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Version: Published Version

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### **Article:**

Ustek Spilda, Funda (2020) Statisticians as back-office policy-makers: counting asylum-seekers and refugees in Europe. *Science, Technology and Human Values*, 45 (2). 289 - 316. ISSN 0162-2439

<https://doi.org/10.1177/0162243919882085>

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# Statisticians as back-office policy-makers: Counting Asylum-Seekers and Refugees in Europe

Funda Ustek-Spilda<sup>1,2</sup> 

## Abstract

Street-level bureaucracy literature ascertains that policies get made not only in the offices of legislatures or politicians but through the discretion bureaucrats employ in their day-to-day interactions with citizens in government agencies. The discretion bureaucrats use to grant access to public benefits or impose sanctions adds up to what the public ultimately experience as the government and its policies. This perspective, however, overlooks policy-making that gets done in the back offices of government, where there might not be direct interaction with citizens. Furthermore, it treats discretion as inherently anthropogenic and ignores that it is exercised in relation to sociotechnical arrangements of which bureaucrats are a part. In this paper, based on extensive ethnography at national statistical

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institutes and international statistical meetings across Europe, I make two arguments. The first is that, statisticians emerge as back-office policy-makers as they are compelled to take multiple methodological decisions when operationalizing abstract statistical guidelines and definitions, thus effectively making rather than merely implementing policies. This is the “discretion” they employ, even when they may not interact with citizens. The second argument is that the exercise of discretion is sociotechnical, that is, it happens in relation to the constraints and affordances of technologies and the decisions of other bureaucrats in their institutions and others.

### **Keywords**

street-level bureaucracy, discretion, population statistics, asylum-seekers, refugees

## **Introduction**

The definition of population is a complex matter. In statistics, the definition of population establishes the basis for who is to be included or excluded in an enumeration. There are many national definitions of population (United Nations Economic Commission for Europe [UNECE] 2014, 95),<sup>1</sup> but for international comparison purposes, countries are recommended to use internationally harmonized definitions. One such definition is “usually resident population” (URP), recommended by European Statistical Office (Eurostat) for European member states and UNECE (2006, 35-39).<sup>2</sup>

The European Regulation (No 1260/2013) defines URP as “all persons having their usual residence in a Member State at the reference time” (European Parliament 2013, Article 2c). Here, “usual residence” is specified as “the place where a person normally spends the daily period of rest, regardless of temporary absences for purposes of recreation, holidays, visits to friends and relatives, business, medical treatment or religious pilgrimage” (European Parliament 2013, Article 2d). The Regulation further sets out that where a full twelve-month residency has not been achieved, but individuals have “the intention to stay for at least one year,” they should also be counted in the URP (European Parliament 2013, Article 2d).

At first sight, the population definition of URP and its criteria seem rather straightforward. This is also the same impression one would get if

they examined the metadata reports for the 2011 Census round in Europe. Of the thirty European countries, twenty-six stated, “There are no particular reasons for data unreliability for this topic,” when asked about the overall accuracy they have achieved with respect to URP (Eurostat 2014). Nevertheless, the problems identified with applying the concept to national contexts (Lanzieri 2014) reveal that population definitions require assumptions, adaptations, and interpretations by statisticians. As a result, we find a variety of diverging practices in European Union (EU) member states, such as setting different time frames for measuring temporary absence or usual residence or interpreting “intention” to stay, due to reasons of data availability or national laws and regulations that draw the boundaries of residency. These adaptations and interpretations are the focus of this paper, as I aim to show that through them statisticians not only implement but also make policies. They are the “discretion” employed by statisticians and the institutions they are part of.

The concept of “discretion” in public policy was theorized by Michael Lipsky (2010) in *Street-Level Bureaucracy* where he wrote that bureaucrats in public administration emerge as policy-makers through the “discretion” they employ in their interaction with citizens. Discretion has been conceptualized as the “free space” of frontline bureaucrats (Fletcher 2011, 449) that occurs “wherever the effective limits on [the public official’s] power leave [them] free to make a choice among possible courses of action or inaction” (Davis 1971, cited in Evans 2011, 370). For Lipsky, the complexity of tasks of street-level bureaucrats required elaboration of rules, guidelines, or instructions in accordance with individual circumstances and limited resources at their disposal (Lipsky 1980, cited in Evans, 2011, 370). Then, Lipsky deduced that policies are implemented in these elaborations, adapted and redefined so much so that they actually get made there. Through their direct contact with citizens, street-level bureaucrats would assess if and how policies, which are abstract and not specific, would apply to individual contexts and to what extent. Through their expert assessment, bureaucrats would have the power to enable or withhold access to the legally defined rights and resources or impose sanctions. However, as I will show in this paper, such an understanding of discretion ignores the increasingly technical structures of government, where many policy decisions do not involve direct contact with the subjects of government.

The idea for this paper emerged in an International Migration Statistics Meeting in 2016 when a statistician remarked that “One has to be very careful to stick to internationally agreed on definitions, because that’s the only way we can compare.”<sup>3</sup> Indeed, lack of consistency of terminology and

methods between different countries is often described as the single most important reason why population numbers including those on migration are often not comparable across countries. Thus, an important part of work in international statistics is devoted to the harmonization and standardization of enumeration methods. Although this seems possible and straightforward on paper, actual implementation is less so and requires statisticians to negotiate and adapt agreed international standards and methods to fit the established political, methodological, and technical infrastructures of their national contexts.

Thus, I pose two questions in this paper: (1) How do statisticians operationalize abstract international concepts and definitions into their national contexts? and (2) What are the sociotechnical practices through which this operationalization occurs? To answer these questions, I focus on the categories of refugees and asylum-seekers, following the increasing governmental concern with statistics about these groups on the European political agenda (Berry, Garcia-Blanco, and Moore 2016; Carrera et al. 2015; Streeck 2016).

The research presented here draws on data from three years of research as part of a research project titled ARITHMUS: How Data Make a People. The research involved multisited, collaborative ethnography on changing population enumeration methods in Europe. I was part of a team of researchers<sup>4</sup> who studied the work practices of statisticians through participant observation and interviews across five national statistical institutes (NSIs) in Europe and two international statistical organizations. In this paper, I draw mainly on collaborative ethnography of the research team, which was conducted in five countries (the Netherlands, the UK, Estonia, Turkey, and Finland) and two international organizations (UNECE and Eurostat). I draw in particular on material I have collected in international meetings on migration and refugee statistics and interviews about refugee statistics in relation to Norway and Turkey.

I make two interrelated arguments. The first is that, when operationalizing abstract international statistical guidelines, definitions, and categories in relation to national rules and conventions, statisticians engage in important negotiations with other organizations and agencies that are involved in producing population data for policy-making. Thus, they effectively *make* rather than just implement policies, as they adapt abstract international guidelines to national contexts. This, I argue, is the “discretion” they employ as bureaucrats. While they may have no direct contact with those they are enumerating, these decisions and methodological choices nevertheless have political implications as they shape how

the population is enacted as an object of government. They are, therefore, onto-political, insofar as they have consequences for public policy, allocation of resources, and access to public services (Mol 1999). The second is that discretion needs to be reconceived as a sociotechnical issue, as statisticians make decisions in relation to the constraints and affordances of technologies (material and technical) and the decisions of other bureaucrats within their institutions and others. This entails that discretion is not individualistic but that institutions also exercise discretion. This is part of their sociotechnicality.

