Today, migration features prominently in headlines and political debates. How many people immigrate in a given year and the question of how to regulate migration can decide elections or, as recently demonstrated by the vote for Brexit in the UK, shape the future of the European Union (EU). In the context of this intensifying politicization of migration, though, the knowledge practices that are mobilized to constitute migrations as intelligible, actionable objects of policy-making and related disputes and interventions of government have not yet received much scholarly attention. Such knowledge practices include, for instance, the production of migration statistics, the registration of migrant bodies in biometric databases, the projection of future migration flows or the visualization of migration routes used by illegalized migrants, as in the annual Risk Analysis Reports of the EU border-agency FRONTEX in Figure 1. This inattention is astonishing because, from an epistemic point of view, migration does not exist independently of the concepts, definitions, methods, statistics, visualizations and various other data practices that are mobilized to produce knowledge on migration for the purposes of its ‘management’. Commonly understood as movement to and residency in another nation-state from a previous country of residence, migration refers to the decisions, practices and movements of scores of people who move and criss-cross national dividing lines in various ways and for various reasons and time-spans. Hence, migration is not a reality ‘out there’ to which policy-makers and other stakeholders have direct access. Rather, what is known, negotiated and targeted as migration is mediated by a plethora of data practices, including registering, enumerating, counting and estimating to storing, cleaning, imputing, extrapolating and anticipating. These data practices, while often framed as matters of technocratic expertise, are of course political, sustaining the knowledge regimes that inform and shape migration policies, border regimes and migration management. The contributions to this special issue (SI)
demonstrate this irreducibly political character of data practices and related forms of expertise that enact migration as an object of government.

The contributions to this SI were first presented at the workshop *Peopling ‘Europe’ through Data Practices* organized by the members of the ARITHMUS project as part of their study of how methodological changes in the production of population statistics within the EU affect the enactment of populations as objects of government. We asked for contributions that study data practices through which the people of Europe are enumerated, classified, narrated, quantified, territorialized, visualized and imagined into being as knowable categories of people, such as citizens, workers, consumers, travellers, minorities, and so on. This origin explains why the SI contributions focus mostly on the enactment of migration in (and to) Europe. Additionally, rather than providing more examples of Eurocentric research, we offered that this geographical focus should not be taken as an epistemic bias. The focus on Europe takes up the intellectual challenge to interrogate the project of constituting a European polity and identity at the moment of ‘multiple crises’ of this project (cf. New Keywords Collective, 2017). The distinct contribution of the collection lies in the proposition that knowing and acting on these crises happens not only through public and parliamentary debates or government policies and laws. They also happen, we argue, through various data practices that constitute who are the people of Europe in relation to who are its imagined ‘others’.

The articles that follow thus highlight that answers to the conundrum of a European identity are, to date, mostly framed by enacting and talking about Europe’s imagined ‘others’. It confirms Nicholas de Genova’s (2016: 76) observation that what is problematized and disputed in today’s heated debates on the ‘migration question’ are, first and foremost, competing notions of ‘Europe and Europeanness.’ As such, this SI is situated in a long tradition of scholarship that highlights the intertwinement of a politics of belonging with a politics of alterity in which the European ‘self’ is constructed via enactment of a non-European ‘other’ (e.g. Balibar, 2003; Greenblatt, 1991; Honig, 2001; Isin, 2001; Kristeva, 1991; Todorov, 1999).
What this collection adds to this line of scholarship is that it locates these politics in a range of material-semiotic data practices. Some of the contributions seek to complicate the binary logic of ‘us’ and ‘them’ by highlighting that one important challenge of forming a coherent European identity and people resides in (re)enacting previous ‘others’ as fellow European citizens but which may fail due to the perseverance of racializing imaginaries and practices (e.g. Plajas et al., 2019: 589). In the remainder of this introduction, we explain why we speak of *enacting* migration. We elaborate, moreover, on our conception of data practices and how the individual articles in this SI illustrate and develop different aspects of it.

