EU border technologies and the co-production of security ‘problems’ and ‘solutions’

Bruno Oliveira Martins and Maria Gabrielsen Jumbert

Pre-print version of the article forthcoming in Journal of Ethnic and Migration Studies, part of the special issue on “The Spiral of Securitization in EU Migration’, guest edited by Valeria Bello and Sarah Léonard
EU border technologies and the co-production of security ‘problems’ and ‘solutions’

This article aims at contributing to an understanding of how expert technological knowledge shapes the security-migration management nexus at the EU borders. It argues that the recent migration flows impacted pre-existing dynamics of growing reliance upon technology in EU border management. These issues are assessed through an in-depth single case study congruence analysis of the way emerging technologies, in particular Unmanned Aerial Vehicles (UAV, commonly known as drones), and specific information and surveillance technologies installed on them, have become increasingly understood as crucial for the management of migration into the EU. The article synthesizes securitization theory with Science and Technology Studies to assess the ways in which expert technological knowledge impacts security practices at the border. It argues that the values reflected in border technologies often encapsulate a securitized understanding of the migrant, and that the increased arrivals of migrants to Europe have been framed in a way that triggers securitization dynamics that eventually seek for state-of-the-art technology, contributing the spiral of securitization. In this logic, security ‘problems’ and security ‘solutions’ are co-produced within a complex multi-layered network of public and private actors.

**Keywords:** Technology; border management; European Union; securitisation; expertise; drones

**Introduction**

For more than two decades, since the Amsterdam Treaty, migration has been a dominant issue on the EU agenda. The management of the arrival of migrants into the EU territory has led to the creation of policy arenas dealing specifically with asylum seekers, regular and irregular economic migrants, and internal workers. These distinct policy areas have created differentiated legal and political spaces in which migrants are placed. These legal and political spaces, in turn, establish different policy regimes and encapsulate different understandings of ‘the migrant’.

A crucial element in the differentiation of these policy spaces, and in the shaping of the EU’s border management more broadly, is the level of available knowledge about ‘the migrant’. ‘We need to know more’ is both a leitmotiv of border management and the idea that provides...
the structural logic behind surveillance. Yet, we distinguish between two different levels of ‘knowledge needs’ in border management: a top layer referring to knowledge about the big trends of migration, about the movements towards or across the border, and having ‘the group’ as the referent object; and a lower layer, having ‘the individual’ as the focus of concern, concentrating on the knowledge about and identification of the individual migrant, i.e., their background, legal status, and personal history. The latter typically depends upon the verification and screening that occurs at border crossing points, carried out by authorities that verify individuals' identity and right to stay. The former may consist of gathering information about numbers and origins of migrants, and type of border crossing, in order to adapt border management responses accordingly. This distinction is relevant insofar as it recognizes that different referent objects originate different (real or fabricated) ‘knowledge needs’ and, concomitantly, require different technological solutions to address them. Whereas the ‘knowledge needs’ of the individual level lead to an employment of technologies such as body scans, biometrics or personal travel records (Bellanova and Gonzáles Fuster 2013, Bellanova and Duez 2012), the former, having ‘the group’ as the referent object, relies upon techniques of surveillance that include unmanned aerial vehicles (UAV, commonly known as drones) as an important instrument, in addition to radars, satellites and regular border patrolling information that feeds into systems and agencies such as the EU Border surveillance system (EUROSUR) (Jeandesboz 2012, 2016, Jumbert 2012, 2016) or Frontex (Csernatoni 2018) respectively.

This article focuses precisely on surveillance techniques aiming at addressing knowledge needs that have ‘the group’ as the referent object. In concrete, we investigate the way by which emerging technologies, such as drones, and specific information and surveillance technologies installed on them, have become increasingly understood as crucial for the management of migration into the EU. In this article, we are interested in understanding the way technological expert knowledge influences EU border management; with this focus we aim at addressing our main research questions: how, and with which consequences, does expert technological knowledge shape the security-migration management nexus at the EU borders?

