How a border told became a border controlled

From narratives to material solutions – developments in EU migration control

Emilie Hermansen

Master's Thesis in Criminology

UNIVERSITY OF OSLO

Department of Criminology and Sociology of Law

31 AUGUST 2020

How a border told became a border controlled

From narratives to material solutions – developments in EU migration control

2020

How a border told became a border controlled. From narratives to material solutions – developments in EU migration control.

Emilie Hermansen

http://www.duo.uio.no/

Abstract

Title: How a border told became a border controlled. From narratives to material solutions – developments in EU migration control.

Author: Emilie Hermansen

Main supervisor: Mareile Kaufmann (University of Oslo)

Co-supervisor: Bruno Oliveira Martins (Peace Research Institute of Oslo)

Submitted: Department of Criminology and Sociology of Law, University of Oslo, autumn 2020

Narratives and material objects are both intertwined with the contemporary politics of migration and crime control in the European Union. In this thesis, I investigate how narratives on migration control have developed in the EU from 1951 and until today by assessing key political documents from this period. In addition, the thesis provides an in-depth study on the Automated Border Control-gate as a concrete materialisation of the political narratives. I explore how these narratives materialises by analysing technical documents and international standards in combination with online video observations as well as focused interviews with police employees.

The narratives and the material object are analysed through the theoretical and methodological frameworks of narrative criminology and actor-network-theory. While narrative criminology is used to investigate the political narratives on EU migration and crime control development, actor-network-theory is applied to analyse the concrete materialisation of these narratives. Political narratives are characterised by the ways in which they identify issues of the past and the present, frames individuals or groups who are to blame for these issues as well as providing solutions to the issues at hand. With the use of actor-network-theory, I seek to further expand this view on narratives to also take into account the ways in which material objects also have a role to play in this development.

The study demonstrates that the development of EU migration and crime control is mainly driven by three narratives: the *collaboration*, *security*, and *management narrative*. The EU narratives on migration and crime control starts out as a collaboration between European countries to secure peace, mutual trust and solidarity. This narrative gives birth to important cornerstones of the EU such as the freedom of movement and abolition of internal border controls. This political achievement did however create new political issues related to the difficulty to control cross-border crime, terrorism and irregular migration which gave rise to the security narrative. In this narrative, the internal security of the Union is perceived as being at stake by threats and risks stemming from outside the external borders. A third narrative arose at a time where it became clear that the EU would never fully be able to control migration, and therefore needed to find ways to manage it instead. The last narrative is therefore the management narrative and involves a gradual shift from control to management of migration and is identified by wordings such as risk assessment and performance outputs.

The findings also show that the three narratives materialised into several different legislations and tools for controlling and managing migration. These materialisations are all solutions implemented to solve the issues of the political narratives. In the security narrative, the biometric passport, and a Visa Information System (VIS), came as a solution to provide more secure identification methods and means of regulating migration. In the management narrative, the EU introduced the Smart Border which promoted the use of automated border control technologies. Here, the ABC-gate becomes an important figure in the narrative. By examining the design, the functionalities and the use of the gate, the thesis illustrates how political narratives are part of the construction of the material object. In addition, the findings suggest that the material object also gives shape to border controls by for example providing a self-service border check for all travellers entering the external border of the EU as well as it relocates border guards from the direct interaction with travellers and are placed at distance for observing behaviour. The most important insight provided by the thesis, is the ways in which the human and the technical is strongly intertwined in control practices and cannot be distinguished as two isolated entities.

Acknowledgements

A BIG thank you to my supervisor Mareile Kaufmann and my co-supervisor Bruno Oliveira Martins. Your support, feedback, inspiration, and encouragement throughout the work with this thesis has been very much appreciated. I have always left your offices (and virtual meetings) feeling motivated and uplifted.

Thank you to the informants who so kindly shared their experiences with me. I learnt a lot from you!

A thank you to PRIO for taking me under your wings and including me in you master's student programme as well as inviting me into an excellent academic environment. Thank you Kristoffer, Stine and Håvard for including me in your projects, and to the Security Research Group for your valuable feedback. I will truly miss the third floor, the Learner's Loft, the Munchy Mondays, the Waffle Fridays and all the cake parties in between.

Thank you to all my friends and family! To Camilla for being my study buddy for the past 5 years. We did it! To Alida and Anette for always being there for me, and for helping me in the final stages of the project. We will keep on knitting! To my family for always creating spots of freedom. To Anders for simply being everything to me and for your patience. I am back now.

Finally, **thank you** to all the nonhumans in my life. The MacBook, the Acer, the Nespresso machine and the delete button. This thesis would not have happened without you.

Oslo, August 2020
Emilie Hermansen

Table of contents

1 Introduction

The use of new technologies can help manage the flow of travellers arriving at our external borders, while at the same time tackling irregular migration and enhancing our internal security. Today, we address an important gap in our information systems and take concrete action to make our borders stronger, smarter and more efficient for the ever-increasing numbers of travellers coming to the EU

Dimitris Avramopoulos, (in European Commission, 2016a)
EU Commissioner for Migration, Home Affairs and Citizenship

The European Union (EU) is today faced with a complex and dynamic field of migration. The numbers suggest that there will be close to 900 million border crossings in and out of the EU by 2025 (Frontex, 2019). At the same time, the Union is facing a population of 1.9 to 3.8 million irregular migrants that reside within the internal area of the Schengen (EES Proposal, 2013, p. 2). The Commissioner's statement above presents a solution to the dual objective of managing the increasing numbers of travellers to the EU, and the prevention of irregular migration. The presented solution, a Smart Border, consisting of an Entry/Exit-system and automated border controls are seen as the key to tackle both these issues. The Entry/Exit-system creates a datafile with the passport details, entry and exit dates as well as facial images and fingerprints of every non-EU national crossing the external border of the Union (EES Regulation, 2017). The Smart Border also represents an automatization of the identity checks performed at the external borders.

This thesis stems from my curiosity about the need to collect this vast amount of data of anyone crossing the external border and the possibility to do it in an automated way. This made me want to look more closely into how the border controls of the EU have developed over the years. In this thesis, I therefore take a look back at the development of the EU's migration control to shed light on how the Smart Border has emerged as a solution. Through

an analysis of political narratives from the formation days of the EU in the 1950s until the launch of the Smart Border, I want to show how political narratives both fuel the development forwards to new legislations and practices, and specifically to a new technological object for the automatization of the border control procedure. The topic of migration has been central to the study of criminology from its very beginning, and the thesis is thus a contribution to this tradition. Many of the criminological studies on migration have focused on criminalisation processes (see for example Aas, 2011; Stumpf, 2006) and the policing of migration (Gundhus & Franko, 2016; Aas & Gundhus, 2015). My thesis is building on this literature and is a further investigation of how the control of migration is narrated, as well as providing an exploration of a concrete material object for migration control.

The thesis offers interesting findings both in terms of the narratives and the material object. Through a narrative analysis of a number of key political documents from the EU, I found that there are mainly three narratives that have been important in the emergence of the Smart Border: *the collaboration, the security and the management narrative*. These three narratives materialise in a series of information systems and objects for controlling migration and crime at Europe's external borders. Finally, these narratives and objects manifest themselves in a technological object called the Automated Border Control-gate (ABC-gate). Through an analysis of this object using actor-network-theory, I detected that it is not only a container of the political narratives of the EU but that it by itself also gives shape to the border control practices. In sum, the thesis suggests that border control practices are a result of both narrative and material agency.

The concrete device chosen for the purpose of this thesis is the ABC-gate[1]. It is an object installed at border control points, mostly air borders, that allow for a self-service border check by travellers entering the EU (for pictures, see for example Cominfo, 2019; Secunet,

[1] It is sometimes referred to as an e-gate or an electronic passport gate, but I will use the term ABC-gate throughout the thesis.

2020). Such gates are believed by the EU and the technology developers to lead to a more secure and efficient border control procedure. At the gate, travellers can themselves perform the required border check by introducing their passports and provide the gate with their fingerprints and facial images. Automated ways for facial recognition will establish if the traveller is the owner of the travel document. Further, the gate will check the personal and biometric data against relevant information systems and watchlists and from there determine if the person is allowed to enter the country, or if s/he have to proceed to a manual check. The ABC-gate is thus performing the traditional tasks of identity checks normally performed by border guards.

The aim of the thesis has been to analyse EU political narratives on migration, and how these narratives materialise in a concrete border management device, which is the ABC-gate. An additional aim is to examine how this material object is both a container of these political narratives, but also how the object in itself might give shape to border control procedures. With the use of both narrative criminology and actor-network-theory, I seek to find a way to present both the stories of humans and technologies. The research questions are therefore:

- *What narratives underlie the development of migration control in the European Union?*
- *How have the narratives of migration control materialised in the ABC-gate?*
- *What are the functions of the ABC-gate and how does it give shape to EU migration control?*

The field of migration control in the EU is a very complex matter, and since the thesis is aiming at drawing the big lines in the developments of migration control, I need to draw a line of demarcation. Since the thesis stems from a curiosity about the Smart Border and its automatizations of border control, my emphasis has been on the type of migration control that is performed at the external borders of the EU. ABC-gates are for the most part installed in airports, and I have therefore focused on the type of border control that is performed in

this context. Since the thesis is based on the documents produced by the EU, I will also use the term irregular migrant according to the definition provided in the EU-documents. When the term is used it refers to a migrant who has either entered the EU with a forged travel document, have overstayed his or her allowed period of stay, or have not returned to his or her home country after a negative decision on an asylum application (Communication, 2006, p.2). In chapter 5.4-5.6, I also apply the term "traveller" as the ABC-gate can be used by both migrants and citizens of the EU.

The thesis is composed of six chapters. After the introduction, I offer a very short overview of the history of migration control and an introduction to biometric technologies. I demonstrate how biometric technologies have become central to control efforts in the area of migration, how the technology works and some key concepts from the academic literature on the topic. The chapter is rounded off with a reflection on how a narrative and material analysis can build on this literature and further expand the knowledge in the field.

Chapter 3 consists of the theoretical framework and a methodological reflection. Here, I present two theoretical and methodological approaches, narrative criminology and actor-network-theory. I reflect on their epistemological underpinnings as well as how materiality can be brought into the field of criminology. In chapter 4, the concrete methods and approaches used to collect and analyse the data is presented. The thesis employs document analysis as the primary tool, but for the analysis of the ABC-gate, video observations and interviews are also included. The chapter also includes an ethical reflection as well as a quality assessment, and an overview of the datasets.

Chapter 5 is a combined analysis and discussion of the data material and the findings. The first part of the chapter (5.1-5.3) concentrates on the three main narratives that I identified as part of the narrative analysis, and these are discussed in the light of narrative theory. The second part of the chapter (5.4-5.6) focuses on the materialisation of these three political

narratives and studies the ABC gate as a concrete control device. By looking at its design and functions, I examine how the narratives are built into it and how it gives shape to the border control practices. In the conclusion in chapter 6, I summarise the most important findings before I reflect on what a narrative and material study can offer the criminological field.

2 Background

The history of migration control in Europe is long and complex and this chapter provides a short introduction to how the control has evolved over the last years. I demonstrate how migration control has been gradually more concerned with controlling migration with an emphasis on identification methods and with the use of biometric technologies. Identifying and verifying the identity of individuals through biometric technologies has in general become a task for many different actors within the society. With data retrieved from body measurements, individuals are given or denied access to certain places and services. What was once a futuristic scenario of gaining access to places using fingerprints has by today become a quite normal procedure. This is true also for migration control. In this chapter, I explain what biometric technology is and what its role in migration control is. An overview of the relevant academic literature on the topic will also be presented. I will also demonstrate how a narrative and material approach to the topic can contribute to broaden the understanding of the technology and its impact on migration control.

2.1 A very short introduction to migration and crime control in Europe

Criminologists have been researching the dynamics and consequences of migration at least since the start of the Chicago School in the 1920s. The interesting aspect of migration in the European context is, however, that migration *to* Europe is a fairly modern phenomenon. During the 19th century, European countries were first and foremost countries of emigration where thousands of Europeans left their home-countries to seek new opportunities in for example the US (Melossi, 2015, p.49). However, sometime during the 20th century the direction of the flows of migrants shifted, and Europe started to receive migrants from all corners of the world. This happened alongside the globalisation processes from the 1980s and onward, which had an important impact on how the national and the international was perceived. The world became smaller and more connected and this brought forth insecurities about international dangers that threatened the local (Aas, 2013, p.11). With

this shift, borders became a place for the expression of state power (Donnan & Wilson, 1999) and today the external borders of Europe are often perceived as "vulnerable entities in need of protection" (M'Charek, 2018, p.92) from terrorists, criminals and irregular migrants. As will be demonstrated later, this is an important aspect of the security narrative.

The notion of protection was especially emphasised after the terrorist attacks on 9/11 as well as the different attacks in Europe during the 2000s (Bosworth, 2008; Ceyhan, 2008; Goldstein & Alonso-Bejarano, 2018; Jusionyte 2018). These events led to great insecurities and they shattered the idea of the US and Europe being "untouchable powers" (Ceyhan, 2008, p.105). After this, the protection of the borders became gradually more connected to the control of the identity of migrants and still is today:

> *Identity is increasingly becoming a vital object of policing and various strategies of mobility policing are focusing on suspect identities, thus shifting attention from traditional police narratives about what someone has done to who he or she is* (Gundhus & Franko, 2016, p.511).

In the same line, Ajana states that identity is today closely connected to risk, and being at risk: "[…] the risk of fraud, the risk of crime, the risk of terrorism, the risk of illegal immigration, the risk of illegal working and so on" (Ajana, 2013b, p.79). Ultimately, identity have become an object of control which materialised into the securitisation of travel documents such as passports. The introduction of a machine-readable passport containing the biometric data of the migrant became the first refined attempt at controlling migration and the risks it carried (Dijstelbloem, Meijer & Besters, 2011, p.5).

The machine-readable passport became one object of control in relation to migration, but there was also a second development of importance. Crimmigration has been used to address the gradual interlacing of criminal law and migration law (Stumpf, 2006), and is today also used to argue for the fusion between migration and crime control (Guia et al., 2011, Stumpf, 2014 p.237). The developments represent a temporal shift where the

management of borders and the control of the moving population is aimed at avoiding future unwanted incidents such as terrorist attacks. Governments are trying to prevent these possible scenarios from happening and this way of handling the migration issue is termed a "politics of possibility" (Amoore, 2013). In this environment, establishing the identity of the migrant is not in itself the primary goal. The goal is to assess the level of risk the migrant is posing when granted entry to a country (Ajana, 2013b, p.12). The intertwining of risk and identity can lead to migrants being perceived as a dangerous other, and this can legitimise more coercive methods to secure them, a process termed "criminalisation of identity" (Aas, 2013). In sum, controlling migration through the lens of risk can to the furthest extent label migrants as potential criminals or terrorists (Gundhus, 2018).

Migration control and its focus on identity has led to technology developments that focus on using the body of the migrant as a control tool. Biometric technology has been presented as the perfect solution to meet this end (Marciano, 2018, p.4). In this context, the body becomes an object of calculation, observation, suspicion and prediction when being present at the border (Adey, 2009). Identity is therefore something that becomes proven by showing up at the border presenting a part of the body either to a human border guard or a machine that will verify the identity (Salter, 2004; Torpey, 2000). Since biometric technology is such a fundamental part of the functions of the ABC-gate, the next section will explain some of the most central features of the technology.

2.2 Biometric technology – functions and uses

The term biometrics is derived from the two Greek words *bios* (life) and *metron* (measure) and refers to "[…] the technology of measuring, analysing and processing the digital representations of unique biological data" for identification purposes (Ajana, 2013b, p.3). Biometric technology claims that every individual carries a body with body parts with specific measurements that can be used to establish the identity of the individuals in an automated way. Biometric data can consist of physiological and behavioural traits. In migration control,

the most widely used traits are physiological such as facial images (Savvides, Heo & Park, 2008), fingerprints (Lewis, 2014; Maltoni & Cappelli, 2008) and iris patterns of the eye (Bodade & Talbar, 2014). Behavioural traits refer to individual ways of walking, talking and writing and can be measured via observations and recordings of the gait (Sarkar & Liu, 2008), voice (Abdalrahman, Bülent & Kahraman, 2018) and handwriting (Smejkal & Kodl, 2018). The biometric data of an individual is registered either in an information system, such as a population register, or stored in the chip of a travel document (Asbourn, 2011, p.15).

Biometric technology is used in a wide range of areas stretching from population registers (Jacobsen & Rao, 2018, p.25; Kloppenburg & Van der Ploeg, 2018, p.2), law enforcement authorities (Condell et al., 2018, p.152) and in consumer products such as smartphones and debit cards (Biometric Update, 2019; BBC News, 2019). In the context of migration, biometrics are implemented to "[…] identify and categorise individuals in order to monitor and control their mobility" (Olwig et al., 2019, p. 1). Biometric technologies are being used to identify refugees as for example through a UNHCR system that provides identity documents to refugees from Myanmar who have fled to Thailand (UNHCR, 2015). It is also implemented at the US-Mexican border where iris scanning technology control the iris patterns of border crossers against a database containing almost a million iris scans from over 180 law enforcement databases in the US (The Intercept, 2017). In the European context, the development of the Smart Border with multiple biometric systems for different categories of migrants will lead to every non-European citizen being registered upon arrival (EES Regulation, 2017).

In order to understand the role of biometrics in migration control, two concepts are important to distinguish from each other, and they are: *identification* and *verification*. The biometric *identification* process is an automated operation where the measurement of the body trait and the identity of the individual are linked across different networks and databases (Ajana, 2013, p.581). It is performed through a one-to-many comparison where the collected body measurement of an individual, for example a facial image, is compared

with biometric data from all individuals enrolled in a biometric system (Li, Schouten & Tistarelli, 2009, p.4). An example of identification is when an individual is compared against the biometric data of watchlists. The UN Security Council Resolution 2396 (2017) requires that all member states develop watchlists with biometric data retrieved from known and/or suspected terrorists and foreign terrorist fighters. The process of *verification* is, on the other hand, performed through a one-to-one comparison where the individual's body trait is compared to biometric information stored in the chip or in the visible data page of the travel document that the person carries (Li, Schouten & Tistarelli, 2009, p.4). Border guards are verifying identities when they compare the facial image in the passport with the person standing in front of him or her. Central to this thesis, is that the ABC-gate provides for an automated solution to the identification and verification of migrants at the border.

The popularity and attraction of biometrics may be accredited to the underlying assumptions and logics behind the technology. The assumption is that every human being inhibits the same set of physiological and behavioural traits that are constant over time, but when measured these traits are unique for every individual (Kloppenburg & Van der Ploeg, 2018, p.5). What differentiates biometrics from other types of identification methods is that it is based upon *who you are* rather than *what you have* (e.g. an ID-card) or *what you remember* (e.g. a password or a pin-code) (Jain & Ross, 2008, p.2). In a critical assessment of biometric technologies, Aas (2006, p.145) suggests that the body becomes something similar to a password or a token that we always bring with us and it can even be interpreted as some sort of a digital DNA (Kruger, Magnet and Van der Loon, 2008, p.104). What I want to highlight in this thesis, however, is that although ID-documents and passwords becomes less important, it does not mean that there is necessarily a shift from objects to subjects and their bodies. The question and process of verifying *who you are,* is instead coupled to other types of objects such as the ABC-gate and biometric information systems in the hands of the EU.

2.3 Previous research on biometrics and migration control

Biometric technologies promise identity verification to be more efficient and secure. It is therefore very attractive for governments seeking to control populations and their movements (Miller, 2017, p.768). Biometrics are by several official institutions believed to be "[…] the last step in fixing identity once and for all" (Rao & Nair, 2019, p.470). The expansion of biometric technologies for the regulation of migration have, however, not gone unnoticed in the academic field, and it has been critically targeted from several disciplines including criminology, critical security studies and international relations. Key concepts derived from the discussions in these fields, indicate that biometrics brings forth many new societal and ethical issues that challenges the technology as being such a last step. Questions are also being raised by human rights advocates and data protection authorities on how this technological solution affects the society, political decisions, and the general ideas surrounding technologies, identities, and bodies. In the following, these key concepts will be presented.

The research of Olwig et al. (2019, p.1) shows that authorities in charge of border management often presents biometrics as "[…] scientifically based, exact and neutral methods of identification and verification". In support of this perspective, scholars have noted that there is a political assumption that biometric technologies are universal applicable to all human beings that surpasses "[…] class, status, education or any social characteristics" (Jacobsen & Rao, 2018, p.33). The literature does however to a big extent focus on examples that contradict these claims. One source of critique is for example that biometric technologies for facial images are calibrated to whiteness, which means that people of other skin colours might have trouble achieving the quality of the biometric capture needed in order to be identified (Magnet, 2011, p.32; Pugliese, 2010, p.57). Other scholars points to the fact that the quality of fingerprints is often lower in the elderly population (Magnet, 2011), people engaged in manual labour (Jacobsen & Rao, 2018), for some persons undergoing chemo-therapy (Chavarri-Guerra & Sota-Perez-de-Celis, 2015) or having a permanent lack of fingerprint due to a genetic disorder, most often known as the

"immigration delay disease" (Nousbeck et al., 2011). This can lead to a situation where invisible, and often sensitive, information about an individual is made visible by the technology (Marciano, 2018, p.5). It also demonstrates that the technology has the potential to exclude, categorise and even stigmatise certain groups of people.

Categorisation mechanisms is a common critique of biometrics. The technology is not only used to register the identity of those who enter or leave a country, but also to distinguish between different categories of migrants (Lyon, 2003). The literature notes ways in which the proclaimed neutrality of biometric technologies is contested regarding its ability to categorise and classify migrants according to the risk they pose. Paper-based identity systems was earlier used to include and exclude persons from memberships of society (Stalder and Lyon, 2001), and new biometric technologies can be used in the same manner (Ajana, 2013b, p.4). Ajana (2013b, p.5) notes that this practice became especially important after 9/11, and that certain groups became constructed as security threats by the US and the EU. The categorisation and risk profiling practices at border control points have implications for the status of the migrant. They can go from being "[…] citizens, foreigners, and refugees, with complex identities and claims to home, into objects of danger or benefit" (Salter, 2007, p.59). These developments have led scholars to engage in debates on how current border practices have led to a notion about the immigrant becoming a "dangerous other" (Aas, 2013).

> *The space-time compression of globalised modernity has not only brought about worldwide flows of people […], but it has also brough about an increase in fear and uncertainty – for it is not only the good citizen who travels fast, but also terrorists, organised criminals and illegal migrants […]* (Leese, 2016, p.412).

This discussion has led to notions such as "the deviant immigrant" (Melossi, 2003) and "the crimmigrant other" (Franko, 2020). This is related to Garland's concept of the criminology of the other, where the fear of criminality is strongly attached to the fear of those who are seen as strangers to us (Garland, 2001, p.153). In general, this means that "'Our' security depends upon 'their' control" (Garland, 2001, p.182) and can ultimately lead to a culture of

control. In line with Garland, Nock (1993, pp.1-4) has discussed how the increasing numbers of strangers in a society can lead to an increase in surveillance technologies in order to learn more about who these strangers are and what they do. Based on these debates, scholars have discussed whether the use of biometrics in border control leads to a "surveillance society" (Lyon, 2007; Walters, 2006). The counter-terrorism strategies implemented in the aftermath of 9/11 is especially relevant for this discussion (Lyon, 2003; Zureik & Salter, 2005).

The role of biometrics in a surveillance society is to strategically implement it on border checkpoints to "[…] protect spaces of privileged sociality against unwanted entrants […]" (Jacobsen & Rao, 2018, p.26). Because biometrics relies on specific body measurements of individuals, the migrant's bodies become readable to migration and crime control as well as state power (Epstein, 2016, p.43). Surveillance of the body has been legitimated by the idea that the body holds an immense level of truth about the identity and the movements of the person (Ball, 2005, p.91; Franko, 2020). Through these border control practices, the border becomes a "sieving border" in which information sieves from the migrant body and to the relevant authorities (Broeders, 2011). A lack of trust in people thereby shows through an increased trust in technology (Aas, 2006). The consequence is that, "[…] the symbols of trust and security take less the human form of a police officer […] and more the form of physical representations, such as the CCTV camera and other security fixtures" (Aas, Gundhus & Lomell, 2009, p.11).

In sum, these different contributions do by and large indicate a border practice that is based on binary logics and where there is little room for ambiguity. The border control decides between those who are welcomed and those who are returned (Dijstelbloem, Meijer & Besters, 2011, p.5). Either you are in, or you are out (Broeders, 2011, p.46). ABC-gates installed in the Copenhagen Airport gives access to individuals who carry bodies that are successfully read by the machine, while those who are unsuccessful must go through a manual control (Olwig et al, 2019, p.8). Since biometrics is so closely related to bodies, scholars also note that the border control practices create different types of bodies. It is said

to produce and expose fraudulent bodies (Maguire & Rao, 2018), crimmigrant bodies (Aas, 2011; Franko, 2020), deviant bodies (Jacobsen & Rao, 2018) and illegal bodies (Van der Ploeg, 1999b) which are all examples of the migration status mixed with notions of illegality.

2.3.1 How can a narrative and material analysis advance the discussion?

The previous paragraphs have demonstrated the large amount of work done in the field of biometrics, and it might therefore be somewhat difficult to imagine what knowledge gaps that exist in the field of study. The common denominator in these contributions is, however, that they tend to focus on the real and potential *consequences* that such technologies might bring. My approach will be less focused on the consequences, and rather oriented towards seeing how this technology has emerged over time and is a result of political narratives, and first then explore how it might give shape to the border control processes. In the following, I will reflect on the ways in which narrative criminology and actor-network theory can add additional insight to the already rich literature on the topic. In order to broaden and complicate the field, I have identified four blind spots where this theoretical framework can come to use.

First, many of the academic works mark 9/11 as the starting point for biometric technologies. This means that the understanding of the technology is often limited to looking at the object situated in a security discourse. Although this is very apt, these works miss the political development that precedes this event. With using narrative criminology to examine the development from the very beginning of the EU, it will be possible to detect other narratives that has also been part of giving the technology such a big role in the control of the external borders. The focus becomes therefore more oriented towards how the technology came about. Second, a combination of the two methods could bring more nuance to the relations that exist between the "human" and the "technical". Waltz (2006, p.55) states that material objects "[…] are rarely considered beyond their status as equipment enabling human ends". This means that looking at the technology from the

narrative angle is not sufficient as that would lead to the technology being perceived as only a material outcome of what someone has said in the past. This calls for a closer examination of certain aspects of the technology itself.

Third, actor-network-theory can be applied to assess the material properties of the technology and can therefore be used to explore how it can shape the actions of its users, both in regard to border guards and to migrants. It can for example determine the level of interaction required from the user, and how this works in practice. Last, how the functionalities of a technology came about is rarely addressed. The bits and pieces of a technology is always a result of human choices (Latour, 2005; Norman, 2013) and are thus based on concrete ideals, values, goals from the past. Narratives can also take a part in this aspect. These aspects are built into the design of the object and can therefore serve as an important indicator of the social context of the technological object. By looking more closely into these aspects of the technology, it can downplay the popular binaries between humans/machines and the social/technical. In the next chapter, the two theories of narrative criminology and actor-network-theory will be explained in more depth.

3 Theoretical and methodological framework

The two theories of narrative criminology and actor-network-theory are applied in the thesis in order to provide deeper insight into how political narratives and material objects play an important role in the development of EU migration control. By combining the two approaches I am seeking to bring both humans and technologies to the front. Research in the criminological field tends to forefront humans in the analyses, as for example in the roles of perpetrators, as victims, as controllers and law makers. This thesis is, however, seeking to understand the ways in which technologies also play a role in this respect. This chapter therefore introduces the two theoretical and methodological perspectives and their epistemological underpinnings, and I reflect on why studies of materiality in criminology should matter. The chapter starts out with an explanation of narrative criminology. From there it goes into a discussion of materiality and criminology and then to a concrete theory of exploring materiality, namely actor-network-theory. At the end of the chapter I provide a reflection on some of the critiques of the theories, and the ways in which the combination of the theories might solve some of these issues.

3.1 Narrative criminology

Narrative criminology (NC) is a theoretical and methodological framework that developed in the beginning of the 2000s following a "narrative turn" within criminology (Sandberg & Ugelvik, 2016). Presser (2009) was the first to introduce the term and with contributions from Sandberg (2010; 2013; 2016) the framework was further developed. NC involves an inquiry into how narratives inspire and motivate harmful actions and how storytelling can make sense of harm itself (Presser & Sandberg, 2015, p.1). Harm is understood in broad terms as any action causing troubles for others (Presser, 2013). As such, NC focuses on "[…] societal stories about crime and the stories of those labelled as criminals by the judicial

system" (Sandberg, 2016, p.156). Up until now, the field has been investigating the personal narratives of for example drug dealers (Sandberg, 2009) and people involved in violence (Sandberg, Tutenges & Copes, 2015). However, in the 2019 publication of *The Emerald Handbook of Narrative Criminology* (Fleetwood et al., 2019), new topics such as green criminology and environmental harm (Brisman, 2019), drug policy (Barrerra, 2019) and material objects (Ugelvik, 2019) is introduced. In this publication, it is stated that NC is a field that is still in the making (Fleetwood et al., 2019). The thesis takes this statement seriously, and focus its attention on political narratives about migration and crime control as well as material objects.

NC might not be much more than 10 years of age, but there is no doubt that stories and the act of storytelling have played an important role within criminology for more than the last decade. One example is the study of "neutralization techniques" (Sykes & Matza, 1957), where the researchers explored the spoken techniques and narratives used by offenders seeking to justify their immoral behaviour. A second example is Katz (1990) who in his study of the "seductions of crime", explored how deviant behaviour follows certain narrative scripts and that most actions are motivated by their storytelling potential. Further, Giertsen (2000) investigated a story about murder as told by the offender himself. This included reflections on the act by the offender, but also how official actors such as the police interpreted his story. These examples illustrate that stories have always mattered to criminologists although the research has not been labelled as narrative criminology. Since these examples were written long before Presser introduced the name of the theory, they do not take an explicit stance towards storytelling as narrative criminologists do.

Narrative criminologists work from the assumption that stories are "[…] constitutive of crime and harm" (Brisman, 2019, p.156) which means that they are more than just retellings of what happened in the past. They are closely related to each other. But what exactly is a narrative? Narratives:

> *[…] allocate causal responsibility for action, define actors and give them motivation, indicate a trajectory of past episodes and predict consequences of future choices, suggest courses of action, confer and withdraw legitimacy, and provide social approval by aligning events with normative cultural codes* (Smith, 2005, p.18).

This quote contains many elements that are important for what makes a narrative a narrative. A narrative has elements of *temporality,* it indicates some sort of *causality*, it involves some kind of *agency* and it is *normative*. As stated by Presser & Sandberg (2015a, p. 2): "[…] a narrative is a type of discourse that follows events or experiences over time and make some point".

That a narrative makes some point is connected to what is defined as the *plot* of the story or the narrative. The plot "[…] moves the story towards some point" (Presser, 2018, p.69) and is often referred to as the storyline. The plot is therefore what makes the narrative meaningful as it provides a logical ordering of events and causes. It is built up by two central elements: temporality and causality. Temporality is a way to explain how certain events follow each other in chronological order whilst causality explain how the events are related to each other (Sandberg, 2016, p. 154). An example taken from this thesis is for example that the abolition of internal border controls in the European Union caused issues about the extent the EU was able to control cross-border crime and *therefore* there is a need to enforce stronger controls of the external border. This logical ordering of events makes the story meaningful (Polletta et al., 2011; Presser, 2006). The careful production of stories underlines the fact that storytelling and action, or agency, is connected. Storytellers are active and they act with a purpose in mind, they cannot be reduced to mere "[…] purveyor[s] of information" (Gubrium & Holstein, 2009, p.17).

Storytellers are therefore both the architect and the builder of the story. As such, the narrator has much power, because s/he is the one who controls the final version of the story (Presser, 2006, p.179). This also means that the narrator controls what is told and what is silenced in the final version of the story. Agency also shows by the ways in which narratives

impact the future action by the storyteller. In other words, narratives do not only explain crime and harm, but they also precede action and legitimises certain acts (Fleetwood, 2016, p.174). This aspect of narratives is very important for the purpose of the thesis. The aim is to show how the carefully constructed narratives of the EU are leading forwards to changes in control practices and thus makes a real difference in the context of migration management through materialisations of control devices. Hence the title: How a border *told* became a border *controlled.*

As already noted, NC has up until quite recently focused on individual stories of crime, but in this thesis the focus is turned towards the narratives of the EU as a political institution. Political narratives are

> *[…] the communication of ideas which emerge from official political frameworks (such as governments, political parties, media) and entail narratives and counter-narratives related to power relations, legal or policy decision making or challenge* (De Angelis, 2020, p.240).

The narratives of political actors and institutions are important for NC because of the claim that it "[…] hews to a critical perspective on power and agency as constituted discursively" (Sandberg & Presser, 2015a, p.1). Lately, this has led to a tendency to "study up" which involves an exploration into how narratives contribute to the informing and sustaining of the criminal justice system, prosecution, policing and migration control (Presser & Sandberg 2019, p.134). One example of criminological work on political narratives, is Pickering's (2006) research on border narratives. The study shows that when borders are narrated, they become more than simple lines on the map - they become a site where political ideologies are turned into practice. The way that the border is narrated within political discourse have direct consequences for how the border is controlled and managed, through practices, but also through material objects. Scholars also point to the fact that the topic of migration is

suitable for a narrative examination because of its complex, uncertain and debated character (Boswell, Geddes & Scholten, 2011; Roe, 1994).

To focus on the narratives of political institutions requires a change in narrative environment – the physical or virtual place where stories unfold (Gubrium & Holstein, 2008, p.252). The environment in this thesis, the EU and its associated institutions, is chosen based on the assumption that institutions and organisations create narratives that are easily disseminated to the population (Gubrium & Holstein, 2009, p.174; Presser & Sandberg, 2019, p.135). A narrative framework for the analysis of policies offers a way to understand how policymakers understands the temporal and causal effects of past events, as well as who they see as responsible for those events and how the future is predicted and built based on this knowledge (Boswell, Geddes & Scholten, 2011, p.4; Keeton, 2015, p.129).

