

AALBORG UNIVERSITY COPENHAGEN

Master's Thesis in Techno-Anthropology

## **Incorporating Human Values in Asylum Applicant's Fingerprints**

A tripartite analysis of the Eurodac and Danish fingerprinting systems  
encompassing assemblages of actants, legal mechanisms, and social contexts

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**September 14<sup>th</sup> 2018**



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Incorporating human values into asylum applicant's fingerprints: A tripartite analysis of the Eurodac and Danish fingerprinting systems encompassing assemblages of actants, legal mechanisms, and social contexts

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## **Abstract**

In the wake of the ‘European migration crisis’ and the arguably calamitous mismanagement by the EU Member States, the rather esoteric implementation of the Eurodac Regulation has not been without its controversies. Ranging from the publicized contentions over the Dublin Convention to the more philosophical debates concerning biopolitics, this paper seeks to further the discussion in an explorative manner from the perspective of asylum applicants in Denmark. The research herein is motivated by a theoretical undertaking combining Actor-Network Theory (ANT) with a Capability Approach (CA) which is then evaluated through a Value Sensitive Design (VSD) epistemology. In so doing, ANT is utilized to map out the inherent actors that make themselves visible in the process of associating with the issue. The CA is thereafter called upon as the method through which to raise an understanding of the values and capabilities that the asylee’s consider to be important. Finally, a Value Sensitive Design approach is utilized in an effort to embrace potential suggestions of these human values into the design process of technology. It will be argued that, in the case of Eurodac and its’ implementation in Denmark, security concerns take primacy over ethical considerations, impacting on one’s privacy, sense of autonomy, and respect for the well-being of the person seeking protection. Furthermore, and regardless of which side of the digital fence one is situated, the collection, enrolment, processing, and dissemination of asylum applicant fingerprints has wide-ranging implications for both direct and indirect stakeholders. Finally, points of intervention are suggested that are undemanding and technically feasible and which seeks to redress the imbalance.

**Keywords** EU asylum policies; Eurodac; udlændingeloven; Actor-Network Theory; Capability Approach; Value-Sensitive Design

## Resumé

På baggrund af den "Europæiske Flygtninge krise", og den fallit som Europa Parlamentets flygtninge politik har vist sig at resultere i, udspilles debatten om Dublin Forordningen og det kontroversielle elektronisk fingeraftryksregister Eurodac.

Til den teoretiske diskussion som også spænder over filosofiske betragtninger om magt, overvågning og bio politik, vil denne opgave forholde sig til flygtninge politik som den opleves af asyl ansøgere i Danmark.

Mit udgangspunkt er empirisk og baseret på en kombination af Actor network Theory (ANT) samt Capability Approach (CA) og perspektiveret ved Value Sensitive Design (VSD).

ANT beforder *flygtning* som aktør i den mulige tilsynegørelse der forledes i registrerings processen. Ved at forholde aktør til CA undersøges de kompetencer som udvikles i forbindelse med ophold og proces.

Slutligt i opgaven forsøger jeg at forholde mine empiriske funderede overvejelser som human/etisk aspekt til den teknologiske design proces. Det vil blive foreslået at Nationale sikkerheds politik i den Danske kontekst tager præcedens over etisk stillingtagen og humane hensyn, med det resultat at asylansøger efterlades i en prekær position. De fulde konsekvenser af Eurodac som registrerings procedure er problematiske i en digital/globaliseret verden og tilsidesætter asylansøgers ultimative behov for beskyttelse.

I denne sammenhæng vil jeg i opgaven foreslå etisk funderede, teknologisk innovation som i udformning tager hensyn til de humane aspekter af flygtninge og deres kår.

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I can hardly imagine an attitude more dangerous, since we actually live in a world in which human beings as such have ceased to exist for quite a while; since society has discovered discrimination as the great social weapon by which one may kill men without any bloodshed; since passports or birth certificates, and sometimes even income tax receipts, are no longer formal papers but matters of social distinction.

It is true that most of us depend entirely upon social standards; we lose confidence in ourselves if society does not approve us; we are—and always were—ready to pay any price in order to be accepted by society

*We Are Refugees*  
Hannah Arendt

## INTRODUCTION

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*The term "refugee" shall apply to any person who...owing to well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion, is outside the country of his nationality and is unable or, owing to such fear, is unwilling to avail himself of the protection of that country ; or who, not having a nationality and being outside the country of his former habitual residence as a result of such events, is unable or, owing to such fear, is unwilling to return to it.*

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### - 1951 Convention Relating to the Status of Refugees

The 2015 European migration crisis arrested the collective attention of the continent's citizens, media and government representatives. The bleak picture presented by the media and politicians in the Member States painted an image of a flood, where front-line states were inundated by the overflowing migration crises. Yet this portrayal turned a blind eye to the issue of displacement on a worldwide scale. That year, more than 1.25 million first-time applicants were registered in the Eurodac database (Eurostat 2018); for the same period, the global composition of refugees, asylum seekers, and internally displaced persons accounted for 63.9 million individuals (UNHCR 2016). With 441,900 claims Germany was the primary receiver of applicants in Europe, followed by Sweden with 156,400. Just outside the EU, Turkey alone was already hosting 2.5 million refugees; meanwhile, Lebanon hosted 1.5 million accounting for 33% of its total population of 4.5 million. Meanwhile, of the 1.25 million first-time applicants in Europe, 433,505 asylum applications were rejected (European Migration Network 2016). Of Germany's 441,900 claimants, 26,654 were forcibly returned while 54,006 were repatriated under 'assisted return programmes' (Ibid). Refugees are hence entered into the big data realm where facts and figures are distorted according to the whims of the presenter. A "crisis of statistics" (The Guardian 2017a) is occurring at a time when bigger data is being equated with better decision-making in the discourse on migration management. The Sustainable Development Goals (SDGs), for example, hinges significant importance on the ability to process large data sources to measure the progress towards achieving them. As governments, public and private organizations, and business entities incorporate such initiatives, the data deluge will face ever more scrutiny (Chatham House 2018). News reports,

such as those detailing the lax effort to protect the data of vulnerable people (The Guardian 2017b) coupled with the serious security vulnerabilities faced by a platform hosting 11 major NGOs and UN agencies (Irin News 2017a) are causes for concern; the harm that could befall those vulnerable individuals that can be identifiable are serious (Irin News 2017b). Biometrics, which has long been used by the UNHCR as well as the EU for identification and verification of refugees and asylum applicants, are heralded for the ease with which to detect fraud and expedite applications. Yet this information, which, amongst others, includes fingerprints, iris scans and facial images, is subject to concerns of privacy, security and physical safety (ATHA 2015).

The Eurodac Regulation falls very much within this discussion, where asylum applicants are required to enrol their fingerprints as stipulated by the Dublin Convention. The collection, transmission and dissemination of the fingerprint data are done in an automated manner, often without the consent of the individual whose persona has now been digitized and shared across EU Member States. The explicit purposes, of the Regulation, is to establish the exact identity of the applicant for international protection and to ensure that the individual has not already applied in another Member State. Some authors have suggested that such systems are meant as a process of bordering (Adey 2012), producing a “knowable, governable entity” (Walters 2002: 573) which distinguishes between “crimmigrants and bona fide travellers” (Aas 2011: 338). This project heeds Jacobsen’s (2015) call for a science and technology studies (STS) inspired take on the issues surrounding technologies in employment of humanitarian practices. An understanding is taken which acknowledges the issue of fingerprint identification as tantamount to coding the body (Aas 2006), and focusing on the oft-neglected role of the actual collection of fingerprints for Eurodac purposes (van der Ploug 1999). The research furthermore takes issue with certain authors who approach the topic from a top-down perspective, conceivably lending endorsement to biometrics with little regard for the refugees, asylum seekers and third-country nationals affected by the system. In so doing, the paper is an attempt to rectify Achraf Farraj’s (2011) comprehensive insight into biometrics and human rights concerns, by incorporating the affected individual’s viewpoints as a focal point of the discussion. The research takes a starting point at the Sandholm asylum center in Denmark, peering into the concerns from the perspectives of the applicants, and unravelling the legal, technical, and value considerations that comprise the fingerprinting systems.

## RESEARCH QUESTION

As part of the formulation of the problem statement, several issues may be addressed in the process of seeking a response to the stated question. These issues divide themselves over the course of three different analytical approaches, which the reader will become shortly acquainted with, and are meant to be viewed as distinct viewpoints yet synergistic in its revelations. The intention is to consolidate composite understandings which, ultimately, will arrive at an aggregated finding in seeking an understanding of the following:

How may human values be incorporated into the meshwork of assemblages that compose the fingerprint systems inherent in Eurodac and the Danish fingerprint databases?

## THEORETICAL UNDERPINNINGS

Techno-anthropology is an interdisciplinary scientific analyses conducted in the manner of flâneur; as a techno-anthropologist, the analyst “wanders the paths of the domain of investigation in order to acquire in-depth knowledge about potentials, possibilities and problems he or she meets on the path” (Botin 2015: 220). In the process, we aim to “create a holistic, ethical and responsible framework for ‘seeing’ the human being from a technological perspective” (Ibid: 222). The reader will subsequently become acquainted with the three approaches taken, through which to funnel the interpretations for analysis, beginning with the Actor-Network Theory approach, traversing a Capability Approach, and ending with a Value-Sensitive Design.

## ACTOR-NETWORK THEORY

Bruno Latour has drawn attention to how artefacts can exhibit force by triggering behavioural responses from their users, while technology can have a *manipulative* twist. This force can be seen as a form of power which follows, according to Latour, a paradox: “when you simply have power – in potentia – nothing happens and you are powerless; when you exert power – in actu – others are performing the action and not you” (Latour 1986: 264-265). The action of others becomes the catalyst for the metamorphosis of power *in potentia*, to power *in actu*. As more people enter into the composition, and enable this power to be attributed to them, the amount of power variegates; the notion of power subsequently becomes less useful as power increases or decreases. This power, or force, necessitates a faithful transmission, or translation – of claims, artefacts, goods – and, following the translation model, this results in a diverse set of

personalised adaptations as it “moves from hand to hand” (Latour 1986: 268). Bruno Latour further explains the translation model and the multiplicity of a statement, or token:

*“force is never transmitted in its entirety and no matter what happened earlier, it can stop at any time depending on the action of the person next along the chain; again, instead of a passive medium through which the force is exerted, there are active members shaping and changing the token as it is moved. Instead of the transmission of the same token – simply deflected or slowed down by friction – you get, in the second model, the continuous transformation of the token”*

(Latour 1986: 268)

In this interpretation, power derives from its ability to enrol a multitude of actors; it necessitates a collective will to be enrolled, convinced and enlisted into a complete web of associations bound by an affiliation to any given token. “Society is not what holds us together, it is what is held together” (Latour 1986: 276). The task, for the sociologist, is thus to study these associations required in order for this society to function. It must, in the words of John Law, “characterize the ways in which material join together to generate themselves and reproduce institutional and organizational patterns in the networks of society” (Law 1992: 379).

Actor-Network Theory (ANT) treats social relations as network effects. These networks, it is argued, are materially homogeneous in the sense that “entities take their form and acquire their attributes as a result of their relations with other entities” (Law 1999: 3). In this way, ANT is a semiotics of materiality, focused on a belief that all materials are produced in relations and become “*performed* in, by, and through those relations” (Ibid: 4). So, the question begs, ‘what links us together’? Latour, in his explanation of a shift from an ostensive to a performative definition of society relates:

*“Society is not the referent of an ostensive definition discovered by social scientists despite the ignorance of their informants. Rather it is performed through everyone’s efforts to define it. Those who are powerful are not those who ‘hold’ power in principle, but those who practically define or redefine what ‘holds’ everyone together”*

(Latour 1986: 273)

The adhesive that thus brings society together can be seen as binding associations and relations and it thus becomes imperative to seek clarifications on who are the actants that enable (or incapacitate) these associations from forming. This ordering, of associations and dissociations, requires inquiring about a process termed as translation. Translation, as outlined by John Law,

“is a verb which implies transformation and the possibility of equivalence, the possibility that one thing (i.e. an actor) may stand for another (i.e. a network)” (Law 1992: 386). This transformative element of the translation model implies that tokens undergo a continuous process of alterations in the different contexts it passes through (i.e. individuals, organisations, cultures); the form that one such thing may hold true for one actant may have a completely differentiated definition for another. The notion of *centres of translation* view this as a result of relational effects whereby the intention is to explore the “conditions and materials that generate these effects and contain the resistance that would dissolve them” (Law 1992: 388). It is expected that a “series of strategies” (Ibid: 388) would appear to configure a unified, durable whole entity; closer inspection of such blackboxes would possibly reveal the variegated interpretations, or utilizations, of some such entity. In order to comprehend, or understand, this “whole”, the researcher must attend to the “materials and explore how these were practiced in different sites and locations” (Law & Singleton 2014: 382). That is to say, the strategies at play behind the scenes of the ‘blackbox’ under the microscope. Oftentimes these *series* of strategies are unravelled to reveal multiple strategies, rather than one ‘best-fit’; strategies furthermore facilitates the ability to expound upon the organisation of materiality and the durability and manipulability of these material forms. What holds durable at one point in time or space for one element, may be manipulated and appear less durable for another. Likewise, there exists a material heterogeneity as, “each strategic logic performs material relations in its own distinctive way” and, that “the co-existence of multiple strategic semiotics implies the co-existence of multiple forms of materiality...means that the world is a kind of kaleidoscope in which materiality is continually being organised and reorganised” (Law & Mol 1995: 286). The whole thus becomes stratified into fragmented strategies, for which each ‘layer’ contains its own material relations, or material heterogeneity. The different sites and locations, referred to above, could uncover *patchworks*, as John Law and Annemarie Mol recount:

*“it is to ask about the possibility that there are partial connections. Partial and varied connections between sites, situations, and stories...it’s to imagine that materials and social – and stories too – are like bits of cloth that have been sown together. It’s to imagine that there are many ways of sewing. It’s to imagine that there are many kinds of thread. It’s to attend to the specifics of the sewing and the thread. It’s to attend to the local links. And it’s to remember that a heap of pieces of cloth can be turned into a whole variety of patchworks. By dint of local sewing. It’s just a matter of making them.”*

(Law & Mol, 1995: 290)

## Extended Translations

Particularly for this project, Callon's suggestion of an extended theory of translation is seen as providing a useful heuristic through which to view the process of fingerprinting asylum applicants. Extended translations appeal to "all the operations that link technical devices, statements, and human beings" (Callon 1995: 50), where uncovering the translation networks enables a comprehension of the configuration between the context and the content being investigated. The purpose of charting the chain of translations, while progressively discovering that the artefacts "take on form and materiality" (Ibid: 51), is to ultimately arrive at an understanding of the "displacements and equivalences" (Ibid: 50), the various actants that are brought into play and their alliances within the translation network. Furthermore, translation provides a practical tool through which to further expand upon the Capability Approach, as will be discussed in the next section.

## CAPABILITY APPROACH

Pursuing an optimal condition of life is most often contingent on a variety of factors; access to resources and education, not to mention a multitudinous assortment of economic, political and societal constraints, means an individual is never truly independent from the wider world. More specifically, one relies on a series of interrelated, and often concealed, strategies leaving the individual with a host of choices which has been conditioned according to the environment.

Amartya Sen and Martha Nussbaum have, through the capability approach (or capability-based approach), called for an assessment mechanism in which the well-being, or quality-of-life, are considered to be "plural and qualitatively distinct" (Nussbaum 2011: 18). Sen advances an understanding of the quality of one's life on what an individual is "able to do and be, on the quality of their life, and on removing obstacles in their lives so that they have more freedom to live the kind of life that, upon reflection, they have reason to value" (Robeyns 2005: 94). These 'beings and doings', termed as functionings, are closely related to the capability to function, or the "person's freedom to choose from possible livings" (Sen 1992: 40). In other words, the capability approach espouses a focus on understanding what a person considers a fulfilled life in terms of quality, what is necessary to attain that life and what prohibits a person from achieving such a life. Freedom to pursue such life forms an essential unit of analyses from which the research can attempt to proffer suggestions.

As alluded to, it is not necessarily possible to arrive at these opportunities without considering the milieu out of which these freedoms arise; Nussbaum expounds upon Sen's substantial

freedoms as: “...not just abilities residing inside a person, but also the freedoms or opportunities created by a combination of personal abilities and the political, social, and economical environment” (Nussbaum 2011: 20). In the process of identifying a person’s capability ‘achievements’, an explicit interest is accorded to the manifest types of “entrenched social injustice and inequality” (Nussbaum 2011: 19) which appear to hinder or even prevent a person from attaining a predetermined set of functionings, or opportunities. If such prohibitive policies arise, the task is set to present the findings in a manner that correlates with the person’s well-being, or inability to attain a certain quality of life. Identifying such impasses would equip a researcher with the capacity to seek resolutions, bearing in mind the plurality of such solutions, and the distinct setting from which such findings occur. Martha Nussbaum provides a preliminary list of central capabilities that enable individuals from seeking a dignified life, which administrations and governments should strive to ensure (Nussbaum 2011: 33-34):

1. *Life*. Being able to live to the end of a human life of normal length; not dying prematurely, or before one’s life is so reduced as to be not worth living.
2. *Bodily health*. Being able to have good health, including reproductive health; to be adequately nourished; to have adequate shelter.
3. *Bodily integrity*. Being able to move freely from place to place; to be secure against violent assault, including sexual assault and domestic violence; having opportunities for sexual satisfaction and for choice in matters of reproduction.
4. *Senses, imagination, and thought*. Being able to use the senses, to imagine, think, and reason—and to do these things in a “truly human” way, a way informed and cultivated by an adequate education, including, but by no means limited to, literacy and basic mathematical and scientific training. Being able to use imagination and thought in connection with experiencing and producing works and events of one’s own choice, religious, literary, musical, and so forth. Being able to use one’s mind in ways protected by guarantees of freedom of expression with respect to both political and artistic speech, and freedom of religious exercise. Being able to have pleasurable experiences and to avoid nonbeneficial pain.
5. *Emotions*. Being able to have attachments to things and people outside ourselves; to love those who love and care for us, to grieve at their absence; in general, to love, to



grieve, to experience longing, gratitude, and justified anger. Not having one's emotional development blighted by fear and anxiety. (Supporting this capability means supporting forms of human association that can be shown to be crucial in their development.)

6. *Practical reason*. Being able to form a conception of the good and to engage in critical reflection about the planning of one's life. (This entails protection for the liberty of conscience and religious observance.)
7. *Affiliation*. (A) Being able to live with and toward others, to recognize and show concern for other human beings, to engage in various forms of social interaction; to be able to imagine the situation of another. (Protecting this capability means protecting institutions that constitute and nourish such forms of affiliation, and also protecting the freedom of assembly and political speech.) (B) Having the social bases of self-respect and nonhumiliation; being able to be treated as a dignified being whose worth is equal to that of others. This entails provisions of nondiscrimination on the basis of race, sex, sexual orientation, ethnicity, caste, religion, national origin.
8. *Other species*. Being able to live with concern for and in relation to animals, plants, and the world of nature.
9. *Play*. Being able to laugh, to play, to enjoy recreational activities.
10. *Control over one's environment*. (A) Political. Being able to participate effectively in political choices that govern one's life; having the right of political participation, protections of free speech and association. (B) Material. Being able to hold property (both land and movable goods), and having property rights on an equal basis with others; having the right to seek employment on an equal basis with others; having the freedom from unwarranted search and seizure. In work, being able to work as a human being, exercising practical reason and entering into meaningful relationships of mutual recognition with other workers.

The list, while catalogued in a manner of importance, provides a generalized purvey of central capabilities which policy-makers should endeavour to ensure as a basic necessity; nevertheless, certain issues may appear to take ascendance over others, gained through an understanding of local actors' perception of significance. Furthermore, in providing a list of crucial areas for a government to ensure the individual is capable of leading a dignified life, Nussbaum is keen to

stress that *tragic choices* may appear to manifest themselves in the process (Nussbaum, 2011). The notion of *tragic choices* posits that, in the course of investigation, it may become apparent that, in an attempt to satisfy one's functioning, an individual may have to forego or sacrifice another functioning; alternatively, ensuring the freedom to achieve a certain functioning may support the capacity to achieve other capabilities. The key to providing suggestions that safeguard all, or as many capabilities as possible, lies in devising a robust framework. A first step entails an understanding that good policies are ones which enable a person from choosing out of practical reasons, wherein the choice of living a certain life is not obstructed or deemed as unique to the point of attempting to coax them into a homogeneously acceptable version of life. Augmenting an individual's freedom leads to the capacity to choose from further opportunities that amplify a life of value. Differentiating somewhat from Sen's conceptualisation of capabilities, Nussbaum focuses on the skills and personality traits, of the individual in question, as a component feature of capabilities. The capability set an individual is able to achieve is dependent, according to this view, on different types of capabilities, which Nussbaum appropriates into three categories of capabilities as being the basic, internal, and combined capabilities. Basic capabilities are discernible as the "innate abilities" that people are conditioned with and which make later training and development possible. Internal capabilities are differentiated as the "states of a person" that have been trained or developed as a response to economic, social, familial and political environment. The combined capabilities, which Nussbaum likens to Sen's "substantial freedoms", are thereafter defined as "internal capabilities plus the social/political/economic conditions in which functioning can actually be chosen" (Nussbaum 2011: 22).

In conceptualising the combined capabilities of individuals it becomes apparent that, in certain situations, a society could well provide the opportunity to achieve certain functionings yet inadequately provide means through which to facilitate individual capabilities; to give an example, a nation-state may provide the possibility to participate in elections and vote, yet have a poor education sector that prevents individuals from accessing an environment conducive to learning in order to participate in those elections in a meaningful manner. Jonathan Wolff and Avner de-Shalit have argued, in their book "Disadvantage" (2007), for a conceptual understanding of *fertile functioning* and *corrosive disadvantage*. 'Fertile functionings' are seen to promote capabilities of other sorts; a basic example could show that the provision of work enables an individual to secure for him/herself such a capability as control over one's environment and bodily health. Conversely, 'corrosive disadvantage' maintains that

deprivations or disadvantages can have far-reaching effects on other aspects of life. Understanding fertile functionings and/or corrosive disadvantages facilitates the possibility to propose optimal points of intervention in public policies or societal, economical, and political spheres of life. Martha Nussbaum likens this to the aforementioned understanding of *tragic choice*, wherein the promotion of a certain capability may diminish another. In a technological perspective, the choice of promoting big data collection for the purposes of better medical diagnosis oftentimes has the unfortunate side-effect of privacy infringement.