In what follows, I develop these arguments in four sections. First, I bring together the work on street-level bureaucracy literature with science and technology studies (STS) with respect to the performativity of discretion and the sociotechnical arrangements of which it is a part (Latour 2010; Latour and Woolgar 1986; Law 2004; Mol 2002). Second, I demonstrate my first argument—that statisticians are compelled to employ discretion through interpreting and adapting internationally standardized definitions to their national contexts—through the example of URP. Third, I delve into the specific case of asylum-seekers and refugees and address whether they are included as part of the URP in Europe to illustrate my second argument—that discretion is sociotechnical. Fourth, building on the second argument, I look at how institutions also exercise discretion through negotiation of methods as well as other sociotechnical arrangements of their institutions. Lastly, I conclude with a discussion of the implications of reconceptualizing discretion as sociotechnical.

## **Statisticians as Back-end Policy-makers: Onto-politics of Discretion**

Michael Lipsky's work on *Street-level Bureaucracy* aims to solve a major puzzle in public policy. Bureaucracy implies a set of rules and structures of authority, but these rules need to be applied at the "street level" by those working in schools, police and welfare departments, lower courts, legal service offices, and other government agencies (Lipsky 2010, xi). This entails that decisions about the dispensation of benefits or allocations of public sanctions are made at a distance from the center by those who often do not access to their initial formulation and legislation (Lipsky 1980). Lipsky (1980) resolves this puzzle by pointing out the *discretion* street-level bureaucrats exercise in their *interaction* with citizens as bureaucrats often work in situations that are too complex to completely account for in abstract rules, guidelines or instructions (p. 15), and they also need to

“perform” with limited resources and high caseloads (pp. 9-10). Consequently, street-level bureaucrats make policy in two related aspects. First, they exercise wide discretion in decision-making about citizens with whom they interact. Second, when taken together, these individual actions make up the behavior of particular social, political, and economic structures of government (Lipsky, 2010, 13). As such, policy-making is also located in the encounters with citizens and not merely in legislatures or the offices of high-ranking administrators.

Literature that followed the street-level bureaucracy theory, including its critiques (Evans 2011; Cheetham 1993; Howe and Davies 1991), also focused on the two concepts of discretion and interactions of street-level bureaucrats with citizens in the making of policy. While some studies focused on how street-level bureaucrats practice needs assessment and eligibility (Scott 1997; Canales 2013; Ellis 2011) and illustrated how street-level bureaucracy works in practice (Blundo 2006; Watkins-Hayes 2011; Halliday et al. 2009), others investigated the (continued) applicability of the theory given technological advances in information technology that formalize and structure bureaucrats’ work practices (Bovens and Zouridis 2002; Mole 2002; Canales 2011) and other changes into the organization of their work in light of public-sector reforms (Hjörne, Juhila, and Van Nijnatten 2010; Fletcher 2011; Wastell et al. 2010; Durose 2011).

Such a focus on direct interaction in the exercise of discretion, however, misses the discretion employed by bureaucrats in the back offices, which is more about rulemaking for policy rather than specific decisions on individual cases. This, I argue, is the case for statisticians who may not have direct encounters with citizens but who exercise discretion in operationalizing abstract international statistical concepts and definitions into their own national/local contexts through a myriad of major and minor methodological decisions. I make this argument in relation to three conceptual positions in STS: *method*, *performativity*, and *sociotechnical arrangements*.

Statisticians employ statistical methods such as censuses and surveys that have been understood as techniques for identifying, configuring, and assembling populations (Curtis 2001; Desrosières 1998). As Espeland and Stevens (2008, 404) put it, censuses make up the categories of people such as citizen and migrant, native and foreign-born, first- or second-generation migrant, and so on. However, while specific statistical techniques, definitions of concepts, and organization of categories are frequently discussed and debated, as John Law (2004) argues in relation to methods more generally, a range of assumptions are naturalized and more or less hidden, such as what is deemed important, what data are needed, and what techniques are

appropriate for collecting that data (p. 5). Porter argues that such naturalization is the result of a tension between the “disciplinary objectivity” sought in expertise and the search for “mechanical objectivity” (Porter 1995, 4). He notes that because a consensus is hard to reach between experts, and outsiders need to be satisfied, mechanical objectivity is put forth as a check on subjectivity, personal biases, or preferences, as it is “Better to speak grandly of a rigorous method, enforced by disciplinary peers, cancelling the biases of the knower and leading ineluctably to valid conclusions” (Porter 1995, 4). This process, however, results in what Espeland and Stevens (2008, 421-22) call “uncertainty absorption” as ambiguities and assumptions are removed and discretion behind the numbers fades into the background. Consequently, quantification practices, and their producers, are granted authoritative and objective power, as long as they follow the rules of their discipline, that is, its methods, concepts, and technologies (Urla 1993). But as Law (2004), citing Wittgenstein, put it, rules do not suggest their own application (p. 53) and when rules are applied, discrepancies emerge even on the same object (p. 55) with different effects. This is my first critique of how discretion is conceptualized in street-level bureaucracy literature. Statisticians (and other bureaucrats) in back offices engage in discretion through *rulemaking*, through interpreting, adapting, and applying abstract standards, guidelines, and concepts into their own national contexts. Through this discretion, different realities are created and adjusted albeit with greater or lesser difficulty (Law 2004, 55).

Such an understanding of reality acknowledges that “statistics do not exist *sui generis*”; “they have to be created” (Law 2004, 39). This is because scientific knowledge, technologies, and methods do not evolve in a vacuum and are not merely techniques that describe existing realities that exist out there (Law 2009, 240). Nor do statisticians simply identify and deploy methods to perfectly represent an external reality. Rather, like scientific knowledge and technologies, statistics are shaped by the historical, organizational, and social contexts of the methods and practices that produce them (Law 2004). As such, population statistics do not simply represent the populations they are set to count, and statisticians do not merely count populations that exist out there waiting to be identified. Instead, methods are *performative*: they enact the social world they are set to describe and represent (Law and Urry 2004; Lury and Wakeford 2012; Mol 2002; Law, Ruppert, and Savage 2011). This is my second critique of the street-level bureaucracy literature: that statisticians’ exercise of discretion is performative—they enact the things and people they set out to study and describe. They do so in varying, particular ways, with varying political effects. This

opens a political space to inquire about the circumstances that enact realities in one way rather than other (possible) versions of the real (Law 2009; Mol 1999), which Annamarie Mol (1999) calls “ontological politics.” As such, questions about the choice of things to measure, the classification system used, and weighting of constitutive elements all become part of a political process rather than a merely technical one (Engle Merry 2016, 21).

That different realities might be enacted does not mean anything goes, implying a relativist position. Instead, it means that realities hold only insofar as the methods that enact them have advocates and practitioners who promote and use them and who pursue tacit political agendas that are realized by these methods (Law, Ruppert, and Savage 2011, 12). This, however, is no single individual’s decision. It happens in relation to and with technologies (material and technical) and other humans. As such, they are neither entirely social nor technical, but sociotechnical (Latour 1992). So methods—and the sociotechnical arrangements of which they are part—are sites where certain accounts and enactments of the world come to be contested, negotiated, and competed over (Ruppert 2012). This is my third critique of the conceptualization of discretion in the street-level bureaucracy literature: by focusing on individual decision-making, it ignores the sociotechnical arrangements of which bureaucrats and their institutions are a part and thereby ignores how the constraints and affordances of these arrangements come to shape how discretion is exercised.