Political narratives often take shape as "[…] diagnostic/prescriptive stories that tell, within a given issue terrain, what needs fixing and how it might be fixed" (Rein & Schön, 1996, p.87). The aspect of causality in political narratives often relates to identifying those who causes certain issues, and this often includes the blaming of a specific group or a set of actors for the problem (Schneider & Ingram, 1993). When the cause of the issue is detected, the narrator can point out the victims and the perpetrators of the issue, and present this within a workable narrative containing a meaningful plot. In sum, political narratives shape alliances and affect policy choices, with the subsequent effects on society and the target groups within it (Miller, 2012, pp.25-26). A narrative analysis of political narratives therefore focuses on political issues of the past and the present, who causes the issue, and solutions to it (Boswell, Geddes & Scholten, 2011, pp.4-5).

3.1.1 Epistemological reflection

Narrative criminology is most often categorised under the umbrella of social constructivism which entails the idea that "[…] we act based on the meaning assigned to things. We respond to some version of the world and not the world per se" (Presser, 2018, p.9). A second notion is that the meanings assigned to things change according to time and space (Aradau et al., 2015). Social constructivism therefore rejects the idea that there exists one single, objective reality that is the same in all places at all times. Findings from the analysis of EU's political narratives on migration control illustrates for example how the control over the external borders have changed over time in line with other societal changes. For the narrative criminologist, language is crucial to understand how such social constructs are upheld. Through language, humans use storytelling to classify and make sense of the world (Sandberg, Tutenges & Copes, 2015). The agency element is also strong in NC, by the ways in which storytelling takes an an active part in the "[…] *making* and *shaping* [of] the world" (Sandberg, 2016, p.156, emphasis in original). This is supported by Wibben who states that: "[…] through narratives, we not only investigate but also invent an order of the world" (Wibben, 2011, p. 2).

The central assumptions in social constructivism are therefore useful when trying to understand how political discourses and narratives shape the landscape of migration and crime control. It gives sense to the ways in which powerful political narratives can evolve into new legislations, regulations, practices, and objects. This is, however, an exclusive focus on human agency which creates a strict division between the discursive and the material or language and objects (Baron & Gomez, 2016, p.135; Campbell, 1998, p.221). Agency is in NC restricted to humans and words, which gives too much power to language (Barad, 2003, p.801). In this thesis, however, I try to take this one step further to understand not only how language shapes border controls but also how material objects can play a role in this. This is an approach in which humans and technologies are seen as working together in creating reality (Aradau, 2010). When seeking to understand how control practices merges with official policies, it can be fruitful to understand the roles that specific material objects play in that relation (Kaufmann, 2018a, p.29).

Bridging the gap between the discursive and the material have been targeted by amongst others post-structuralist approaches, where discursive entities are redefined as material (Aradau et al., 2015, p.61). In addition, comes certain strands of post-humanism, which are not trying to degrade humans or even question the status of being human, but rather to:

> *[…] revisioning the human beyond some of the anthropocentric constraints of humanism, and about questioning and transgressing some of our most prized dichotomies of thought: subject and object, public and private, active and passive, human and machine* (Adams & Thompson, 2016, p. 4).

The most important aspect of this perspective is to view agency as something distributed between humans and material objects. This means that the world does not consist of merely active humans and passive objects, but that both have the capacity to make a difference. This offers an opportunity for NC to make material objects matter. As Ugelvik (2019, p. 229) explains: "[…] stories and material objects may work together, each informing the other, each one acting on our understanding of a situation and the options that are seen as open to us". In the following, I therefore introduce the actor-network-theory as a theoretical lens of understanding the material aspects of migration control practices as well as a reflection on what a material perspective can bring to criminology.

3.2 Actor-network-theory and reflections on bringing a material perspective to criminology

Actor-network-theory (ANT) is, in short terms, "[…] a theory […] about how to study things […]" (Latour, 2005, p. 142). Things refer to the material objects that surrounds us in our world. The theory is one of the foundations of Science and Technology-studies (STS) and was developed during the 1980s and 1990s by amongst others Latour (1992; 1994; 2005) and Callon (1986). The theory stems from a curiosity "[…] about who and what is acting when

'we' act" (Latour, 2005, p. 45). A central claim in the theory is that agency is not limited to humans and that the material objects of the world should also be taken into account (Latour, 2005, p. 52). Agency is within this theory distributed in heterogenous networks that consists of both humans and material objects. The theory has been used to investigate material objects ranging from mundane artefacts such as automatic door openers and speed bumps (Latour, 1992), sleep-preventing benches and other "anti-homeless designs" (Rosenberger, 2014, 2017) to more complex, technological objects and infrastructures such as airplanes (Law, 2002) and electricity systems (Akrich, 1992). In the following, I will point to some criminological works that either uses ANT or has an object-oriented focus. From there I go on to explaining what an actor-network is, with first defining what an actor[2] is and thereafter what a network is.

As noted in the introduction to chapter 3, criminology has traditionally tended to centre the human in the research and consequently not been very attentive to what Latour (1992) refer to as the "missing masses of the world". These are the objects that surrounds us in our daily life. Instead, criminology has researched the human in different roles as victims, perpetrators, enablers, and law makers. The focus has been on questions such as: How does humans explain and make excuses for their deviant behaviour? (Sykes and Matza, 1957). How do humans learn deviant behaviour? (Burgess & Akers, 1966). Or how do they calculate the costs and benefits of criminal acts? (Cornish & Clarke, 2008). This exclusive focus on the human is however gradually being challenged by new object-oriented approaches in the criminological field. Some scholars have used ANT to the study of for example cybercrime (Van der Wagen & Pieters, 2015), violence (Holligan, 2015) and tasers (Dymond, 2014). Object-oriented approaches include Sætnan, Lomell & Hammer (2011) who have written about the role of numbers and statistics. Kaufmann (2018b, 2019) on crime predictions and algorithms. In addition, Aas, Gundhus & Lomell (2010) have also edited a collection of works on both mundane and technological objects for crime control.

[2] There are many terms used for the word actor in ANT as for example «actants» and «mediatiors». I will stick to the use of the word «actor» to make it as little confusing as possible. Note that an actor can refer to both a human and a material object.

But why has criminology been so late to take up studies on material objects? It is inevitable to mention that objects in many cases stand to be both targets and means of both criminal acts and crime control. As Ugelvik (2019, p.217) puts it: "[…] nine out of ten reported crimes are automobile related, yet criminologists are not interested in cars". It is impossible to think about a crime that does not involve any kind of materiality. Because who would the hacker be without a keyboard? Or the robber without a weapon? Would theft even be a possibility? Objects are also important in criminal investigations as physical evidence. In for example the famous Norwegian Orderud-case, a hand-knitted orange sock was portrayed in the media as being the key to find the perpetrators of the crime (Dagbladet, 1999). It is therefore no question that material objects play an important role for the traditional research topics of criminology. Maybe objects have tended to slide into the background because crime and deviancy are so closely related to the notion of intention and active decision made by human actors. The focus has been on questions of why people commit crimes, and maybe not so much about how they do it. To include materiality in criminological research, a clearer definition of agency is needed, and this is to be found within actor-network-theory. By redefining agency, it will become clear how the ABC-gate also can give shape to border control practices in the EU.

Latour's definition of agency is related to some*one* or some*thing* "[…] making some difference to the state of affairs […]" (Latour, 2005, p.52). This simply means that everything that make a difference in a situation have agency. This someone or something refer to the *actor* in the actor-network. This requires an acceptance from the researcher to see that "[…] there exist many more figures than the anthropomorphic ones" (Latour, 2005, p.53). These figures, who are not human, is in the ANT-literature often referred to as nonhumans. Latour's concept of nonhuman actors and agency can be illustrated through the concept of *affordances* (Gibson, 1979; Norman, 1988). The concept by Gibson is originally used to describe the relations between animals, humans, and the nature, but the insight from this theory is still relevant for the study of technological objects. The term affordance refers to:

> *[…] the perceived and actual properties of the thing, primarily those fundamental properties that determine just how the thing could possibly be used […]. Affordances provide strong clues to the operations of things* (Adams & Thompson, 2016, p.45).

In simpler terms, affordance means the possibilities that objects offer for action by the human. Airplanes are for flying. Seats are for sitting in. A water bottle is to drink out of. An object does by its construction and design indicate some course of action by its users. When it comes to manufactured objects, such as technologies, these affordances must be built into its design (Norman, 2013). It must be clear to people how they can use it. In addition, manufactured objects can indicate courses of action not intended by the designer of the object. Rosenberger (2014, 2017) illustrates this point in his research on the sleep-prevention bench. Benches in bus terminals are installed with the idea that they will provide people with a place to sit when they are waiting for their bus, but because of its design and installment in a public space it might also be used as a bed for the homeless. This illustrates the fact that it is not possible to have full control over what objects make people do or what they invite people to do (Latour, 2005, p.50). To prevent people from sleeping on the benches, the bench has now been equipped with separators to make it impossible to lie down and hence it has been turned into a sleep-prevention bench that only affords sitting. Material objects can therefore be results of constant battles over intended and actual use.

The affordances of an object are also dependent on the user understanding how it is supposed to be used (Norman, 2013). This means that technological objects must be made with a certain behaviour and use in mind, and this is referred to as the *script* of the object (also at instances referred to as inscriptions and prescriptions). In this respect, Latour (1994, p.31) notes: “Each artifact has its script, its ‘affordance, its potential to take hold of passerby and force them to play roles in its stories”. The fact that one is forced to play a role in the script of the object, is related to the fact that its design indicates the ways in which a human should or should not act in the meeting with the object. The script is therefore reliant on: “What a device allows or forbids from actors – humans and non-human – that it anticipates;

it is the morality of a setting both negative (what it proscribes) and positive (what it permits)" (Akrich & Latour, 1992, p.261). What is interesting here, and especially in relation to criminology, is that objects then can be used to discipline people. Nonhumans can act as "moral agents" (Latour, 1988, p.301) that shape and discipline the behaviours of their human users. This is especially relevant for technological objects such as the ABC-gate because it is an object that is designed to control migrants. The character and behaviour of the human inside the ABC-gate is decided on and measured by both human and nonhuman actors that work together in the heterogenous network of the object (Akrich, 1992, p.217).

So far, the focus have been on the actor in the actor-network, so now is the time to focus on the *network*. A network is "[…] a string of actions where each participant is treated as a full-blown mediator" (Latour, 2005, p.128)[3]. Networks are not to be considered as a physical thing that exist in the world, but it is rather a concept for describing how different actors relate to each other (Latour, 2005, p.131). Networks are therefore not similar to for instance organizational charts that clearly designates tasks and positions to the humans listed in it. It is rather a way of describing how different actors, both human and nonhuman, act together and produces some effect in the world. Agency is thus the property of both human and nonhuman actors working together in networks. Every material object and human in the world is in itself an actor-network (Adams & Thompson, 2016, p.37). This means that every object is entangled in an intricate web that consists of many other actors, both human and nonhuman. This is true also for the ABC-gate. It has obvious connections to humans in the EU who legitimised it through its Smart Border initiative and to designers and engineers who made it a reality. As a technological object it is dependent on nonhuman actors such as for example an electrical infrastructure. A broad range of humans and nonhumans must thus be in motion to keep it "going". This illustrates why "Action is a property of associated entities" (Latour, 1994, p.35).

[3] A mediator is close to what an actor is but refers to a human or nonhuman actor that *mediates* action. I will still use the term "actor" to not cause any confusion.

The heterogenous networks of humans and nonhumans is in ANT investigated by following the "[…] trace left behind by some moving agent" (Latour, 2005, p.132). That the network is heterogenous implies that it consists of both social (people) and material (objects) elements (Michael, 2000, p.4). It is thus a "[…] conglomerate of many surprising sets of agencies that have to be slowly disentangled" (Latour, 2005, p.44). The practices of a nonhuman can be investigated through a concept within ANT, namely the idea of following the actor (Latour, 2005, p.121). The concept consists of two steps: First, choose an actor of interest and second, map the practices and the other key actors that surrounds it (Adams & Thompson, 2016, p.35). The object is therefore not investigated in isolation, but by its connections to other actors, both human and nonhuman. Simply follow the actor of interest and see what it does, what it says and where it goes. At the first glance, this may sound like a straightforward task, but as Latour notes:

> *How ridiculous is it to claim that inquirers should 'follow the actors themselves', when the actors to be followed swarm in all directions like a bee's nest disturbed by a wayward child? Which actor should be chosen? Which one should be followed and for how long? And if each actor is made of another bee's nest swarming in all directions and it goes indefinitely, then when the hell are we supposed to stop?* (Latour, 2005, pp.121-122).

The researcher should therefore always bear in mind that the goal is not to create an exhaustive list of all thinkable practices and actors that exists in the actor-network of the object (Adams & Thompson, 2016, p.35). As Akrich (1992, p.205) states, this would be a "mammoth task". In chapter 4.1, I provide a short account on how I followed and mapped the actor-network of the ABC-gate and how that led me to find the relevant data sources for the thesis.

When following and analysing a technological object such as the ABC-gate it is important to be aware of the fact that it is "[…] a complex historical accomplishment" (Michael, 2000, p.23). Every new object consists of social and technical elements of the past (Akrich, 1992, p.210). When following an actor, it is therefore possible to detect actors that comes from

other times and places (Latour, 2005). This illustrates the fact that every object is a result of careful selections and decisions by humans. Even though a high-tech object does not seem anything like a human, it is important to always bear in mind that every little part of it has been chosen by human actors working from past ideas and research. A technological object can therefore have many relations that stretches across time and space although they are not visible in the finished object. A particular strong actor is recognised by its many connections to other actors, and the more relations it creates the more powerful it gets (Latour, 2005). A strong actor has therefore many historical and contextual strings, and this will be demonstrated in the analysis of the ABC-gate.

3.2.1 The combination of two theories

A strength in combining the two theories of narrative criminology and actor-network-theory is that it leads to a triangulation that offers the possibility to look at a phenomenon from at least two angles (Flick, 2018). By using both the narrative and the material lens on previous and current border control practices in the EU, the triangulation provides for a more holistic account in which the interconnections between language and objects can be discovered. The combination of the two theories is also an approach that does not reduce objects to "[…] passive backdrops to narrative action" (Humphries & Smith, 2014, p.479). Ugelvik (2019) have detected that objects can be used as props in storytelling, but in this thesis, I push this notion further to see how also the props can make a difference. As noted by Kaufmann (2019, p.141): "Technology is not simply a material solution designed by humans for problems identified by humans […]". Instead, it leads to an understanding of how the macro-practices of political narration materialise in concrete micro-practices of the ABC-gate, and how that object also give shape to the border control practices. Combining the two approaches therefore enable me to navigate through both the social and the technical.

In chapter 3.1.1, I discussed the issue of how narrative approaches privilege humans and language over nonhumans and materiality. Critics of ANT have on the other side expressed

concerns about the theory creating a symmetry between humans and nonhumans (see for example Collins & Yearly, 1992). Here, I need to make clear that the thesis does not claim that humans and nonhumans are similar or that they are equally important for the shaping of border control practices. It is rather about acknowledging the fact that they both have the potential to do so. I therefore apply Latour's perspective of not "[…] impose a priori some spurious asymmetry among human intentional action and a material world of causal relations" (Latour, 2005, p.76). An excellent example of Latour's statement is illustrated in Kaufmann's (2019) study where her intention for the study was to look at the agency of algorithms in isolation. She soon discovered that algorithms were interwoven in webs of many different actors leading to the acknowledgement that "[…] I could not take human agency out of the equation" (Kaufman, 2019, p.146). This also became very clear in my analysis of the ABC-gate as will be described in chapters 5.3-5.6.

Looking at a political solution by applying both narrative and material theory is also interesting for an additional reason. Narrative criminology has been criticised by amongst others Bucerius & Haggerty (2017) for the claim that […] discerning the "truth" is not always important" (Sandberg, 2010, p.448). When it comes to politics, the question of truths and lies becomes maybe extra important. As Skilling has noted about policy narratives is that they "[…] are not neutral descriptive accounts but performative: attempts to act on their world through persuasion and, perhaps manipulation" (Skilling, 2012, p.364). The analysis of political narratives becomes especially important in a world where words such as "post-truth", "fake news" and "alternative facts" challenge the ways in which we relate to politics and factual accounts (Maguire & Rao, 2018, p.3). How can we know that political institutions are always telling the truth, or the full truth, about the policies they implement? The claim in NC is that this question does not matter all that much.

What is important, is "[…] the perceived coherence of the sequel (temporal order) of events rather than the truth or falsity of a story element determines the plot and thus the power of the narrative as a story" (Czarniawska, 1998, p.5). This means that it is a careful construction

of a persuasive narrative that determines what happens next, and maybe not so much whether it is true or not. The background chapter of this thesis showed the known flaws, ethical concerns, and societal impact of biometric technologies. The EU was anyhow able to implement the solutions despite these known issues and must therefore have created a powerful narrative to make this happen. By applying actor-network-theory to the narrative analysis it is possible to detect if the material solution is telling the same story as the one getting it implemented, and to see if it can lead the story in its own ways.

4 Methods

The previous chapter offered a theoretical framework for the analysis of narratives and objects. In this chapter, I explain the concrete methods and approaches used to perform both the analysis of the political narratives of the EU as well as the analysis of the ABC-gate. The chapter starts out with an account of how the data material and methods for the narrative and material analysis was chosen. This involves two mapping exercises which are visually presented. Based on the findings of these mappings, the remainder of the method chapter will focus on the narrative and material analysis respectively. In chapter 4.2, I provide an account for how the narrative analysis of the political narratives were performed through a document analysis. The chapter also includes a complete overview of the documents used for the document analysis and is to be found in chapter 4.2.2. In chapter 4.3, I account for the three methods used in the analysis of the ABC-gate. First, I describe the document analysis, then video observations and last focused interviews with police employees. Chapter 4.4 contains an ethical reflection as well as a quality assessment of the thesis.

4.1 A search for narratives and objects

In chapter 1, I described how I found the EU Smart Border and its possibilities for automating border control procedures interesting. It was thus clear from the very beginning that I wanted to focus both on the political development that had led forth to this solution, as well as the material objects that can be used in order to automate border controls. For the sake of the political development, it was clear from the very beginning that data for this purpose was to be located in the textual production of the EU itself and did therefore not require much more attention at that point. When it came to the aspect of automatization of the border control, I needed to locate a material object that could be used for that purpose. The ABC-gate was chosen as the material object to follow after having consulted an EU-funded project that presented the gate as one of the key solutions to the automatization of the European borders (see ABC4EU, 2015). The next step became to detect the relevant data for

assessing the ABC-gate. I did this by using Latour's (2005) approach of following the actor. I therefore did a mapping to detect the human actors that circulates in the actor-network of the ABC-gate (see figure 1). The reason to why I chose to focus on human actors was simply because they are the ones who would produce relevant data material.

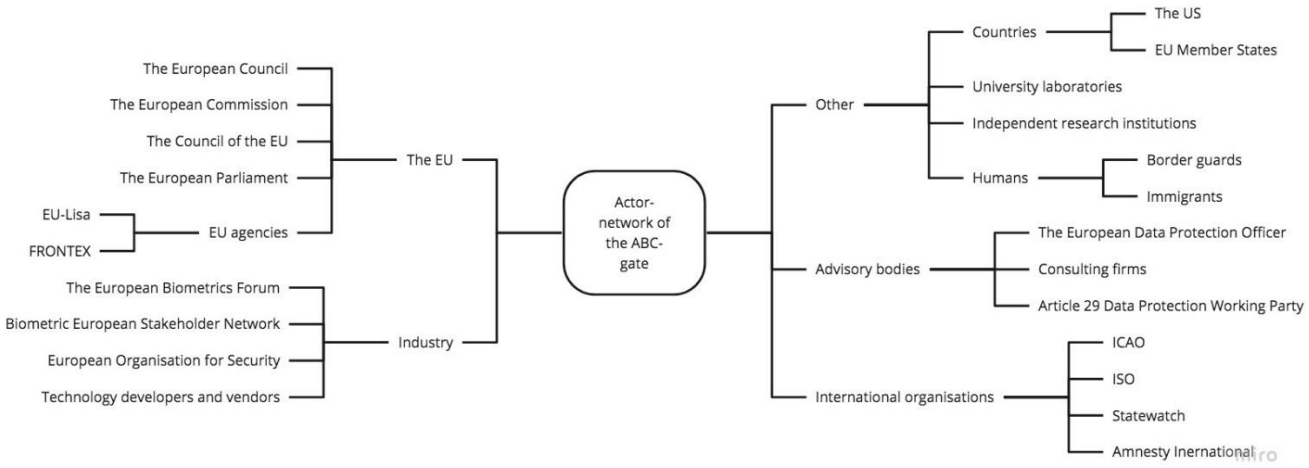

Figure 1. Map of relevant human actors in the actor-network of the ABC-gate. Map made by using miro.com.

The tracing of the human actors in the actor-network of the ABC-gate was by and large performed through three steps. In the first step, I consulted the academic literature on the topic. The work of amongst Olwig et al. (2019), showed that the EU institutions, designers, engineers, and organisations for standardisations were important for the development of different biometric technologies such as the ABC-gate. In the second step, I found other relevant actors when searching for the topic on the Internet. Here I discovered different representatives from the biometric industry that organised themselves in different forums and research groups. I also discovered that researchers and universities are important for the development of such technologies. The map got a final update once I had started to go through the material collected from the actors detected in step 2 and 3. This included for example different privacy and data protection authorities, law enforcement authorities and third countries and EU member states. Figure 1 is thus a visual representation of some of the relevant human actors in the network of the ABC-gate but it is not to be considered as an

exhaustive list. This map provided me with important information on where I could collect data material for the analysis of the material object.

Having mapped the central human actors in the network of the ABC-gate, a following step was to find the types of data that was available for the narrative and material analysis respectively. For the narrative analysis, I had already determined that I was focusing on the documents provided by the institutions and agencies of the EU as the aim of thesis were to follow the narratives of the Union and I therefore needed to look at the original sources in its digital archives. In respect of the material analysis, I decided to focus on three main groups: Frontex, ISO and the technology vendors. These choices were made on the availability of data. In addition, these organisations provided detailed information on how the ABC-gate is constructed and how it is supposed to work. Having decided on the sources of the data, the next step was to examine what types of data was available from the different sources and thus would influence the choice of methods. This led to a second mapping exercise (figure 2).

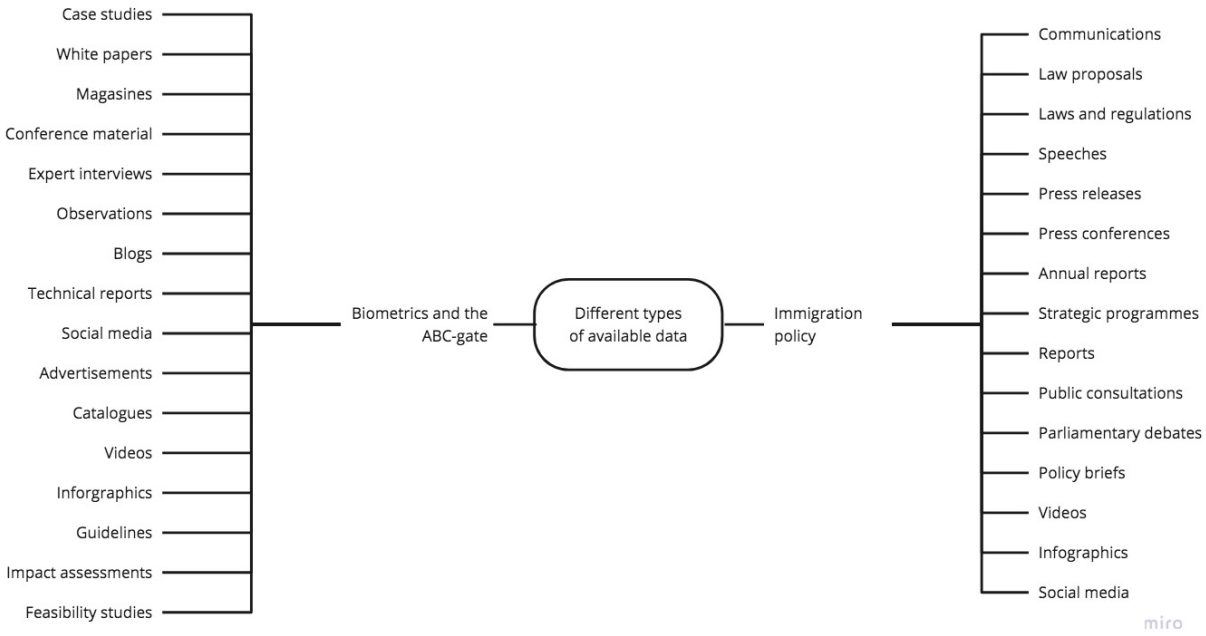

Figure 2. Map of relevant data for the narrative and material analysis. Map made by using miro.com.

Figure 2 illustrates the different types of data available for the narrative and the material analysis, respectively. The search for political documents in the digital archives of the EU uncovered a broad range of documents ranging from laws and regulations to infographics and speeches. I chose to focus mostly on the treaties, regulations, communications, programmes, and strategies as these were marking the developments going on in the field of migration control. For the narrative analysis, it became evident early on that a document analysis alone would not enable me to provide a rich account of its functionalities, and I therefore decided to perform a triangulation of document analysis, video observations and interviews with police employees. This provided me with an opportunity to look at the ABC-gate from many different perspectives. In the following chapters, I will first describe how I performed the narrative analysis of the political documents. Second, I will present how the ABC-gate was analysed by using a combination of different methods.

4.2 Analysis of political narratives

Narrative criminologists have for the most part accessed narratives via interviews (Copes, Hochstetler & Ragland, 2019, p. 175), but there are also examples of visual methods (Carrabine, 2019) and document analysis (Keeton, 2015). The reason to why interviews have been so prominent is perhaps related to the fact that NC for the most part has been used to explore the stories of individuals. In this thesis, however, I seek to draw the big lines in the developments of EU narratives on migration control. The method of interview would therefore be insufficient because it would be difficult to find the humans that could provide accounts with the same amount of detail as the political documents. Related to this, Bowen (2009, p. 31) has stated that the document analysis is suitable for the exploration of things that have happened in the past as there might not be other available data on the topic. An important motivation behind this choice is related to the fact that policy is both expressed and performed through the medium of documents. Policy development and statements are anchored in text, and this makes them a valuable source of data for social research (Fleetwood et al., 2019, p.8).

As a qualitative method, document analysis, is characterised by the fact that it seeks to interpret opinion formation and the consequences of these opinions (Tjora, 2018b, p. 12). A central argument in this thesis is that political narratives have the potential of materialising into material objects, and tracing these opinion formations is therefore important. Documents are therefore especially useful for a narrative inquiry that is focused on detecting the temporalities and causal links in political narratives. As noted by Tight (2019, no page): "[…] all policy involves documents, to set out the policy and how it will be implemented, and then perhaps to monitor its implementation". The document analysis is suitable for giving a picture of a specific case that was written down at a specific time and place (Tjora, 2018, p. 183) and is therefore a fruitful method when seeking to trace the narratives in political development over time. It also increases the historical sensitivity for the topic (Tjora, 2018, p. 187). By following the development over time in key political documents of the EU, I could see how political issues were detected and addressed, and ultimately also how the Union interpreted the outcomes of the solution.

The method is suitable for the study of the developments in migration and crime control because these are recorded in laws and regulations and therefore easily accessible through the digital archives of the European Union. This is important regarding the stability of the documents (Bowen, 2009). Since the documents uploaded to the digital archives of the Union are not changed after publication, they represent the thoughts and assumptions present at the moment in time of publication. Document analysis is less intrusive than other qualitative methods such as interviews and observations (Bowen, 2009; Tjora, 2018), and it is time- and cost-efficient in regards of data collection (Creswell & Poth, 2018). I must however note that I found the collection of data for the narrative analysis to be quite time-consuming. This is mostly related to the fact that the political documents of the EU are not sorted into categories easily understandable for the novices on the topic. The collection of the documents therefore became almost like a snowballing method where one key document led me to other relevant documents through direct textual references. I soon discovered that it was easiest to start out with the newest documents on the topic, as for example those on the Smart Border, and from there work my way back in time.

4.2.1 Analysis

There are several approaches to document analysis, but I chose to follow the approach described by Bowen (2009, p. 32). It consists of three steps: (1) skimming, (2) reading and (3) interpretation. I found this three-step approach useful as the language of the political documents were hard to grasp in the beginning. By reading the documents multiple times, I gained more understanding of the material and I did also by time learn the "jargon" of the documents. The first phase of the document analysis is the skimming phase. This phase is similar to a content analysis, which "[…] entails a first-pass document review, in which meaningful and relevant passages of text or other data are identified" (Bowen, 2009, p. 32). In this phase, I simply read quickly through the documents and noted the important themes as well as were they were located in the documents. Since some of the EU-documents contain information on more topics than migration and crime control, I was in this phase able to shorten them down to concrete pages addressing the topic of interest.

The second phase, the reading phase, is a "[…] careful, more focused re-reading and review of the data" (Bowen, 2009, p. 32). This is more similar to a thematic analysis were the researcher take a closer inspection of the data and performs more concrete coding. In the reading phase of the narrative analysis, my approach was abductive which means that I used both an inductive and deductive approach to the data material (Graneheim, Lindgren & Lundman, 2017, p.31). Based on the research question and the theoretical framework, some codes were set already before I read the texts, and this illustrate the deductive point. These codes were oriented towards the broad categories of migration, crime and control and included more specific codes such as irregular migration, crime types, policing strategies, etc. In addition, some codes related to the theory of NC was also included. These were for example temporality, causality, and characters. Because I had many documents to analyse, these codes were necessary to handle the amount of data. However, when reading the documents, additional codes also emerged from the data material, and this exemplifies the inductive approach. Examples of this is that I found traces of narratives genres, as well as identity building, policy problems and policy solutions.

The last phase, interpretation, involves the analysis of the data with the use of a specific theory. Narrative criminology was the theoretical lens used for the purpose of the analysis of the political documents. Because I did a narrative analysis of a political issue, I decided to follow an approach described by Boswell, Geddes & Scholten (2011, pp. 4-5). They propose that policy narratives are built up by three components. The first component is "[…] a set of claims about the policy problem that a policy intervention should address" (Boswell, Geddes & Scholten, 2011, p. 4). This include both claims about the nature of the problem, how big it is perceived to be as well as it maps and points out the target population (Schneider & Ingram, 1993). At this step, I focused mostly on how migration was problematised, or supported, and what categories of migrants that were important in this respect. I also took note of statistics and numbers that were presented in the documents as these were often used to describe the extent of the phenomenon.

The second component of political narratives is related to a definition of who are causing the political issue and to what extent the issue can be controlled (Boswell, Geddes & Scholten, 2011, pp. 4-5). This aspect of the narrative can lead to a specific group being blamed for the articulated problem. For the narrative to be strong, convincing, and compelling, the aspect of causality needs to be clear. In this step, I therefore focused on the types of migrants who were seen to cause the political issue as well as how these migrants were characterised. I also added codes for the times there were other competing narratives, or counter-narratives, visible in the material. I have mentioned a couple of these in chapter 5, just to illustrate that there are always competing narratives on a political issue. The third and last component of the political narrative is the way in which political interventions have affected this issue in the past and how it will affect it in the future (Boswell, Geddes & Scholten, 2011, pp. 4-5). Here, I focused mostly on the analytical aspects of temporality and causality. I focused on the ways in which problems had occurred, how the EU addressed this issue and what kind of solutions they proposed to tackle it. This also involved a look into how the EU envisions the future with their new solutions.

4.2.2 Dataset – political documents

The complete dataset of the political documents consists of 44 documents of 2174 pages produced by the political institutions and agencies of the EU. The documents have all been accessed via the internet. The EU documents are for the most part downloaded via the database EUR-Lex. An overview of the data material is provided in table 1 (for the complete reference with links see chapter 7.1 and 7.2). The table consists of the long name of the document and the short name that is used when referencing to the document in the analysis and discussion. It is important to note that some of the documents might not be directly referenced in the final edition of the analysis and discussion. Since my analysis have been concerned with understanding and exploring the big lines in the development of the political narratives, there have not been room to report very detailed from all documents. All documents have nevertheless been important in order to see the big picture and for the understanding of how the narratives have developed.

Table 1. Dataset on political documents.