**Research design**

For answering this research question, we conduct a crucial case study (Levy 2008: 12-13) based on a most-likely design. This design consists of an in-depth single case study congruence analysis of the way emerging technologies employed by drones have become increasingly
portrayed as relevant in the management of migration into the EU. The purpose is to observe the ‘(mis-)matches between empirical findings and concrete expectations deduced from core elements of theories’ (Blatter and Blume 2008: 319). Congruence analysis is an approach that focuses on ‘drawing inferences from the (non-)congruence of concrete observations with specified predictions from abstract theories to the relevance or relative strength of these theories for explaining/understanding the case(s) under study’ (idem: 325).

According to Blatter and Blume (2008: 319), there are two preconditions allowing for a congruence analysis to take place: 1) plurality of full-edged and coherent theories from which concrete expectations can be deduced; and 2) plurality and diversity of available observations. Regarding the first pre-condition, we synthesize securitization theory with Science and Technology Studies (STS), drawing in concrete on the concept of ‘security knowledges’ (Vogel et al 2017) with an understanding that conditions of ignorance can create a ‘surplus of ambiguity’ (Gusterson 2008) that some actors can benefit from. STS’s approach to the relations between knowledge and security is multifaceted and opens up myriad opportunities to explore how society, security practices and security technologies are co-produced: through their work, people simultaneously arrange both the world and what we know about it (Miller 2017: 910; see also Jasanoff 2004).

In this sense, STS relates to the notion of ‘(in)securitization practices’ (Bigo 2014, i.e. an understanding of securitization as embedded in training, routine, skills, technological knowledge, and artifacts, rather than a product of a simple speech act. Here, the issue of (expert) technological knowledge is of paramount importance. From an STS perspective, we are interested in what Baird has called the production, circulation, and consumption of scarce forms of knowledge (Baird 2017). In the context of this special issue, this approach also allows an engagement with the idea of the spiral of the securitization of migration (Bello 2017), namely its interest both in how practices and routines translate into perceptions of threats and on the role of non-state actors in framing border policies.

As for the second precondition, dealing with a plurality and diversity of available observations, we have put in place a plurality of data gathering techniques. Firstly, we generate data from official EU documents focusing on migration management, with a focus on the ones that highlight security concerns and/or refer to the ‘need to know more’. Here we have information about public tenders issued by Frontex and the European Maritime Safety Agency (EMSA), press releases, communications, European Council conclusions, European Commission decisions, and general information provided on the webpages of official EU
institutions and agencies. These documents illustrate the recent measures adopted by the EU and its agencies since the latest increased movement of people to the EU observed since 2014, in which more than 1 million people have entered EU territory and many others have attempted to do so. The second strategy is a participant observation, in the context of a meeting between Frontex, member states, and technology companies, occurred in November 2017. The third data generation technique relates to the authors’ engagement in several EU-funded projects that conduct research on the technology – border management nexus, gathering government bodies, research institutions, and the tech-industry. This circumstance enabled multiple participant observations across a long period of time, and this first-hand familiarity with EU-funded security and migration research allows us to better understand complex decision-making and agenda-setting processes that involve many actors beyond the EU officials. The information generated out of these sources was then cross-checked in seven semi-structured background informal interviews with EU officials (four), fundamental rights NGOs (one) and the industry (three), that took place between October 2017 and February 2018.

The data generated out of our research will allow a confrontation with the expectations generated by our theoretical apparatus. This congruence analysis will therefore contribute to an expansion of the intersections between securitization theory and STS, exploring the potential for cross-fertilization between both bodies of literature. At the same time, the analysis of new empirical data through the article’s theoretical lenses will shed new light into recent developments in EU border surveillance and on the growing importance of drones as a border surveillance technology.