Through these three points, *method*, *performativity*, and *sociotechnical arrangements*, I make two arguments. The first is that statisticians emerge as back-office policy-makers when they operationalize abstract international statistical guidelines, definitions, and methods in relation to their national contexts; the second is that discretion needs to be reconceptualized as sociotechnical. In the next three sections, I will illustrate these arguments in relation to three empirical cases: (1) the internationally standardized definition of URP, (2) counting of asylum-seekers and refugees in URP, and (3) how institutions exercise discretion through negotiation.

## Problematizing “URP”

Earlier I introduced the URP and noted that it is a population definition recommended by Eurostat and UNECE for international comparison purposes. I also noted that although URP provides seemingly straightforward criteria for who to include and exclude from the population count, there are a variety of diverging practices used to implement them in EU member states. In this section, I will look at how statisticians operationalize this

abstract international definition in relation to their national contexts in Europe. I will look at three particular moments of interpretation and adaptation that takes place: (1) methods for establishing residency, (2) establishing time criteria for residency, and (3) establishing “intention” for (continued) residency.

## Methods for Establishing Residency

Although URP states that all those persons who have their usual residence in a Member State should be counted as part of the population of that Member State (; European Parliament 2013, Article 2c), it does not specify how “usual residence” is to be established and measured. As such, NSIs choose between different census methods for enumerating population in line with the sociotechnical affordances and limitations of their own contexts.

In population statistics, there are mainly three census methods: traditional/conventional, register-based, and the combination of the two (Eurostat, 2014; INSEE 2015; UNECE 2007, 2008, 2012; Valente, 2010). Traditional censuses, usually taken decennially, are based on the field enumeration of all individuals present in a jurisdiction (UNECE 2006, 6) through the administration of census survey. Some countries have moved from field enumeration to register-based census: the use of administrative registers (UNECE 2006, 6) for establishing and counting who is resident. Register-based censuses entail that data from multiple government departments, such as Ministry of Education, Labor, Tax Office, and so on, are linked together to produce data. This means that the records held about a resident, such as her tax records, education history, employment status, marital status, and residence address, are brought together to compile a full record about her; those records are then assembled together for an integrated social, demographic, and economic view of the country (UNECE 2006, 6). When government registers do not provide information on all the census topics for which NSIs would like to produce data (or supplement data available in the registers), “combined” census methods are used. These involve incorporating data from questionnaire-based surveys into the data from administrative registers. These different methods lead to statisticians having to make adjustments and adaptations—hence use *discretion*—when they seek to implement the URP definition.

For instance, Norway conducts register-based censuses, which enables them to count the residents of the Norwegian prison (*Norgerhaven*) based in the Netherlands as part of the Norwegian resident population. As a

Norwegian statistician put it, this is because the prisoners are not staying in that facility “out of their own will” but out of obligation.<sup>5</sup> Having information about prison residents in the population register entails that those who are physically residing in another country can be included in the population through adjustments to the data held at registers. If Norway were to conduct a traditional census survey, the same population of prison residents would not be included in Norway’s population count, as the prison is located outside of the country’s national jurisdiction.

In another example, Estonian statisticians developed a “residency index” (RI) to calculate the probability of the actual residency of individuals in the country based on the amount of transactions they make with government agencies (Tiit and Maasing 2016). When a child is born, she is registered in the birth register; when she goes to school, she is added to the education register; when she takes up employment, she is then included in the employment and tax registers, and so on. The more “signs of life” she has in registers, the higher the likelihood that she is resident in the country.<sup>6</sup> However, this means that individuals who do not interact much with government agencies, such as those living in rural areas and not holding formal employment, might end up being excluded from the URP if their RI falls below a certain probability threshold.<sup>7</sup>

Establishing residency requires important interpretations and adjustments by statisticians—how lives appear in data and are lived may not always be one and the same. As a Norwegian statistician put it, people may be living at addresses different to those at which they are legally registered to reside (as in the case of students); they might have moved abroad and never notified the authorities about their move or they died but their records were not updated. Hence, the information held at registers may not always be up-to-date, with the implication that those who are no longer resident in the country end up being counted in URP or those who are resident but do not produce sufficient “signs of life” in registers may be excluded from the count.<sup>8</sup> These examples illustrate that statisticians are compelled to establish rules not only about which methods they will employ to produce statistics but also about how these methods will interpret, make adjustments to, and adapt the international definitions and their criteria to their own contexts.

### *Establishing Time Criteria for Residency*

URP sets out a twelve-month criterion for establishing “usual” residency and specifies that temporary absences do not entail a change of residency.

Despite being a quantitative criterion, the existing sociotechnical arrangements of which statisticians and their institutions are part lead to adjustments and adaptations to this seemingly “exact” criterion.

For instance, while France, Germany, and Norway implement a six-month residency criterion to be included in URP, Austria excludes all those who have been absent from the country for more than “ninety days” (Eurostat 2014). Similarly, the Netherlands notes that for those individuals who are enumerated in a census survey but not registered in the population register, a stay of at least two months is sufficient to determine their usual residence (Eurostat 2014).

Moreover, for certain groups of individuals, exceptions are made so as to lift or adjust the time criterion in order to comply with national laws and regulations that draw the boundaries between residents and nonresidents. In line with national directives, members of the army, police authorities, and diplomatic service members who are posted abroad (and their family members who reside with them), for instance, are included in the URP of their countries of citizenship rather than countries of residence (Eurostat 2014). In contrast, students studying abroad might be included in the URP count depending on their marital status (e.g., Norway), level of education (e.g., Romania), place of residency for the majority of the study period (e.g., the UK), or they might be excluded (e.g., Poland; Eurostat 2014).

These examples illustrate that even when the criteria specified in an international definition are quantitative and seemingly exact, statisticians are compelled to adapt them to their own national contexts in line with the methods and data available to them and the national laws and regulations that determine who is a resident.

### *Establishing “Intention” for (Continued) Residency*

Although URP sets a twelve-month rule for establishing residency, it recognizes that some people might not be able to fulfill it, especially if they recently moved. Hence, the intention to stay for at least one year is proposed to include those in the URP with the intention of continued residency. It is, however, difficult to measure intention. Hence, statisticians are compelled to make assumptions and adjustments to implement this rule.

Hungary reports that international students who have studied in the country for less than a year will be assumed to “have the will to stay for more than twelve months” and will be included in the URP (Eurostat 2014).<sup>9</sup> Similarly, a statistician in a meeting on migration statistics noted that the intention of international students to stay on after their courses was

assumed. As he noted, students tend either not to respond or to underreport their plans to stay after their studies in migration surveys, as they fear their answers could be held against them.<sup>10</sup> Belgium also specifically states that “It is impossible to know whether [individuals] intend to stay in the country in the following twelve months,” and henceforth assumes intention to stay (Eurostat 2014).