According to Ingrid Robeyns (2007), it has been argued that the capability approach is limited as being too individualistic, paying inadequate attention to groups as well as social structures. Amartya Sen has countered the first claim of individualism by noting the importance that the capability approach pays to *social opportunities*, which posits that a person's possibilities are greatly dependent on "its' relations with others and on what the state and other institutions do" (Dreze & Sen 2002: 6). The capability approach is thus guided by an understanding that social and environmental circumstances enable or impede upon a persons' ability to convert commodities into functionings; furthermore, the theoretical distinction between capabilities and functionings states that a persons' ability to choose from a specific functioning correlates with a researched set of capabilities, and are shaped in accordance with societal structures and institutions, which in turn influence the choices a person is able to make. The social context in which a person finds himself situated within heavily affects the ability to convert commodities and the freedom to choose functionings out of a capability set, as is made obvious in the above visualisation. Accordingly, the crucial aspect that the capability approach delves into are the social determinants which enable or inhibit a persons' capabilities, which permit a choice of functionings. This cognizance, as to the significance that societal structures and institutions afford on an individual's opportunities and constraints, is summarily illustrated in Figure 1:

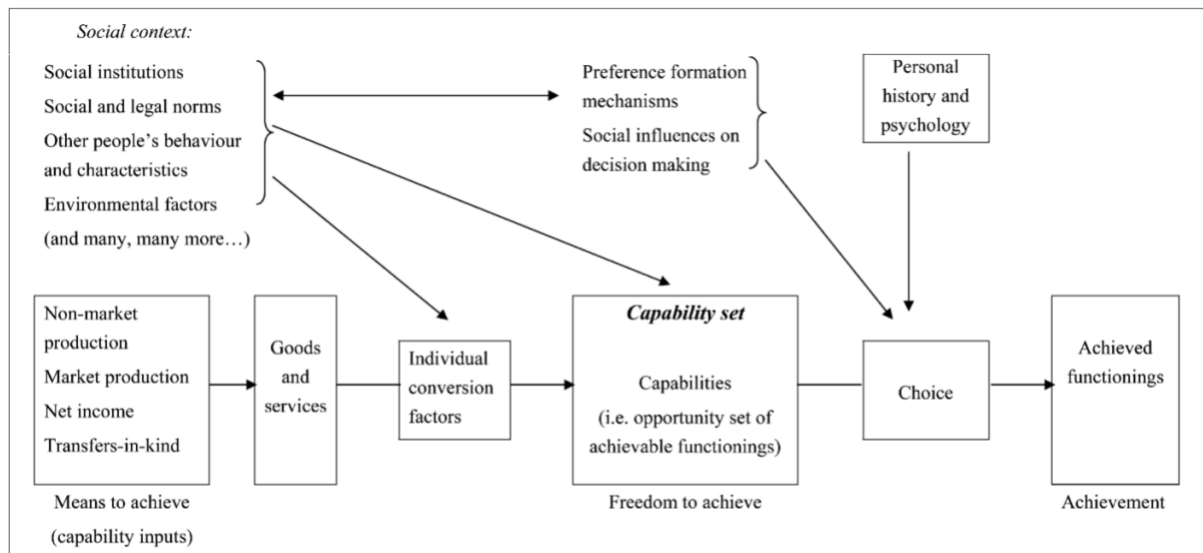


Figure 1 A stylised non-dynamic representation of a person's capability set and her social and personal context.  
(From Robeyns 2007: 98)

### Sen's moment of *conversion*, ICT, and Actor-Network Theory

Amartya Sen has written on the nature of commodities, in *Commodities and Capabilities* (1999), and the need to go beyond simply viewing the characteristics of a thing, towards an understanding that accounts for “what the person succeeds in *doing* with the commodities and characteristics at his or her command” (Sen 1999: 6). Sen's example conceives the bicycle as a commodity which facilitates an individual's functioning, yet which is highly dependent on the context in which the individual finds him/herself (i.e. being physically handicapped) as well as the utilization function (i.e. being able to cycle around). For capability theorists the *conversion* of a commodity, with its inherent characteristics, into potentially achieved functionings is seen to be influenced by personal and social factors. The ‘moment of conversion’, as it were, becomes apparent after a person has adapted the artefact in a manner that is attuned to that individual's needs, and has subsequently put the commodity to use. Conversion thus encapsulates the stage wherein a commodity is made fit-for-purpose for the individual and in a manner that further advances an individual's functionings; in the example of the bicycle, the artefact in question capacitates the individual with the ability to travel, to work for his/her salary or to visit friends and nurture relationships. Kim Kullman and Nick Lee (2012) have called for an exploration of Sen's use of *conversion*, arguing for an expanded notion that embraces a more relational understanding of commodities wherein “designed materials are not converted by individuals or even humans alone, but by situated arrangements of people, technologies and environments” (Kullman & Lee 2012: 50). Furthermore, Sen's approach to conversion views the process in a linear manner, which Kullman and Lee (2012)

claim as being too reductive and instrumental. The authors call upon Bruno Latour and his idea of translation as a useful means through which to forge ahead with an augmented understanding of conversion, which will be discussed further in the following section. However, prior to explicating upon the linkages of capability approach and actor-network theory, particularly the notions of conversion and translation, the next paragraph will illuminate on the role of technology in the capability approach.

#### Technology and the capability-based approach

There is a growing appreciation of the role that technology plays in our daily lives, and the significance of that role in shaping human behaviour. Amartya Sen has weighed in on this discussion, from a capability approach-perspective, by conversing about the role of bicycles, guns and mobile phones (Sen 1999). Sen underlines the importance of understanding what the technology enables us to do, rather than falling into the trap of Karl Marx's "commodity fetishism – to regard goods as valuable in themselves and not for (and to the extent that) they help the person" (Sen 1999: 19). In his interpretation Sen views commodities and technological artefacts as potentially freedom-enhancing, in the case of the bicycle and mobile phones, or having adverse impacts, as in the case of guns. Furthermore, Sen argues that, in order to move beyond 'commodity fetishism', we must endeavour to understand what is made possible by the commodity under investigation; a person's functionings, in this regard, are closely connected to properties of the person, for example being physically handicapped, as well as the social and physical environment, i.e. legislations that protect bicyclists and road infrastructure that promote safe cycling. Capabilities, according to Justine Johnstone (2007), are thus "...not properties of the person only, but of persons in particular circumstances, where those circumstances include both inner and outer dimensions" (Johnstone 2007: 86). The ontological disposition of the capability approach conjectures that capabilities are contextual and relational in nature. That is to say that a person's capability to achieve a certain functioning is highly contingent upon an individual's social, political and environmental circumstance and the "relations in which people stand both to other people and to *things*" (Lawson 2010: 211). Things, with respect to the approach taken in this research, encompass technological artefacts and devices which are seen to enhance or diminish a person's ability to achieve a certain functioning. Clive Lawson (2010) concurs with Sen's view that technology is generally seen to extend human capabilities, but stresses that this is only possible when they are "enrolled in both technical and social networks of interdependence" (Lawson 2010: 211-212). In order to do this, Lawson enlists Bruno Latour's actor-network theory (ANT) to understand and

demonstrate how technical objects, or commodities, “take on their properties, characteristics, powers or whatever only in relation to the networks in which they stand” (Ibid: 212). Unravelling this dependency, on the networked effects upon a technology, thus enables the researcher to attend to the various facets of the various dimensions that extend or diminish such ‘freedom-enhancing’ values from occurring. Ilse Oosterlaken (2011) contends that, in undertaking such a perspective on technology and the capability approach, the investigation should seek to clarify such issues as: (a) what capabilities are worthwhile extending, and for whom, and (b) what mechanisms are inscribed in a given context and how are they seen to be enacted in terms of enabling or diminishing the capabilities discerned in part A. It is crucial to underscore the case-by-case nature of suggested outcomes, and refute the prospect of a ‘best practice’ scenario. Nevertheless, coming to grips with these understandings helps advance an awareness of what interventions can be postulated to extend capabilities. Moreover, the outcome from such an enquiry can serve to demonstrate the point at which Sen’s moment of conversion occurs. The following section will briefly hark back to the previously mentioned notions of conversion and translation, for the express purpose of shepherding the reader into the next chapter detailing value-sensitive design.

#### Commodity conversion and translating artefacts

As previously described, the moment of conversion occurs when an individual is seen to put a commodity into situated use, which entails an adapted utilization fit for personal needs. It follows that, from this conversion, a commodity enables an individual to increase or diminish his/her capabilities. This understanding, of commodity conversion, has been said to inadequately account for the often multiple, and unpredictable, ways in which an artefact can be ‘put to use’. Actor-network theory, and specifically Bruno Latour’s concept of translation, can prove to be beneficial for interpreting the “collective and unpredictable aspects of conversion” (Kullman and Lee 2012: 52). In its essence, translation accounts for the process whereby two disparate things become one, or equivalent; it “implies transformation, and the possibility of equivalence, the possibility that one thing (i.e. an actor) may stand for another (i.e. a network)” (Law 1992: 386). Translation predicates the heterogeneous nature of technological practices, as a diverse network composed of artefacts, people, infrastructures, things and a multitude of other related elements, which must align often contradictory interests in a coherent, and whole, manner. This involves an ongoing process of transformations and associations, from which emerges a common orientation. Accordingly, it becomes “necessary to redefine who is acting, why it is necessary to act together, what are the boundaries of the

collective, how responsibility should be allocated, what are the best metalanguages to define collective action” (Latour 1986: 276). As a result, the process of translation is seen to form a core part of the actor-network theory, which will unfold over the course of the succeeding analysis chapters.

## VALUE-SENSITIVE DESIGN

Information technology (IT), and information communication technology (ICT), has been said to be “ubiquitous and pervasive”, likewise regarded as a “universal technology” and configures as both a metatechnology and a constitutive technology (Van den Hoven 2008: 49). It is also, rather conspicuously yet oft-neglected, about information. Studies in computer ethics therefore requires us to take a diligent approach that seeks to detect “the effects they have on people, how they constrain and enable us, how they change our experiences, and how they shape our thinking” (Van den Hoven 2008: 50). Probing into the types of institutional and material conditions that must be acknowledged and addressed, for an applied ethics research to be beneficial allows us to deal with previous short comings such as the “fallacy of the path-dependent dilemma” (Van den Hoven 2008: 59).

Acknowledging the fact that IT and ICT has become such an inescapable, and increasingly omnipresent, component of our society enables us to perceive the ways in which it determines our courses of action; furthermore, it makes us conscious of the fact that it “impacts our social lives not only positively, but sometimes negatively” (Friedman 1999: 2). It is in this contested arena into which Value-Sensitive Design (VSD) offers a method of investigation that addresses the development and design of technology. While computer ethics generally cultivates an appreciation of significant values, that manifest themselves at the intersection of computer technology and human lives, VSD draws on moral epistemology in an effort to embrace these human values into the design process of technology.

Values, in this way, are understood as aspects that “a person or group of people consider important in life” and which “depend substantively on the interests and desires of human beings within a cultural milieu” (Friedman et al. 2008: 71). Of the multitudinous values, VSD is “primarily concerned with values that center on human well being, human dignity, justice, welfare, and human rights” (Friedman 1999: 3). Figure 2, neatly summarizes some of the commonly referenced human values.



**TABLE 4.1 Human Values (with Ethical Import) Often Implicated in System Design**

Human Value	Definition	Sample Literature
Human welfare	Refers to people's physical, material, and psychological well-being	Friedman et al. (2003), Leveson (1991), Neumann (1995), Turiel (1983, 1998)
Ownership and property	Refers to a right to possess an object (or information), use it, manage it, derive income from it, and bequeath it	Becker (1977), Friedman (1997b), Herskovits (1952), Lipinski and Britz (2000)
Privacy	Refers to a claim, an entitlement, or a right of an individual to determine what information about himself or herself can be communicated to others	Agre and Rotenberg (1998), Bellotti (1998), Boyle et al. (2000), Friedman (1997b), Fuchs (1999), Jancke et al. (2001), Palen and Dourish (2003), Nissenbaum (1998), Phillips (1998), Schoeman (1984), Svensson et al. (2001)
Freedom from bias	Refers to systematic unfairness perpetrated on individuals or groups, including preexisting social bias, technical bias, and emergent social bias	Friedman and Nissenbaum (1996), cf. Nass and Gong (2000), Reeves and Nass (1996)
Universal usability	Refers to making all people successful users of information technology	Aberg and Shahrmeiri (2001), Shneiderman (1999, 2000), Cooper and Rejmer (2001), Jacko et al. (1999), Stephanidis (2001)
Trust	Refers to expectations that exist between people who can experience goodwill, extend goodwill toward others, feel vulnerable, and experience betrayal	Baier (1986), Camp (2000), Dieberger et al. (2001), Egger (2000), Fogg and Tseng (1999), Friedman et al. (2000a), Kahn and Turiel (1988), Mayer et al. (1995), Olson and Olson (2000), Nissenbaum (2001), Rocco (1998)
Autonomy	Refers to people's ability to decide, plan, and act in ways that they believe will help them to achieve their goals	Friedman and Nissenbaum (1997), Hill (1991), Isaacs et al. (1996), Suchman (1994), Winograd (1994)
Informed consent	Refers to garnering people's agreement, encompassing criteria of disclosure and comprehension (for "informed") and voluntariness, competence, and agreement (for "consent")	Faden and Beauchamp (1986), Friedman et al., (2000b), The Belmont Report (1978)
Accountability	Refers to the properties that ensure that the actions of a person, people, or institution may be traced uniquely to the person, people, or institution	Friedman and Kahn (1992), Friedman and Millett, (1995), Reeves and Nass (1996)
Courtesy	Refers to treating people with politeness and consideration	Bennett and Delatree (1978), Wynne and Ryan (1993)
Identity	Refers to people's understanding of who they are over time, embracing both continuity and discontinuity over time	Bers et al. (2001), Rosenberg (1997), Schiano and White (1998), Turkle (1996)
Calmness	Refers to a peaceful and composed psychological state	Friedman and Kahn (2003), Weiser and Brown (1997)
Environmental sustainability	Refers to sustaining ecosystems such that they meet the needs of the present without compromising future generations	Hart (1999), Moldan et al. (1997), Northwest Environment Watch (2002), United Nations (1992), World Commission on Environment and Development (1987)

*Figure 2 Human values (with ethical import) often implicated in system design  
(from Friedman, B Kahn Jr., PH and Borning A 2008)*

### Conceptual, Empirical, and Technical Investigations

VSD postulates that technology is not value-neutral, underlined by an understanding that “an artifact (e.g. systems design) emerges through iterations upon a process that is more than the sum of its parts” (Friedman et al. 2002: 2), and that “the technology in some ways reflects designers’ values” (Friedman 1999: 6). VSD employs a methodology which “consists of a three-pronged iterative approach” (Cummings 2006: 702), examining conceptual, empirical, and technical issues in relation to the design of a technological artifact.

The conceptual phase of the investigation apprises of “philosophically informed analyses of the central constructs and issues under investigation” (Friedman & Kahn 2003: 187). Conceptual investigations require the researcher to familiarize oneself with the artifact in



question, and consider in what ways “stakeholders might be socially impacted by one’s technological designs” (Friedman et al. 2002: 3). Stakeholders encompass both direct and indirect, where “direct stakeholders are defined as those who interact directly with a technology, while indirect stakeholders are those who are peripherally connected to the technology” (Cummings 2006: 703). Indirect stakeholders are routinely under-addressed, or neglected altogether, in the design of such technological systems. Attending to these potential benefits and/or harms to the stakeholders enables the researcher to be cognisant of how the identified human values would likely be supported or diminished. The enumerated human values are likely to change in the course of the research, due to the ever-changing dynamics of technology, both in technical terms and social ones as well. Friedman, Kahn and Borning (Friedman et al. 2008: 72) usher a list of questions that help guide the conceptual investigation:

- Who are the direct and indirect stakeholders affected by the design at hand?
- How are both classes of stakeholders affected?
- What values are implicated?
- How should we engage in trade-offs among competing values in the design, implementation, and use of information systems (e.g., autonomy vs. security, or anonymity vs. trust)?
- Should moral values (e.g., a right to privacy) have greater weight than, or even trump, nonmoral values (e.g., aesthetic preferences)?

Conceptual investigations often “need to be informed by empirical investigations of the human context in which the technical artifact is situated” (Friedman et al. 2008: 3).

Empirical investigations utilize “quantitative and qualitative measurements to evaluate the design from both a technical and value assessments approach” (Cummings 2006: 703). At this point of the study social science research methods prove useful, such as “observations, interviews, surveys, experimental manipulations, collection of relevant documents, and measurements of user behaviour, and human physiology” (Friedman et al. 2002: 3). The outcome of implementing such methods facilitates the researcher to comprehend “understandings, contexts, and experiences of the people affected by the technological designs” (Friedman & Kahn 2002: 1187). Subsequently this can feed into “how the designer can support or detract from value conflicts” (Cummings 2006: 703). Again, Friedman, Kahn and Borning (Friedman et al. 2008: 73) outline various guiding questions in which the researcher could focus on:

- How do stakeholders apprehend individual values in the interactive context?
- How do they prioritize competing values in design trade-offs?
- How do they prioritize individual values and usability considerations?
- Are there differences between espoused practice (what people say) compared with actual practice (what people do)?
- Moreover, because the development of new technologies affects groups as well as individuals, questions emerge of how organizations appropriate value considerations in the design process. For example, regarding value considerations, what are organizations' motivations, methods of training and dissemination, reward structures, and economic incentives?

The technical phase and the empirical phase may appear to focus on similar investigations yet they differ markedly in their unit of analysis as the technical phase “focuses on the technology while the empirical phase focuses on the human interaction with the technology” (Cummings 2006: 703).

The technical investigation, with the aforementioned focus on technology, requires an examination of the technical design. This becomes conceivable only by opening the black box of the artifact in question, in order to “assess how they support particular values, and how values identified in the conceptual investigation could be best supported by different design possibilities” (Cummings 2006: 703). These “value suitabilities” follow from properties of the technology, as Friedman, Kahn and Borning claim (Ibid: 73): “a given technology is more suitable for certain activities and more readily supports certain values while rendering other activities and values more difficult to realize”. This phase, moreover, involves “identifying values, and then identifying and/or developing technical mechanisms and designs that can support these values” (Friedman & Kahn 2003: 1187).

Ultimately, the research undertaken within a VSD framework should be “used in consort with other existing technical methods” (Friedman 1999: 3), and have the potential, according to a Value-Sensitive Design workshop organized by Batya Friedman, to contribute uniquely in the following ways (Ibid: 3-4): proactively oriented toward influencing design, carrying critical analyses of human values into the design and engineering process, enlarging the scope of human values, and broadening and deepening the methodological approaches. The following chapter describes the methodological approaches conducted in the duration of this project.

## METHODOLOGY

The chapter herein gives a description of the methodological considerations made in the process of conducting the research for this project. Special attention was paid to investigation methods that would be feasible, taking into consideration the context in which this study took place, and that would enable an understanding of the milieu from the perspective of the individuals affected by the fingerprinting technologies and the complex system it is situated within. A pragmatic ethical strategy (Liamputtong 2007) is adhered to, considering the need to ask the asylum applicants to go through their experiences again and to ensure they feel safe in doing so. Assurances have been given that their names and other personally identifiable information would be kept confidential in this report; pseudonyms, containing only the first letter of their names, are used to associate the individual with their statements in the following report.

In the case of this research, the research took place at the site in which asylum seekers formalize their deliberation to seek asylum status in Denmark: “Center Sandholm”. The Sandholm Center is part of a network of asylum centres in Denmark, operated and managed by the Danish Red Cross, numbering a total of eight centres situated in Jylland (Jutland), Sjælland (Zealand), and Bornholm. Further in depth description of the setting will be described in the section entitled ‘case study site’.

## CASE STUDY

In accordance with the research questions, the investigation is inquisitive of the operational links - in the instance of fingerprinting technology and the complex system it is embedded in - that become traceable over the course of analysis. The case study approach taken in this report takes inspiration from Bent Flyvbjerg’s 2006 article detailing “Five Misunderstandings about Case-Study Research”. It is argued that a critical case is being followed through this report, wherein the interview subjects reflect the broad spectrum of applicant ‘types’ in the Danish Udlændingeloven. Those consists of individuals who apply for asylum and are considered as third-country nationals (Interview # 3 -6, Appendix II) or stateless (Interview # 2, Appendix II). Furthermore, a third type of applicant is identified as someone who applies for asylum in Denmark yet originates from another EU member state (Interview # 1, Appendix II). In this way, the interview respondents reflect a ‘most-likely’ type of critical case scenario wherein the intention is to provide irrefutable evidence that supports the propositions made herein; in other words, “if it is valid for this case, it is valid for all (or many) cases” (Flyvbjerg 2006: 230).

As has been mentioned, the case under investigation in this report concerns the application of fingerprinting technology in the asylum registration process for newly arrived asylee's at Sandholm Center. The research enquires into the facets of the technology that refugees themselves traverse and as perceived by the asylum seekers themselves, by conducting semi-structured interviews with asylum seekers at the Center. In this way, the research conducted herein situates itself within the realm of a real-life phenomenon to understand the behavioural effects of the fingerprinting technology, yet makes no attempt to manipulate that behaviour.

The case study contemplates the theoretical approaches, utilized for the analysis chapter, and which is substantiated by the empirical sources of evidence utilized for this research: semi-structured interviews with asylum seekers, and publicly available archival records that come to be seen as pertinent for the purpose of elucidating the labyrinthine phenomenon that is asylum registration. The archival footage relates primarily with national, as well as supranational, rules, and regulations and used in a manner with which to paint a comprehensive picture of what the interview subjects allude to.

The purpose, of combining the three theoretical underpinnings utilized as part of the analysis, is to develop a canvas that resembles a description of the 'heterogeneous engineering' (Callon, 1995) that become apparent in the process of study and to pinpoint areas of possible intervention that would enable the asylum seekers to improve their situation. Furthermore, the theories coalesce in a sense-making manner whereby a process of theory triangulation offers the possibility to discover different perspectives. Uwe Flick's (2002) understandings of 'hybridization' validates this researcher in utilizing a pragmatic approach in combining interviews and secondary data (i.e. laws & regulations) and avoiding a "restricting subscription to a specific methodological discourse" (Flick 2002: 459). Furthermore, an ontological hybridization is taken which combines multiple theoretical approaches and methods, as an endorsement of Jacobsen's (2015) call for an STS approach to understanding the "digital refugee body" (Jacobsen 2015: 155) and the political and social context in which it situates itself. Actor-Network Theory is used, in this sense, in a descriptive manner to paint this picture of the refugee body in lieu with the fingerprint mechanisms; meanwhile Capability Approach and Value Sensitive Design are employed as a framework within which constructive suggestions of human empowerment through the assemblages could emerge. Justine Johnstone (2007) suggests a broadened capability approach which follows a "*descriptive* as well as normative agenda...[besides being] a *justice* as well as an ethics agenda" (Johnstone 2007: 81) where a concern is paid to the expansion and distribution of capability and functions.

Consequently, the research will contribute to the field of refugee studies, albeit from the perspective of science and technology studies (STS), and where the explicit aspiration is to aid in unravelling the asylum application process for third-country nationals, stateless persons, and citizens of EU Member States. The aim is to further empower asylees with regards to understanding the structural implications of recording fingerprint data. In the process of evaluating the substance of the fingerprinting artefact, specifically the network in which it is embedded in, and the values and issues that the interview subjects identify, the theoretical approach will attempt to provide an adjudicatory role. It is also hoped that the findings will also be seen as benefitting the organizations and governments which partake in such endeavours.

### Ethical considerations

By the very nature of relationships that arise in a research context, between researcher and participant, the ethical implications of such associations are worth paying considerable attention to. As has been made evidently apparent, research of this kind, in which interview subjects are in their uncertain situation and suspicious of the interviewer and his interests, a particular flexibility and empathy is needed for the purpose of fulfilling the notions of informed consent. Following in the footsteps of medical, legal and research contexts, the research conducted herein acknowledges the importance paid to notions of 'beneficence' and respect of persons, as espoused by Mackenzie, McDowell & Pittaway (2007). Understanding the vulnerable conditions that asylum seekers situate themselves in, in general and particularly more so in the case of this research, plays an important role in this research. Interview subjects were approached over a period of two months prior to the actual interview, thereby permitting reciprocal trust to develop over time. The slow and reciprocal establishment of relations further allowed the respondents to tell their stories over time, in acknowledgement of the fact that they may have suffered from traumatic experiences. The researcher was already aware of their histories by the time the interviews were actually conducted and, as a result, the interviews were merely seen as a continuation of the conversation, albeit in a controlled environment with a recording device. Prior to the interview, the interviewees were made aware of the voluntary nature of the interviews and the fact that their names and other identifiable information would not be used in the research paper. This procedure was followed for two main reasons: (a) to ensure that the interviewees gave consent over the information they provided and trusted the interviewer to act responsibly with that information, and (b) to contend with the potentiality that the interviewee's responses were not considered as part of a survival strategy on the part

of the respondents. Despite having attempted to address issues most commonly encountered in refugee studies, methodological shortfalls could nonetheless have been perceived to occur. In what follows is an attempt to account for such drawbacks.