**Theoretical framework**

From the late 1990’s, securitization theory has provided an important contribution to the debate between those who claim that threats are objective (i.e., what really constitutes a threat to international security) on the one hand, and those that maintain that security is subjective (what is perceived to be a threat) on the other (Van Munster 2012). Endorsing a process-oriented conception of security, securitization has focused extensively on the field of migration. Balzacq et al refer that migration, particularly in Europe and the EU, is the issue to which securitization theory has been applied most frequently (Balzacq et al 2016: 508), from the exploratory works of Huysmans (1995, 2000) or Waever (1995) to more recent accounts (Lazaridis and Wadia 2015, Bello 2017). Over the last two decades, securitization, as a theoretical proposition, has expanded widely and today its distinctiveness lies in its “capacity to articulate a specific
Yet, despite its immense popularity, securitization has not generated consensus on “what kind of theory – if any –“ it is (Balzacq and Guzzini 2015). Different scholars reach opposite conclusions applying securitization to the same objects (cf. Huysmans 2000, on the one hand, and Boswell 2007 on the other), and Lene Hansen has argued that the “international political theory and the applied analysis literatures on securitization have by and large run on separate tracks” (Hansen 2012: 528). For Hansen, what unites the political theory and the applied literature is a concern with the normative-political potential of desecuritisation – an idea that we will resume later on. Additionally, Vicky Squire points to the fact that, in securitization studies in the field of migration, there is an “entrenched divide” (2015: 20) between migration scholars and critical security studies scholars: while migration approaches tend to focus on institutionalist approaches, policy measures, and regulatory procedures, critical security studies perspectives look more into practices, routines, and other politico-sociological dynamics that emphasize context, perceptions and discourse.

This focus on security practices has been explored to study border management (Bigo 2014, Côté-Boucher et al 2014, Salter et al 2012) and it is adequate for exploring the processes by which expert technological knowledge shapes the security-migration management nexus at the EU borders. The idea here is that “practices of control are routinely embedded in a practical sense that informs what controlling borders does and means” (Bigo 2014: 209), within the logic that “technocratic and bureaucratic day-to-day practices, like population profiling, risk assessment and statistical calculation, communicated within specialist circles yield bigger influence on border securitization processes than political elites’ capacity to speak security to large audiences” (Lemberg-Pedersen 2018; see also Léonard 2010). To use Bigo’s words, for “understanding practices of (in)securitization, actual work routines and the specific professional ‘dispositions’ are therefore more important than any discourses actors may use to justify their activities” (Bigo 2014: 209).

In this article, we are interested in understanding the way expert technical knowledge influences EU border management. Within the realm of EU formal policy-making, expertise is often associated with the “expert groups” established by the European Commission. These groups are formally defined as “(…) consultative bodies set up by the Commission or its departments for the purpose of providing them with advice and expertise (…) and which are foreseen to meet more than once”, providing “advice and expertise to the Commission and its
departments in relation to: (a) the preparation of legislative proposals and policy initiatives; (b) the preparation of delegated acts; (c) the implementation of Union legislation, programmes and policies, as well as coordination and cooperation with Member States and stakeholders in that regard; (d) where necessary, the early preparation of implementing acts (…)” (European Commission 2016). Yet, in this article we engage with the literature that understands expertise and knowledge production beyond the formal setting of the Commission-regulated expert groups (Boswell 2007, Carmel 2016, Eriksen 2011; Gornitzka and Holst 2015, Maguire 2015). Within this logic, we understand expertise as referring to the particular, professional knowledge ascribed to individual or collective professionals and recognized by a public authority with decision-making powers.

From a STS perspective, expert knowledge and the ways in which the “production of knowledge is organized and regulated—and how this in turn creates areas of non-knowledge and ignorance – is a central question in any area of human activity” (Vogel et al 2017: 980), and it provides valuable insights into the workings of specialized EU agencies in which expert knowledge is a dominant feature. For STS, the issue of expertise goes beyond knowing who has knowledge. In the words of Miller, it is “also about how the making of knowledge is organized; who participates, in what ways, and at what points in the process; who has rights and responsibilities to speak authoritatively about knowledge; and the norms and rules for both making and applying knowledge to important societal decisions” (Miller 2017: 912). In the context of EU border management, these insights from STS point to the prominence of both the tech industry and specialized EU agencies in the general architecture of border management. Emma Carmel has shown how practical knowledge in security research has “enabled major European corporations to assert a privileged discursive and political position in the ‘linked ecologies’ of formal scientific research, product development and EU policymaking” (Carmel 2016: 771). The research carried out here will provide new elements for evaluating who governs EU border management and assessing the consequences of over-reliance upon technical knowledge.

