No reported instances of forced labour in neighbouring country to Libya in the sample.

Appendix 8: Explanation of methodological approach

My initial approach involved using the *simple_cycles* algorithm within the NetworkX package in Python, a tool designed to identify cycles in directed graphs. However, I encountered limitations with this method. Specifically, the algorithm sometimes either overlooked actual cycles or identified non-existent ones. To illustrate this issue, consider the example in **Figure 34** below. In this graph, the algorithm creates the cycle $(a b c d)$. However, in reality, the only independently travelled cycles were $(a e f b)$, $(b c h g)$, $(c d j i)$, and $(d a l k)$. While $(a b c d)$ is a valid cycle in terms of graph structure, it was not actually travelled by a participant and is simply a product of the way individual edges in the graph combine. In other words, with the graph coded as a list of edges with an associated weight within NetworkX, the *simple_cycles* algorithm operated based on the connectivity of the nodes composing edges, not on the actual paths — or collection of edges — taken by the participants.

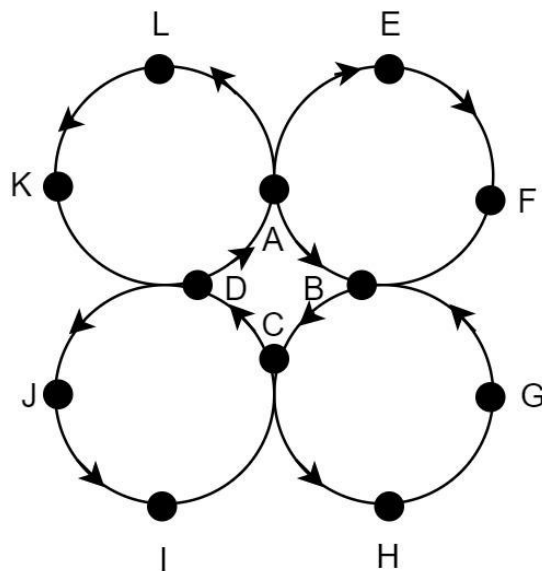


Figure 34 Adjacent cycles to illustrate the NetworkX algorithm's error, which incorrectly identified the travelled cycle 'ABCD' alongside actual travelled cycles, underscoring the need for the development of a tailored algorithm.

Moreover, an alternative algorithm that could have been used, *chordless_cycles*, focussed exclusively on identifying chordless cycles within a graph. A chordless cycle is defined as a cycle in which no two nodes are connected by an edge that does not form part of the cycle itself. While this algorithm is adept at identifying such cycles, it was deemed unsuitable for the analysis because it does not inherently identify ‘nested’ cycles — cycles that are contained within larger cycles — which was crucial for a holistic examination of where participants could experience im/mobility without migration.

The mismatch between identified cycles and cycles that were actually travelled also highlighted another challenge when applying standard network analysis, such as centrality measures (used to find important nodes in a graph), to our script graph. Centrality measures are commonly computed by using algorithms that find paths in a graph. However, these rely on the assumption that all possible computed paths have practical relevance. This assumption could not be met with 100% certainty in the case of our script graph. As an illustrative example, Dijkstra’s shortest path (an algorithm that helps to identify the shortest path between two nodes in a graph), identified that the shortest possible path conceptually from the beginning of the graph (in a non-neighbouring country to Libya) to the end was 12 steps. However, this path had not been travelled by any participant. Analysing, the path conceptually, it seemed feasible for a migrant to potentially take this journey, however I did not hold data that showed this exact combination was travelled. Yet, many centrality measures are computed based on Dijkstra’s shortest path algorithm (e.g. betweenness centrality and closeness centrality). Therefore, calculating the importance of certain nodes using centrality measures, would yield results that could not be verified empirically since the paths computed to calculate those measures would not necessarily have been actually travelled by anyone. However, if these paths make conceptual sense, then they may still be used to inform the analysis, with the caveat that their relevance may be limited by the fact that they were not actually travelled. Such considerations

could enrich future research, but they were beyond the scope of this study, primarily due to the extensive time commitment required — potentially hundreds of hours — to conceptually validate each possible combination.