**Beyond representation: The onto-politics of migration management**

If migration is an abstraction that does not exist independently of data practices, as argued above, then why is this fact understudied? After all, the same argument about the performative and political qualities of data practices could be illustrated with reference to Ernst Georg Ravenstein’s famous ‘laws of migration’. While widely acknowledged as the first attempt to formulate a comprehensive migration theory, the laws were developed by Ravenstein (1885) on the basis of data from the 1871 census of the United Kingdom. One reason certainly is that the performative and political implications of data production, circulation and analysis are difficult to ignore in the age of a veritable ‘data deluge’ (Kitchin and McArthur, 2016) and related calls for ‘evidence-based policy-making’ (Botterill, 2005). The latter arefuelled by the mere availability of new types and extraordinary quantities of digital data that can be exchanged and analysed with the help of rapidly growing computational capacities. In the context of migration, these calls are also driven by the rise of ‘migration management’, which has become the dominant paradigm of migration policy. Due to its promise to create triple-win situations that migration benefits countries of origin and destination as well as migrants themselves, the migration management paradigm implicates a demand for more and ‘better’ knowledge on migration (Boswell, 2009; Geiger and Pécoud, 2010; Olgemöller, 2017). Because of the authority attributed to numerical ‘facts’ (Hansen, 2015), this demand often translates into calls for better statistical data on migration, as Stephan Scheel and Funda Ustek-Spilda (2019: 631) explain in their article. This is also well reflected in the claim of the then Director General of IOM, William Lacy Swing that

> [w]ell-managed migration builds on reliable data and evidence. Too often, data is seen as the abstract business of technical experts operating in backrooms. Yet data is “more than numbers” as it is essential to produce real-life results. It is needed to identify challenges, design responses, monitor implementation and evaluate the effects of migration policies.4

The demand for more and better data has also been fuelled by the continued securitization of migration (Bigo, 2002; Huysmans, 2006) and the related proliferation of migration control-related information systems – most notably biometric databases, black lists and the related digitization of visa and asylum procedures. These information systems enable authorities to trace the movements and institutional trajectories of mobile individuals and populations (Bonditti, 2004), as well as the deployment of anticipatory security practices like preventive policing and risk profiling (Aradau and Blanke, 2017; Bigo, 2014). Furthermore, the provision of humanitarian assistance to migrants and refugees in Europe’s borderzones is increasingly intertwined with the production and use of various kinds of data (Choulia and Georgiou, 2017; Tazzioli, forthcoming) In sum, these developments have prompted some scholars to diagnose a ‘datafication of migration and mobility management’ (Broeders and Dijstelbloem, 2016: 242).
While there exists a growing body of literature on the increased importance of technologically mediated dataveillance in border and migration management (e.g. Bigo, 2011; Broeders and Hampshire, 2013; Dijstelbloem and Meijer, 2011; Jeandesboz, 2016; Leese, 2016; Muller, 2010; Scheel, 2019; Sontowski, 2018), the performative effects and political implications of data practices have not been sufficiently acknowledged and interrogated so far. This is illustrated by the notion of a datafication of border and migration management, which suggests that already-existing realities such as abstract migration flows, are increasingly ‘datafied’ by ‘an ever expanding network of surveillance systems and databases aimed at visualising, registering, mapping, monitoring, and profiling mobile (sub)populations’ (Broeders and Dijstelbloem, 2016: 243). Hence, the notion of datafication remains caught up in an ontology where innovative surveillance technologies enable state authorities to produce, exchange and retrieve digital data about already existing phenomena – namely migration flows as well as individual mobile subjects – with unprecedented speed and efficiency so that ‘the state’s perception of reality becomes more technically and statistically mediated and datafied’ (Broeders and Dijstelbloem, 2016: 242). The problem of such an ontology is that it does not fully account for the performative and political implications of data practices.

If we start with the analysis of data practices as objects of research, rather than existing entities and phenomena that are datafied, the increased production, circulation and usage of data for knowing and governing migration cease to be a question of observation. The focus on practices rather permits scholars to account for the constituent, generative moments of data practices which help to bring into being and perform the very migration-related realities they apparently only describe. Hence, as exemplified by some of the contributions (see in particular the contributions by Plajas et al., Pollozek and Passoth, Scheel and Ustek-Spilda as well as van Reekum), we move from the phenomenological register of perception to the constructivist register of performativity. Instead of different perspectives and more or less ‘accurate’ representations of an already existing reality ‘out there’, the politics of knowing migration become a question of what Annemarie Mol (1999) calls ‘ontological politics’. That is, a question of how – and through what kind of data practices – migration-related realities are enacted as objects of government. For if we focus on data and related knowledge practices as primary research objects ‘we observe that what is conventionally understood as a pre-given singular reality [...] is in fact not singular at all: it multiplies’, as Georgius Glouftsis (2017: 3) aptly summarizes. This is because different data practices will enact different realities (Law, 2004; Mol, 2002). For one crucial aspect of the notion of enactment is that it ‘allow[s] objects and subjects to change over time, enable[s] their identities to be fragile and allow[s] them to differ from site to site’ (Ruppert, 2011: 223).