Long name	Short name (reference)	Pages
Treaty establishing the European Coal and Steel Community	ESCS Treaty, 1950	302
Treaty establishing the European Economic Community	ECC Treaty, 1957	72
European Council Meeting at Fontainebleau. Conclusions of the Presidency.	European Council, 1984	10
Convention implementing the Schengen Agreement of 14 June 1985 between the Governments of the States of the Benelux Economic Union, the Federal Republic of Germany and the French Republic on the gradual abolition of checks at their common borders	Schengen Agreement, 1985	44
Single European Act	SEA, 1986	28
Treaty on European Union	Maastricht Treaty, 1992	112
Treaty of Amsterdam amending the treaty on European Union, the treaties establishing the European Communities and certain related acts	Amsterdam Treaty, 1997	144
Tampere European Council 15 and 16 October 1999. Presidency conclusions.	European Council, 1999	Webpage
Communication from the Commission to the Council and the European Parliament on a Community immigration policy	Communication, 2000	29
Council Regulation (EC) No 2725/2000 of 11 December 2000 concerning the establishment of 'Eurodac' for the comparison of fingerprints for the effective application of the Dublin Convention	Council Regulation, 2000	10
Council Common Position of 27 December 2001 on combatting terrorism	Council of the EU, 2001	3
Commission Working Document. The relationship between safeguarding internal security and complying with international protection obligations and instruments	Commission Working Document, 2001	22
Communication from the Commission to the Council and the European Parliament on a common policy on illegal immigration	Communication, 2001	26
Council Directive 2002/90/EC of 28 November 2002 defining the facilitation of unauthorised entry, transit and residence	Council Directive, 2002	2
Council framework Decision of 28 November on the strengthening of the penal framework to prevent the facilitation of unauthorised entry, transit and residence	Council Decision, 2002	3
EU Schengen Catalogue. External borders control, Removal and readmission. Recommendations and best practices.	EU Schengen Catalogue, 2002	53
Presidency Conclusions Seville European Council 21 and 22 June 2002	European Council, 2002	Webpage
A secure Europe in a better world. European Security Strategy	European Security Strategy, 2003	16
Communication from the Commission to the European Parliament and the Council in view of the European Council of Thessaloniki on the development of a common policy on illegal immigration,	Communication, 2003	21

smuggling and trafficking of human beings, external borders and the return of illegal residents		
Council decision of 8 June 2004 establishing the Visa Information System (VIS)	Council Decision, 2004	3
Council Regulation No 2252/2004 of 13 December 2004 on standards for security features and biometrics in passports and travel documents issued by Member States	Council Regulation, 2004	6
Communication from the Commission to the Council, the European Parliament, The European Economic and Social Committee and the Committee of the Regions Study on the links between legal and illegal migration	Communication, 2004	20
The Hague Programme: strengthening freedom, security and justice in the European Union	Hague Programme, 2005	14
Communication from the Commission. A strategy on the external dimension of the area of freedom, security and justice.	Communication, 2005	12
Communication from the Commission on Policy priorities in the fight against illegal immigration of third-country nationals	Communication, 2006	12
Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. Preparing the next steps in border management in the European Union	Communication, 2008a	10
Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. A Common Immigration Policy for Europe: Principles, actions and tools.	Communication, 2008b	19
Commission Staff Working Document. Preparing the next steps in border management in the European Union. Impact Assessment.	Commission Working Document, 2008	104
Entry-Exit Feasibility Study	Feasibility Study, 2008	360
Report on the European Security Strategy - A secure Europe in a better world.	Report on EES, 2009	43
Commission Decision of 9 October 2009 laying down specifications for the resolution and use of fingerprints for biometric identification and verification in the Visa Information System	Commission Decision, 2009	4
The Stockholm Programme – An open and secure Europe serving and protecting citizens	Stockholm Programme, 2010	38
Commission Staff Working Document on the fulfillment of the 29 measures for reinforcing the protection of the external borders and combatting illegal immigration adopted at the Justice and Home Affairs Council Meeting, held on Brussels on 25 and 26 February 2010	Commission Working Document, 2010	24
Communication from the Commission to the European Parliament and the Council. Smart borders – options and the way ahead	Communication, 2011a	14
Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the	Communication, 2011b	11

Committee of the Regions. Schengen governance – strengthening the area without internal border controls		
The Global Approach to Migration and Mobility	GAMM, 2011	25
Proposal for a regulation of the European Parliament and of the Council establishing an Entry/Exit System (EES) to register entry and exit data of third country nationals crossing the external borders of the Member States of the European Union	EES Proposal, 2013	61
Speech: "Smart Borders": for an open and secure Europe	Press Conference, 2013	Webpage
Commission Staff Working Document establishing an Entry/Exit System (EES) to register entry and exit data of third country nationals crossing the external borders of the Member States of the European Union	Commission Working Document, 2013	8
Regulation (EU) 2016/399 of the European Parliament and of the Council of 9 March 2016 on a Union Code on the rules governing the movement of persons across borders (Schengen Borders Code)	Schengen Borders Code, 2016	52
FRONTEX Programming Document 2018-2020	FRONTEX, 2017	238
Regulation (EU) 2017/2226 of the European Parliament and of the Council of 30 November 2017 establishing an Entry/Exit System (EES) to register entry and exit data and refusal of entry data of third-country nationals crossing the external borders of the Member States and determining the conditions for access to the EES for law enforcement purposes	EES Regulation, 2017	63
Regulation (EU) 2018/1806 of the European Parliament and of the Council of 14 November 2018 listing the third countries whose nationals must be in possession of visas when crossing the external borders and those whose nationals are exempt from that requirement	EU Regulation, 2018	20
Annex to the Commission recommendation establishing a common "Practical Handbook for Border Guards" to be used by Member States' competent authorities when carrying out the border control of persons	Handbook for Border Guards, 2019	116
Total number of pages		**2174**

4.3 Analysis of the material object

The analysis of material objects by using actor-network-theory is a less straightforward task comparing it with the narrative analysis of the political documents. Latour (2005) rejects the idea that there exists an all-purpose methodology for the analysis of material objects, and this calls for an approach where methods are triangulated. Triangulation of methods make the researcher able to assess the object of interest from multiple perspectives (Flick, 2018). The analysis of the ABC-gate started out with an idea that a document analysis would be sufficient as both the Frontex, ISO and the technology developers provided much information about it in their texts. I did however soon discover that these documents did not provide me with much information on how the ABC-gate would give shape to border

controls, so I therefore had to look for other methods. Material objects are silent and "[…] specific tricks have to be invented to *make them talk*, that is, to offer descriptions of themselves" (Latour, 2005, p.79). Some of these tricks is to look for textual data, to observe the object in use and to talk to people that have made it or are using it. In the following, these three tricks will be presented through the methods of document analysis (4.3.1), video observations (4.3.2) and the focused interview (4.3.3.).

4.3.1 Document analysis

One of the tricks to make nonhumans talk is to consult different types of archives. Latour (2005, p. 80) notes that different types of documents, memoirs, museum collections and fictional literature can offer rich data material about the nonhuman (Latour, 2005, p. 80). In addition comes online sources, technical reports, researcher journals, policy documents, journals, films and photographs (Adams & Thompson, 2016, p.27). To perform a document analysis is thus one way to make the object talk. When it comes to the perspective of documents in ANT, it is important to note that these are also actors in the actor-network of the material object. A document is "[…] a material entity that circulates and connects with other material configurations" (Michael, 2000, p. 13). The technical documents that describes the ABC-gate are therefore important actors in the network of the object as they describe the ways in which it is to be made or operated.

The documents collected for the analysis of the ABC-gate was by and large international standards on automated border control solutions and biometrics, Frontex-guidelines for the operation of ABC-gates and product brochures from the technology developers. The full overview of the dataset can be observed in 4.3.1.1. The document analysis of the ABC-gate followed the same three-step approach as for the political documents in chapter 4.2, and involved skimming, reading and interpretation of the documents. The skimming phase was first and foremost an exercise in simply understanding the technicalities, and to look for what the document actually could provide of information about the ABC-gate. I discovered

that I could code the data material into categories such as physical descriptions, functionalities, and scripts. In the second reading phase, these were supplemented with other codes such as scripts and affordances which were based on the actor-network-theory. At this point it was also important to see if the narratives detected by the narrative analysis also were visible in the descriptions of the ABC-gate.

The document analysis of the ABC-gate provided me with good insight to the ways in which the technology is constructed and how it is supposed to function. One important thing to note, and something that came to be an obstacle, is that documents used in qualitative research are not made for the purpose of research. It is therefore important to contextualise and reflect on the nature of the documents (Bowen, 2009; Tjora 2018). The documents used in the material analysis are produced by authors that promote the technology. The technology developers want to sell their products and Frontex must promote the solution chosen for the border control of the EU. This created an obstacle in detecting the breakdowns and accidents of the technology that is so central to the theory of ANT (Latour, 2005, p. 80). Through observing such situations, the agential capacities of the material object show. So, although the documents provided me with good insight into how it works, it said very little about the ways in which it might not work and that made me search for additional methods.

4.3.1.1 Dataset

The finished dataset consists of 17 documents with 731 pages and is a collection of international standards, studies on automated border control solutions, technical documents, brochures from developers of the technology, and best practices. The international standards are downloaded via www.standard.no where I needed to create a student account for access. The remaining documents are available and downloaded from the webpages of the vendors of the biometric technology and Frontex. The complete reference is found in the literature list. The table follows the same logic as that of political documents in 4.2.2.

Table 2. Overview of dataset on automated border control solutions and biometrics.

Long name	Short name (reference)	Pages
BIOPASS Study on Automated Biometric Border Crossing Systems for Registered Passenger at Four European Airports	FRONTEX, 2007	86
ISO/IEC TR 24714 (2008) Information technology – Biometrics – Jurisdictional and societal considerations for commercial applications.	ISO/IEC TR 24714, 2008	24
BIOPASS II. Automated biometric border crossing systems based on electronic passports and facial recognition: RAPID and Smart Gate	FRONTEX, 2010	51
iBorders Biothenticate ABC Gate (brochure)	SITA, 2014	2
ISO/IEC TR 29195 (2015) Traveller processes for biometric recognition in automated border control systems	ISO/IEC TR 29195, 2015	32
Document ICAO 9303 (2015) Current ICAO Specifications for Machine-Readable Passports, Visas and ID Cards.	Doc9303, 2015	38
Best Practice Technical Guidelines for Automated Border Control (ABC) Systems	Technical Guidelines, 2015	62
Best Practice Operational Guidelines for Automated Border Control (ABC) Systems	Operational Guidelines, 2016	71
Guidelines for processing of third country nationals through automated border control	TCN Guidelines, 2016	34
ISO/IEC 24779-4 (2017) Information technology – Cross-jurisdictional and societal aspects of implementation of biometric technologies – Pictograms, icons and symbols for use with biometric systems. Part 4: Fingerprint applications.	ISO/IEC 24779-4, 2017	48
ISO/IEC TR 29196 (2018) Information technology – Guidance on biometric enrolment.	ISO/IEC TR 29196, 2018	62
i720 Skylane. New Generation of Automated E-Gate (brochure)	Skylane, 2018	2
ISO/IEC 39794-5 (2019) Information technology – Extensible biometric data interchange formats. Part 5: Face image data.	ISO/IEC 39794-5, 2019	194
e-Gate. Your Future Automated Border Control Solution (brochure).	Cominfo, 2019	3
Automated Border Control. Easy Going with Secunet Easygate (brochure)	Secunet, 2020	4
Thales Gemalto ABC solution (Automated Border Control). Where security, convenience and efficiency meet (brochure)	Thales Group, 2020b	4
ISO/IEC 24779-5 (2020) Information technology – Cross-jurisdictional and societal aspects of implementation of biometric technologies – Pictograms, icons and symbols for use with biometric systems. Part 5: Face applications.	ISO/IEC 24779-5, 2020	14
Total number of pages		**731**

4.3.2 Video observations

A second trick to make the material object talk is by observing the object in use. The language of nonhumans is different than words and discourses. They simply lack the "convenient vocabulary" (Latour, 1988, p. 298), and interviewing objects therefore becomes a task in watching and observing. Video observation was therefore added as a method to see

the interaction between the human and the nonhuman ABC-gate. Observing the technology through videos is maybe not the most common approach within research, but research needs to take practical conditions into account (Tjora, 2018, p. 37. The original plan for the observational data for the thesis was to observe ABC-gates at the Passenger Terminal Expo which were supposed to be held in Paris at the end of March 2020, but because of the global pandemic I needed to change my plan and adapt to the new situation. For the same reasons, it was neither an option to watch the ABC-gate in airports. However, I soon discovered that there were several videos demonstrating the ABC-gate on YouTube, and I found these to be informative for the understanding how they are supposed to be used, and what steps a human must take in order to self-process through the gate. The full dataset can be observed in table 3.

Table 3. Overview of dataset on videos.

Name	Reference	Length
PRADOTEC Border Control System - Complete solution for Identity & Access	Pradotec, 2016	6:48
Automated passport control	Flughafen Zürich, 2017	1:13
GEMALTO Automatic Border Control Gates (Youtube)	Gemalto, 2018	2:30
Everis e-Gates	Everis, 2018	1:23
How to use Automated Border Control at Brussels Airport	Brussels Airport, 2019	1:04

The observations were therefore performed in my home where I watched the Youtube-videos on TV, and I noted my observations and reflections in a notebook while I was watching the videos. Some of these observations are reported as quotes in the analysis, and they are referenced as “personal observation journal”. The reason to why I decided to include these observations is that my approach was somewhat similar to those of the traditional observation studies besides the obvious fact of not being in the field. As pointed out by Tjora (2018, pp. 84-85), the Internet can also be an arena for observation studies because it is a collection and a virtual representation of places and communities. Back & Puwar (2012, p. 7) also notes how the methods for research “[…] are being extended by digital culture in a hyper-connected world, affording new possibilities to re-imagine

observation and the generation of alternative forms of research data" (Back & Puwar, 2012, p. 7). The practical change that I needed to for my thesis thus became an attempt to take advantage of new methods for research.

Since the observations needed to be based on videos and I could not observe "real travellers" use them, I used the observations mainly as part of my preparation for the interviews, as it gave me a deeper understanding of how the technology worked in practice. I did therefore not do an analysis of the videos per se but used the reflections as a method for transforming the video to text useful for the analysis. Before watching the videos, I made some sort of an "observation guide" as to what I wanted to look for in the videos. This included questions like:

- How does the ABC-gate look?
- What is going on in the scenes?
- What does the human actor do?
- How do the human and ABC-gate interact?
- Do they cooperate in any ways? How?
- How are the tasks divided between the human and the nonhuman?

The observations were useful for understanding the concrete steps needed to be taken to get through the border control process and did therefore highlight the ANT-concept of scripts. An advantage of observing via videos is that the researcher always have the opportunity to go back and double-check the observations (Tjora, 2018, p. 104) and in addition it was possible to pause at instances where I wanted to take a closer look at something. The videos did, however, have the same obstacle as the documents, namely that they were produced by someone wanting to sell and promote the solution. Therefore, I needed to conduct interviews to get an understanding of the situations of breakdowns and accidents.

4.3.3 Focused interviews

A third trick to make an object talk is by interviewing the people who either have made them or who use them (Latour, 2005; Ugelvik, 2019). It can be useful to talk to people that have experiences with the object because they would provide information on what they have to do, if the technology either disappears or breaks down (1992, p. 229). Talking to the humans involved with the object can also reveal instances where "[…] the inside and the outside of objects are not well matched" (Akrich, 1992, p. 207). This means for example that the design of the object does not provide a clear script, and that the human users therefore can have difficulties in understanding how to use them. Interviewing humans with experiences with the technology can thus describe situations in which the script of the material object is hard to follow, instances where the users does not want to follow the script or cases where the technology acts on its own. In this thesis, the interviews were conducted with police employees that have biometric enrollment of people as their everyday work task. In their job they observe how people engage with a biometric machine that takes both a facial image and collects fingerprints. Since the ABC-gates installed in airports in Norway today does not yet support fingerprinting, I found it most suitable to interview people that works in other police departments that has this experience. They could therefore offer valuable insight to the technology and how people interact with it.

Interviewing is one of the most common methods for data collection in qualitative inquiry (Tjora, 2018, p. 113). Because I did the interviews after having started the analysis of documents and the video observations, I designed the interview according to a *focused interview.* The focused interview is a specific type of interview that was first presented by Merton & Kendall (1946). This type of interview is rarely used as the sole data material in research and is often applied in combination with observation, document analysis or field research (Johnson & Rowlands, 2012, p. 2). It is perceived to be most useful in cases where the researcher is "[…] interested in questions of greater depth, where the knowledge sought is often taken for granted and not readily articulated by most members […]" (Johnson & Rowlands, 2012, p. 3). This fitted well with my need to understand more about the ways the technology fails or breaks down, and about the interactions between people and the

biometric machine. The focused interview has four characteristics (Merton & Kendall, 1946, p. 541):

1. the informants have been involved in or experienced a concrete situation,
2. the interviewer has knowledge about the topic, or s/he has already done some analysis of other type of data material on the subject,
3. this knowledge is built into the interview guide and,
4. the interview is concentrated to the personal experiences of the informants

All these four points were relevant to my thesis. The informants had all experience with the biometric enrollment process as well as the technology. I had done both background research, analysis of technical documents as well as observations through videos. In addition, an interview guide was made on the background of the knowledge that I had obtained from my previous research, and I had therefore also noted some knowledge gaps that I wanted to be filled by information from the interviews.

The interview was semi-structured where some aspects of the interview were prepared beforehand (Tjora, 2018). This means that the structure of the interview and some of the questions were decided on beforehand, but that it also was room for deviating from that plan. The questions articulated in the interview guide was made with the focused interview in mind. The best questions for this type of interviews are deemed to be of the descriptive and explanatory types, simply meaning questions that focus on the what and how rather than the why (Johnson & Rowland, 2012, p. 4). These type of questions "[…] allow for greater freedom for interviewees to elaborate on their replies" as well as to extend their answers (Wang & Yan, 2012, p. 10). For the focused interview, it is good to start out with 2-3 questions that work as icebreakers. After that, five to ten questions should follow with a focus on "the heart and essence" of the aim of the research (Johnson & Rowlands, 2012, p. 9, Tjora, 2018, p. 154). An interview guide like this is totally reliant on the interviewer having knowledge of the topic beforehand (Wang & Yan, 2012, p. 11).

To design an interview guide so focused on one concrete material object was, however, challenging. It was beforehand difficult to really understand what type of questions would trigger the informants to think and reflect on the material object. I therefore conducted three pilot interviews with friends before I landed on the last version of the interview guide (see annex 3). Since my friends does not know, or at least very little, about automatic border control technologies, I instead asked them about concrete objects that are important for them in their daily work such as printers and computers. This was a great learning lesson in understanding what types of questions that gave the best and most filling answers. I learnt for example that the 2-3 icebreaker questions where I asked them to describe the functions and look of the object was very fruitful to get them started. The pilot interviews did also provide me with a good estimate on the length of the interviews. Latour warns that humans are almost impossible to stop when they start to talk as "[a]n indefinite stream of data springs forth […]" (Latour, 2005, p. 79). The pilot interviews therefore gave a good indication on how many questions were needed.

The informants were recruited via an employee in the police who I know from a previous job network. The sampling method used was therefore both strategic and convenient. That the sampling strategy was convenient means that it collects informants "available by means of accessibility" and is an often-used method by academic researchers (Edwards & Holland, 2013, p. 7). That the sample also was strategic means that I recruited informants based on their "[…] perceived ability to answer specific questions of substantial or theoretical importance to the research" (Johnson & Rowlands, 2012, p. 8). The informants had all experience with biometric technologies and could therefore answer my specific questions about its functions and breakdowns. My contact in the police provided me with the contact details, e-mail, of 4 persons that wanted to take part in the interviews. From here, I did only speak directly with the participants to plan for the date and place of the interview.

One important ethical principle with interviews is that informants shall not be placed at risk (Creswell & Poth, 2018, p. 54). The COVID-19 situation therefore represented some issues that I needed to consider to ensure that the interviews were conducted in a safe manner. First of all, I informed the informants that the interview could be conducted over telephone or Skype/Zoom if they did not feel comfortable with meeting in person. The informants had no problems meeting me as they already had to be physically present in the office for work, and the interviews took place in June when the situation was more stable. In addition to the safety measures, the place of the interview should be convenient and familiar to the informant as this may encourage them to talk as freely as possible (Seidman, 1991). The interviews were therefore conducted in an outdoor area at the work premises that had tables and chairs which easily allowed us to keep the 1-meter distance, as well as it was a place that the informants knew from before. The situation also meant that ordinary courtesies such as handshakes had to be avoided, but since we are all in the same situation, this did not cause any issues.

As already noted, my contact provided me with the contact information of 4 persons and all of them were included in the study. This number made sense both in terms of the extent of the interview and also in terms for the work needed from me. I did also feel that I got a lot of details on the topic we discussed. Because of the small number of participants, I will not provide any further details in regards to age and gender as I do not want the informants to recognise each other through the statements used for the analysis and discussion. All names have been anonymised as Chris, Alex, Taylor and Billy, but these names do not necessarily refer to the gender of the informant. I conducted one interview with each participant, and the interviews lasted from 17 to 26 minutes with an average of about 20 minutes.

Because the focused interview often involves an experienced informant, or even an expert on the topic, it can create a situation in which the interviewer takes the role as a student and the informant a teacher (Johnson & Rowlands, 2012, p. 4). There will always be some sort of an asymmetry in the interview situation. The interviewer comes prepared on the subject and

with an interview guide that sets the agenda for the conversation. When the interview starts, the interviewer "[…] is more passive in the role of listener, and if the interviewer is successful, the informant is more active as a speaker" (Johnson & Rowland, 2012, p. 9). Because I already had some knowledge of the topic and the technology, I did feel that I managed to outbalance this power structure. I focused on being an active listener that did not only ask the prepared questions but did also follow up on the cues and information that the informants provided. Lillrank (2012, p. 4) notes that the encouragement of informants to expand on their answers can have a positive effect on them because it shows that their replies are both interesting and valuable for the research.

I transcribed the interviews as soon as I had conducted them. I listened to the audio recording two times: The first one for transcribing the interviews, and a second time to check that I had got the quotations right. The transcriptions did not contain any sensitive information such as names or workplaces. In addition to what the informants said, I added instances where they laughed, or where they took a break. A break is marked by . . or . . . responding to the length of the break. With the transcribed interviews in hand, I went on to analyse the interviews. Since the interviews were short, I coded and analysed them manually. I used the same strategy as for the documents by first skimming lightly through them, then a second re-reading and at last analysing the material in light of the theoretical concepts of ANT. Some of the codes were predefined from the findings in the document analysis, such as design and functionalities. Other codes were based on the interview data and involved for example "wrong behaviour", "right behaviour" and "fingerprinting".

4.4 Ethical reflections and quality assessment

Ethical principles are important throughout the entire research project (Creswell & Poth, 2018, p. 53). From the very beginning of the thesis and to the very end, I have strived to follow the guidelines for research ethics from The Norwegian National Research Ethics

Committees (NESH). When it comes to the analysis of the political documents there have not been any ethical concerns other than ensuring that I have used the correct references. When it comes to the interviews however that required more ethical consideration both in terms of formal arrangements but also because of the fact that I reached out to and talked to humans that with rights that must be protected by me as a researcher.

Research must "[…] be conducted in accordance with basic considerations for data protection, such as personal integrity, privacy and responsible use and storage of personal data" (NESH, 2016, p. 13). These ethical principles were safeguarded through an application to the Norsk Senter for Forskningsdata (NSD) who had to approve of my project before conducting the interviews. The approval was needed because I was processing personal data of my informants by storing their contact information as well as their voices on audio recordings. The topic and questions of the interviews were strictly related to the informants' work tasks and experiences with biometric technology, and therefore no questions of sensitive nature. The only topic that I was worried might come up during the interviews were if the participants would express their political opinion about biometrics. In consultation with NSD, it was agreed that this was not something I needed to apply for in the application, but that I could rather inform the informants in advance that I did not want to know such information. I therefore explained the informants that this type of information is considered sensitive personal data, and this did not become a problem during the interviews.

For the NSD-application, I prepared an information letter with the most important details regarding the research project, the aim of the project, the data that would be collected as well as the rights of the informant when participating in the project (see Annex 2 for the information letter). The information letter was formulated in Norwegian as all the informants had Norwegian as their mother tongue. The application was approved after 30 minutes (see annex 1 for the approval). Two days prior to the interview, I sent the informants the information letter so they could have time to read it and have an opportunity

to ask me questions. I also started the interviews by going through the information letter and asked the informants if they wanted to participate in the study. I did this to make sure that the informants gave an informed consent as in line with the NESH-guidelines. Because the interviews were conducted at a time when the University had closed its premises due to COVID-19, the consent was recorded orally on the audio recorder as I had no place to store the consent form other than in my private home. The tape recording was safely stored on the University servers by using the remote desktop. This had also been approved by the NSD and the UiO beforehand.

Before the interview started, I made sure that the informants were okay with the interview being audio recorded. None of the informants objected to this. To make the interview situation as comfortable as possible, I chose to do the interviews in Norwegian although that would add some extra amount of work in regards to translation. There are two main reasons behind this choice. First, I was worried that the informants would not want to participate if I asked them to speak in English as they were perhaps not comfortable with it. Second, I was convinced that the most importing thing was to make the interview situation as similar as possible to a normal conversation, and it would have been unnatural to speak English with another Norwegian-speaking person. Having to talk in English could therefore create an even more uneven balance in the interview setting. I did however explain to my informants that I was writing my thesis in English and that their statements therefore needed to be translated by me. I therefore offered to send them the relevant, translated quotes before the publication of the study so that they could check if the meaning content was not being altered by my translation.

4.4.1 Quality assessment

There are several ways to assessing the quality of a qualitative study. One conventional way to assess a study is through the validity and reliability of the study. *Validity* is the way in

which the study has a logical coherence between the design of the study and the findings and *reliability* to the coherence in the thesis from start to beginning as well as the internal logic (Tjora, 2018, p.231). The validity of the study is strengthened by being transparent about the theories and methods used in the research (Creswell & Poth, 2018, pp.260-263). In this thesis, I have tried my best to show the reader the different steps of data collection and analysis so that the readers can assess the approach chosen. A second dimension of a valid research project is that it is rooted in other relevant research (Tjora, 2018) and this is achieved both by the background chapter and by referring to relevant research in the analysis and discussion.

Creswell & Poth (2018, pp.260-263) adds that the quality of the study is further strengthened by being open about ones position as a researcher in the study, that the study follows ethical principles, to report about negative cases and that there is a triangulation of methods, theories and/or data. Negative cases are in this study for the most part related to the notion of counter-narratives, and these are reported at a few instances in chapter 5. Positioning of the researcher in the study is referred to as "researcher reflexivity". Researcher reflexivity is especially important in qualitative studies as the researcher is the one who observes the phenomenon of the study, the one who talks to informants during the interview, the one who reads the documents and the one who is interpreting the data collected (Creswell & Poth, 2018, p.43). It is therefore important that the researcher reflects on "[…] their understandings about the biases, values, and experiences that he or she brings to a qualitative research study" (Creswell & Poth. 2018, p.261).

As a student of criminology, and maybe especially Norwegian criminology (see Johansen, 2018), it is not to come away with that this background takes a more critical stance towards how migration control and technological devices for controlling the behaviour of individuals are developing. It has therefore been important to me to consult different data sources as well as academic literature in order to provide a nuanced account of the object of study. I have given voice to the political institutions implementing the policy, the objects that result

from this as well as the people working under the policies and with the objects. By being transparent about my approaches in the study, I have aimed for the reader of this thesis to think critically about how the theories and methods used have led to the findings and this brings forth the importance of triangulation. I have already mentioned at a few instances throughout the thesis that I have done a triangulation of theories, methods, and data sources to see the object of study from multiple angels. Flick (2018) states that this can contribute to create more knowledge than simply relying on one approach and is therefore important for bringing more nuance into the research.

5 EU narratives and their material solutions to control migration

This chapter is a combined analysis and discussion of the narratives that underlie the developments in migration control in the European Union from the 1950s to the Smart Border, as well as an exploration on how these narratives have materialised in solutions to control migration. The first half of the chapter is oriented towards the political narratives. As noted by Boswell, Schouten & Geddes (2011, pp.4-5), political narratives are about the detection of political issues of both the past and the present, to find those who can be blamed for the issue, and from there provide solutions to deal with it. Through an inquiry into key political documents of the EU, I show how the narratives have shifted and evolved over the years and the ways in which this have impacted migration control in the EU. Chapter 5.1, presents the first narrative that arose after the formation of the EU in the 1950s. The evolution of the narratives becomes more and more oriented towards different threats and risks that come with migration, and this is the ground for the second narrative presented in chapter 5.2. Over time, migration becomes to be treated as a fact rather than something that can be completely controlled which lead to a third narrative presented in chapter 5.3.

In the second half of the chapter, I look more in-depth of a concrete material object for controlling migration, the ABC-gate. By an examination of its design, its functionalities and use, I will show how the narratives of migration and crime control of the EU are incorporated into the object. In addition, I illustrate how the gate is giving shape to the border controls in the EU. This part of the chapter is based on a document analysis of technical documents, international standards, and product brochures as well as video observations and focused interviews with police employees. In chapter 5.3, I illustrate how the ABC-gate looks as well as what actors that is important in its actor-network. Chapter, 5.2 goes more concretely into the functions and uses of the gate whilst chapter 5.3 demonstrates different situations where the use of the ABC-gate can lead to failures in the border check. The chapter is rounded of with a brief reflection on what have been detected throughout the chapter.

5.1 The collaboration narrative - building a united Europe without internal borders

The establishment of the European Union started with the formation of the European Coal and Steel Community (ECSC) in 1951, which was an effort in ending the bloody conflicts that had ridden the European continent through the two world wars (ECSC, 1951). The thought was that cooperation in politics and economics would promote and secure long-lasting peace between the countries and citizens of Europe. The next important event was the signing of the Treaty of Rome in 1957 which established the European Economic Community (EEC) consisting of Belgium, France, Italy, Luxembourg, the Netherlands, and West Germany (EEC, 1957, p.3). These two developments at the very beginning of the EU history on migration and crime control are part of a narrative that I have termed the *collaboration narrative*. The collaboration narrative can in short be summed up by this quote from the treaty that established the ECSC:

> *RESOLVED to substitute for age-old rivalries the merging of their essential interests; to create, by establishing an economic community, the basis for a broader and deeper community among peoples divided by bloody conflicts; and to lay the foundations for institutions which will give direction to a destiny henceforward shared* (ECSC, 1951, p.3).

A narrative analysis of the quote clearly illustrates both the temporal and causal elements of the narrative. Conflicts in the past have led to a policy issue of today, a people divided, and the solution is collaboration in economic affairs and institutions that will merge the interests of the countries. The quote also indicates, though quite implicitly, that there is a causal link between the lack of cooperation in the past and the bloody conflicts of the present. Despite the difficult past, the narrative is hopeful about the future and there is a strong belief that the future of Europe is one that is shared amongst the countries. The citizens of Europe are in this narrative highlighted as important characters to which the Union shall promote peace. The birth of the ECSC therefore signals the end of an era. Sala (2018, p.268) describes this type of narrative as a reflexive narrative. This means that the political institution tells a

story of its past to create a picture of both itself and the way forward. A united Europe is the key to a peaceful future and thus the notion of the united "us" is created.

The collaboration narrative was further expanded in the Treaty of Rome by the introduction of one of EU's cornerstones: "the freedom of movement" (EEC, 1957, art.3, letter c) which still today is "[…] a defining principle of the European Union" (Communication, 2011b, p.2). Freedom of movement refers to the abolition of internal border controls between the member countries of the EEC and was especially targeted towards the working citizens of the member states. It was stated that workers should be "[…] allowed to move freely within the territory of the Member States" (EEC, 1957, art.48, §3, letter b) for the purpose of employment. The freedom is important for the collaboration narrative as it enforces the development of the economic community. There was a shared belief that the exchange of work capacity would strengthen the stability of the region, relations between the people and at the same time strengthening the economy. The EU in the collaboration narrative is therefore represented by a group of countries that communicates, creates trust and solidarity, and one that builds a strong economic area. The abolition of internal borders was therefore an important step in creating a common European identity.

In the 1980s, the EEC took further steps to fully materialise the vision of the freedom of movement. This was done by the signing of the Schengen Agreement in 1985 as well as the Single European Act (SEA) in 1986. The Schengen Agreement was signed by the same five countries that made up the EEC and they agreed on a "[…] gradual abolition of checks at their common borders" and to create an "[…] area without internal frontiers" (Schengen Agreement, 1985, p.19). The abolition of internal border checks is important for the collaboration narrative in two aspects. First, it means that the citizens of the different member states are treated equally when crossing internal borders. No one is controlled, and that brings me to point number two. The absence of control requires the member states to trust each other. "Solidarity, trust and shared responsibility […] is a key requirement in an area without internal border […]" (Communication, 2006, p.3). The collaboration narrative

builds the European citizen as a strong character with the right and freedom to move within the common area, without being subject to border checks and therefore, at least in theory, free from suspicion.

In the very beginning, the collaboration narrative fit well within the narrative genre of romance. The romantic genre is "[…] a fully optimistic genre marked by the belief that actions can make a difference and that change for the better is in the air" (Smith, 2005, p. 26). Coming from a long and bloody past marked by conflicts between the countries and people of Europe, collaboration was now the key for making a better future. Just like any other romance, this narrative strongly relies on trust, solidarity, and openness between the parties to create a strong and coherent "us". This was first and foremost achieved through the abolition of internal border controls and the freedom of movement in the common area. And in like any other relation, communication was the key to success. It was there important to build a common meeting ground where the countries could debate, discuss, and agree on different political issues, and this was materialised in the formation of the ECSC and later the EEC. In addition, the formation of the political institutions of the EU, such as the Commission (EEC, 1957), was an important step towards a shared future in which the institution developed a common response to political issues.

The Schengen Agreement was the materialisation of political debates and discussions that were held in a European Council meeting in Fontainebleu in 1984. Under the headline of "A People's Europe" (European Council, 1984, p.8), it was decided that the EEC countries should abolish police and customs at internal borders as well as streamlining the border check procedures at other frontier posts. An important side note here is that the United Kingdom vetoed the elimination of internal border checks on "[…] the grounds of indispensability for identifying third country nationals trying to enter the country illegally" (Maricut, 2017, p.164). This is important for two reasons: It illustrated that the notion of irregular migration was a concern already in the beginning of the 1980s and therefore long before the Schengen Agreement was actually put into force. Furthermore, it serves as the first indication that the

notion of a “People’s Europe” might be something restricted to some people only and not people in general.

The abolition of internal border controls led to a common effort in controlling the external borders of the Union, and this created the first notions about internal security. The Schengen Agreement thus held provisions for the law enforcement authorities to “[…] assist each other for the purposes of preventing and detecting criminal offences” (Schengen Agreement, 1985, art.39, §1). It further opened for cross-border surveillance of persons who were presumed to be involved in criminal activities such as murder, forgery of money, kidnapping, and trafficking (Schengen Agreement, 1985, art.40, §1-7). Information exchange between the Member States was perceived as the key to crime prevention and the prevention of “[…] offenses against or threats to public policy and public security” (Schengen Agreement, 1985, art.46, §1). Especially was the illegal export, import, sale and supply of narcotics, illicit drugs and firearms targeted as an objective of the cross-border co-operation (Schengen Agreement, 1985, art.71, §2-3). The law enforcement authorities therefore became an important character in protecting the security of the internal area of the Schengen. The abolition of internal border controls therefore saw some societal changes that threatened the romantic vision of the future of the United Europe. Bigo (2002, p.77) also supports that the idea of “internal security” was born out of the relocation of border controls.

