CONSTRUCTING SUSPICION THROUGH FORENSIC DNA DATABASES IN THE EU. THE VIEWS OF THE PRÜM PROFESSIONALS

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This article explores the fluid and flexible forms of constructing suspicion, which take shape in transnational governance of crime through forensic DNA databases. The empirical examples are the views of professionals engaged with the so-called Prüm system. This technological identification system was developed to enable DNA data exchange across EU Member States in the context of police and judicial cooperation to control cross-border crime and terrorism. We argue that suspicion is constructed through forms of deterritorializing and reterritorializing assumptions about criminality linked to the movements of suspect communities across the European Union. Transnational crime management is configured through narratives of global expansion of criminal mobility, technical neutrality of DNA identification and the reliance on criminal categorizations of particular national populations.

Keywords: suspicion, deterritorializing, reterritorializing, Prüm system, forensic DNA databases, cross-border crime

Introduction

Forensic DNA databases are typically presented as an almost failsafe tool to identify individuals and match traces found at crime scenes with a suspect's profile (Lynch et al., 2008). Because of growing transnational mobility and in the context of concerns with security beyond the nation-state, the scope of forensic DNA databases is seen as an increasingly important tool for enhancing transnational cooperation in the control of crime (Williams and Johnson 2008; Prainsack and Toom 2010; McCartney et al. 2011; Prainsack and Toom 2013; McCartney 2014b; Wilson 2016; Santos and Machado, 2017; Machado and Granja, 2018, 2019; Toom et al. 2019). This article aims to explore the fluid and flexible forms of constructing suspicion, which takes shape in transnational governance of crime through forensic DNA databases. The research questions guiding our research are the following: Which forms of suspicion emerge and are expanded by the transnational exchange of DNA data in the European Union (EU)? How do 'new' forms of suspicion relate to the reinforcement of 'old' criminal categories? The empirical context for this discussion is the views of professionals in charge of operating the so-called Prüm system, developed to enable DNA data-as well as fingerprints and vehicle information data-to be exchanged in an automated manner throughout EU

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Member States, in the context of police and judicial cooperation to control cross-border crime and terrorism (EU Council 2008a, 2008b)

The Prüm system is part of several computerized information systems for surveillance, which are currently being developed by the Member States of the EU. The unprecedented scale of the development of networks in the field of identification, security and crime control has been receiving considerable academic attention. Criminological studies have shown that the expansion of construction of digital databases highlights a trend towards integrating national security into criminal justice. Such trend is accompanied by a temporal and geographic shift that encompasses a blurring of the borders between states' internal and external coercive capacities (Pickering and Weber, 2006; McCulloch and Pickering 2009; Aas 2013). In the words of Bosworth and Guild, 'Not only are the criminology's traditional shackles to territorial borders of the nation-state of diminishing utility in an age of mobility and transforming state sovereignty, but the construction of 'new' crimes and modes of criminalisation located on or beyond the border arise from and reformulate understandings of identity, community, and justice' (Bosworth and Guild 2008: 704).

The Prüm system offers a form of identification that fits perfectly into contemporary modes of disembedded global governance (Aas 2006). The development of this technical system for surveillance should be understood as part of a general trend towards the entanglement between management of crime and 'securitisation of identify' by which biological tokens of identification—such as the case of DNA profiles—are becoming vital in identifying the 'undesirable populations' in the new global order (Aas 2006: 146).

Previous criminological literature on processes of criminalization of citizens in the EU has mostly focused on the intertwined nature of crime control and migration policies, which directly or indirectly highlight and discriminate against minorities and populations and individuals of specific countries of origin. Instead, this article aimed to analyse the fluidity and flexibility of forms of constructing suspicion targeted at already criminalized populations. The forensic DNA databases which are part of the Prüm system network are formed by the collection, storage and analysis of data retrieved from the bodies of individuals who have had encounters with the criminal justice system (e.g., as convicted offenders or suspects).¹ This article thus aimed to contribute to expanding the discussion on how technologies of human identification sustained in connected computerized systems not only track individuals and enable the rapid sharing of the resulting information but also assign those individuals to groups who are already over-policed and place them under special forms and implications of surveillance (Skinner 2018).

The establishment and expansion of the Prüm system within EU Member States constitute a specific form of surveillance organized around an ideology of 'European security' (Johnson and Williams 2007: 115; Prainsack and Toom 2013). The seminal work of Williams and Johnson (2004) is important in this respect for its analysis of the unique nature of the surveillance operated by DNA data and its implications for

¹A comparative analysis of the legislation that regulates the functioning of forensic DNA databases in 22 countries in the EU (Santos *et al.*, 2013) emphasized a distinction between expansive and restrictive effects as the proportion of the population included in the expansive group is generally more significant than in the restrictive group. The countries with expansive legislation usually store profiles of suspects and the DNA profiles are stored for more extended periods than in countries with restrictive legislation.

the construction of suspicion. The authors argue that DNA databases allow for 'reconstructive surveillance' forming a closed-circuit system of surveillance, which holds information that can be applied retrospectively, meaning that people and their actions are not watched, but are inferentially reconstructed by expert practices (Williams and Johnson 2004: 3–6). As the authors note, 'DNA databases have speed, efficiency, automation, and accuracy that are unmatched in the history of policing' (Williams and Johnson 2004: 8). Moreover, Williams and Johnson explain that DNA databases form 'a type of surveillance which is essentially concerned with "management" of those already deemed criminal (...) delimiting them from the wider population and managing them through assured detection' (Williams and Johnson 2004: 11).