An alternative approach to graph analysis that could have been considered were Markov chains, which allow for the calculation of transition probabilities between different steps. For instance, Markov chains could quantify the likelihood of encountering a harmful outcome following a specific activity, such as work. However, this method hinges on the assumption that the probability of transitioning to any future state (e.g., a harmful activity) depends solely on the current state (e.g., working) and not on the sequence of activities that preceded it. However, this assumption of independence was not met in my case. For instance, a decision to hire a smuggler would significantly influence subsequent journey stages, contradicting the Markovian property of state independence. This dependency pattern means that traditional Markov chains could not be applied to calculate the probability of a future state given a previous state in this case. Future research could explore the possibility of computing a simple adjacency matrix for the script graph, however, to easily identify steps that preceded a given event. This was beyond the scope of this research.

An alternative probabilistic graphical model that could have been considered was Bayesian network modelling. However, these networks function best with Directed Acyclic Graphs (DAGs), where cycles, or paths that loop back to their origin, are absent. Bayesian networks rely on conditional probabilities that are defined in a hierarchy, where a cycle would imply a circular dependency, contradicting the fundamental assumption of conditional independence. In the case of my script graph, as detailed in Chapter 6, this criterion was not met due to the presence of cycles within the graph structure.

Appendix 9: Explanation of algorithms

Identifying cycles within each path

Algorithm 1 (Comprehensive Cycles Extractor): The first algorithm I developed helped to identify and record all the cyclic permutations present in each of the 71 paths representing the total number of recorded participant journeys in the sample. I created the function *find_cycles* to detect cycles, within *participant_paths* (where each key uniquely identifying a participant and their unique path). The function tracked each activity within a path and scanned for any instances of repeated activities within the remainder of the path. If the same activity was identified later in the path, it recorded a cycle from the activity's first occurrence to just before its next occurrence, capturing the cycle without the repeated activity that would close the cycle, i.e. it would record $(a\ b\ c)$ instead of $(a\ b\ c\ a)$. With the function *create_participant_cycles*, I then stored all identified cycles for each participant into a dictionary called *participant_cycles*. I have formalised this process with the following formulas:

Given $p \in P = [p_1, p_2, \dots, p_n]$, where P is the list of all 71 paths, and p is a participant path

Given a path $p_1 = [v_1, v_2, \dots, v_n]$ where v_i represents an activity and v_1 is the first activity in the path, and v_2 is the second activity in the path, a cycle $c \in C$ can be defined as a subsequence $c = [v_i, \dots, v_j]$ such that $i < j, v_i = v_j$, where i and j represents the position of the activity in the path, and v_i and v_j are the same activities.

The function *find_cycles* (P) yields a set of all such subsequences C within P that meet the following criteria:

$$find_cycles(P) = \{ C | c = [v_i, \dots, v_j] \subseteq P \}$$

The algorithm was designed to enumerate all the cyclic permutations present in a path, accounting for both simple cycles and compound cycles. A simple cycle is a closed path where no node is repeated except for the first and last node. In contrast, I call a compound cycle, a cycle composed of several simple cycles that share common nodes, effectively creating a larger cycle that encompasses the smaller ones. For instance, within a given path ($a b c d a b c a b c$), the first algorithm would identify nine cycles representing three cyclic permutations (see Figure 35). Six cycles are simple cycles while three cycles are compound cycles that contain these simple cycles (see Figure 35). For example, the cycle ($a b c d a b c$) is a compound cycle, encapsulating four simple cycles.

Algorithm 2 (*Simple Cycles Extractor*): To complement this more comprehensive detection of cyclic permutations, I modified the algorithm to identify the number of nested simple cycles within the paths (without the compound cycles) (see Figure 35 for an example on the same sequence). To do so, instead of keeping identified cycles in the sequence, I removed the activities composing a cycle once it was identified, except for the final repeated activity that closed the cycle. This would help prevent the further enumeration of compound cycles.

Identifying representative cycles

Algorithm 3 (*Representative Cycle Identifier*): The next step involved identifying and storing representative cycles of the cyclic permutations identified in the first step; this, to allow for a better comparison of trends across participants. To do so, I processed each cycle into its doubled form. By doubling the cycle, I could capture all possible cyclic permutations of a given representative cycle, allowing any starting point of the cycle to be matched within this new

extended sequence. For example, doubling the cycle (*a b c*) entailed recording it (*a b c a b c*), within which the (*a b c*) cycle's variations (*b c a*) and (*c a b*) could be easily identified.