### Limitations

Admittedly, the research suffers from an obvious absence of control groups that would substantially aid in supporting arguments made in reference to the causal links between fingerprinting technologies and refugee empowerment. Nevertheless, attempts have been made to overcome this glaringly obvious omission by conducting interviews with individuals each coming from distinctly unique situations and experiences. The prolonged exposure to the research site, in this way, enabled the researcher to become acquainted with individual stories, and to derive a variety of representative asylum ‘types’ each with unique circumstantial scenarios in which their asylum registration occurred. The types referred to are meant in terms of their background story, whereby their reasons for applying for asylum are seen to be distinctive and were chosen as interview subjects for the express reason that their cases represented a broad spectrum of conceivable asylum scenarios in lieu with critical case scenarios. Furthermore, the ongoing contact with these respondents prior to the interview stage made it feasible to provide the interviewees with an understanding of what the research entailed and for making it clear that participation was entirely voluntary. Although the researcher maintained an open-eye for any and all participants, a pragmatic approach was necessary which restricted the pool of potential interview subjects to those with a level of English that would comprehend the purpose of the study, and yet which nonetheless came from diverging asylum circumstances which provided the research with a wide variation of factors. As a result, issues of self-selection bias could be perceived to have played a role in the outcome with a propensity of interviewing individuals with a certain degree of education; nevertheless, as will become evident in the research findings, a general lack of understanding of the fingerprinting system would render similar results if non-English speakers were to be involved as part of the research.

### THE CASE STUDY ‘SITE’

The case in which this study is concerned with pertains to the Sandholm asylum reception center in which asylum seekers announce their motivation to seek refuge in Denmark, the status of which is made official through a registration process conducted by the National Police (Danish: Rigspolitiet). Specifically, the case study delves into the fingerprinting technology, employed as a vital cog in the registration ‘machine’, and the experiences of individual asylum

seekers with the inherent, yet abstruse, procedures. The case study sets about to take a detailed investigation of the fingerprint system, in both its physical and abstract manifestations, as perceived by the individuals who have been subjected to the process. In order to make this tenable, the research was conducted over a time-span of 3 months, from May 15<sup>th</sup> to August 15<sup>th</sup>, during which the researcher made himself available for activities at Sandholm as a Red Cross volunteer. The activities included football coaching of male asylum seekers between the ages of 14 and 40, primarily on Tuesdays, but also on the odd weekday when it was logistically feasible. Furthermore, the researcher regularly participated in the information café, a large lounge room which housed free-to-use computers, coffee/tea and recreational activities. Researcher-participant relationships will be further discussed in the next section, while attention will be presently re-established to the field study site.





*Satellite imagery of Sandholm Asylum Center  
Photo courtesy of Google Maps*

The “Center Sandholm[’s] famed yellow buildings”<sup>1</sup> (translation and emphasis own) are set amongst the background of a two-lane road that provides a tree-lined route from Sandholmgårdsvej to Sandholmlejren (Sandholm camp). To the left of the thoroughfare lies a car-park facility with a capacity for 30-40 vehicles at any one time, whilst on the right side a large, grassy field contrasts the man-made with the natural. On occasion, when the sun has reached its’ climax for the day, one might find an individual splayed out beneath the tree trunk, using the shade as protection from the sun’s rays while waiting for an appointment.

<sup>1</sup> Center Sandholm, Red Cross Denmark homepage, url: <https://www.rodekors.dk/vores-arbejde/roede-kors-asyl/asylcentre/center-sandholm>, accessed on 29/05/2018



Sandholmgårdsvej runs parallel to the field, the thoroughfare, and the parking lot and is the only paved route that leads towards Copenhagen, the capital city, or Allerød, which is the biggest town in the vicinity.

The aforementioned ‘famed yellow buildings’ loom large, and majestic amidst this backdrop, and yet it remains visibly partitioned off from the outside world through the imposition of walls and fences. Red Cross staff are keen to point out that it’s to prevent the asylum seekers, who are temporarily inhabiting the center, from external harm; ironically, the Center Sandholm is a former military facility housing the Royal Guard<sup>2</sup>, and which was recommissioned by the Danish Red Cross in 1985 to function as the reception center for refugees. The Center has an accommodation capacity for three hundred asylum-seeking residents, according to one Red Cross official, but has the potential to house up to six hundred occupants on a provisional basis<sup>3</sup>. Presently, Sandholm Center is home to the Danish National Police and the Immigration Office, which is situated near the beginning of the Center, as a distinctly separate entity within the compounds; the area administered by the Danish Red Cross and that of the National Police, for example, are divided by fenced partitions.

The process, for newly arrived asylum seekers, involves gaining admission to the Center by stating the intention to do so to a Red Cross individual manning the entrance at the gate. Depending on the time of day at which the individual arrives at the Center, the person can either be expected to start the registration process on the day, or the next workday when Police authorities have resumed office hours. In the event that the individual arrives after-hours, the Red Cross will begin preliminary registration of the individual to be housed, with information including a person’s name, country of origin, and date of birth, as well as a fingerprint scan in similar manner to that conducted by the National Police. It should be noted that the Red Cross creates this registration for purposes of keeping a record of the individuals at the Center; nevertheless, this information is also shared with the National Police, who then expand upon this relatively basic set of data once the official application for asylum-status registration has begun. The asylee will either be told by the Red Cross staff personally or else have the possibility to check TV screens, set up around the premises, for their case number and the

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<sup>2</sup> Sandholmlejr, Gyldendal Den Store Dansk homepage, url: [http://denstoredanske.dk/Samfund, jura og politik/Jura/Internationale\\_hj%C3%A6lpesystemer/Sandholmlejr](http://denstoredanske.dk/Samfund,_jura_og_politik/Jura/Internationale_hj%C3%A6lpesystemer/Sandholmlejr), accessed on 29/05/2018

<sup>3</sup> Sandholmlejr, Kulturarv ‘fakta om Asylcenter’, url: [http://www.kulturarv.dk/1001fortaellinger/da\\_DK/sandholmlejr-sandholmgardsvej-40-3460-birkerød](http://www.kulturarv.dk/1001fortaellinger/da_DK/sandholmlejr-sandholmgardsvej-40-3460-birkerød), accessed on 29/05/2018

expected appointment time at the Police and Immigration offices. Post-registration, the asylum seeker will, on average, expect to wait anywhere between two and four weeks before a second interview is to be conducted. The second interview is used to further corroborate the individual's story, and gives enough time for the officials to process the fingerprint and the concomitant information into the Danish asylum registration database.

Issues relating to researcher-participant relationships, the types of questions, and the necessity for flexibility and gaining consent in the interview process will be furthermore discussed in the following section.

## SEMI-STRUCTURED INTERVIEWS

### Researcher-participant relationships

Research in general, but more so in the context of refugee studies, must be aware of issues of construct validity, reactivity and representativeness. In cases such as that experienced in this research, where research is substantially dependent on attaining meaningful levels of acquaintance with the participants, establishing trust with the interview subjects paves the way for such knowledge generation to blossom. The seeds of this relationship, however, must be cautiously grown; in the context of refugee research, Jacobsen and Landau (2003), for example, have made a call for an explicit research objective of “alleviating that suffering” (Jacobsen and Landau 2003: 186) and for acknowledging the strengths and limitations of the approach taken. The authors mention the issues related as: construct validity, objectivity, the frequent lack of control groups in making causal linkages, and demonstrating the representativeness of the interviews. An attempt at redressing such concerns follows hereafter.

The research, conducted over a period of 3 months, accounted for the need to be seen as a trustworthy individual. Working as a volunteer, under the auspices of the Red Cross yet as an individual separate from the organization, enabled the researcher to become acquainted with residents and staff alike at the center; likewise, the constant exposure provided a measure of opportunities for the researcher to appear approachable. The combination, of approachability and acquaintance, put the researcher in situations where asylum residents felt confident enough to request extemporaneous advice and tips on their asylum status situation. Furthermore, it became a platform whereby the researcher became acquainted with a whole host of inhabitants, from families to unaccompanied minors, besides the individuals that would play a role in the actual research. As a result of the prolonged exposure to the residents of the center, the volunteer activities enabled the researcher to build a modicum of trust and, eventually, develop

relationships with asylum seekers. This relationship subsequently facilitated a smooth transition from the researcher being perceived as an outsider to someone who, in the paraphrased words of many residents, was mistaken as an asylum seeker himself! In this way, the researcher has had the opportunity to develop friendly relationships with the research participants who were selected for the explicit role of being interview subjects. This apparent congeniality, in the eyes of the residents, further enabled the researcher to become acquainted with other potential sources of interview subjects. All in all, the relationships that fostered in the course of the research, were built on mutual trust and played a vital role in acquiring honest responses in exchange for a research topic that was aimed at “alleviating the suffering” alluded to by Jacobsen and Landau (2003, p. 186). This research is in agreement with the refugee as “a resource rather than as a problem or liability” (Voutira & Doná 2007: 167) which integrates advocacy and scholarship, and is seen as a valuable endorsement for the possibility of combining the refugee-centric viewpoint with analysing complex systems and supranational issues. In this vein of thought, the interview questions were formulated in a basic and open-ended manner, so as to allow the interviewees the space in which to air their views and recount their narratives in the manner they saw fit. This is then followed up in the analysis, where concepts are derived from the articulations made by the respondents, in accordance with a refugee centric perspective; this feedback has been peppered throughout the paper as the foundation from which the research applies the theoretical underpinnings and perceives the issues to be addressed as originating from. The research is thus guided by a bottom-up, refugee-centric approach where the interview subjects were provided with a channel through which to air their thoughts on the issues and share their experiences on the matter at hand.

#### Types of interview questions

The format in which data is collected from the qualitative interviews conducted for this research takes the form of semi-structured interviews. Semi-structured interviews were conducted out of a desire to carefully glean information from the asylee’s perspective and as s/he experienced it, with regards to the fingerprinting process of asylum registration. The flexible approach was taken in order for the interview process to allow for a reciprocal exchange of information, following Steinar Kvale’s “construction site of knowledge” (Kvale 1996: 2). More specifically, inspiration is taken from his metaphor of an interviewer as a *traveller* (Kvale 2011), where the “potentialities of meanings in the original stories are differentiated and unfolded through the traveller's interpretations in the narratives” (Kvale, 2011, p. 19). The metaphorical country, through which this interviewer travelled, concerns the

field of fingerprinting as part of the registration, and where the interviewer was inquisitive of the values and customs held by the ‘natives’. Nevertheless, the journey is a short one, in line with Robert Yin’s *focused* case study interview type (Yin, 2009), where the conversation follows a protocol as presented below.

The interview questions were led by an interview guide, which was divided into topics, yet only referred to sporadically and only when the conversation had reached a standstill on a given topic; for the most part, the questions retained a similar sequence with regards to the topics covered, but were adapted to the circumstances of the asylees’ background so as to make it as relevant to the experiences encountered by the individual. Nevertheless, a common thread was followed throughout the various interviews, which delved into the main issues the research aimed to cover. Considering the vastly variegated experiences of the individuals, a semi-structured approach enabled the interview subjects to recount their stories in the manner befitting their narrative style, yet also allowing the researcher to address specific issues that became apparent in the course of interviewing. Furthermore, the rather narrow point of interest that this research took, added to the fact that the research is primarily concerned with the isolated case of Sandholm Center, the exploratory conversations with the respondents afford sufficient points of interest from which to suggest potential propositions. The interview guide can be found in Appendix I at the end of this paper.

The seven interview subjects have all been made aware of the purpose of the research and the risks of involving themselves in such a research. Barring one interview, the majority of the interviews were performed in a closed-off, private room where privacy was ensured and external disturbances were minimized. On some occasions attention was distracted by the recording device - the researcher’s smart phone - but such apprehensions were quickly overcome as the conversational approach to the interview put such concerns at ease for the interview subjects. Apart from one interview, all the respondents requested that the research refer to them with nicknames, out of fear for impacting negatively on the immigration officials’ decision on their asylum cases. Out of an obligation to respect the wishes of the interviewees, and keeping to the promise made by the interviewer, the individuals are therefore referred to with the first letter of their name, often preceded by a number that signals the sequence in which the interviews were conducted. A brief summary of their background story, as to the reasons for why they sought asylum application in Denmark, is given in the Appendix II. A combination, of the level of trust gained by the researcher together with verbal assurances that the information the interviewees gave would not enable the identification of the individuals, or

jeopardise their opportunities, allowed the respondents to be as plain-speaking as possible. It is believed that this went some way to gleaning honest answers in-so-far as they conformed with the respondents' impression that their responses would not impact upon their chances. The next chapter will utilize the three approaches chosen for this study, starting with Callon's extended translation as part of the Actor-Network Theory analysis. Capability Approach and Value-Sensitive Design are subsequently employed for investigating the issues uncovered, which will be infused by the findings made within the ANT analysis chapter.

## ACTOR-NETWORK THEORY

### EXTENDED TRANSLATIONS

Taking cue from Michael Callon's call for a notion of extended translation, which abets the researcher in explaining linkages between various statements, the proceeding section attempts to describe the ongoing reconfiguration process "between context and content" (Callon 1995: 50) within the realm of fingerprinting of asylum applicants at Sandholm Center and the enmeshed system it befinds itself. Taking a starting point, from the Eurodac central system (Regulation (EU) No. 603/2014) as the main theoretical statement, a translation network is built for purposes of inversion, what John Law terms "heterogeneous engineering" (Law 2012: 107). The translation chains are composed of "statements, technical devices, and the tacit skills that can rightly be called embodied skills" (Callon 1995: 50), to form a "*network* of juxtaposed components" (Law 2012: 107). Bruno Latour's notion of inscription and inscription devices are called upon to propose relationship building between technical fingerprint substances and the statements implied therefrom (Latour and Woolgar 1987). The extended model of translation (Callon 1995), or determining the 'heterogeneous engineering' of asylum fingerprinting techniques that become detectable in the networked effects of the Eurodac fingerprint database, is applied hereafter. Callon's statement, "the structure of DNA is a double helix" (Callon 1995: 53) is the model statement of the last link in the translation chain to be 'translated' herein, in an attempt to investigate "who has the right to speak on behalf of whom?" (Ibid: 60), and reframed for this discussion to:

the configuration of the European Asylum Dactyloscopy Database  
(Eurodac) is a binarization automation of friction ridges

### A (VERY) BRIEF HISTORY OF EU LEGISLATIONS IN THE CONTEXT OF ASYLUM

Without becoming a purely legalistic research, there is, nevertheless, a need to establish a succinct background to the contemporaneous legal situation vis-à-vis refugees in Europe. An agreement, upon a common approach to freedom, security and justice, was deemed a necessity after the uncertain outcomes of the Maastricht Treaty. The common European policy, establishing the need for "an area of freedom, security and justice" (Amsterdam Treaty 1997: Title IIIa), was subsequently endorsed in 1997 by the Treaty of Amsterdam, which devolved national powers to the European Council, and within which a common approach addressed "external border controls, asylum and immigration" (Ibid: Title IIIa). The 1999 Tampere

Conclusions determined a need for a Common European Asylum and Migration Policy<sup>4</sup>, which was seen as a requisite element in implementing the area of freedom, security and justice as set out in the Amsterdam Treaty. It is within, and through, the Common European Asylum System (CEAS) referred to by the Policy, from whence the extant policies that shape EU procedures on asylum are most evident; the Eurodac Regulation, Dublin III Regulation, Asylum Procedures Directive and the Reception Conditions Directive make up the body of legislative works presently governing the CEAS. To contextualise further, and to make it pertinent to this research, Denmark is not a signatory to these policies yet nevertheless implements, through a parallel agreement<sup>5</sup>, in the application of the original Eurodac Regulation (Regulation No. 2725/2000), and, hence the Dublin Convention as the corollary to the database. As such an exploration of, or rather an opening up of, the black box of the Eurodac is applicable.

Eurodac (Regulation No. 603/2013) was established to effectively apply the Dublin Convention (Regulation No. 604/2013), as a means for identifying applicants for international protection<sup>6</sup> within the European Union territory. The need for the database was furthermore borne out of a necessity to prevent the fraudulent and multiple applications for international protection, the cases of which had become so apparent that it developed a rather innocuous seeming expression of ‘asylum shopping’. From its inception, Eurodac has been heralded as a vital cog in the determination of individuals who wish to seek asylum, are not recognized as citizens by any nation-state, or are deemed to have traversed into the EU illegally; these third-country nationals are subsequently given the monikers of asylum seekers, stateless people and illegal immigrants, yet delegated under the phraseology ‘applications for international protection’. According to the statements uttered in the Eurodac Regulation, “fingerprints constitute an important element in establishing the exact identity of such persons” (Reg 603/2013: 2) and for which it would become imperative to create a centralized system through which to host the data and function as the “electronic means of transmission between the

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<sup>4</sup> European Parliament, *Tampere European Council 15 And 16 October 1999 - Presidency Conclusions*, URL: [http://www.europarl.europa.eu/summits/tam\\_en.htm#a](http://www.europarl.europa.eu/summits/tam_en.htm#a), accessed on 15 July, 2018

<sup>5</sup> Datatilsynet, *EU-fingeraftryksregisteret (Eurodac)*, URL: <https://www.datatilsynet.dk/internationalt/eu-fingeraftryksregisteret-eurodac/>, accessed on 21 July, 2018

<sup>6</sup> The Qualification Directive 2011/95/EU defines application for international request as “a request made by a third-country national or a stateless person for protection from a Member State, who can be understood to seek refugee status or subsidiary protection status, and who does not explicitly request another kind of protection”

Member States and the Central System” (Ibid: 2). The Central System would thereafter automatically run a cross reference comparison of the fingerprint data with those stored in the database. Upon completion of this automated transaction, the System would deliver a response in the form of a ‘hit’ or a ‘negative’ to the authorities in the country from where the registration originated.

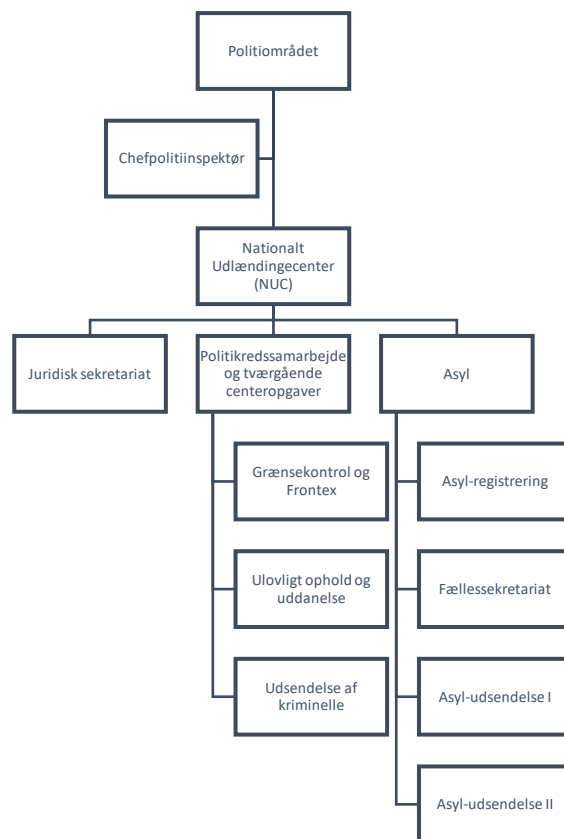


Figure 3 Organization of the Danish National Police

The Regulation mandates a National Access Point and designated authorities in each Member State through which such operations occur. In the case of Denmark, the *Udlændingeloven*, or Aliens Consolidation Act, ratifies the *Rigspolitiet* (in English: National Commissioner of Police) as the responsible verifying authorities as well as operating the *edb-register* (in English: special data register) which performs the capacity of the National Access Point mentioned earlier. Lastly, the edb-registered data is maintained by a constellation of agencies including the Immigrations

and Integrations Ministry, the Immigration Agency, and the International Recruitment and Integrations Ministry (§ 40a, stk. 15). An inspection of the organization of the *Rigspolitiet* reveals the pictorial representation in Figure 3. As made evident by the administrative composition, the *Nationalt Udlændingecenter* (in English: National Immigration Center) department of the *Rigspolitiet* is charged with the *asyl-registrering* (in English: asylum registration), as well as *grænsekontrol og Frontex* (in English: border control and Frontex). Frontex, or the European Agency for the Coordination of Operational Cooperation at the External Borders of the EU, retains relevance to this discussion insofar as to intimate the further complexity of the EU border systems. Besides this point, the focus for this paper is rather more interested in the asylum-seeking aspect of the border management and fingerprinting techniques, as continued.



From this enquiry into the regulations that enable Eurodac to exert its' force over supranational and national entities, the next step of the translation chain can be deduced as implying a theoretico-observation statement:

The CEAS apparatus contends a vital importance in establishing a  
common area of freedom, security and justice in the European Union  
context

#### CENTRAL SYSTEM AND EDB REGISTER

The Central System functions as the main centralized hub of fingerprint data in addition to undertaking the task of a Communication Infrastructure, which serves as the relay point between the various parties encompassed within the network. The administration of the System falls under the rubric of the European Agency for the operational management of large-scale IT systems in the area of freedom, security and justice, otherwise known by the acronym eu-LISA. In addition to Eurodac, eu-LISA operates the Schengen Information System II (SIS II) and the Visa Information System (VIS) endorsed via Regulation No. 1077/2011. In common parlance, the Agency (eu-LISA) is responsible for the smooth, secure running of the database systems, and for ensuring the uninterrupted communication with designated authorities in the Member States, as well as European Police Office (Europol). Eu-LISA is obliged by the European Data Protection Supervisor (EDPS) to maintain a transparency with regards to the “processing of personal data by the Community institutions and bodies and on the free movement of such data” (Regulation No. 1077/2011: 3). As such, the processing of personal data of asylum applicants' fingerprints, and the transmission of that data, becomes a three-way arrangement between Member States and the Central System, or four in the event of a security concern in which case Europol is enrolled; the EDPS keeps vigilant tabs on the Agency, and other EU bodies and institutions, to ensure that the lawful application of such measures take place, while on a 'local' level national supervisory authorities (i.e. the *Rigspolitiet*) have responsibility for monitoring the “lawfulness of the processing of personal data by Member States” (Regulation No. 603/2013: 6).