Street-level bureaucracy literature focuses on the individual decisions that frontline bureaucrats make in their contact with citizens. As such, it pays attention to the “free space” bureaucrats might utilize to apply an abstract policy to the specific circumstances of a citizen. This focus on direct interaction for the exercise of discretion overlooks two important points. The first is that bureaucrats in the back offices, such as statisticians who may not have direct interaction with citizens, also employ discretion. Their discretion is less about deciding on individual cases but more about establishing rulemaking in adapting abstract international statistical concepts, definitions, and regulations in relation to their national contexts. Through their rulemaking, statisticians also not only implement but also make policies, since the rules they decide on shape and enact how the population they set to count and represent come to be known. The second point is that street-level bureaucracy literature conceives of discretion as individualistic, that is, it happens between a bureaucrat and a citizen. However, the variety of interpretations, assumptions, and adjustments made by statisticians in adapting URP to their own contexts demonstrates that statisticians are not sovereign in making decisions. The institutions they are part of shape (enable and restrict) how and in which ways they use discretion. In the next section, I will continue building on this latter point through an analysis of how a particular group of population, refugees, and asylum-seekers are counted in the URP.

## **Are Refugees and Asylum-seekers Part of the URP?**

During the peak of the refugee crisis, the numbers of people seeking refuge in Europe became particularly contentious. While some politicians referred to these groups as “swarms of people” (BBC 2015) and questioned their need for protection by asking whether they were “economic migrants” (Buckley 2016), others pushed for increasing quotas for refugees in their countries (Carrera et al. 2015). In such a climate, statisticians noted that they often found themselves trying to maintain a tricky balance between providing good quality statistics, while keeping their professional independence by not being involved in the politics of the issue.<sup>11</sup> However, such

statements ignore that the social contexts within which statistics are produced also have political dimensions, as the produced knowledge has the capacity to shape decisions of governance (Engle Merry 2016, 209). In this section, I will develop the second argument of the paper: discretion is sociotechnical; it happens in relation to and with technologies (material and technical) and other humans, with political effects. I will illustrate this argument through the case of differential assignment of personal identification numbers (PINs) to asylum-seekers and refugees<sup>12</sup> in Norway.

The recommendations for the 2010 Round of Censuses state:

Persons who may be illegal, irregular or undocumented migrants should be included in the resident population and should follow the same rules of usual residence for other persons. (...) Asylum-seekers and persons who have applied for or been granted refugee status or similar types of international protection should be included in the resident population if the duration of stay in the country is, or is expected to be, at least 12 months as for the rest of the population. This also applies when persons are granted temporary protection *in situations* of mass displacement but where a formal status of protection has not yet been granted due to practical considerations. (...) The intention is not to distinguish these persons separately but rather to ensure that they are not missed from the enumeration. (UNECE 2006, 40-41)<sup>13</sup>

Despite the clarity of the recommendation for treating asylum-seekers and refugees the same as the rest of the population, a brief look into its application reveals that all European countries include refugees, but more countries exclude asylum-seekers from their URP than include them (17 and 15, respectively, see Table 1).

Although an asylum application might have many potential outcomes, the enumeration of individuals who go through this process is organized only by their asylum-seeker status (awaiting decision on their asylum application) and refugee status (acceptance of their application). This binary labeling, however, does not reveal the complexity of the asylum process. When a person applies for asylum, her application might be accepted and she might be given internationally recognized refugee status or temporary/subsidiary protection or it might be rejected. If rejected, she might appeal, and if her appeal is also rejected, she might continue appealing until her appeal routes are exhausted (Zetter 2007; Wettergren and Wikström 2014). At that point, she might be returned or she might be allowed to remain in the country if her return goes against the international principle of *nonrefoulement*: not returning asylum-seekers to a country where they might face

**Table 1.** Member States and European Free Trade Association (EFTA) Countries by Inclusion/Exclusion of Asylum-seekers and Refugees in the Data on Population Reported to Eurostat in the Framework of the Unified Demographic Data Collection, Reference Year 2015.

| Population as of January 1, 2016               | Asylum-seekers   |  | Refugees  |          |
|--|--|--|---|----------|
|  | Included   | Excluded   | Included  | Excluded |
| Conventional census (including rolling-census) | Ireland, Greece, Italy, Cyprus, Luxembourg, France, Portugal, the UK | Bulgaria, Croatia, Hungary, Romania, Slovakia                  | Ireland, Greece, Italy, Cyprus, Luxembourg, France, Portugal, the UK, Bulgaria, Croatia, Hungary, Romania, Slovakia   |          |
| Register-based census                          | Belgium, Austria   | Finland, Sweden, Norway, Denmark, Slovenia                     | Belgium, Austria, Finland, Sweden, Iceland, Norway, Denmark, Slovenia   |          |
| Combined method census                         | Germany, Spain, Estonia, the Netherlands, Switzerland                | Czech Republic, Latvia, Lithuania, Malta, Poland, Lichtenstein | Germany, Spain, Estonia, the Netherlands, Switzerland, Czech Republic, Latvia, Lithuania, Malta, Poland, Lichtenstein |          |

Source: Table adapted from Eurostat (2017) International Migration Statistics, Reference Metadata in Euro SDMZ Metadata Structure, [http://ec.europa.eu/eurostat/cache/metadata/en/migr\\_immi\\_esms.htm](http://ec.europa.eu/eurostat/cache/metadata/en/migr_immi_esms.htm), accessed on June 21, 2019.

persecution (UNHCR 1977). Moreover, in exceptional circumstances, mass protection status might also be given, as has been the case for Syrians in Turkey during the peak of the Syrian conflict (Ustek-Spilda 2017).

On the surface, the simplification used in statistics is a result of the presumed difficulty of covering all instances and kinds of people, as countries use different classifications with specific legal and administrative applications (EGRIS 2017). However, these legal and administrative differences (and the different classifications used by different government

departments and international organizations) comprise the sociotechnical arrangements that enable one group (refugees) to be counted in URP while restricting others (asylum-seekers) as in the case of Norway.

In Norway, the source of population data is the Central Population Register. To be registered as resident, a person should have lived, or have the intention to do so, for at least six months in Norway (Eurostat 2014). Residents are issued a PIN, which grants them rights and access to a variety of public and private services. The PIN connects all the records held about residents across different government registers.

The Norwegian Directorate of Immigration (UDI) issues the PIN, then the data are shared with Statistics Norway, which compiles population data for the purposes of doing a census. During this transfer, the information on refugees is passed onto Statistics Norway (as they have a PIN), but not for asylum-seekers (as they lack a PIN). Under normal circumstances, individuals who reside in Norway for longer than six months are issued PINs. For asylum-seekers, duration of the application process does not change the rule that they are not issued PINs. Consequently, refugees are included in the URP as they are assigned PINs, but asylum-seekers are excluded.