We take additional inspiration from a body of literature on the criminalization of risky populations—mostly focused on the case of surveillance on irregular migrants—which signals that a focus on territory has shifted to a focus on internationally mobile populations considered as suspect communities (Broeders 2007; Bosworth and Guild 2008; Aas 2011; Ajana 2013; Amoore 2013; Tutton *et al.* 2014; Skinner 2018). Following Christina Pantazis and Simon Pemberton proposal, we adopt the concept of suspect community to refer to 'a sub-group of the population that is singled out for state attention as being "problematic". Specifically, in terms of policing, individuals may be targeted, not necessarily as a result of suspected wrongdoing, but simply because of their presumed membership to that sub-group'. (Pantazis and Pemberton, 2009, p. 649).

The increasing criminalization of suspect communities through computerized information systems operating in a pan-European network of databases has gained unprecedented scale. This scale is likely to grow even further through technological advancements and the political wish to increase the 'interoperability' of the systems created (Broeders 2007; Brouwer 2016). These technological systems enabling the increasing use of data retrieved from the body, of which DNA profiling and DNA databases are just an example, represent a developing instrument in modern state surveillance that favours the strategy of tracing the movement of people over the old strategy of using discipline to attach them to a territory (Bigo and Guild 2005: 3).

The construction of suspect communities involves elements such as race, ethnicity, religion, class, gender, language, accent, dress, political ideology but also nationality or any combination of these factors (Cole 2001; Pantazis and Pemberton 2009; M'charek *et al.* 2014; Skinner 2018). Understanding the forms of constructing suspicion enacted by the Prüm system thus requires considering the fluidity and flexibility of notions of suspect communities. Our focus in this article is therefore on the social processes that refer to the (re)making of connections between criminality and suspicious movements of data and particular populations leaving specific national territories.

The article is structured as follows: in the first section, we briefly outline the previous studies of the Prüm system and elaborate on the idea of constructing suspicion through DNA databases to capture some of the processes involved in the forms of constructing suspicion enacted within the Prüm system. In the second section, we analyse our interview material to understand how forms of constructing suspicion are portrayed in the accounts of the professionals working in the Prüm system. We argue that suspicion is constructed through forms of deterritorializing and reterritorializing assumptions about criminality linked to the movements of suspect communities across the EU. The views of the professionals of the Prüm system show how transnational crime management is configured through narratives of global expansion of criminal mobility,

technical neutrality of DNA identification and the reliance on criminal categorizations of particular national populations.

The Prüm system and the construction of suspicion

On May 2005, in the small German town of Prüm, government representatives from Austria, Belgium, France, Luxemburg, Germany, the Netherlands and Spain signed a treaty that would become known as the Prüm Convention. The preamble of the Convention stated that, in the context of the free movement of persons, the EU Member States have to 'play a pioneering role in establishing the highest possible standard of cooperation especially by means of exchange of information, particularly in combating terrorism, cross-border crime and illegal migration, while leaving participation in such cooperation open to all other Member States in the European Union' (EU Council, 2005).

The background to the Prüm Convention² was an initiative of Otto Schily, the former Interior Minister of Germany who, in 2003, proposed closer cooperation in justice and home affairs with France, Belgium and Luxembourg in the context of the opening of a Police Centre in Luxembourg by the four countries. According to Luif (2007), this initiative, which aimed to develop closer cooperation between the police forces of Germany and its neighbours, was deemed necessary because of 'transnational crime, which had increased after the removing of the Iron curtain at the end of the Cold War and which had been made easier by the ceasing of border controls between the participants of the Schengen area' (see also Bigo 2004; Kuus 2004; Bigo and Guild 2005; Luif 2007: 6; Bigo, 2008: 94; M'charek *et al.* 2014: 16)

In 2008, some of the Prüm Convention provisions were subsumed into the police and judicial cooperation provisions in European Union law by a Council Decision, commonly referred to as the Prüm Decision (EU Council 2008a, 2008b). This Decision made it mandatory for all EU Member States to join this pan-European network.

The latest report on the progress of the implementation of Prüm, dating from October 2018, indicates that 24 EU Member States are involved in it (EU Council 2018³). Regarding the specific case of DNA, which is the focus of this article, when a search is done in a national database for a DNA sample retrieved from a crime scene, and no match is found, the Council Decision permits the data to be transmitted and searched in other Member State's national databases. A notification is then sent to the original Member State notifying it of a hit (a matching profile) or no-hit⁴. If a hit is identified, further requests for information are processed through the existing police or judicial channels.