The focus on police cooperation and surveillance across borders is an acknowledgement that the lack of controlling mobility might foster crime. At this intersection, immigration control and crime control become two sides of the same coin. The control of narcotics for example becomes to revolve around people’s movements across borders, and this illustrate the merging of immigration and crime control as explained by the crimmigration theory (Stumpf, 2014). The risks that the abolition of internal borders posed, became a fear that ultimately materialised in concrete and material control devices. One example is the Schengen Information System (SIS, now known as SIS II), which was established by the Schengen

Agreement (1985, title IV). This marks a point in which the collaboration narrative materialises in a concrete object. The member states can through the system issue alerts on persons and objects of seizure (Schengen Agreement, 1985, art.94 & 100). It provides the possibility of sharing information across borders on stolen or lost objects such as firearms and identity papers. The SIS can also be used to issue alerts on persons involved in serious crime or where there is clear evidence that there is intent to commit serious crime in the future (Schengen Agreement, 1985, art.99). The goal of the system was to prevent these persons from moving across borders and thereby to prevent or lessen the threats by criminals (Schengen Agreement, 1985, art.96, §1-2).

The focus on internal security did not only materialise in practices relating to police cooperation across the borders, but also an enforcement of the control of the external borders of the Union. This was for example targeted in the Single European Act (SEA) which set down a deadline for the creation of the "internal market programme" which came into existence in 1992. The SEA does again demonstrate the collaboration narrative with the statement that the EEC "[…] shall have as their objective to contribute together to making concrete progress towards European unity" (SEA, 1986, art.1). Concrete steps included the creation of an internal market without borders and with "free movement of goods, persons, services and capital" (SEA, 1986, art.3). The SEA as well as the Schengen Agreement acknowledged that very existence of the internal market could only be protected by controlling the external borders of the community. External border control on persons, goods and means of transport should therefore be stepped up through a common effort (Schengen Agreement, 1985, art.71, §3). The protection of the internal security and the four freedoms is thus framed as "our" responsibility through controlling the external borders.

The different steps taken in the field of migration control was summed up under what is known as the Home and Justice Affairs pillar, or simply the third pillar, of the EU. This pillar was established by the Treaty of Maastricht in 1993 which is the treaty that established the European Union. Protecting the freedom of movement was stated to bed one of the main

objectives of the treaty (Maastricht Treaty, 1993, art.K1). A common policy on migration and asylum, common rules on the governance of the movement across external borders and border controls as well as a policy on non-EU citizens crossing the external borderd was seen as fundamental steps in protecting the freedom of movement (Maastricht Treaty, 1993, art.K1, §1-3). The freedom of movement is thus again presented as a common effort in the areas of migration control. The treaty also included provisions on cross-border cooperation between the police to prevent and combat crime, drug trafficking and terrorism (Maastricht Treaty, 1992, art.K1, §9).

Terrorism had not previously been addressed as specifically in the previous EU documents. From the 1960s and until the 1980s, terrorist attacks were in most cases performed by local, political groupings in the individual member state (Nehring, 2007, p.343), but in the 1990s the Western Europe saw an increase in attacks from militant Sunni Islamist activists (Nesser, 2008, p.924). This marks a point in time were the collaboration narrative gradually became accompanied by a second narrative, namely the *security narrative.* From the ECSC to the Treaty of Maastricht, more and more threats to the security of the Union and its citizens were identified. The globalisation years of the 1980s and the 1990s led to the introduction of new risks, threats, and challenges to the European border (Aas, 2013; Melossi, 2020, p.54). Not only was terrorism a concern, but other important issues was for example the sudden influx of refugees from southern European countries such as Albania and Kosovo which created a “migration crisis” in the EU (Maricut, 2017; Pastore, 2019). Although this crisis was smaller than that of 2015, it had a great influence on the development of the EU policy on migration control.

The inclusion of more and more member states to the Union, especially in 2004 where the Union went from 15 to 24 member states (Commission, 2015), made the external borders longer and the internal area bigger. The borders also stretched further south and east creating a more complex border landscape. The “us” therefore became a lot bigger and a lot more complex. This led to serious concerns whether the new member states could maintain

the level of external border control which was needed to protect the internal area (Koulish & Van der Woude, 2020, p.4). As stated in a communication from the Commission in 2001: "The common security system is only as strong as its weakest point" (Communication, 2001, p.10). The 1990s therefore saw a rising fear in relation to a coherent approach to the control of the external borders of the Schengen area. At the same time, migration was defined as something that was strongly needed because of population decline, a significant rise in the average age of the European citizen, and labour shortages in the EU (Communication, 2000, p.6&24). Migration control in Europe therefore became a balancing task in managing between the migrants that were needed in order to uphold the population numbers, the migrants who needed international protection and the migrants who threatened the safety of European citizens and the EU itself. "A People's Europe" (European Council, 1984) thus became oriented to many different categories of people.

5.2 The security narrative – external threats and risks threatening the internal area

The terrorist attacks and the migratory challenges that faced the EU during the 1980s and the 1990s made the Union increasingly aware of the tensions that existed between the protection of the internal area of the EU and the threats stemming from outside the external borders. This tension provided a breeding ground for the security narrative. The temporal and causal elements of the security narrative involve the perspective of a successful past in which the EU came together and united through a narrative of collaboration. Through the cooperation the Union had been able to create an internal area without inner border controls and ensured the freedom of movement of its citizens to promote peace and trust between the countries. However, these achievements were threatened by external threats posed by terrorism, large migratory flows, and cross-border crime, and this created a new political issue. How could the EU both have a borderless internal area and at the same time guarantee the security of the people and institutions of the Union?

One of the first steps to address this issue came with the adoption of the Schengen Agreement to EU legislation through the treaty of Amsterdam in 1996. The treaty came into force in 1999 and stated that the member states were "RESOLVED to facilitate the free movement of persons, while ensuring safety and security of their peoples, by establishing an area of freedom, security and justice" (Amsterdam Treaty, 1996, art.1, §3). Whilst in the Treaty of Establishing the ECSC (1951), the Union was resolved to create an economic community with stronger relations between the people of Europe, the new treaty included strong claims about protection and security. Freedom and security were now said in the same breath and something that should be achieved through a collaborative effort by the member states. This illustrates that the collaboration narrative did not cease to exist by the introduction of the second narrative. This is further exemplified by the fact that the Schengen Agreement was adopted to EU legislation, and by that made it mandatory for all member states. The treaty further stated that the freedom of movement could only be achieved as long as "[…] appropriate measures with respect to external border controls, asylum, immigration and the prevention and combatting of crime" (Amsterdam Treaty,

1996, art.1, §5, hyphen 5) were in place. Police cooperation to prevent organised crime, trafficking in humans, firearms and illicit drugs were also highlighted as important measures.

The documents created within the security narrative clearly defines the threats and risks that were facing the EU, both at the present time and in the future. This was for example reflected in the European Security Strategy (ESS) which was adopted in 2003. Terrorism, weapons of mass destruction, regional conflicts, state failure and organised crime was defined as key issues threatening the safety of the Union and its citizens. Failed states were believed to foster organised crime and terrorism. Organised crime was a threat to the Union as the external borders would be faced with drug trafficking and irregular immigrants which in turn could be linked to terrorism (ESS, 2003, p.4). It also identified these separate threats as more "complex and interconnected" (Report on ESS, 2009, p.8) which illustrate the start of a gradual blending of categories such as migration and crime. The strategy was in addition strongly supporting the collaboration narrative by stating that "We are most successful when we operate in timely and coherent manner" (Report on the ESS, 2009, p.8). The issue of timing became especially important:

> *The risks of proliferation grow over time; left alone, terrorist networks will become ever more dangerous. State failure and organised crime spread if they are neglected […] This implies that we should be ready to act before crisis occurs. Conflict prevention and threat prevention cannot start too early* (ESS, 2003, p. 8).

As the quote suggest, the security narrative frames a current situation in which action is needed quick and the focus is on prevention rather than damage control. It is a question about what the EU can do now in the present to prevent future harms. Possible threats and risks cannot be ignored. The vision of the future in the security narrative is thus somewhat different to that of the collaboration narrative. Whilst the collaboration narrative had a positive outlook on the future, especially through the romantic genre, the security narrative has a more dual view of the future. The future can be secured if situations that threaten the EU are prevented, but without sufficient control, the entire EU security is at stake.

The security narrative was further strengthened after the events of 9/11, which created a state of emergency in which the political actors of the EU needed to come up with solutions that provided security to the citizens (Argomaniz, 2010). A sense of emergency and urgency is very much visible within this narrative and was materialised through a broad range of tools to control both migration and crime. To get a better understanding of the development of these tools, I will in the following explain the gradually intertwining of migration and crime issues that is central to the security narrative. 9/11 is believed by several scholars to mark the creation of a strong link between globalisation, migration, security, and crime (Aas, 2013; Stumpf, 2006). This can, to some extent, be explained by the fact that the perpetrators of the terrorist attack were foreigners and thus represented a threat and a risk from the outside of the external border. Europe also experienced terrorist attacks in for example Madrid and London in 2004 and 2005, which were both connected to the ideology of the international terrorist network Al-Qaeda (BBC News, 2005; 2014). The EU started therefore to emphasise a strategy that more firmly concentrated on the control of the external borders in order to prevent threats from the outside to materialise in the internal area of the EU (see also Carling & Hernandés-Carretero, 2011, pp.43-44).

This strategy involved elements from the collaboration narrative as cooperation was said to be the key to provide security in the internal area of the EU. A working document from the Commission in 2001 stated that this would be achieved through:

> *[…] pre-entry screening, including strict visa policy and the possible use of biometric data, as well as measures to enhance co-operation between border guards, intelligence services, immigration and asylum authorities of the State concerned, could offer real possibilities for identifying those suspects of terrorist involvement at an early stage* (Commission Working Document, 2001, p.6).

The quote illustrates both the need of cooperation between countries, as well as the focus on prevention which is central to the security narrative. Later the same year, the two

narratives was yet again demonstrated when the EU called for the member states to implement measures against refugees and asylum seekers to ensure "[…] that the asylum seeker has not planned, facilitated or participated in the commission of terrorist acts" (European Council, 2001, art. 6). In addition, the member states were strongly encouraged to cooperate through both police and judicial matters to prevent terrorist acts (European Council, 2001, art.11-12) as well as through effective border controls and the control of identity and travel documents (European Council, 2001, art.10). Information exchange between border guards and the police was in this respect deemed to be of great importance (EU Schengen Catalogue, 2002, p.14). The two narratives was also strongly present in the Council meeting in Seville in 2002, where it was stated that a common policy on asylum and migration as well as a harmonised control of external borders were fundamental to the prevention of crime and irregular migration to the EU (Seville Conclusions, 2002).

The meeting in Seville also marked the beginning of a growing concern about irregular migration to the Union. A common denominator in documents targeting irregular migration is that little is known about the extent of the phenomenon. A communication from 2004, for example, states that: "By definition, as illegal migrants do not identify themselves to the authorities, it is difficult to establish a clear picture of the scale of illegal migration […]" (Communication, 2004, p.11). Estimates from 2013 does for example state that there are between 1.9 and 3.8 irregular immigrants in the EU (EES Proposal, 2013, p.2) and the discrepancy between these numbers clearly illustrates the issues with understanding the extent of the phenomenon. Regardless of this knowledge gap, the EU have tended to perceive of irregular migration as a phenomenon that is growing in numbers from year to year (see for example Communication, 2005, p.3; Communication 2006, p.3). Scholars have argued that the increasing problem of irregular migration is a symptom that the EU has "lost control" over its external borders and therefore risked the security of the internal area of the Union (see for example Sassen, 1996; Vollmer, 2011).

Regarding the issue of irregular migration, the collaboration narrative was again illustrated by "[…] the need for a consistent control of external borders to stop illegal immigration and to combat those who organise it and commit related international crimes" (Conclusions from Tampere, 1999). The external border was the place to gain control over irregular migration and the place from which internal security would be protected. That the control needed to be consistent means that it is a common effort by all member states throughout the Schengen. Several solutions to the issue of migration was provided:

> *The European Council is determined to tackle at its source illegal immigration, especially by combating those who engage in trafficking in human beings and economic exploitation of migrants. It urges the adoption of legislation foreseeing severe sanctions against this serious crime* (Conclusions from Tampere, 1999).

The wording of "illegal", "combating", "legislation" and "sanctions" are all terms normally used to describe criminal matters, but this quote is describing migration. The debates at the Tampere meeting materialised in a Council Directive in 2002 where the member states where obliged to have regulations and laws that targeted who with or without financial gain, "[…] intentionally assists a person who is not a national of a Member State to enter, or transit across, the territory of a Member State" (Council Directive, 2002a, art.1, §1, letters a-b). The laws were also required to held special provisions for the instigation, attempt or accomplice in such matters. A second directive made sure that the persons targeted by the directive was "[…] punishable by effective, proportionate and dissuasive criminal penalties" (Council Directive, 2002b, art. 1, §1). These two directives illustrate how certain acts that is exclusively relevant for migration becomes criminalised and thus punishable by criminal law. This further demonstrates the convergence of criminal and migration law and control. The Council called for the use of the provisions under criminal law, as for example money laundering, to combat criminal networks that facilitated irregular migration (Communication, 2001, p.20). Within the criminological discipline, this development is known as crimmigration (Aas, 2011; Stumpf, 2006, 2014).

As a side note, the convergence between migration and crime control did not only create more deviants but also victims. The human traffickers and trafficked human-beings emerged as types of migrants that also became the target of political intervention. The EU took a strong stance towards human traffickers and stated that "Our aim must be to prevent the human tragedies which the activities of human traffickers expose persons to" (Stockholm Programme, 2009, p.66). The human trafficker is in the security narrative portrayed as a vigilant and active actor that enters the lives of vulnerable individuals and violate their human rights and dignity. It is "a very serious crime […] that the EU cannot condone" (Stockholm Programme, 2009, p.44). The trafficked human-being is an individual that the EU must protect and offer "[…] a humane and dignified treatment" (Communication, 2006, p.3). They are described close to what Christie (1986) would call an "ideal victim". This entails for example the idea that the individual is passive and cannot be blamed for what has happened to them. The human trafficker and their victims therefore stand in a dyad where the responsibility of the EU is to detect and handle both of them. In relation to the victims, the EU therefore takes on the character of a saviour, and this is an example of a more humanitarian narrative that is also important in relation to migration control but one that will not be treated in this thesis.

5.2.1 The irregular migrant

In addition to the human traffickers and their victims, the irregular migrant is an important figure within the security narrative. The uncertainties brought forward by the knowledge gap on irregular migration pose consequences also for how the irregular migrant is portrayed. Because so little is known about irregular migration, the irregular migrant becomes some sort of a mythical character that the EU knows very little about. As described in the chapter 2, such strangers are often connotated with deviancy and crime and thus a threat towards "us" and "our" security. The EU have however identified three ways an individual can become an irregular migrant:

> *[…] third-country nationals who enter the territory of a Member State illegally […] by using false or forged documents or with the help of organised criminal networks of smugglers and traffickers. In addition, there is a considerable number of persons who enter legally with a valid visa or under a visa-free regime, but "overstay" or change the purpose of stay without the approval of the authorities; lastly there are unsuccessful asylum seekers who do not leave after a final negative decision* (Communication, 2006, p.2).

As the quote states, the three ways of becoming an irregular migrant are all related to intention. The first category of irregular migrants does already from the beginning have the intention to enter the EU irregularly by using a false or forged travel document. This means that the individual has prepared for an irregular entrance. The second category might enter the EU lawfully but takes an active decision to overstay their allowed period in the Union. The third category of irregular immigrants involves the persons that have entered the Union to seek for protection but have had their asylum applications denied. This category is seen as taking an active decision to not leave the EU although they are required to. The intentional dimension of these two last categories of irregular immigrants is that they intentionally stay although they know that their allowed period of stay is over.

That irregular migrants are persons that takes active decisions are also illustrated by the ways in which the EU interprets their reasons to come to the Union. They are attracted by the EU because they "[…] seek a better life [and] they will continue to head for the EU as long as life chances are better here than in their home countries" (Communication, 2006, p.8). The same communication also states that there are small chances that the irregular migrant will be detected once inside the Union, and that this increases the chances of migrants taking this decision (Communication, 2006, p.8). The EU further states that there is "[…] evidence to suggest that the highest percentage of illegal residents is males between the ages 20 and 30, who are young, mobile and willing to take risks" (Communication, 2004, p.11). This notion of risk versus benefits is quite similar to a theory within criminology that is known as rational choice. Rational choice theory sees human action as both purposive and rational. This means that: "People have needs and desires, and beliefs about how these can be fulfilled. Guided by these beliefs, they take actions to achieve their particular goals"

(Cornish & Clarke, 2008, p.33). Decisions about action is further based on the risks and benefits for the offender. In line with this theory, the EU's sees the risk of detection as too low, and this might call for stronger control mechanisms.

The character of the irregular migrant as one who intentionally breaks the laws regulating his or her right to stay in the EU and one who is willing to take the risk with taking part in illegal work, is enforcing a tendency in the EU to create a distinction between "us", the EU, and "them", the irregular immigrants who threatens our labor markets and welfare systems. If taking the narratives of collaboration and security into account, this distinction becomes almost logical. Them, the others, are threatening our security and freedoms and this is illustrating the exact point where the collaboration narrative and the security narrative meet. The collaboration narrative is fundamental to the creation of a strong, coherent and unified European Union. The security narrative focuses on the challenges raised by migration which is perceived as a threat to the Union and its citizens. "Our" security and shared, secure and peaceful future is threatened by "them", the irregular migrants. This finding is also supported by D'Amato & Luccarelli (2019, p.5): who states that "[…] narratives about migration are usually used as tools to define a society or a group in relation to an 'other'". Franko (2020) has also pointed out this distinction, and how it creates the notion of a "crimmigrant other".

5.2.2 Materialisations of EU policy on irregular migration

The political issue and fear of an ever-growing population of irregular migrants within the security narrative was in desperate need for a solution. The fear materialised during the 2000s in a broad range of legislations and tools that attempted to gain control over who was crossing the external border of the Union, as well as targeting those inside the Union who stayed there irregularly. The question thus became: How can "we" control "them" and their movements? The many ways to obtain an irregular immigration status created problems for the EU. The issue was too big and complex for a "one size fits all"-approach, and this is why

the field of migration control in the 2000s saw an expansion of tools and information systems targeting different categories of migrants.

The issue of asylum seekers not leaving after a negative decision had actually been a concern for the EU since the 1990s where an "asylum crisis" (Vollmer, 2011, p.318) led to the development of the EURODAC-database which contained the fingerprints of all persons seeking protection in the EU. The information system also included the fingerprints of irregular border crossers for comparison and identification purposes (Council Regulation, 2000, point 6). The database is still used in the EU, and only in 2019 almost a million sets of fingerprints were added to the database in which 54,6% of the fingerprint sets belonged to persons either found crossing the border irregularly or detected inside the Union with an irregular migration status (EU-Lisa, 2020, p.5). Trying to achieve control over the two other categories of irregular migration, the EU developed policies regarding visas and travel documents. These were also reliant on biometric technologies in the same manner as the EURODAC and is a further step in using the immigrant body as a source of truth about the immigrant's identity and movement (see also Franko, 2020). For the sake of the vision of the future in the security narrative, security was now located in the body of the migrant by its connections to travel documents and information systems.

The 2000s saw a rapid development in the areas of visas and passports were the body measurements of migrants became the primary control tool. After the terrorist attacks on the 9/11, the US decided to strengthen their policies on visas and travel documents through the visa-waiver programme (see for example Gilgannon, 2006). This made the biometric passport the global standard as it was determined that all travellers to the US needed to possess a machine-readable travel document with a chip containing the body measurement of the traveller. The work on an international standard for machine-readable passports was performed through the International Civil Aviation Organization (ICAO) which is a UN specialised agency. ICAO states that in relation to biometric passports "[…] a holistic, coherent, coordinated approach to the interdependent elements of traveller identification

management is essential" (ICAO, no year). This statement therefore fits very well with the collaboration and security narrative of the EU. The only difference was that cooperation for security was performed at an international level.

In the same manner as the US, the EU decided that the passports of all EU countries had to include a storage medium containing facial images and fingerprints (Council Regulation, 2004, art.1, §2). This was done to:

> *[…] to achieve enhanced harmonised security standards for passports and travel documents to protect against falsification. At the same time biometric identifiers should be integrated in the passport or travel document to establish a reliable link between the genuine holder and the document* (Council Regulation, 2004, point 1).

The goal was that the passport would be a method for verifying the authenticity of the travel document and the identity of the holder (Council Regulation, 2004, art. 4, §3, letters a-b). The development of the biometric passport was an example where the insecurity of the Union and its security narrative materialised into a concrete material object for control. The biometric passport was perceived to be more secure as a method for identifying migrants (Frontex, 2007, p.23), but also for the overall security of the Union (Thales Group, no year b).

The collaboration and security narrative were yet again illustrated through the creation of a common visa system and a database available to all member states as it was stated that it would prevent threats from terrorists (Communication, 2001, p.13). It also illustrated a further externalisation of immigration control that allowed for "[…] illegal immigration to be effectively tackled at its roots" (EU Schengen Catalogue, 2002, p. 12). The externalisation of immigration control is also a very important strategy in the EU's struggle against irregular immigration, but a topic too big to discuss under the limits of this thesis. The common visa policy consisted of a list (EU Regulation, 2018) of countries whose citizens were either required or exempt from having a visa when travelling to the EU. The requirement of having

a visa is for example based on the country's status in relation to economics, trade, and irregular migration (EU Regulation, 2018, art.1).

The second step in the common visa policy was the establishment of the Visa Information System (VIS) which was decided on in 2004 (VIS Decision, 2004) and became fully operable at all EU border crossing points in 2016. The goal of the VIS was to establish a link between the visa-required immigrant, his or her passport and his or her right to enter the EU with the use of biometrics. The VIS uses fingerprints as the biometric identifier and adheres to the ICAO standards set for travel documents (Commission Decision, 2009, point 6). With the VIS, the EU also developed a Biometric Matching System that is a search engine that connects the biometric data of the VIS with other identity management databases and systems of law enforcement authorities (EU Parliament, 2013). With these changes to the biometric passport as well as the visas, the EU sought to raise the risk for irregular migrants because their body data are stored in the information systems.

The political issues identified by the security narrative were all provided with a solution in the domain of body measurement for identification and control purposes. Biometrics therefore became the technical and material solution to a human and social problem. The security and collaboration narrative and the fear of irregular migration and its consequences materialised and manifested itself in shared databases and travel documents containing information about immigrant's specific body measurements. These developments led to a very important moment in the history of EU migration and crime control. The standardisation of biometric passports as well as interoperable biometric databases for different categories of migrants shared by all member states of the EU made it possible to control all different categories of migrants with the same tools. Security was now inscribed in the body data of the migrants and was made into something that could be controlled by border authorities. The two narratives led to the development of an Integrated Border Management System (Hague Programme, 2005, p. 6) which contains the idea that the area of freedom, security and justice can only be obtained and protected by action from both the

EU level and down to the individual member state as well as the police, customs and border guards (Hague Programme, 2005, p.2).

5.2.3 The European Border Guard and new political issues

The many tools of migration and crime control were part of this integrated system and includes SIS II, lists of visa exempt/visa required countries, common legislation on the visa format, EURODAC, biometric passports and the VIS. The focus in these types of border control tools is to define and specify what individuals that should be excluded or not allowed entry to the Schengen area. The integrated border management system makes up the tools available for the border guards working at the external borders of the EU. A very important character in the story of EU migration and crime control is thus the border guard. The border guards have been delegated the tasks and duty of controlling the entry and exit of both EU-nationals and non-EU-nationals at the external borders of the Union (Schengen Borders Code, 2016, art. 7). The most important task of the European border guard is to perform systematic checks on all persons crossing the external border of the Union (EU Schengen Catalogue, 2002, p. 14).

The creation of the "European Border Guard" (Communication, 2001) was a process that started just around the same time as the birth of the security narrative, so in the early 2000s. It was backed up by the belief that the protection of the internal area of the Schengen could only be achieved through training, operational skills, and legislative knowledge (EU Schengen Catalogue, 2002, p.14). This does not mean that border guards were non-existent before this time, but it simply refers to the fact that the role, tasks, and duties were more clearly articulated and legislated after the birth of the security narrative. The role and duties of the border guard were also standardised throughout Europe through for example the EU Schengen Catalogue (2002) and later also the Practical Handbook of Border Guards (2019). A high-quality on the border guards was perceived as the key to prevent irregular migration (Communication, 2001, p. 17). In strong relation with the

collaboration narrative, there was an idea that all border guards throughout the Schengen Area should follow the same curriculum and training to ensure that border checks were carried out in the same manner at all external border control points to combat crime, terrorism and irregular immigration. Ultimately, the European Border and Coast Guard Agency, or FRONTEX, was established in 2004 (Council Regulation, 2004) which further strengthen a united border guard system throughout the EU.

A learning lesson from the collaboration narrative was that new political solutions to old political issues can foster new political issues. This is also true for the security narrative. The first issue was that irregular migration was still difficult to control. This was first and foremost related with travel documents. Because it is a material document in the hands of the migrant, it is vulnerable for tampering. For example, after the terrorist attacks in Paris in 2016, it was discovered that "[…] two of the terrorists involved had previously irregularly entered via Leros and had been registered by the Greek authorities, presenting fraudulent Syrian documents […]" (FRONTEX, 2006, p. 12). This example illustrates that there is a possibility that irregular bodies can hide in passports which is of great concern regarding irregular migration. In addition, the control of irregular migrants on the inside of the EU was difficult because some migrants destroys their passports after arrival in a Schengen Country and if the person is not registered in any of the many information systems s/he will be very difficult to identify, and consequently returned to his or her country of origin (EES Proposal, 2013, p. 2).

Issues were also still present regarding immigrants overstaying their visas. The EU stated that the practice of manual stamping of migrant's travel documents with entry- and exit-dates was of such a low quality that they did not really work at all. They were hard to read, difficult to detect if a travel document had many stamps, and they were easy to counterfeit and forge (EES Proposal, 2013, p. 2). It was seen as old-fashioned by the Commission: "[…] in this 'digital era' made of tablets, smartphones and high-tech devices, our border guards still use a manual system based essentially on stamps in the passports" (Press Conference, 2013).

The physical material aspect of the travel document as thus was seen as an obstacle to the security of the Union.

There were also identified several issues related to the fact that the border was protected by humans, as humans have their limitations. Although the EU border guard goes through training, or in the Latourian terms, is being disciplined, s/he still has limitations. The EU stated for example that it was a difficult task for the human border guard to find, read and calculate the allowed period of stay for the migrant, and that made it difficult to identify irregular immigrants (EESP Proposal, 2013). Studies have also shown that humans vary greatly in the ability to compare facial images (ISO/IEC TR 29196, 2018, p. 23). "Humans are generally found to be better at recognizing faces of individuals with similar demographic factors, e.g. ethnicity/race, age and gender" (ISO/IEC 29196, 2018, p. 35). This is of course a big issue when framed within the security narrative, and as noted by Murphy & Maguire (2015, pp. 161-162):

> *"[…] security staff at the operational end of guarding borders in airports […] are no longer the trusted embodiments of the state, but, rather, the problems for security. […] the border guard is suspected as an error-prone link in the aviation security chain, a potentially biased "human factor", or just an inefficient and bored cost"*

An additional concern with border guards being human, is that s/he needs to be paid. This is a concern because of the issue that more and more people wish to enter the EU for tourist and business purposes (Press Conference, 2013). This puts an increased pressure on the border control and EU, as many of the member states do not have an economy that supports additional hiring of border guards to work at the border control points. The EU therefore started to look for alternatives to the border guard. Case studies indicated that the increased implementation of Automated Border Control-gates minimised the need for border guards in the identification processes (Impact Assessment Annex, 2013, p. 10) and that "electronic gates leads to 10-20% higher processing times" (Feasibility Study, 2008,p. 19). Additionally, and in strong connection with both the collaboration and the security

narrative: The ABC-gate provide “[…] consistent and secure border control processing of travellers” (ISO/IEC 29195, 2015, p. 2). These new political issues created a situation where the EU needs to find new and optimised solutions to both combat irregular migration terrorism and crime, but also to facilitate for tourists and businessmen. This is the breeding ground for the third narrative.

5.3 The management narrative – from control to management of the external border

The practices and information systems that grew out of the security narrative was not sufficient in controlling irregular migration. The ever-increasing number of migrants wanting to enter the EU for tourism and business purposes posed even more pressure on the external borders. The problem of irregular migration and the lack of knowledge about the phenomenon further pushed the EU to look for better alternatives for controlling the external borders. A third narrative therefore developed in the political documents, namely one that I have named the *management narrative*. The management narrative offers even more practical and material solutions to the political issues of the two other narratives and it also represents a development in the EU's approach to migration by shifting the focus from migration control to migration management. This is both illustrated with an increased use of strategical documents on security, migration, and crime, as well as a material solution in the shape of a Smart Border with automated border controls.

The management narrative builds on the belief that there has not been a good enough control of migration in the past and this has created a problem with a large (but yet unknown) amount of irregular migrants on the territory which is defined as a security issue. The solution is a better management of the external borders where the migration flow is steered to better navigate between the different categories of migrants. According to this narrative, the political issue needs solutions that enforce and strengthen the practices for border control and management, and the human protection of the border through the figure of the border guard is gradually diminishing. As stated by Henrik Nielsen who was the head of the unit for Border Management and Return Policy:

> *We think that this approach does not really make sense anymore, partly in the light of growing travel flows and of increasing waiting times at our borders, partly in the light of limited resources of our member-states to deploy their border guards to carry out the checks* (in Jeandesboz, 2016, p. 297).

The collaboration narrative is anyhow very important in the way forward for the controls of the external borders:

> *The dismantling of the EU's internal border controls is one of the greatest achievements of European integration. An area without internal borders, which has expanded from 7 countries in 1995 to 24 countries at the end of 2007 – a unique, historic accomplishment –, cannot function, however, without shared responsibility and solidarity in managing its external borders* (Communication, 2008, p. 2).

The objective is no longer to control the external borders but to manage them. The genre of the management narrative is again over in the romantic landscape. It rests heavily on the "[…] transformative power of the human agent […] that lead to social improvement and integration – to a better world or the recovery of a lost Eden" (Smith, 2005, p. 26). The unique, historic accomplishments made by the EU by the support of the collaboration narrative cannot risk being destroyed by the threats and risks presented in the security narrative. Recovery is needed, and the solution to that is within a better, coherent, and shared management of the external borders.

The Hague Programme (2005) and the Stockholm Programme (2009) are important strategic documents regarding the control of migration and crime. The documents outlined the specific goals of EU migration control over a set number of years. The goal was to "[…] take a more effective, joint approach to cross-border problems such as illegal migration, trafficking in and smuggling of human beings, terrorism and organised crime, as well as prevention thereof" (Hague Programme, 2005, p.1). The collaboration and security narrative are clearly visible with the use of wordings such as "joint", "illegal", "organised crime" and "prevention". A communication from the Commission the same year stated that the EU faced severe threats and external challenges related to the terrorist attacks in the beginning of the 2000s. This called for an effective and joint management of the external borders to fight the threat of organised crime and terrorism (Communication, 2005, p.3). In the same line, the Hague Programme focuses on management under the headline of "Management of migration flows" (Hague Programme, 2005). The management of migration according to the

programme, however, focuses almost exclusively on the prevention of irregular migration and does not pay much attention for the management of legal paths of migration to the Union, but this was about to change.

The Stockholm Programme set out the goals and objectives for the period of 2010-2014 (Stockholm Programme, 2009, p.2). The programme promoted the ideas of "A Europe that protects" and "Access to Europe in a globalised world" (Stockholm Programme, 2009, p.4). What is new with this programme is the fact that it focuses both on security as well as openness to the world. According to the Stockholm Programme, the EU should work to improve the security of its citizens and to tackle the issues of organised crime and terrorism and at the same time promote access to the Union by tourists, businessmen, students and others that had "[…] a legitimate interest to access EU territory" (Stockholm Programme, 2009, p.4). It is important to note here, that the strategy was published the year after the EU financial crisis, and the promotion of everything that would lead to strengthening the EU economy is therefore maybe quite logical. From this point forward, it becomes very visible that the EU seek to manage migration through creating two parallel systems of control. The first approach is to continue making it hard for irregular migrants, criminals, and terrorists to cross the border. The second is to make it easy for those with "a legitimate interest" to cross the European border. I will in the following refer to this dual-track system as "unwanted" and "wanted" immigrants to reflect the wishes of the Union.

As have been stated before, the collaboration narrative and the security narrative are mutual dependent on each other and almost always said in the same breath. They respond well to what Sourieau (1950, in Smith, 2005, p.20) terms the "bien desiré" of narratives: a goal that can be material, embodied or abstract. Or in other words – a thing, a person or an ideal. The ideal is the freedom of movement and a strong collaborative community protecting that freedom. The migrant becomes both a necessity and a threat in that story. The migrant can be wanted because of his or her ability to boost the economy through having certain working skills or as a tourist. On the other side, the migrant can be unwanted

if s/he is without such skills and “might overload the welfare system and jeopardize the internal market” (Fereira, 2018, p.59). This means that migration control in the EU is fuelled both by security and economic motives, and this shall both be fulfilled by an effective management of the European external border. This is the heart of the management narrative.

The promotion of regular migration and the fear of irregular migration started to gradually go hand in hand in the EU narrative on migration management. The wordings used in the EU-documents from the mid-2000s shows a discourse shift. The EU-documents are filled with wordings and terms such as analyses, profiling techniques, statistics, assessments, indicators, data collection, operational plans, reporting mechanisms, analytical products, capacity building, rate of detection, good practices and targeted programmes in relation to the management of migration and crime (Communication 2008b; Stockholm Programme; Commission Working Document, 2010; GAMM, 2011). The chosen wording builds on the assumption that migration is maybe no longer something that can be controlled but rather managed using numbers and statistics to create facts or evidence on the issue, and from there create more targeted action. This notion is further enforced by this statement: “Immigration into the EU is a reality. […] Immigration is a reality which needs to be managed effectively” (Communication, 2008b, p.2).

This is similar to what criminologists have termed “actuarial reasoning” and “actuarial justice” (Garland, 1997; Feeley & Simon, 1998). Actuarial justice refers to the fact that crime control has become «[...] concerned with techniques of identifying, classifying, and managing groups assorted by levels of dangerousness» (Feeley & Simon, 1998, p.375). This is supported by Garland (1997, p.181) who argues that statistical processes are increasingly being used to classify and categorise the population into categories based upon their level of risk. The main concern is no longer to find evidence and assert blame for past offenses, rather it is concerned with the regulation of groups as a strategy to regulate potential risks. It is therefore coherent with the emphasis on prevention which was discussed in the security

narrative. In the area of border control, Lyon (2003) refer to the same categorisation mechanisms as "social sorting". The management of the external borders is therefore not something completely new, as it draws on similar developments from the field of crime control.