The exclusion of asylum-seekers from the population count is presented as a technical matter for the statistical office. As another organization, UDI issues the PIN, and since the statistical office only receives information about those individuals with a PIN, they end up excluding asylum-seekers from the population enumeration. A statistician from UDI explained the reasoning behind this practice. He noted that the police department takes the initial registrations of asylum applications, but sometimes, due to an error, the same person can be registered twice or some asylum-seekers might purposefully lodge multiple applications in the country (or across different countries), which is considered “asylum shopping” by authorities. As the Dublin system<sup>14</sup> establishes that asylum-seekers would be returned to the initial country of asylum application, issuing them with PIN numbers would be too costly to administer, as “some of these people could be sent back” and some would return voluntarily or move to other countries.<sup>15</sup> Another statistician from Statistics Norway also stressed the potential cost of including asylum-seekers in the population and noted that it would be “overwhelming” and “not productive” given the limited resources of statistical offices.<sup>16</sup> He then added that this is why strict compliance with the URP definition was not feasible for Norway: it would be too expensive to make these changes to the way the population registration is done and the registers kept, especially given the small number of asylum-seekers.<sup>17</sup>

This example illustrates that discretion is exercised in relation to the counting of asylum-seekers involves the interplay between a technology—the PIN—which is implemented by a government agency other than the NSI (i.e., UDI) and statisticians and UDI bureaucrats. As such, it shows that discretion is not merely technical but sociotechnical; it happens in relation to and with technologies (material and technical) and other humans. This is my second critique of the conceptualization of discretion in street-level bureaucracy: by focusing on individual decision-making, it ignores the sociotechnical arrangements of which bureaucrats and their institutions are a part. But bureaucrats are not outside of these sociotechnical arrangements that extend to their particular offices and methods. This is why it would be “too costly” to try to alter them, as doing so would require uprooting an enormous hinterland of not only the institutions they are part of but the material and technical elements that comprise the government registers, PINs, and the welfare policies and sanctions that are sustained through them.

The Norwegian example illustrates two further points in relation to STS. First, discretion is performative: it ends up enacting the social world it is set to describe and represent. The exclusion of asylum-seekers from the population enumeration entails that even when they are “resident” in Norway, they are not part of the Norwegian population and are unable to access public services as other residents in the country. Second, the decision to exclude asylum-seekers from the population count is onto-political (Mol 1999), as it means that they are unable to access public services or the allocation of resources. In the next section, I will look at negotiations between different government departments for data and resources and how they align their classification systems and methods. My aim is to illustrate that not only individuals, but also institutions, exercise discretion. This is part of their sociotechnicality.

## **Institutions and Discretion**

In the previous section, I noted that because asylum-seeker numbers were small in Norway, statisticians argued that excluding them from the population count was not a major issue.<sup>18</sup> The small numbers argument, however, would not hold for Turkey, which, according to UNHCR figures, hosts 3.5 million refugees, currently the highest number in any country in the world (UNHCR 2018). Previously, Turkey was deemed a “transit” country for asylum-seekers, as they would log asylum applications to the UNHCR and stay only until given refugee status elsewhere (Kirişçi 2014; İçduygu

2015). Up until the 2000 Census, Turkey held traditional censuses. This meant that all those present on the census day were counted in the population. However, because the census survey did not include any questions about asylum applications or refugee status, it was not possible to identify refugees and/or asylum-seekers within the overall population count.<sup>19</sup> Turkey held its first combined-method census in 2010, but the number of asylum-seekers and refugees was not considered a relevant problem at that time. “The issue began,” as one statistician put it, when Turkey opened its borders to Syrians in the peak of the conflict, when Syrians were allowed to enter without passports and any form of initial registration.<sup>20</sup> It was also during the peak of the crisis that the Turkish Directorate for Migration Management (DGMM) was founded to manage all migration-related matters, and Turkey started the switch from a combined-method toward a full register-based census by 2020. As a consequence of both changes, to produce information for URP and other internationally agreed topics and categories on migration, the Turkish Statistical Institute (TurkStat) needed DGMM to share their data with them.

Indeed, DGMM often shares the details of the number of asylum applications that the agency processes, and having made receiving social benefits conditional on registration, it can be said that they have up-to-date information on asylum-seekers and refugees in the country.<sup>21</sup> Nevertheless, as a humanitarian agency worker in a refugee statistics meeting noted, for statistics, they need more than mere numbers; they need to decompose numbers into categories such as age, sex, language, education level, and so on.<sup>22</sup> Only when they have these details, they can meet humanitarian demands in a timely and efficient manner, he added.

Also, even though DGMM was responsible for migration management, it was still TurkStat that had the mandate to produce migration statistics.<sup>23</sup> In a meeting held with various government agencies involved with migration matters in Turkey, it became apparent that TurkStat was having difficulty producing numbers. This was due not only to lack of access to timely and up-to-date data from DGMM and other government agencies but also due to incompatible classification practices, confusions about what each institution is responsible for, and varying levels of expertise for statistical data production among the agencies, which resulted in conflicting accounts on the same topics or large amounts of missing data. Statisticians at TurkStat expressed that it is their responsibility to “establish the ordering of the(se) administrative data held by different institutions” and to take those that are “the most accurate.”<sup>24</sup>

Bureaucrats attending the meeting pointed out that the observable differences between the data held by different government departments are also a result of the particular circumstances of asylum-seekers and refugees, where data might not always be available or compatible. As one bureaucrat explained:

For demographic information, we look at the passport they used when they were entering the country. For illegal entries, their testimony/declaration is principal. But yeah, at this point, it might be a guessing-game sometimes. If the guy has 10 children, perhaps he does not remember the exact birthdate of each of them. Or perhaps these data were entered back in the day and their format does not fit into our current system anymore, so it might not be read easily or immediately. And sometimes, let's face it, there are discrepancies between the countries' data management systems as well. The system of the country that entered the (passport) data to begin with is very important. For instance, in Afghanistan, their birthdate is entered as 1-1-1, this is because they have a registration system like that. If someone does not know how to read this system, then they might enter some other detail.<sup>25</sup>

We see that there are many moments of “guessing” in the enumeration of asylum-seekers and refugees who bring with them the sociotechnical arrangements of the places they come from: their classification, numbering systems, formats for recording demographic information, and so on. When these arrangements conflict, “missing cases” emerge in government registers, even when those persons might be present in the country, or “missing data” emerge, even when the data might be recorded somewhere in some unrecognized format.

Even when data are accessed, the question of drawing the boundaries for inclusion and exclusion in the population involves a political decision. TurkStat statisticians discussed the implications of including Syrians who were given temporary protection in the population count, if they fulfilled the six-month residency criteria. One statistician highlighted the higher fertility rate of Syrian women in comparison to Turkish women, noting that the population composition would significantly change, given the size of the Syrian population in the country. She also added that population projections for the next ten, twenty, and fifty years would also be significantly altered, if they would “all” be included in the population count.<sup>26</sup>

The difficulties with the migration data held in government databases, however, resulted in only those who were “registered” to be counted in the population. As a statistician explained, this amounted to only a tiny group of

those under protection, as (at the time of fieldwork) only those residing in dedicated camps were registered, and the majority lived outside of camps.<sup>27</sup> There are important policy implications of this enumeration, as the public administration of funds and services need to take into consideration local population size for things such as opening (new) schools and hospitals, appointment of teachers and doctors, as well as constructing new housing, managing waste systems, and water and food supplies.<sup>28</sup>

Although in the European context NSIs are given the right to access administrative registers for statistical purposes (European Commission 2012), in practice, this access varies widely as illustrated in the case of Turkey. Migration data are considered sensitive, since it is often held by border police or designated migration management authorities. The recent political debates that make border security a national issue, and reducing migration numbers (Holmes and Castañeda 2016), make having access to these registers ever more political. Against that background, statisticians are compelled to set “the standard for developing, producing and disseminating (. . .) European official statistics” (Eurostat 2011), hence establish the *rules* of how they make adjustments to their methods in line with the Code of Practice that they share as European statisticians. This involves negotiating access and working with data and registers that are produced, organized, and updated by other government departments; it also requires that they abide by the effectiveness and credibility of their statistical authority through a commitment to principles such as professional independence, impartiality and objectivity, and quality (Eurostat 2011).