This is also why we adopt the term ‘enacting’ over alternatives like ‘constructing’ or ‘constituting’. While ‘constituting’ suggests a one-time creational act, ‘constructing’ suggests that migration realities are accomplished by wilful human subjects. The concept of enactment highlights, in contrast, that realities only hold as long as the webs of relations that bring them into being ‘are enacted, enacted again, and enacted yet again – which may or not may happen in practice’ (Law, 2008: 635). Hence, the politics of migration management do not happen after knowledge about migration has been produced. They happen in and through the data practices that are mobilized to know (and enact) migration as an actionable reality.

Consequently, the conception of data practices as performative transcends the simplistic idea that data are collected about already existing realities ‘out there’ that these data reflect or represent more or less accurately. Such an understanding of data is carried by the notion of datafication. If we start from the idea of data practices we can, instead, appreciate that ‘raw data is an oxymoron’ (Gitelman, 2013) because ‘data do not exist independently of the ideas, instruments, practices, contexts and knowledges used to generate, process and analyse
them’, as Rob Kitchin (2014: 2) puts it. Hence, data are not objective, neutral or pre-analytic representations, but fragile, mutable accomplishments that are invested with political and institutional agendas as well as commercial interests.

With this constructivist understanding of data practices as performative, this SI makes an important contribution to literatures and debates at the crossroads of border, migration and science and technology studies (STS). In particular it advances debates on how the production of knowledge features in and shapes the government of human mobility and borders. In his influential definition of migration regimes, Giuseppe Sciortino (2004: 33) notes for instance that border and migration regimes rely on constant feedback loops between ‘observation and action’, that is, knowledge production about mobile flows and populations that inform modes of governmental intervention that have, in turn, to be assessed in terms of their effects. Rather than locating the politics of migration governance in these feedback loops, the collection highlights data practices as important sites of the ‘politics of international migration management’ (Geiger and Pécout, 2010) as it is in and through data practices that migration is enacted – in particular and contingent ways – as an object of government and political debate. Conversely, the SI advances debates in STS by demonstrating that the enactment agenda can be put to use in politically highly contested contexts beyond conventional sites of knowledge production such as hospitals, laboratories or surveys.

**On data practices**

Adopting the notion of enactment allows scholars to highlight the performative and political dimensions of the data practices involved in knowing and governing migration. In analytical terms, the notion of enactment directs scholarly interest to practices because practices enact realities. In John Law’s (2012) words, ‘[t]his means that if we want to understand how realities are done or to explore their politics, then we have to attend carefully to practices and ask how they work’ (157). Hence, a second important theoretical resource for our conception of data practices is what is more generally referred to as ‘practice theories’ in the social sciences (Gad and Jensen, 2014; Schatzki et al., 2001). While recognizing that there are many theories and no unified approach to practices, Schatzki et al. (2001) offer that a central core is a conception of practices as ‘embodied, materially mediated arrays of human activity centrally organized around shared practical understanding’ and ‘occur within and are aspects or components of the field of practices’ (10–11). What this core conception highlights is that practices are not merely techniques or technical operations. Rather, they are activities performed by humans in relation to materials, technologies and shared understandings and occur within specific fields. Put differently, practices always involve a doing and put socio-technical arrangements to use that only come to matter by being used in practice. This is also implicitly or explicitly conveyed in scholarly work that refers to data practices as the generation, editing, collecting, cleaning and analysis of data (Gabrys et al., 2016; Garnett, 2017; Leahey, 2008; Leonelli, 2016). From the judgements and tacit knowledge of practitioners, to the rules, standards and struggles within a community of practice and the affordances and constraints of technologies, data practices are not understood as merely techniques but activities that involve numerous elements and relations.

These understandings of practices have been variously elaborated in concepts developed in the social sciences. In what follows, we briefly identify those concepts with which the articles in this SI engage to constitute and interpret data practices. Each of the contributions first attends to how data practices enact migration as we have defined above. They then variably examine how those practices are: situated in and produced by sets of relations; sociotechnical in that they involve relations between humans, materials, infrastructures and technologies; performed
by actors and function as stakes in struggles over authority and power within specific professional fields of practice; and contingent in that they do not have a ‘prior and determinate form’ (Law, 2004: 38) but involve practical adjustments to address complex and changing conditions.

