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OF THE US DRONE POLICY JOÃO VICENTE GLIMPSES OF TOMORROW: THE COMING AGE
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SANTOS E JOÃO VIEIRA CAETANO PORTUGUESE AIR FORCE RESEARCH, DEVELOPMENT
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Os veículos aéreos não-tripulados, vulgarmente denominados por *drones*, estão a assumir uma importância crescente nos conflitos armados e em operações de combate ao terrorismo, nas quais são empregues como instrumentos de recolha de informações e de emprego de força letal (especialmente pelos Estados Unidos no Afeganistão, Iémen, Iraque, Líbia, Paquistão e Somália). Para além dos Estados Unidos, países como Israel, China, Irão, França e Reino Unido, entre outros, operam-nos de forma conjunta e integrada em operações militares, bem como atores não-estatais como o Hezbollah. Outros Estados iniciaram ou estão em fase de consolidação do desenvolvimento dos seus programas de veículos aéreos não-tripulados, ainda que com níveis de ambição muito diferenciados.

No entanto, não é consensual o recurso aos *drones* em tarefas de vigilância e de recolha de informações e emprego da força em missões de combate ao terrorismo. Questões de natureza política, a que se adicionam as relacionadas com a letalidade, moralidade e legalidade do seu emprego, têm pautado um intenso debate, transversal às esferas políticas, militares e académicas. Não raras vezes, tal debate tende a ser distorcido e a subalternizar dimensões estratégicas do emprego da tecnologia dos *drones* no combate ao terrorismo, nomeadamente as associadas à sua proliferação (ou difusão, como defende um autor) vertical e horizontal, com inerente impacto no plano securitário.

Os decisores políticos e militares vêm no emprego dos *drones* um instrumento eficiente e eficaz na recolha de informações e na supressão de células terroristas: por não apresentarem qualquer risco para o piloto; poderem operar ininterruptamente por várias horas sem estarem condicionados por horários ou fatores da natureza humana (e.g. *endurance*); poderem ser rapidamente redirecionados para outros alvos; poderem fazer ataques com elevada precisão; e possuírem tecnologia sofisticada que lhes permite recolher e transmitir informação em tempo real.

Para além da existência de uma curta janela de oportunidade na eliminação do alvo, a alternativa passaria pela projeção e emprego de forças especiais em territórios adversos, contra adversários extremamente hostis, bem preparados e numericamente superiores. Desta combinação, resultariam inevitavelmente baixas que poderiam não ser compreendidas ou aceites pela opinião pública, penalizando os índices de popularidade de um governo.

Contudo, por outro lado, os *drones* reduzem o limiar de emprego da força letal. No passado a reação da opinião pública ao potencial número de baixas militares condicionava fortemente as opções políticas associadas a uma intervenção militar. Ao retirar-se este ónus, a secundarização das complexas e prolongadas opções político-diplomáticas pode tornar-se mais apelativa.

Quanto à letalidade, e independentemente do emprego dos *drones* tanto em teatros de operações militares como em áreas sem conflitos, ainda não existe um estudo abrangente que tenha medido a eficácia dos veículos aéreos não-tripulados no com-

bate ao terrorismo. Neste âmbito continuam sem resposta questões como: a proliferação (ou difusão) vertical e horizontal de *drones* é positiva ou negativa? Os *drones* contribuem para a degradação permanente das redes locais de terroristas? O impacto ao nível da segurança resultante do emprego dos *drones* justifica as consequências políticas e sociais locais? Os *drones* fazem parte da estratégia de combate ao terrorismo ou tornaram-se eles próprios numa estratégia?

No plano da moralidade, o debate centra-se na argumentação de que os ataques por *drones* não são particularmente cirúrgicos. Os críticos defendem que um número substancial de civis são mortos nos ataques, ultrapassando o de terroristas abatidos. Além do mais, a tecnologia dos *drones* pode ser interpretada como um passo tecnológico tendente a alienar cada vez mais a opinião pública da realidade das operações militares, fragilizando o escrutínio das lideranças políticas e militares. Ou seja, a dimensão da letalidade interliga-se com a da moralidade, projetando-se ambas para a terceira questão: a da legalidade, de onde deriva as vertentes do *jus ad bellum* e do *jus in bellum*.

No cerne do *jus ad bellum* está a Carta das Nações Unidas que preconiza poucas exceções ao recurso legítimo da força militar ou só a valida se for autorizada pelo Estado cujo território será o teatro de operações. Quanto ao *jus in bellum* define, entre outros quesitos, a necessidade e proporcionalidade do emprego da força, algo bastante debatido quanto à utilização dos *drones* no combate ao terrorismo e as baixas colaterais por vezes causadas.

Estes são alguns dos pontos abordados no presente número da revista *Nação e Defesa*, que reúne especialistas na temática, com perspetivas com tanto de interessante quanto de dialéticas.

Wali Aslam defende que, como qualquer tecnologia, nenhum estudo sobre o emprego de *drones* pode ser conduzido de forma completamente objetiva, não sendo possível afirmar se esta tecnologia é eficaz se eliminar terroristas e ineficaz se vitimar civis inocentes. Existem muitos outros fatores que são necessários considerar quando se estuda o impacto destas máquinas em ambientes de guerra e de contraterrorismo. O autor realça alguns dos amplos desafios com que somos confrontados pela tecnologia dos *drones*, argumentando que para um Estado estar mais preparado para lidar com as consequências do emprego dos *drones*, deve adotar uma abordagem que não se cinja unicamente a aferir a sua eficácia apenas com base no número de terroristas e de civis mortos.

Bruno Cardoso Reis defende que o conceito de proliferação de *drones* é um termo inadequado. Os *drones* estão a difundir-se rápida e globalmente, sendo errado qualificar *a priori* a sua exportação ou desenvolvimento (mesmo dos armados) como algo de ilegal ou negativo para a segurança global. Os *drones* podem ser uma forma de abordar nacionalmente o problema das vastas áreas fronteiriças remotas e des-governadas, usadas por insurgentes e o crime organizado como refúgios seguros.

Em qualquer caso, dada a natureza desta tecnologia de dupla utilização, os riscos do seu uso indevido não podem ser evitados. Para o autor seria melhor concentrar esforços não na limitação da difusão mas na criação de um regime global que defina o emprego de *drones* militares por parte dos Estados, em desenvolver contramedidas contra seu uso indevido por atores não-estatais, bem como a proibição de máquinas de matar totalmente autónomas.

Bruno Oliveira Martins, foca-se na normalização e institucionalização de medidas de segurança (que antes eram excepcionais) e nos correspondentes desafios aos fundamentos constitucionais das democracias ocidentais. O autor argumenta que os mecanismos de responsabilização jurídica e política são crescentemente postos em causa pelos desenvolvimentos tecnológicos, com inerente impacto nas práticas securitárias, gerando um desajustamento que pode ser crítico.

Sarah da Mota e André Barrinha, descrevem as ligações cruciais que existem entre *drones* – enquanto equipamentos tecnológicos letais –, a visibilidade e as possibilidades da política. Com base nos pressupostos filosóficos fundamentais de Hannah Arendt relativamente à política, à segurança e às sociedades modernas, os autores problematizam as implicações políticas da utilização de veículos não-tripulados.

João Vicente foca-se nas tendências tecnológicas dos sistemas aéreos não-tripulados, explorando argumentos concorrentes com o fim de demonstrar o potencial de mudança para um novo paradigma militar. A sua análise sobre os principais fatores potenciadores do desenvolvimento e emprego de veículos aéreos não-tripulados confronta os desafios e as implicações dos sistemas autónomos letais. O autor enfatiza a necessidade de aproveitar os benefícios imediatos proporcionados pela colaboração homem-máquina, recomendando uma análise mais aprofundada antes de se abraçar modelos operacionais completamente autónomos.

Por fim, José Passos Morgado, Aurélio Casaleiro dos Santos e João Vieira Caetano descrevem o programa de investigação, desenvolvimento e inovação que a Força Aérea Portuguesa através, do seu Centro de Investigação, Desenvolvimento e Inovação (CIDIFA), vem desenvolvendo, desde 2006, no domínio dos Sistemas Aéreos Autónomos Não-Tripulados. Em particular, são focados os aspetos relacionados com a operacionalização deste tipo de tecnologia, no contexto daquele Ramo das Forças Armadas, para utilização no âmbito da vigilância marítima e da busca e salvamento. Os autores mostram que o programa de investigação, desenvolvimento e inovação atingiu já níveis de maturação tecnológica muito elevados, o que lhe permitirá, a nível nacional e em colaboração com a Base Tecnológica e Industrial de Defesa, liderar o processo global envolvendo todas as valências conducente à industrialização daqueles sistemas.

Na secção extra-dossiê, Reinaldo Saraiva Hermenegildo debruça-se sobre a evolução do “Espaço de Liberdade, Segurança e Justiça” e o impacto que esse desenvolvimento trouxe para os Estados-membros e a União Europeia. O autor argumenta

que um conjunto de acontecimentos de ordem externa e interna ao processo de integração europeia contribuíram para a emergência e comunitarização da segurança interna europeia. Esta evolução incremental possui agora uma lógica supranacional, mas não tem uma dimensão estratégica sustentada, fazendo da União Europeia um ator incompleto em segurança interna.