Finally, our reflections engage with Bello’s notion of spiral of securitization, which claims that securitization started with “particular frames of interpreting our world” which latter, “mixed with actual facts politics, practices, narratives and techniques, have engendered a spiraling process that each of these factors has contributed to speeding” (Bello 2017: 62). This concept underlines the self-reinforcing logics that fosters increasing levels of securitization in particular domains. In the case of migration into the EU, this process has been observed in
recent years and, indeed, relies upon a multiplicity of actors. These different actors that participate in the spiral of securitization of migration are organised by Bello in binary categories: violent / non-violent, public / private, and pursuing collective / individualistic interests. Our analysis will provide additional elements to understand how these self-reinforcing logics are created and how much they rely upon technological expertise.

**Technology in EU border management**

The process by which high levels of technology were increasingly seen as the most adequate solution to EU’s border management challenges has been covered by the literature in recent years (Rijpma 2017, Sontowski 2018, Lehtonen and Aalto 2017). This technologization of EU border management goes back to the 2004 Hague Programme and received a decisive impetus with the the Smart Borders Initiative, from October 2011, a crucial step in the discursive construction of a security-technology nexus in the field of border management. Responding to the European Council conclusions of June 2011 which called for work on "Smart Borders" (European Council 2011), this initiative has triggered a number of developments that have equated increasing security with technological developments in the management of (documented and undocumented) movements across EU borders. Since then, the so called Smart Borders package has been revised regularly and has acquired legislative form. But, most importantly, it helped framing migration as a security issue that can be addressed with better, more advanced, and “smarter” technological solutions (Dijstelbloem and Meijer 2011).

These dynamics are certainly not new nor exclusive of the EU, as the pursuit of security has always triggered technological developments and used cutting-edge scientific knowledge. Recently, though, authors looking into particular EU security/ized issues have problematized the role of private actors, expert bureaucrats, and novel forms of policy-making based on technocratic regulation where the governance of security escapes democratic control. Eriksen (2011) has called attention to how expert knowledge at the service of a comprehensive EU security strategy may not be democratically accountable, whereas other studies have raised similar concerns about several EU agencies, including security agencies.

This process happened in parallel with a growing securitization of migration as a consequence of the current migration flow into Europe observed recently. Current security practices in EU’s border management rely heavily upon knowledge that is technically so specialized that regular, elected policy-makers and their constituencies have problems understanding it in all its outreach. These include increasing robotization, mounting use of
biometrics, and state-of-the-art surveillance platforms, for example. Consequently, the governance of the migration-security field has increasingly been transferred to non-elected bodies such as Frontex, the EMSA, or the European Defence Agency (EDA), and a growing number of consortia involving the defence industries, research institutions and member states have become important actors in the production of knowledge and expertise that eventually contributes to shaping political decisions on this field (Martins and Küsters 2019).

In the context of EU’s border management, the process by which increased security is associated with expanded technological devices is held together by “multiple translations and enrolments through which the technical side of dataveillance – platforms, automated gates, matching systems, and so forth – has become associated with the processes of policymaking on border security and sustains the furtherance of mass dataveillance’ (Jeandeboz 2016: 292). EU border security, with its complex assemblage of human actors and computorized systems, became what in STS can be called a ‘dense socio-technical environment’ (Bellanova and Duez, 2012: 110).

In this context, the way specialized agencies select technologies, adopt practices, and endorse ‘technological solutions’ is particularly relevant. As part of its research and innovation activities, Frontex, for example, studies the availability and readiness of technology for integrated border management. According to the agency’s webpage describing its role in technology assessment, Frontex - in cooperation with Member States, industry and internal stakeholders – ‘aims to identify technical solutions that could address operational needs, establish their readiness to be integrated and tested in a real operational scenario, and then make recommendations for introducing these solutions in the field’ (Frontex 2019). To test potential solutions and assess their capabilities as well as identify future needs, Frontex organises demonstrations of technology, conducts technical feasibility studies and runs pilot projects at all types of border. Some of the agency’s main activities and products in the area of technology assessment include tests and demonstrations of technologies for border control; Technical feasibility studies; Examining emerging technologies and their readiness to respond to specific needs; Identifying capability needs; Facilitating working groups and workshops to exchange views; Reporting on current practices for technology acquisition and deployment as well as presenting recommendations for EU-sponsored research (ibidem).

In the next section we explore these processes by looking at the specific case of drone technology and how it came to be understood by Frontex, the EMSA, and the technology industries as a key system to reinforce surveillance at the border as part of an effort to increase
security. While the social construction of drone technology as central for the management of EU border crisis has been highlighted in Jumbert 2016 and Casernatoni 2018, our contribution places these developments in the broader context of a increasing reliance upon technological knowledge for the definition of security ‘solutions’ to security ‘problems’.