The balancing act of managing wanted and unwanted migration to the EU was said to be achieved through an integrated border management strategy which refer to:

> *National and international coordination and cooperation among all relevant authorities and agencies involved in border security […] to establish effective, efficient and coordinated border management at the external EU borders, in order to reach the objective of open, but well controlled and secure borders* (European Commission, no year).

The collaboration narrative is very much present in this strategy by its call on coordination and cooperation as well as the security narrative through the focus on secure borders. The dual objective of the border management calls for an effective and efficient border management. These are both words that are most often used in relation to the management of company operations, and this makes it even more important to understand for the relevance of the management narrative. To be effective is to produce "a decided, decisive, or desired effect" (Merriam Webster, no year b) whilst being efficient refers to the capability of producing "desired results with little or no waste (as of time or materials)" (Merriam-Webster, no year a). What does this mean in relation to an integrated border management? It means that border controls must be more efficient regarding regular migration. The check of regular migrants should be done as fast as possible with the use of as little resources as possible. On the other side, the border control must be effective regarding irregular migration. The desired effect of the control is to prevent irregular migration, crime and terrorism and is related to the security of the border control process. In sum, "Being effective is about doing the right things, while being efficient is about doing things right" (Insight Squared, no year).

Table 4. Relations between efficiency and effectiveness. The grey area is the ultimate goal of border management.

Effective	Security is achieved, but the cost is too high.	Security is achieved, and it is cost-efficient.
Ineffective	Low security, and cost is too high.	Low security, but cost-efficient.
	Inefficient	**Efficient**

Table 2 illustrates the different relations that exists between efficiency and effectiveness in border management. It is a balancing act in creating and open but secured border that at the same time needs to be time- and cost efficient. As mentioned in the last chapter, the human border guard was an obstacle to EU border control because s/he needs to be paid, and by his or her limits of simply being a human. "Seeking to increase security and to speed up travel flows just by increasing the number of border guards is not a viable option for many Member States as they strive to curb budget deficits" (Communication, 2011, p.4). Taking these two aspects into consideration, to hire more border guards is an inefficient and ineffective solution. A solution provided by the Commission was therefore to make use of "[…] advanced biometrics and technology for automating the border crossing process for different types of travellers" (Commission Working Document, 2008, p.15).

The discussions on biometrics and new technologies for managing the external borders had been part of the official discussion for many years and was already implemented in travel documents and information systems. For example, the Hague Programme (2005, p.7) stated that:

> *[…] the fight against illegal immigration should be strengthened by establishing a continuum of security measures […]. In order to achieve this, a coherent approach and harmonised solutions in the EU on biometric identifiers and data are necessary.*

This was supported by the Stockholm Programme (2009, p. 39) in which it was stated that there was a need for the use of new technologies to ensure the freedom, security, and safety of the people of Europe. An integrated technological approach, the e-border, was the key to fight irregular migration (Communication, 2006, p. 6). In addition, a border like this would provide the wanted category of migrants a "[…] smooth border crossing and on the other hand, the internal security of the Schengen area should be guaranteed" (Commission Working Document, 2008, p. 7). A coherent use of technologies across the Union therefore became a meeting place of the three narratives of collaboration, security, and management as it would both enhance security and make the border more effective.

The Commission was asked by the Stockholm Programme (2009, p.57) to present a proposal for the establishment of an entry/exit-system to control the movements of migrants in and out of the Schengen area, a European travel authorisation programme as well as continuing the work on automated border controls. This was met by the Commission and presented through the Smart Borders Package (SBP) in February 2013. This was a direct answer to the Stockholm Programme's call "[…] to maximise the positive and to minimize the negative effects of migration" (Stockholm Programme, 2009, p. 62). In a press conference, the European Commissioner of Home Affairs said: "I have the pleasure today to present the 'Smart Borders' that will help facilitate a more open and secure Europe, relying on the state-of-the-art technologies" (Press Conference, 2013). The SBP consisted of one legislative proposal on the Entry/Exit-system (EES) which would register the entry and exit date of the traveller as well as passport information and biometric data (EES Proposal, 2013). In addition, they proposed a Registered Traveller Programme (RTP) which was a program to

facilitate the border crossing and minimising the control of non-EU nationals that visited the EU on a frequent basis[4].

The EES builds on three central ideas that by now is very well established from the analysis and discussion from the three narratives: "[…] enhancing border control, preventing illegal immigration, and facilitating the management of migration flows" (EES Proposal, 2013, p. 11) The EU also addressed the fact that some member states already had such entry/exit-systems in place, but they had limited value because only the member state had access to the data (Impact Assessment, 2013, p. 3). A more harmonised solution was needed in order to build a stronger border control:

> *No Member State alone is able to cope with irregular immigration and with combating international terrorism and serious crime. A person may enter the Schengen area at a border crossing point in a Member State where a national register of entry/exit data is used, but exit through a border crossing point where no such system is used. The monitoring of compliance with EU rules on authorised stays can therefore not be done by Member States acting alone* (Impact Assessment, 2013, p. 4)

Border management is thus yet again promoted as a collaborative task. The logic of the EES builds on replacing the manual stamping of passports by border guards by creating an electronic file containing the date of entry and exit of immigrants visiting the EU for short stays, 90 days within a 180 day period (EES Regulation, 2017). Two things are important here that changes the norms of border control. The tasks of the border guard to identify migrants are being automated. Second, the entry and exit information which earlier were provided in the passport of the migrant, is now the property of the EU as an electronic file in an information system. The data record is attached to the personal information obtained from the passport as well as the biometric data of the traveller (EES Regulation, 2017, p.11). So, although it seems like migration control becomes less concerned with materiality because

[4] The project of the RTP was withdrawn because of the cost (EES Proposal, 2016) and will therefore not be taken into consideration in the further discussion.

manual stamping of travel documents is abolished, this is not an accurate description. Rather, the material "evidence" or "proof" of the migrant's movements are in the hands of the EU and no longer located in the personal travel document of the migrant.

In the aspect of the EES, it is important to note that it became a target of great controversies within the EU. The proposal presented by the Commission in 2013 was not accepted due to insecurities about its cost, technical feasibility, and data protection. The European Data Protection Supervisor (EDPS) did for example in a press release under the headline "Smart borders: key proposal is costly, unproven and intrusive" state that:

> *[…] one of the stated aims of the proposals was to replace the existing 'slow and unreliable' system but the Commission's own assessments do not indicate that the alternative will be sufficiently efficient to* ***justify*** *the* ***expense*** *and* ***intrusions into privacy*** (EDPS, 2013).

Smith states that ambitious political programmes are vulnerable for attacks from "advocates of realist and tragic visions" (Smith, 2005, p.26). This was very much true for the initial proposal for the EES and the other Smart Border-solutions. What is interesting is the fact that the EDPS attacks the specific efficiency/effectiveness-nexus that is so central to the management narrative. In the following years, the Commission performed a "proof of concept" consisting of a technical study and a pilot for testing the solution. This was done in order to demonstrate and create factual evidence of the feasibility of the solution (EES Proposal, 2016, p.2). This led to a new proposal in 2016, which was accepted.

Despite the controversies, the EES proposal was revised and finally adopted in 2017 and will become fully operable in 2022 (European Commission, no year b). The biometric data will be used to establish the connection between the traveller and his or her passport and to perform background checks. Additionally, the data is kept in the database for three years for the persons who exit on time (EES Regulation, 2017, p.19). Biometrics are of great

importance to the system, which can be illustrated by the fact that travellers are refused entry to the Union if they do not cooperate in providing their biometric data (EES Regulation, 2017, p.1). Maybe even more important, law enforcement authorities are given full access to the data stored in the EES and use it as:

> *[…] an identity verification tool both in cases where the third–country national has destroyed his or her documents and where designated authorities are investigating a crime through the use of fingerprints or facial images and wish to establish an identity. It should also be possible to use such data as a tool to construct evidence by tracking the travel routes of a person suspected of having committed a crime or of a victim of crime* (EES Regulation, 2017, p.13).

The EES is therefore not only limited to control at the border, but also sieves into control performed by the police in the internal area of the Schengen. The EES thus represent yet another step in the merging of migration and crime control in the EU. The fact that biometric information from all non-EU nationals are stored in the system is of great importance. Earlier, I discussed how intention was an important feature in the characterisations of the irregular migrant. The EU states that the largest category of irregular migrants is the one with those who overstay their visas (EES Proposal, 2013, p. 2). It is very difficult for the border guard and the EU to assess in the border control situation if the person will become an irregular migrant after entering the EU. The interoperability between systems and background checks might provide a statistical risk, but since so little is known about why some migrants becomes irregular this strategy is not enough. The EES is thus a system that creates hand-held information on the identity and the body measurement of the migrant which can be used in cases where s/he becomes irregular *after* entry. If the security narrative created a distinction between "us", the EU, and "them", the irregular migrants, the EES does leads more to a notion that is in line of "us" versus "all of them". All migrants have the potential of becoming an irregular migrant after entry.

One of the specific policy objectives of the EES is further to "Facilitate the crossing by third country nationals of EU external borders through self-service systems and semi-automated

or automated systems while maintaining the current level of security" (EES Annex, 2016, p.4). The reasons for the automatization of the border controls are related to freeing up border control resources from border guards (EES Proposal, 2016, art.5, letter e) and to meet the pressure of a 57% increased traveller inflow by 2025 (EES Annex, 2016, p.6). The automatization of the border control shall therefore lead to a more efficient and effective border control at the EU external borders and fit well with the management narrative. In addition, the automatization is said to "[…] ensure a homogeneous and systematic control of the authorised period of stay of third country nationals (EES Annex, 2016, p.7). The automated border control solution is therefore perceived as a solution to the limits of the border guard, but it also promotes the collaboration narrative by it being a homogenous form of control. With automated border controls, all migrants will be controlled in the same way and this is where the Automated Border Control-gate enters the scene in the narrative. In the analysis of the two previous narratives, I discussed how their solutions to political problems often led to new political issues. Since the EES will not become operable before 2022, it is too early to say if this also applies to the management narrative. In the next three chapters, I will therefore look more closely into the concrete materiality of the gate and to biometric technologies to see where this story might evolve next.

5.4 The Automated Border Control-Gate

The Automated Border Control-Gate is an important material object that arose from the management narrative's quest for a more efficient and effective border control. By its design, construction, and functionalities it "[…] enable the automated verification of travellers' identity without the intervention of border guards" (Communication, 2008, p.6). The gate therefore takes over the role from the European border guard in identifying and verifying traveller's right to enter and stay in the EU. This involves the tasks of identification, background checks against relevant information systems and watchlists, as well as checking if the person has the right to enter according to the visa regulation (Schengen Borders Code, 2016). When the ABC-gate takes over these tasks from the border guard, it is in ANT described as a *delegation* (Latour, 1992). The ABC-gate can therefore be interpreted as the "[…] delegated version of whoever is responsible for the mechanism" (Latour, 1992, p. 166). In the following, an investigation of the ABC-gate will look closer at how the ABC-gate is designed, how it looks, how it operates and how it interacts with humans in order to understand more about how this delegation gives shape to EU border control.

As have already been discussed, the three narratives of collaboration, security and management are all important to understand how border controls are performed in the EU today. The member states must collaborate in performing effective and efficient border controls on all persons crossing the external borders of the EU in order to secure the internal area, the freedom of movement and to make Europe open for those categories of migrants that will boost the economy. This type of agenda is within ANT referred to as a programme of action (Latour, 1992) and refers to the steps, goals and intentions that an agent can describe in a story. This program of action was integral to the work tasks of the human border guard who operated under the collaboration and security narrative, but with the management narrative's call for efficiency and effectiveness, the ABC-gate is now taking centre stage in this story. On the one side, this means that the material delegated object must be designed and constructed in a way that preserves this programme of action. On the other side, it is now the delegated actor that "[…] determines the shape, direction or fate of that action" (Waltz, 2006, p.61). In this first chapter, I will focus on the first aspect whilst the

two next chapters will illustrate how the ABC-gate gives shape to EU border control procedures.

The notions of effectiveness and efficiency derived from the management narrative is one of the most central themes recurring in the brochures on ABC-gates from the technological developers:

> *Security and speed, cost-efficiency and convenience have long represented conflicting goals for airports and border control authorities. The Gemalto ABC solution is designed with these challenges in mind […]* (Thales Group, 2020b, p.1).

In the same line, SITA (2014) states that with ABC-gates: "Governments can handle increased international passenger traffic with an improved immigration process, making better use of resources without compromising security". As can be observed from this statement, the biometric company is clearly targeting the political issue of the increased travelling population to the EU. This also involves the idea of not having to increase the numbers of border guards to keep up with this development. In that respect, Cominfo (2019) states: "The e-Gate solution is designed to enable fast and smooth security control during the departure and arrival at borders without the need for security staff". Security is also addressed in all the three quotes in this paragraph, and it therefore also addresses the challenges defined by the security narrative. None of the documents explain what they mean by "security", and it is therefore possible to see that the notion of security within border control has taken the shape as a trope. A trope is by Sandberg (2016, p. 157) defined as "words or phrases that hint towards a familiar story". Taking everything learnt from the analysis of the security narrative, there are good reasons to believe it refers to irregular migration, terrorism and crime as this is by now a familiar story in the border control context.

The introduction of automated border control is by the EU and FRONTEX believed to have a positive impact by "[…] enhancing security while facilitating travel" (Technical Guidelines, 2015, p.8). The ABC-gate offers both a smooth travel for the low-risk travellers and an automated way of making decisions about those who deviate from the norms:

> *Automated border controls for bona fide travellers would provide major benefits in time savings on crossing the external border and allow border authorities to focus their resources on those groups of third country nationals that require more attention, thus improving overall security at borders* (Communication, 2008, p. 6).

The ability of the ABC-gate to undertake border controls of the low-risk migrant does, as the quote indicate, free up border guards to focus on categories of travellers that need more attention. This is a more efficient and effective use of resources according to the definitions set out in the management narrative, and it is further stated that "Cost-effectiveness is also an important dimension to be observed. Properly set ABC systems allow for an increased rate of traveller checks in a given time at first-line control without necessarily having to increase the number of border guards" (Operational Guidelines, 2016, p. 26). Further, the combination of the management and security narrative inscribed into the design of the ABC-gate is interpreted to elevate the overall security of EU border controls.

The implementation of automated border control solutions are by the EU promoted through financial support from the External Borders fund in order to create a "[…] widespread and coherent use of automated border control systems" (Communication, 2008, p. 6). Latour (1992) states that the problem with most humans is that a good amount of discipline is needed to make humans perform their tasks as wanted, but even then, they can fail. The ABC-gate, on the other hand, does not need to be disciplined in the same manner. The ABC-gate can be programmed to perform in the same way at all external border control points, which could lead to a more uniform method of control throughout Europe. As stated by Thales Group (no year, p. 2): "Our customers can implement a consistent framework to secure borders by enabling the same checks and functionality for all border control

stations". The ABC-gate is thus in strong support of the collaboration narrative where the ABC-gates work in tandem throughout the member states to protect the internal area of the Schengen. In that sense, this illustrates Ugelvik's (2019) argument that material objects can produce stories about their owners.

Now that it has been established how the three narratives are inscribed in the ABC-gate, I will proceed to an exploration of the construction of the gate. By watching a video of an ABC-gate from Gemalto (2018), I formed a first impression of the look and functioning of the gate:

> *The gate looks like some sort of a high-tech room that is furnished with black plastic and metal pieces. The walls and the doors are all made of something that look like glass. It seems like a place that you can just flow through, but at the same time you are bounded against the world by the walls and the doors. Open, but yet closed. It is a bit "heavy" on the right side. Both the passport reader, the camera and the fingerprint sensor are placed there* (Personal observation journal).

What struck me from the very first observation of the ABC-gate was that it did not bear any resemblance to its human counterpart. It looks high-tech, with very "cold" materials. Reading about the ABC-gate in the brochures confirmed this observation. The ABC-gates are mostly made of stainless steel, tempered glass, and polycarbonate (SITA, 2014; Skylane, 2018; Cominfo, 2019). It is also a requirement that to use solid materials, as they need to be "scratch proof and impact-resistant" (Technical Guidelines, 2015, p. 16).

The video observations did, however, not reveal the full composition of the gate. What I could see was simply walls, doors, camera, passport reader, some sort of a screen and fingerprint sensor. When looking at documents that described the minimum requirements for the construction of ABC-gates in the EU, it fast became evident that there are much more to the gate than the eye can see. The minimum requirements of ABC-gates are:

> *[…] physical barriers (single door or double e-gates); monitoring and control station and equipment for the operator; document reader (optical devices including a radio*

> *frequency reader module); biometric capture device (camera, fingerprint reader), user interfaces (monitors, LED signals, audio devices, panic button); processing units and network devices (PC, controller, hubs); cameras/sensors for surveillance (CCTV, tailgate detection, left luggage detection* (Technical Guidelines, 2015, p. 26).

The quote illustrates clearly the many different nonhuman and human elements that must be in place for the ABC-gate to perform its tasks. The sum of the different elements makes up a heterogenous network where all bits and pieces and humans are fundamental for the ABC-gate to work as intended. If for example the passport reader went out of function, the traveller would not even be able to open the doors of the gate. The assembly of the many different human and nonhuman elements therefore give the ABC-gate status as an actor-network according to the definition by Latour (2005, p.128).

The actor-network of the ABC-gate is an assembly of nonhuman technologies that measures the body of the traveller, whilst the doors and walls permit and restrict his or her movement. Although there are no humans visibly present at the gate, the border guard is still present as an operator who has overview of 3-10 ABC-gates at a time (Operational Guidelines, 2016, p.18). In the role as an operator, the most important task for the border guard is to "[…] bring the necessary human factor into the automated tasks" (Operational Guidelines, 2016, p.46). This requirement is related to the fact that the Schengen Borders Code (2016, art.7) specifically assigns the responsibility of border checks to the border guard. As an operator, the border guard is relocated from the direct interaction with the travellers and is instead placed at a distance. From this position, s/he monitors the gate with the following priorities:

> *"[…] the operator SHOULD evaluate the traveller flow in order to detect suspicious behaviour and to identify travellers who should be more closely checked. The evaluation or assessment method is typically based on a traveller's actions and body language, i.e. non-verbal communication"* (Operational Guidelines, 2016, p. 47).

In his or her role as an operator, the responsibility is also to detect if someone tries to trick the ABC-gate by for example entering two persons at the same time (so-called tailgating) or if it is being used by a minor (Operational Guidelines, 2016, p. 30). The new role of the border guard is thus more related to surveillance of the travellers passing through the automated gates and performance this task with an observational stance at a distance. Since the border guards can see the traveller, but not the other way around, it has strong resemblances to the features of Bentham's panoptic prison (for more information on the panopticon, see for example Foucault, 1977).

Adams & Thompson (2016, p. 2) have stated that with all nonhuman actors there is "[…] an activity of buzz in the background – the work of other actors being attributed to the powerful and highly visible actor". The border guard is a clear example of such a background character, but it is also important to acknowledge the presence of other human actors. All technological objects are in fact designed, constructed, and put into use by humans (Norman, 2013, p.5). This also entails the idea that all material objects are part of institutions (Latour, 1994, p.46). The EU have for example provided the legislation supporting its implementation and Frontex have outlined the ways in which it can be best implemented and operated (Operational Guidelines, 2016; TCN Guidelines, 2016; Technical Guidelines, 2016). In addition, the ABC-gate is part of a long process of standardisations. The gate is inscribed with years and years of developing standards on biometric identification tools, such as those for facial images and biometric passports. They are all following the same standards on facial images and fingerprints, as described in ICAO's DOC9303 (2015). Such standards are fundamental to the interoperability between different entities such as travel documents, automated border control solutions and watchlists (ISO/IEC, 2019, p.vii). As pointed out in a study on automated border control systems, the very existence of the ABC-gate is only possible due to the standardisations of biometric passports and identifiers (Feasibility Study, 2008, p.13).

When looking into the actor-networks of objects, it is also possible to detect actors that comes from other times and places (Latour, 2005). Diving into the history of the object might therefore reveal some stories about the object's past (Ugelvik, 2019). Such historical figures in the ABC-gate are related to the practice of body measurement for control purposes which have a history stretching centuries back in time. Material objects are, as pointed out by Akrich (1992, p. 205), part of "[…] a long chain of people, products, tools, machines, money and so forth". The high-tech camera for facial recognition and the fingerprint sensors are both based on the work of people seeking to find solutions to control certain categories of people. The Thales Group (no year b) informs for example about the fact that biometrics have traditionally belonged to the field of criminal investigations. Law enforcement authorities have for example used automated systems for fingerprint verification since the 1960s (Frontex, 2007, p. 10), but the history of body measurement stretches even further back and has some interesting similarities with the birth of criminology and ideas about deviance itself. During the 19th century, major advancements were made in this respect and the concept of identification through body measurement became a product of this period (Ashbourn, 2011, p.6).

Even the history of criminology starts out with the measurement of bodies. Cesare Lombroso, the father of modern criminology (Cullen, Agnew and Wilcox, 2014), used numbers derived from bodies and statistical analyses as evidence for connecting certain body measurements with the criminal propensity of an individual. From there, he discovered that the size of certain bodily features correlated with the person's involvement in crime. Although his ideas did not survive for very long, his work is well known within the field of criminology as he was one of the first to concentrate upon the *criminal* rather than the *crime* (Cullen, Agnew and Wilcox, 2014, p 22). The connection between crime and establishing individual identity was, however, further developed in the 1890s. A French police officer named Alphonse Bertillon, stationed in the Paris police department, saw the need for a more efficient and secure way to identify and detect whether an arrestee was a first time offender or a recidivist (Ceyhan, 2008, p.110; Dessimoz and Champod, 2008, p.433). His solution, Le Bertillonage, was the world's first biometric system. The system consisted of

identity cards belonging to every single individual arrested in the police department (for an example of identity cards see Cole, 2001, pp.38-39). The identity card contained information from measurements derived from 11 specific dimensions of the human body (Nandakumar, Ross & Jain, 2008, p.347), and it also contained a photograph of the individual. Bertillon standardised the ways in which the photograph had to be taken which subsequently made him the inventor of the mugshot (Finn, 2009). These are inventions that are foundational to the technologies in the ABC-gate today, and as well as the logic of the information systems that it is connected to.

In addition to the body measurement technique provided by Bertillon, fingerprinting started to become an important step in the identification of deviants. The Bertillon system was celebrated and believed to solve the growing crime problem, and the system became so popular that it was also tried out in British colonies such as India to identify Indian citizens (Cole, 2011, p.71). The problem was that colonial officials was sceptical to the system's ability to distinguish between individuals who to them looked homogenous (Cole, 2001, p.71). This marks the point in which fingerprinting methods really became popular. The method of identifying individuals based on their fingerprints was developed by Francis Galton in the 1890s (Stigler, 1999, p.132). His fingerprinting methodology is known as dactyloscopy, which is also in the name of the EURODAC-system, EURopean DACtyloscopy. By studying 8000 sets of fingerprints and applying them to different statistical analysis, Galton was able to determine their degree of uniqueness for each individual on Earth (Stigler, 1999, p.133; Ashbourne, 2011, p.11). The scientific basis provided by Galton made fingerprinting to an important tool in law enforcement's identification of offenders. But maybe most importantly, Galton's scientific work made fingerprints into "[…] an individual identifier […]" (Cole, 2001, p.100) free from predictions of the individual's character or criminal propensities, ultimately making fingerprint sound more factual and less value laden.

So, what was the purpose of bringing this long history into the debate of the ABC-gate? Well, first and foremost it illustrates the fact that the objects we perceive as high-tech and

modern has in fact a long history containing ideas and persons from the past and is thus much more complex than what can be seen by the naked eye. The program of action becomes more and more advanced over time and consists of more and more social and technical relations (Akrich & Latour, 1992). Second, and maybe even more important, it shows that in the actor-network of the ABC-gate there are several actors that also operates in other actor-networks. The technologies in the gate are developed by actors that sought to find methods of controlling the deviant population and citizens in the oversea colonies. This overlap in actor-networks illustrates even more clearly the intersections of immigration and crime control which lead to the merger crimmigration control. This was also noted by Franko (2020, p. 4) who stated that "Migrant's bodies are – like the bodies of convicts in the past – deeply connected to sovereignty and the production of truth" (Franko, 2020, p. 24). In the same manner as the Bertillonage was used to identify those to keep inside a prison, the biometric systems and the ABC-gate are used to keep certain types of migrants on the outside of the border. This shows that new technologies are always "[…] a complex historical accomplishment" (Michael, 2000, p. 23). Technologies such as biometrics are therefore also multistable with the "[…] ever-present potential […] to be used in multiple ways through multiple contexts" (Rosenberger, 2014, p.373). Having this amount of strings and relations to actors of different times and places also make the ABC-gate very powerful according to Latour's (2005) concept.

5.5 Affordances and scripts of the ABC-gate

"They are supposed to look straight into the camera and not smile, and not show any teeth"

(Billy)

This chapter focuses on the ways in which the ABC-gate performs border checks at the European border, and how it gives shape to the border control procedures. There is a claim that the identification process performed via the ABC-gate is fundamentally the same as the one performed by a human border guard (Operational Guidelines, 2016, p. 25). ANT however claims quite strongly that "[…] each actor, be it human or nonhuman, will express the action differently according to its own capacities, constraints and location among other actors" (Waltz, 2006, p.61). It will therefore be central to see how the ABC-gate shapes the norms of border control in the EU.

The ABC-gate presents itself as a physical barrier where the traveller must perform a chain of tasks to enter the Schengen area. When observing one of the videos of an animated person, named Mrs. Jones, using an ABC-gate (Gemalto, 2018), I noticed that:

> *The gate is constructed almost like a narrative itself. Mrs. Jones is approaching the gate, and this marks the beginning of the story. She's a woman with a mission: entering the country. There are two obstacles standing in her way to the achievement of that goal, and this marks the middle of the story. First, she must scan her passport to get the entry door to open. Once in the gate the second obstacle arises […]. Her facial image is taken to check that she is the one that owns the passport. Luckily for Mrs. Jones, it worked! The exit door open and she can enter the country. The end* (Personal Observation Journal).

The use of the gate has clearly temporal elements. The entry door marks the beginning, there are some struggles in the middle, and the exit door marks the end. There are also clear

causal relations for example between the success of reading the passport and entering the gate. This narrative build-up of the ABC-gate illustrates that: “Each artifact has its script, its ‘affordance, its potential to take hold of passer-by and force them to play roles in its stories” (Latour, 1994, p.31). This concept of affordances, scripts and roles will be central in the following analysis and discussion.

The connection between narratives and human interaction with technologies illustrates the terms affordance that was introduced in chapter 3.3. There are two main categories of affordances. The first is the way an object offers support to a user and the second is that the object is designed relative to the proportions of the user (Gibson, 1979, p.1). The example of Mrs. Jones above, illustrates both aspects. The floor, surrounded by walls and moving doors, support the action of standing inside the gate by the user. Once inside the gate and with both the entry/exit-door closed, the sum of these three elements are referred to as a mantrap (Technical Guidelines, 2016). A standard-sized ABC-gate is about 1,6-metre-long and 1 metre wide (Skylane, 2018) which supports 1 person with luggage. The gate should also be made with a human who is between 140 to 200 centimetres tall (Technical Guidelines, 2016, p.40). The walls and the limited floor size is designed in a way that encourages the right position of the traveller so that the best results when it comes to facial image and fingerprints are achieved (ISO/IEC 29195, 2015, p.9) as “[p]ose is known to strongly affect performance of automated face recognition systems” (ISO/IEC 39794, 2019, p.139). Designed in relation to and with a human user in mind, the size of the gate fits the proportions of a human and influences the actions of the user.

The positioning of the camera inside the ABC-gate is also important. In line with the standards on facial images (ISO/IEC 39794, 2019, pp.108-109), the camera shall be at the same height as the eye-level of the person and the distance between the camera and the person must be correct in order to achieve a good quality image. One of my informants explained that: “The camera moves automatically, so if the person stands in the right position and has his eyes open, the camera will adjust to the right height itself” (Taylor). For

this to work, the human must therefore stand inside the gate with both eyes open, because "[…] algorithms use the centres of the eyes in photographs to reference the face" (ISO/IEC TR 29196, 2018, p.34). The gate is designed by the notion of a universal build-up of the human body in which the human has the possibility to look straight forward with both eyes open. One of the informants in the study did however point to the fact that: "The automatic positioning of the camera is sometimes causing trouble if the person is blind or has strabismus, because the eyes are not centred" (Billie). A second important side to the facial camera is that it controls whether the person standing in front of it is alive through a so-called live-ness detection (ISO/IEC 29195, 2015, p. 3). The ABC-gate is therefore designed with an alive person in mind, standing up-right and with the ability to look straight-forward.

Norman (2013, p.6) states that the material object and its designer have a duty in understanding people and how they will act. This means for example understanding the fact that humans can stand in an upright position only when the floor is horizontal and flat. The ABC-gate therefore affords standing. It is here important to note that material objects also have anti-affordances which refers to "the prevention of interaction" (Norman, 2013, p.11). In relation to the ABC-gate, such anti-affordances are for example related to a limited floor size which prohibits the person from easily moving forwards, backwards or to the sides. The walls range from 1,2 to 1,8-metre-high, which also restricts the user to climb out of the gate (Cominfo, 2019). The Technical Guidelines (2015, p. 27) states that ABC-systems must "[…] be constructed in such a way as to form a robust barrier so that a person may not gain access over, under, by the side of or through the ABC system". These anti-affordances are therefore intentional and "[…] constrain the range of possible interpretations open to the user" (Hutchby, 2001, p.445). The automated entry/exit-doors, however, have both affordances and anti-affordances built into them depending on the situation. The doors are made of "Clear, 10 mm thick tempered monolithic glass obstacles, swinging in the direction of user passage" (Skylane, 2018). When the doors are closed, the traveller can see through them but not walk through them. The doors therefore both encourage movement when open and restrict movement when closed, and thereby encompasses a dual function in the gate.

Akrich (1992, p.208) states that designers and engineers always have a target group in mind and that they design objects based on the target group's competences, tastes, and motives. The competences are strongly related to the notion of scripts, whilst tastes and motives in relation to the ABC-gate can be interpreted considering the narrative analysis. When taking the findings from the management narrative, the EU Smart Border and the ABC-gate is designed to fit the tastes of the frequent traveller and the low-risk passenger. The process of border-checking shall be as smooth as possible for this category of travellers, so that they can easily travel through border control without delays and at the same time make EU an attractive destination (Operational Guidelines, 2016, p. 19). The ABC-gate must however also be able to capture those who have fraudulent motives for entering the EU, and the process must therefore also be able to check the person against watch list and information systems such as the VIS and the SIS. When it comes to the competences of the travellers this vary to a great degree and will be further explored in the following.

The competences of the traveller are closely related to the ANT-concept of scripts. The term refers to the sum of affordances and anti-affordances that are built into the design of an object (Akrich & Latour, 1992, p.217). The script describes the steps needed to be performed to reach a set goal. In the beginning of this chapter, I illustrated with examples from a video observation how the use of the gate had similarities with the build-up of a narrative, and this is basically the same as the concept of scripts. The script of the ABC-gate can in very short terms be summarised in a chronological order like this according to the Operational Guidelines (2016, p.25):

1. The human must place his or her biometric passport on the passport reader outside the gate (ISO/IEC 29195, 2015, p.3). The biographic data from the personal page and the chip is read by the machine, and the security features are checked to verify the authenticity of the document.
2. The reading of the passport can have to outcomes:

a. *Acceptance*: The entry door open and the human can proceed to step 3.

b. *Rejection:* The entry door remains closed and the human must go to a second-line inspection.

3. A facial image is taken, and the live image from inside the gate is compared to the one stored in the chip of the passport as well as information systems and watchlists.

4. The human puts his fingers on the fingerprint sensor, and the same one-to-one and one-to-many comparison is performed (ISO/IEC 29195, 2015, p.11).

5. Step 3 and 4 have two outcomes:

a. *Acceptance:* The human is identified as the true owner of the travel document, and s/he is cleared by the information systems and can enter. Exit-door opens.

b. *Rejection*: The human is not identified and/or s/he is not cleared by the information systems and must therefore proceed to a second-line inspection. Exit-doors remain closed and the entry door opens, so that the human can proceed to a manual second-line check with a border guard.

Many technological devices are similar to each other, and the knowledge and experience obtained from one device may help the human to understand the script of other similar devices. As noted in the previous chapter, biometrics are a central figure in many different actor-networks. One of my informants stated that people in general are comfortable with the fingerprint sensor because they use their fingerprints several times a day to access their smartphones (Chris), but experience was also said to come from elsewhere:

> *I've seen a couple of times that people are rolling their finger from side to side . . You are supposed to hold it still, right. But the rolling thing is something they used to do before to save fingerprints in the crime registry, so I always wonder if they have experience from there or if they have seen it on TV* (Billy).

The placements of ABC-gates and the lines are also said to have a positive impact as the people waiting in line can observe how others use the gate, and it can therefore become a learning process (Operational Guidelines, 2016, p.58). if the political solutions provided by the management narratives is to be successful, it is important that people understand how

to follow the script and how to interact with the gate, and last but not least have a wish to interact with the ABC-gate. Every new technology bears the risk that no one wants to use it (Akrich, 1992, p.214), and there is no way that the EU could maintain the notions of efficiency and effectiveness if the ABC-gate is too difficult to use and understand. The understanding of biometrics from other contexts can therefore be an important factor in that respect, but the use can also be boosted by ways of making it easier to understand how the technology is supposed to be used.

If a traveller finds the ABC-gate difficult to use, it can have consequences for further use both from the affected traveller self but also indirectly if s/he reports about the difficulties to other potential travellers (ISO/IEC 29195, 2015, p.4). The travellers therefore need to be persuaded to play the role that the technology provides for them (Akrich, 1992, p.214). This is also acknowledged in the technical documents:

> *"Ultimately, the ability of travellers to use the system easily and effectively will have a critical impact on its levels of usage and on the volume of rejections yielded. An implementation which is attractive and user friendly is thus crucial"* (Operational Guidelines, 2016, p. 19).