Fernanda Carneiro da Silva analisa as motivações daqueles que concorrem às forças de segurança, em virtude do risco associado a esta atividade profissional, com o objetivo de identificar os motivos apresentados como as razões da escolha da profissão de polícia e tornar conhecida a natureza e organização cognitiva dos candidatos ao Curso de Formação de Agentes, da Polícia de Segurança Pública em Portugal.

Vítor Rodrigues Viana

Drones

Perceptions and Politics in a World of Drones

Wali Aslam

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Abstract

With an increasing number of states employing Uninhabited Aerial Vehicles (UAVs), or drones, there is a need to conduct a comprehensive evaluation of the efficacy of this technology. Western politicians often praise drones for both their accuracy and precision. They may indeed be both of these, but their use also has significant, far-reaching consequences for the societies where they are deployed.

This paper makes the case for adopting a more comprehensive approach that will keep in mind the politics surrounding the use of drones and in particular how they are perceived by the communities at the receiving-end. There is a need to look beyond the narratives of precision, accuracy and lack of risk. We also need to be vigilant to ask our politicians why they decide to use the drones in a given situation. Finally, we should also be cognisant of their use for the host communities, for the rule of law and for democracy at home.

Resumo

Percepções e Política num Mundo de Drones

Com um número crescente de Estados a recorrerem ao emprego de veículos aéreos não-tripulados, ou drones, existe a necessidade de efetuar-se uma avaliação abrangente sobre a eficácia desta tecnologia. Os políticos ocidentais elogiam frequentemente os drones pela sua exatidão e precisão. Na verdade, podem ser ambas, mas o seu uso também tem consequências significativas e de grande impacto para as sociedades dos países onde são empregues.

Este artigo justifica a adoção de uma abordagem mais abrangente que tenha em mente a dimensão política envolvente ao recurso a drones e, em particular, como eles são percecionados pelas comunidades dos países onde são empregues. Há a necessidade de olhar para além das narrativas de exatidão, precisão e ausência de risco. Também é necessário estar vigilante, de forma a questionar os políticos sobre o porquê da utilização de drones em determinadas situações. Por fim, deve-se estar consciente das consequências mais amplas - por vezes negativas - junto das comunidades dos países onde são empregues, a bem da defesa do Estado de Direito e da democracia no país que deles se socorre.

The usage of drones across the world has increased manifold in the last decade. Another such recent military technology that has garnered so much international public attention in such a short period of time is hard to come by. It is routine for countries to experiment and deploy new technologies to tackle various conflicts but the use of drones has gripped our collective imagination in a unique way. Given how quickly several states have started using the technology, the long-term impact of the use of drones (also called Unmanned Aerial Vehicles, or UAVs) will take a while to materialise.

Like any other technology, no study of the use of drones can be conducted in a completely objective way. It is no wonder that several analyses concerning the efficacy of the drones ask us to adopt a broader view – a view that is beyond the question of just looking at whether drones are killing ‘good’ or ‘bad’ guys. In other words, it is not possible to just say that this technology is effective if it is killing terrorists and it is ineffective if it is harming innocent civilians. There are a number of other factors that we need to keep in mind when we study the impact of these machines in settings of war and counterterrorism.

This piece will highlight some of the broader challenges the drone technology throws at us. It argues that in order to be better prepared to deal with the consequences of using drones, a state contemplating this relatively novel method of warfare is advised to adopt a new approach - one that is not restricted just to assessing drones' efficacy through the numbers of terrorists or civilians killed.

The drone technology is truly marvellous in that it provides its operators an ability to fly these machines from thousands of miles away without putting the lives of the operators in harm's way¹. Some drones have the ability to hover over a country's airspace for up to eighteen hours in one go and provide live feedback to the operator about the developments in the territory they are overseeing. The ability to collect immensely large amounts of data and to target individuals with little cost to those using it is seen as one of the biggest successes of the drone programme.

Although we hear a lot about the utility of these machines, we do not get to know much about how they are perceived by the citizens of the countries they are overseeing. One question can be: does the public in the targeted state see the drones in the same way as they are seen in the West? The answer is likely to be in the negative. A cursory glance at any mainstream Pakistani newspaper will reveal that drones are often seen as a new face of imperialism by many members of the Pakistani public (Dawn, 2013). For such individuals, drones symbolise American imperialism (aided by technology), which is reminiscent of British imperialism.

Interestingly, these perceptions are reflected in the surveys conducted on the use of

1 It is common knowledge that the United States flies its drones working in Iraq and Afghanistan from Creech Air Force Base in Clark County, Nevada, USA.

drones in Pakistan. Drones target a narrow area of Pakistan called the Federally Administered Tribal Areas (FATA). Almost all the strikes that have targeted Pakistani territory between 2004 till today have focused on FATA and only a handful have taken place outside it. Surveys conducted in the rest of Pakistan have generally tended to show opposition to the use of American drones in Pakistan (Iqbal, 2014). That is despite the fact that American drones have killed many high-ranking terrorists wanted by the Pakistani state, such as Baitaullah Mehsud. Furthermore, the human toll has also been decreasing (New America Foundation, 2017b). Similar to the case of any other weapons, it is critical to remember that the perception of drones by those at the receiving end matters a great deal. However, the issue of the continuity of Western domination (through direct or remote means) is a topic that does not feature much in Western policy evaluation of the use of drones.

This author does not argue that the West should stop using the technology as an instrument of counter terrorism – far from it! The purpose here is to assert that understanding the local viewpoints would better prepare us to understand the resistance to several Western methods of conflict resolution and counter terrorism. By learning about those views, we would be able to devise more effective strategies that will better anticipate on-the-ground consequences of the technology. If the overall objective is to win the confidence of the people in a foreign state, then the battle is being fought not only on the battlefield but also in people's minds, as always.

The studies of the efficacy of the use of drone technology tend to neglect one further critical aspect of their use: how drones help disperse terrorists from one contained space to a wider territory that spans across borders and boundaries. American drone strikes in FATA started in 2004. The tribal areas have a distinct political status in Pakistan and the country's standard laws do not apply there. These areas had become the new homes of various Al-Qaeda and Taliban militants after the American invasion of Afghanistan in December 2001 (Aslam, 2013a). Soon afterwards, it became clear to Americans that due to the remoteness of the tribal areas, they had little chance to track down these individuals in the absence of active Pakistani cooperation. Hence drone strikes seemed to provide a perfect answer for the problem. As a result, around 392 strikes have been conducted in the tribal areas of Pakistan so far with only 6 strikes targeting areas outside FATA (New America Foundation, 2017b).

Given this situation, suspected terrorists have been leaving FATA to relocate to other parts of the country (Ali, 2010; Aslam, 2014). A number of them have moved to Karachi, Lahore and those parts of FATA that have not been heavily targeted by drones. The move, however, has not changed the basic agenda of these individuals, which is to wage a jihad against those they consider infidels. The dispersal of suspected terrorists across Pakistan in order to escape drones has come with serious consequences for their new host populations. In FATA, they used their tribal

hideouts to target American forces in Afghanistan, but after their relocation, they have been targeting Pakistani civilians to continue their mission. These civilians and members of the country's security forces are legitimate targets for these individuals as the state is an official ally of the United States. Though their target has changed, their mission remains the same. Proponents of drones have been highlighting their success in decreasing the number of attacks on Western forces in Afghanistan. However, the approximately 50,000 Pakistani civilian victims of terrorism rarely get mentioned in such assessments, and some of these may likely have been the target of terrorists who have moved from FATA to escape drones.

After their relocation, these individuals do not confine themselves to religious violence. They also actively participate in kidnapping for ransom, drugs and arms smuggling, and land grabbing in cities like Karachi (Ali, 2010). Much of the revenue generated through their participation in such activities goes back to fund militant activities in the country's northwest. This under-studied consequence of the use of drones will have significant implications for the regional security in South Asia long after the Western forces depart from the region.

While studying under-examined aspects of the drone warfare, we also have an obligation to scrutinise on-the-ground politicisation of the use of drones in host territories. It is generally observed that the use of this technology helps in the radicalising agendas of various politicians and noted personalities of the political right in spreading a message that is conducive to their cause (Aslam, 2015). Countries like Pakistan have seen an overall shift to the right among the public's attitudes, with an increasing number of its citizens displaying religious symbols and attending rallies organised by conservative politicians and clerics. Several politicians have referred to the use of drones by the US in Pakistani territory as being the cause of most of the problems facing the country. For example, the cricketer-turned-politician, Imran Khan, has used these attacks as examples of American hubris, blaming the US for massive collateral damage and death of innocent civilians. Khan believes that the use of American UAVs has not been very effective, as the situation in Afghanistan is far worse than it was when the strikes were initially employed in 2004.