The implications of the development of the Prüm system have already received academic attention through two distinct lines of inquiry: on the one hand, studies that focus on the societal, political and ethical challenges; on the other hand, a group of

²In this article, we use the term 'Prüm Convention' to refer to the 2005 Convention involving seven countries, the term 'Prüm Decision' to refer to the Council Decision that established the mandatory nature of transnational data exchange for all EU Member States, and the term 'Prüm system' to refer to the actual network of European Union countries exchanging DNA data. ³Greece, Ireland, Italy and the United Kingdom are not operational in the Prüm system.

⁴A 'match' or a 'hit' are both used equally to describe a correspondence between DNA profiles discovered by a database search at a given moment in time (ENFSI 2016).

studies that aim to map the geographical patterns of cross-border crime and DNA data flows among the different EU Member States.

One crucial topic of debate in the first group of studies relating to the implementation and expansion of the Prüm system concerns the enormous disparities in national legislation and data protection, encompassing systems to ensure responsibility and database custody; transparency, accountability and trust; and lack of ethical oversight of the transnational flow of law enforcement information (Prainsack and Toom 2010, 2013; McCartney *et al.* 2011; McCartney 2013, 2014a, 2014b; Hufnagel and McCartney 2015; Amankwaa, 2019; Matos, 2019; Toom *et al.* 2019). More recent studies explore what 'ethics' means to forensic practitioners actively involved in transnational DNA data exchanges under the Prüm system (Machado and Granja, 2018) and how forensic DNA evidence is given meaning within the different ways of constructing a police epistemic culture in the context of Prüm (Machado and Granja, 2019).

A different set of literature on the Prüm system can be found in the field of critical security studies (Balzacq et al. 2006; Bigo 2008; Bellanova 2017). This latter group of studies emphasizes that the Prüm system represents a form of European security politics, masked by the globalization of insecurity argument and by the social and political construction of threats and risks created by the institutions dealing with this. These threats and risks are largely fuelled by the idea of the growth of cross-border crime and transnational movements of people (Lyon 2004; Broeders 2007; Guild and Geyer 2008; Hufnagel and McCartney 2017). The main themes in the second group of studies of the Prüm system have been the assessment of geographical patterns of cross-border crimes solved by the exchange of DNA data among different EU Member States (Taverne and Broeders 2015, 2016; Bernasco et al. 2016). One study suggested a territorial divide between Western and Central European countries and Eastern European countries. Based on an analysis of the official statistical dataset of the Prüm system, this research revealed a trend amongst Western and Central European countries towards accumulating the majority of DNA profiles of individuals originating from Eastern European countries (Santos and Machado, 2017). In other words, the study showed how the geographical patterns of DNA flows between the EU Member States involved in the Prüm system appeared to confirm previous research on patterns of criminal mobility affecting Central European countries, which is mostly associated with volume crime usually involving individuals originating from Eastern Europe (Van Daele 2008; Siegel 2014; Bernasco et al. 2016).

Studies on the geographical patterns of cross-border crimes and DNA data flow among the different EU Member States tend to convey what may be called a representationalist view of data, meaning that the data simply represents a certain aspect of the world in a numeric, computable form (Matzner 2016). This approach focuses on the veracity of the data and tends to disregard the subjectivizing effects of surveillance processes. Among such subjectivizing effects are those which derive from the construction of suspicion as linked to particular suspect communities, which is of particular interest in this article.

A representationalist view of surveillance data goes hand in hand with what Simon Cole and Michael Lynch (2006) call an 'objectivist view' of suspicion. They argue that although 'a [conventional] objectivist view holds that suspects are in the world and are identified by specific characteristics (...) in contrast, constructionists hold that suspects are constituted through social interaction with the criminal justice system

agents, agencies, and processes' (Cole and Lynch 2006: 40). The authors develop the idea of the construction of suspects by claiming that at every stage in the criminal investigation discretionary processes deploy the 'demographic, socioeconomic, and cultural stigma that criminal justice agents associate with suspect status' (Cole and Lynch, 2006: 40).

In this article, we address the research questions of which forms of suspicion emerge and are expanded by the transnational exchange of DNA and of how 'new' forms of suspicion relate to the reinforcement of 'old' criminal categories. We take inspiration from a two-stage process that Deleuze and Guattari (1987) developed and that were taken up to define the concept of 'surveillance assemblage' that 'operates by abstracting human bodies from their territorial settings and separating them into a series of discrete flows (...) then reassembled into distinct "data doubles" which can be scrutinized and targeted for intervention' (Haggerty and Ericson 2000: 606). Deterritorialization is a process that creates a certain uniformity, regularity and abstraction of elements. Reterritorialization, in turn, refers to a process that reassembles immaterialized forms into new, and highly controllable and controlled, forms of elements (Lyon 2006: 105). Being interested in the construction of suspicion in times of tracing the borderless and deterritorialized nature of criminality associated with mobile populations, we take the reference to 'territory' more literally than in the initial conceptualizations. In consequence, we link the abstraction and reconfiguration processes of de- and reterritorialization to connecting suspicion with particular territories.