One way to make a technology easier to use is by equipping it with signifiers (Norman, 2013, p. 4). Gibson (1979, p. 2) notes that humans pay most attention to the type of signifiers that are sonic or visual. The ABC-gate is equipped with different types of signifiers that communicates the correct type of behaviour expected from the user. These are placed in order to make the traveller understand how to use the gate (Operational Guidelines, 2016, p. 19). Standards exists for visual signifiers and relates for example to that a person needs to take of hats and sunglasses (ISO/IEC 24779-5, 2020), or that s/he is not positioning the finger right on the fingerprint sensor (ISO/IEC 24779-4, 2017). A third example is that the floors often are marked with footprints, and this is because the positioning of the traveller is crucial to get a good photo for the facial recognition (ISO IEC 29195, 2015, p. 9). The

difference between an affordance and a signifier is thus that affordances indicate courses of action whilst signifiers indicate where the action shall take place.

Although I did not ask specifically about signifiers in the interviews, two of my informants talked about it implicitly. The footprint marked on the floor was for example important: “The footprint is crucial because the camera won’t find the person if he doesn’t stand on it. In addition, the person often ends up standing in the wrong position . . for example, a little bit too skewed, if he doesn’t stand on the print” (Alex). One of the other informants stated that the biometric machine does not provide a sound when the picture is taken, so this would often lead the person to just stand there for longer than needed. “So, they basically just stand there until I tell them that the picture is ready. Most of the time, I just say ‘AND then we’re done with the picture’ so that they can relax” (Alex). With the ABC-gate, the ISO are stating that the border check process by the AB-gate can be so smooth and fast that the person does not even understand that they have finished (ISO/IEC 29195, 2015, p. 20). This can be enforced by the fact that the doors are made of glass, and it is not sure if the person notice that the doors opens. Some airports have therefore added chevrons to the glass doors (ISO/IEC 29195, 2015, p.23). This clearly illustrates a point made by Norman (2013, p.8) that the design of technological objects must take human error into consideration (Norman, 2013, p. 8).

Previous in this chapter, it was pointed to a statement that claimed that the border check procedure by the ABC-gate is fundamentally the same to that of a human border guard. There is however one big difference, and that is the fact that the ABC-gate leads to a self-service border. Border control is now an action performed by the traveller itself. This gives the traveller completely new responsibilities and a new role in the context of border control. Although the ABC-gate afford the person to enter and stand up inside the gate, and indicate the right positioning through signifiers, there are several things demanded from the human traveller. The ability to self-check at the border crossing point comes down to three important aspects: First, the traveller must possess a biometric passport containing

information on his or her personal body measures (facial image and fingerprints). Second, the travellers must have a body that can be read and measured by biometric technologies. Third, the traveller must understand the script of the gate in order to go through the body measurement process. This self-service smart border solution is changing the norms of border control to fit with the management narrative. If the travellers can self-process, less border guards are needed, and it is therefore both cost- and time efficient.

The fact that border guards are positioned at a distance where their main task is to observe behaviour, and to handle those travellers rejected at the gate also leads to a border control situation that is more targeted against certain categories of immigrants. An interesting dimension to this, is that the border guard is able to lock a suspicious person inside the ABC-gate if there is a positive match with for example the watch-lists, or the person has been detected using a fraudulent travel document. “There can be situations where the record in the police database indicates a wanted person. In such a case, the passenger remains “locked” in the mantrap until the police arrive” (FRONTEX, 2007, p. 28). This can also be observed in the video produced by Pradotec (2016). The physical material affordances of the gate can therefore be used to create a detention area. The term “mantrap” shows its true potential in these situations. This is one picture of what crimmigration looks like, as the laws of criminal and immigration law “[…] are the two legal arenas that wield the greatest government power over the physical liberty of individuals” (Stumpf, 2014, p. 238). The last question that remains to be answered is if the ABC-gate is finetuned enough to only keep the doors closed for the unwanted categories of immigrants, and to make it smooth and open for the remaining immigrants in order to be a complete solution to the political issues of the management narrative.

5.6 Failures at the ABC-gate

"[…] so when we say that they cannot smile in the picture they always try that Mona Lisa thing"

(Billy)

The last chapter showed that the norms of border control have been shaped by the introduction of the ABC-gate. The border control is now performed mainly by a self-service check with border guards observing from a distance and handling the incidents of deviancy. The effectiveness and the efficiency of the border control therefore rests heavily on the ability of the traveller to follow the script of the gate. In this chapter, I therefore focus on the ways in which the ABC-gate might pose problems for the humans seeking to follow its scripts. It reports on the incidences of failure and breakdowns that might happen during the automated border control procedure.

In one of Latour's (1992) writings he describes how even the most well-trained and disciplined people might forget to close the door behind them when entering a building. They simply do not follow the script. He also notes that "[…] the amount of work, innovations, sign-posts and recriminations" (Latour, 1992, p.155) stating that the door must be closed, shows that people might never fully realise the true potential of door closing. All technological objects force the human to act accurate and with precision, but this is not always the strength of the human being (Norman, 2013, p.5). If it is true that people do not even manage to follow the simple script of closing a door, how can they ever fulfil the true potential of high-tech devices such as the ABC-gate? Is it possible that such solutions will actually lead to a more efficient border? Remember the inclination from the EDPS on the Smart Border Proposal in 2013. He was not convinced that this new solution would be more effective compared to the manual operation by the border guard (EDPS, 2013). As also observed by Sontowski (2017) in his observation of automated border control solutions:

> *While little devices such as logos, icons and video animations attempt to illustrate the appropriate conduct and although feedback monitors mirror and try to correct false behaviour in order to stabilise this important but fragile process at every single step there is a potential for forms of conduct that leads to its failure* (Sontowski, 2017, p.2742).

During the interviews with my informants I tried to get an understanding of what failures might occur during a biometric enrolment process. The common denominator in all interviews were re-occurring issues related to fingerprinting, facial images, age, and external factors such as the indoor and outdoor climate. Some of the informants also revealed situations in which the technology acted by itself which led to insecurities about its stability and security.

Guidelines and standards on fingerprints were presented as a big challenge by all the informants. When talking about the quality required of fingerprints, Chris revealed that there were some discrepancies about the perceived quality of the fingerprint between the human and nonhuman controller:

> *Ehm, a good fingerprint is where we get all the lines approved by the system. It's in a way the system that let us know if it's approved or not. Quite often, it can give approval of something we consider to be a bad fingerprint* (Chris).

This led to uncertainties "[…] because the system is supposed to be smarter than me, right?" (Chris). Further, this fostered insecurities about who should be trusted, but as Taylor pointed out: "In the end, it is up to us to decide". This last quote is an indication of the border guards being the necessary human factor in the automated systems. The two informants also said that they often engaged with other colleagues in assessing the quality of the fingerprint, and

that they felt that their competence in this regard was at times better than that of the machine.

A second issue in relation to fingerprints was also addressed. If a person with very moist fingerprints have been using the fingerprint sensor, traces of his or her fingerprint might be left on the sensor. The sensor is cleaned maybe only one to two times a day, and this could lead to multiple fingerprints being blended or even that the trace of the fingerprint from the previous person would be the one registered by the machine.

> *I actually don't know how often this happens, but I'm worried that it's more normal than we would like to think. This could indeed lead to some problems for the person in border checks if the fingerprint in the chip is a mix of the prints from a whole range of people"* (Alex).

The issue of the blended fingerprints shows the vulnerabilities that exists in the actor-network of the ABC-gate. If the biometric enrolment for travel documents is not properly conducted, it might lead to errors in the meeting with the gate, and maybe also to suspicion from the human border guards. "A repeatable biometric enrolment process is a prerequisite for the successful use of biometric recognition in one or more applications at a subsequent time" (ISO/IEC TR 29196, 2018, p.10). Showing up at the border with someone else's fingerprint would therefore quite obviously be an obstacle. Failures at the enrolment stage can therefore lead to unreadable bodies in the ABC-gate, and also to great suspicion by the border guards during the manual inspection.

Regarding fingerprints, the standardisations were seen to create trouble for some individuals because they lacked good enough prints on their hands. It is expected that approximately 2 % of the population will have insufficient quality of their fingerprints for a biometric verification system (ISO/IEC 29195, 2015, p.11). "The issue of bad fingerprints are most often related to the elderly, but also people like carpenters and .. basically all people doing some

sort of practical work" (Chris). Besides the elderly, which the informants deemed to have bad fingerprints in most cases, the informants explained that they had to almost interrogate the persons about why their fingerprints had such low quality. "You know, we get a bit suspicious if a very young person lacks fingerprints. This is most often a problem after turning 60" (Billy). The informants reported that besides the factor of age, other different reasons such as different skin conditions and scars, hobbies like knitting and skateboarding could lead to low quality fingerprints. Two of the informants reported about issues that occurred during the phase where they tested new machines for the biometric enrolment process. Billy and Taylor had both experienced that the machine did not register the fingerprints of some persons. Without giving any specific details they told me that all these people had a similar demographic profile, but there were no obvious reasons to why the biometric machine would not detect their fingerprints. "I could see the fingerprint on the person's finger with my own eyes, there was no doubt that there was a fingerprint there, but the machine didn't see it" (Taylor).

The informants were also unsure whether some people understood how to engage with the machine. "Biometric systems are subject to not only technical malfunction but also to reduced performance as a result of user behaviour (including operators and subjects), deliberate or accidental […]" (ISO/IEC TR 24714, 2008, p.9). Akrich (1992, p.207) states that these are situations where the material object and the functions it is supposed to have are poorly matched. "They get instructions from the machine, but then it is how much they . . hehe . . emphasise it then. And how much they actually observe and get from what is happening on the screen in front of them" (Chris). A common mistake is that people do not understand which finger to put on the fingerprint sensor although the instructions are on the screen in front of them. Taylor noted that although information is easily available on the screen, it seemed like "[…] some people are just not able to process that information. Maybe they are just to stressed out about the whole thing. But anyway, I often have to break in and show with my own finger which one to use" (Taylor). Another informant noted in this respect, that in situations similar to this it seemed like people listened more to the

instructions given by the operator than that of the machine: “I provide more comprehensive information that complements what the machine says” (Alex).

These situations are showing the most challenging aspect of technological objects: “If we get the rules wrong even slightly, the machine does what it is told, no matter how insensible and illogical” (Norman, 2013, p. 5). The biggest issue with biometric technologies is that it only has one story to tell its users, the script is the same for everyone. There is only one correct way to open the door, and by that there are several other ways to make it remain closed. This can also be related to issues with the technology itself. Alex explained to me how the new machines was badly calibrated for catching the fingerprint on the thumb.

> *The machine gave instructions that said that the person needed to move his finger more to the left, but if the person moved the finger more to the left it would be on the outside of the sensor. So, it basically seemed like it was made for smaller thumbs* (Alex).

Billy also reported on incidents where the biometric machine failed when trying to take multiple facial images: “It just blacked-out if we tried to take more than five pictures, so then I needed to send the person, often a kid, to one of my colleagues and then I had to restart the whole thing and just hope that the next person was an ‘easy’ one” (Billy). In sum, poor quality of fingerprints, difficulties in following scripts and failures of the technology could lead to breakdowns in which the technology stops working, and in the border control context the consequence would be that the traveller must go through a second-line inspection. These failures and breakdowns must also be seen as a challenge to the efficiency/effectiveness notion in the management narrative as much time and resources are spent on making the machine work again.

The informants also gave examples of situations where persons did not want to adhere to the predefined rules set for facial images. The Operational Guidelines (2016, p. 52) terms

this as “non-cooperative behaviour”. The international standard on facial images for travel documents and biometric information systems reads as follows:

> *The face shall have a neutral expression; in particular the capture subject shall not smile. The mouth shall be closed; the teeth shall not be visible. A smile is not allowed, even with a closed jaw* (ISO/IEC 39794, 2019, p.124).

The process of capturing facial images was reported to be frustrating from all of the informants. “People are more interested in looking pretty in pictures than actually making the passport work, so when we say that they cannot smile in the picture they always try that Mona Lisa thing” (Billy). The standardisation of facial images also lead to a situation in the self-service border check procedure where the traveller must replicate the picture taken at the biometric enrollment stage for the travel document. As noted by Sontowski (2017, p.2742): “[…] the travellers have to practically reduplicate the precisely orchestrated corporeal performance, straight view to the camera, no smiling, no headdress or glasses etc. […]”. The informants were unsure if they had ever heard of anyone struggling with their travel document if the facial image were not correct, but Taylor stated that:

> *We sometimes have people in here that say that their passports doesn’t work in the ABC-gates, but we don’t find any errors in the chip. I suspect that this might be related to the fact that the facial image is too old, the person has gained or lost weight, or if it’s because of a . . ehm, weird facial expression* (Taylor).

Although the informants were unsure about whether a bad facial image could lead to a failure in the ABC-gate, they had some other examples on issues related to the ways people took care of their passports. “Some tell us that they’ve washed the passport in the washing machine because it was kept in a pocket for example, and then the pages become totally ruined. […] I have also heard about a dog eating up an entire passport” (Billy). The

informants did all agree on the fact that one of the most normal sources of error was that people kept the passport in the back pocket of their jeans:

> *Yeah, that happens from time to time. People come in, a bit annoyed, because they have been rejected by the ABC-gate and a border guard have told them that the chip is broken and that they need to apply for a new one. And then they are angry at us because the passports are made of such poor quality, but it is almost every time related to the fact that they have been sitting on the passport for several hours a day when travelling* (Taylor).

The ISO also supports this finding and states in relation to passports that: “Durability is perhaps the single biggest unknown. Over their lifespan, the documents get bent, sweat on and pounded with border-crossing stamps” (ISO, 2014). One of the informants stated that such scenarios in some cases caused suspicion because there had been examples where it could almost look like that someone had tried to remove the chip (Taylor). This is supported by the Operational guidelines. When a chip has anomalies, it should “[…] be considered as a red flag indicating a possible risk situation” (Operational Guidelines, 2016, p. 52). So, if people do not take care of their travel documents, it can ultimately lead to extra checks by border guard personnel.

When people intentionally object to the script of the material object, it is a way for them to define a different role for themselves which is not the same as the designated role from the designers (Akrich, 1992, p. 208). As in the example of the facial image above, the motive for smiling is mostly relating to the wish of looking as good as possible in the passport photo. There are however instances where people have fraudulent motives and want to "trick" the ABC-gate, and this is called an anti-programme in the ANT-literature (Akrich & Latour, 1992, p. 261). Anti-programmes refer to an actor that has a different agenda than that of the actor in the actor-network investigated. As stated by one technology developers: “While the vast majority of international travellers pose no threat, there will always be a minority who will seek to circumvent border control and security for their own ends” (SITA, no year). The example with Mrs. Jones earlier, showed her also trying to enter via the gate by holding an

iPad with a facial image belonging to a different person in front of her in order to try to enter with the identity of a different person (Gemalto, 2018; Personal observation journal).

It is, however, not only humans that can perform anti-programmes as certain nonhumans also have a role to play in this regard. One standard identifies that extreme climates related to temperature and humidity as well as dust and illumination can interfere with the work of the ABC-gates (ISO/IEC TR 24714, 2008, p.15). The informants were also very aware of these types of anti-programmes. “In the summer people have sweaty hands which work bad with the fingerprint sensor. In the winter their hands are too cold for the fingerprint sensor to even detect that someone has put their finger on it” (Taylor). This is at most times a malfunction due to the live-ness detection. This is also found in a Frontex-study: “However, the design of a secure and reliable liveness test is a real challenge and in fact many liveness tests under certain circumstances reject genuine users” (FRONTEX, 2007, p. 20). In the border control context, this is also identified as an issue: “There are differences on departures and arrivals (fingers can be too dry just after leaving the aircraft) and in the summer and winter time” (FRONTEX, 2007, p. 49). Dry or moist fingers are also defined as an issue in the ISO/IEC TR 29196 (2018, p. 37). The informants reveal that there are several strategies used to counter these nonhuman anti-programmes. “When people have very dry hands we offer them some hand cream or a wet wipe to see if that brings the fingerprint forth” (Chris) and “Earlier, we actually told them to put the finger on the forehead just to get some moisture from there” (Alex) .

What became clear by talking with my informants, and as presented in this chapter, about the failures surrounding the biometric technology is that it is as much related to body problems as behavioural problems. As Noted by Norman (2013, p. 6): “[…] we humans are amazingly complex”. The problems that arises by the interactions between the human and the ABC-gate may rely on the fact that it is designed for a wanted behaviour, and maybe not the actual behaviour performed by the human. Statistics indicate for example that: “It is estimated that 17% of the false rejections can be attributed to the use of glasses; other

factors include wearing hats or occluding the face with hair" (FRONTEX, 2010, p. 24). This can indicate that the persons passing through the ABC-gate does not follow the different signifiers and information provided. Earlier, I stated that standards simplified and facilitated the very existence of the ABC-gate, but what is evident from this section is that, as Norman (2013, p. 155) also have noted – they can be a hinder for the future development of the technology and also for improving the status quo.

5.6.1 A final reflection

This thesis has investigated the narratives and their materialisations in EU migration control. Latour's (1992) concept of agency is, as discussed in chapter 3, related to a human or nonhuman actor's capacity to make some difference in the state of affairs. The agency of the narratives of the EU are clearly visible by the ways in which new legislations, practices and objects materialise as results of powerful narrations about political issues and political solutions. What became evident is that these new solutions also bring new problems to the scene, and these often call for even more refined and efficient solutions. The EU Smart Border and the ABC-gate are one of the newest solutions implemented in the context of migration control in the EU. Through the analysis of the ABC-gate, I have illustrated the ways in which this material object also gives shape to border controls. It allows for a smooth and self-processed way of crossing the border for the skilled human user. It provides border guards with new roles where they can spend their time and resources to focus on specific categories of migrants and to observe from a distance suspicious behaviour in the ques.

The agency of the ABC-gate has, however, also been illustrated by the ways in which it makes border crossings more troubling for some categories of travellers. Despite its careful design and construction that pushes people into playing roles in its story, there are still possibilities that the users do not understand its script. It is also a possibility that the human user does not have a body that can be read by its technology, or they can have failed in taking care of their passports. These failures in the meeting with the ABC-gate can become a

big challenge in the years to come and time will tell if this technological solution will once and for all solve the political problems of the collaboration, security and management narrative. What is even more important to take from this thesis is that even though the ABC-gate might very well facilitate border crossings for the vast majority of travellers, and opening it doors to Europe – it will for the people failing to read the scripts or having unreadable bodies remain a wall forcing them to go though a manual check. To furthest extent, this can lead to a double-control of large categories of travellers and this is something that should not go unnoticed in our future research.

6 Conclusion

The aim of this thesis was to explore the narratives that underlay the development in EU narratives on migration control from the 1950s and until the presentation of the Smart Border in 2013. In addition, it focused on how the narratives materialised in one concrete border control solution, the ABC-gate, and how this technological material object gave shape to border control practices at the external borders of the Union. The study was conducted by an analysis of 61 key political documents, technical and operational guidelines, international standards, and product brochures, as well as by video observations and focused interviews. Drawing on a theoretical and methodological framework of narrative criminology, I found that there are mainly three narratives important for the implementation of automated border control solutions. These are the collaboration, security, and management narrative. By applying actor-network-theory for the analysis of the ABC-gate, a central finding pointed to the ways in which the three narratives are built into the functions of the gate. In the following, I will summarise and point to the most important findings of the study before I end with a reflection for the ways forward.

The first narrative that I detected was the *collaboration narrative*. It came about at the same time as the formation of the EU in 1951. It was a political response to the many conflicts and wars that had characterised the European continent for the past decades. The solution to this problem was framed within a future vision of a united Europe without internal border controls in which the citizens could freely move without being subject to border checks. The findings suggested that the narrative drew on a romantic genre in which the ideals of freedom, trust, solidarity and cooperation was crucial for securing the peace between the countries. From this narrative, “A People’s Europe”, was created and was strengthened by a positive vision of the future. This narrative was important for the building of an EU identity and a strong feeling of a “us”. It did, however, not take long before the political solutions of abolition of internal border controls brought forth new political issues. No control at the inner border led to less control over cross-border crime, and cooperation between national police authorities became very important. The analysis demonstrated how this was a point

in time where migration and crime became to be controlled at the same time through the same measures. A smaller “refugee crisis” and several terrorist attacks put the collaboration narrative and its political solutions under great pressure, and a new narrative arose and worked in parallel with the collaboration narrative.

The second narrative entering the scene was the *security narrative.* The abolition of internal border controls created a political issue with crime, terrorism and irregular migration that called for new solutions. The findings suggest that the protection of the internal area of the Schengen was framed within a security concept. An example was for example that great emphasis was put on the prevention of terrorism, and that the EU needed to act before the threats materialised. This narrative was especially strengthened after 9/11 and the subsequent terrorist attack on European soil in the beginning of the 2000s. Irregular migration became gradually linked to crime and terrorism, and was considered to be a major security risk although the EU did not know with certainty the extent of the phenomenon. The findings suggest that the irregular migrant became an important character in the narrative, and that s/he was given an almost mythical character. The strong identity of the EU as a “us” created by the collaboration narrative, turned into a logic of “us” versus “them” in the security narrative. To tackle these new political issues, the security narrative materialised into a biometric passport and information systems for the government of different categories of migration. Security was to be achieved by creating links between migrants’ bodies, their travel documents and biometric information systems. This is a finding that indicate the ways in which political narratives can materialise into concrete practices and objects.

The solutions of the security narrative provided the protectors of the external borders, the border guards, with many new tools to control migration and to prevent high-risk migrants from entering the Union. The border guard became thus an important character in the narrative. In the same line as the collaboration narrative, the solutions of the security narrative, was not the final step in the development of migration control in the EU. The

thesis suggests that new political solutions often foster new political issues, and this was also true for the security narrative. Irregular migration was still a problem, and it was believed to increase year by year and travel documents was still a source of uncertainty. A growing concern was also about the irregular migrants that entered the EU legally but overstayed their visas. This created a problem as they could not be detected in a border control situation. The EU also faced a rapid rise in numbers of travellers that wanted to enter the Union. The border guard became in this environment put under great pressure. In terms of being a human creature, the border guard had its limitations in controlling irregular migration as well as the increasing number of visitors. This called for new solutions that would both enhance the security and the effectiveness of the border control, and this paved the way for the last narrative.

The third narrative I detected was the *management narrative*. It arose at the meeting point between ensuring the freedom of movement, security in the internal Schengen area and the need for managing the growing numbers of migrants wanting to enter the EU. It describes a situation where migration became an object of management rather than control and findings show that the EU under this narrative takes irregular and regular migration as a fact, and does not longer perceive it as something that can be fully controlled. Much like a company operation, emphasis is in this narrative put on statistics, analytical products, risk assessments and performance results. A border management system based on the notions of efficiency and effectiveness was promoted as the solution. Regular migration should be facilitated whilst irregular migration complicated. This need materialised in the Smart Border-package with its Entry/Exit-system registering the biographic and biometric data of all persons crossing the external borders of the EU as well as provisions for automating border controls. This was a solution to combat the overstaying of visas, and the notion of "us" versus "them" turned into a "us" versus "all of them". The role of the border guard became smaller and automated border control solutions was promoted as the solution to protect the security of the internal area by making border controls coherent throughout the member states. Here, the thesis shows how the three narratives materialise in one solution.

A central finding is thus that different political narratives does not disappear, but they fit well with each other and continue to live in parallel.

The tasks and duties of the border guard for checking the identity of the migrants entering the EU was by the management narrative delegated to a technological object called the ABC-gate. Although the narrative analysis had provided me with great insight into the developments happening at the macro-level of politics in relation to developments in migration control, the material orientation enabled by the actor-network-theory gave me good insight to what happened at the micro-level of the border practices. The ABC-gate became in several different ways the solution to the many different political issues that had been addressed through the different narratives. As a delegated version of the human border guard, the ABC-gate became the solution to the efficiency/effectiveness problem and offered to make border control fast and smooth for the major portion of regular migrants and travellers, but at the same time enhance security. It therefore reflected well the issues detected in the management narrative. Further, the solution offered a coherent and secure solution throughout the Union which promoted both the collaboration and security narrative. By looking at the details of the ABC-gate I was able to illustrate how the new border control solution created a space for the border guards to observe from a distance. In addition, I pointed to the more invisible humans that is a part of the actor-network of the ABC-gate, represented by ideas from the past. This showed that the technology of the ABC-gate was based on methods originally used for controlling deviants, and individuals in overseas colonies, which again illustrated the intertwining of migration and crime control.

Furthermore, I investigated in what ways the ABC-gate performs border controls, and how this gives shape to migration controls in the EU. I noticed that the functions of the object were constructed almost as a narrative with a clear beginning, middle and end. In the actor-network-theory this is referred to as the script of the object. It thus became clear that the travellers needed to understand this logic to self-process through the border check. By looking into the physical design of the ABC-gate it became clear how its material properties

were shaped in order to physically “push” people to perform specific actions such as standing in the correct position towards the camera. This could be further be enforced with the use of various signifiers such as foot marks on the floor. The informants in the study pointed out that people in general more easily understood how the technology would be used if they recognised them from other contexts. The success of the ABC-gates is important for the EU as that allows for border guards to spend their time more purposefully on certain categories of migrants, and to spend their resources in a more efficient and effective manner.

At the end of the thesis, I investigated the failures and the breakdowns with the ABC-gate that could lead to challenges to the notion of efficiency and effectiveness. The interviews with informants from the police provided me with many examples of the ways in which there is a struggle between the technology and the humans using it. These issues were related to aspects of the human body, human behaviour as well as cases in which the machine acted on its own behalf. They explained that sometimes people did not understand what the machine wanted from them despite clear messages provided via a screen. In other cases, people had their own agendas, and refused to be pushed into a role where they were not allowed to smile in the picture. Other nonhuman factors also played a role in the success of the biometric enrolment. Cold or sweaty hands impacted by the outdoor climate could lead to problems with the fingerprint sensor, and the elderly as well as those involved in manual work generally had poor fingerprints that did not fit into the standards set for biometrics. Ultimately, these examples showed that ABC-gate may not only sort out the high-risk migrants, but also the people who do not understand what the machine wants and those with bodies that cannot be read. For some, therefore, the ABC-gate will be a door to Europe, while for others it will be a wall.

The thesis has demonstrated how a narrative analysis and a material approach in combination can turn into a rich description of topics such as migration control. It does not only open up for including many different voices in one study, but it also enables the

researcher to understand control narratives from the macro-level and detailed descriptions of the practice at the micro-level. In the background- chapter, I suggested that it might be a good idea to see the technology in the light of a longer political development and not just in light of individual events. In the analysis of the ABC-gate this was demonstrated by showing how a narrative that was formulated 60 years ago is still very much present in the technological solution of controlling borders today. It is therefore not something implemented solely as a solution to enhance security in the aftermath of 9/11 and the other terrorist attacks although these events without doubt have fuelled the development rapidly forwards.

The most important thing to take from this thesis is that the differences between what is thought of as human and what is thought of as technical might be smaller than one should believe. Humans and nonhumans overlap and work together to create certain control situations, and technological objects are not just passive control tools in the hands of humans. As Latour once stated when assessing the relations between humans and guns: "You are different with a gun in hand; the gun is different with you holding it" (Latour, 1994, p.33). Translated to the context of border controls of this thesis, this means that the technology for controlling migrants are shaped by the political narratives, but also that the border controllers themselves are shapes by the new technical solutions. In addition, engaging more closely with the technological objects can tell us stories from the past. Past ideas, past projects, past design thoughts, past political issues and past interactions. This requires a careful and slow interrogation of the object, but it enables us to show that control devices are more than simply end-products of political statements and objectives. This is perhaps the most important lesson from this thesis: policies and practices concerning border control in the EU is not strictly divided between the human and nonhuman. It is indeed both social and technical.

So, how can this perspective and approach be used to explore other topics of interest to criminology? Directly relevant for this thesis would be to explore in depth how the roles and

tasks of the border guards change with the implementation of automated border control solutions. A similar approach could be used for assessing the different control devices used by other controllers such as the police. For the Norwegian context, it could be very relevant to perform a narrative and material study on whether the police should be armed or not. Police officers' narratives about their everyday work in combination with studies of the possible weapon can open up for interesting, and most likely new perspectives on the topic. In addition, studies can be made on "object-oriented" forms of crime such as theft, fraud, and drug dealing to see the significance of these objects for the criminals, and how the objects either facilitates or restricts this type of crime. It can also be possible to assess how the police handles physical evidence in criminal investigations, and through the ways in which they trace the stories of material objects to solve their crime cases. Last, I would think it could be useful to apply the same theoretical framework to explore how narratives are constructed in judicial proceedings, and what role physical evidence plays in this context. I would say there are endless possibilities in this area, and only creativity can set limits. Or as Latour (2005, p. 81) states – it is the never the lack of data or available objects that stops studies, it is the will.

Total amount of words: 41207.

7 Literature list

Aas, K. F. (2006) "The body does not lie": Identity, risk and trust in techno culture. *Crime Media Culture*, 2(2), pp. 143-148. doi: 10.1177/1741659006065401.

Aas, K. F. (2011) 'Crimmigrant' bodies and bona fide travellers: Surveillance, citizenship and global governance. *Theoretical Criminology*, 15(3), pp. 331-346. doi: 10.1177/1362480610396643.

Aas, K. F. (2013) *Globalization and Crime.* California: SAGE Publications.

Aas, K. F., Gundhus, H. O. & Lomell, H. M. (2009) Introduction: Technologies of (in)security. In: Aas, K. F., Gundhus, H. O. & Lomell, H. M. (eds.) *Technologies of InSecurity. The surveillance of everyday life*. Oxon: Routledge-Cavendish, pp. 1-18.

Abdalrahman, R.S.A., Bülent, B. & Kahraman, N. (2018) A cascaded voice biometric system. *Procedia Computer Science*, 131, pp. 1223-1228. doi: 10.1016/j.procs.2018.04.334.

Adams, C. & Thompson, T. L. (2016) *Researching a Posthuman World. Interviews with Digital Objects*. London: Palgrave Macmillan.

Adey, P. (2009) Facing airport security: affect, biopolitics, and the pre-emptive securitisation of the mobile body. *Environment and planning D: Society and Space*, 27, pp. 274-295. doi: 10.1068/d0208.

Ajana, B. (2013) Asylum, Identity Management and Biometric Control. *Journal of Refugee Studies*, 26(4), pp. 576-595. doi: 10.1093/jrs/fet030.

Ajana. B. (2013b) *Governing through biometrics. The biopolitics of identity*. Hampshire: Palgrave Macmillan.

Akrich, M. (1992) The De-Scription of Technical Objects. In: Bijker, W. E. & Law, J. (eds.), *Shaping Technology/Building Society. Studies in Sociotechnical Change.* Cambridge: The MIT Press, pp. 205-224.

Akrich, M. & Latour, B. (1992) A summary of a convenient vocabulary for the semiotics of human and nonhuman assemblies. In: Bijker, W. E. & Law, J. (eds.), *Shaping Technology/Building Society. Studies in Sociotechnical Change.* Cambridge: The MIT Press, pp. 259-264.

Amoore, L. (2013) *The Politics of Possibility. Risk and Security Beyond Probability.* Duke: Duke University Press.

Aradau, C. (2010) Security That Matters: Critical Infrastructure and Objects of Protection. *Security Dialogue,* 41(5), pp. 491-514. doi: 10.1177/0967010610382687.

Aradau, C., Coward, M., Herschinger, E., Thomas, O. D., & Voelkner, N. (2015) Discourse/materiality. In: Aradau, C., Huysmans, J., Neal, A. & Voelkner, N. (eds.), *Critical Security Methods. New frameworks for analysis*. New York: Routledge, pp. 57-84.

Arcimaviciene, L. & Baglama, S. H. (2018) Migration, Metaphor and Myth in Media Representations: The Ideological Dichotomy of ”Them” and ”Us”. *SAGE Open*, pp. 1-11. doi: 10.1177/2158244018768657.

Argomaniz, J. (2010) *The EU and Counter-Terrorism. Politics, Polity and Policies after 9/11*. Abingdon: England.

Ashbourn, J. (2011) *Guide to Biometrics for Large-Scale systems.* London: Springer.

Back, L. & Puwar, N. (2012) A Manifesto for Live Methods: Prvocations and Capacities. *The Sociological Review,* 60(1), pp. 6-17. doi: 10.1111/j.1467-954X.2012.02114.x.

Baird, T. (2018) Interest groups and strategic constructivism: business actors and border security policies in the European Union. *Journal of Ethnic and Migration Studies*, 44(1), pp. 118-136. doi: 10.1080/1369183X.2017.1316185.

Ball, K. (2005) Organization, Surveillance and the Body: Towards a Politics of Resistance. *Organization*, 12(1), pp. 89-18. doi: 10.1177/1350508405048578.

Barad, K. (2003) Posthumanist performativity: toward an understanding of how matter comes to matter. *Signs: Journal of Women in Culture and Society*, 28(3), pp. 801-831. Available from: https://www.uio.no/studier/emner/sv/sai/SOSANT4400/v14/pensumliste/barad_posthumanist-performativity.pdf [Accessed: 3 April 2020].

Baron, L. F. & Gomez, R. (2016) The Associations between Technologies and Societies: The Utility of Actor-Network Theory. *Science, Technology & Society,* 21(2), pp. 129-148. doi: 10.1177/0971721816640615.

Barrera, D. J. S. (2019) Doing Dialogical Narrative Analysis: Implications for Narrative Criminology. In: Fleetwood, J., Presser, L., Sandberg, S. & Ugelvik, T. (eds.) *The Emerald Handbook of Narrative Criminology.* Bingley: Emerald Publishing Limited, pp. 367-388.

Bellanova, R. & Fuster, G. G. (2013) Politics of Disappearance: Scanners and (Unobserved) Bodies as Mediators of Security Practices. *International Political Sociology,* 7(2), pp. 188–209. doi: 10.1111/ips.12017.

Bigo, D. (2002) Security and Immigration: Toward a Critique of the Governmentality of Unease. *Alternatives,* 27(1), pp. 63-92. doi: 10.1177/03043754020270S105.