Imran Khan has a clear appeal amongst the country's youth and his rhetoric has played a key role in turning some of the youth against the West, leading them to believe that there is an international conspiracy to weaken Pakistan and drones are just one part of that plan (Guardian, 2012). Khan has successfully portrayed himself as the spokesperson of the political right in Pakistan. This radicalising impact of drones has been detrimental to conducting a fair and impartial assessment of America's role in helping build Pakistan's democratic institutions and supporting the people of the country through its numerous development projects. This is yet another examples of how the public's perceptions trump the material realities. The material realities are not utilised for the purpose of objective evaluations.

There is also a need to understand the effect of the drones in weakening the institutions of the states they might be operating in. Several US administrations have made a case for empowering the institutions of the states where terrorism might be a major challenge. These states include countries like Afghanistan, Somalia, Pakistan and Iraq. It is often contended that terrorism flourishes in failed or failing states because these states do not have the right capacity to deal with the challenge at hand. We are told that only a stable democratic setup will solve the internal problems in these countries, including sectarian and religious terrorism. That explains several Western efforts that concern supporting rule of law initiatives in states like the ones mentioned above. A key objective of the endeavour is to enable countries to have the capacity to apprehend, charge, try and detain those considered to be breaking the law.

Where the US has stressed the need to bolster the state's capacities in many failed or failing states, it has also engaged in extra-judicial killings in these countries through its drones. There are very few platforms for those who might want to appeal such strikes. Importantly, such forums are often outside the targeted country's own judicial system.

Pakistani military officials often collude with the US in facilitating the targeting of suspected terrorists in FATA. Traditionally, Pakistan's army has been the main decider of the state's foreign policy. Pakistan's foreign allies have also chosen to work directly with the army, bypassing the civilian leadership even when democracy existed in Pakistan. That explains why Pakistan's democratic institutions suffer from a lack of legitimacy as their control over the country's destiny has been limited since the country's creation in 1947.

When it came into the White House, the Obama administration officials admitted that Washington was mistaken in supporting various military rulers in the country and from then on it would work to strengthen the democratic institutions there. There had been an acute realization that Pakistan's many ills may be attributed to the lack of a stable democratic system, and that not only the country but many other nations across the world have had to suffer for that reason. However, that support was not more than lip service during the two terms of US President Barack Obama. Though there has been much focus in American policy statements towards strengthening the democratic setup, Obama's usage of drones flew in the face of that approach (Aslam, 2011).

Officially, the government of Pakistan opposes the use of drones on its territory. The country's National Assembly and one of its High Courts have asked Washington to halt the attacks as they violate Pakistani sovereignty. However, this has had limited effect on American policy. This situation contributes to undermining the legitimacy of the Pakistani Parliament and the country's democratic setup, which is already struggling to emerge from the shadow of dictatorship. This neglect of the country's

democratic institutions has much symbolic relevance and significance. Such obvious bypassing of their own democratic and legal institutions may help the citizens of a targeted country legitimise circumventing the rule of law. In other words, the policy has served to undermine the legitimacy of the democratic system that the US wanted to support (Aslam, 2010).

Those championing the use of drones often focus on their ability to be precise and accurate. There is no doubt that by making the drones hover over their targets for hours, drone operators tend to ensure that they only attack the right person and the collateral damage is minimum or none. This faith in the technology's ability to deliver on its objectives is crucial for the contemporary drone programmes initiated by states. An intricate intelligence network is behind every drone strike. There are several ways to collect intelligence on one's targets. Some targets are selected on the basis of complex algorithms that may be related to the target's mobile phone signals. For example, one's chances of being attacked are higher if their mobile phones reveal they have an enhanced presence inside the home of a known terrorist. There are also sources of human intelligence that the targeting state employs to collect information on who is to be struck. That is often the case with Afghanistan, Iraq and Pakistan. Significantly, these informants are also part of the same societies as the targets. There are no publically available mechanisms to ascertain that these informants provide the correct information on their targets. Given that we cannot confirm whether the person killed was a combatant or a civilian, we cannot be certain of the exact accuracy of drone wars (Aslam, 2012).

Drones are useful for Western governments because they provide low-cost solutions to various complex problems that might otherwise have required a presence on the ground. They are a convenient tool in the time of austerity when the deployment of boots-on-the-ground is too expensive and not feasible. That also magnifies the need to be critical of the official discourses of accuracy and precision. An accurate weapon does not give *carte blanche* to our statesmen and women to use it in almost any possible setting. A more careful scrutiny and selection of all available tools are necessary in order to answer different challenges.

This writing has earlier studied the impact of the use of drones on domestic rule of law in certain states. However, it is also important to remember that certain facets of the usage of drones can also run contrary to the international law. The employment of drones is not prohibited under international law *per se*. However, there are aspects of their usage that, according to some, directly contravene the Geneva Conventions surrounding armed conflict. For example, one such use is in the form of double-tap attacks. Such attacks refer to strikes that closely follow on from another strike. They are normally undertaken to target those who might sympathise with the terrorists and who may come to rescue their friends after the first strike. That is a way to maximise the impact and to attack most number of enemies at one time and space.

Though there are cases where other terrorists come to help their allies after the first strike, these strikes also attract rescuers. Rescuers and humanitarian workers motivated by the objective to help those in need get together to recover bodies and take the injured to hospital. Quite clearly, not all of those who reach a location after a drone strike are terrorists. They include ambulance-drivers, other rescue workers and sometimes regular civilians. The Geneva Conventions specifically prohibit the killings of rescuers who are solely motivated by a humanitarian urge to help those in distress (Greenwald, 2012). American double-tap strikes have often been criticised quite vociferously and their number has now gone down in recent years.

Given the visibility of drone strikes, those undertaking them go out of their way to give an impression that they are following necessary rules and the force is being used in a proportionate manner. In order to avoid being criticised for killing innocent civilians, the Obama administration expanded the definition of who would be considered a combatant compared to who would be characterised as a civilian. Its members decided to define any 'military-aged-male' as a combatant and thus a legitimate target (Becker and Shane, 2012). This age range covered men as young as 16 and as old as 60. This redefinition was considered helpful in avoiding legal ramifications for killing innocent civilians. That reveals that successive governments employing drones take into account the legal impact of their actions. That also means that we have to be vigilant as to how certain terms like 'combatants' and 'civilians' are defined by Western leaders.

The United Kingdom's use of drones in the Afghanistan-Pakistan theatre particularly reveals that states are keen to use their drones under the framework of international law. The United States has launched the most number of lethal drone strikes so far in the region. The UK forces have joined their American counterparts in Afghanistan in using drones. However, the latter quite often made a point of distancing itself from the former by asserting that it uses these weapons within a clear legal framework. That framework has been guided by domestic British law as well as international law. The British forces' adherence to law was also applauded in a report by the UK Parliament's Defence Select Committee (Parliament, 2014). Importantly, the UK has not conducted any known strike in Pakistan due to the lack of a clear legal basis for the action. This remains true despite the fact that the British have launched hundreds of strikes as part of action against insurgents in Afghanistan (Roggio, 2017). The British government always maintained that it only employs its drones when there is a clear threat to British interests, especially to its armed forces operating in conflict zones. According to that logic, Pakistan would have been a target given that the country's tribal areas have provided haven for those who tried to perpetrate terrorist attacks in the UK (Alderson, 2008). In the absence of a clear legal mandate, however, the UK tended to rely on the US to attack

individuals threatening its interest. This British policy could be described as a responsible approach (Aslam, 2013b).

The 21 August 2015 British drone strike in Syria, killing two of its own citizens, however, has major implications for the UK's standing as a responsible great power in international society. The strike was a departure from that longstanding UK position of abiding by the rule of law. It has generated much interest and controversy since the day it was announced. It appeared that after much reluctance, the UK government started to follow in American footsteps to act as the judge, jury and executioner in matters of national security, citing 'imminent' threat (BBC News, 2015). Where the action may provide some legitimacy to the US stance of using armed drones in preemptive self-defence, it also poses a series of pertinent questions that require urgent answers before another such strike is undertaken.

One of the questions relates to the killing of British citizens as part of 'collateral damage'. Apparently, the British missile was aimed at Riyadh Khan, 21, from South Wales, who was considered to be involved in planning an attack on VE Day commemorations in Central London in the summer of 2015. That strike also killed Ruhul Amin, a 26-year-old British citizen from Aberdeenshire, as well as another IS fighter. Unlike Khan, these individuals were not considered to be posing an imminent threat to UK interests and were killed because they happened to be traveling in the same car with Khan in the Raqaa area of northern Syria when the strike took place. If one were to accept the logic that Khan posed an imminent threat of the nature that he had to be targeted whenever the opportunity arose, a key question would ask whether the new British approach means that the UK government is willing to accept the loss of British lives as collateral damage. If yes, then how many British lives would be too many for the government to stop a strike from going ahead, leading the government to decide that the cost-benefit calculus was not in its favour? The US has in the past often called off strikes against terrorists that were on its watch lists if individuals not wanted by it were present in the area. The question is especially pertinent for the UK government given that the individual in question was a British citizen.