We base our analysis on the views of professionals involved in transnational exchanges of DNA data in the context of police and judicial cooperation in EU in the Prüm system. Our aims are two-fold and interrelated: first, we aim to contribute to expanding the debate on the transnational exchange of DNA data by going beyond the representationalist view of data fluxes and focusing on the subjectivizing effects of surveillance processes. Second, we aim to add to an in-depth understanding of how the governance of crime through technological systems is closely related to (re-)making of suspicion of particular communities.

Methods

The data on which our analysis is based include a total of 32 interviews, conducted in 22 EU countries, with 40 professionals in charge of operating the so-called Prüm system. The EU regulations for the Prüm system stipulate that for the purposes of supplying data, each Member State must designate a National Contact Point (NCP) whose powers are governed by the applicable national law (EU Council 2008a). The criterion for selecting participants was to choose professionals acting as Prüm NCPs for the so-called Step 1 and Step 2 of the Prüm system⁵.

⁵The Council Decision decreed that the Prüm system is based on a two-step approach. The first step consists of an automatic exchange of DNA profiles of stains and persons on a hit/no-hit basis (Step 1) (Van der Beek, 2011). In practice, the process is semi-automated since each Member State may choose which DNA data it wants to exchange. The second step allows a Member State to request additional information through mutual assistance procedures (Step 2). No 'personal data' are supposed to be transferred between the Member States through such channels until a match has been declared (McCartney, 2014a, 2014b).

Different countries have attributed custody of the national DNA databases to different entities, ranging from judicial authorities to police forces⁶. As a result, the roles and responsibilities of Prüm NCPs may vary among countries, according to different organizational structures and national legislation.

The NCPs in charge of complying with the technical standards for the exchange of DNA data information among Member States on a match/no-match basis are officially called Step 1 NCPs. Typically, these NCPs are forensic experts working in forensic genetics laboratories who carry out the routine work that enables DNA data to be exchanged transnationally. In general, these Step 1 NCPs have to organize and implement the necessary procedures and connections to perform automated exchanges with other databases (both receiving and sending information), perform tests with partners in other countries, and manage and report DNA matches.

The Prüm NCPs for Step 2 are in charge of the requests for additional information through mutual assistance procedures are called Step 2 NCPs. These professionals usually hold experience of police and judicial cooperation in transnational criminal investigations.

The interview protocol and procedures complied with the European Research Council ethical regulations. Potential participants were identified by accessing the public contact list provided in the 'Working Party on Information Exchange and Data Protection' documents (EU Council 2015), and also by contacting key informants. The participants were recruited by email, letter and telephone.

The script for the interviews covered the following themes: views on and experiences of implementing Prüm at national and European levels; opinions on the purposes and contributions of Prüm; ethical issues raised by the transnational exchange of DNA data; expectations of DNA technology development and innovation; perceptions related to communication with the general public.

Before the interviews, all the participants signed a written informed consent document and agreed to be audio-recorded. The interviews took place at the interviewees' workplaces or a location chosen by the participant. All interviews except one were digitally recorded and transcribed *verbatim*. To ensure that the interviews remained anonymous, a letter was assigned to each country. This system is used in the extracts from the interview analysed in the following section.

Extracts referring to forms of constructing suspicion were coded and subjected to multiple readings to develop an in-depth understanding of how categories of suspicion are constructed by professionals operating within the Prüm system. To prevent narrow framings of 'forms of constructing suspicion', this notion was made researchable by considering not only ideas about suspect or criminal groups but also what the Prüm professionals directly cited as being important considerations when making decisions about with which countries to prioritize in the exchange of data. These quotations were then systematically compared, contrasted, synthesized and coded by theme and thematic category following the principles of grounded theory (Clarke

⁶In the great majority of countries involved in the Prüm system, the Ministry of the Interior (or Ministry of Internal Affairs or Ministry of Home Affairs)—a government ministry typically responsible for policing, emergency management, national security and immigration matters—has custody of the National Criminal DNA Database. In the following EU Member States the Ministry of Justice has custody of the National DNA Database: Belgium, Netherlands, Portugal and Sweden. The Ministry of Justice typically has specific duties associated with organizing the justice system, overseeing public prosecutors and maintaining the legal system and public order.

2005; Charmaz 2006), then interpreted using a qualitative content analysis approach (Mayring 2004). In this article, we have analysed the replies that were considered by all the authors to be illustrative of each of the thematic categories that emerged from the content analysis.

Results

Deterritorializing suspicion

The development of the Prüm system is indicative of a broader set of trends by which technologies, practices and modes of thought are part of a larger paradigm shift in policing and crime control: a crime management paradigm, concerned rather with identifying and managing what is taken to be an inherently criminal element within society (Skinner 2018). According to Williams and Johnson (2008), the routine use of technologies of identity like DNA profiling has been a vital element in realizing the crime management paradigm, by providing an effective means of both identifying and incriminating that criminal element.