**Issue framing: surveillance and drones as the solution for border related challenges**

The EU’s increasing interest on drones as a surveillance platform necessary for border management has attracted some attention from the literature. Hayes, Jones and Töpfer (2014) have showed how the enmeshment of the defence industries with key EU officials has decisively contributed to putting drone development and air traffic regulation in the agenda of the EU. Part of an emerging European military-industrial complex (Jones 2017), the relations between the industry and EU agencies have contributed to a growing reliance upon technology for managing EU borders, especially in the Mediterranean. In this context, Csernatoni has asked whether these initiatives are an instance of a broader process of militarization of border controls and subsequently, if technology is per se a back door for pushing forward such a process (Csernatoni 2016 and 2018). Challenges related to border management, and especially border control activities at sea, are framed in a way where surveillance becomes the ultimate and needed solution and drones the most adapted vehicle to carry out this surveillance (Jumbert 2012, 2016).

Both the challenges related to governing the geographical space that constitutes Europe’s southern borders, as well as to the subjects of surveillance – the so-called migratory flows – are framed to show, on the one hand, the difficulties to have a perfect oversight, and on the other, the need for more information in order to gain a better overview. Contrary to land borders, the external maritime borders of the EU are not a fixed line where border patrols can be set up, although land borders too face challenges related to the scope of the area to watch over (Carling 2007). The Mediterranean sea is a vast area, with large stretches of international waters between Europe, Africa, and the Middle East, and geographically challenging to watch over. Much of the policy discussion, jurisdiction and policy making over the last years has related to what EU Member States or EU agencies can do and not do in terms of border patrolling, surveillance, and border control at sea, in the sense of preventing the entry of unauthorized travelers. In this respect the landmark case of *Jamaa Hirsi and Others v. Italy* in 2012 led Italy to be condemned by the European Court of Human Rights for its practice of collective expulsion and breach of the obligation of non-refoulement, with the understanding
that migrant vessels cannot be stopped at sea and brought back to North African shores (Papanicolopulu 2013).

While policy thinking and practice on this has continued to seek other ways to prevent the irregular migratory flows across the Mediterranean, the challenges have often been framed in terms of lack of sufficient information, with increased surveillance and other means of information gathering thus becoming part of a needed response. This applies whether talking about the number of arrivals in Europe – to which border guards and Frontex respond that there is a need to know more about ports of departure, origins of the migrants, modus operandi of smugglers, shifting trends in migratory routes, etc. – or the shipwrecks and lives lost at sea – which have also often been followed by claims that a better overview or sharing of distress signals is needed.

An illustrative example of the framing of border management as a problem amenable to increased surveillance provided by drones is the drone tender opened by the European Maritime Security Agency (EMSA) in 2016 (EMSA 2016). This tender launched a pilot project aimed at creating operational and technical synergies between different Coast Guard functions at EU level particularly between EMSA, the European Fisheries Control Agency (EFCA), and Frontex. The tender was part of broader reform and expansion of the EU’s border agencies in the context of migration management adopted by the European Parliament and the Council in 2015, where the mandates of Frontex, the EFCA and EMSA were amended and a new cooperation article was introduced in their Founding regulations, requiring them to work together in five areas: information sharing, surveillance and communication services, capacity building, risk analysis and capacity sharing (EMSA 2018a). The idea of increased integration and cooperation among EU agencies with a border management portfolio was further developed in Regulation 2016/1624 of the European Parliament and the Council, that established the principles for what was labelled ‘European integrated border management’ (European Parliament 2016). One of the eleven components of the European integrated border management is ‘use of state-of-the-art technology including large-scale information systems’ (European Parliament 2016, article 4, i).