The former British Prime Minister, David Cameron, asserted that the strike had a clear legal basis under international law according to the advice given by the country's Attorney General. The apparent reference was to Article 51 of the UN Charter which upholds the right of states to respond when an armed attack occurs on their soil. However, the recent strike was not undertaken after an attack against the United Kingdom. It can be more aptly categorised as an example of preemptive self-defence. Policymakers in Washington have often referred to the US National Security Strategy of 2002 that made the US case for acting preemptively instead of waiting for an attack to occur (The White House, 2002). British officials, on the other hand, have refrained in the past from using that language so openly. David Cam-

eron's statement was a major departure from that approach as he championed that idea of preemption quite explicitly.

The issue of preemptive self-defence itself is not very contested, and nations around the world broadly concur that in the case of an imminent threat, governments are justified in acting to defend themselves. The question, however, is related to where the British government would draw the line. In other words, when would a threat move from the classification of 'likely' to 'imminent'? Furthermore, who will decide how to define an 'imminent' threat? British policymakers might have all good intentions but, as Henry Kissinger said, having good intentions does not always mean that one's actions would also be right. That is why liberal democracies have a system of checks and balances that allow for oversight and review of different branches of government. Critics of the August 2015 strike called for evidence of the threat to be presented to either the UK Parliament's Intelligence and Security Committee or an independent reviewer. Reviews such as these are critical in determining whether the government's decision to act preemptively was justified.

The British drone strike of August also opened the possibility of such strikes happening in the future. The strike also made it clear that the British government has decided to target its enemies directly instead of going to the US to take action against those who might be threatening British interests (as happened in the case of Rashid Rauf, killed in Pakistan in 2008 by American drones). There might be any number of reasons why the UK chose this approach despite protestations at home and abroad. One of these could be the desire among British policymakers to reassert the UK's position as a major great power in international society at a time when Russia, China and the US are returning to an era of great-power competition. Such preemptive actions do send clear signals to those plotting against the UK to refrain from doing so, but the policy shift has complex implications for Britain's status as a great power. In a rush to tackle imminent threats to its interests and to be (re)counted as a major player in global politics, the United Kingdom statesmen would be well advised to not endanger the country's standing as a more responsible great power that abides by international law, both in letter and in spirit.

The acquisition and use of drones is increasingly becoming an international status symbol. It is estimated that around eighty countries in the world have a drone programme or are exploring the possibility of establishing one (New America Foundation, 2017a). That means that we are going to see an increased likelihood of states arming them to intervene in conflicts. Given this scenario, we are going to face a world in which breaches of sovereignty are going to get more frequent in the coming years. Western countries have to be prepared to see other great powers, such as China, India and Russia, employ them inside their states or within the region. We need to be better prepared to avoid drone-led breaches of sovereignty escalate into major international conflicts.

There is also the challenge of non-state actors using these machines during conflicts. It has been reported that Hezbollah has been using quad copter-style drones to drop explosives in Syria to kill Syrian rebels (Axe, 2016). These are significant developments because it is clear that the technology is not just for the use of well-established militaries, they can also be used by non-state actors engaged in low-intensity conflicts. The United States military is already investing significant sums to destroy drones that might be coming to attack American forces. That means that the race does not just concern who develops a more sophisticated drone programme but also relates to who has a better defence against them. Future technologies created for such purpose would focus on mid-air destruction of such platforms.

This piece has highlighted various under-studied aspects of the use of drone technology. Though the author has brought up some of the significant negative repercussions of their use, the intention has not been to advocate a renunciation of drones. Furthermore, the author does not want to convey the message that nothing good comes out of the use of UAVs and the technology has only negative points. This is the technology of the future. As mentioned earlier, more and more states are investing heavily in their drone programmes. This piece has made the case to use these weapons with much more caution and circumspection. It warns us to not let our confidence in our technological expertise close our eyes to on-the-ground consequences of the use of drones.

The author has also shown that the perception of these weapons by different individuals matters a great deal. For example, we have examined on-the-ground consequences of American drone strikes in Pakistan and how the issue of perceptions can be critical. The debates on the efficacy and appropriateness of drone strikes rarely take into consideration these aspects of drone usage. We do not know much about how the masses in the countries at the receiving-end of drones make a link between these machines and the continuity of Western imperialism. There is also a need to understand how the technology may be weakening the rule of law. Furthermore, drones provide cannon fodder to the conservative politicians and statesmen in the target states to sell their ideology. Their job is made easier by a silent response adopted by the US with reference to their drone programme. There are hardly any justifications that are put forward to counter the indigenous narratives. The vacuum is filled by those who have their own agendas.

We have also looked at the implications of the drone usage for international law. Though not specifically contrary to international law, certain aspects of their usage are said to be breaking Geneva Conventions. We also highlighted how state and non-state actors in the world are employing drones for reasons ranging for surveillance, reconnaissance and even to attack their enemies.

The shortcomings of the policy of using drones have to be addressed if the West would like to conduct a fair and impartial assessment of the efficacy and appro-

priateness of the employment of this tool to counter the global terrorist threat. Furthermore, there is a need to view the use of drones as a short-term tactic with limited value in the long-run. They cannot serve as a replacement for the comprehensive strategy which would be required to deal with the type of challenges different countries are trying to tackle through the use of drones.

Drones are the technology of the future and there needs to be much more awareness about them among the statespersons as well as among the members of the public (Aslam and Rauxloh, 2015). Militaries would like to use any technology that will make their jobs easier. It is only by having a socially and politically aware masses that we can hold our militaries in check and our politicians accountable in every situation in which they make a case to employ drones to counter an emerging threat.

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It is Drone Diffusion, not Proliferation! A (Mostly) Positive Impact on Security in the Global South

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Abstract

The central argument is that the concept of drone proliferation is a misnomer. Drones are spreading quickly and globally, but it would be wrong to qualify *a priori* the exporting or development of drones and drone technology as illegal or even negative from the point of view of global security. Drones can be a way of addressing nationally the problem of vast remote ungoverned border areas used by insurgents and organized crime as safe-havens therefore limiting the arguments for a problematic use or abuse of drone strikes overseas by the US. In any event, given the nature of this double usage technology the risks of its misuse cannot be avoided. It would be much better to focus efforts not on limiting the diffusion of military drones, but rather on trying to develop in a multilateral setting, global parameters of usage of military drones by states, and counter-measures against its misuse by non-states actors, as well as banning fully autonomous killing machines.

Resumo

É Difusão, não é Proliferação de Drones! Um Impacto (Sobretudo) Positivo na Segurança do Sul Global

O argumento central é que o conceito de proliferação de drones é um termo inadequado. Os drones estão a difundir-se rápida e globalmente, sendo errado qualificar a priori a sua exportação ou desenvolvimento (mesmo os armados) como algo de ilegal ou negativo para a segurança global. Os drones podem ser uma forma de abordar nacionalmente o problema das vastas áreas fronteiriças remotas e des governadas usadas por insurgentes e pelo crime organizado como refúgios seguros, contrariando a argumentação que legitima o uso ou mesmo o abuso de ataques com drones por parte dos EUA e outros países. Em qualquer caso, dada a natureza desta tecnologia de dupla utilização, os riscos do seu uso indevido não podem ser evitados.

Seria muito melhor concentrar esforços não na limitação da difusão mas na criação de um regime global que defina o emprego de drones militares por parte dos Estados, em desenvolver contramedidas contra seu uso indevido por atores não-estatais, bem como a proibição de máquinas de matar totalmente autónomas.

The central argument of this article is that the concept of drone proliferation is a misnomer. Not because the global spread of drones is not a significant reality, but because it would be wrong to qualify *a priori* the exporting or developing of drones and drone technology as wrong or illegal. Although some Western countries have considered themselves bounded by a multilateral agreement restraining exports of missile technology (Missile Technology Control Regime – MTCR) – that since 1987 regulates nuclear-capable missiles and related technologies, the key point is that there is no international regime that limits drone exports as is the case for weapons of extreme destructive power like nuclear weapons, and those that are actually banned like chemical and biological weapons. Any similar limitations for drone exports or development would not be accepted by many countries in the Global South not least by emerging powers like China, India, and Brazil. Moreover, as I will try to show it is far from clear that the spread of drones, even armed drones is necessarily negative.

In any event, given the nature of this double usage technology the risks of its misuse cannot be avoided by limiting state-to-state diffusion of military drones. In so far as certain drone uses have negative consequences, then the same rules limiting these abuses should apply to all powers starting with the US, not just to emerging powers and other small and medium power. This is a point in which I agree with Sarah Kreps and Micah Zenko (who tend, however, to be much more skeptical than me about the negative consequences of what they term drone proliferation), for the United States to have any significant influence in this respect, it must lead by example¹.