Thus, building on the argument that discretion is sociotechnical, I argue that both individuals *and* institutions exercise discretion. This is part of their sociotechnicality. The classification systems, data practices, and technical infrastructure affordances of various government registers, and the bureaucrats who produce, update, and enable access to them, demonstrate that statisticians do not make decisions as isolated individuals. The negotiation that takes place between the institutions in the process of implementing abstract international rules and recommendations is socio-technical: it depends on what the methods and technical infrastructures do and do not enable.

## Conclusion

Statistical knowledge is often ascribed a level of objectivity that stands above politics. Yet, as Sally Engle Marry (2016) puts it, “one effect of

power is what gets measured,” and what gets measured depends on what is deemed to be important politically (p. 29). The Expert Group on Refugee Statistics, which I have followed for the last three years for this research, has come into being only in 2015, but the term “refugee” was coined during the Refugee Convention of 1951. Also, the Group’s first meeting location, Turkey, was/is a major refugee-hosting country during this crisis, with a special agreement with the EU for hosting refugees.<sup>29</sup> The systematic measurement of the group became important, however, only when asylum-seekers targeted the EU countries as their destination in large numbers. In other words, refugee statistics emerged as a separate field of migration statistics only when the issue became important in the EU’s political agenda.

Given this context, it is difficult to deny the political character of refugee and asylum-seeker numbers; once made into statistics, the “political” in data is camouflaged, and the political considerations that went into the choice of definitions, categories, and methods, as well as assumptions and motivations, become authoritative numbers. However, once the numbers are established and circulated, the politics of how they come to be produced is erased; and the politics is analyzed only with respect to the policy-making. This is what I challenged in this paper.

Despite claims of objectivity, statistics are built on a plethora of decisions, negotiations, adaptations, and interpretations; subtly and sometimes unconsciously shaped by the assumptions, motivations, and concerns of those who carry them out (Engle Merry 2016, 19-20). As such, statisticians emerge as *back-office policy-makers* rather than merely implementers of policies. They exercise discretion as they adapt abstract international definitions into their local contexts, deciding on exceptions and exclusions while also drawing the boundaries of who and what comes to be counted and how. In counting refugees, but not asylum-seekers, for instance, they do not just produce numbers on a subgroup of population. They render one group visible and accountable, while making another invisible (their needs for protection, shelter, and access to education or the labor market are also rendered invisible).

Moreover, the discretion that goes into the production of statistics is sociotechnical. It is exercised in relation to the constraints and affordances of technologies and in relation to other bureaucrats within and outside statisticians’ organizations. As such, it displaces responsibility for decisions. The more complex the infrastructures of decision-making and the larger the relations that sustain them, the more difficult it becomes to challenge them. As the ambiguities in categorization, missing data, and

incommensurability disappear from the numbers presented (Engle Merry 2016, 19-20), they appear more accurate and precise than they are. In a world where direct contact with the subjects of government is increasingly declining and replaced by automated decision-making systems deemed more objective, impartial, and unambiguous, it is important to recognize the *discretion* that goes into building the techniques of government. Rather than standing above politics, these techniques create the world they attempt to measure and represent.

### **Author's Note**

Paper submitted for the special issue: "Peopling Europe through Data Practices," edited by Baki Cakici, Evelyn Ruppert, and Stephan Scheel. Special issue contact: e.ruppert@gold.ac.uk. This paper is based on research that comes out of the ARITHMUS project.

### **Acknowledgments**

I would like to thank editors of this special issue Professor Evelyn Ruppert, Dr. Stephan Scheel, and Dr. Baki Cakici and the participants of "Peopling 'Europe' Through Data Practices" Workshop organized by members of the ARITHMUS project at Tate Modern in 2017 for helpful comments on the earlier versions of my manuscript. I would also like to thank the three anonymous reviewers and editors of *Science, Technology, & Human Values* for their comments and helpful suggestions throughout the review and publication process.

### **Declaration of Conflicting Interests**

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

### **Funding**

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: The research leading to this publication has received funding from the European Research Council under the European Union's Seventh Framework Programme (FP/2007-2013)/ERC Grant Agreement No. 615588. Principal Investigator, Evelyn Ruppert, Goldsmiths, University of London.

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## Notes

1. Although all European member states produce population counts based on the usually resident population, multiple population counts still exist. For instance, Greece, Hungary, Ireland, and Switzerland continue to use three separate population definitions (United Nations Economic Commission for Europe [UNECE] 2014, 98) and other countries also producing statistics based on the “registered” population definition (e.g., Norway, Finland).
2. UNECE recommendations are for guidance only to member states, whereas Statistical Office of the European Union (Eurostat) member states are required to follow their recommendations.
3. Field notes, UNECE and Eurostat Migration Statistics Meeting (MigStat), May 18-20, 2016, Geneva, Switzerland.
4. ARITHMUS team members are: Professor Evelyn Ruppert (Principal Investigator), Dr. Francisca Grommé, Dr. Stephan Scheel, Dr. Baki Cakici, and Dr. Ville Takala. Further information on the project can be obtained from the website [arithmus.eu](http://arithmus.eu).
5. Interview, Statistics Norway, September 2016.
6. Interview, Statistics Estonia, March 2016.
7. Interview, Statistics Estonia, March 2016.
8. Interview, Statistics Norway, April 2016.
9. Reference has been taken from <https://ec.europa.eu/CensusHub2/metadata.do>, Hungary, 3.4. Statistical Concepts and Definitions—usual residence, accessed December 12, 2018.
10. Field notes, Conference on the Migration Statistics User Forum, Home Office, London, September 21, 2016.
11. Field notes, Expert Group on Refugee and Internally Displaced Persons Statistics (EGRIS) Meeting 2017 in Oslo, Norway.
12. A refugee is someone “who, owing to a well-founded fear of being persecuted for reasons for 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” (EGRIS 2018, 20). Asylum-seeker is not a legal term per se, but “a general term for someone who is claiming or applying for protection as a refugee and who has not received a final decision on his or her claim. It can also refer to someone who has not yet submitted an application for refugee status recognition (has not yet formalised the administrative requirements in national law) but may nevertheless be in need of international protection” (p. 22).