Danish jurisprudence regarding immigration and asylum is established under Udlændingeloven (in English: Aliens Consolidation Act) lovbekendtgørelse nr. 1117 af 2. October 2017. The *Rigspolitiet* are therein given the authority to fingerprint applicants for international protection, as well as being mandated to reject applicants who refuse to permit the recording of fingerprints (§ 47, stk. 2). Where possible, fingerprinting must be done in as gentle a manner as possible,

although forceful measures may be taken where deemed necessary (§ 40a, stk. 10). In adherence with the standard data collection format prescribed by Eurodac, rolled and plain impressions are conducted using a biometric fingerprint reader. Depending on the circumstance, the collected information can take on multiple purposes including: responding to queries from international police collaborations (§ 40a, stk. 8); on the grounds of substantiating immigration cases or verifying identities, police services can, without the consent of the applicant, share the information with foreign immigration services, with representatives of the home country or a third country, or with international police collaborations (§ 40a, stk. 9). Conversely, data received from the Eurodac repository cannot be shared with international organizations, private institutions or countries outside the EU; the *datatilsynet* (in English: Data Protection Agency) is in charge of processing and application of information that is sent and received by Eurodac. In summation asylum applicants' data, which is collected by *Rigspolitiet*, has a wide variety of usages extending beyond the confines of the European Union; information that is shared by Eurodac, however, are strictly restricted for usage only by, and within, Member States, Europol, and the Central System. Unearthing the establishment of the Eurodac Regulation No. 603/2013 reveals the next stage of the network of translations as:

eu-Lisa situates itself at the nexus of national and supranational delegates, giving cogency to the Central System of Eurodac, and which supersedes yet respects the integrity of Danish law

## THE ASYLUM PROCESS

In a given hypothetical situation, an applicant over the age of 14 years for international protection is received by the Danish Red Cross at Sandholm Center (or by the Police and Immigration services at Airport or border customs, and then transferred to Sandholm Center) and is given a timetable in which his/her application will be processed. When the time comes, the applicant(s) will be seated in a room within the premises of the Police and Immigration Services building at the Center during which he/she will be informed of the imminent application procedure as mediated via a television. The information film<sup>7</sup> presents the modus operandi in which the application is processed, including mentions of the Dublin Convention

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<sup>7</sup> An abridged version of the film is available for viewing, courtesy of the official portal for aliens in denmark at: <https://www.nyidanmark.dk/da/Ord-og-begreber/US/Asyl/Film-om-asylsagsbehandlingen>

and the Eurodac database and its' purposes. The applicant will thereafter formally apply for asylum, going through the procedural stages of: filing of personal information and reasons for seeking asylum and the recording of biometric identifiers (fingerprint registration and photograph of the individual).

The registration of fingerprints, of persons who apply for asylum status (amongst others<sup>8</sup>), is compulsory by national law in Denmark; upon enrollment of the fingerprint data, the digital information is stored in the edb register, which is then beamed to the Eurodac Central System for comparing with the extant data. The Eurodac database contains the templates of digitally processed fingerprints recorded by EU Member States and shared with the Central System for the purposes of “comparison of their fingerprint data” (Regulation [EU] No. 603/2013: p. 2) as well as for “the prevention, detection or investigation of terrorist offences” (Ibid). If the data from the edb register corresponds with that of the Eurodac database, a ‘hit’ is automatically established, and relayed back to the immigration and police services. If not, a negative response is given, and the application can be assumed to be the responsibility of the Danish state, in accordance with the Dublin Convention (Regulation No. 604/2013). Annex I of the Eurodac Regulation stipulates the proper data format and fingerprint form, necessitating rolled and plain (fingerprints) impressions, through which certain features become apparent and readable by the optical sensor. The format has been provided for the reader’s perusal in Figure 4, on the following page.

From hypothesizing the typical scenario for applicants of international protection, the operationalization of Eurodac and the policing of national fingerprint procedures, a theoretico-observational statement is insinuated as follows:

Eurodac capacitates national immigration services with the technical  
and enforceable ability to fingerprint applicants in the name of  
security

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<sup>8</sup> This also includes: persons who have been apprehended on charges of illegally coming into the country; are seeking an extension of their residence permits; or even “if this is deemed appropriate for identification purposes” (Udlændingeloven, § 40 a Stk. 2. (1), translations own)

Eurodac – Fingerprint form		105 mm from top of form	155 mm from top of form	205 mm from top of form
1.	Reference number			
2.	Place of the application for international protection or place where the third country national or stateless person was apprehended			
3.	Date of the application for international protection or date on which the third country national or stateless person was apprehended			
4.	Sex			
5.	Date on which the fingerprints were taken			
6.	Date on which the data were transmitted to the Central System			

ROLLED IMPRESSIONS				
1. Right thumb	2. Right forefinger	3. Right middle finger	4. Right ring finger	5. Right little finger
50 mm	40 mm	40 mm	40 mm	40 mm
6. Left thumb	7. Left forefinger	8. Left middle finger	9. Left ring finger	10. Left little finger
40 mm				

PLAIN IMPRESSIONS			
LEFT HAND <small>Four fingers taken simultaneously</small>	TWO THUMBS <small>Impressions taken simultaneously</small>		RIGHT HAND <small>Four fingers taken simultaneously</small>
	LEFT	RIGHT	
75 mm	30 mm	30 mm	75 mm

*Figure 4 Eurodac fingerprint data format  
(Annex I of EC Regulation No. 603/2014)*

## A BRIEF HISTORICAL INTERLUDE

Dactyloscopy, as the scientific study of fingerprints, owes its' conception to a historical fascination of the uniqueness of fingerprints by a wide variety of officials and scientists. Depending on the usage, whether for purposes of identification or authentication, fingerprints and the distinctive marks contained within our fingers have been known and observed since antiquity. In Babylonian times, business transactions were given legitimacy by fingerprints on clay tablets, while King Hammurabi authenticated his endorsement of one of the first code of laws by fingerprinting clay tablets (Kindt 2013). Identification by fingerprints have been employed, by some accounts (National Institute of Justice 2012), since 300 B.C. by Chinese officials and merchants where friction ridge impressions were etched into clay seals and tablets to ascertain the legitimate author. The first published article on the observations of the ridges on hands and feet started proliferating in the late 17<sup>th</sup> century, with Dr. Nehemiah Grew's 1694 *Philosophical Transactions of the Royal Society of London* describing the existence of friction ridge skin (which will be duly described further on), while two doctors – J.C.A Mayer and Henry Faulds - are accredited with proclaiming the uniqueness of the friction ridge details (National Institute of Justice 2012; Kindt 2013). Faulds' journal article, baring particular resonance for this research, was the first to publish an account of the possible application of ridge details of fingers as evidence in crime scenes (National Institute of Justice 2012). In the meantime, Alphonse Bertillon proposed a concept of judiciary anthropometry informing the study of body measurements for identification purposes, primarily for identifying culprits (Kindt 2013). However, it wasn't until Juan Vucetich, building on Sir Francis Galton's catalogue determining friction ridge uniqueness, published a study on comparative dactyloscopy, and proposed "practical uses of the fingerprint science by law enforcement personnel" (National Institute of Justice 2012: 1-13). The overriding theme, through a perusal of the history of fingerprints and friction ridges, appears to have paid significant attention to the unique, and permanent, features of ridge details and the possibility to apply it for identification of individuals, most notably wrongdoers. Nevertheless, manual inspection of fingerprint data was the norm which required experts to painstakingly examine the 'individualization' characteristics of multitudinous sets of fingerprints. As data sets became larger, the need for an automated fingerprint system prompted the Federal Bureau of Investigation (FBI) to contract Cornell Laboratories, which resulted in the Automated Identification System (AIDS) prototype; subsequent developments led to the Automated Fingerprint Identification System (AFIS), extracting the minutiae features of fingerprints

which “creates mathematical maps of each impression in a finger block and of the card as a whole” (National Institute of Justice 2012: 5-23). This form of automated fingerprinting, advancing from the FBI’s known criminal known-print repository, has proliferated into numerous applications, most notably for biometric purposes.

As has become evident, the Eurodac database requires that applicant’s fingerprints are enrolled into the Central System, so as to enable the comparison with the existing database and determine who is responsible for processing the asylum application. Fingerprints are scanned into an optical reader by the national designated authorities, shared with Eurodac, and automatically queried by the Central System. Yet the possibility of doing so requires that the same method is applied universally, that is, in a consistent manner by the designated authorities in all Member States. As has been observed in the Eurodac Regulation, rolled and plain impressions are adjudged as being the best method for doing so. The homogenized data format ensures the interoperability of the infrastructure for usage by Member States, the Central System, and Europol. A quick glance at the Annex I of the Eurodac Regulation, makes it obvious that the fingerprint data registration apparatus must be capable of implementing the tenprint (enrolling ten fingerprints) system for the rolled impressions to be collated into the Central System.

The uniqueness of fingerprints, in this way, facilitate the inspection of applications to prevent fraud and multiple asylum claims; fingerprint data is seen as the panacea for uniquely identifying applicants of international protection (third country nationals and stateless persons). This is representative of a general trend towards a widening of the usages of biometric methods, understood as the collection, measurement, and storage of unique or distinctive characteristics of a person. In this way, European border officials employ biometric fingerprint readers to collect and measure applicants’ fingerprints and store it in Eurodac’s Central System; this variant of biometrics employs first generation biometrics, whereby optical scanners ‘read’ fingerprints and transform them in to digital versions to be stored in the database, and applies a verification-type referred to as *negative identification* (Jain and Kumar 2012: 50). The attested successfulness of fingerprinting purposes including authentication, verification, and identification, suggest a beneficial application to uniformity in border control; it thus proffers a theoretico-observation as:

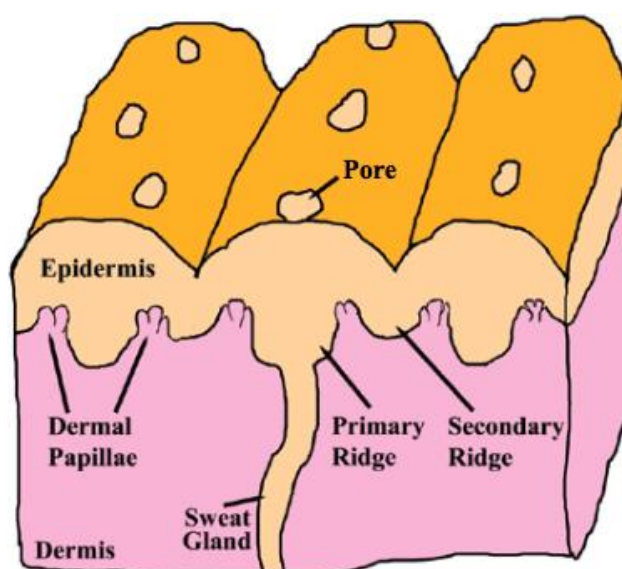
The progenitors of Eurodac give credence to a certified method for identifying and verifying asylum applicants in a compatible manner over EU territories

Yet the question begs: what are fingerprints composed of, and how do these identify the individual?

### WHAT'S IN A FINGERPRINT?

Rolled and plain impressions are words that find substance within the fingerprint and biometric lexicon; a glossary which, as has been touched upon, includes a wide variety of terms as: minutiae, valleys, and ridge endings and ridge bifurcations; friction ridge and landmark points; biometric readers, fingerprint sensors and spatial distributions; templates and dactyloscopy, to name but a few.

In its' simplest physiological definition, fingerprints are made up of patterns of ridges and valleys on the friction ridge of fingerprint surfaces, as visualized in Figure 5. The ridges are "characterized by several landmark points, known as minutiae" (Jain and Kumar 2012: 51) and are "rooted in the dermis by primary ridges (under-the-surface ridges) and secondary ridges (under the valleys)" (National Institute of Justice 2012: 2-4).



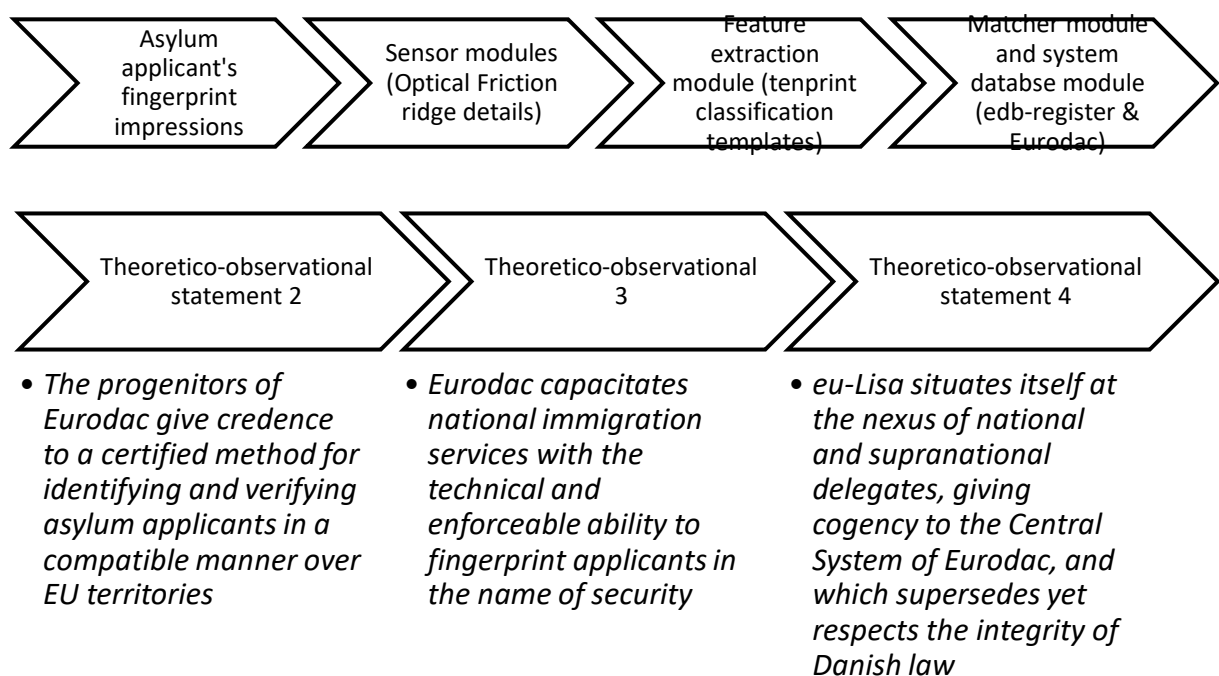
*Figure 5 Structure of friction ridge skin  
(National Institute of Justice 2012: 2-5)*

The patterned arches that form within the friction ridges are known as whorls, loops,

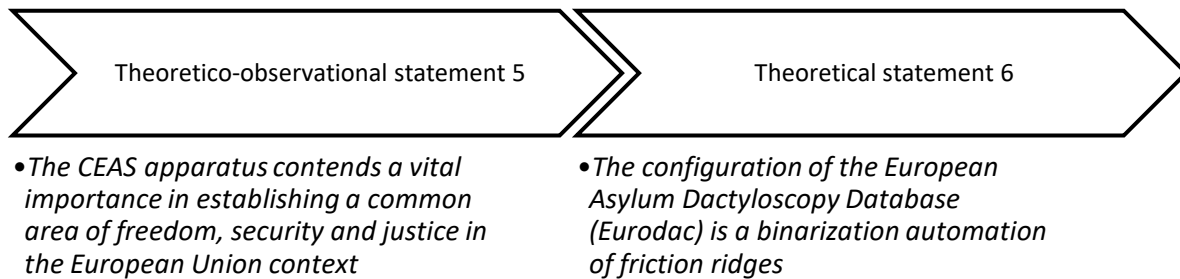
arches, combinations and transitions, and result out of a concerted concoction of genetics, nature and environmental dispositions (National Institute of Justice 2012). These "friction ridges", made up of the valleys, 'ridge endings and ridge bifurcations', are the minutiae points that are captured and employed for matching multiple fingerprints. The impressions they leave behind on the optical pads of optical scanners capture the minutiae features of the fingerprints, usually at a resolution of 1000 ppi (pixels per inch) or higher. High resolution images are typically captured as a gray-scale-enhanced fingerprint image, which is then automatically translated into a binary version by an automation technique known as fingerprint feature

extraction algorithm; the binarization algorithms constantly filter the grey image impressions to a ‘skeletal image’ where “all black pixels correspond to ridges, and all white pixels correspond to valleys” (National Institute of Justice 2012: 6-25). Biometric systems, and by extension the designated authorities at European border agencies, follow a blueprint of four modules (Jain et al. 2004). The collection of the fingerprint data occurs with the aid of sensor modules, where the optical scanners are put to work. Feature extraction module occurs when automatic fingerprint indexing and retrieval algorithms subsequently classify the tenprint impressions into a number of classes, typically based on the fingerprint features composing the patterns of arches, and outputted as spatial data structures (Jain et al. 2004; Jain & Kumar 2012; National Institute of Justice 2012). The matcher module and system database module, whereby extracted features are compared with the fingerprint data templates stored in the Central System, can be seen to represent the stage at which Eurodac is enrolled into the network. This type of system is the framework through which the transmission of fingerprint data can be communicated by the various parties to Eurodac, i.e. Member States, Europol and the Central System.

To conclude the translation network, as remarked upon at the end of each preceding section, a translation chain is visualized as follows:







The aspect that makes fingerprints so compelling for identification lies in the fact that these arrangements, of the ridges and furrows, remains in a constant position throughout the life of a human. The unique spatial distributions of the minutiae points, or friction ridges, and the permanence of the friction ridges means that fingerprint data will retain life-long admissibility. Moreover, the speed and ease at which the fingerprint-data collection, measurement and matching are conducted by immigration and police officials, further promotes the promulgation of the automated procedure. A mapping of the network, which become apparent as the translation chain proceeds, reveals a host of actors enrolled into the system. In order to help guide the reader through this labyrinthine system, an illustration is made in Figure 6 that crafts a depiction of the network (a larger version is attached in Appendix III):

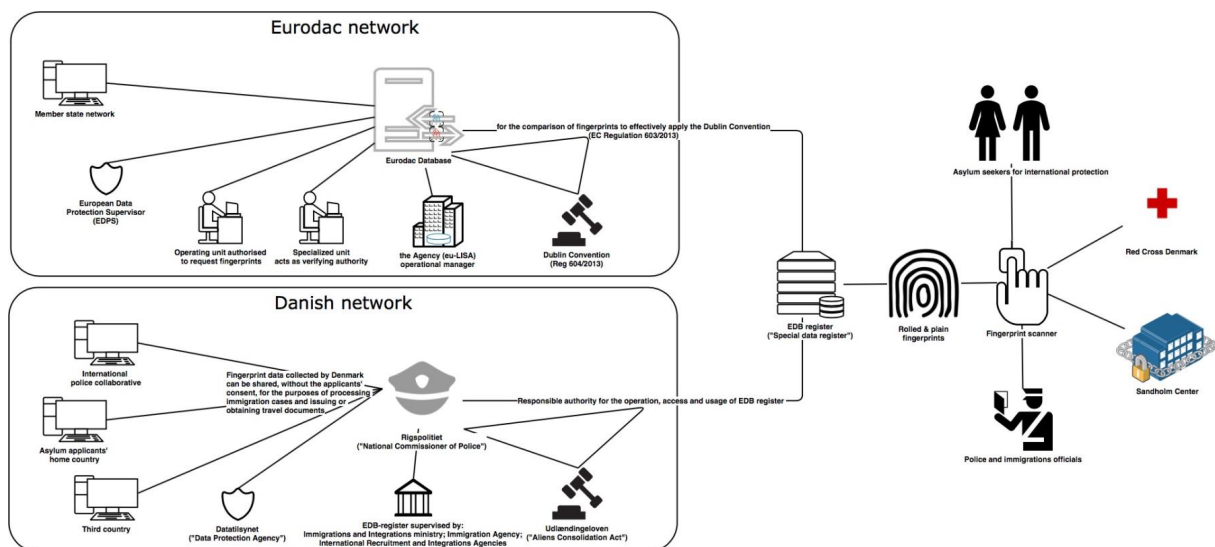


Figure 6 Actor-network map of the fingerprint system in Denmark and the EU

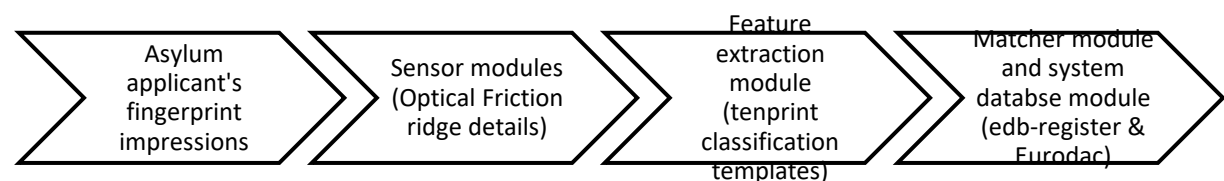
The network appears to show no form of resistance, and punctualization has apparently been reached. Yet these networks are never completely durable, momentarily “contingency disappears” (Van House 2003: 14). What is often disregarded, in the implementation of such systems as Eurodac, are the vulnerable whose lives have now been enrolled into a networked monster, of which they are often unaware of the complexities. The following chapter attempts to tackle some of the issues that applicants for international protection have disclosed to this

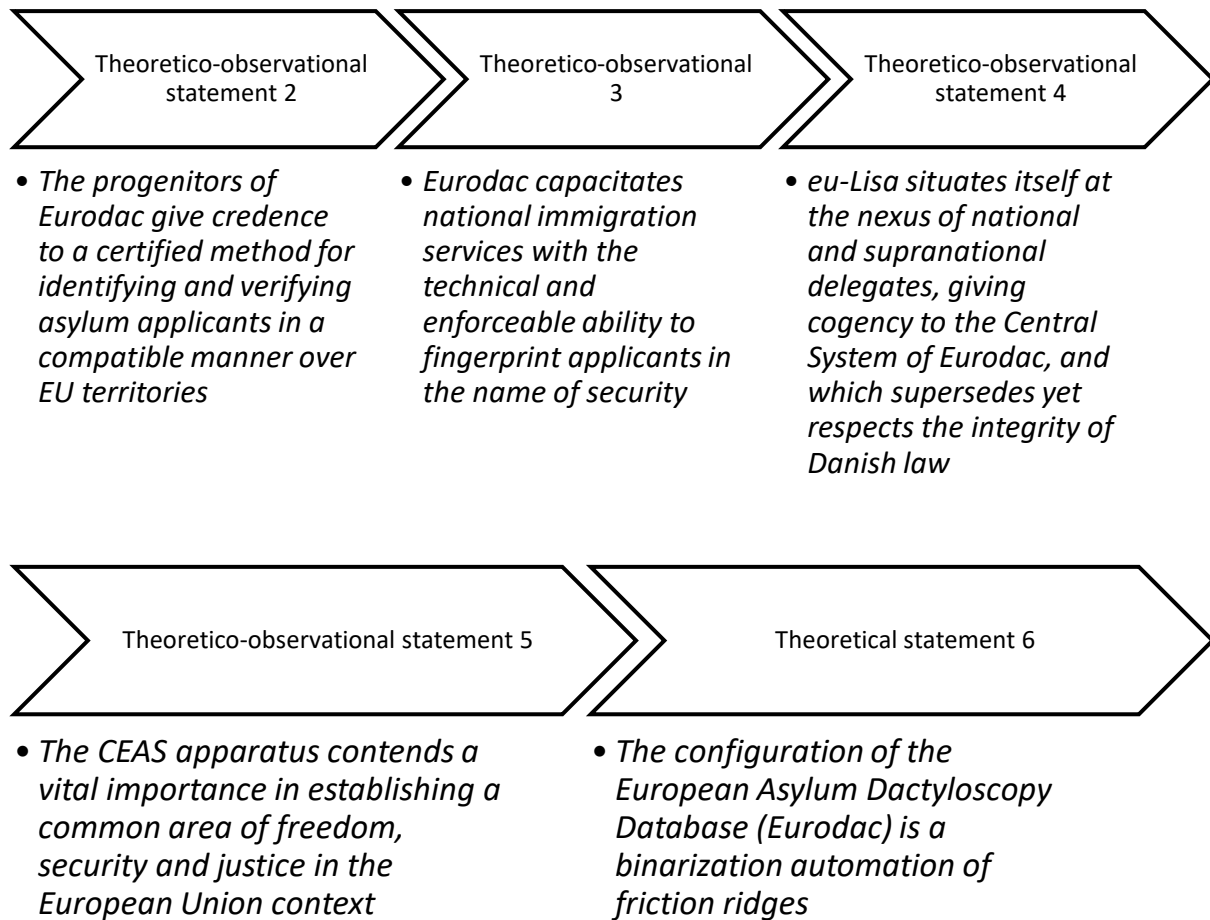
researcher, when confronted with the leviathan that is Eurodac; an attempt is made to reveal discrepancies between the seemingly robust system of fingerprinting and the actors which it impinges upon, through the framework of the Capability Approach (CA).