Consequently I would argue that as difficult and unlikely as this might seem in the current global context, namely with Trump as president, it would be much better to focus efforts not on limiting the diffusion of military drones, but rather on trying to develop in a multilateral setting global parameters of usage of military drones by states, developing counter-measures against its misuse by non-states actors, as well as banning fully autonomous killing machines.

But before moving forward in providing arguments for my claim and pointing some of its wider implications, some clarifications and caveats are necessary.

Concepts and Caveats

I use the notion of military drones primarily to refer to the use by the armed forces of remotely piloted planes with reconnaissance, surveillance and, more rarely, strike capabilities or “air drones”. Of course, there are also and increasingly land and sea drones, but their development has been slower and their impact in global security more limited and still less clear, and I will not address them in this text.

1 See Kreps and Zenko (2014a, 2014b).

Consequently when I use the word drones in this text it should be understood as primarily referring to “air drones”.

Drones and their diffusion have an important role, as the series of articles in this journal illustrate and I will try to argue, in some of the most important and topical issues in global security. I would highlight: (1) American preponderance and its possible erosion as part of a trend towards a multipolar world; (2) the search for more effective responses by the conventional military forces of states to transnational terrorism and irregular warfare by non-state actors; and (3) the effectiveness and legitimacy of target assassination, signature attacks and state surveillance within and across states borders.

Drones are arguably already a significant part of wider trends regarding these very important topics, but they are often confused and conflated with them. Two examples are: (1) the confusion of air drones with the wider robotic and information revolution and its impact in warfare and global security that goes well beyond air drones; (2) the complex multidimensional challenges of responding to terrorists and insurgents finding safe havens in vast and remote ungoverned spaces not effectively controlled by any state that again goes well beyond the use of drones to deal with them or not.

It would be wrong to confuse drones with these wider trends in global security of which they are a more or less important part, but only a part. It is important to make clear that this text does not aim to do so, despite the fact that given its goal as well as its limited scope and length, the main focus of this analysis will be on the diffusion of drones and its impact in global security.

A final generic caveat is that it would be wrong to argue that drones, or, in fact, any military technology, can by itself fundamentally change global politics or even global security in a clear-cut way. True, the history of warfare and of some of its most significant transformations are closely linked with the history of technology applied to armed conflict; but while it would be a mistake to ignore the potential transformative impact of certain military technologies in the conduct of warfare and potentially even of global security and politics, it would be equally misguided to think of them in isolation of wider trends and the different options on how best to use them in different social and institutional contexts. As van Creveld (1991, p. 1) puts it in a seminal study “war is completely permeated by technology” [but it would be wrong to ignore] “that behind military hardware there is hardware in general, and behind that [...] a certain kind of know-how, as a way of looking at the world and coping with its problems”.

Why is Drone Diffusion Inevitable?

The central problem addressed by this text is the question often mislabeled as drone proliferation. Drone diffusion is the best way to qualify the phenomenon of

the spread of a military technology aimed at surveillance and armed strikes by remotely piloted planes and other military uses of robots. I will pay a particular attention to non-Western powers importing, developing and deploying drones because this is where drones may have a greater transformative impact on the current global order.

Why do I argue that drone diffusion is here to stay? Because it is a military technology of proven efficacy and relatively inexpensive when compared with equivalent military tools, not least manned airplanes. Drones provide solutions to some of the key problems of global security, such as how to respond effectively, in terms of intelligence and strike capability, at a relatively low cost to transnational and national insurgents that profit from safe-havens in vast, remote and often ungoverned spaces.

Moreover, I believe the argument about the fundamental illegitimacy of remotely piloted warplanes is weak. They basically perform the same functions as manned planes, just with much greater effectiveness and lower costs. This may indeed lower the threshold for the use of force, and this may in turn lead to the abusive use of drones' that should be questioned, but what does not logically follow is that their diffusion is a negative thing². As I will try to show in this text the opposite may well be the case: drone diffusion, namely in the Global South, may provide a partial remedy for drone abuse by a single hegemonic global drone power, which is in effect what the United States has been until now.

I am aware of the basic objection about the fundamental illegitimacy of a strike safely from afar by pilots that are not in harm's way. But drone pilots are not immune to the effects of warfare, and even if their potential trauma is not an issue I can develop here, it is important to underline that the idea that drones provide a carefree approach to armed conflict is mistaken. Also the potential negative impact of drone strikes in killing innocent civilians is also not something that is or could be expunged from the debate, just because these planes are remotely piloted, this is evidently very much part of the debate about drones. Last but not least the argument now raised about drones had, significantly, already been present in much the same format regarding the NATO bombing campaign against Serbia during the Kosovo crisis of 1999 or even in the first Iraq War of 1991, because Western manned warplanes had such a technological edge that they could strike from a safe distance and were basically invulnerable to attack after anti-aerial defenses that in any event already been largely disabled. However, as Lawrence Freedman (2000, p. 645) underlined then, "armies historically do not seek to fight fair, they have always sought to win with as little casualties as possible".

2 See the exhaustive collection of legal problems regarding drone abuses in Knuckey (2015).

In fact this argument echoes debates that go all the way back to the Middle Ages about, the then novel and many argued unchivalrous nature of the use of arrows against knights, as opposed to cavalry charges and close range hand-to-hand combat. But melees, as the name indicates, have never been a particularly effective way of fighting. In fact, it can be argued that the entire history of the development of military technology going back to pre-historic times and the initial development of weapons as tools to hunt can be seen as an effort to deal effectively with threats from as safe a distance as possible.

To speak of drone proliferation is *a priori* to point to the spread of military drones as inevitably negative and illegitimate. And yet even the legitimacy of a non-proliferation regime as currently applied by the Non-Proliferation Treaty to the exceptionally destructive nuclear weapons is questioned by emerging powers, outside of the nuclear great power club, like Brazil, who see it as in large measure an attempt by *statu quo* nuclear powers to crystalize their position of power without keeping their end of the bargain, namely disarming gradually. This is why when Brazil gave up its military nuclear program for a number of reasons, it made a point of doing so outside of the existing regime, of which it has been critical ever since³.

In any event, what is clear is that Brazil, as well as India, China or Iran do not accept the idea that they should not have access to a new effective military technology like drones or that doing so would affect negatively global security. Why these emerging powers are keen to import, develop, deploy, and eventually export military drones and the impact of this will be in global security is open to debate, of course, but it is relevant in terms of global political trends to underline this basic fact: they refuse the notion of the need or legitimacy of global drone non-proliferation regime. Furthermore, this attitude makes success in limiting drone diffusion between states unlikely and any such initiative potentially counterproductive in terms of global politics.

The use of the notion of proliferation regarding military technologies like drones arguably undermines the rationale for using an exceptional concept and exceptional norms for exceptional regimes regarding exceptionally destructive military technologies. Whatever the misgivings about the military use of drones this would not seem to be the case. Diffusion is the more appropriate way to conceptualize this problem and to better understand it from a non-Western-centric point of view.

The effectiveness of drones for specific military missions is only part of the reason why containing drone diffusion is such a difficult proposition. Drones are the highest growth sector in aerospace industry. This will increase the pressure for countries with a significant weapons manufacturing and aerospace industries or with the

3 See Mallea, Spektor and Wheeler (2015).

ambition of catching-up in these high-value high-tech sectors to develop their own drones. This is evidently the case of China, which is predicted by some to soon dominate drone exports, given the relative price advantage of Chinese drones compared American or Israeli drones, and the absence of restrictions limiting the range of potential drone importing countries (Rajagopalan, 2015).

A similar concern is present even in the case of Europe, where the lack of investment in the development of drones has led the main European weapons contractors – EADS, European Aeronautic Defense/Airbus, Dassault and Finmeccanica – to express concern in a statement arguing for the need to urgently address the growing gap with competitors like Israel and the United States, via a joint European development program (Clark, 2013).

Israel has been, alongside the United States, in the vanguard of research and development of military drones. But Tel Aviv has been much less restrictive than Washington in its export policy. Israel is in fact the biggest drone exporter in the world. Between 2010 and 2014 Israel delivered 165 drones across the globe, the United States delivered 132, and Italy delivered 37. And since 1985 Israel has accounted for more than half – 60.7% to be precise – of drone exports. China according to the same report so far is responsible for less than 1% of total exports, but significantly it is moving fast and aggressively into this market. Also it is important to note that while discussions of drones are mostly linked to armed drone strikes, they only make so far a small portion of export trade or 2.5%. The United States initiated this trend by exporting armed drones to the Britain in 2007. In 2014 China became the second country to openly export armed drones, specifically to Nigeria, selling five to help in the Nigerian campaign against the Boko-Haram insurgency, and apparently had done so covertly to Pakistan in 2013, engaged in its counterinsurgency against the local Taliban (Arnett, 2015).

These numbers regarding drone exports may be less than entirely reliable, but still give an idea of order of magnitude regarding drone diffusion. The key strategically significant aspect of this process of drone diffusion is that the clients of Israeli and Chinese drones include a number of emerging and non-western powers like India, Nigeria and Brazil, who are in turn often also developing their own models. And all expectations are that this market, small as it currently is, will be growing very fast with analysts predicting a doubling or even a quadrupling of demand for military drones over the next decade (Meyer, 2013; Frost and Sullivan, 2017).