Bigo, D. (2014) The (in)securitization practices of the three universes of EU border control: Military/Navy – border guards/police – database analysts. *Security Dialogue,* 45(3), pp. 209-225. doi: 10.1177/0967010614530459.

Bodade, R. M. & Talbar, S. N. (2014) *Iris analysis for biometric recognition systems.* New Dehli: Springer.

Boswell, C., Geddes, A. & Scholten, P. (2011) The Role of Narratives in Migration Policy-Making: A Research Framework. *The British Journal of Politics and International Relations*, 13, pp. 1-11. doi: 10.1111/j.1467-856X.2010.00435.x.

Bosworth, M. (2008) Border Control and the Limits of the Sovereign State. *Social & Legal Studies,* 17(2), pp. 199-215. Available from: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1852206 [19 October 2019].

Bowen, G. **A.** (2009) Document Analysis as a Qualitative Research Method. *Qualitative Research Journal,* 9(2), pp. 27-40. doi: 10.3316/QRJ09020.

Burgess, R. L. & Akers, R. L. (1966) A Differential Association – Reinforcement Theory of Criminal Behaviour. *Social Problems,* 14(2), pp. 128-147. DOI: 10.2307/798612.

Brisman, A. (2019) Stories of Environmental Crime, Harm and Protection: Narrative criminology and Green Cultural Criminology. In: Fleetwood, J., Presser, L., Sandberg, S. & Ugelvik, T. (eds.) *The Emerald Handbook of Narrative Criminology*. Bingley: Emerald Publishing Limited, pp. 153-174.

Broeders, D. (2011) A European «Border» Surveillance System under Construction. In: Dijstelbloem. H. & Meijer, A. (eds), *Migration and the New Technological Borders of Europe.* London: Palgrave Macmillan, pp. 40-67.

Campbell, D. (1998) *Writing Security: United States foreign policyand the politics of identity*. [2nd edition]. Manchester: Manchester University Press.

Carling, J. & Hernandés-Carretero, M. (2011) Protecting Europe and Protecting Migrants? Strategies for Managing Unauthorised Migration from Africa. *The British Journal of Politics and International Relatio*ns, 13(1), pp. 1-11. doi: 10.1111/j.1467-856X.2010.00438.x.

Carrabine, E. (2019) Reading Pictures: Piranesi and Carceral Landscapes. . In: Fleetwood, J., Presser, L., Sandberg, S. & Ugelvik, T. (eds.) *The Emerald Handbook of Narrative Criminology*. Bingley: Emerald Publishing Limited, pp. 197-216.

Ceyhan, A. (2008) Technologization of Security: Management of Uncertainty and Risk in the Age of Biometrics. *Surveillance & Society*, 5(2), pp. 102-123. doi: 10.24908/ss.v5i2.3430.

Chavarri-Guerra, Y. & Soto-Perez-de-Celiz, E. (2015) Loss of fingerprints. *The New England Journal of Medicine,* 372(16), p. 22. doi: 10.1056/NEJMicm1409635.

Christie, N. (1986) The Ideal Victim. In: Fattah, E. A. (ed.), *From Crime Policy to Victim Policy. Reorienting the Justice System.* London: Palgrave Macmillan, pp. 17-30.

Codd, J. A. (1988) The construction and deconstruction of educational policy documents. *Journal for Education Policy,* 3(3), pp. 235-247. doi: 10.1080/0268093880030303.

Cole, S. A. (2001) *Suspect Identities. A History of Fingerprinting and Criminal Identification*. Cambridge: Harvard University Press.

Collins, H.M. & Yearley, S. (1992) 'Epistemological Chicken'. In Pickering, A. (ed.), *Science as Practice and Culture.* Chicago: University of Chicago Press, pp. 301-26.

Condell, J., Chaurasia, P., Connolly, J., Yogarajah, P., Prasad, G & Monaghan, R. (2017) 'Automatic Gait Recognition and its Potential Role in Counter-Terrorism'. *Studies in Conflict and Terrorism*, 41(2), pp. 151-168. doi: 10.1080/1057610X.2016.1249777.

Cominfo (2019) e-Gate. *Your future automated border control solution.* Available from: https://www.cominfo-trade.com/docs_files/e-gate-brochure-20190109.pdf [Accessed: 24 June 2020].

Copes, H., Hochstetler, A. & Ragland, J. (2019) The Stories in Images: The Value of the Visual for Narrative Criminology. In: Fleetwood, J., Presser, L., Sandberg, S. & Ugelvik, T. (eds.) *The Emerald Handbook of Narrative Criminology*. Bingley: Emerald Publishing Limited, pp. 175-196.

Cornish, D. B. & Clarke, R. V. (1987) Understanding crime displacement: an application of rational choce theory. *Criminology,* 25(4), pp. 933-948. doi: 10.1111/j.1745-9125.1987.tb00826.x.

Cornish, D. B. & Clarke, R. V. (2008) The rational choice perspective. In: Wortley, R. & Townsley, M. (eds.), *Environmental Criminology and Crime Analysis* (2nd edition). London and New York: Willan Publishing, pp. 29-61.

Creswell, J. W. & Poth, C. N. (2018) *Qualitative inquiry and research design. Choosing among five approaches.* (4th edition). California: SAGE Publications.

Cullen, F.T., Agnew, R. & Wilcox, P. (2014) The origins of Modern Criminology. In: Cullen, F.T., Agnew, R. & Wilcox, P. (eds). *Criminological Theory: Past to Present.* Oxford: Oxford University Press, pp. 21-26.

D'Amato, S. & Lucarelli, S. (2019) Talking Migration: Narratives of Migration and Justice Claims in the European Migration System of Governance. *The International Spectator*, 54(3), pp. 1-17. doi: 10.1080/03932729.2019.1643181.

De Angelis, M. (2020) Competing Narratives in the Nexus of Migration-Crime-Gender. In: Althoff, M., Dollinger, B. & Schmidt, H. (eds.), *Conflicting Narratives of Crime and Punishment*, Cam: Palgrave Macmillan, pp. 239-258.

Dessimoz, D. & Champod, C. (2008) Linkages between Biometrics and Forensic Science. In: Jain, A. K., Flynn, P. & Ross, A. A. (eds.) *Handbook of Biometrics*. New York: Springer, pp. 425-459.

Dijstelbloem, H., Meijer, A. & Besters, M. (2011) The Migration Machine. In: Dijstelbloem. H. & Meijer, A. (eds.), *Migration and the New Technological Borders of Europe*. London: Palgrave Macmillan, pp. 1-21.

Document ICAO 9303 (2015) *Current ICAO Specifications for Machine-Readable Passports, Visas and ID Cards.* Available from: https://www.icao.int/publications/pages/publication.aspx?docnum=9303 [Accessed: 10 January 2020].

Donnan, H. & Wilson, T. M. (1999) *Borders: Frontiers of Identity, Nation and State.* Oxford: Berg Publishers.

Dymond, A. (2014) Taser: from object to actant? How Actor-Network Theory can advance the literature on Taser. *International Journal of Criminology and Sociological Theory,* 7(2), pp. 1-12. Available from: https://ijcst.journals.yorku.ca/index.php/ijcst/article/view/39704 [Accessed: 3 June 2020].

Edwards, R. & Holland, J. (2013) *What is Qualitative Interviewing?* London: Bloomsbury.

Epstein, C. (2016) Surveillance, Privacy and the Making of the Modern Subject: Habeas what kind of Corpus? *Body&Society*, 22(2), pp. 28-57. doi: 10.1177/1357034X15625339.

EU-Lisa (2020) *Eurodac – 2019 Statistics*. Available from: https://www.eulisa.europa.eu/Publications/Reports/Eurodac%20-%202019%20Statistics.pdf [Accessed: 16 August 2020].

Fairclough, N. (1992) Discourse and Text: Linguistic and Intertextual Analysis within Discourse Analysis. *Discourse and Society,* 3(2), pp. 193-217. doi: 10.1177/0957926592003002004.

Feeley, M. & Simon, J. (1998) Actuarial justice: the emerging new criminal law. In: O'Malley, P. (ed.), *Crime and the risk society*. Ashgate, Brookfield, pp. 353-381.

Fereira, S. (2018) From Narratives to Perceptions in the Securitisation of the Migratory Crisis in Europe. In: Karakoulaki, M, Southgate, L., & Steiner, J., *Critical perspectives on Migration in the Twenty-First Century.* E-International Relations Publishing, pp. 57-73. Available from: https://www.e-ir.info/publication/critical-perspectives-on-migration-in-the-twenty-first-century/ [Accessed: 21 May 2020].

Ferraro, F. (2012) *Biometric passports.* Available from: https://www.europarl.europa.eu/RegData/bibliotheque/briefing/2012/120292/LDM_BRI(2012)120292_REV1_EN.pdf [Accessed: 23 June 2020].

Finn, S. (2009) *Capturing the criminal image: from mug shot to surveillance society.* Minneapolis: University of Minnesota Press.

Fleetwood, J. (2016) Narrative habitus: Thinking through structure/agency in the narratives of offenders. *Crime Media Culture*, 12(2), pp. 173-192. doi: 10.1177/1741659016653643.

Fleetwood, J., Presser, L., Sandberg, S. & Ugelvik, T. (2019) Introduction. In: Fleetwood, J., Presser, L., Sandberg, S. And Ugelvik, T. (eds.), *Emerald Handbook of Narrative Criminology*. Bingley: Emerald Publishing Limited, pp. 1-26.

Flick, U. (2018) *Doing triangulation and mixed methods.* London: SAGE Publications.

Foucault, M. (1977) Discipline and punish : the birth of the prison. New York: Pantheon Books.

Franko, K. (2020) *The Crimmigrant Other. Migration and Penal Power*. London: Routledge.

Frontex (2007) BI*OPASS Study on Automated Biometric Border Crossing Systems for Registered Passenger at Four European Airports.* Available from: https://op.europa.eu/en/publication-detail/-/publication/8d92e664-4511-4620-94f0-563423454294 [Accessed: 8 April 2020).

Frontex (2010) *BIOPASS II, automated biometric crossing systems based on electronic passports and facial recognition*. Available from: https://op.europa.eu/en/publication-detail/-/publication/2095694c-9e95-4d3a-8d57-a587577fcff0/language-en/format-PDF/source-search [Accessed: 8 April 2020].

Frontex (2016) *Best Practice Operational Guidelines for Automated Border Control (ABC) Systems.* Available from: https://op.europa.eu/en/publication-detail/-/publication/e81d082d-20a8-11e6-86d0-01aa75ed71a1/language-en/format-PDF/source-search [Accessed: 2 February 2020].

Frontex (2016) *Best Practice Technical Guidelines for Automated Border Control (ABC) Systems*. Available from: https://op.europa.eu/en/publication-detail/-/publication/955279eb-2171-11e6-86d0-01aa75ed71a1/language-en/format-PDF/source-148934493 [Accessed: 2 February 2020].

Frontex (2016) *Guidelines for processing of third country nationals through automated border control*. Available from: https://op.europa.eu/en/publication-detail/-/publication/71620cd2-f0c6-11e5-8529-01aa75ed71a1/language-en/format-PDF/source-148935080 [Accessed: 2 February 2020].

Frontex (2017) *Programming Document 2018-2020.* Available from: https://www.statewatch.org/media/documents/news/2019/feb/frontex-programming-document-2018-20.pdf [Accessed: 29 January 2020].

Garland, D. (1997) 'Governmentality' and the problem of crime: Foucault, criminology, sociology. *Theoretical Criminology,* 1(2), pp. 173-214. doi: 10.1177/1362480697001002002.

Garland, D. (2001) *The culture of control: Crime and social order in contemporary society.* Oxford: Oxford University Press.

Gibson, J. J. (1979) The theory of affordances. In: Gibson, J. J. (ed.), *The Ecological Approach to Visual Perception.* Available from: https://pdfs.semanticscholar.org/eab2/b1523b942ca7ae44e7495c496bc87628f9e1.pdf [Accessed 3 June 2020].

Giertsen, H. (2000) *K og måter å forstå drap på.* Oslo: Universitetsforlaget.

Gilgannon, S. D. (2006) *Striking a Secure Balance: Participation of EU Member states in the US Visa Waiver Program*. Available from: https://heinonline.org/HOL/LandingPage?handle=hein.journals/curritlj15&div=15&id=&page= [Accessed: 30 June 2020].

Goldstein D. M. & Alonso-Bejarano, C. (2018) E-Terrify: Securitized Immigration and Biometric surveillance in the Workplace. In: Maguire, M., Rao, U. & Zurawski, N.

(eds.) *Bodies as Evidence: Security, Knowledge, and Power*. Durham: Duke University Press, pp. 67-88.

Graneheim, U. H., Lindgren, B-M., Lundman, B. (2017) Methodological challenges in qualitative content analysis: A discussion paper. *Nurse Education Today,* 56, pp. 29-34. doi: 10.1016/j.nedt.2017.06.002.

Gubrium, J. F. & Holstein, J. A. (2009) *Analyzing narrative reality.* California: SAGE Publications. Available from: https://methods.sagepub.com/book/analyzing-narrative-reality/d9.xml?fromsearch=true [Accessed: 15 December 2019].

Guia, M. J., van der Woude, M. A. H. & Van der Leun, J. P. (2011) *Social Control and Justice: Crimmigration in the Age of Fear.* Tha Hague: Eleven International Publishing.

Gundhus, H. I. (2018) Negotiating risks and threats: Securing the border through the lens of intelligence. In: Fyfe, N. R., Gundhus, H. I., & Rønn, K. V. (eds.), *Moral issues in intelligence-led policing*. London, New York: Routledge, pp. 221-245.

Gundhus, H. O. I. & Franko, K. (2016) Global Policing and Mobility: Identity, Territory and Sovereignity. In: Bradford, B., Jauregui, B., Loader, I. & Steinberg, J. (eds.), *The SAGE Handbook of Global Policing*. London: SAGE Publications, pp. 497-514.

Holligan, C. (2014) Disenfranchised Violent Young Offenders in Scotland: Using Actor-Network Theory to Explore Aetiology of Knife Crome. *Sociology*, 49(1), pp. 123-138. doi: 10.1177/0038038514532037.

Humphries, C. & Smith, A. C. T. (2014) Talking objects: Towards a post-social research framework for exploring object narratives. *Organization,* 21(4), pp. 477-494. doi: 10.1177/1350508414527253.

Hutchby, I. (2001) Technologies, Texts and Affordances. *Sociology,* 35(2), pp. 441-456. doi: 10.1177/S0038038501000219.

ISO/IEC TR 24714 (2008) *Information technology – Biometrics – Jurisdictional and societal considerations for commercial applications.*

ISO/IEC TR 29195 (2015) *Traveller processes for biometric recognition in automated border control systems.*

ISO/IEC 24779-4 (2017) *Information technology – Cross-jurisdictional and societal aspects of implementation of biometric technologies – Pictograms, icons and symbols for use with biometric systems. Part 4: Fingerprint applications.*

ISO/IEC TR 29196 (2018) *Information technology – Guidance on biometric enrolment*.

ISO/IEC 39794-5 (2019) *Information technology – Extensible biometric data interchange formats. Part 5: Face image data.*

ISO/IEC 24779-5 (2020) *Information technology – Cross-jurisdictional and societal aspects of implementation of biometric technologies – Pictograms, icons and symbols for use with biometric systems. Part 5: Face applications.*

Jacobsen, E. K. U. & Rao, U. (2018) The Truth of the Error: Making Identity and Security through Biometric Discrimination. In: Maguire, M., Rao, U. & Zurawski, N. (eds.) *Bodies as Evidence: Security, Knowledge, and Power*. Durham: Duke University Press, pp. 24-42.

Jain, A. K. & Ross, A. (2008) Introduction to Biometrics. In: Jain, A. K., Flynn, P. & Ross, A. A. (eds.) *Handbook of biometrics.* New York: Springer, pp. 1-22.

Jeandesboz, J. (2016) Smartening border security in the European Union: An Associational inquiry. *Security Dialogue,* 47(4), pp. 292-309. DOI: 10.1177/0967010616650226.

Johnson, J. M. & Rowlands, T. (2012) The Interpersonal Dynamics of in-Depth Interviewing. In: Gubrium, J. F., Holstein, J. A., Marvasti, A. B., & McKinney, K. D. (eds.), *The SAGE Handbook of Interview Research: The Complexity of the Craft.* Available from: https://methods.sagepub.com/book/handbook-of-interview-research-2e/n7.xml [20 May 2020].

Jusionyte, I. (2018) Injured by the border: Security Buildup, Migrant Bodies, and Emergency Response in Southern Arizona. In: Maguire, M., Rao, U. & Zurawski, N. (eds.), *Bodies as Evidence: Security, Knowledge, and Power.* Durham: Duke University Press, pp. 43-66.

Katz, J. (1990) *Seductions of Crime. A chilling exploration of the criminal mind – from the juvenile delinquency to cold-blooded murder*. New York: Basic Books.

Kaufmann, M. (2018a) Kriminalitetskontroll eller sikkerhetspolitikk? *Nytt Norsk Tidsskrift,* 35(1), pp. 21-31. doi: 10.18261/issn.1504-3053-2018-01-03.

Kaufmann, M. (2018b) The co-construction of crime predictions: Dynamics between digital data, software and human beings. In: Fyfe, N. R., Gundhus, H. I. Rønn, K. V. (eds.) *Moral Issues in Intelligence-led Policing*. London, New York: Routledge, pp. 143-160.

Kaufmann, M. (2019) Who connects the dots? Agents and agency in predictive policing. In: Hoijtink, M. & Leese, M. (eds.), *Technology and Agency in International Relations.* London: Routledge, pp. 141-163.

Keeton, R. M. (2015) "The Race of Pale Men Should Increase and Multiply": Religious Narratives and Indian Removal. In: Presser, L. & Sandberg, S. (eds.), *Narrative Criminology: Understanding Stories of Crime.* New York: New York University Press, pp. 125-149.

Kloppenburg, S. & Van der Ploeg, I. (2018) Securing Identities: Biometric technologies and the enactment of human bodily differences. *Science as culture*, pp. 1-20. doi: 10.1080/09505431.2018.1519534.

Koulish, R. & Van der Woude, M. (2020) Introduction. The "Problem" of Migration. In: Koulish, R. & Van der Woude, M. (eds.), *Crimmigrant Nations: Resurgent Nationalism and the Closing of Borders*, New York: Fordham University Press, pp. 1-29.

Kruger, E., Magnet, S. & Van Loon, J. (2008) Biometric Revisions of the 'Body' in Airports and US Welfare Reform. *Body&Society*, 14(2), pp. 99-121. doi: 10.1177/1357034X08090700.

Latour, B. (1988) Mixing Humans and Nonhumans Together: The Sociology of a Door-Closer. *Social Problems,* 35(3), pp. 298-310. Available from: http://www.bruno-latour.fr/sites/default/files/35-MIXING-H-ET-NH-GBpdf_0.pdf [Accessed: 7 March 2020].

Latour, B. (1992) «Where Are the Missing Masses? The Sociology of a Few Mundane Artifacts». In: Bijker, W. E. & Law, J. (eds.), *Shaping Technology/Building Society: Studies in Sociotechncial Change.* Massachussets: MIT Press, pp. 225-258.

Latour, B. (1993) *The Pasteurization of France*. Cambridge: Harvard University Press.

Latour, B. (1994) On technical mediation. *Common Knowledge,* 3(2), pp. 29-64. Available from: http://www.bruno-latour.fr/node/234.html [Accessed: 20 January 2020].

Latour, B. (2005) *Reassembling the Social – An Introduction to Actor-Network-Theory.* Oxford: Oxford University Press.

Law, J. (2002) *Aircraft stories. Decentring the Object in Technoscience*. Duke: Duke University Press.

Leese, M. (2016) Exploring the Security/Facilitation Nexus: Foucault at the 'Smart' Border. *Global Society,* 30(3), pp. 412-429. DOI: 10.1080/13600826.2016.1173016.

Leese, M. & Hoijtink, M. (2019) How (not) to talk about technology: International Relations and the questions of agency. In: Hoijtink, M. & Leese, M. (eds.), *Technology and agency in International Relations*. Oxford: Routledge, pp. 1-23.

Lewis, I. (2014) Ever had your fingerprints taken? Meeting the challenges of 21st Century access control. *Biometric Technology Today*, 5, pp. 9-11. doi: 10.1016/S0969-4765(14)70089-X.

Li, S. Z., Schouten, B. & Tistarelli, M. (2009) Biometrics at a Distance: Issues, Challenges, and Prospects. In: Tistarelli, M., Li, S. Z., & Chellappa, R. (eds.), *Handbook of Remote Biometrics*, London: Springer, pp. 3-21.

Lillrank, A. (2012) Managing the interviewer self. In: Gubrium, J. F., Holstein, J. A., Marvasti, A. B. & McKinney, K. D. (eds.), *The SAGE Handbook of Interview Research: The Complexity of the Craft.* Available from: https://methods.sagepub.com/book/handbook-of-interview-research-2e/n7.xml [20 May 2020].

Lyon, D. (2003) Surveillance as social sorting. Computer codes and mobile bodies. In: Lyon, D. (ed.), *Surveillance as social sorting. Privacy, risk and digitial discrimination*, London: Routledge, pp. 13-30.

Lyon, D. (2007) *Surveillance Studies. An Overview.* Cambridge: Polity Press.

Magnet, S. A. (2011) *When biometrics fail: Gender, race, and the technology of identity.* Durham: Duke University Press.

Maguire, M. & Rao, U. (2018) Conclusion: Discontinuities and Diversity. In: Maguire, M., Rao, U. & Zurawski, N. (eds.), *Bodies as Evidence: Security, Knowledge, and Power.* Durham: Duke University Press, pp. 228-236.

Maltoni, D. & Cappelli, R. (2008) Fingerprint Recognition. In: Jain, A. K., Flynn, P. & Ross, A. A. [eds.] *Handbook of biometrics*. New York: Springer, pp. 23-42.

Marciano, A. (2018) Reframing biometric surveillance: from a means of inspection to a form of control. *Ethics and Information Technology,* 27, pp. 127-136. doi: 10.1007/s10676-018-9493-1.

Maricut, A. (2017) Different narratives, one area without internal frontiers: why EU institutions cannot agree on the refugee crisis. *National Identities,* 19(2), pp. 161-177. doi: 10.1080/14608944.2016.125698.

M'Charek, A. (2018) «Dead Bodies at the Border»: Distributed Evidence and Emerging Forensic Infrastructure of Identification. In: Maguire, M., Rao, U. & Zurawski, N. (eds.) *Bodies as Evidence: Security, Knowledge, and Power*. Durham: Duke University Press, pp. 89-109.

Melossi, D. (2003) «In a peaceful life»: Migration and the crime of modernity in Europe/Italy. *Punishment & Society*, 5(4), pp. 371-397. doi: 10.1177/14624745030054001.

Melossi, D. (2015) *Crime, Punishment and Migration.* California: Sage.

Melossi, D. (2020) Migration, Populism, Racism. Between "Old" Italy and "New" Europe. In: Koulish, R. & Van der Woude, M. (eds.), *Crimmigrant Nations: Resurgent Nationalism and the Closing of Borders*, New York: Fordham University Press, pp. 50-67.

Merton, R. K. & Kendall, P. L. (1946) The Focused Interview. *American Journal of Sociology,* 51(6), pp. 550-566. DOI: 10.1086/219886.

Michael, M. (2000) *Actor-Network Theory. Trials, Trails and Translations.* Los Angeles: Sage.

Miller, H. T. (2012) *Governing Narratives. Symbolic Politics and Policy Change*. Tuscaloosa: University of Alabama Press.

Miller, D. (2017) Migration and justice. A reply to my critics. *Critical Review of International Social and Political Philosophy*, 20(6), pp. 763-773. doi: 10.1080/13698230.2016.1231847.

Murphy, E. & Maguire, M. (2015) Speed, Time and Security: Anthropological Perspectives on Automated Border Control. *Etnofoor*, 27(2), pp. 157-177. Available from: https://www.jstor.org/stable/43656024?seq=1 [Accessed: 3 February 2020].

Nandakumar, K., Ross, A. A. & Jain, A. K. (2008) Incorporating Ancillary Information in Multibiometric Systems. In: Jain, A. K., Flynn, P. and Ross, A. A. (eds.) Handbook of biometrics. New York: Springer, pp. 335-356.

Nehring, H. (2007) The Era of Non-Violence: 'Terrorism' and the Emergence of Conceptions of Non-Violent Statehood in Western Europe, 1967-1983*. European Review of History – Revue Européene d'Histoire*, 14(3), pp. 343-371. doi: 10.1080/13507480701611605.

Nesser, P. (2008) Chronology of Jihadism in Western Europe 1994-2007: Planned, Prepared, and Executed Terrorist Attacks. *Studies in Conflict & Terrorism*, 31(10), pp. 924-946. DOI: 10.1080/10576100802339185.

Noaks, L. & Wincup, E. (2004) *Criminological Research*. London: SAGE Publications.

Nock, S. L. (1993) *The cost of privacy. Surveillance and reputation in America*. New York: Aldine de Gruyter.

Norman, D. (2013) *The Design of Everyday Things.* (2nd edition). New York: Basic Books.

Norwegian National Research Ethics Committees (2016) *Guidelines for Research Ethics in the Social Sciences, Humanities, Law and Theology.* [4th edition]. Oslo: NESH.

Nousbeck, J., Burger, B., Fuchs-Telem, D. Pavlovsky, M., Fenig, S., Sarig, O., Itin, P. & Sprecher, E. (2011) A Mutation in a Skin-Specific Isoform of SMARCAD1 Causes Autosomal-Dominant Adermatoglyphia. *Am J Hum Genet,* 89(2), pp. 302-307. DOI: 10.1016/j.ajhg.2011.07.004. 0

Olwig, K. F., Grünenberg, K., Møhl, P. & Simonsen, A. (2019) Introduction. The biometric world. In: Olwig, K. F., Grünenberg, K., Møhl, P. and Simonsen, A. (eds.) *The Biometric Border World. Technologies, Bodies and Identities on the Move*. London: Routledge, pp. 1-22.

Pastore, F. (2019) From Source to Corridor: Changing Geopolitical Narratives about Migration and EU-Western Balkans Relations. *Journal of Balkan and Near Eastern Studies*, 21(1), pp. 11-26. DOI: 10.1080/19448953.2018.1532683.

Pickering, S. (2006) Border Narratives. In: Pickering, S. & Weber, L. (eds.), *Borders, Mobility and Technologies of Control*. Dordrecht: Springer, pp. 45-62.

Polletta, F., Chen, P. C. B., Gardner, B. G., & Motes, A. (2011) The Sociology of Storytelling. *Annual Review of Sociology*, 37, pp. 109-30. doi: 10.1146/annurev-soc-081309-150106.

Presser, L. (2009) The narratives of offenders. *Theoretical criminology*, 13(2), pp. 177-200. doi: 10.1177/1362480609.

Presser, L. (2013) *Why we harm.* New Brunswick: Rutgers University Press.

Presser, L. (2018) *Inside Story. How Narratives Drive Mass Harm.* California: University of California Press.

Presser, L. & Sandberg, S. (2015a) Introduction: What Is the Story? In: Presser, L. and Sandberg, S. (eds.), *Narrative Criminology: Understanding Stories of Crime*. New York: New York University Press, pp. 1-20.

Presser, L., & Sandberg, S. (2015b). Conclusion: Where to Now? In: Presser L. and Sandberg S. (eds.), *Narrative Criminology: Understanding Stories of Crime.* New York: New York University Press, pp. 287-300.

Presser, L. & Sandberg, S. (2019) Narrative Criminology as Critical Criminology. *Critical Criminology*, 27, pp. 131-143. doi: 10.1007/s10612-019-09437-9.

Pugliese, J. (2010). *Biometrics: Bodies, technologies, biopolitics.* New York: Routledge.

Rao, U. & Nair, V. (2019) Adhaar: Governing with biometrics. *South Asia: Journal of South Asian Studies*, 42(3), pp. 469-481. doi: 10.1080/00856401.2019.1595343.

Rein, M. & Schön, D. (1996) Frame-critical policy analysis and frame-reflective policy practice. *Knowledge & Policy,* 9, pp. 85-104. doi: 10.1007/BF02832235.

Roe, E. (1994) *Narrative Policy Analysis: Theory and Preactice.* Duke: Duke University Press.

Rosenberger, R. (2014) Multistability and the Agency of Mundane Artifacts: from Speed Bumps to Subway Benches. *Hum Stud*, 37, pp. 369-392. doi: 10.1007/s10746-014-9317-1.

Rosenberger, R. (2017) *Callaous objects. Designs against the Homeless.* Minneapolis: Minnesota University Press.

Salter, M. B. (2004) Passports, Mobility, and Security: How smart can the border be? *International Studies Perspectives,* 5(1), pp. 71-91. doi: 10.1111/j.1528-3577.2004.00158.x.

Salter, M. B. (2007) Governmentalities of an airport: heterotopia and confession. *International Political Sociology*, 1(1), pp. 49-61. doi: 10.1111/j.1749-5687.2007.00004.x.

Salter, M. B. (2015) Introduction: Circuits and Motion. In: Salter, M. B. (ed.), *Making Things International 1. Circuits and Motion*. Minnesota: University of Minnesota Press, pp. vii-xxii.

Sandberg, S. (2009). Gangster, victim or both? The interdiscursive construction of sameness and difference in self-presentations. *British Journal of Sociology*, 60(3), pp. 523- 542. doi: 10.1111/j.1468-4446.2009.01254.x.

Sandberg, S. (2010) What can «lies» tell us about life? Notes towards a framework of narrative criminology. *Journal of Criminal Justice Education,* 21(4), pp. 447-465. doi: 10.1080/10511253.2010.516564.

Sandberg, S. (2013) Are self-narratives unified or fragmented, strategic or determined? Reading Breivik's manifesto in light of narrative criminology. *Acta Sociologica*, 56(1), pp. 65-79. doi: 10.1177/0001699312466179.

Sandberg, S. (2016) The importance of stories untold: Life-story, event-story and trope. *Crime, Media, Culture: An international Journal,* 12(2), pp. 153-171. doi: 10.1177/1741659016639355.

Sandberg, S., Tutenges, S. & Copes, H. (2015). Stories of Violence: A narrative criminological study of ambiguity. *British Journal of Criminology,* 55(6), pp. 1168- 1186. doi: 10.1093/bjc/azv032.

Sandberg, S. & Ugelvik, T. (2016) The past, present, and future of narrative criminology: A review and an invitation. *Crime, Media, Culture: An International Journal*, 12(2), pp. 129-136. doi: 10.1177/1741659016663558.

Sala, V. D. (2018) Narrating Europe: the EU's ontological security dilemma. *European Security,* 27(3), pp. 266-279). DOI: 10.1080/09662839.2018.1497978.

Sarkar, S. & Liu, Z. (2008) Gait Recognition. In: Jain, A. K., Flynn, P. & Ross, A. A. [eds.] *Handbook of biometrics.* New York: Springer, pp. 109-129.

Sassen, S. (1996) *Losing Control? Sovereignity in an Age of Globalisation.* Available from: file:///C:/Users/Acer/AppData/Local/Temp/Losing_Control_Sovereignty_in_an_Age_of_Globalizat.pdf [Accessed: 4 June 2020].

Savvides, M., Heo, J. & Park, S. W. (2008) Face Recognition. In: Jain, A. K., Flynn, P. & Ross, A. A. [eds.] *Handbook of biometrics.* New York: Springer, pp. 43-70.

Schneider, A. & Ingram, H. (1993) Social Construction of Target Populations: Implications for Politics and Policy. *The American Political Science Review,* 87(2), pp. 334-347. Available from: https://ojs.unbc.ca/index.php/design/article/viewFile/1484/1227 [Accessed: 4 March 2020].

Schofield, J., Wyles, K. J., Doherty, S., Donnelly, A., Jones, J. & Porter, A. (2020) Object narratives as a Mehodology for Mitigating Marine Plastic Pollution: a New Multidisciplinary Approach, and a Case Study from Galapagos. *Antiquity,* pp. 228-244. doi: 10.15184/aqy.2019.232.

Schouten, P. (2014) Security as controversy: Reassembling security at Amsterdam Airport. *Security Dialogue,* 45(1), pp. 23-42. doi: 10.1177/0967010613515014.

Secunet (2020) *Automated Border Control. Easy Going with Secunet Easygate*. Available from: https://www.secunet.com/fileadmin/user_upload/_temp_/importexport/Print/Factsheets/englisch/secunet_easygate_Factsheet_EN_Web.pdf [Accessed: 23 March 2020].

Seidman, I. E. (1991). *Interviewing as qualitative research: A guide for researchers in education and the social sciences.* New York: Teachers College Press.

SITA (2014) *iBorder biothenticate ABC gate*. Available from: https://www.pista73.com/media/2014/11/Sita_ABC_Gate_How_it_workspdf.pdf [Accessed: 23 March 2020].

Skilling, P. (2012) Immigration policy in New Zealand: divergent narratives, shared assumptions and national identity. *Critical Policy Issue,* 6(4), pp. 363-378. doi: 10.1080/19460171.2012.730765.

Skylane (2018) *i720 Skylane. New generation of automated e-gate for access control & boarding*. Available from: https://www.ier.com/wp-content/uploads/2018/03/i720-SKYLANE_V1_EN_03-2018.pdf [Accessed: 4 March 2020].

Smejkal, V. & Kodl, J. (2018) Dynamic Biometric Signature - an Effective Alternative for Electronic Authentication. *Advances in technology innovation*, 3(4), pp. 166-178. Available from: http://ojs.imeti.org/index.php/AITI/article/view/818 [Accessed: 21 October 2019].

Smith, P. (2005) *Why War? The cultural logic of Iraq, the Gulf War, and Suez.* Chicacgo: University of Chicago Press.

Sontowski, S. (2017) Speed, timing and duration: contested temporalities, techno-political controversies and the emergence of the EU's smart border. *Journal of Ethnic and Migration Studies*, 44(16), pp. 2730-2746. DOI: 10.1080/1369183X.2017.1401512.

Stalder, F. & Lyon, D. (2003) Electronic identity cards and social classification. In: Lyon, D. (ed.), *Surveillance as social sorting. Privacy, risk and digitial discrimination*, London: Routledge, pp. 77-93.

Stigler, S. M. (1999) Statistics on the table. The history of statistical concepts and methods. London: Harvard University Press.