## CAPABILITY APPROACH

### CONVERSIONS AND TRANSLATIONS

Applying the notion of extended translations, as implemented in the previous chapter, provides valuable competencies through which to understand the conversions that are seen to occur in the process of fingerprinting of asylum applicants. Continuing with Kullman and Lee's (2012) figurative reconciling of Latour's notion of translation with Sen's understanding of conversion, this chapter seeks to understand how "freedom as liberation within" (Kullman & Lee 2012: 40) can be applied to the issue at hand. Successful implementations of programmes, in this way, depends on the quality of the relationships between the various heterogeneous entities which become apparent in the process of detecting the translation chain. Situating that understanding within the setting of this research, considerations as to whether Eurodac can be deemed to be successful must thus account for the endorsement of the asylum applicants themselves. In as much as 'liberation within' can be applied to this case, penetrating into the embedded network of Eurodac enables the researcher to peer into the possible avenues wherein asylum applicants can be given room to manoeuvre. The translation chain conceptualized in the prior chapter is thus re-invoked herein, with a view to conceiving how the unfolding 'tragic choice' between the capabilities of the border officials on the one hand, and the asylum applicants' capabilities on the other, can perhaps be remodeled.





The translation chain, illustrated above, provides an outline of the network of actors inherent in the fingerprinting of asylum applicants. The description of the various translations that occur in the process are meant to show how enrollment between a variety of inscription devices materializes as they become evident in the unearthing of the blackbox that is Eurodac.

## CAPABILITIES AND FINGERPRINTING - ASYLUM APPLICANTS PERSPECTIVES

The basic premise that underlines Amartya Sen's capability-based approach, is to make apparent the various circumstances that facilitate or hinder a person from 'converting' a service "into actual 'capabilities' that enable them to shape their own lives" (Kullman and Lee 2012: 39). For Sen and Latour liberation can occur, but only when considered as part of the "collectives of human and non-human elements" (Ibid: 44). This section builds on the extended translation chain, established in the previous chapter, to seek an understanding that coalesces asylum perspectives with the fingerprinting system. The aim is to seek a "careful and gradual 'conversion' or 'translation' of everyday relationships" (Ibid: 45). The conversion, or the adaptation of fingerprinting technologies for the needs of asylum seekers, is sought after herein. Martha Nussbaum's (2011) list of central capabilities is utilized to support the conversion

claims made by the refugees. But first, the idea is to build from the meso-scale, if we can envisage it as such without making any broad stroke proclamations on power: the intermediate level is seen to occur at the domain whereby fingerprint data is collected from applicants for asylum at Sandholm and the international airports in Denmark. At these locations a prospective asylee states his or her wish to be processed by the Danish government, in the hopes of attaining asylum status in the country. As the interviews conducted as part of this project corroborates, one of the very first steps taken are to register the asylee's fingerprints with the use of an optical scanner at either or both locations. The ridge details, which the fingerprint reader manages to extract with the high-resolution images, convert into binary details, and order into a system of classes, enrolls the applicant into the EDB register. From here, the digitized fingerprints take a life of their own: the Danish Udlændingeloven ("Aliens Consolidation Act") permits authorities to share with Eurodac, yet it isn't limited to just this option. If it is seen as necessary, for 'security of the nation' purposes, the government can share the fingerprint data with the asylee's home country, a third country, and/or international police collaboratives. While the datatilsynet (Data Protection Agency) are tasked with ensuring this is done in an accountable manner and offer a modicum of protection, the individual, whose fingerprints are being dispatched, would be unaware of the eventuality; at a time when the much-debated General Data Protection Regulation (GDPR) gives data subjects rights, informed consent is not considered as a matter of concern in the processing of asylum applications.

A number of the interviewees who participated in this discussion raised the haunting specter of the harm, that dissemination of their data, could potentially incur. Interview # 1, "D", mentioned a general sense of distrust for the safety claims made in reference to the stored data:

*D: "No. I've been verily told that what you tell everybody here is safe and secure. I simply don't believe that at all...The moment it's lost, or misused. Who actually governs that? That's the very worrying side of the biometric system. If someone's got the data and information, we trust that data with people above us... I think there should be a transparency. There should be an umpire put in place. All this information should be given to a third party, with a safe-house."*

(Interview # 1, Appendix II: 73-75).

The palpable apprehensions surrounding the potential misuse of the data is evident from this interview extract. So long as the data remains inviolable, from this interviewee's perspective, it can be rightly seen as a useful mechanism for the asylum process. The applicant's data

security, and by extension that of his own, sits precariously on a tightrope, with trust being the only confidence that it will be hold. The quotation above also elicits an ignorance of the role of Eurodac. While the vast majority of the interview subjects alluded to the Dublin Convention, in some way or another, none of them mentioned Eurodac. The following interview extract neatly sums up the uncertainty regarding the treatment of the fingerprint data, and the helpless situation that asylum applicants face in navigating the process:

*Y: they say everything is confidential in the interview, but I don't know who sees my passport, who sees my information. I don't know who hears about my story, I don't know who gets access. I don't know, I just don't know.*

*K: I was never told who will see my passport, or who gets my information. You know, we don't know what we get ourselves in to. And if we were to ask, it might bother a person. Cause we're desperate people, and if you're asking someone for help, we shouldn't bother them*

(Interview # 5, Appendix II: 94)

One of the respondents, “Y”, mentions her awareness of the Dublin Convention, after being made aware of it from watching a video that explains the procedure prior to registering her fingerprints; nevertheless, throughout the rest of the interview she remains perplexed as to the treatment of that data. While it would appear that it is useful to know about the Dublin Convention, keeping the asylum seekers in the dark about Eurodac does go some way to explaining how all the participants mention trust as their only saving grace. Yet Article 29, of the Eurodac Regulation (EC Regulation 603/2013), stipulates the rights of the data subject, as summarized: the right of access to the data collected on him/her, the right to correct incorrect data and the right to erase unlawfully collected data. Were the fingerprint data to be transmitted to Eurodac and the participating Member States, the applicant could safely consider themselves within the rights framework as a data subject. Making the asylee aware of their rights as a data subject could go a long way to building a two-way relationship of trust, where the subject has an ability to plan and conduct one's life accordingly, wherein one feels a sense of ownership and, in the words of another interviewee, “independence” (Interview # 6, Appendix II: 98).

However, in cases where the authorities deem it necessary to share it with home countries, which in many cases means the country the asylee is fleeing from for fear of persecution, the data could jeopardize the security of the person. In the case of another interview, the harm could befall others: “They told us that they would never share with Turkey and Pakistan also.

Because we don't want that Pakistan should be aware that we left the country... We're scared that if they get to know that we left, in Pakistan I have so many friends, and they [Pakistan authorities] don't know that I am not in Pakistan" (Interview # 3, Appendix II: 79). The safety of the friends they left behind is, for lack of better words, in the hands of the fingerprint data. The interview participant in question had fled from Pakistan with her husband, who also lent his voice to this paper, and two kids, after being subjected to intimidations from ISI, the Pakistani secret service agency. Both husband and wife are adamant in their belief that Denmark is a safe, and trustworthy country, and are amenable to their data being shared with other EU countries, so long as it doesn't end up raising the suspicion back in their home country of Turkey or Pakistan. But Denmark is also the only country they traversed within Europe, and so questions could be raised as to how the authorities would verify their identity; having spent some time in a UNHCR refugee camp in Pakistan, there is the possibility that their case handlers could send, and request, information from the UNHCR database. Needless to say, in that eventuality their trust in the Danish government would also be broken, as they both mention their suspicion of the organization's independence in Pakistan. The following quotation neatly sums up their beliefs: "The Pakistani UNHCR is not completely independent. Just from an observation...So I'm not trusting them" (Interview # 4, Appendix II: 90-91). And it's not just an observation, as the wife claims, the mistrust arises from prior experiences of questioning how they were detected in Pakistan: "I'm sure that they used that. You will get everything there [UNHCR database]. There is so much information and those people I don't trust...There's rules, but no protection, personal protection. They [Pakistan] share, with Turkish government" (Interview # 3, Appendix II: 85). For the sake of verifying the identity of this family, the Rigspolitiet are limited in their choices to the home country (Turkey), the third country (Pakistan), or the organization (UNHCR); yet sharing and receiving data with any of these entities could result in adverse consequences for the remaining family in Turkey, or their friends in Pakistan. The sharing of fingerprint data, in this way, takes on a treacherous attribute for the family; the harm that can arise, from the potentially careless sharing of data, has obvious, tangible risks for the applicant, and their family and friends. This can be seen as having a detrimental impact on life, bodily integrity and emotions.

Whereas interviewees have thus far mentioned the mystery surrounding the usage of their data and the potential ramifications for the sharing of the data, others have been left in a state of limbo after registering their fingerprints. One of the interview respondents, a British national designated as "D", claimed to have applied for asylum in Norway prior to migrating to

Denmark. To his astonishment, however, the Danish authorities could not find a record of his Norwegian asylum application: “When it came back from the interview, the first interview, there was no record of me being in Norway. Which I find very hard to believe” (Interview # 1, Appendix II: 71). The troubling situation that befell this individual pertains to the fact that, while applying for asylum in Norway, he had neglected much of his documentations in the belief that he would be conferred with asylum protection. After having his case denied he travelled to Denmark, believing that the prior registration would prove his credentials. He goes on to express his incredulity at the situation by saying that, “You should never ever be in this position. For you not to have my details in Norway, in a European database, that’s the whole idea of it, is criminal...this actually appals me, this tells me the system does not work” (Interview # 1, Appendix II: 76). While for “D” the issue concerns the fact that his fingerprint registration was deleted after leaving a Member State, as per Eurodac regulations (Reg 603/2013: Article 16 [2]), he was obviously unaware of the matter; he had unfortunately lost significant identification documentations, as a result of being uninformed, and thus impaired his ability to critically chart out his asylum plans. In an altogether different, yet thematically similar scenario, interviewee number 6, “Sh”, had fled from Iran together with his family after crackdowns on students by the regime. While the rest of his family had relocated to Sweden, “Sh” had decided to apply in Denmark. Upon registering his fingerprints, he was informed of the Dublin Convention and the fact that he had to settle his asylum case in Denmark before he could move freely in Europe. His case was accepted and subsequently settled in Esbjerg, entailed as part of the terms and conditions for asylum. Nevertheless, he did not understand the rules surrounding the ability to visit his family in Sweden. After visiting his family there for a year he had unwittingly overstayed the statutory limit of six months, requiring him to have to re-state his asylum status. “Sh” mentioned being unaware of Eurodac, and believing he would do things differently if he had been fully aware about the ramifications of getting his fingerprints registered in Denmark in the first place: “Yes. Now I know. For example, before they fingerprint you, you wouldn’t be able to seek asylum in another place in Europe. If you wouldn’t want to do that, then you just go to another country and seek asylum there. That would be better” (Interview # 6, Appendix II: 98). While Eurodac is tacitly built for the purpose of curtailing these such issues of ‘asylum shopping’, it would appear rather heavy-handed to apply the same rules for those with family in another European country. Needless to say, in both the case of the British national and the Iranian, a lack of instructions contributed to disconcerting asylum experiences and prevented both parties from being guided by practical life-planning strategies.

Not unlike these two cases, interviewee # 2, “I”, had had some harrowing experiences as a result of being unknowledgeable about Eurodac. Born in Bosnia before the dissolution of Yugoslavia, “I” had been drifting around Europe for 16 years before he felt the need to legitimize himself for work purposes. He arrived in Copenhagen and requested asylum after hearing that Denmark would be considerate of his claims for statelessness. However, his first experience would go on to shape the subsequent years where, after having his fingerprints registered, he was told that the chances for a Bosnian were slim: “Yeah, they use for normal the fingerprints. But they say me ‘you don’t have chance. Safe country, Bosnia’” (Interview # 2, Appendix II: 77). Responding to the researcher’s questions about what the police told him the fingerprint registration would mean he said, “nobody speak with me. No body speak with me one word, what happens if asylum here. Nobody” (Interview # 2, Appendix II: 79). Having gone through this ordeal “I” left after three days for Germany, where he subsequently found a wife and lived for four years until he felt the need to officially register his residency. However, due to the fact that he had registered his fingerprints and lodged his first asylum application in Denmark all those years ago, he had to close his case before he could attempt it in Germany. Though these are three different experiences, each coming from diverse backgrounds, they all share in their experience of being led astray by the complexity of the European asylum process. In each of the cases, informing the applicants about the procedure and the consequences of Eurodac could presumably have prevented all three from facing humiliating treatment and showing respect for their bodily integrity and emotions.

## OPERATIONALIZING THE CAPABILITY APPROACH

Comprehending the context in which the asylum applicants are situated is significant from the Capability Approach point of view, as well as that of Actor-Network Theory. Translations and translation chains, arising from ANT, views technology and society as enmeshed in a network of heterogeneous elements; Conversions and conversion factors, associated with the CA, the act of putting a good or service into use occurs from an outgrowth of embedded encounters. As Kullman and Lee have adroitly summed up, marrying Latour’s translations and Sen’s conversion enables a more holistic understanding of what determines a ‘successful’ outcome, with a focus on determining “the *quality* of the relations among persons, technologies and environments” (Kullman and Lee 2012: 54). This chapter wishes to heed these words yet understands that stylization, of a seemingly unwieldy meshwork of aspects, pays dividends for the reader. As such the diagram introduced by Ingrid Robeyns (2007), in the CA theory chapter,



is adapted to the context of the capabilities with regards to fingerprinting asylum applicants, and recreated in Figure 7 (a larger version can be found in Appendix III):

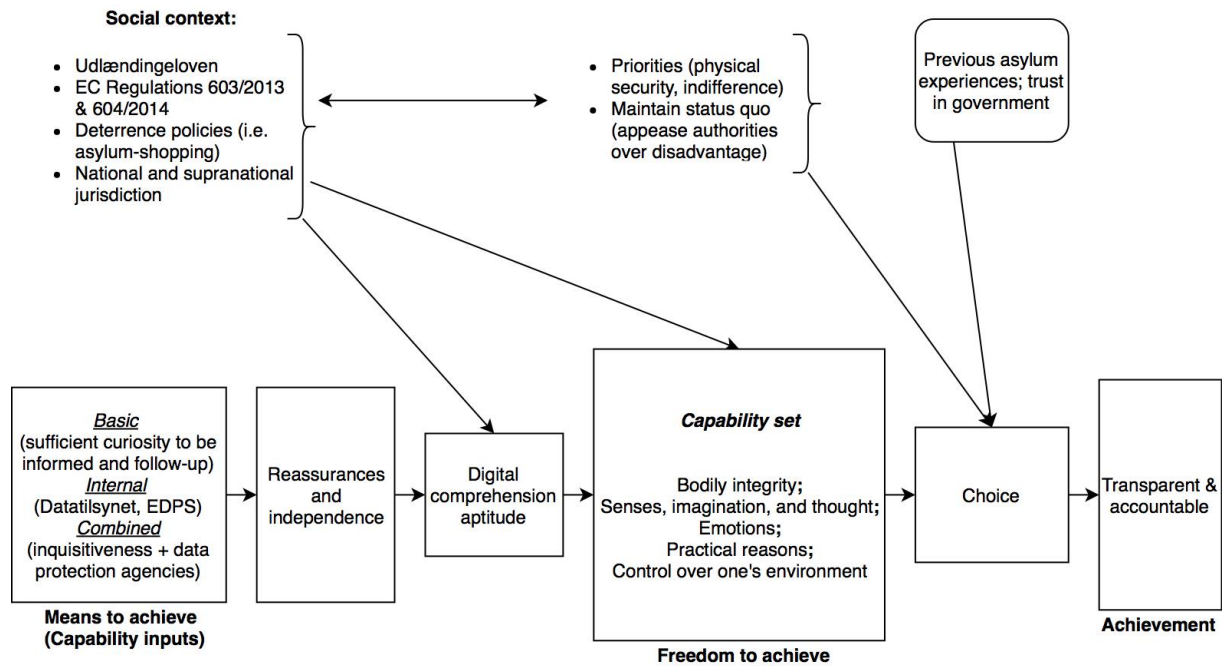


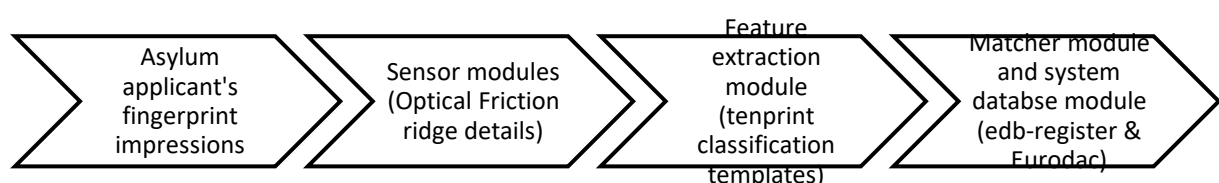
Figure 7 Capability Sets and social and personal contexts

The end goal, or the aspiration, is to arrive at the achievement of a transparent and accountable system of fingerprint data. Starting from the capability inputs, a couple of potential considerations of basic, internal and combined capabilities become discernible. Basic capabilities are considered as the “innate faculties of the person that make later development and training possible” (Nussbaum 2011: 24). Internal capabilities can be seen to occur, if the circumstances allow, as the facilities that enable a person to exercise a capability (Robeyns 2007). Combined capabilities are, evidently, the concerted efforts of internal and basic capabilities that give the means to execute that capability. The three capability inputs will be discussed in depth in the following paragraph.

In the context of this paper, basic capabilities are interpreted as a form of education, whereby the asylum applicants all articulated a desire to be informed. One of the interviewees stated it as: “if they tell us that they share this information, it will be good. For us it is luxury! If they give this right to us, definitely we will be happy” (Interview # 4, Appendix II: 92). The wife, meanwhile, mentioned the need for protection and an openness about the transactions (Interview # 3, Appendix II). The double interview, with participants “Y” and “K”, alluded to a general ill-informed disposition coupled with an unease at further enquiring about their data (Interview # 5, Appendix II). The Iranian, when extrapolating his feeling of ownership over his

*Sundhed* information (‘medical data’) to fingerprint data, mentioned the sense of “independence” (Interview # 6, Appendix II: 98). Internal capabilities, meanwhile, are considered to be the data protection agencies that are tasked with monitoring the lawful application of data, as stipulated by Articles 30 and 31 of the Eurodac Regulation. The European Data Protection Supervisor (EDPS) is tasked with ensuring the fair and lawful processing of personal data (EC Regulation 45/2001). In the context of Eurodac data the asylum applicant, or the data subject, has, amongst others, a right to know for which purposes the data will be processed, the recipients of that data and a right of access to that data (Article 29, Regulation No. 603/2013). Meanwhile, Article 30 calls for a national supervisory authority to act as an independent monitor, observing the lawful processing of the data. In Denmark, the role of supervisory authority is given to the *datatilsynet* (‘Data Protection Agency’), who is charged with overseeing the processing of information sent and received by Eurodac. The EDPS and *datatilsynet* are considered as the internal capability that would enable the applicant for asylum to exercise his capabilities. Combined capabilities would thus occur when the data protection agencies would render their services as available to the data subject, and the applicant would have a manifest interest to be informed and a means to understand that information.

Goods and services are understood as the characteristics that make potentially make the individual interested in an artefact. In this context it is deemed as the interest in qualities of independence and reassurance that can be derived from the fingerprint databases. The individual conversion factor, meanwhile, can be considered as the ability of the individual to be able to comprehend the fingerprint data in a meaningful and actionable manner. It is also, as depicted in Figure 7, conditioned by the social context whereby issues of supranational and national jurisprudence, policies and norms that attempt to deter asylum shopping, and the laws and regulations that determine asylum procedures all come into play. Michael Callon’s (1995) concept of translation chain provides a useful heuristic tool through which to understand the various social and environmental factors. As an example, the four biometric modules which determine the collection, identification, classification and dissemination of the fingerprints enable one to peer into various stages at which the applicant could become more involved.



Considering the fingerprints aren't tangibly enrolled into the EDB and Eurodac databases until the feature extraction module stage - at which point the applicant will be considered an applicant for asylum under Dublin Convention – there exists a feasible point of intervention wherein the applicant would be informed explicitly about the fingerprint databases, their purposes of collection, transmission consequences, and the rights of the data subject. Furthermore, from the selected interview passages, the asylum applicants' perspectives on fingerprint data has revealed an array of central capabilities which would further enable the asylum applicant's capacity to understand the processing of fingerprint data. These capabilities have been alluded to at the end of each passage in the previous section, considered from Nussbaum's list of ten Central Capabilities (Nussbaum 2011) as:

- bodily integrity – seen to occur as the ability to move freely and, in the realm of fingerprint data transmission and processing, considered as the ability for asylum applicants to understand and exercise his rights as a data subject;
- senses, imagination, and thought – being able to do these things in a humane manner, where an informed and educated approach is taken to ensure that a clarity exists with fingerprint data in the sense of the purpose and transmission of it. Crucially, fingerprint data should not result in 'nonbeneficial' pain for the applicants, and is closely associated with the next capability;
- emotions – having "one's emotional development blighted by fear and anxiety", is understood in this context primarily as counteracting measures to prevent applicants from feeling scared, anxious, and impervious to fingerprint data processing;
- practical reasons, and – the ability to plan one's life based in a critically constructive manner, is seen to occur when the uncommunicated processing and transmission of fingerprint data results in applicants being left in a state of limbo;
- control over one's environment – primarily political, the ability to participate in an effective manner over the choices that govern one's life is seen in this milieu as being able to have a sense of independence and ownership of one's fingerprint data.

Crucially, as Nussbaum states, the capability approach emphasizes that, ultimately, "the choice is theirs" (Nussbaum 2011: 18). A 'good' society should strive to ensure that people are given a set of opportunities, but are nonetheless not coerced into exercising those options. In this setting, the choice, for example of being made aware of the transmission of fingerprint data, should ultimately rest with the asylum applicant. Whether or not he or she exercises the opportunities suggested by this research is ultimately up to that individual. The choices are

furthermore influenced by preference formation mechanisms, social influences on decision making, and personal history and psychology. Preference formation from this investigation has revealed how some applicants are simply uninterested in their fingerprint data, while others give physical, bodily security a priority over metaphysical, digital security. Moreover, some respondents claimed their unease at upsetting the status quo, whereby questioning authorities in power is seen with trepidation for fear of putting themselves at a disadvantaged position. Lastly, previous asylum experiences and an instinctive dis/trust of government can be seen to shape understandings of a citizen's role and participation possibilities. Yet if the applicant wishes to exercise these opportunities, a possibility to achieve a transparent and accountable system of fingerprint data could be realizable.

The overarching purpose of the Capability Approach, in the end, is to enrich the possibilities for self-determination of societies, particularly those who have been historically marginalized. Thus far the reader has been shown the way to some alternative avenues for asylum fingerprinting systems, yet this has largely remained at the level of an innocent abstraction. The next chapter draws on a Value-Sensitive Design approach, which seeks to build on the evaluations thus far made, where observable values are incorporated into the design of the fingerprint system.