In their contribution, Ildiko Plajas, Amade M’charek and Huub van Baar investigate how ‘the Roma’ – an ethnic category that is officially not supposed to exist – are enacted as a racialized group of people in Romania by two administrative data practices: first, allocation to an officially non-existent ethnic category in the census and, secondly, differential treatment in the issuance of identity cards. Through this analysis, they demonstrate how ‘race’ is enacted as an absent-present, material-semiotic object by various situated data practices. Their analysis particularly underscores a point that has been elaborated by Annemarie Mol (2002), Donna Haraway (1988) and John Law (2004): practices are located in and produced by sets of situated relations. These are the relations that Plajas and her co-authors bring into consideration. Based on observations in a local government office issuing ID cards to Romanian citizens, they reveal how officials combine different racialized markers – particular dialects, clothing, behavioral traits, smells, and so forth – to recognize ‘the Roma’ among the people entering their office. In these situated data practices, ‘race’ emerges as a category that combines absence in official data practices like the census or the population register ‘with a hypervisibility inside the individual file’ (p. 601). Importantly, through these racializing, unofficial data practices people identified as ‘Roma’ are effectively stripped of crucial entitlements offered by Romanian and EU citizenship, as the temporary resident cards issued to them do not allow them to travel abroad and exercise freedom of movement within the Schengen area of Europe.

Silvan Pollozek and Jan Passoth’s article provides, in turn, an ethnographic analysis of registration and identification practices at the Moria hotspot in Greece. Combining post-ANT approaches with a logistical lens, they understand the hotspot as a ‘logistical device’ that turns newly arriving migrants into ‘traceable and sortable objects’ (p. 608). Key to this endeavour are a plethora of data practices involving various humanitarian, asylum-related and border control agencies that channel migrants, in a Tayloristic manner, through a ‘registration street’ (p. 611). What their framework permits them to highlight is the non-human, socio-technical dimensions of these data practices such as the relations between officers and various materials, infrastructures and devices. At the same time, they unravel how data practices involve a ‘more or less messy set of practical contingencies’ (Law, 2004: 13). That is, while practices may be configured, what is done ‘takes work and effort’ (Law, 2004). Furthermore, Pollozek and Passoth stress the contingency of data practices. While the materiality of the paper-based identification form used by Frontex officers ‘guarantees immutability’ (p. 615), the categories and values used in the form to allocate an identity to a migrant are subject to change. For instance, the ‘new version’ of Frontex’s identification form introduces a distinction between ‘claimed’ and ‘presumed’ nationality (p. 614), highlighting the power asymmetries and symbolic violence of data practices employed at the Moria hotspot. Hence, Pollozek and Passoth show that data practices at Moria enact migrants as governable subjects in a ‘continuum between registration and investigation’ (Law, 2004).

Rogier van Reekum’s article on the EU’s attempts to render migration visible also attends to the material, socio-technical aspects of data practices. Van Reekum does this through the study of three practices of visualization within the monitoring infrastructure of European border management: patrolling, recording and publicizing. Patrols, for instance, ‘check IDs, stare at their camera displays, detain the unauthorised and record these events’ with various inscription devices (p. 629). Patrolling also involves material work that is done to actively reorganize terrains and spaces, not only to make it easier to monitor and patrol them, but to turn them into devices that sort and channel migrations in particular routes and corridors.
The emphasis on data practices as socio-technical permits van Reekum in turn to demonstrate that enactments accomplished by data practices are not reducible to intended outcomes of willful human action. Patrolling visualizes, for instance, not only migration, but also the violence that border policing involves. In this way patrolling also highlights ‘that migrants would not be deterred no matter how violent the terrain would become’ (p. 629), thus demonstrating ‘this Europe to be a particular association that could be otherwise’ (p. 626).

In her contribution, Susanne Schultz investigates data practices that inform population projections produced by Eurostat (the statistical agency of the EU) and Destatis (the statistical agency of Germany). Generally, population projections provide policy makers with highly speculative, future-oriented knowledge that is nevertheless mobilized to call for and justify political interventions in the present, particularly in the fields of migration and social policy. Schultz’s analysis highlights how these data practices are part of political struggles and thus invested with tacit institutional agendas, economic interests and political projects. It also unravels the politics and uncertainty of data practices informing population projections by attending to the ‘assumption politics’ (p. 646) that guide the forecasting of future net-migration rates – one of the most important, but also the most volatile parameter of population projections. By focusing on different assumptions on future net-migration rates in population projections and how these changed after the influx of mostly Syrian migrants to Germany in 2015, Schultz’s analysis illustrates how data practices are situated and contingent. Different assumptions about future net-migration rates result in very different outcomes regarding the projected population of Germany for 2060, ranging from 65 million (Destatis) to 80.8 million (Eurostat), with crucial implications for derived policy recommendations in the fields of migration and social policy.