It is also important to underline that for Israel drone exports are important in helping sustain economically their massive development of this strategic new industry. Shmuel Falik, who markets drones for Israeli state-owned drone-making IAI is very open about this: “We exist because of the international market... We’re too big for Israel, to our delight” (Goldenberg, 2013). Still Israel has been careful not to spread this new technology in its immediate vicinity with the exception of

Turkey and has primarily export surveillance drones. Drones are another example of the Israeli strategy of maintaining a technological edge relative to its regional rivals but also of building up strategic partnerships with major regional powers outside of its immediate region. In any event this means Israel has necessarily been far less concerned than the United States regarding the potential disruptive impact of drone diffusion in global security, and a major force driving the diffusion of advanced military drones.

The case of Israel is important in terms of evaluating trends regarding drone diffusion and its impact. With a growing number of powers investing in the development of military drones, they are likely to be strongly tempted to similarly engage in lucrative exports – if that was not one of the key objectives to begin with – and they will be even less constrained than Israel by a close security partnership with the United States. The diffusion of drones therefore seems to be a growing and unstoppable trend, also given the fact that they are relatively cheaper than an equivalent manned plane.

These two trends come together most evidently in the case of China. This is one of the reasons analysts are predicting that China will be the major exporter of drones in the short term seeking to claim as big a share of what is predicted to be a 10 billion dollars market by mid-2020s. So far and from what is known, alongside Nigeria and Iraq, that have used them in combat, Chinese armed drones have been sold to Saudi Arabia, Egypt and the United Arab Emirates as well as to the Somali army and this is considered an incomplete list, after all they cost just 1 million dollars, a quarter of comparable US drones, that would in any case often not be available for export (Dillow, 2016).

The US has been extremely guarded in its drone exports, severely limiting the export of especially armed drones even to close allies. This strategy has clearly failed to stop drone diffusion. The technological edge of the West in this respect has had the strategic effect of increasing the pressure upon non-Western countries to follow suit, if they wanted to keep up, if they wanted to emerge as significant players in global security and the global weapons market. The best evidence for the failure of the attempts to stop military drone diffusion and the importance of this growing market for drone exports is that it has forced the United States to rethink its very strict restrictions on drone exports. This will probably help American weapons sales abroad, but more importantly to our point is contributing to the normalization of this growing trend for drone diffusion, even if the United States has tentatively tried to follow suit by also publicizing in 2015 a set of guidelines for its exports in terms of best practices in drone use (McLeary and Mehta, 2015).

But why drone diffusion is not necessarily bad news? This is a point developed in the following section.

Drones as Part of the Solution for a Global Security Problem by Better Controlling Vast Remote Border Areas

Aren't emerging drone nations a major disturbing factor of global security by upsetting the global power distribution? The answer is no, at least not yet⁴.

Drones as well as other weapons system can cover under the same generic name very different actual capabilities and levels of technological development. To say that more than 80 countries have or are developing some kind of drones for some kind of military use therefore actually means little.

Most of these countries are still very much in the experimental stage of developing or deploying surveillance, not armed drones. And the much smaller number of countries that are using more or less advanced versions of drones in actual military operations, are doing so primarily in a reconnaissance and surveillance role within their own, often vast territory, not for military strikes, and in any of these cases, not outside their borders.

Brazil is a good example of this. The main threat to be addressed by Brazilian drones is neither territorial disputes with neighbors nor even armed insurgency, but rather organized transnational criminal networks. Brazilian drone imports and drone development, moreover are tacitly justified in terms of affirming Brazil's status as an emerging power, and explicitly in terms of the need to increase surveillance and control over vast borders and often lightly populated territories, that are traditionally under-monitored. But as is also normal in Brazil, investment in drones as well as in other defense equipment is also justified as part of an effort to promote knowledge transfer and improve national industrial capacity, not least because of their dual use, namely in agro-business, a massive sector of the Brazilian export economy. Even more specifically, the need to invest in the future competitiveness of the significant Brazilian sector of aerospace production, of which Embraer is the paradigmatic example, is also part of the equation, with the latter's military wing Avibras being in charge of developing the main model of Brazilian military surveillance drone in partnership with the Israeli company Elbit. This *Falcão*, or Brazilian hawk drone aircraft, is tailored to conduct reconnaissance missions and surveillance of Brazil vast borders with an autonomy of 16 hours, and a payload of up to 150 kilos of equipment (Andrade, 2013). It should be noted that as is recognized by Geraldo Branco, head of the Ministry of Defense's Sensitive Technologies Division "the manufacturing of drones is still incipient". But what is important is that even Brazil, a relatively peaceful democratic emerging power has "several companies" with the active encouragement of the state aiming at "reaching a high degree of technological capacity in this area" even if "few units have been commercialized" so far (quoted in Castro, 2014).

4 On this, see for instance Joshi and Stein (2013).

If even Brazil is engaged actively in this trend of diffusion of drone technology for both military and civilian use, what can be expected of other emerging powers in less benign neighborhoods? The answer is that a similar logic but with a much greater sense of urgency, especially in those countries of the Global South, and there are many, including India and China, facing the need to counter effectively active insurgencies and/or transnational terrorist groups active within their vast territories while minimizing public outcries at potential abuses when using use of force in counterinsurgency or counterterrorism – from the Naxalite insurgency in India to Uighur separatists in China.

Brazil also helps to illustrate that drones have also become important not just for their actual usage, but also because they have come to be seen as a must have new military technology, the absence of which from a country's arsenal becomes a noticeable gap. Drones, as has been the case with other weapons in the past, are also a status symbol. But it would be wrong to underestimate how profitable commercially they can be, and how useful operationally they have been.

At the same time is noticeable that among the limited if growing number of states with armed drones, actually only a few have actually used them for aerial strikes⁵. This small club is unquestionable led by the United States that alone conducted more than 1000 drone strikes while all other states combined do not reach a tenth of that. There have been a limited number of strikes by armed drones by Britain, Israel but also Pakistan, Nigeria and Iraq. What is crucial to note here is that the non-Western states that have made use of armed drones did so to strike insurgents within their own borders, in remote regions of their country they have difficulty controlling. The understandable concerns that armed drones diffusion would be destabilizing and would lead to a spread of the American style of drone of warfare (Knuckey 2015), does not seem to have been fulfilled so far. Armed drones as well as surveillance drones have been used to improve the control of each state's territory.

Furthermore, only a very limited number of states, only emerging or re-emerging great powers – China or Russia – are even likely to aim for and seriously attempt to try to emulate the global reach of US drones, investing in the global support system that it requires. China has recently, for instance, reached an agreement with Argentina for a satellite tracking station that might signal this type of ambition for the future. Most powers, however, probably even most emerging powers, will most likely be satisfied for some time with domestic or, at the most, a regional reach for drones in their neighborhood. Most countries would have no strategic reasons for a very costly and challenging global military drone system or a provocative use of drones in their neighborhood. The immediate risk might be the temptation to strike

5 For data on this see New America Foundation – International Security Program, World of Drones: Military. Available at <http://securitydata.newamerica.net/world-drones.html>.

insurgents seeking refuge in neighboring states. Concerning as this might be, it is hardly a novelty brought by drones, which are probably less intrusive and less provocative than cross-border counterinsurgency raids that have existed for many decades in the past.

As for non-state actors the main threat seems to come less from state sponsored diffusion than from the military use of drones originally design for civilian use. Hezbollah has apparently acquired a limited number of Iranian armed drones. Hamas seems to be improvising with double use civilian materials, and this is definitely the case for the Taliban that have used commercial drones to provide reconnaissance or even live guidance to their ongoing attacks (Gramer, 2017). But while the latter use seems to have been relatively successful, it is unclear that Hezbollah had any for its Iranian supplied drones.

These two facts have important implications for evaluating the impact of drone diffusions in the international system, because it seems to show that the use of military drones, even for military strikes, does not seem to pose a particular challenge to global security so far.

The main impact of drones in global security for the moment seems most likely to come from a relatively conservative use of drones, mostly for surveillance of remote and vast border territories, and strikes against insurgents in those areas, in fact reducing the justification for a US global strike strategy using drones and partly addressing, in so far as military tools can, the major challenge posed by the use of ungoverned spaces as safe-havens by criminal organizations, insurgents and terrorists.

There is then the very real risk of the use of drones by non-state actors, terrorist and insurgent groups. But this has already happened and is likely to continue to happen via the unconventional use of commercial civilian drones, widely sold in a globalized market, whose diffusion is therefore already extremely widespread and very difficult to stop. The greatest threat would come from its potential use to overcome a traditional practical obstacle to the use of weapons of mass destruction by terrorists – that a conventional explosion is not the best way to spread weaponized chemicals or other similarly deadly materials. But research into active countermeasures against unauthorized drone uses, as well as active preventive intelligence activities and other early warning systems against the diffusion of materials that might be used for weapons of mass destruction, would seem to be the most logical and practical response to these threats. In fact, the US military is actively developing countermeasures to drones.