This paradigm in policing and crime control is largely sustained by what is termed here as processes of deterritorializing suspicion (Deleuze and Guatarri 1987). Our interviews reveal social deterritorializing processes framed within Prüm, which have two main dimensions: firstly, the amplification of imaginaries of Europeanization, which erases the markers of territorial boundaries to criminal mobility. Secondly, the incorporation of the depersonalization, neutrality and procedural objectivity commonly associated with forensic DNA databases (Lynch *et al.* 2008; Williams and Johnson 2008; Hindmarsh and Prainsack 2010), which facilitates the use of such surveillance mechanisms as a response to criminal threats.

The rhetoric of deterritorialization of suspicion is largely sustained by the participants in this study by evocations of 'European security' that associate the (alleged) expansion of cross-border crime with the relaxing of border controls for members of the Schengen area (Johnson and Williams 2007; Prainsack and Toom 2010, 2013; Bigo 2006, 2016). These imaginaries are particularly associated with the idea that globalization contributes to 'open borders' which, in the practitioners' views, must be addressed by capturing flows of information and monitoring the direction, intensity and speed of undesired mobility. It is described in the following terms by the participants in this study:

I think that if you have a society, a European Union, with no limits, no borders, people can cross, I think that is very good for ordinary people, but it is also good for criminals. They can travel and commit crimes wherever they like. (...) Maybe that is the cost of open borders within the EU. [Country U]

It was a necessity, from my point of view, because after [entering] Europe [the EU] we had the borders free for trespassing by European citizens; it's very easy to understand that criminality and people who commit crimes will trespass geographical and political or administrative borders and will go to other countries. So, if we want to solve some cases or to catch the bad guys, we have to extend our tools. [Country]].

In this context, our interviewees normalize the emergence of the Prüm system as the consequence of this scenario, in which mobility for non-criminal and criminal populations coexists. In particular, the transnational exchange of DNA data is seen as an

opportunity to regain 'control' over suspect communities. As one of the interviewees commented,

We're just getting globalised – I like that. I think that (...) in terms of fighting crime, of course, the freer the movement of people, the harder things could get. (...) Prüm is a normal reaction to globalisation in terms of fighting crime: we need to react to that, the world is changing, the police need to change as well, and start to cooperate more closely. So, I consider it something that's just absolutely needed. [Country K].

The tensions between the celebration and facilitation of movement in Europe and the need to monitor the movements into and within the EU of suspect communities and other people deemed problematic has been the focus of intensive academic attention in the last two decades, with a particular emphasis on the increasing governance of migration 'through crime'. In this context, foreigners—particularly asylum seekers, refugees and members of ethnic minority groups—are subject to discourses of criminalization in government policy and legislation, in the media, and in public and community discussions (Malloch and Stanley 2005; Calavita 2006; Pickering and Weber 2006; Bosworth and Guild 2008; Aas 2011; Tutton *et al.* 2014).

The narratives of the professionals operating the Prüm system who we have interviewed for the purpose of this study illustrate well how Europe might be understood as a 'technological zone' with shifting spaces of government (Barry 2001). In this zone, the governing of mobility produces different subjects whose movements are to be monitored, and either facilitated or restricted and inhibited (Aas 2005, 2011; Ajana 2013). In the words of Amade M'charek and colleagues: 'Europe's internal populations are increasingly known through genetic–genealogical, medical and forensic databases that in their varied regimes of sampling and classification also enact difference and belonging.' (M'charek *et al.* 2014: 3–4). In other words, the ongoing development of transnational surveillance and identification regimes, aimed at controlling mobilities across Europe, are addressed through the translation of people into data that operate along with specific notions of suspect communities. In the capacity of technical systems of surveillance for social sorting and exclusion, it is increasingly hard to distinguish whether their primary goal is the internal stability or external integrity of national territories (Bosworth and Guild 2008; Skinner 2018).

The second way in which Prüm practitioners construct suspicion through the deterritorialization of suspicion relates to incorporating the depersonalization, neutrality and procedural objectivity commonly associated with DNA databases (Lynch *et al.* 2008) and transnational DNA data exchange (Machado and Granja, 2018). This became evident when the interviewees talked about the procedures used in the automated transnational exchange of DNA data enabled by the Prüm system⁷. When DNA profiles are first exchanged between countries, we see an operation that abstracts human bodies from their territorial settings. The practitioners' narratives address DNA profiles as a series of discrete and virtual information flows, represented only by a set of numbers, as the following extracts illustrate:

⁷The Council Decision decreed that the Prüm system is based on a two-step approach. The first step consists of an automatic exchange of DNA profiles of stains and persons on a hit/no-hit basis (Step 1; Van der Beek, 2011). In practice, the process is semi-automated as each Member State may choose which DNA data it wants to exchange. The second step allows a Member State to request additional information through mutual assistance procedures (Step 2). No 'personal data' is supposed to be transferred between Member States through such channels until a match has been declared (McCartney, 2014a, 2014b).

The two-step approach—first, compare DNA profiles. Then, if you find a match, go and exchange the case and personal information. (...) In the first step [in the Prüm system] you only compare DNA profiles, and DNA profiles are only twenty or thirty numbers. There is nothing you can tell about the owner of the DNA profile from the DNA profile itself. [Country A].