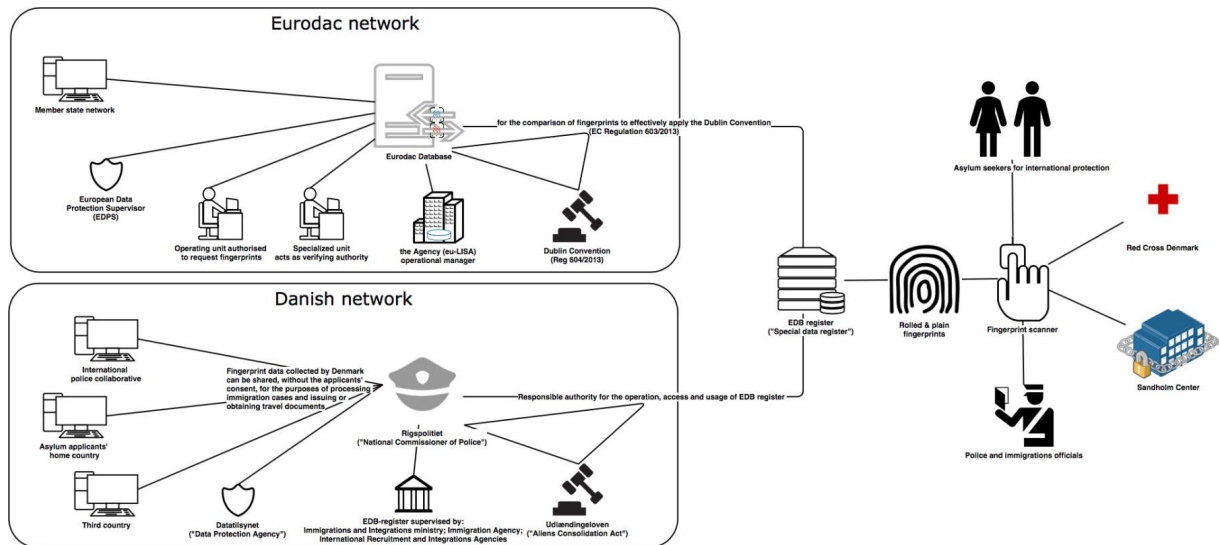
## VALUE-SENSITIVE DESIGN

The chapter herein expands upon the analysis chapters discussing Actor-Network Theory and Capability Approach, by delving into the Value-Sensitive Design approach to technology design. An interest is paid to the values that are imparted, both in the process of unravelling the translation chains as well as the conversion factors which facilitate the functioning of capabilities. While it is clearly too late to impinge these findings upon the asylum fingerprint system as it stands, the iterative nature of technology would verily postulate that future variants will be contrived. Taking inspiration from the tripartite methodology espoused by Batya Friedman, Peter H. Kahn Jr., and Alan Borning (2008), an attempt is made to acknowledge enquiries as they pertain to the conceptual, empirical, and technical investigations of fingerprint data.

## CONCEPTUAL, EMPIRICAL, AND TECHNICAL INVESTIGATIONS

### Conceptual investigation

The conceptual investigation seeks to craft a comprehensive conceptualization of the values that become apparent in the researched context. In the process of drawing out this postulation, amidst the backdrop of asylum applicant's fingerprint data, a host of applicable questions are raised. Friedman et al., (2008) lists this as follows: Who are the direct and indirect stakeholders affected by the design at hand? How are both classes of stakeholders affected? What values are implicated? How should we engage in trade-offs among competing values in the design, implementation, and use of information systems (e.g., autonomy vs. security, or anonymity vs. trust)? What values are implicated? How should we engage in trade-offs among competing values in the design, implementation, and use of information systems (e.g., autonomy vs. security, or anonymity vs. trust)? Should moral values (e.g., a right to privacy) have greater weight than, or even trump, nonmoral values (e.g., aesthetic preferences)? Utilizing the suggestions from the previous analysis chapters proves useful in answering these questions. In the case of asylum applicants' fingerprint data, a host of direct and indirect stakeholders, or actors, become apparent. The obvious, human stakeholder relates to the asylum seeker themselves, but also the sundry of government officials in the national (Denmark) and supranational (Eurodac) realms. Recalling the mapping exercise conducted in the actor-network chapter simplifies this stage somewhat.



From the network represented, the human actors are as follows: asylum seekers, red cross staff, the members of the Rigspolitiet who handle asylum cases and the operating units and verifying authorities under the Eurodac administration, and the EDPS and *datatilsynet*. Furthermore, the actors who are blackboxed within the Member States, the home country, third country, and international police collaboratives must be acknowledged. Finally, in accordance with the Actor-Network Theory, the technological and material components are themselves considered as stakeholders within this society; chief amongst these entities are the finger, fingerprint scanners, friction ridge and minutiae details, edb and Eurodac database servers. Indirectly, stakeholders who are affected by fingerprint databases include the family and friends of the individual's whose fingerprints are transmitted for verification, identification, and processing of asylum cases.

Direct stakeholders are affected in a variety of manners, ranging from the limited mobility with regards to the asylee who is identifiable by his registered fingerprints to the double shifts the police and verifying authorities must effect when repeat applicants enter their offices. While, directly, the asylum seekers are often made explicitly aware of the Dublin Convention, the apparent clandestine nature of Eurodac could be seen as a cause for a notable number of asylee's to nevertheless venture forth with their intended course of action. Very closely associated with this reaction, is the indirect effect on the police and immigration staff who must then identify, verify, and process these individuals' fingerprints again.

In the process of fingerprint registration, a number of values can be determined. While some, such as informed consent and privacy are overtly distinguishable, others are not so clear cut. Privacy, in this context, is considered as the rights of the data subject to gain access to the

database, and to be privy to the transmission of the data. Informed consent is palpable in both a physical manner and a putative one: concretely, the asylee has an option to assent to the registering of fingerprints or to leave to the country of origin, which really leaves little room for manoeuvre; as implied in the interviews, the act of taking fingerprints often occurs without the applicant being made fully aware of the consequences of the action. Slightly beneath the surface of the self-evident values, trust, between the asylum applicant, the verifying authorities, and the intermediate fingerprint databases plays a subliminal role in the transactions. So too autonomy is an inconspicuous value that plays out only after the fingerprints have been enrolled into the networks; when applicants are kept in the dark as to the fingerprint databases, and the future ramifications from the storage and dissemination of this information, they face being suspended in a digital no-man's land.

Against the backdrop of this research exists the formidable issue of the EU and the Member states' security concerns. While ostensibly the formation of the Eurodac Regulation and Dublin Convention is publicized as mechanisms which expedite asylum cases, prevent asylum shopping, and ensure the safety of European Member States, a rather glaring omission of the asylee's liberties are palpable. In centralizing the digitized fingerprints, Member States are effectively given a tool by which to legitimately expel asylum seekers, monitor and consolidate border flows, and classify applicants' fingerprints under the same banner as terrorists. Considering this rather heavy-handed imposition of dominion over asylum seekers, this research takes the view that the balance of power could be rectified somewhat, yet without impinging on the capabilities of the national and supranational entities. Autonomy can be achieved by respecting the applicants on an equal footing with citizens, and giving them an adequate understanding of their rights as a data subject. This does not bequeath them with the possibility to delete or alter their digitized identity, but simply gives them a sense of independence and a transparency of the system. It also feeds in to a sense of trust, where importance is paid to ensuring "that it's a two-way conversation with the person being processed" (Interview # 1, Appendix II: 72). Meanwhile, the EDB and Eurodac systems maintain their competences and authority, yet are recast in a slightly more transparent, and cogent manner. Lastly, the suggestion is not a revolutionary one in the least; these rights are already stipulated by the Eurodac Regulation and the Danish Udlændingeloven, the suggestion simply being that that information is made accessible and explicitly communicated.

This disposition furthermore promotes the view that the moral values (privacy and informed consent, autonomy and trust) should be given greater ascendancy than aesthetic preferences

such as the enhanced ease at which processing and disseminating fingerprint data occurs. The interview respondents suggest a willingness, on the asylum seekers part, to divulge as much information as possible and be amenable to the dissemination of that information, so long as safeguards are put in place on the data, the safety of the individuals, their family and friends' are secured, and there exists the possibility to be kept in the loop about the processing, transmission, and use of the fingerprint data. Nonetheless, care must be taken as to the function creep already being demonstrated in the way social media are being utilized as a supplementary instrument to verify individuals. One of respondents claimed feelings of consternation as to the use of social media for corroboration purposes (Interview # 3, Appendix II), while another suggested it as a deluded approach that would misinform the authorities (Interview # 5, Appendix II). In summation, the conceptual investigation alluded to the importance attached to values of trust, autonomy, privacy and informed consent, and furthermore views them as having interrelated properties which has a seemingly simple solution: increased awareness of the purposes of fingerprint data and a two-way communication of the transmission and dissemination of that data.

#### Empirical investigation

Thus far an understanding has been reached as to the asylum perceptions of fingerprint data and the vast gulf prevailing between them and the systems they are enrolled in. It has been assumed that a simple solution exists in bridging this digital divide. However, it will be shown that the design of the system and the technical artifacts employed present some obstacles which hinder the suggested outcomes; as the phrase goes, *all that glitters is not gold*. An empirical investigation is taken which combines interview responses, the various regulations that fossilize the Danish and European asylum system, and secondary data which shine a light on the technical aspects.

Friedman et al., (2008) distinguishes a different unit of analysis between the investigation conducted herein and that of the technical kind where the current focus will be paid to the asylum applicants who are enrolled into the fingerprint system, and further understanding their perspectives. An attempt will be made to present a fresh take on the interview responses, that differentiates itself from the previous analysis chapter and delves more into the influence that the system affects in their lives. In the process the intention is to comprehend: (i) Are there differences between espoused practice (what people say) compared with actual practice (what people do)? And (ii) regarding value considerations, what are organizations' motivations, methods of training and dissemination? These questions will be understood hereon in as (i) are



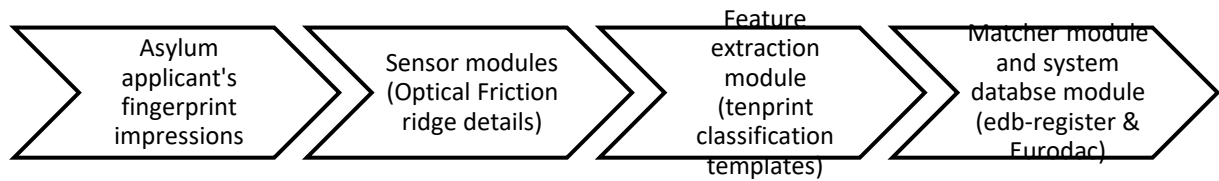
there differences between the promotion of the data subject's rights and the actual engagement with the data subjects? And, (ii) what assurances does the Eurodac Regulation give with regards to data protection, and how is this guaranteed? In responding to these questions, the reader will be confronted with a combination of the interviews conducted with the asylum applicants and a perusal of the Eurodac Regulation and the Danish Udlændingeloven.

The interview respondents attached a variety of understandings and interests with regards to fingerprint data and the enmeshed system. The predominant message related to a reasonable interest in the processing and transmission of fingerprint data, yet prioritizing other matters over that of their rights as data subjects. Some respondents were afraid that raising their concerns over the treatment of the data would harm their chances of asylum; others were simply not interested in the possible deluge of information that would arise from such a possibility. The disinterest is beguiling in its own way as it manifests from an apathy towards the treatment of the data, yet it is taken out context. Taken as a whole conversation, however, it becomes apparent that the disinterest arises more out of an unawareness of the possible implications of fingerprint data. Towards the end of interview # 2, for example, "I" states that "they can use my information how they want, I don't [take an] interest in it" (Interview # 2, Appendix II: 79). Nonetheless, throughout the rest of the conversation he repeatedly stresses how he was kept in the dark as to the asylum procedure, wherein fingerprint registration plays a role of great consequence. As for the ramifications: "German say you can stay all your life in Germany, but [only] when you finish your process in Denmark, because your first finger[print]." (Interview # 2, Appendix II: 77). The fact that the police were uncommunicative about the procedure as regards to enrollment of his fingerprints into the Edb-register, and subsequently Eurodac, led him to take drastic measures, the consequences of which lingered far after his initial application and followed him across borders. Yet both Eurodac and the Udlændingeloven insist on the fact that the applicant has a right to know. Already on page six of the Eurodac Regulation, the first mention of the data subject pertains to the need to inform the individual about the "the purpose for which his or her data will be processed within Eurodac, including a description of the aims of Regulation (EU) No 604/2013, and of the use to which law enforcement authorities may put his or her data" (EC Regulation No. 603/2013; 6). Furthermore, the rights of the data subject are mentioned as the right to be informed of the purposes of the processing of the data, the recipients of the data, and the right of access to the data (EC Regulation No. 603; Article 29). Likewise, Section III of the law on the processing of personal data by law enforcement authorities (LOV nr 410 af 27/04/2017) makes similar requirements: the *Rigspolitiet*, as the

responsible authority for data in asylum context, must make the individual aware of the rights of the data subject and the purposes of the data amongst others. Chapter 5, meanwhile states that the applicant has the right to be informed on the processing of his/her data, but, crucially, only once a request has been made. It might be said that the interview respondent “I” could have avoided much humiliation were he made aware of the collection purposes of his fingerprint data. Interview respondent # 3, meanwhile, stresses the need for security assurances of her data as well as being transparent on the processing of that data: “No. they should be open with everything. But I don’t want to think about that too much, I don’t want to have that tension” (Interview # 3, Appendix II: 85). Of interest, besides her desire for openness, is how she frames feelings of tension within the same composition of fingerprint data. Evidently the thought that the data could be shared with others without her knowing it agitates her. Section IX, § 49 of the previously mentioned law, is entitled to recompense if the data has been handled in an illegal or contravening manner and results in bodily or intangible harm. While in this context it would be excessive to claim this right, the point to be made is that these laws exist for the protection of the data subject. Nonetheless, if the individual is unbeknownst of such rights, let alone the full extent of the purposes and processing of fingerprint data, such situations as those faced by the British, Iranian, and Bosnian asylum seekers are bound to persist. In conducting an empirical investigation, it has become apparent that a general obliviousness of the ramifications of registering fingerprint data is coupled with an apathetic approach to fulfilling the extant laws by authorities. The rights of the data subject exist, but lax adherence and unawareness cause such protracted situations, as those faced by “I”, to occur. It effectively also goes some way to demonstrate an indifferent approach to respecting the rights of the asylum applicant, which might be seen as an organizational deficiency on the part of the *Rigspolitiet*, but is also an issue that can quite easily be rectified. An examination of the technical aspect of asylum applicant’s fingerprints might further illuminate how solutions could be conceived.

#### Technical investigation

The research into the translation chain, presents applicable knowledge in a convenient manner yet again. In particular, probing the inscription devices of the technical facets describes the various heterogeneous elements which make up the technical side of fingerprinting technologies. The elementary components, discovered through the examination of translation chains are as follows:



From the chain depicted above, it becomes perceptible that each stage entails a different undertaking with regards to the enrollment of fingerprints into the fingerprint databases. Rolled and plain impressions have been specified as the proper data format whereby Eurodac can achieve a level of consistency, and an interoperable system across all Member States. Nevertheless, it is not until the optical sensors have been engaged whereby the friction ridge details are scanned by the fingerprint readers. Next, the tenprint classification templates create a binary variant of the fingerprints, thereby converting the minutiae details of the fingerprints into a digital version that can be read by a machine. Up until this point, however, the fingerprints have yet to be registered in the databases, and thus the asylum seeker is yet to be formally inducted into the Dublin Convention. At the matcher module and system database module the applicant is a bona fide applicant, and must pursue the procedures as per the Dublin Convention. Might there be some scope for intervention at the feature extraction module of the application? What possibilities are there for an applicant to become cognizant of the consequences for becoming a registered applicant? In this scenario the individual would be read his rights, and have an opportunity to reverse his or her asylum application, and be permitted to exit the border as an unregistered asylee. The Iranian national, whose family had relocated to Sweden as he went through the Danish procedure, had hinted at his remorse for having registered his fingerprints in Denmark whilst being oblivious as to the consequences of doing so; he went on to express how he would do things differently had he had the knowledge of the asylum system as he comprehends it now: “Yes. Now I know. For example, before they fingerprint you, you wouldn’t be able to seek asylum in another place in Europe. If you wouldn’t want to do that, then you just go to another country and seek asylum there. That would be better” (Interview # 6, Appendix II: 98). On the other hand, the Bosnia-born stateless applicant was vexed by the fact that, on registering his fingerprints the first time in 2015, no official authority treated him with any respect and he left the country as a result; the lack of respect, coupled with not being read his rights as an applicant and made aware of the purposes of fingerprint data, resulted in a protracted application case which he would have to return again three years later to finalize. Nevertheless, while it would appear technically feasible to implement such an intervention that explicitly states the application procedure and the purposes

and consequences of registering fingerprints, legal issues pose potential drawbacks to this scenario.

In the Danish context, for one, the rights of the data subject do not apply until the individual is a registered applicant. As a result, he or she would not be protected by the laws concerning personal information, which fingerprints falls under. This includes the possibility to access the data and, by extension, to know which personal data exists on the person, and how it is being processed and disseminated. Meanwhile, the *datatilsynet* are only called upon to monitor the lawful processing of fingerprint data which is sent or received from Eurodac. The mandated requirement, that an applicant for international protection must be fingerprinted, furthermore, forestalls the individual from making an educated decision of registering in Denmark. The Eurodac Regulation, on the other hand, makes it clear that Member States are requested to communicate, in writing or verbally, the purposes for the collection and processing of fingerprint data with regards to Dublin Convention. Moreover, the authorities must state the applicant's obligation to enroll his fingerprints into the database. Notionally, and if the rights of the data subject were consistently held up, this period might also present an opportunity to state the implications of doing so. The individual would obviously not be considered as a data subject, and hence the rights would be inapplicable to the person, yet it would help give a sense of possibility, where none usually appear plausible. Such a quandary is reflected in the experiences of the Turkish family fleeing from Pakistan, where unsentimental options were given:

*H: "They have given us options also, if you do not want to apply it [fingerprinting] is not good for you. If you want you can go back to where you came from. If you want you can apply, if you do not want you can go back. This is your option. I came for asylum in Norway, if I cannot go to Norway, then the option remaining is to apply in Denmark, so I have applied. They have started procedure. But the policeman, or the person in charge, they haven't informed us, the next step will be like this. They said, for fingerprints you have to come, and in another room we have given our fingerprints"*

#### Interview 1, Appendix II: 87

Unsurprisingly, considering what they were fleeing from, the family 'chose' to register their asylum application procedures in Denmark. The husband and wife both indicated that they would nonetheless appreciate being treated with respect as humans, and be given access or at least be informed of the processing and dissemination of data. Particularly considering the

possibility that their fingerprint data would be sent to either UNHCR, Turkey, or Pakistan for verify purposes, they felt “tension” (Interview # 3, Appendix II: 85) at the thought.

In the various investigations, a host of issues, values and possibilities were brought to the fore. From the conceptual investigation, values of trust, autonomy, privacy, and informed consent were addressed; furthermore, and making use of a mapping of the actor-network, direct and indirect stakeholders, and the effects of fingerprint data on these stakeholders, have been indicated. An empirical investigation shows how the rights of the applicant with regards to his/her data are provided for by law, yet inadequately disclosed. Lastly, technical investigations, utilizing the information derived from the translation chain analysis, an attempt was made to peer into the blackbox of fingerprint artefacts and proffer interventions that might show a willingness to provide the asylum seeker with the option to make critical choices for the planning of one’s life.

## CONCLUSION

In the process of exploring the systems of fingerprinting asylum applicants, a variety of theoretical underpinnings provided a stage from which to unearth the blackbox, understand the refugee’s perspectives, and suggest possible avenues to balance it in a more egalitarian manner. From ANT and extended translations an exploration of the fingerprinting technologies, systems and legislations revealed a host of actors centred around the edb-register for fingerprint data. CA analyses disclosed that a lack of awareness resulted in humiliating experiences for the asylum applicants, in the process disrespecting their bodily integrity and emotions. The social context, prioritizations, and previous asylum experiences and (mis)trust in government are some of the key factors which further convolute the synthesizing of applicant with the systems. Nonetheless, if basic, internal and combined capabilities are address, and the freedom to achieve the identified capability sets are permitted, a transparent and accountable system of fingerprinting may be possible. Finally, a VSD analysis demonstrates that privacy, autonomy, informed consent, and trust are implicated by the passive, non-committal application of the rights of the data subject in spite of the stipulated entitlements. Furthermore, a technical investigation suggests some possible areas of intervention that could enable certain capabilities from being achieved, which would help to further solidify the stabilization of the network with the active and meaningful participation of the asylees themselves.

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## APPENDIX I

### INTERVIEW GUIDE

The semi-structured interviews were guided according to a desire to comprehend the refugee's perspectives and experiences along the lines of certain areas considered relevant to this research. As follows, the guide is divided into topics (i.e. privacy, autonomy and uncertainty of outcomes) within which specific questions have been outlined. The interviews all started with the same question, on the types and quantities of data, but adapted to the circumstances of the conversation as they unfolded.

#### The guide

##### On privacy

- Which types and quantities of data will the technology require and/or generate?
  - Have you been asked to provide information/personal data/ biometric data upon entry/registering in a European country? If so, what type of data and with which organizations?
- Who will have access to the data?
  - Have you been notified of whether the information you provided will be shared/distributed with other states/organizations?
- Who will know about the existence and possible inferences from the data?
  - Have you had experiences where information collected by one state/organization have been shared with others? If so, how has that benefitted/complicated your travels?

##### On autonomy

- In what ways does the technology improve independence/ autonomy?
- To what extent does the technology monitor or control people's behaviour, attitude, emotions, thoughts, moods, and actions?
- Does the technology make decisions? What are these decisions based on, and do they take into account ethical issues?

##### On treatment of humans

- In what ways could the technology impact on the daily life of people?
- Could vulnerable people be particularly affected by this technology?
  - Do you have access to the information you provided? If so, are you comfortable navigating and understanding the data?
- Does the technology seek informed consent where necessary?
  - Have you ever been given the possibility to decline the collection of your data?
- Could events that happen within the virtual world of the technology negatively impact on the real world?

- Have you had experiences where your asylum status has been determined solely on the basis of the information provided? (i.e. have you had the opportunity to provide personal stories as part of the documentation)

#### On identity

- Does the technology change human capabilities, e.g. their ability to perform certain tasks?
  - Has the fact that you provided data at one stage of your journey made it simpler/less intrusive in other stages of your journey?
- How will the technology affect the way in which users see them-selves or one another?
  - Have you had experiences of mistaken identity/ categorized as a different ethnicity in which the collected data has been improperly labelled and read by the relevant authorities?

#### On security

- Is the technology likely to create novel types of vulnerabilities, e.g. by generating or requiring sensitive data?
  - Have you been hesitant to provide some information that you consider too private/personal to share? If so, have you been able to decline to share such information?
- To what degree will existing security solutions be applicable to the technology?

#### On digital divides

- Which impact will the technology have on the possibility to participate in social life?
  - Have you yourself experienced, or heard stories about, the information being given to and used by private entities (i.e. insurance companies, doctors)?
- Which mechanisms of diffusion are likely to be used to introduce the technology widely?
- What are the likely consequences for groups that are already marginalised?
  - If you have access to the data, have you been instructed on how to use the systems?