Drones may offer the possibility of faster and cheaper catching up than more conventional aerial military capabilities. If this is the case, drone diffusion might marginally accelerate the trend towards a multipolar world. But whether or not this is a good thing is an open question. It is not evident that US unipolarity, very evident

in the case on its prolonged monopoly in the use of armed drone strikes, has been unequivocally good, also in terms of drone usage, feeding a pertinent discussion about a moral hazard of over use of drones. But whatever the verdict on the latter, drones seem most effective in less conventional uses, not in conventional conflicts with other states which may have their own drones and will have sophisticated air defenses that are or can be adapted to deal with drone threats. There is, therefore, no clear evidence that drone diffusion increases the likelihood of inter-state conflict or even of greater use of armed drones. As far as they improve surveillance capabilities they may even make the latter less likely and have – as a few others also have argued (Whittle, 2017) – in stabilizing effect in global security.

Of the Relative Efficacy and Legitimacy of Drones in Dealing with Insurgents in Ungoverned Territories

Military drone technology has been in use for decades since the Second World War. But the sudden massive leap in their capabilities of surveillance and a new capability of targeted armed strike came into being after 9/11. This rapid, massive development and expansion of military drones, much against the reservations of existing bureaucracies, is undeniably linked to drones providing a solution to the major problem of how to retaliate effectively against transnational terrorist organization making use of safe havens in largely ungoverned foreign territories via long distance unnamed targeted killing. And few would dispute that the systematic military use of drones has had a significant impact in diminishing the operational capability of Al-Qaeda core. Evidently drones have not solved the problem of jihadi terrorism and insurgencies, but in part because this has led jihadi groups to adapt, the most radical example being the attempt by Daesh to establish a jihadi state of its own.

Actionable intelligence is crucial in effective counterinsurgency and counterterrorism. Drones, especially sophisticated armed drones are ideally fitted for addressing this need very effectively. This is why they have impacted global security significantly and are likely to continue to do so. Even if military drones have so far had only a minor impact in the global distribution of power – this may grow if they become a major part of existing arsenals. And drones are unlikely to have an impact in the likelihood of conflict between states. In fact, the opposite is more logical with drones providing better border surveillance as a possible additional deterrent against open or even covert inter-state aggression or proxy wars.

In so far as the problem of transnational terrorism and insurgent safe-havens in remote ungoverned areas is unlikely to go away anytime soon, and alternative solutions have hardly become any more appealing and cost effective in the meantime, surveillance and armed drones as a tool of state security are probably here to stay.

Do drones and drone diffusion not have a clearly negative role regarding the respect for the law of armed conflict? The legitimacy of drone usage is not free of controversy or justified criticism. This is particularly true regarding so-called signature strikes that impose a broad generic deadly label violating the principles of distinction between civilian and military as well as of proportionality. But these are questions and controversies within the existing law of armed conflict they are not a fundamental challenges to it. Certain drone strikes may be violating the basic principles of proportionality and the obligation of due diligence in distinguishing civilians from combatants, but this would be an argument to do away with certain uses of drones, first and foremost signature strikes, not with surveillance drones or even armed drones *per se*.

The use by drones of so-called “intelligent weapons” is a misnomer. It tends to ignore the fact that these weapons, while potentially significantly more capable of discriminating targets and reducing collateral civilian victims of the use of military force, are only as “intelligent” and their deadly strikes and only as “targeted” as the quality of the intelligence available.

Moreover, arguing that drones can be effective says nothing about how wise politically and strategically a specific campaign of targeted killing or even certain usages of surveillance is in any given context. It is, of course, concerning if the extreme ease in the use of drones in the absence of alternatives, means that tactics is driving strategy in this regard. But this would seem to be an additional argument about the abuse of a drone quasi-monopoly by the United States, not an argument against all drone uses or drone diffusion.

I can accept that the diffusion of military drones has the potential to multiply some of these challenges, all the more so if the United States continues to use and legitimize tactics such as signature strikes. But I would underline again that military drone diffusion has been used primarily for securing border areas against insurgents or organized criminals. Drone diffusion not only does not necessarily lead to greater violation of the norm of non-intervention, it may on the contrary contribute to reinforcing it. States facing insurgencies or transnational terrorist within their vast difficult to control territories can in the future argue that they, not the United States, should use their own drones for surveillance and strikes against armed groups.

In so far as armed strikes and surveillance within a state border by that state also poses problems – for instance, the risk of an escalation of state surveillance by authoritarian regimes – this is not so much a threat to global security or international law as one to domestic law and human rights. And it is as such that the problem should be addressed. In any event these problems preexist the use of drones. While drones may allow an escalation of state surveillance and violence domestically, the challenges posed by how to deal lawfully and proportionately

with armed insurgency preexisted drones. Insurgents cannot be confused with ordinary criminals that might be handled by normal policy and criminal system and may even be potentially attenuated by drone diffusion. It can even be argued that drones offer the possibility of attenuating these problems by allowing more targeted attacks based on better intelligence provided by prolonged surveillance. This is not to say that drone diffusion is ideal or that it provides a “silver bullet” solution to the problem of the best military response to the challenges of insurgency and transnational terrorism. I do not believe such a simple solution exists, not least because other non-military dimensions are also needed. But in terms of the relative merits of different specific military tools, which should always be used with care and alongside other tools, drones do provide some relative advantages. To demonize all drone usage, will make it harder to distinguish the truly abusive and even criminal usages of drones.

Lastly, the “Terminator scenario” (i.e. of fully autonomous drones) would present a fundamental challenge to the law of armed conflict, to the existing international order and even more widely to human politics. Fully autonomous killing machines would clearly not be in accordance with existing laws of war, because they do not represent a legitimate authority. Who would be held legally accountable, the commander who activated them, the political leadership, the manufacturer? This would be a real problem even in the absence of a machine take-over of the world, a film scenario that according to some of the brightest minds in the planet nevertheless does pose a real threat to humankind. Yet it is difficult to argue that state drone diffusion *per se* would make this scenario significantly more likely.

Drones and drone diffusion may actually have contributed to furthering this debate by giving it added urgency. Not all drone exports are going to non-democratic regimes as we have seen. And even non-democratic regimes with drones would have no interest in losing control of this or any other weapon systems to anyone or any “thing”. In fact, if anything, historically authoritarian regimes have been obsessively concerned with exercising strict control over their military and their weapons systems.

The real risk may if or when it becomes obvious that autonomous systems would be significantly more effective militarily. Arguably Israel would be an interesting test-case of this, given how advanced it is in this field, and how much at risk of violent attack it has been. But the best solution for this problem would seem to be not an unrealistic ban on drone diffusion, but rather a cooperative development of a new international regime, based on an absolute universal ban on fully autonomous weapons systems of any kind.

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Drones, Technology, and the Normalization of Exceptionalism in Contemporary International Security

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Abstract

This article focuses on the normalization and institutionalization of (previously) exceptional security measures and the correspondent challenges to the constitutional foundations of Western democracies. It argues that established mechanisms of legal and political accountability are increasingly being challenged by technological developments with an impact on security practices. Technological developments unfold at a quicker pace than legal and constitutional change, and this mismatch can be critical.

Resumo

Drones, Tecnologia e a Normalização do Excepcionalismo na Segurança Internacional Contemporânea

O artigo foca-se na normalização e institucionalização de medidas de segurança (que antes eram excecionais) e os correspondentes desafios aos fundamentos constitucionais das democracias ocidentais. Argumenta-se que os mecanismos de responsabilização jurídica e política são crescentemente postos em causa pelos desenvolvimentos tecnológicos, com inerente impacto nas práticas securitárias. Os desenvolvimentos tecnológicos ocorrem a um ritmo bem mais elevado do que os necessários ajustamentos jurídicos e constitucionais, e este desajustamento pode ser crítico.

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Introduction

The international security environment that emerged after the terrorist attacks of 11 September 2001 in New York and Washington (hereafter 9/11) introduced new dynamics in the practice of international security. The most significant of these changes did not occur in the provision of insecurity; rather, they happened in the way liberal democracies have responded to threats they have been confronted with. Exceptional security measures focusing on individuals such as torture, extraordinary renditions, indefinite detentions, unauthorized surveillance, and targeted killings existed before 9/11. However, since then, they became widespread, to a larger extent openly recognized and accepted by governments, and, most importantly, they are gradually becoming an integral part of the normal instruments to fight non-state violence. To some extent, the post-9/11 era is more acutely characterized by the changes observed in the way Western democracies fight security threats than by the threats themselves these democracies are confronted with.

Although some of these practices, including torture and extraordinary rendition, have decreased in recent years, others have been internalized by Western democracies and its employment has been expanded. Mass surveillance, reliance upon digital metadata, and the use of drones for surveillance (Wall and Monahan, 2011), data gathering, and targeted killings are part of a *new normal*, in which notions of time and space are contested, and where technological asymmetries amplify power relations.