Using the acronym Remotely Piloted Aerial Systems (RPAS), the EMSA announced the new agreement on drones mentioning that,

These new contracts (…) build on those already in place for marine pollution (oil spill) detection and ship gas emission monitoring. Through the RPAS portfolio available to member states and EU agencies, a wide range of coastguard functions can be supported including environment
protection, maritime safety and security, fisheries control, border control, law enforcement and customs (EMSA 2017)

Crucially, the EMSA’s traditional mandate focused on maritime safety issues, such as oil spills or ship safety, and not on migration management. But the understanding of migration as a ‘problem’ in search of a ‘solution’ enabled this extension of the mandate, that several EU member states were not convinced about (Stares 2016). In September 2018 the EMSA-contracted drones were used for the first time by Frontex to ‘provide support to the Portuguese Guarda Nacional Republicana (Portuguese National Republican Guard), Air Force and Navy, as well as to the Eurosur National Coordination Centre’ (EMSA 2018b). As highlighted by Nowak, ‘the political consensus among EU governments to restrict migration reinforces the economic interests of the defence industry and vice versa, and the interest of national governments to attract high-tech investment adds to this’ (Nowak 2019).

In addition to these recurring frames, the recourse to step up surveillance efforts, as a means to gather more information and know more, and doing so by investing in more sophisticated technologies, has the additional function of resorting to technical solutions a politically intricate and sensitive question, from legal, ethical and political points of view (Jumbert 2018). Arguing for more information, through new technology, may appear as the least controversial, and presented as most neutral, form of response, while at the same time serving the purpose of showing the capacity to take concrete action. Drones also come with the function, and promise, of providing this sought-after overview with a view from above, which can at the same time be more detailed than land-based radars or satellites (view from afar, with few details beyond direction/speed/type of vessel), and more flexible, wide-ranging, discreet, as well as cheaper, than manned border patrols (Jumbert 2012).

Language in the EU’s socio-technical environment in border mangement

The discourse around the promises of drones in the EU border management context permeates official documents, industry presentations, and the broader “border solution ecosystem”, as the socio-technical environment in border management is often called.1 In these issue-framing

1 The reflections in this section, as well as the quotations, derive from three main sources: the authors’ participation in EU-funded consortia dealing with technology development for border management, the seven interviews referred to in the methodology section, and one of the author’s participant observation
processes, language and rhetoric are central for the formation of ideas about needs, problems, and solutions. When some of the companies present their drone portfolio, they refer that some of the vehicles have a “combat proven-label”, which is understood as something akin to a quality stamp. Yet, interestingly, this reference to the military domain is balanced by a highly euphemistic set of expressions that include calling “bird” to the drones, labelling a group of drones as “swarm of drones”, or calling “shield family” to a set of defensive technical infrastructures. These expressions humanize the technology, and they often co-exist with a rhetoric and a language that de-humanizes the migrant: the language employed to classify relevant people to monitor through the drone includes expressions such as “object of interest” and “intruder”.

It derives from these illustrations that issue-framing processes reinforce securitization processes as well. In the words of a senior EU official interviewed in February 2018, the technology industries present practitioners with a puzzle that they then solve in front of their eyes. In the case of drones, migration management is framed as a problem amenable to a technological solution: increased surveillance provided by drones. In other words, the formulation of migration as a security problem marked by scarce information is what makes drones the solution to it. As one representative of a defence industry company has mentioned “we will fly whatever solves your problem”. The challenges posed by sharply increased migrants flows to Europe therefore trigger securitization dynamics that eventually seek for state-of-the-art technology, reinforcing the spiral of securitization that Bello (2017) refers to.

Technical expertise, knowledge, and policy

How is technological knowledge produced, and how does it circulate and permeate policy-making within the migration-security nexus? Our theoretical section has pointed out to the fact that, within formal procedures, expertise within EU policy-making is often associated with the Commission-regulated “groups of experts”. Yet, as our empirical section has showed, the generation and circulation of expert knowledge also happens outside these rigid boundaries. Indeed, as highlighted by Emma Carmel, expert knowledge can be produced in of a 2017 meeting between EU member states, industry representatives, and Frontex. These contexts provided both direct input to our reflections and background material that is included in the text after triangulation with official documents.
“networks of social relations among knowledge producers and knowledge brokers, organized around normative or paradigmatic differences, around member state commonalities; by money and its circulation to support particular policies or research; and by the fit of different kinds of knowledge with the temporal and political rhythms of policymaking. Thus, the knowledge generated in and through diverse practices of EU governance itself constitutes ways of seeing, organizing and acting on the political space to be governed.” (Carmel 2016: 778)

A key manifestation of expertise’s role in security governance concerns the definition of “what is risky and what a threat is, what should be dealt with as a security issue and what not“ (Berling and Bueger 2015:1). “Expertise” also comes with a connotation of neutrality, elevated above politics, seeking to challenge the “notion of an apolitical sphere of science and expertise, while at the same time demonstrating how the politics of expertise shapes the authority and subjectivity of scientists and reconfigures the meanings and roles of scientific knowledge“ (Rychnovská et al 2017: 327).