I then transformed both the original cycles and the doubled cycles into unbroken string format (removing separators like spaces and commas) and stored them in the variables *cycle_string* and *double_cycle_string*. The function *find_existing_cycle* first ensured that the length of each *double_cycle_string* (keys in *count_cycles*) was exactly twice the length of *cycle_string* to confirm that only complete cycles were being compared, thereby avoiding any false matches.⁹⁴ The function then iterated through the doubled cycle strings (*double_cycle_string*) in the *count_cycles* dictionary. For each of these doubled cycles, the function checked if *cycle_string* was a substring of *double_cycle_string*. If a matching doubled cycle was found within *count_cycles*, the function returned the *double_cycle_string* that corresponded to the detected cycle.

The permutations were then processed by the *create_count_cycles* function, which recorded the frequency of each cycle across all participants in the *count_cycles* dictionary. The outcome was a dictionary where keys represent the first matching doubled cycles encountered, and the values were a list of participants who experienced those cycles. The CSV output with the final

⁹⁴ Without this length check, shorter sequences within a longer cycle could be mistakenly identified as repeating cycles. For example, the shorter cycle (*a b c*) could be found within the permutation of a longer double cycle (*a b c d a b c d*). By ensuring that the doubled cycle string was exactly twice the length of the cycle string before checking for a match, such misidentifications were avoided.

counts was then analysed using a combination of Python and Excel to display figures (see below). I have formalised this process as follows:

Given a cycle $c = [v_i, \dots, v_j]$ identified from the first algorithm, I create its doubled form to capture all cyclic permutations, where \oplus denotes concatenation and where v_k is the final activity in the cycle, before it is repeated:

$$C' = C \oplus C = [v_i, \dots, v_k, v_i, \dots, v_k]$$

For each cycle C , the function *find_existing_cycle* (C, C') checks against the set of all previously identified double cycles C' and looks for a match where:

$$\text{find_existing_cycle}(C, C') = (|C'| = 2 |C|) \wedge C \subseteq C'$$

This is a direct check without considering permutations of C other than in the cycles. It verifies two conditions:

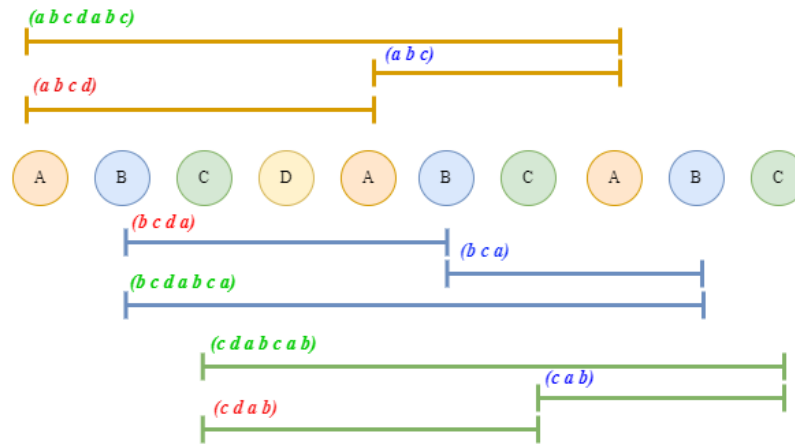
- The length of the doubled cycle C' is exactly twice the length of the cycle C .
- The cycle is a subsequence within the doubled cycle C' .

If both conditions are met, the function identifies C' as an existing cycle that matches the input cycle C .

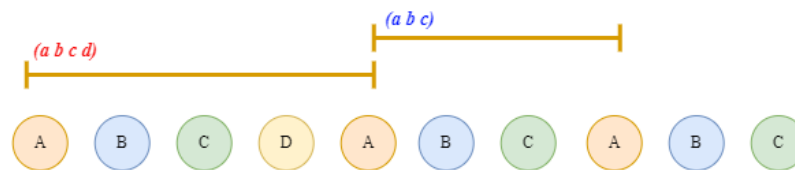
All three algorithms were tested by manually identifying cycles and permutations within five more complex participant paths and checking them against the results of the algorithms to ensure accuracy. Moreover, the analysis on repeated activities yielded the same number of

participants than the cycles algorithms, which provides an additional partial parameter for validation.