Finally, Stephan Scheel and Funda Ustek-Spilda attend to the production of migration statistics in Europe. They highlight how dominant representations of migration as a series of precisely quantifiable stocks and flows hinge on the production of ignorance, understood as a particular form of non-knowledge, about the known limits of quantifying migration. Their contribution shows that data practices are performed by actors within specific professional fields that mobilize them as stakes in their struggles over influence, budgets and policy agendas. Importantly, these struggles are not limited to the transnational field of statistics, but also concern other fields such as the transnational field of migration management. Within the latter, migration is enacted as a single, coherent, precisely measurable reality that can be ordered according to certain policy objectives through data practices that feature the production of strategic ignorance. In this way, the article demonstrates that data practices do not only enact realities through the production of various forms of knowledge, but also through various types of non-knowledge. In addition, their contribution highlights the contingent outcome of data practices by showing that it is, somewhat ironically, statisticians’ quest for more reliable and accurate migration statistics, that intensifies, through the introduction of new, allegedly ‘better’ methodologies, the incoherence and incomparability of migration statistics.

While the articles approach the theme of this SI in different ways, they share a concern about the performative and political implications of data practices that render migration knowable and actionable. It is through this concern for the onto-politics of data practices that the collection moves beyond a critique of knowledge about migration as ‘biased’ or ‘inaccurate’. Such a (limited) critique would be implied by the notion of datafication, which implicitly or explicitly treats data as a more or less accurate account of an already existing reality of migration. Instead, the contributions focus on data practices such as ignoring, patrolling, projecting, tracing, sorting and racializing that bring data and the object of migration into being.
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 (ERC) under the European Union’s Seventh Framework Programme (FP/2007–2013)/ERC Grant Agreement No. 615588. Principal Investigator, Evelyn Ruppert, Goldsmiths, University of London.

Notes

1. We use the term ‘illegalized migration’ rather than the criminalizing official terminology of the EU — which insists on talking about ‘illegal migration’ — in order to highlight the laws, restrictive policies, bordering practices and bureaucratic procedures that make some migratory practices and movements ‘illegal’ (cf. Bauder, 2013).
2. The ARITHMUS project is an interdisciplinary research project on methodological changes in population statistics that has been funded by the European Research Council. The project PI is Professor Evelyn Ruppert (Goldsmiths, University of London) and involves a team of four postdoctoral researchers (Baki Cakici, Francisca Grommé, Stephan Scheel, and Funda Ustek-Spilda) and one doctoral researcher (Ville Takala). The workshop was held in March 2017 at the Tate Exchange in London in the context of the programme ‘Who are we?’ (see: https://www.tate.org.uk/whats-on/tate-modern/tate-exchange/workshop/who-are-we (accessed 18 January 2018).
3. The workshop also led to a second SI on ‘Peopling Europe Through Data Practices’ (Cakici et al., forthcoming) which examines other data practices and related objects of governing such as education, health, citizenship, residence and social policy.
5. For noteworthy exceptions, see the works of Georgius Glouftsios (2017) and Holger Pötzsch (2015).

References


Tazzioli M (forthcoming) Refugees’ subjectivities, debit cards and data circuits. financial-humanitarianism in the Greek migration laboratory. International Political Sociology.


Stephan Scheel works as an Assistant Professor for Transnational Cooperation and Migration Research at the Sociology Department of the University of Duisburg-Essen in Germany.

Evelyn Ruppert works as a Professor at the department of sociology at Goldsmiths, University of London. She is Principal Investigator of the ERC-project “ARITHMUS – How Data Make a People”.

Funda Ustek-Spilda is currently working as a Research Officer in the Department of Media and Communications at the London School of Economics (LSE) for the Virt-EU Project (“Values and Ethics in Innovation for Responsible Technology in Europe”). Before taking up their new roles, both Stephan and Funda have been working as post-doctoral researchers on the project “ARITHMUS – How Data Make a People.”