The field of border management technologies is particularly relevant to study through the lense of security experts and the roles they are assigned. As migration is a highly politicized field, and as the frequent application of the “securitization” framework suggests, it is also a field where elevating the discussion above the realms of politics is apparently particularly needed. Delegating important discussions and seeking advice on how to address given situations from expert groups allows to take these discussions outside the political minefield. In practice, assigning security experts with the task of defining solutions also gives them the power to define of what the problem at stake is.

This role of security experts may be problematic for two reasons: first, the “expert“ view comes with a claim of truth and objective neutrality, that does not take into account how experts are selected, recruited, and how they make their assessments. This allows governments to rely on expert groups as a method in itself, assuming that the reference to the “expertise“ removes the need to justify what methods these experts rely on to make their claims. Second, this creates an opacity around how key assessments are made, which is problematic in terms of democratic access to key discussions on the shaping of security measures in our societies. This sense of lack of democratic control is expanded by the specific technical know-how that the security experts possess: technological knowledge of how drones or other surveillance technologies work and can work, in terms inaccessible to lay people, gives certain experts access to a conversation about the development of key security technologies while excluding the broader
public (see Marin 2016, Loukinas 2017). This is critical because most of the ‘surveilled’ migrants are people in particularly vulnerable situation. In a 2018 report addressing recent developments in IT systems employed by the EU in border management scenarios, the European Union Fundamental Rights Agency highlighted that

“the weak position of the individuals whose data are stored in largescale IT systems creates many fundamental rights challenges. They range from respect of human dignity when taking fingerprints and challenges in correcting or deleting inaccurate or unlawfully stored data to the risk of unlawful use and sharing of personal data with third parties”. (European Union Fundamental Rights Agency 2018: 9)

The elements provided in the previous section corroborate these claims and reinforce the notion that the dense socio-technical environment is populated by myriad actors that include not only official bodies but also private actors and formal and informal networks of experts. At the same time, the way that the EU has dealt with drone development in Europe for migration mangement purposes has contributed to reinforce the securitization of migration. The treatment of migration-related technology development under the FP7 and Horizon 2020 security portfolios reinforces a double issue framing: firstly, it equates migration with security, reinforcing the securitization of migration; and then, secondly, it presents securitized issues as amenable to technological solutions.

This implies that EU security, as a field of EU governance, is thus

“represented in knowledge claims and expertise that appear to be detached from any particular social actors – policy solutions are reduced to problem-solving technological products. As a result, EU security governance is both underpinned by, and enacted through, processes of technological innovation and product research, development and testing. Defence, security, border control and surveillance are unified as a single technological domain, generating increasingly dense webs of concepts which link economic innovation, market expansion, global economic competitiveness and ‘European’ security requirements, to shape governance practices” (Carmel 2016: 788).

This increasing importance of technology in the management of EU borders has a number of additional ramifications. The first one relates to the broader issue of the growing importance of expert knowledge in EU’s security and migration agencies. Expert knowledge-based policy-making has systematically increased in the EU and became mainstream in virtually all the domains of the security agenda, understood here in its widest sense. This includes agencies on defence (EDA and EU Satellite Centre, SatCen), borders (Frontex and the European Agency
for the operational management of large-scale IT systems in the area of freedom, security and justice, eu-LISA), health (European Centre for Disease Prevention and Control, ECDC), and maritime security (EMSA), to name but a few actors.

The second consequence is the growing presence of hybrid rule in EU’s migration management. Aarstad (2017) and Hurt and Lipschutz (2015) have argued that privatization has counter-intuitively led to substantial growth in state/public power, rather than to its diminution. This is mostly manifested through hybrid rule, which refers to a set of practices that combine public and private resources to address one particular issue and to overcome political-ideological blocades (Martins and Küsters 2019). In the very critical definition of Hurt and Lipschutz applied to the security field,

“Hybrid rule results from a set of practices deployed by political elites that rely on the private sector to shield national security activities by expanding state power while constraining democratic accountability. This hybrid rule strategy seeks to safeguard the state’s legitimacy through valorization of the market as a primary mechanism in pursuit of myriad political objectives.” (Hurt and Lipschutz 2015: 2).