But since you just exchange the DNA profile and the numbers, I cannot say anything about any profile from the country, I can just say if it is a match or not. So, I think that in that sense they decided to have a nice system that is quite safe, Step 1 and then Step 2. And the benefit is, of course, that you can find very quick matches for travelling people who commit crimes, anyway. [Country U].

Deterritorialization of suspicion is reinforced by the decoupling of 'DNA-profiles' understood as being non-personal—and 'personal information' – understood as information which provides the means for the immediate identification of an individual. Thus, deterritorialization of suspicion is linked to depersonalization of data, as it is anchored in the notion that the reference numbers for DNA profiles do not provide any kind of immediate information that enables a certain individual to be identified and that would allow territory-related claims.

However, technologies of identity such as DNA profiles do not simply offer more objective means of confirming or disconfirming conventional identity claims; they redefine the social categories of identity on which decisions about suspect movements or risky populations are made. As we will explore in the following section, the operations of the Prüm system provide an ideal platform for constructing suspicion and speculating about particular people and population groups linked with DNA profiles. In the second step of the Prüm system, the practitioners have to act upon the 'DNA matches' using reconstructive surveillance processes hidden within the seeming neutrality of numbers and automation of Step 1, thus enacting discretionary processes that deploy suspect status through DNA profiles (Cole and Lynch 2006: 40).

Underneath their posited dispassionate, evidence-based decision-making, data systems like the Prüm system make the construction of suspicion hidden in the workings of technical processes (M'charek *et al.* 2014; Skinner 2018). Through the mediation of technologies fed by biometric data, the construction of suspicion in crime management and policing can thus be rationalized as 'the performance of mechanical objectivity' (Magnet 2011; Skinner 2018).

Reterritorializing suspicion

The capacity for social sorting of forensic DNA technologies lies in the co-existence between rhetoric of technical neutrality and practical reliance of common-sense criminal categorizations and prejudices (M'charek *et al.* 2014; Tutton *et al.* 2014; Skinner 2018). Simultaneously, this form of identification fits into contemporary disembedded global governance of crime acting at a distance (Aas 2005, 2011) that comes along discourses that crime has no territorial borders. This type of governance of crime is developed in Lash (2002), Rose (1996) and Garland's (1997) analyses of government at a distance which requires, metaphorically and literally, coding of individuals and populations that correspond to computer programmes. We use the term reterritorializing suspicion to refer to reassembling abstract forms of suspicion in new and highly concretized forms that suggest a potential social control of particular distinct populations. We emphasize the very notion of assigning physical territory by exploring the assumptions attributing suspicion to populations from particular territorial areas and using territories as lines of demarcation. Deterritorializing suspicion is juxtaposed with modes of reterritorializing suspicion, firstly through the continuous (re)creation of assertions about criminality and particular populations located in the territories of particular countries and, secondly, from the suspected movements of individuals leaving their national territories. Exploring the processes of reterritorialization suspicion helps us to understand a mode of normalization of social sorting of suspect populations classified along with territorial belonging across Prüm professionals of particular own territorial belonging.

The following narratives of the Prüm professionals based in Western Europe show an understanding that the most prominent category for suspicion is groups from certain East European countries. This mode of constructing suspicion thus enacts a division of the Cold War in which former communist countries are considered risky (M'charek *et al.* 2014). As described by one of the interviewees,

Since the early 2000s, with criminals from East European countries and so on, there are a lot of networks (...) So, people are crossing, and with Schengen that's quite easy, you know. (...) People are coming, so we [know] a list of Lithuanian networks, we know Romanian networks, Bulgarian networks, Polish networks and so on. [Country H].

This practice of ascribing suspicion to populations from particular East European countries is, according to some practitioners' accounts, backed up by views on the composition of populations who have their profiles stored in DNA databases. The following narratives of the Prüm professionals based on Western Europe countries indicate the assumptions that citizens from certain East European countries tend to be overly represented in the national DNA databases of the richer countries in Europe which host migratory flows:

[The majority of] criminal profiles which are stored in our biometric databases, 50% for some types of crime and 80% in cases of burglary, are not those of national citizens. They are criminals from the West Balkans. They are coming from Romania, Estonia, from the Baltic States... But they are not national citizens. This is the outcome of these open borders. [Country M]

I think it is comparable with the nationalities who are represented in the [general] population. Sometimes there are more of certain kinds of persons who come from certain countries who, for example, steal jewellery. A lot of them come from Romania, come from Bulgaria, come from Estonia, Lithuania. [Country O].

One additional way of constructing suspicion concerns making decisions on which countries to prioritize in the data interconnection process.⁸ As the following interviewee accounts illustrate, one relevant criterion for prioritizing the establishment of connections within the Prüm system involves attributing priority to countries whose populations are considered risky. As also noted by Pantazis and Pemberton (2009) construction of suspicion is primarily linked to a perceived membership of a sub-group, in this case, a particular nationality, and not necessarily to suspected wrongdoing:

⁸Although the Prūm system aims to have all countries working in a Pan-European network, engaged in automated and permanent information exchanges, in practice this varies widely. Although some countries are connected to all/the majority of operational countries, others have only a few connections established.