13. The recommendations for the 2000 Census round suggested the inclusion of refugees but exclusion of asylum-seekers (UNECE 2008, 74). Note that this was changed for the 2010 Census round.
14. Dublin Regulation establishes the European Member State responsible for the assessment of an asylum application. The Regulation considers the country where the initial entry was made from as the responsible country. Other criteria for establishing responsibility include family considerations and possession of recent visa or residence permit in a Member State ([https://ec.europa.eu/home-affairs/what-we-do/policies/asylum/examination-of-applicants\\_en](https://ec.europa.eu/home-affairs/what-we-do/policies/asylum/examination-of-applicants_en), accessed December 26, 2018).
15. Interview, Norwegian Directorate of Immigration, April 28, 2017.
16. Interview, Statistics Norway, March 2017.
17. Interview, Statistics Norway, March 2017.
18. Interview, Statistics Norway, April 2017.
19. Informal communication, TurkStat, November 2015.
20. Informal communication, TurkStat, November 2015.
21. Directorate for Migration Management's website gives exact figures on various types of migration, including entry–exit rates, residence permits, temporary protection, and return statistics of asylum applicants ([http://www.goc.gov.tr/icerik/migration-statistics\\_915\\_1024](http://www.goc.gov.tr/icerik/migration-statistics_915_1024), accessed January 5, 2019). These statistics do not, however, include any details other than aggregate number and country of origin. The number of asylum applications that have been accepted is also not specified, other than temporary protection.
22. Field notes, EGRIS 2015.
23. Field notes, TurkStat, December 2015.
24. Field notes, TurkStat, December 2015.
25. Field notes, TurkStat, December 2015.
26. Informal communication, TurkStat, November 2015.
27. Field notes, TurkStat, December 2015.
28. Informal communication, EGRIS 2015.
29. See EU-Turkey Statement to end irregular migration flows from Turkey to the EU ([https://ec.europa.eu/home-affairs/sites/homeaffairs/files/what-we-do/policies/european-agenda-migration/20180314\\_eu-turkey-two-years-on\\_en.pdf](https://ec.europa.eu/home-affairs/sites/homeaffairs/files/what-we-do/policies/european-agenda-migration/20180314_eu-turkey-two-years-on_en.pdf), accessed May 5, 2019).

## References

- BBC. 2015. "David Cameron criticised over migrant 'swarm' language." *BBC News*, July 30, 2015, sec. UK Politics. Accessed 11, October 2019. <http://www.bbc.co.uk/news/uk-politics-33716501>.

- Berry, Mike, Inaki Garcia-Blanco, and Kerry Moore. 2016. *Press Coverage of the Refugee and Migrant Crisis in the EU: A Content Analysis of Five European Countries*. Geneva, Switzerland: United Nations High Commissioner for Refugees.
- Blundo, Giorgio. 2006. "Dealing with the Local State: The Informal Privatization of Street-level Bureaucracies in Senegal." *Development and Change* 37 (4): 799-819.
- Bovens, Mark, and Stavros Zouridis. 2002. "From Street-level to System-level Bureaucracies: How Information and Communication Technology Is Transforming Administrative Discretion and Constitutional Control." *Public Administration Review* 62 (2): 174-84.
- Buckley, Neil. 2016. "Czech President Calls for Economic Migrants to Be Deported." *Financial Times*, October 2, 2016. Online edition, sec. EU immigration. Accessed 11, October 2019. <https://www.ft.com/content/8bae2ec6-8725-11e6-bbbe-2a4dcea95797>.
- Canales, Rodrigo. 2011. "Rule Bending, Sociological Citizenship, and Organizational Contestation in Microfinance." *Regulation & Governance* 5 (1): 90-117.
- Canales, Rodrigo. 2013. "Weaving Straw into Gold: Managing Organizational Tensions between Standardization and Flexibility in Microfinance." *Organization Science* 25 (1): 1-28.
- Carrera, Sergio, Steven Blockmans, Daniel Gros, and Elspeth Guild. 2015. "The EU's Response to the Refugee Crisis: Taking Stock and Setting Policy Priorities." SSRN Scholarly Paper ID 2715460. Rochester, NY: Social Science Research Network.
- Cheetham, Juliet. 1993. "Social Work and Community Care in the 1990s: Pitfalls and Potential." In *Social Policy Review* 5. Vol. 5, edited by R. Page and J. Baldock, 155-176. Canterbury, UK: Social Policy Association.
- Curtis, Bruce. 2001. *The Politics of Population: State Formation, Statistics, and the Census of Canada, 1840-1875*. Toronto, Canada: University of Toronto Press.
- Davis, K. (1971) *Discretionary Justice: A Preliminary Inquiry*. Urbana, IL: University of Illinois Press.
- Desrosières, Alain. 1998. *The Politics of Large Numbers: A History of Statistical Reasoning*. Edited by R. D. Whitley. London, UK: Harvard University Press.
- Durose, Catherine. 2011. "Revisiting Lipsky: Front-line Work in UK Local Government." *Political Studies* 59 (4): 978-95.
- EGRIS (Expert Group on Refugee and Internally Displaced Persons Statistics). 2017. *Draft International Recommendations for Refugee Statistics [Obtained via Fieldwork]*. Luxembourg: EGRIS.

- EGRIS (Expert Group on Refugee and Internally Displaced Persons Statistics). 2018. *International Recommendations on Refugee Statistics (IRRS)*. Luxembourg: EGRIS.
- Ellis, Kathryn. 2011. "Street-level Bureaucracy Revisited: The Changing Face of Frontline Discretion in Adult Social Care in England." *Social Policy & Administration* 45 (3): 221-44.
- Engle Merry, Sally. 2016. *The Seductions of Quantification: Measuring Human Rights, Gender Violence, and Sex Trafficking*. London, UK: University of Chicago Press.
- Espeland, Wendy Nelson, and Mitchell L. Stevens. 2008. "A Sociology of Quantification." *European Journal of Sociology* 49 (03): 401-36.
- European Commission. 2012. *Commission Decision of 17 September 2012 on Eurostat (2012/504/EU)*. Vol. L 251/49. Accessed October 11, 2019. <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32012D0504&from=EN>
- European Parliament. 2013. *Regulation (EU) No 1260/2013 of the European Parliament and of the Council of 20 November 2013 on European Demographic Statistics Text with EEA Relevance.*, Vol. L 330/39. Accessed October 11, 2019. <https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2013:330:0039:0043:EN:PDF>
- Eurostat (European Statistical Office). 2011. *European Statistics Code of Practice*. Luxembourg: Eurostat.
- Eurostat (European Statistical Office). 2014. "European Statistical System Census Hub\_ Metadata." Accessed October 11, 2019. <https://ec.europa.eu/CensusHub2/metadata.do?method=loadMetadata>
- Evans, Tony. 2011. "Professionals, Managers and Discretion: Critiquing Street-level Bureaucracy." *The British Journal of Social Work* 41 (2): 368-86.
- Fletcher, Del Roy. 2011. "Welfare Reform, Jobcentre Plus and the Street-level Bureaucracy: Towards Inconsistent and Discriminatory Welfare for Severely Disadvantaged Groups?" *Social Policy and Society* 10 (4): 445-58.
- Halliday, Simon, Nicola Burns, Neil Hutton, Fergus McNeill, and Cyrus Tata. 2009. "Street-level Bureaucracy, Interprofessional Relations, and Coping Mechanisms: A Study of Criminal Justice Social Workers in the Sentencing Process." *Law & Policy* 31 (4): 405-28.
- Hjörne, Eva, Kirsi Juhila, and Carolus Van Nijnatten. 2010. "Negotiating Dilemmas in the Practices of Street-level Welfare Work." *International Journal of Social Welfare* 19 (3): 303-9.
- Holmes, Seth M., and Heide Castañeda. 2016. "Representing the 'European Refugee Crisis' in Germany and beyond: Deservingness and Difference, Life and Death." *American Ethnologist* 43 (1): 12-24.