Stone, D. (1997) Policy Paradox: The art of political decision making. [2nd edition]. New York: W. W. Norton & Company.

Stumpf, J. P. (2006) The Crimmigration Crisis: Immigrants, Crime, and Sovereign Power. *American University Law Review*, 56(2), pp. 367-419. Available from: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=935547 [Accessed: 29 September 2019].

Stumpf, J. P. (2014) Crimmigration: encountering the leviathan. In: Pickering, S. & Ham, J. (eds), *The Routledge Handbook on Crime and International Migration,* pp. 237-250. Oxon: Taylor & Francis Group.

Sykes, G. M. & Matza, D. (1957) Techniques of Neutralization: A Theory of Delinquency. *American Sociological Review*, 22 (6), pp. 664-670. Available from: https://is.muni.cz/el/1423/podzim2016/BSS166/um/Sykes__Matza_Techniques_of_Neutralization.pdf [Accessed: 5 October 2019].

Sætnan, A. R., Lomell, H. M. & Hammer, S. O. (2011). By the Very Act of Counting — The Mutual Construction of Statistics and Society. In: Sætnan, A. R., Lomell, H.M. & Hammer, S. O. (eds.), *The Mutual Construction of Statistics and Society*. London: Routledge, pp. 1–17.

Thales Group (2020a) *Why We Spend More Time Thinking About Paper (And You Should, Too!) An expert's guide to using the paper elements of a passport to protect against counterfeiting*. Available from: https://www.sc.pages05.net/lp/22466/661972/gov-wp-paper-still-matters.pdf [Accessed: 20 July 2020].

Thales Group (2020b) *Thales Gemalto ABC solution (Automated Border Control). Where security, convenience and efficiency meet*. Available from: https://www.thalesgroup.com/sites/default/files/gemalto/gov-eborder-abc.pdf [Accessed: 3 August 2020].

Thales Group (no year) *Thales Gemalto Border Management System. Offering convenience for secure border crossing Improving border intelligence for detection and prevention. Supporting your immigration organization*. Available from: https://www.thalesgroup.com/sites/default/files/database/document/2020-06/gov-border-management.pdf [Accessed: 20 July 2020].

Tight, M. (2019) *Documentary Research in the Social Sciences.* Available from: https://methods.sagepub.com/Book/documentary-research-in-the-social-sciences [Accessed: 3 December 2019].

Tjora, A. (2018) *Kvalitative forskningsmetoder i praksis.* (3rd edition). Oslo: Gyldendal.

Torpey, J. (2000) *The Invention of the Passport. Surveillance, Citizenship and the State.* Cambridge: Cambridge University Press.

Ugelvik, T. (2019) The Tales Things Tell. In: Fleetwood, J., Presser, L., Sandberg, S. & Ugelvik, T. (eds.) *The Emerald Handbook of Narrative Criminology.* Bingley: Emerald Publishing Limited, pp. 217-233.

Van der Ploeg (1999b) The illegal body: "Eurodac" and the politics of biometric identification. *Ethics and Information Technology*, 1, pp. 295-302. doi: 10.1023/A:1010064613240.

Van der Wagen, W., & Pieters, W. (2015). From cybercrime to Cyborg crime. Botnets as hybrid criminal actor-networks. *British Journal of Criminology,* 55(3), pp. 578–595. DOI: 10.1093/bjc/azv009.

Van der Woude, M., Barker, V. & Van der Leun, J. (2017) Crimmigration in Europe. *European Journal of Criminology,* 14(19), pp. 3-6. doi: 10.1177/1477370816639814.

Vollmer, B. A. (2011) Policy Discourses on Irregular Migration in the EU- 'Number Games' and 'Political Games'. *European Journal of Migration ad Law,* 13(3), pp. 317-339. doi: 10.1163/157181611X587874.

Walters, W. *(2006)* Border/Control. *European Journal of Social Theory*, 9(2), pp. 187-203. doi: 10.1177/1368431006063332.

Waltz, S. B. (2006) Nonhumans Unbound: Actor-Network Theory and the Reconsideration of "Things" in Educational Foundations. *Educational Foundations*, 20 (3/4), pp. 51-68. Available from: https://eric.ed.gov/?id=EJ794732 [Accessed: 26 May 2020].

Wang, J. & Yan, Y. (2012) The Interview Question. In: Gubrium, J. F., Holstein, J. A., Marvasti, A. B. & McKinney, K. D. (eds.), The SAGE Handbook of Interview Research: The Complexity of the Craft. Thousand Oaks: SAGE Publications. Available from: https://methods.sagepub.com/book/handbook-of-interview-research-2e/n7.xml [20 May 2020].

Wibben, A.T. (2011) *Feminist security studies: a narrative approach*. London: Routledge.

Wilson, D. (2006) Biometrics, Borders and the Ideal Suspect. In: Pickering, S. & Weber, L. (eds.), *Borders, Mobility and Technologies of Control*. Dordrecht: Springer, pp. 87-110.

Zureik, E. & Salter, M.B. (2005) *Global Surveillance and Policing. Borders, security, identity.* New York: Routledge.

7.1 Political documents

Council of the European Union (2000) *Council Regulation (EC) No 2725/2000 of 11 December 2000 concerning the establishment of 'Eurodac' for the comparison of fingerprints for the effective application of the Dublin Convention*. Available from: https://eur-lex.europa.eu/legal-content/en/TXT/?uri=celex:32000R2725 [Accessed: 8 February 2020].

Council of the European Union (2001) *Council Common Position of 27 December 2001 on the application of specific measures to combat terrorism*. Available from: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32001E0931 [Accessed: 20 March 2020].

Council of the European Union (2002) *Council Directive 2002/90/EC of 28 November 2002 defining the facilitation of unauthorised entry, transit and residence.* Available from: https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX%3A32002L0090 [Accessed: 3 February 2020].

Council of the European Union (2002) *Council framework Decision of 28 November 2002 on the strengthening of the penal framework to prevent the facilitation of unauthorised entry, transit and residence*. 2002/946/JHA. Available from: https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX%3A32002F0946 (Accessed: 5 February 2020).

Council of the European Union (2002) *EU Schengen Catalogue. External borders control, Removal and readmission. Recommendations and best practices.* Available from: https://www.consilium.europa.eu/media/31011/catalogue-en.pdf [Accessed: 3 February 2020].

Council of the European Union (2002) *Presidency Conclusions Seville European Council 21 and 22 June 2002.* Available from: https://www.consilium.europa.eu/media/20928/72638.pdf [Accessed 27 January 2020].

Council of the European Union (2003) *A secure Europe in a better world. European Security Strategy*. Available from: http://data.consilium.europa.eu/doc/document/ST-15895-2003-INIT/en/pdf [Accessed: 27 January 2020].

Council of the European Union (2004) *Council Decision of 8 June 2004 establishing the Visa Information System (VIS)*. 2004/512/EC. Available from: https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=celex:32004D0512 [Accessed: 4 February 2020].

Council of the European Union (2004) *Council Regulation (EC) No 2252/2004 of 13 December 2004 on standards for security features and biometrics in passports and travel documents issued by Member States*. Available from: https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX%3A32004R2252 [Accessed: 9 February 2020].

Council of the European Union (2005) *The Hague Programme: strengthening freedom, security and justice in the European Union*. Available from: https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX%3A52005XG0303%2801%29 [Accessed: 27 January 2020].

Council of the European Union (2009) *Report on the European Security Strategy - A secure Europe in a better world.* Available from: https://www.consilium.europa.eu/media/30823/qc7809568enc.pdf [Accessed: 4 February 2020].

European Commission (2000) *Communication from the Commission to the Council and the European Parliament on a Community immigration policy*. COM/2000/0757 final. Available from: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52000DC0757 [Accessed: 19 January 2020].

European Commission (2001) *Commission working document - The relationship between safeguarding internal security and complying with international protection obligations and instruments.* COM/2001/0743 final. Available from: https://eur-lex.europa.eu/legal-content/en/ALL/?uri=CELEX%3A52001DC0743 [Accessed: 20 January 2020].

European Commission (2001) *Communication from the Commission to the Council and the European Parliament on a common policy on illegal immigration*. COM/2001/0672 final. Available from: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52001DC0672 [Accessed: 20 January 2020].

European Commission (2003) *Communication from the Commission to the European Parliament and the Council in view of the European Council of Thessaloniki on the development of a common policy on illegal immigration, smuggling and trafficking of human beings, external borders and the return of illegal residents*. COM/2003/0323 final. Available from: https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX%3A52003DC0323 [Accessed: 25 January 2020].

European Commission (2004) *Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions - Study on the links between legal and illegal migration*.

COM/2004/0412 final. Available from: https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX%3A52004DC0412 [Accessed: 7 February 2020].

European Commission (2005) *Communication from the Commission - A strategy on the external dimension of the area of freedom, security and justice.* COM/2005/0491 final. Available from: https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX%3A52005DC0491 [Accessed: 2 February 2020].

European Commission (2006) *Communication from the Commission on Policy priorities in the fight against illegal immigration of third-country nationals.* COM/2006/0402 final. Available from: https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX%3A52006DC0402 [Accessed: 12 February 2020].

European Commission (2008a) *Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions - Preparing the next steps in border management in the European Union.* COM/2008/0069 final. Available from: https://eur-lex.europa.eu/legal-content/ga/TXT/?uri=CELEX:52008DC0069 [Accessed: 4 February 2020].

European Commission (2008b) *Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions - A common immigration policy for Europe: Principles, actions and tools*. COM/2008/0359 final. Available from: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52008DC0359 [Accessed: 4 February 2020].

European Commission (2008) *Commission staff working document - Accompanying document to the Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions - Preparing the next steps in border management in the European Union - Summary of the impact assessment.* SEC/2008/0154 final. Available from: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52008SC0154 [Accessed: 1 February 2020].

European Commission (2008) *Entry-Exit Feasibility Study*. Available from: https://ec.europa.eu/home-affairs/sites/homeaffairs/files/e-library/docs/pdf/ca_b38_fr_004_1_20_entryexit_final_report_en.pdf [Accessed: 17 February 2020].

European Commission (2009) *Commission Decision of 9 October 2009 laying down specifications for the resolution and use of fingerprints for biometric identification and verification in the Visa Information System*. 2009/756/EC. Available from: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32009D0756 [Accessed: 28 January 2020)].

European Commission (2010) *Commission Staff Working Document on the fulfillment of the 29 measures for reinforcing the protection of the external borders and combatting*

illegal immigration adopted at the Justice and Home Affairs Council Meeting, held on Brussels on 25 and 26 February 2010. Available from: https://ec.europa.eu/transparency/regdoc/rep/2/2010/EN/2-2010-1480-EN-F1-1.PDF [Accessed: 13 February 2020].

European Commission (2011a) *Communication from the Commission to the European Parliament and the Council. Smart borders – options and the way ahead*. COM/2011/0680 final. Available from: https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX%3A52011DC0680 [Accessed: 8 February 2020].

European Commission (2011b) *Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. Schengen governance – strengthening the area without internal border controls.* COM/2011/0561 final. Available from: https://eur-lex.europa.eu/legal-content/en/TXT/?uri=CELEX%3A52011DC0561 [Accessed: 8 February 2020].

European Commission (2011) *Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions - The Global Approach to Migration and Mobility.* COM/2011/0743 final. Available from: https://eur-lex.europa.eu/legal-content/en/ALL/?uri=celex%3A52011DC0743 [Accessed: 28 January 2020].

European Commission (2013) *Proposal for a regulation of the European Parliament and of the Council establishing an Entry/Exit System (EES) to register entry and exit data of third country nationals crossing the external borders of the Member States of the European Union.* COM/2013/095 final - 2013/0057 (COD). Available from: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52013PC0095 [Accessed: 13 February 2020].

European Commission (2015) *Enlargement of the European Union*. Available from: https://ec.europa.eu/neighbourhood-enlargement/sites/near/files/enlargement_brochure_en.pdf [Accessed: 4 January 2020].

European Commission (2016) *Annexes. Proposal for a Regulation of the European Parliament and of the Council establishing an Entry/Exit System (EES) to register entry and exit data and refusal of entry data of third country national crossing the external borders of the Member States of the European Union and determining the conditions for access to the EES for law enforcement purposes and amending Regulation (EC) No 767/2008,and amending Regulation (EU) No 1077/2011.* COM(2016) 194 final. Available from: https://eur-lex.europa.eu/resource.html?uri=cellar:19cfa4b9-fca5-11e5-b713-01aa75ed71a1.0020.02/DOC_2&format=PDF [Accessed: 3 March 2020].

European Commission (2016) *Commission Staff Working Document Accompanying the document Proposal for a regulation of the European Parliament and of the Council establishing an Entry/Exit System (EES) to register entry and exit data and refusal of entry data of third country nationals crossing the external borders of the Member*

States of the European Union and determining the conditions for access to the EES for law enforcement purposes and amending Regulation (EC) No 767/2008 and Regulation (EU) No 1077/2011 and Proposal for a Regulation of the European Parliament and of the Council amending Regulation (EU) 2016/xxx as regards the use of the Entry/Exit System (EES). SWD/2016/0116 final - 2016/0105 (COD). Available from: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52016SC0116 [Accessed: 12 February 2020].

European Commission (2019) *Annex to the Commission recommendation establishing a common "Practical Handbook for Border Guards" to be used by Member States' competent authorities when carrying out the border control of persons.* Available from: https://ec.europa.eu/home-affairs/sites/homeaffairs/files/e-library/documents/policies/borders-and-visas/schengen/docs/c2019-7131-annex.pdf [Accessed: 11 February 2020].

European Council (1984) *European Council Meeting at Fontainebleau. Conclusions of the Presidency.* Available from: https://www.consilium.europa.eu/media/20673/1984_june_-_fontainebleau_eng_.pdf [Accessed: 15 February 2020].

European Council (2010) *The Stockholm Programme – An open and secure Europe serving and protecting citizens.* Available from: https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2010:115:0001:0038:EN:PDF [Accessed: 21 January 2020].

7.1.1 Treaties, conventions and regulations:

Convention (1985) *Convention implementing the Schengen Agreement of 14 June 1985 between the Governments of the States of the Benelux Economic Union, the Federal Republic of Germany and the French Republic on the gradual abolition of checks at their common borders*. Available from: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A42000A0922%2802%29 [Accessed: 20 January 2020].

Regulation (EU) 2016/399 *of the European Parliament and of the Council of 9 March 2016 on a Union Code on the rules governing the movement of persons across borders (Schengen Borders Code).* Available from: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32016R0399&from=EN [Accessed: 6 February 2020].

Regulation (EU) 2017/2226 *of the European Parliament and of the Council of 30 November 2017 establishing an Entry/Exit System (EES) to register entry and exit data and refusal of entry data of third-country nationals crossing the external borders of the Member States and determining the conditions for access to the EES for law enforcement purposes*. Available from: https://eur-lex.europa.eu/legal-

content/EN/TXT/PDF/?uri=CELEX:32017R2226&from=EN [Accessed: 6 February 2020].

Regulation (EU) 2018/1806 *of the European Parliament and of the Council of 14 November 2018 listing the third countries whose nationals must be in possession of visas when crossing the external borders and those whose nationals are exempt from that requirement.* Available from: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32018R1806&from=EN [Accessed: 5 February 2020].

Single European Act (1986) Available from: http://aei.pitt.edu/8582/1/8582.pdf [Accessed: 2 February 2020].

Treaty ECSC (1957) *Treaty establishing the European Economic Community.* Available from: https://eur-lex.europa.eu/legal-content/DE/TXT/PDF/?uri=CELEX:11957E/TXT&from=EN [Accessed: 18 January 2020].

Treaty of Maastricht (1992) *Treaty on European Union*. Available from: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:11992M/TXT&from=EN [Accessed: 14 February 2020].

Treaty of Amsterdam (1997) *Treaty of Amsterdam amending the treaty on European Union, the treaties establishing the European Communities and certain related acts.* Available from: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A11997D%2FTXT [Accessed: 10 February 2020].

7.2 Web-pages and videos

ABC4EU (2015) *Automated border control gates for Europe*. Available from: http://abc4eu.com/docs/Abc4eu_leaflet_19102015.pdf (Accessed: 13 December 2020).

BBC News (2005) *London bomber: text in full*. Available from: http://news.bbc.co.uk/2/hi/uk_news/4206800.stm [10 August 2020].

BBC News (2014) *Spain remembers Madrid train bombings 10 years on.* Available from: https://www.bbc.com/news/world-europe-26526704. [Accessed: 10 August 2020].

BBC News (2019) *Testing the debit card with a fingerprint sensor.* Available from: https://www.bbc.com/news/av/technology-49322217/testing-the-debit-card-with-a-fingerprint-sensor [Accessed: 21 November 2019].

Biometric Update (2019) *Government, retail and smartphones to push facial recognition market to $7B by 2024*. Available from:

https://www.biometricupdate.com/201911/government-retail-and-smartphones-to-push-facial-recognition-market-to-7b-by-2024 [Accessed: 9 November 2019].

Brussels Airports (2018) *How to use Automated Border Control at Brussels Airport.* Available from: https://www.youtube.com/watch?v=IC3JmGHfRTI (Accessed: 23 March 2020).

Dagbladet (1999) *Raggsokk nøkkelen til drapsgåten?* Available from: https://www.dagbladet.no/nyheter/raggsokk-nokkelen-til-drapsgaten/65543323 [Accessed: 16 April 2020].

European Commission (2013) *SPEECH - 'Smart Borders': for an open and secure Europe.* Available from: https://ec.europa.eu/commission/presscorner/detail/en/SPEECH_13_172 (Accessed 16 December 2019).

European Commission (2016a) *Stronger and Smarter Borders in the EU: Commission proposes to establish an Entry-Exit System*. Available from: https://ec.europa.eu/commission/presscorner/detail/en/IP_16_1247 (Accessed: 2 December 2019).

European Commission (no year) *European Integrated Border Management*. Available from: https://ec.europa.eu/home-affairs/content/european-integrated-border-management_en [Accessed: 2 July 2020].

European Commission (no year b) *Entry/Exit System (EES).* Available from: https://ec.europa.eu/home-affairs/what-we-do/policies/borders-and-visas/smart-borders/ees_en [Accessed: 6 August 2020].

European Data Protection Supervisor (2013) *Smart borders: key proposal is costly, unproven and intrusive*. Available from: https://edps.europa.eu/press-publications/press-news/press-releases/2013/smart-borders-key-proposal-costly-unproven-and_en [Accessed: 4 August 2020].

European Parliament (1999) *Tampere European Council 15 and 16 October 1999. Presidency Conclusions.* Available from: https://www.europarl.europa.eu/summits/tam_en.htm?fbclid=IwAR04s-faw2mJrU3uP076vgopfcswpIfurRsn_bHhq2UdXjvPokmWjOe99JE [Accessed: 3 March 2020].

European Union (no year) *Regulations, Directives and other acts.* Available from: https://europa.eu/european-union/eu-law/legal-acts_en [Accessed: 26 April 2020].

Everis Global (2018) *Everis e-Gates.* Available from: https://www.youtube.com/watch?v=rUUomzpVjEM (Accessed: 23 March 2020).

Flughafen Zürich (2017) *Automated Passport Control.* Available from: https://www.youtube.com/watch?v=R9p64-l_9OY [Accessed: 23 March 2020].

Frontex (2019) *Smart borders: bringing Frontex and customs closer together.* Available from: https://frontex.europa.eu/media-centre/news-release/smart-borders-bringing-frontex-and-customs-closer-together-AzessI [Accessed: 3 August 2020].

Gemalto (2018) *GEMALTO Automatic Border Control Gates.* Available from: https://www.youtube.com/watch?v=UYU64ycpVcU [Accessed: 23 March 2020].

ICAO (no year) *ICAO TRIP.* Available from: https://www.icao.int/Security/FAL/TRIP/Pages/default.aspx [Accessed: 24 March 2020].

Johansen, N. B. (2018) *En kritisk vending.* Available from: https://sosiologen.no/debatt-og-kronikk/debatt/en-kritisk-vending/ [Accessed: 3 August 2020].

International Organisation for Standardisation (2014) *ISO toughens tests for machine readable passports.* Available from: https://www.iso.org/news/2014/04/Ref1834.html [Accessed: 23 July 2020].

Lexico (no year) *Agency.* Available from: https://www.lexico.com/definition/agency [Accessed: 4 March 2020].

Merriam-Webster (no year a) *Efficient.* Available from https://www.merriam-webster.com/dictionary/efficient?utm_campaign=sd&utm_medium=serp&utm_source=jsonld [Accessed: 6 June 2020].

Merriam-Webster (no year b) *Effective*. Available from: https://www.merriam-webster.com/dictionary/effective [Accessed: 6 June 2020].

Pradotec Corporations (2016) *PRADOTEC Border Control System - Complete solution for Identity & Access.* Available from: https://www.youtube.com/watch?v=NtY0_5vItdQ (Accessed: 23 March 2020).

The Intercerpt (2017) *The Biometric Frontier."Show Me Your Papers" Becomes "Open Your Eyes" as Border Sheriffs Expand Iris Surveillance*. Available from: https://theintercept.com/2017/07/08/border-sheriffs-iris-surveillance-biometrics/ [Accessed: 11 November 2019].

Thales Group (no year a) *Automated Border Control - Slash queues with faster eGates*. Available from: https://www.thalesgroup.com/en/markets/digital-identity-and-security/government/eborder/eborder-abc [Accessed: 25 May 2020].

Thales Group (no year b) *High-security printing for passport: The 2020 expert's guide.* Available from: https://www.thalesgroup.com/en/markets/digital-identity-and-security/government/passport/security-printing [Accessed: 8 August 2020].

UNHCR (2015) *UNHCR's new biometrics system helps verify 110,000 Myanmar refugees in Thailand.* Available from: https://www.unhcr.org/news/latest/2015/6/55926d646/unhcrs-new-biometrics-system-helps-verify-110000-myanmar-refugees-thailand.html?query=biometric%20identity%20management%20systems Accessed: [21 November 2019].

United Nations Security Council (2017) *Resolution 2396 (2017) adopted by the Security Council at its 8148th meeting, on 21 December 2017.* New York: United Nations

Security Council. Available from: https://digitallibrary.un.org/record/1327675 [Accessed: 21 October 2019]

Annexes

Annex 1 – Approval from NSD

NSD sin vurdering

Prosjekttittel
The Digital Walls of Europe: things and bodies at the border

Referansenummer
945185

Registrert
04.06.2020 av Emilie Hermansen - emilher@uio.no

Behandlingsansvarlig institusjon
Universitetet i Oslo / Det juridiske fakultet / Institutt for kriminologi og rettssosiologi

Prosjektansvarlig (vitenskapelig ansatt/veileder eller stipendiat)
Mareile Kaufmann, mareile.kaufmann@jus.uio.no, tlf: 22850122

Type prosjekt
Studentprosjekt, masterstudium

Kontaktinformasjon, student
Emilie Hermansen, emilher@student.jus.uio.no, tlf: 46412075

Prosjektperiode
01.06.2020 - 01.10.2020

Status
04.06.2020 - Vurdert

Vurdering (1)

04.06.2020 - Vurdert

Det er vår vurdering at behandlingen av personopplysninger i prosjektet vil være i samsvar med personvernlovgivningen så fremt den gjennomføres i tråd med det som er dokumentert i meldeskjemaet 04.06.2020 med vedlegg, samt i meldingsdialogen mellom innmelder og NSD. Behandlingen kan starte.

MELD VESENTLIGE ENDRINGER
Dersom det skjer vesentlige endringer i behandlingen av personopplysninger, kan det være nødvendig å melde dette til NSD ved å oppdatere meldeskjemaet. Før du melder inn en endring, oppfordrer vi deg til å lese om hvilke type endringer det er nødvendig å melde:
https://nsd.no/personvernombud/meld_prosjekt/meld_endringer.html
Du må vente på svar fra NSD før endringen gjennomføres.

TYPE OPPLYSNINGER OG VARIGHET
Prosjektet vil behandle alminnelige kategorier av personopplysninger frem til 01.10.2020.

LOVLIG GRUNNLAG
Prosjektet vil innhente samtykke fra de registrerte til behandlingen av personopplysninger. Vår vurdering er at prosjektet legger opp til et samtykke i samsvar med kravene i art. 4 og 7, ved at det er en frivillig, spesifikk, informert og utvetydig bekreftelse som kan dokumenteres, og som den registrerte kan trekke tilbake. Lovlig grunnlag for behandlingen vil dermed være den registrertes samtykke, jf. personvernforordningen art. 6 nr. 1 bokstav a.

PERSONVERNPRINSIPPER
NSD vurderer at den planlagte behandlingen av personopplysninger vil følge prinsippene i personvernforordningen om:

- lovlighet, rettferdighet og åpenhet (art. 5.1 a), ved at de registrerte får tilfredsstillende informasjon om og samtykker til behandlingen
- formålsbegrensning (art. 5.1 b), ved at personopplysninger samles inn for spesifikke, uttrykkelig angitte og berettigede formål, og ikke viderebehandles til nye uforenlige formål
- dataminimering (art. 5.1 c), ved at det kun behandles opplysninger som er adekvate, relevante og nødvendige for formålet med prosjektet
- lagringsbegrensning (art. 5.1 e), ved at personopplysningene ikke lagres lengre enn nødvendig for å oppfylle formålet

DE REGISTRERTES RETTIGHETER
Så lenge de registrerte kan identifiseres i datamaterialet vil de ha følgende rettigheter: åpenhet (art. 12), informasjon (art. 13), innsyn (art. 15), retting (art. 16), sletting (art. 17), begrensning (art. 18), underretning (art. 19), dataportabilitet (art. 20).

NSD vurderer at informasjonen som de registrerte vil motta oppfyller lovens krav til form og innhold, jf. art. 12.1 og art. 13.

Vi minner om at hvis en registrert tar kontakt om sine rettigheter, har behandlingsansvarlig institusjon plikt til å svare innen en måned.

FØLG DIN INSTITUSJONS RETNINGSLINJER
NSD legger til grunn at behandlingen oppfyller kravene i personvernforordningen om riktighet (art. 5.1 d), integritet og konfidensialitet (art. 5.1. f) og sikkerhet (art. 32).

For å forsikre dere om at kravene oppfylles, må dere følge interne retningslinjer og eventuelt rådføre dere med behandlingsansvarlig institusjon.

OPPFØLGING AV PROSJEKTET
NSD vil følge opp ved planlagt avslutning for å avklare om behandlingen av personopplysningene er avsluttet.

Lykke til med prosjektet!

Kontaktperson hos NSD: Henrik Netland Svensen
Tlf. Personverntjenester: 55 58 21 17 (tast 1)

Annex 2 – Information letter and informed consent

Vil du delta i forskningsprosjektet

The Digital Walls of Europe: things and bodies at the border?

Dette er et spørsmål til deg om å delta i et intervju til en masteroppgave hvor formålet er å undersøke ulike sider av en grensekontrollteknologi, en såkalt ABC-gate, i Europa som innhenter biometrisk informasjon av immigranter. I dette skrivet gir vi deg informasjon om målene for prosjektet og hva deltakelse vil innebære for deg.

Formål
Formålet med masteroppgaven er å undersøke hvordan en konkret grensekontrollteknologi påvirker kontrollen av Europas yttergrenser. Problemstillingen det arbeides ut ifra er: *What are the stories told about and by the ABC-gate and how does its materiality shape EU border control?* Oppgaven baserer seg hovedsakelig på en analyse av dokumenter fra EU og bedrifter som utvikler denne teknologien. I tillegg vil det bli foretatt et lite antall korte intervjuer med personer som har arbeidserfaring med biometrisk registrering. Arbeidet med masteroppgaven varer i ca. ett år og intervjuene vil bli foretatt som ett av de siste stegene i arbeidet. Dette blir gjort for at intervjuene skal være så konkrete som mulig.

Hvem er ansvarlig for forskningsprosjektet?
Institutt for kriminologi og rettssosiologi ved Universitetet i Oslo er ansvarlig for prosjektet. Prosjektleder/veileder er Mareile Kaufmann og student er Emilie Hermansen.

Hvorfor får du spørsmål om å delta?
Du får spørsmål om å delta i studiene fordi du har relevant arbeidserfaring med teknologien det forskes på i masteroppgaven.

Hva innebærer det for deg å delta?
Hvis du velger å delta i prosjektet, innebærer det at jeg vil foreta et intervju med deg som vil vare i omtrent 30 minutter. Intervjuet vil bli tatt opp av en lydopptaker. Spørsmålene i intervjuet handler om hvordan teknologien fungerer i ditt daglige arbeid og disse spørsmålene er klargjort på forhånd. Sentrale spørsmål er for eksempel: Kan du beskrive en normal situasjon der teknologien fungerte som den skulle? Kan du beskrive en situasjon der den ikke fungerte? Hvilke faktorer påvirket da den ikke fungerte? Hvilke kroppslige faktorer kan føre til at den ikke fungerer? Hvilke ytre faktorer kan føre til at den ikke fungerer? Hva er konsekvensene for ditt arbeid når teknologien ikke fungerer?

Det er frivillig å delta
Det er helt frivillig å delta i prosjektet. Hvis du velger å delta, kan du når som helst trekke samtykket

tilbake uten å oppgi noen grunn. Alle dine personopplysninger vil da bli slettet. Det vil ikke ha noen negative konsekvenser for deg hvis du ikke vil delta eller senere velger å trekke deg.

Ditt personvern – hvordan vi oppbevarer og bruker dine opplysninger
Vi vil bare bruke opplysningene om deg til formålene vi har fortalt om i dette skrivet. Vi behandler opplysningene konfidensielt og i samsvar med personvernregelverket.

- Det er kun studenten som vil ha tilgang til lydopptakene. Prosjektleder/veileder vil kunne ha tilgang til anonymiserte, løsrevne sitater fra intervjuet i utkast av masteroppgaven.
- Navnet og kontaktopplysningene dine vil bli erstattet med en kode som lagres på en egen navneliste som er adskilt fra de øvrige dataene. Lydopptaket lagres på maskinvare som eies og driftes av den behandlingsansvarlige institusjonen. Datamaskinen er sikret med passord som kun student har kjennskap til.
- Det vil ikke brukes personidentifiserende opplysninger om deg i den ferdige oppgaven. Det innebærer at navnet ditt anonymiseres samt at det ikke vil bli oppgitt informasjon som for eksempel alder, kjønn, etnisitet, arbeidssted og bosted.

Hva skjer med opplysningene dine når vi avslutter forskningsprosjektet?
Opplysningene anonymiseres når prosjektet avsluttes/oppgaven er godkjent, noe som etter planen er 01.10.20. Lydopptakene fra intervjuet blir slettet så snart intervjuet er transkribert og innenfor prosjektets sluttdato. Ved prosjektets slutt vil anonymiserte tekstfiler av intervju beholdes for fremtidige muligheter for publisering eller oppfølgingsstudier. Det er kun studenten som vil ha tilgang til dette materialet.

Dine rettigheter
Så lenge du kan identifiseres i datamaterialet, har du rett til:
- innsyn i hvilke personopplysninger som er registrert om deg, og å få utlevert en kopi av opplysningene,
- å få rettet personopplysninger om deg,
- å få slettet personopplysninger om deg, og
- å sende klage til Datatilsynet om behandlingen av dine personopplysninger.

Hva gir oss rett til å behandle personopplysninger om deg?
Vi behandler opplysninger om deg basert på ditt samtykke.

På oppdrag fra Institutt for kriminologi og rettssosiologi ved Universitetet i Oslo har NSD – Norsk senter for forskningsdata AS vurdert at behandlingen av personopplysninger i dette prosjektet er i samsvar med personvernregelverket.

Hvor kan jeg finne ut mer?
Hvis du har spørsmål til studien, eller ønsker å benytte deg av dine rettigheter, ta kontakt med:

- Institutt for kriminologi og rettssosiologi ved Universitetet i Oslo ved Mareile Kaufmann (forsker/veileder) på epost (mareile.kaufmann@jus.uio.no) eller Emilie Hermansen (student) på epost (emilher@student.jus.uio.no) eller telefon: 46412075.
- Vårt personvernombud: Roger Markgraf-Bye på epost (personvernombud@uio.no) eller telefon: 90822826.

Hvis du har spørsmål knyttet til NSD sin vurdering av prosjektet, kan du ta kontakt med:

- NSD – Norsk senter for forskningsdata AS på epost (personverntjenester@nsd.no) eller på telefon: 55 58 21 17.

Med vennlig hilsen

Mareile Kaufmann
(Forsker/veileder)

Emilie Hermansen

Samtykkeerklæring

Jeg har mottatt og forstått informasjon om prosjektet *The Digital Walls of Europe: things and bodies at the border*, og har fått anledning til å stille spørsmål. Jeg samtykker til:

☐ å delta i intervju

Jeg samtykker til at mine opplysninger behandles frem til prosjektet er avsluttet.

(Prosjektdeltaker, dato)

Annex 3 – Interview guide

Intervjuguide til mastergradsprosjektet:

The Digital Walls of Europe: things and bodies at the border

Oppvarmingsspørsmål:

1. Hvordan ser biometrikiosken ut?
    a. Hva slags materiale er den laget av?
    b. Hvilke deler består den av?

2. Kan du fortelle meg kort om hva du gjør når du registrerer den biometriske informasjonen til en person?

3. Hvordan forløper en slik situasjon når biometrikiosken fungerer som den skal?

Hoveddel:

4. Hvordan forløper en slik situasjon når biometrikiosken *ikke* fungerer som den skal?
    a. Hvilke ytre faktorer kan påvirke dette?
    b. Hvilke faktorer ved personen kan påvirke dette? Kropp/oppførsel.
5. Jeg lurer på om du noen gang har opplevd at maskinen handler på egenhånd eller om den fører med seg noen konsekvenser som de som lagde den ikke tenkte på?
    a. Hva gjør dere når slike hendelser inntreffer?
6. Har du noen eksempler på tilfeller der personene bruker maskinen på en annen måte enn det den var tiltenkt?
7. Hva slags konsekvenser kan det ha for ditt arbeid når teknologien *ikke* fungerer/handler på egenhånd?
8. Hva slags konsekvenser kan det ha for de som registreres når teknologien *ikke* fungerer/handler på egenhånd?

Avslutning:

9. Er det noe mer du vil legge til?