#### On collective human identity and the good life

- Does the technology replace established human activities or work?
  - Are parts of the data collection process completely automatic/computerized? Or are human actors involved throughout?
- Which view of culture or human society is the technology likely to promote?

#### On ownership, data control, and intellectual property

- Which ownership or access models are favoured by the technology?
  - Are you able to edit/refine the data that has been collected on you?
- Does the technology make use of open or proprietary standards?

### On responsibility

- Which existing and legacy system does the technology rely on?
- Who is responsible for testing of the system?
- Which consequences could a malfunction or misuse of the technology have?

### On surveillance

- Will the data that the technology generates allow for surveillance?
  - Have you personally experienced/heard stories about the information being shared with, and used by, police authorities?
- How are access rights embedded in the technology?

### On uncertainty of outcomes

- What are the possible uses of the technology beyond the ones primarily envisaged?
- Are there foreseeable side effects or unintended consequences of the technology?

### On perceptions of technology

- Will the technology appear autonomous to users?
- Will the technology be anthropomorphic, that is, look or act in ways that we normally expect humans to look or behave?
- Which human activities will be replaced by the technology?

### Role of humans

- Which novel capabilities will the technology provide users with?
- Will the technology be closely linked to the user (e.g. be wear-able) or implanted?
  - Do you have the possibility of using the data for your own purposes (i.e. health information, proof of identity)?
- Is the technology likely to replace established human activities or work?

## APPENDIX II

### INTERVIEW # 1

“D”

**British national in his 50s, fleeing from personal harassment to Sandholm Center, having previously sought asylum in Norway.**

**Interview conducted on 6<sup>th</sup> June, 2018 at Sandholm Center**

**S:** Have you been asked to provide information/personal data/ biometric data upon entry/registering in a European country? If so, what type of data and with which organizations?

**D:** Yes, I have. Military, if I have a military record, if I’ve handled guns; my marital status. And on a general, I didn’t think the questioning was actually that in-depth. It was just a general overview of the person. They were primarily interested in the military background, handling of guns...they were asking about my wife, my marital status. But really that’s about it on that question.

**S:** And in terms of biometric sort of data? Fingerprints...

**D:** Well when I first arrived here in Denmark I did show my Norwegian card that I had made for an asylum [application]. I was advised that now you’ve got to Denmark, taken my biometrics readings, and that it’s probably best to get rid of the Norwegian papers and documents because you’re here in Denmark and not in Norway, so I put the card into the bin. When it came back from the interview, the first interview, there was no record of me being in Norway. Which I find very hard to believe. [in Norway] I had a full medical, mental, psychological and I also had a full biometric fingerprint and eye-scan, which cannot just disappear by themselves! We have proof of me flying in to Norway...this I find very hard to believe. I was told that the fact that I’m a British national, that my record won’t be kept on the biometric scheme, which I find also very hard to swallow.

**S:** Which institutions have asked you for information in general?

**D:** Immigration department, no other institutions asked for information

**S:** And immigration would be the same as police department?



**D:** Well the immigration department collect the information. I don't know how that is distributed in the system

**S:** And they haven't been forthcoming, in the sense of distinguishing between police and immigration services?

**D:** No. These lines, for a person going through the process, are completely blurred. You don't know who is doing the interviewing. And also, in this camp it's very difficult to distinguish between the police, immigration and red cross. And none of them will talk to each other. There's no overlapping in the information sharing, and there is some confusion between all parties, or there would appear to be. Especially in my case.

**S:** And when you say in this camp, it's because when you went through the process in Norway you had a different experience?

**D:** In Norway, you have a completely different experience. You're interviewed by the police, and then you're interviewed by immigration. So you have, I think, a much more transparent overview. And the questions they were asking, the police were very forthcoming with how they used the information. I think all in all I had three interviews: two with the police, one with the immigration. And you're dealing with experienced police officers. They've got a certain intuition based on experience.

**S:** And you mentioned transparency, is that in the sense, that they gave you feedback on the information collected on you?

**D:** That's precisely [what I mean]. I was allowed to ask questions about what was happening to me, why is this happening to me. And I think that's very important, that it's a two-way conversation with the person being processed. If that doesn't happen, you start to feel like a person who's just being asked questions, which you don't know why you're being asked these questions. When I arrived here in Denmark, I was wondering why are they asking all these questions if I've handled guns? They even asked me about my junior air force training, which is when I was under 16. But then thinking about the situation [in Sandholm], I think they were thinking about war-torn environments.

**S:** so, they wanted to delve more into the personal story?

**D:** they want to delve more into the personal story, exactly why I'm there. They also went through my paperwork very meticulously, they took notes, they built up a quite good picture.

It was like, why are you here? Question and answer, and I thought this was quite thorough, very well organized and orchestrated. I didn't feel like I'm actually the victim, I thought I was a party of an ongoing process. I haven't felt that at all here in Denmark. From day one I feel I've actually been subjugated to very improper treatment.

**S:** Have authorities, in Denmark or in Norway, been transparent about the sharing of your information? Like who they share it with? How they share it?

**D:** No. I've been verily told that what you tell everybody here is safe and secure. I simply don't believe that at all.

**S:** Do you have reasons to suspect misuse?

**D:** Oh yes! Misuse of information, certainly be the Red Cross. And misuse in position of power...I think you have to be very careful how society is. I don't think my personal documents, my being here, is at all being safe, at all.

**S:** The experiences that you've been through both the Danish and the Norwegian asylum process, and the fact that you said they didn't share the information: do you believe that it has complicated your process?

**D:** Of course, if you lose your valuable information and medical reports...that information should be readily at hand. On my synopsis I presented to I presented to Danish immigration, the open page [prior Norwegian application] is discredited, this person i.e. myself has been in Norway. How can someone actually eradicate my information out of this European network [Eurodac]. This tells me that there is somebody behind that. This actually confirms my suspicion.

**S:** If they were to have shared their information amongst each other, how could you envision that it might have eased your experience?

**D:** far more depth was taken by the Norwegian police. There were three interviews. one was with the immigration. I think I had a six-and-a-half-hour interview here [in Sandholm] with immigration. I think I had about 18 hours interview or more in Norway. You've also got a backup of health professionals: a doctor and psychiatric evaluation and a medical evaluation. So you've got a body of information on a person, that's tangible, that's carried out by professionals.

**S:** so that was just an inherent part of the Norwegian process?

**D:** well I think the first thing you should have here is a medical. You don't want diseases to come into the country, this is a fundamental flaw. And in my instance, it's also a corroborative method. You can see the physical problems that I'm having from this so-called electrical laser tases [part of D's reason for asylum] so it actually supports my application for asylum. What's happened to me. It's important to look at [my physical state]

**S:** Has there been some information that you've been kind of hesitant or even unwilling to share?

**D:** I always think, looking at my situation as an outsider, I have to hold back some kind of sanctity.

**S:** have you been allowed to decline certain information? As in fingerprint, iris scan...

**D:** No I don't think the individual has the right to actually say no. if you say no, I think the asylum process will immediately [be put to] a stop. And I also can see that it is actually a very valuable tool in the processing of people. If the information remains sacred [inviolable]. The moment it's lost, or misused. Who actually governs that? That's the very worrying side of the biometric system. If someone's got the data and information, we trust that data with people above us.... but no I've not refused any information, I've tried to be open and transparent for my being with the authorities here.

**S:** in your case, with your experiences of having being taken advantage of and persecuted [by an individual]: how could you imagine the misuse of the personal data that's been collected on you at the asylum center?

**D:** well, if we go back and look at it: one, there's all the data there, with a person in a position of power saying, this guy is not convenient to us. And the misuse of power here, the person perpetrating these crimes against me seems to be obsessive, wanting every fucking detail. By having people filming me, videoing me, and taking pictures of me in the camp, that will further his pleasure.

**S:** have you heard of situations where the information that is gathered on you, as an asylum seeker, is used in more private setting...insurance companies, local police, doctors?

**D:** I can only go on my experiences here in Denmark. I would imagine that my information, or a form of information, is circulating amongst the red cross staff here...

**S:** because you mentioned before that they [the various institutions] have a lack of communication but at the same time there is also a sort of communication...

**D:** there is certain agenda. There is a person outside of the framework of the Danish police, red cross or immigration service, who's got a different agenda. This person [that D is fleeing from] has money, has quite a lot of contacts, so I can only speculate that he knows that I'm here. Pretty much every email I've sent, every person I've know, he's compromised. So I have to be extremely careful.

**S:** If, as you say, this personal information were to get in the wrong hands...how do you envision that scenario playing out?

**D:** well it's like a chess game he's playing. He wants to anticipate what I'm going to do next. He wants a similar role happening in another place, if I move to another country and claim asylum. He's learning how it's being done in Denmark, he'll take [these] problems and apply that in another country. So that's how information you [Denmark] gathers from me is quite useful, and being a victim of that, it's very difficult to get out of that cycle.

**S:** In the EU there's this new regulation, called the General Data Protection Regulation [D: yes I'm familiar with it], and one of the key components of that is a right to access information that is gathered on you, and to know the whole process of how it's shared with third parties, and what sort of implications would be applicable to you. Could you imagine, if that were to also be applied to asylum registration process, would that help ease your apprehensions?

**D:** No. Me knowing what I've already told the authorities is not going to help me at all...I don't mind people knowing as much information on me as possible. In fact, that may be my saving grace.

**S:** but if you imagine for example this whole experience of going through the Norwegian asylum process and then coming here and seeing that it wasn't shared...

**D:** I think there should be a transparency. There should be an umpire put in place. All this information should be given to a third party, with a safe-house. You would apply for asylum in a country, that organization [third-party] knows you've applied there, your registration and your biometrics should be in a safe place.

**S:** and for example in the instance of being able to corroborate the fact that you were in the Norwegian asylum process and the Danish authorities kind of didn't acknowledge that...

**D:** This is absolute a basic. You should never ever be in this position. For you not to have my details in Norway, in a European database, that's the whole idea of it, is criminal. And this tells me there is some criminal work [behind it]. If I can corroborate the fact that I've been in Norway...this actually appals me, this tells me the system does not work. So I think if someone wants to eradicate a person's details, that is seemingly possible.

## INTERVIEW # 2

**"I"**

**Native of Bosnia in his 40s, a stateless person not recognized by country of birth, or other former Yugoslavian countries; in Sandholm Center having previously sought stateless status in Germany, yet already started application in Denmark.**

**Interview conducted on 19<sup>th</sup> June, 2018 at Sandholm Center**

**S:** Have you been asked to provide information/personal data/ biometric data upon entry/registering in a European country? If so, what type of data and with which organizations?

**I:** First time I come in 2015, in July. But I sleep here three days then I left [the country]...I grow up in Europe, working, I have been residing in 11 countries. I am not interest in to do asylum in this moment [2015]. But after living in Germany, England, Belgium, Switzerland, some people don't want to give you work without papers...I decide to do asylum, and my land [Bosnia] don't give me papers, Serbia not give me the papers. And Europe don't want to accept this story, because if they accept the story they must give you some papers. Germany give me two times negative, they want to give me deportation...

**S:** deportation to Denmark?

**I:** no, to Bosnia. And I fight, legal fight, with proofs. And the German government send my photos, fingerprint, DNA everything to all Balkan countries, and ALL Balkan countries say this person not our citizen...we don't give paper for this person [I], this person is not our citizen. And they [Germany], say after, yeah you are staatenlos (stateless).

**S:** and you say when the German authorities give this information to the Balkan countries, do they let you know they were going to do this?

**I:** they tell me the Balkan countries accept you [verify]? I say I just want a passport, no problem which land....and Germany after three years they accept [the fact of stateless claim] and they give me the permission to stay all my life, with a house, everything

**S:** but no passport?

**I:** but I must close the Danish asylum, because my first fingerprint is in Denmark, after when I come back with the proof that I don't have nothing [no pending case] with Denmark, my procedure start and Germany give me the passport. But stateless passport...I have seen my passport, with picture and everything, but I must close my asylum [in Denmark]. When I come to Denmark [in 2018] I give all my German documents in the border.

**S:** when you came here in 2015, did they tell you the procedure?

**I:** they tell me, in the police station, 'why you come here from Balkan?', I say 'hey, I am 16 years in Europe, and came from Germany, not from Balkan'. After they say 'you don't have chance, why you come here'...they make me little confused, I don't know, I'm feeling not good, you know? People they think I'm lying.

**S:** but they made you take fingerprints...

**I:** Yeah, they use for normal the fingerprints. But they say me 'you don't have chance. Safe country, Bosnia'. Every time I say 'I'm born in Bosnia, I grow up in Europe'. In Holland also people believe, they check everything, they say me 'better for you chance in Germany'.

**S:** and then in Germany they say you have to go back to Denmark?

**I:** German say you can stay all your life in Germany, but [only] when you finish your process in Denmark, because your first finger[print]. We have chance to give you the passport. If you not close your asylum in Denmark, you can stay all your life in Germany with your wife, but you never see your passport. It's the Dublin procedure.

**S:** And nobody, the police authority, they never explained that when you get your fingerprint taken here in Denmark, that means you have to close your case here before you can move on?

**I:** no. they attack me from one minute [the first minute] in 2015, why I come here to Denmark? How you come, how you cross the borders? I don't have problems when I never use asyl [asylum], now when I want to legalize myself in Europe...I was being illegal in Europe [for] 16 years, I don't have the problems. 16 years I don't have the problems, and when I want to legalize me, wow problem! Stupid problem. In Germany, so much angry first

year, and I say couple times, please call now police, please deport me. And sometime afterwards I say the joke: but where you deport me? In mars? Jupiter, Neptune, pluto? Maybe moon? And when you say that to someone in authority...they think two things: you are crazy, or you really tell the truth.

**S:** And so now this is your second time coming to Denmark, to finish the asylum...

**I:** Second time, but same process. My process from 2015, I show you now ID from 2015

[I proceeds to show me documents of his asylum application from 2015.]

**I:** I come in Denmark 7 July 2015, Center Sandholm. And I left, first time from Denmark 9<sup>th</sup> July 2015.

**S:** and do you think now, in this second time that you come back, is it maybe more difficult with the registration?

**I:** No, no its very fast. It's very fast because I give everything, Danish government have a clear case. They ask me everything they want to ask, and I say 'why you ask me, with just one call you can speak with Hamburg, German government, they give you all information'. But I want Denmark to do [asylum case] a little fast, I want to go back to Hamburg [to] work...but ok, I know I must finish this [case], I must prepare myself for this, also for refugee camp. To come from normal home, to...refugee camp. I have a house, a wife now in Germany, I must fight for my future. I must come here...make things clear, and go back to live my life.

**S:** and you say you have given information both to German and Danish authority

**I:** now, when I have interview I can tell. But before they [Danish police] don't want to hear my story, you understand? I give you example, I want to speak with you but you tell me you don't want to speak with me. And what can I ask? I just better go, so I did. 8

**S:** so at the same time, they collected your fingerprint, they started your asylum process, but they didn't want to hear your story, the first time around

**I:** first time they tell me in police station why you come here because your Bosnian country is Europe, and for asyl [asylum] we don't accept you. They don't give paper for people which [come] from Bosnian country, it's normal I know that. But I give you example, if I have Bosnian passport, and I say now I come here for asyl [asylum], it's total stupid because you don't have problem now. But I don't have the passport, I don't have the land! That is the total

difference, it's very little percent that have people like me: stateless...it's the truth. Its stupid, but it's the truth. And one European country say no [to asylum], it's the end of your life.

**S:** is it the same information with the Danish government as it is with the German government?

**I:** yeah.

**S:** and you say also that they didn't give you full explanation of what it would mean if you register your fingerprint

**I:** Nobody speak with me. No body speak with me one word, what happens if asylum here. Nobody. They just give me the room...before there's so much people here [in Sandholm] in 2015, I think maybe 1,000 people. You have like little village here...Crazy!

**S:** but you say first time they didn't give any explanation for the asylum

**I:** No explanation, they just give the room, you sleep here.

**S:** and then you left after a couple of days...

**I:** 3 days! I sleep here Friday, Saturday, Sunday, and Monday I go to Flensburg in Germany. For what I stay here? Nobody speak with me; I don't know nothing.

**S:** and then you applied for asylum in Germany?

**I:** yes, first time when I come back to Germany in 2015. But they refuse me two times...they have all papers, also in Dublin, where is database for papers.

**S:** And when they do the registration, do they tell you how it will be used? If it will be shared with other countries?

**I:** I'm not asking, they don't tell me. I know now how they share [after experience]. They can use my information how they want, I don't [take an] interest in it. I give my information, I don't want to lie. 9



### INTERVIEW # 3

**“Sa”**

**Turkish national, married to Interview respondent # 4; was on the way to seeking asylum in Oslo, yet apprehended at Kastrup airport where Dublin Regulation convened. Previously teachers at a Gulen-affiliated school in Pakistan, they were required to seek UNHCR protection after being intimidated by security officials.**

**Interview conducted on 20<sup>th</sup> June, 2018 at Sandholm Center**

**S:** Have you been asked to provide information/personal data/ biometric data upon entry/registering in a European country? If so, what type of data and with which organizations?

**Sa:** Yes. They asked from where you are coming, and why you are coming here. We explained them the reason, and they take notes. They took our passports, and our ticket and our visa. Money also. And then they took our fingerprints and picture, and sent us to Sandholm. And they repeat those question again, our fingerprint and picture again. They call us for writing the reason, Europe reason, and then first interview.

**S:** And from the very beginning you had to provide these documents to prove your story

**Sa:** Yeah, yeah. We provide everything to them, but over there they have taken everything at airport. They have taken passport, and we were having that UNHCR protection page.

**S:** and so, because you came with your passport they didn't ask for your mobile phone or

**Sa:** no they didn't ask for our mobile phone. Just to search our body, if there's something. And our luggage, nothing else

**S:** so a follow up question to what sort of information has been collected.

**Sa:** our personal information, who we are they were trying to understand. We have given our ID card also, Turkey ID card. Our passport and our ID was matching also.

**S:** and so back home in Turkey you have already been fingerprinted or they have some sort of information?

**Sa:** no just ID we are having, and that card has a ID number. I think you people [Danish citizens] also have your birthday and four-digit number. With that we can enter our government [web]page and we can all the documents where we are living, how many times

we have entered Turkey, from where we flew, you can check that information also. We provide those information at our interview.

**S:** And when you came here and they had taken this information, did they say how they would share the information or who they would share it with?

**Sa:** They told us that they would never share with Turkey and Pakistan also. Because we don't want that Pakistan should be aware that we left the country. Because one of our friends, my best friend, when they left [from Pakistan] the secret agency, they call ISI. ISI they came, you know, and they asked so many questions to us where are they [the friends], when they left. Although they can get this information from airport, but why they came and why they asked we couldn't understand. We're scared that if they get to know that we left, in Pakistan I have so many friends, and they [Pakistan authorities] don't know that I am not in Pakistan. Because of my security reason, I change my address and they are thinking that I am in Pakistan.

**S:** so you told them [Danish authority] out of a fear of...

**Sa:**...because of them. Because they will suffer. I am relaxed now, I am free. If you have money, if your parents are supporting, you can run away from Turkey or Pakistan. We were lucky, our parents helped us...we flew [from Pakistan] to Hong Kong, and from Hong Kong we fly here.

**S:** and so you would be afraid if the Danish immigration service were to provide this information back to Turkey or to Pakistan

**Sa:** yeah they told, or I asked them, not to share, and I believe that. I want to believe. This is not third [world] country, I don't think that they will act like Pakistan.

**S:** and throughout the whole process there was always a human person involved. It wasn't like with the fingerprint and computer and...

**Sa:**...no no. this happened just two times, when we arrived at the airport and when we came here.

**S:** and they identified themselves as being immigration or police?

**Sa:** police? Immigration I think. Or police, I'm not sure actually. In airport it was police but over here they were not wearing uniform, that's why I'm not sure. But I think it's police, because we were in building four<sup>9</sup>.

**S:** have you had any experiences as being identified of someone that you are not. You say, for example, that you were part of a certain movement back home, and is that something that they recognize through this information?

**Sa:** how they can recognize? Because I'm working in the school over there in Pakistan, and I am having that experience certificate [teaching certificate] with me. And now some documents we have sent from Turkey actually, those documents are coming from Turkey because we were not carrying. We were scared that if they will catch us, the Turkish government, if they [get] handed over, they [Turkish government] shouldn't get those documents, that's why we were not carrying [it]. Some documents are coming, the experience certificate, and we can prove that we are belongs to the Hizmet movement ["Gulen movement"], why we are suffering. And we gave them [Danish authorities], from the Pakistani government we received one letter. In that letter its written that within three days you have to leave the country, and my family name is written, and we have given that. We are in the deport list, and we have handed over to them. Those we have taken a picture and uploaded to our email.

**S:** and has there been some information that maybe you don't want to share with police and immigration?

**Sa:** actually I really want to share everything that I want to prove who am I and what [I went through]. I don't have anything secret. Everything is open. And when we were in the immigration service, the lady asked about our Facebook and twitter, and all stuff, and I showed her and she asked 'can I look at your Facebook'. And she has checked. There is nothing wrong, they can check everything, they can see everything. It's their right also, I can understand. Before maybe I cannot, but when I was in Pakistan I saw so many things and its really scary. They [Danish government] have to take care of their country and their people. They can check everything, it's their right I think.

**S:** And so they used Facebook to support your story

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<sup>9</sup> Building # four houses the police and immigration services at Sandholm Center

**Sa:** yes yes.

**S:** Would you say it maybe makes the whole procedure simpler because you were able to provide, like Facebook photos, did it make it easier for you to explain yourself?

**Sa:** It's easy but it's irritating also. It's hard, who I am? I ask this question so many times.

**S:** do you have a possibility to change some of the information that you've given them?

**Sa:** we [were] told that, you can add, you can update our information. Whatever I was having in those documents, I was giving [to the Danish authorities]. I want that they should believe; I don't want to break their trust.

**S:** and how about sharing with other European governments?

**Sa:** they were checking that we were having with Dublin [in the Eurodac database], and we are not. And if they want to show something, then yes they can share with European countries, not with our side [Turkey/Pakistan]

**S:** does that play on the back of your mind at all? In the sense that you share this information with a government, in this case Denmark, and you say please do not share the information with Pakistan. What if the Danish government were to reach an agreement with Turkey, how that would be used

**Sa:** I really don't want to think about that. It's really scary. If they will share, then they also have to provide my security also.

**S:** and I suppose a big part of that security would also be about being transparent? About being open that when the Danish government wants to share some information with another European country

**Sa:** they can yes, this is perfectly fine. Just because of my security I am scared.

**S:** do you have a same level of trust for the UNHCR system as with the Danish [Eurodac]?

**Sa:** No. Over there the [UNHCR] people were Pakistani. There was one Norwegian [the head of the UNHCR division in Peshawar], when we were talking with him he was listening. We were talking, with the Pakistani people and they were [translating]. But some information they didn't tell him.

**S:** does that experience have some influence with your level of trust with Denmark?

**Sa:** Denmark? No. I think I trust them; I want to trust.

**S:** You mentioned WhatsApp messages was also used by the immigration services

**Sa:** yeah, they asked my WhatsApp number, to whom you are talking. I said my parents. They asked 'what you are talking [about]'. I said 'how you are doing'. One of the women, she asked 'can you use a gun, or have you held a gun?' she said this question was for all people.

**S:** were you able to say I don't want to answer?

**Sa:** I didn't say [anything], I just started crying. It's too big for me, these questions. Terrible question. Really irritating. You are thinking, what they are thinking about me. Who am I. Why I am suffering like this. I am thinking also that they have to ask because they don't know who I am, where I am coming from. That's why I didn't say no, but it's irritating. Sometimes, you have to suffer.