Algorithm 1



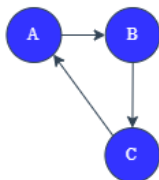
Algorithm 2



Cyclic permutations

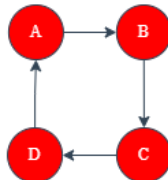
Simple cycle

$(a b c)$
 $(b c a)$
 $(c a b)$



Simple cycle

$(a b c d)$
 $(b c d a)$
 $(c d a b)$
 ...



Compound cycle

$(a b c d a b c)$
 $(b c d a b c a)$
 $(c d a b c a b)$
 ...

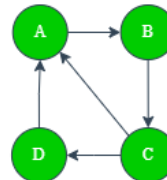


Figure 35 Representation of cycles and cyclic permutations identified with algorithms 1 and 2. The cycle ends with the first letter, but it is not represented.

Appendix 10: Reflexivity statement

As a Franco-British mixed-white male researcher from a middle-class background with a focused speciality in migration, conflict, and crime dynamics in West and North Africa, my professional journey has profoundly shaped the contours of my PhD research. My work, spanning several years and encompassing a diverse array of roles – from advising the EU, US, and UK, to conducting fieldwork with hard-to-reach groups in Africa – has ingrained in me knowledge about the complexities of migration in these regions, without which I would not have been able to do this PhD. However, this experience and the inherent biases and preconceptions that it has given me, combined with my epistemological and ontological stance (complex realism) and the methodology I have adopted have also influenced how knowledge was constructed in this thesis.

I have done my best to remove any preconceptions about what I knew about migration, smuggling or related exploitation, and have tried as best as I could to let the data speak for itself. From a complex realism lens, my approach assumes that rigorous scientific research can identify patterns and mechanisms that exist in the real world, but that this requires specific epistemological frameworks and methods.

While I advocate for safe passage and humane treatment for those in need, I recognise the complexities and limitations of migration policies and practices. My experiences working closely with government agencies have afforded me a closer understanding of the challenges and constraints inherent in shaping migration policies. Despite these complexities, I remain committed to working towards more ethical, informed, and less-biased research and policymaking.

Appendix 11: FEE framework operationalisation

Table 12 provides an example of a potential operationalisation for FEE, of course a user would need to rely on guesswork to answer and rate the importance of many of these questions, and some of these aspects would need to be weighted more than others. Importantly, this framework has not been tested or validated.

Table 12 The FEE framework checklist. Note this framework has not been tested or validated.

FEE checklist	Overall rating: /5
Feasibility	Average rating: /5
1. Resource assessment	Rating: /5
Are the necessary resources (financial, human, material) available?	
What is the estimated financial cost of the intervention?	
2. Timeframe evaluation	Rating: /5
What is the estimated time required for implementation?	
Are there any critical deadlines or time-sensitive factors?	
3. Logistical considerations	Rating: /5
What are the logistical requirements?	
Are there any potential logistical challenges?	
4. Stakeholder involvement and support	Rating: /5
Are relevant stakeholders likely to support the intervention?	
Effectiveness	Average rating: /5
1. Alignment with SCP techniques	Rating: /5
Does the intervention align with the 25 SCP techniques?	
How does it aim to reduce crime opportunities and harm?	
2. Impact assessment	Rating: /5
What is the expected impact on crime and harm?	
What measures can help evaluate this impact?	
3. Displacement analysis	Rating: /5
What types of displacement (temporal, spatial, target, tactical, offense, etc.) might occur?	
How could these be monitored and addressed?	
4. Socio-economic considerations	Rating: /5
What are the potential broader socio-economic impacts?	
How will these be measured and addressed?	
Ethics	Average rating: /5
1. Ethical compliance	Rating: /5
Does the intervention comply with local ethical standards and guidelines?	

Could it impede on a group's human rights or general freedoms, autonomy, and privacy?

Are vulnerable or marginalised groups adequately considered?

2. Risk assessment:

Rating: /5

Are there potential risks or harms associated with the intervention (whether the means or the outcome)?

How could these risks be mitigated?

3. Other unintended consequences

Rating: /5

Are there any other potential unintended consequences to the displacements and socio-economic impacts above?

How could these unintended consequences be addressed?