The police know that there are a lot of Lithuanian people coming and committing crimes in [my country]. So that was on the wish list from the police, to get working with Lithuania, that was a priority for me. [Country U]. We had a lot of interest from our crime-fighting units: they were already looking at those countries where they have a lot of crossing matches [cross-border crime], and they expected a lot of results. (...) We did a survey of the most interesting countries from a police perspective, and then we tried to put it together with the technical standards, because they need [to have] a database of course. (...) For example, Romania, Bulgaria, Poland. [Country O].

The narratives of the participants in this study resonate with what David Skinner has described as forms of operating systems of 'technosecurity', alongside and depending on generating discretionary activity (2018: 15). These technological systems designed for transnational surveillance of criminalized groups represent forms of 'transmitted discrimination' (Reiner 2010) that create, as Skinner also comments, 'moments of affective judgement that invite or require operatives to follow their gut feelings as to whether somewhere, somebody or something makes them uneasy'. (Skinner 2018: 15). However, these expectations, which associate establishing connections to certain countries with a higher probability of obtaining matches, might not work in practice. Our interviewees tended to explain this difference between prior expectations and real outcomes in the light of a set of limitations that some East European countries allegedly present, as illustrated in the following extract from the interviewee previously quoted, who is based in a Central European country:

We expected a lot of hits with countries like Romania, or Bulgaria, or Poland. But we got really few hits. And when we thought about it and asked those countries some questions, we saw that there [they have] very small national databases. There are some countries who do the DNA analysis very intensively, and there are other countries that have difficulties. Maybe they are poor countries, they do not have so much money, or their legislation is too slow for DNA profiling, or they only have one national laboratory (...) [Country O].

Reterritorializing suspicion also leads to what we call here the 'co-construction' of suspicion, by which the assumptions about Eastern Europe's risky populations are, as noted by Marje Kuus, 'actively used by these countries against their particular Easts' (Kuus 2004: 479). This way of reterritorializing suspicion is supported by perceptions of the direction of the flows of people that travel through Europe, hence underlining the role of East European countries in the management of their own 'risky' populations. The daily reproduction and political effects of the discourses about the mobility of Eastern European criminals tend to focus on the countries to which their national citizens most frequently travel or migrate. The following narratives of the Prüm professionals based in East European countries highlight the assumption that they can only solve crimes if resorting to bigger DNA databases located in Central-West Europe:

We were mostly looking at where you might have a larger population of [people from my country] going to other countries (...) Countries where we know a lot of [our nationals] are travelling to, like Germany, France, Sweden... [Country E].

Regarding the fight against criminality, it's easy to see that (...) when we have a lot of [our nationals] going to other countries to work and actually migrating to a better place to live, you can have cases, like old cases, that will be solved only by using other countries' databases. [Country J].

The co-production of suspicion, therefore, involves countries from Western, Central and Northern Europe as well those as from Eastern Europe. Both professions from Western and Eastern Europe were collectively constituting Eastern Europeans as a suspect community. Together, the professionals operating the Prüm system in the diverse countries build and reinforce the idea that citizens from East Europe migrate to other parts of Europe and may commit crimes. This particular framing of East Europe's uses of forensic DNA databases to control crime reproduces a 'premise of Europe's internal East that is still behind Europe and still aspiring to become European' (Kuus 2004: 476). It is in continuity with a long history of opinion and bias enforced for instance through the enlightenment's elite of thinkers, which likewise contributed to the invention of Eastern Europe as distinct and particularly different from Western Europe (Wolff 1994). Reinscriptions of suspicion persist and they are operative in the minds of East Europeans due to complex historical and geopolitical intersections between power and agency, which make discourses about Eastern Europe fluid and flexible and therefore durable (Waever 2000: 261). In this context, the co-construction of suspicion derives from complex geo-political relations involving particular subject positions that reproduce the continued reliance on 'flexible othering', which although operating through multiple demarcations, subtly perpetuates dichotomic notions of East and West, and danger and security (Kuus 2004).

Conclusion

In an age of mobility and transforming state sovereignty, criminology's traditional shackles with the territorial borders of the nation-state is of diminishing utility since the construction of 'new' modes of criminalization located on or beyond the territorial national borders arise (Aas, 2011, 2013). This article aimed to contribute to developing knowledge in this area by focusing on which forms of suspicion emerge and are expanded by the transnational exchange of DNA data in EU and how 'new' forms of suspicion relate to the reinforcement of 'old' criminal categories. Members of particular minorities are more likely to be included in forensic DNA databases and then, consequently, placed under greater surveillance (Chow-White and Duster, 2006, 2011). This article has also contributed to previous debates on how DNA forensic databases reproduce or reinforce patterns of discrimination, disadvantage, and suspicion (Skinner, 2013, 2018).