An aspect to consider here deals with the actors involved in these processes. In the typology of actors involved in the spiral of securitization, Valeria Bello organize them according to a number of dichotomies: violent / non-violent, public / private, and pursuing collective / individualistic interests. In the analysis conducted here, the main actors are EU agencies, EU institutions, the research consortia, and the technology industries. They are non-violent but otherwise they fit all the above mentioned categories. Importantly, some of them, namely the research consortia that involve both private and public actors, fall outside pre-established binary categorization. Indeed, the hybrid public-private consortia that conduct research on border security technologies involve the governments of the member states, third countries, research institutions, and the private sector. Precisely because of their hybrid nature, these partnerships are less visible and therefore less accountable (Leander 2015). These consortia are part of a broader market turn in EU governance (Mörth 2009) and, typically, are funded by the European Commission either directly via specific actions, or, in the majority of cases, indirectly through the EU framework programmes for research such as the Framework Programme ‘7 (FP7) or the current Horizon 2020. In recent years, many of the hybrid consortia created by the EU under the security research programme in order to develop technology relate to the field of migration. Martins and Küsters show that, from Brussels’ viewpoint, the hybrid consortia formed for the purpose of developing drones created value beyond their explicit purpose: they enmeshed the
defence industries with public authorities (in the EU and in the member states), they fostered a common defence R&D community, they kept the European defence industry competitive, and they facilitated the emergence of a shared security and defence culture (Martins and Küsters 2019).

Conclusion

According to Frontex’s 2018 Risk Analysis Report, the sea, especially along the Mediterranean routes, will remain the most active path for illegal crossing of the EU external borders, but also one of the most dangerous for migrants (Frontex 2018: 8-9). In this context, the fact that state-of-the-art technology is one of the eleven strategic components of the European Integrated Border Management strategy (European Parliament 2016) indicates that the processes analyzed in this article are likely to continue.

Part of a broader technologization of border management in the EU, drones have consistently been framed as a ‘solution’ to border management ‘problem’. This ‘problem’, as presented by EU bodies and technology developers, is understood to be lack of information. According to this logic, a state-of-the-art surveillance tool such as a drone emerges as the inevitable solution. Surrounding this process is the idea that society, security practices and security technologies are co-produced: our understanding of societal issues, including migration or security, is strictly connected to the existing modes of imagining (technological) solutions. This corresponds to what Sheila Jasanoff call the co-production of science, technology and social order (Jasanoff 2004). Ordering knowledge impacts the ordering of society, and therefore understanding how the making of knowledge is organized, who participates, and who has rights and responsibilities to speak authoritatively about knowledge is crucial for understanding how solutions come to being. This article provides elements for understanding why security technologies came to be understood as crucial for solving EU’s border problems and highlighted how the possession of technological expertise confers technology developers and other experts a discursive hegemony over border management and vests them with authority.

The security domain, for its reliance on state-of-the-art technology and for its socially sensitive nature, is an area where the challenges of expert-based knowledge are vastly amplified. As we demonstrated here, technology and expertise at the border encapsulate a securitized understanding of the migrant and therefore reiterate securitization processes that
impact the way migration is understood. They engage many non-elected practitioners and a wide number of actors – public, private, and hybrid – across the policy formulation and implementation cycles. Many actors from the ideal types of non-state actors involved in the securitization of migration presented by Bello (2017: 66) are found in the across the policy formulation and implementation policy cycles around drone usage for migration management purposes. These securitization dynamics eventually seek for state-of-the-art technology, contributing the spiral of securitization where security ‘problems’ and security ‘solutions’ are co-produced within a complex multi-layered network of actors whose activities are difficult to monitor and disentangle. Therefore, a de-securitization of migration and a re-humanization of the individual migrant require more transparency in decision-making processes and an acknowledgement of the co-production of security ‘problems’ and the corresponding security ‘solutions’.

References