- Howe, David, and Martin Davies. 1991. *Knowledge, Power and the Shape of Social Work Practice, the Sociology of Social Work*. London, UK: Routledge.
- İçduygu, Ahmet. 2015. *Syrian Refugees in Turkey: The Long Road Ahead*. Washington, DC: Migration Policy Institute.
- INSEE (Institut National de la Statistique et des Études Économiques). 2015. *France Submission to the United Nations Statistics Division Website on 2010 World Population and Housing Censuses November 2005 France's Rolling Census*. Paris, France: INSEE.
- Kirişçi, Kemal. 2014. *Syrian Refugees and Turkey's Challenges: Beyond the Limits of Hospitality*. Washington, DC: Brookings Institute Press.
- Lanzieri, Giampaolo. 2014. "Population Bases—Draft Text for the New CESR (Committee of European Securities Regulators). UNECE Task Force on Population to Be Enumerated and Geographic Characteristics." Presentation presented at the UNECE Expert Group on Population and Housing Censuses, Geneva, September 23.
- Latour, Bruno. 1992. "One More Turn after the Social Turn: Easing Science Studies into the Non-Modern World." In *The Social Dimensions of Science*. Vol. 292, edited by E. McMulin, 272-94. Notre Dame, IN: Notre Dame University Press.
- Latour, Bruno. 2010. *The Making of Law: An Ethnography of the Conseil d'Etat*. Translated by Marina Brilman, and Alain Pottage. Cambridge, MA: Polity.
- Latour, Bruno, and Steve Woolgar. 1986. *Laboratory Life: The Construction of Scientific Facts*. Princeton, NJ: Princeton University Press.
- Law, John. 2004. *After Method: Mess in Social Science Research*. New York: Routledge.
- Law, John. 2009. "Seeing Like a Survey." *Cultural Sociology* 3 (2): 239-56.
- Law, John, Evelyn Ruppert, and Mike Savage. 2011. "The Double Social Life of Methods." CRESC Working Paper Series 95. Milton Keynes, UK: CRESC, Open University.
- Law, John, and John Urry. 2004. "Enacting the Social." *Economy and Society* 33 (3): 390-410.
- Lipsky, Michael. 1980. *Street-level Bureaucracy: Dilemmas of the Individual in Public Services*. New York: Russell Sage Foundation.
- Lipsky, Michael. 2010. *Street-level Bureaucracy, 30th Ann. Ed.: Dilemmas of the Individual in Public Service*. New York: Russell Sage Foundation.
- Lury, Celia, and Nina Wakeford. 2012. *Inventive Methods: The Happening of the Social*. London, UK: Routledge.
- Mol, Annemarie. 1999. "Ontological Politics: A Word and Some Questions." In *Actor Network Theory and After*, edited by John Law and John Hassard, 74-89. Oxford, UK: Blackwell.

- Mol, Annemarie. 2002. *The Body Multiple: Ontology in Medical Practice*. Durham, NC: Duke University Press.
- Mole, Kevin. 2002. "Street-level Technocracy in UK Small Business Support: Business Links, Personal Business Advisers, and the Small Business Service." *Environment and Planning C: Government and Policy* 20 (2): 179-94.
- Porter, Theodore M. 1995. *Trust in Numbers: The Pursuit of Objectivity in Science and Public Life*. Princeton, NJ: Princeton University Press.
- Ruppert, Evelyn. 2012. "Category." In *Inventive Methods: The Happening of the Social*, edited by Celia Lury and Nina Wakeford, 36-47. London, UK: Routledge.
- Scott, Patrick G. 1997. "Assessing Determinants of Bureaucratic Discretion: An Experiment in Street-level Decision Making." *Journal of Public Administration Research and Theory* 7 (1): 35-58.
- Streeck, Wolfgang. 2016. "Exploding Europe: Germany, the Refugees and the British Vote to Leave." SPERI Paper No. 31. Sheffield, UK: Sheffield Political Economy Research Institute.
- Tiit, Ene-Margit, and Ethel Maasing. 2016. "Residency Index and Its Application in Censuses and Population Statistics." *Quarterly Bulletin of Statistics Estonia* (3/2016): 53-60.
- UNECE (United Nations Economic Commission for Europe). 2006. "Conference of European Statisticians Recommendations for the 2010 Censuses of Population and Housing." Prepared by UNECE in Cooperation with the Statistical Office of the European Communities (Eurostat), UNECE, New York.
- UNECE (United Nations Economic Commission for Europe). 2007. *Register-based Statistics in the Nordic Countries*. New York: UNECE.
- UNECE (United Nations Economic Commission for Europe). 2008. *Measuring Population and Housing: Practices of UNECE Countries in the 2000 Round of Censuses*. New York: United Nations.
- UNECE (United Nations Economic Commission for Europe). 2012. "Register-Based Statistics in the Nordic Countries: Review of Best Practices with Focus on Population and Social Statistics." New York and Geneva: United Nations.
- UNECE (United Nations Economic Commission for Europe). 2014. "Measuring Population and Housing: Practices of the UNECE Countries in the 2010 Round of Censuses." ECE/CES/34. Geneva, Switzerland: United Nations Economic Commission for Europe.
- UNHCR (United Nations High Commissioner for Refugees). 1977. *Note on Non-refoulement (Submitted by the United Nationals High Commissioner for Refugees)*. EC/SCP/2. Accessed October 11, 2019. <https://www.unhcr.org/uk/excom/scip/3ae68ccd10/note-non-refoulement-submitted-high-commissioner.html>
- UNHCR (United Nations High Commissioner for Refugees). 2018. <https://www.unhcr.org/tr/en/figures-at-a-glance>.

- Urla, Jacqueline. 1993. "Cultural Politics in an Age of Statistics: Numbers, Nations, and the Making of Basque Identity." *American Ethnologist* 20 (4): 818-43.
- Ustek-Spilda, F. 2017. "Deserving Refugee or Undeserving Migrant? The Politics of the Refugee Category in Turkey." In *Turkey's Syrians: Today and Tomorrow*, edited by Deniz Eroglu Utku, Onur Unutulmaz, and Ibrahim Sirkeci, 45-61. London, UK: Transnational Press.
- Valente, Paolo. 2010. "Census Taking in Europe: How Are Populations Counted in 2010?" *Population & Societies* (467): 1.
- Wastell, David, Sue White, Karen Broadhurst, Sue Peckover, and Andrew Pithouse. 2010. "Children's Services in the Iron Cage of Performance Management: Street-level Bureaucracy and the Spectre of Švejkism." *International Journal of Social Welfare* 19 (3): 310-20.
- Watkins-Hayes, Celeste. 2011. "Race, Respect, and Red Tape: Inside the Black Box of Racially Representative Bureaucracies." *Journal of Public Administration Research and Theory* 21 (2): i233-51.
- Wettergren, Åsa, and Hanna Wikström. 2014. "Who Is a Refugee? Political Subjectivity and the Categorisation of Somali Asylum Seekers in Sweden." *Journal of Ethnic and Migration Studies* 40 (4): 566-83.
- Zetter, Roger. 2007. "More Labels, Fewer Refugees: Remaking the Refugee Label in an Era of Globalization." *Journal of Refugee Studies* 20 (2): 172-92.

### Author Biography

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