In addition, we aimed to contribute to expanding the existing scarce debate on the transnational exchange of DNA data by going beyond the representationalist view of data fluxes and focusing on the subjectivizing effects of surveillance processes. We argue that such an approach makes it possible to add to an in-depth understanding of how the governance of crime through technological systems is closely related to (re) making of suspicion of particular communities through a closed circuit of surveillance (Williams and Johnson, 2004).

Williams and Johnson's account (Williams and Johnson 2004; Johnson and Williams 2007) of the surveillance facilitated by DNA databases provided us with several important considerations for analysing the construction of suspicion that is emerging and is being expanded by DNA data exchanges in the EU. This system presents the characteristics that Williams and Johnson identify when they describe 'reconstructive surveillance', concerning four aspects. Firstly, the Prüm system operates as a 'closed system of surveillance', it is, a form of surveillance that is essentially concerned with the management of those already classified as criminals or suspects to ensure future detection.

Secondly, the Prüm system is supported by the mass availability of identity archives, something unprecedented in the history of European policing, since each country makes its own national digitalized archive of DNA profiles available for transnational exchange. Thirdly, this form of reconstructive surveillance relies on a technological apparatus that is legitimized by the rhetoric of automation, speed, and accuracy. Finally, the Prüm system is operated by expert practitioners who inferentially contribute to the re-making of connections between criminality and suspect communities based on transnational exchanges of DNA data.

Previous research has explored the construction of suspicion with regards to the abstraction and reconfiguration processes of de- and reterritorialization in particular as immaterialization and rematerialization linked to databasing (Deleuze and Guattari 1987, Haggerty and Ericson 2000). Instead, we focussed additionally on the literal assignment of particular 'territories' to suspicious populations and the contribution towards the production of surveillance subjects by Prüm professionals. Our finding is that suspicion is constructed through the simultaneous, co-existing forms of deterritorializing and reterritorializing assumptions about criminality linked to the movements of suspect communities across the EU. Management of criminality is configured through confounding rhetoric of global expansion of mobility of criminals, technical neutrality of DNA identification, and the reliance of criminal categorizations related to suspect movements of particular national populations.

The transnational exchange of DNA data via the Prüm system represents a technological infrastructure designed to control specific populations through a dispersed network of enhanced detection. Our research shows that the Prüm system, functioning based on pre-existing national DNA databases, operates by creating a division between 'criminal suspects'—whose identifiers are stored in a searchable closed archive at national and transnational level—and 'law-abiding citizens'. Prüm thus reinforces a category of suspicion that is subjected to continued and dispersed surveillance: a suspect community.

Suspect communities are therefore part of a collective modality of suspicion that very clearly affects groups and populations that are more subject to the discretionary power of the criminal justice system. Previous research showed that national DNA databases tend to reflect policing practices that usually target minorities, such as foreigners and ethnic monitories (Duster 2006; Chow-White and Duster 2011; Skinner 2013, 2018). Our study, focused on the transnational exchange of data contained in national DNA databases, showed that the Prüm system has the power to reassert and extend the discriminatory power of DNA databases. This article provided empirical data that substantiates what previous literature called the expected development of a 'logic of convergence' (Machado and Silva, 2009; Hindmarsh and Prainsack, 2010) that assumes all national databases will inevitably grow in scope in the future, constituting an ever-widening population of genetic suspects.

Our interviewees' construction of suspicion relies, by one side, on an impersonal and disinterested approach to how materials, in this case exchanged DNA data, have previously been socially and culturally embedded and carry suspect identities related information. We refer to this process as a way of deterritorializing suspicion based on loosening the ties between suspected criminality and particular communities and associated territories. By the other side, our interviewees' construction of suspicion lies on multiple forms of constructing suspicion that give meaning to the production and use of DNA data, as well as to the networking processes which facilitate exchanges of information. We refer to this process as a way of reterritorializing of suspicion.

The deterritorialization of suspicion diffuses responsibility and depoliticizes power by making its actions opaque or invisible. It is configured in two ways. Firstly, it amplifies imaginaries of Europeanization that are linked to the increase in transnational collaboration in the area of crime control. Considering that the 'free' mobility of citizens within the EU facilitates criminal activity across borders, most interviewees normalized the emergence of the Prüm system as a logical outcome. The transnational exchange of DNA data is therefore seen as an opportunity to regain 'control' over the coexisting mobility of non-criminal and criminal populations. Secondly, the deterritorialization of suspicion also involves incorporating depersonalization, neutrality and procedural objectivity into the operations of the automated and permanent DNA data exchange.

The deterritorialization of suspicion is juxtaposed with modes of what we refer to here as reterritorializing suspicion through the continuous (re)creation of assertions concerning criminality and specific populations from certain East European countries. In this way, reterritorialization contributes to the various enactments and enforcements of constructing suspicion in practice by establishing a division organized around the fundamental distinction between suspect and non-suspect populations. This division is assumed to be sustained by generalizations of what Didier Bigo has described as '... the fear of transnational movements of people from poor countries to rich countries' (Bigo 2008: 94). The links between the deterritorialization and reterritorialization of suspicion, therefore, help us to understand the complexity of the suspicion constructed by the Prüm professionals regarding transnational crime in the EU.

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