**S:** And facebook and whatsapp for example, it helps you prove who you are or it helps you answer

**Sa:** yes. I was shocked. I was not expecting my social media [would be used]. She [immigration official] said 'can I see', and I said 'okay'. Then she checked, what I am sharing from my phone. It was a bit shocking but its ok, what can I do.

**S:** and what sort of information would that provide?

**Sa:** I don't know. Maybe she's trying to understand what kind of lady she [Sa] is. Because it can show who you are maybe, your follower list or what you are sharing. If you love animals and are sharing \*laughing\*.

**S:** and friends?

**Sa:** yes, my friends also. This Facebook for me, it's just communication with my friends.

**S:** when you think of the immigration process, and then they try to get as much information from you as possible in order to build this profile of who you are. Do you believe that the more information that you give, the better an image you build? Or should it be rather that you have basic information: you tell your story, you take fingerprints and facial photos, and not have to go into Facebook or WhatsApp?

**Sa:** I hope they can judge that much, what she is sharing. Some people depending on their psychology, you can judge to know what they are feeling. So not from [personal] pictures but what they are sharing. Just because of the picture, it should say something about a person. I don't think that it's right.

**S:** when you were back in Pakistan, the information that you gave to UNHCR, do you think that that was some way that the police, ISI, was that information [for UNHCR] something that they used?

**Sa:** I'm sure that they used that. You will get everything there. There is so much information and those people I don't trust. For money and everything they can give information. There's rules, but no protection, personal protection. They [Pakistan] share, with Turkish government.

**S:** you have given health information; do you know if that is being shared with doctors or hospitals?

**Sa:** they said that they are going to share that with the doctors. They can share everything, but first they have to provide protection.

**S:** would you be ok if they shared without you knowing?

**Sa:** No. they should be open with everything. But I don't want to think about that too much, I don't want to have that tension.

#### INTERVIEW # 4

“H”

**Turkish national, married to Interview respondent # 3; was on the way to seeking asylum in Oslo, yet apprehended at Kastrup airport where Dublin Regulation convened. Previously teachers at a Gulen-affiliated school in Pakistan, they were required to seek UNHCR protection after being intimidated by security officials.**

**Interview conducted on 26<sup>th</sup> June, 2018 at Sandholm Center**

**S:** Have you been asked to provide information/personal data/ biometric data upon entry/registering in a European country? If so, what type of data and with which organizations?

**H:** Yes, personal questions. From where you have come from, which route you have used. I have faced these types of questions at the airport.

**S:** and the first officials you talked to were police and they identified themselves as national police?

**H:** I don't know, they haven't said we are police, but they wore labels with the police uniform. They asked, what is your purpose of the visit to Denmark, why not other countries, what's your reasons to come here

**S:** How did they come to select you to be questioned?

**H:** I don't have a visa, I was trying to go to Norway. Normally I would go through the international port side not domestic side. I don't know why my gate is changed, it was the international port but later on I have seen the board and it had shifted to domestic port. I would have definitely gone to Norway, but when they changed to domestic port I had to pass through security and they realized my situation because we don't have visa and said we cannot go. This is the reason I have applied for asylum, in Norway. Not Denmark.

**S:** so at Copenhagen airport you went through security and at that point they found out about your asylum request

**H:** yes I requested. I demanded asylum and they said ok, shifted us to a room and started a process there checking my luggages. And then we have shifted to another room for fingerprints and they started the procedures. It took about 2 hours. After 2 hours they shifted us here [to Sandholm]

**S:** did they explain what the fingerprints would be used for or how it would be used?

**H:** yes they have explained [it to] me.

**S:** did they mention Dublin Convention?

**H:** for security purpose it would be used in the whole of European union. They will match this fingerprint matches the other records, maybe it was already recorded before, they will check for security purpose. Maybe Dublin or maybe security, they have explained both.

**S:** and as part of that explanation, did they explain once you have taken your fingerprint in Denmark, then you have to resolve the case here and cannot go to Norway as you wish?

**H:** They haven't informed me what is the procedure [with] that. But they have already taken our passport, [which] means that I cannot shift anywhere. But they haven't said that you cannot move. I have applied already to Denmark, which means that my intention is not going to other places. Yes, the first intention was going to Norway, but when I applied here, it means that they will check my case here.

**S:** and when they shifted you to Sandholm, you had to repeat the process?

**H:** Here, after one day, or two days they have called me for the written interview, what is your case, why you have come here, why you applied [for asylum]. Me and my wife, separately we have written our case why we have applied for asylum. And then with those records they have made one copy for ourselves. And then after about 20 days they have requested us for the first interview.

**S:** and throughout the whole process, at the airport and here at the center, there's always been some human interaction? For example, when you were asked to give your fingerprint there was somebody telling you what to do?

**H:** No they haven't explained [it to] me. What is the next step, they haven't explained to me. This is the procedure, we have to take your fingerprints, and we have given them that.

**S:** yeah, so there's always been a human behind the machine, so to say

**H:** at the airport, the policeman haven't informed us: this is the step, after next step it will be this and that. No they haven't inform. They just told us, in the airport, you have to give your fingerprint. They have questions. They have given us options also, if you do not want to apply it [fingerprinting] is not good for you. If you want you can go back to where you came from. If you want you can apply, if you do not want you can go back. This is your option. I came for asylum in Norway, if I cannot go to Norway, then the option remaining is to apply in Denmark, so I have applied. They have started procedure. But the policeman, or the person in charge, they haven't informed us, the next step will be like this. They said, for fingerprints you have to come, and in another room we have given our fingerprints. When we came to Sandholm asylum center, the Red Cross told us you should go to building number x [4] for written interview. And when I asked the questions [procedural], the policemen [said] 'we don't know. You will be informed'. But the Red Cross officials they have informed us what is asylum, what is the procedures, the steps.

**S:** But the police and immigration



**H:** No, no immigration office, nobody inform us what is the next step

**S:** Can you imagine for a future asylum seeker, could you imagine that you would like to have more transparency about these steps, these procedures. Do you think that is something that would make it a better experience for an asylum seeker?

**H:** As an asylum seeker, I have reasons for applying. It is concrete reasons. It is reasonable. But what is my expectations if you are asking, from the police, I'm not expecting what is next steps, it's written already in the internet somewhere. They don't need to give me again. But what is my expectations? I need protections from officials. What is their process I don't know exactly. Are they entitled to give the information or not according to the law? I don't know. But at least they have to give some hope, of what I am [to] expect.

**S:** you mentioned just before about an uncertainty of the information they have on you, and how they use that information. Could you imagine a scenario where they would share this information with turkey for example?

**H:** I don't think so, they will not share. Because the Europeans are abiding [to] their laws. That's why I come to Europe. They always obey the rules. There's no reason to share with Turkey, why would they share with Turkey? What is their benefit? I don't think they will share with Turkey. With government officials I don't think will share. But maybe they will share with private [entities] as they are seeking my person [identity] which type of person. They may share with those people. I believe that they are working under the Denmark [government]. But I don't think so they will share directly with government officials.

**S:** Have the Danish government said anything about sharing information with other organizations for verification purposes, for example with UNHCR?

**H:** They said they will never share your personal information with Turkey. They have informed me. I have given them official documents: my wedding certificate, my university diploma transcripts. I'm trusting them, because these people [Danish government] are obeying their rules, they're never violating their rules. I believe they'll never share.

**S:** And if they do share with UNHCR, would you like to be told about that, or notified that this is happening?

**H:** Yeah it will be good, because I need to open as much as possible. If they want to verify it is good for me also. If they want to communicate with UNHCR, there is nothing wrong in this way. It is better, it is quicker.

**S:** So on the one hand it is better, but on the other hand it would be nice to receive some notification about the sharing of information

**H:** If they notify in this way it will be good, what they demand of UNHCR, definitely. For verification there is nothing wrong.

**S:** Have you used social media as a way to verify your story?

**H:** no I haven't shared [that]. Social media doesn't reflect the truth. Mostly I have written documents, the concrete documents. Also the Pakistani deportation letter. I also don't have a social media.

**S:** And so in your experiences of being in one of UNHCR's [refugee] camps in Pakistan, you sought asylum while you were there and had to provide information to them also?

**H:** Yes, we have explained the written form of our situation.

**S:** Were fingerprints also involved in the UNHCR process?

**H:** Yeah. They have taken all our details.

**S:** Did you have a possibility then, when you arrived to Denmark, to access that information that you gave to UNHCR?

**H:** I don't know if they shared with countries. If they shared they can access, but I don't know

**S:** And you personally don't have access to that?

**H:** Yes, I can call them, our [registration] numbers are written in their forms. Easily they can respond.

**S:** But that is information that you thought not necessary to share with Danish authorities

**H:** [from H perspective] I myself they may share it with me. But as a country, did they share or not I don't know exactly. How the system works, frankly I don't know. Do they share our personal information with the countries I don't know. For example Turkey, if they want to share.

**S:** This experience that you had with Pakistani secret service/ government coming to your house and threatening you and your family. How do you think they would have gotten that information? How did they know that you were part of this organization [Hizmet]?

**H:** They know because, before these things [clamp down on Hizmet supporters] we used to give them our personal information. The Pakistani authorities sent their intelligence officers. They know our address and our phone numbers. They were updating this regularly. The PakTurk schools are linked with the Hizmet movement, so if you are working in PakTurk schools it means that [identified with Hizmet movement]

**S:** When you then came to Denmark and they asked you to give as much information as part of the asylum application, was there some information that you didn't want to share? That might reveal too much information?

**H:** when I was in Pakistan I faced different things. In the house, you wouldn't go outside. Psychologically the people were disturbed. Sometimes some incidences I couldn't remember. Even when I tried to write down what I faced, I tried to remember, and noted what I could remember. Later on something [else] are coming in my memory when they ask. These things happen. So I tried to share as much as possible what I faced, because these things give me the reason why I apply for asylum. I share as much as possible.

**S:** You mention trust, that you trust that the Danish government will handle the information in a fair and independent manner, that it won't be influenced by Turkey or Pakistan. In terms of giving this information, trust seems to be a big part of the procedure. Was it the same level of trust you had with UNHCR in Pakistan?

**H:** The Pakistani UNHCR is not completely independent. Just from an observation. When I talked with officials, for example this Norwegian head, he listened to us whatever we faced [experiences] and he noted down. But another country came, they were shifting [every] three months [management of the camp], in our case another representative came, he was from country X, another Asian country. He says just like this 'go to country, let's see'. I know two of my friends who went back, and they are in jail. There's no need to make experiments. What I understood, is that normally they make their reports and send it to senior staff, who will judge the [asylum] case. If any actions [is to be taken], they will do it. The seniors will decide. But he [country X UNHCR representative] is making the judgments. He doesn't know our case, he doesn't ask what I faced. He just came, and he says 'go to turkey and let's see what will happen'. He doesn't know my story, my case. He's just interested in

the money, completing the hours. So I'm not trusting [the UNHCR]. But I don't think they will share our personal information. Those people [UNHCR] are bounded, these people [Denmark immigration] are independent.

**S:** so trust is a big part of the process. In my understanding, trust is a two-way process. The government should trust that you are giving private information. And you trust the government with that information and that they won't share for fear of repercussions. Could you imagine if the Danish immigration and police services were to share it with private companies in Denmark, maybe a private health clinic or insurance company. You have placed your trust in a government, and they share it with a private company, and you don't trust this company, so that trust is broken, because that company could then pass on the information. If that situation were to happen, would you appreciate the Danish government to tell you that they share the information?

**H:** it will be better if they tell me. My personal information, or some of them. at least if they give us [notification] of sharing that information with institutions. If they inform us it will be better. It will be more transparent for us. At least we would know that this information is shared with this institution, or this company. I have given my whole data. Maybe they can reach my security systems also. As an asylum seeker, sometimes the situation is difficult. Your country is not protecting you, your constitution is not being applied. I never share that in the last 15 years I belong to this [Hizmet] movement on my official account. This is my privacy, why I share with anybody. In this way, transparency can be good: 'we shared your identification, but only your name not your signature or other things'. I am trusting in Denmark, but the institution I don't know. In this way they have to share [notifications].

**S:** At the moment in the European Union, there's this new policy, the General Data Protection Regulation. [Briefly explained the policy] Could you imagine that policy being applied in an asylum procedure, where you have a right to know what information is being collected on you, how it's being shared, and that you have a possibility to stop more information collection?

**H:** we have limited options. I'm already running from my country, trying to find a safe place for my family. So my priorities are for my life. My personal information doesn't come to my mind then, if my personal information is being shared, what will happen, at that time [being an asylee] that is not on your mind. You don't care that they share, they may use it, revealed with other places. But yes, later on it comes to my mind if they tell us that they share this

information, it will be good. For us it is luxury! If they give this right to us, definitely we will be happy. I would like to keep my personal information a secret, but I don't have options. For me my priorities is my security.

## INTERVIEW # 5

**“Y”**

**Mexican national; was seeking asylum in Denmark for the first time. Had left Mexico due to of harassment for her LGBT status.**

**“K”**

**Colombian national, was seeking asylum in Denmark for the first time. Like “Y”, “K” had left Colombia due to of harassment for her LGBT status.**

**Interview conducted on 6<sup>th</sup> July, 2018 at Sandholm Center**

**S:** Have you been asked to provide information/personal data/ biometric data upon entry/registering in a European country? If so, what type of data and with which organizations?

**Y:** I showed my Mexican passport at the airport, got it stamped and left for Sandholm with my luggage. It was at Sandholm that I asked for asylum. The Red Cross employees took me to the office [Reception], took my birth certificate and drivers license and got my information to know who I am and made a copy of it.

**S:** And from a technological perspective, there was the fingerprints for example. Did they also take a photograph?

**Y:** Yeah, well that was the following day because the police are supposed to take pictures of you and identify more deeply you are the person you claim in the birth certificate. Because Red Cross are separate and just doing a favor of giving you a place to stay and eat and shower. So the following morning I was sent to the police station here at Sandholm and that's where I got fingerprinted and my photo taken and ID card given to me. They explained the process, and told me that I was giving myself to Danish immigration and they have the right to investigate whatever they want to investigate. Make sure that that person is me, and sign a paperwork that it is me against all these Danish laws that I am saying the truth.

**S:** And they explained when you did the fingerprint that then your case would be handled by Denmark?

**Y:** they make you see a video while you're waiting, because they pick one by one. And you see a video about 10-15 minutes that explains that if you have fingerprints taken in Europe, that Dublin Regulation, then you will be stamped there unless there's reason you don't want to go to that country for whatever reason. Because this is the first country I landed in, I have never been in Europe and Denmark is the first place I have had my fingerprints taken, I already knew I technically belonged to the Denmark country for the Dublin Regulation.

**S:** And the whole time that you said you went to the police for the registration, was immigration officials also involved? Did they distinguish themselves in that way?

**Y:** umm, I think no that this was police, but I guess, I would assume now that I kind of get the process, that immigration...Sandholm they're all connected, they're all connected even though the immigration, the police and, red cross, they're all connected to fasten the process. They want to speed it up. So I assume that immigration would tell police, you know 'get her fingerprints, send it to us, and we'll check as soon as we get her fingerprints'. Because immigration never asked for my fingerprints or got my fingerprints. Probably I signed something that said that they [police] had the right [to share]. All the contracts...there's a translator that they call over the phone, but the translator just translates what the police officer wants to be translated. The officer doesn't read what the paperwork says, and then the translator will translate that.

**K:** at Sandholm they got my passport and my documents and my fingerprints.

**S:** and when they asked you for your documents did they ask for a story?

**K:** we got a form to fill out that explained why we wanted to seek asylum

**S:** And throughout the whole registration process, was there always a human involved? It wasn't all automated

**Y:** No it wasn't automated. Somebody was explaining 'this finger, that finger'. There was a lot of body language being used to explain what to do. It was pretty easy; I mean I knew because I've been fingerprinted so many times. But he just points at my index finger and he just presses down, if he does it giving me the example then I'll understand because I know. They hold your hand, they press down.

**S:** Do you know if you have a possibility of editing/ change the information you give?

**Y:** I did it on mine, and the reason is because that night I came and got my room around 11[pm] so when I went to the interview I was stressed and tired. There was three errors I mixed: I put two years instead of a year and seven months, and then I put two months instead of three, and then my address: I used to live on 9<sup>th</sup> street in Mexico, and my former address is 6<sup>th</sup>. And because before my first interview I brought it up and then I explained why, and they just filled it down.

**S:** Have you been hesitant to provide some information?

**Y:** yeah I would be afraid to share information like maybe social media and the reason is because in social media we all pose very positive situations we're living right? And yeah, I've lived very bad experiences and hurtful experiences, and obviously it's only the good experiences that I will post. But I don't want them to see my social media with something they could hold against me making them think that I've been having a very positive life. You know, it could mislead them to think that I'm lying when I'm not. So I think people's personal information like social media and e-mails and 55 access should be theirs and it should not be required by immigration or police, unless they believe that the person is part of a terrorist group or poses a problem.

**S:** So the information that you give, are they transparent about how they use it or who they share it with?

**Y:** they say everything is confidential in the interview, but I don't know who sees my passport, who sees my information. I don't know who hears about my story, I don't know who gets access. I don't know, I just don't know.

**K:** I was never told who will see my passport, or who gets my information. You know, we don't know what we get ourselves in to. And if we were to ask, it might bother a person. Cause we're desperate people, and if you're asking someone for help, we shouldn't bother them.

**S:** what about sharing information with Mexican authorities or Colombian authorities?

**Y:** I'm not scared, they should just go ahead and do it. You know, we do need asylum. We wouldn't lie about the fact of our identity. To get a passport in Mexico you have to go through seven different legal requirements, a court, parent's IDs, birth certificate, etc., so by the time you get a passport, at least in my country, you are verified.

## INTERVIEW # 6

**“Sh”**

**Iranian national; had been granted asylum status in Denmark, yet obliged to reapply for asylum after living in Sweden with family for a year. Had left Iran after crackdowns by the regime on Iranian students, personally affecting him and his brother.**

**Interview conducted on 12<sup>th</sup> July, 2018 at Sandholm Center**

**S:** Have you been asked to provide information/personal data/ biometric data upon entry/registering in a European country? If so, what type of data and with which organizations?

**Sh:** Yes, they asked me where are you coming from and you should show some ID from your country and how did you come, with whom did you come, who brought you here.

**S:** And the first time that you had come was?

**Sh:** 5 years ago [2013]

**S:** And in the time in between?

**Sh:** 1 year ago I had travelled out of this country to Sweden, because my family lives there and I went there to meet them but it was more than six months. Eight months. And so they told me that they wouldn't give me a new opholdstilladelse [resident permit] and you have to apply for residential again.

**S:** And this procedure, was that something that you knew about before?

**Sh:** No I didn't know anything about it

**S:** Police or immigration never told you anything about the rules about opholdstilladelse?

**Sh:** no, even I searched it on the internet and it was like if you are staying in Denmark less than 2 years you can only stay out of Denmark for six months. But if you are staying in Denmark for more than four years, you can stay outside of Denmark for one year. So now when I come back I thought that's the rule that I read from the website, but then they said no it's only six months 'you are wrong'.

**S:** and you told them that you had found this information on the website?



**Sh:** No I did not tell them that. I just said I was being there [in Sweden] I was living with my family, and I came back to Denmark. I didn't do something wrong, they said fine you need to wait for us for a month.

**S:** So, to go back to that first time you had come here, you said that they had asked for your country of origin, and what about fingerprints? Or any other technology involved?

**Sh:** Yes, fingerprints they took photo of me, and then they gave me ID card. They gave me a place to stay, and in that time they were paying someone also in Sandholm but now they cut that [stipend]

**S:** And when you made the fingerprint, did they explain what that means in terms of rules?

**Sh:** they said this is for to know if you have fingerprint in other country or you just came to Denmark straight. That was the reason for taking the fingerprint from me.

**S:** did they mention about Dublin convention?

**Sh:** no no

**S:** And so they didn't say that when you make the fingerprint in Denmark, that this is the country that you have stay in until you get your asylum decision?

**Sh:** No yes that they did.

**S:** Ok, so they made clear what the fingerprint is used for in that sense?

**Sh:** Yes, they said when you get your fingerprint here, you can get the asylum here in Denmark. You cannot go to other European countries, if you go they will send you back, and you cannot work in Denmark.

**S:** And how do you think they would track something like that?

**Sh:** Fingerprint. There should be a page, a website or page, somewhere that they save these documents so wherever you go they see the fingerprint and they search it so they get that.

**S:** are you aware if such a database exists?

**Sh:** no, no.

**S:** and when you went to Sweden a year ago, how did they know you had left the country?

**Sh:** I told them. I sent them a mail to my kommune [municipality], Esbjerg, and they told me 'ok now you are udrejse [exit], you have family outside the country, and until you come back

[be determined] that you are out of the country. After that I got some other letters, but because I had e-boks [digital platform], and I didn't have any nem-id [e-boks login codes] so my documents went to immigration service.

**S:** ok, just to track back to when you first came to Denmark: throughout the whole asylum process, was there always a human person involved?

**Sh:** Yes. But also, when the police in Sandholm took my fingerprint they had a video in my language and that video explained everything [the rules]: you make your registration, then you get your ID card

**S:** Ok, so that was the instructions for how to navigate the process?

**Sh:** yes.

**S:** you said that while you were registering in Denmark, your family was getting their asylum case registered in Sweden. Do you think there's a possibility that the officials in Denmark and Sweden were communicating with each other?

**Sh:** not that I know. The thing is, if they talk to each other it would be so much easier for people who have family [in another country]. They just get it together [compile information], but they couldn't between Denmark and Sweden. The whole of Europe, they do not have a company, a service, to connect it. If they have something like that, the countries would save us the trouble.

**S:** this information that you have given to the immigration officials, contains a lot of sensitive details and information that can identify you as you, medical information.

**Sh:** yes, the sundhed [medical] information I only have access to...if I don't print out the medical information, the doctors would not be able to access that. That is a nice part, that nobody else has access to those except me.

**S:** do you feel that you have ownership over that data

**Sh:** yes, that is a good thing to have.

**S:** and the information you provided to immigration – if they shared with other countries, would you want ownership over that too?

**Sh:** Yes

**S:** because that would give you a sense of...

**Sh:** independence.

**s:** Do you trust that immigration services won't share with other countries?

**Sh:** No, you know why? I'm not 100 percent sure, but 99 percent. If you have your fingerprint, after 2-3 years and you go to another country, they wouldn't have the fingerprints. It will be erased. I don't know if it's two years or three years.

**S:** In the beginning of the interview you were saying that you would have done things differently if they had given information about what goes on.

**Sh:** Yes. Now I know. For example, before they fingerprint you, you wouldn't be able to seek asylum in another place in Europe. If you wouldn't want to do that, then you just go to another country and seek asylum there. That would be better.

**S:** How would you feel about information being shared with private companies?

**Sh:** if I know that they have this information and they share with private companies, I wouldn't like it. But I think they wouldn't do that. I have trust.

**S:** I have one last question: you said that you had come with a passport, but for those without they can ask for your phone, how do you feel about that?

**Sh:** I know one person who came with no passport, no documents, and she gave her phone to the officials. That's not good. That's not right.

**S:** why not?

**Sh:** because there are so much private things on your phone. Pictures, videos, all the social media, everything.

## APPENDIX III

### ACTOR-NETWORK MAP OF FINGERPRINT SYSTEM IN DANISH AND EURODAC CONTEXT