By directly causing the death of the object of those actions, targeted killings bring illiberal practices to its ultimate level. For the purpose of this article, the main issue at stake is not the existence of targeted killings. Countries such as Russia, Israel or the United States (US), among others, have been employing this extreme practice for some years – in some cases, even before 9/11 and without drones. What constitutes a novelty is the fact that these actions became no longer an exception when countering terrorism. As will be demonstrated below, the number of US targeted killings observed during the last years has increased exponentially, turning the Obama mandates into what some have labelled as the drone presidencies (Holmes, 2013; Bowden, 2013). Importantly, targeted killings carried out with drones have been officially recognized by the British government and have been a common practice by Israel; although its origin dates back a few decades, targeted killings (with drones or by other means) became a common practice by the Israeli security forces since the second intifada that started in 2000 and lasted until 2005.

In this context, the article explores the consequences of what is labelled here the *normalization of exceptionalism*, i.e. the process through which measures that until recently were seen as exceptional and last-resort options become normalized and institutionalized, and treated as a *normal* instrument in addressing identified security challenges. In concrete, it inquires the way targeted killings challenge constitu-

tional pillars of liberal democracies and the relationship they have with war and conflict.

Several factors concur for explaining the recent rise of the usage of targeted killings by Western democracies, chiefly the US. Cost-benefit analysis (whatever the nature of the cost), higher preciseness of the strikes, or the mere existence of the drone technology are to be found among the most commonsensical ones. While recognizing a multitude of arguments, the research conducted here, though, understands these killings as a form of risk management that goes beyond legal concepts such as preemption or self-defense¹. Moreover, the risk management reasoning enables a closer analysis of the concept of exceptionalism as well as the implication of its usage for challenging the constitutional foundations of liberal democracies.

The article starts with a debate on the way the risk literature has been employed for explaining post-9/11 responses to security threats. In addition, it will look into the concept of exceptionalism, in order to define it and operationalize it further on. In the following section, it will briefly revisit the process through which individuals became the centre of international (in)security concerns, aiming at understanding whether targeting individuals facilitates international conflict. Afterwards, the article addresses the issue of targeted killings. It will do it by looking into the way this practice has become normalized, by analyzing the number of incidents in recent years. Finally, it will explore and apply the concept of exceptionalism to investigate the challenges currently posed by targeted killings to liberal democracies.

Importantly, the article understands the challenges posed by targeted killings via drones to the constitutional foundations of liberal democracies as illustrative of a broader trend by which technological developments impact security practices and expose our societies to new dynamics.

Security, Risk and the Exceptional

The period towards the end of the Cold War closed an era that, despite being marked by severe concerns, was to some extent more predictable for decision-makers in the field of security. Up until that point, leaders and societies in Western democracies, and mainly in the US, faced one major, clear identifiable threat. But advances in technology, societal changes, and the emergence of environmental concerns, among other factors, gradually created a society increasingly concerned with the future and, concomitantly, with the risks it faced or it could face. Sociologists such as Anthony Giddens and Ulrich Beck identified these trends arguing that this emerging risk-society was a “systematic way of dealing with hazards and insecurities induced and introduced by modernization itself” (Beck, 1992, p. 21).

1 See Fisk and Ramos (2016) for a compilation of studies on preventive action.

Within the risk reasoning, societies fear the future, but not only the threats that they know already; they also fear the unknown unknowns, and it is their awareness of the existence of the unknown that makes societies willing to rely on precautionary action to reduce their exposure to risk.

The impact of 9/11 on Western societies expanded this notion and has taken the fear of the unknown into a new level. The Islamist terrorist threat, with its non-conventional and guerrilla characteristics and religious inspiration, had the precise qualities that could operate this expansion of the concept of risk society. This has been possible because the risk society has the fear of the enemy as a constitutive principle (Aradau and Van Munster, 2007 and 2009). Beck advocated that new risks are uncontrollable, unpredictable and potentially affect everyone; in the immediate post-9/11, the Islamist terrorist threat seemed to have precisely those characteristics. Also in the context of the post-9/11, other authors have understood risk as a legitimizer of a precautionary logic, which dictates that any level of risk is now unacceptable and should be avoided at all costs (Rasmussen, 2006; Petersen, 2011).

The precautionary logic is a cornerstone in the risk literature. But most importantly, it is also the notion that bridges this reasoning with idea of exceptionalism. Exceptionalism is part of precautionary governmental processes that challenge law's relationship with the future, institutionalizing the above – mentioned fear of the enemy as a constitutive principle for the risk society. According to Jef Huysmans, exceptionalism reshapes political communities in three ways: it redistributes fear and trust; it reconsiders inclusion and exclusion; and it institutes a predisposition towards violence (Huysmans, 2006 and 2008). It is precisely this last consequence of the exceptional condition that will be explored below. In parallel with other factors the way Western societies react to the fear of the unknown has contributed to changes in the nature of war and conflict. In the words of Christopher Coker (2009), today's practices of war and intervention should be understood in terms of tactics rather than strategic goals, and management rather than control. According to this logic, targeted killings seem to be a form of risk management (Kessler and Werner, 2009) that has strong constitutional implications. But how did we get here? How did targeting individuals come to be seen as the most efficient way of doing counter-terrorism? The roots of this logic can be understood as a result of the individualization of (in)security, a theoretical and political process that will be addressed in the section below.

Sanctioning Individuals

In the context of the restructuring of international politics in the post-cold war era, academics working on security studies identified a shift in the framework and referent objects of security. Until that point, the state had been the main referent object of security, i.e., an entity that is taken as a focus for analysis in security studies, or

“that which is to be secured” (Peoples and Vaughan-Williams, 2015, p. 4). But during the 1990s, security studies academics from the Schools of Aberystwyth, Copenhagen, and Paris, among others, developed theoretical thinking having the individual as the main referent object of security (Booth, 1991; Wyn Jones, 1995; Krause and Williams, 1997; Buzan and Hansen, 2009), theorizing about the processes by which security is constructed (Buzan, Waever and de Wilde, 1998) and the sociological dimensions of security practices (Bigo and Tsoukala, 2008). These critical security studies found fertile ground for widening and deepening security’s research agenda in some political developments taking place during the same time. The United Nations Development Program of 1994 and its introduction of the concept of Human Security are among the most relevant ones, illustrating this individualization of security.

In parallel, the post-Cold War period inaugurated the “sanctions decade” (Cortright and Lopez, 2000), a decade that witnessed a relevant increase of the instauration of United Nations (UN) sanctions against states such as Libya, Iraq, Yugoslavia, Haiti, Liberia and Afghanistan, among others. Whereas the main cause of legitimacy of these sanctions was the insecurity of their (national) individuals and the impossibility of emancipation, the massive use of this instrument also had negative consequences on those very same individuals. By using the state as the framework for sanctioning, the implementation of this regime had severe unintended consequences, of which the main example is the humanitarian crisis in Iraq in the 1990s (van Sponeck, 2006). Therefore, using the state as a reference for punishing led to collective punishing and to turning people against the external punishers rather than against their leaders (Wallensteen, 2005, p. 229).

The way found for facing these counter-productive measures was to individualize the recipients of the sanctions, due to the role of the former in fabricating the lack of security of their citizens. These targeted sanctions, also called smart sanctions, targeted only the individuals or organizations that were linked to a particular censurable conduct. By this, the state was no longer the referent framework for implementing the sanctions because *individuals* were the agents of insecurity. These dynamics contributed to detaching the concept of insecurity from the one of state. This *individualization of insecurity* is especially apt for ensuring international security against violence by non-state actors. This is particularly well illustrated in the UN sanctions regime against individuals affiliated with the Taliban and bin Laden, introduced in 1999 with UN Security Council Resolution 1267, a regime further expanded after 9/11 through a series of other resolutions.

Recent Developments

A similar dynamic was observed in the aftermath of the terrorist attacks of 9/11. Following an initial phase where conventional war against two states (Afghanistan and Iraq) constituted the core of the “war on terror”, the reference point quickly

changed from the state to the individual. But that fact did not necessarily reduce the intensity of the conflict. What it did change was the way the US and its allies, having the focus on individuals – rather than on states – dealt with the fear of the unknown. Seeing individuals as the main sources of (perceived) high levels of diffused insecurity led Western democracies to change their relation to law and their constitutions. Targeted killings can be seen as yet another case of illiberal practices that were adopted in the course of the “war on terror” (Bigo and Tsoukala, 2008), grouped together with widespread use of torture or massive surveillance. These practices not only challenge the rule of law in Western societies and the security vs freedom equation, but also fundamentally overrule the principle of reciprocity (Parisi and Ghei, 2003), a fundamental pillar of the just war tradition and in international law. The long shadow of 9/11 witnessed the end of reciprocity (Jenkins and Godges, 2011; Osiel 2009). But the implications of targeted killings go even beyond that, as will be demonstrated in the following section.

Targeted Killings and Exceptionalism

Is there anything riskier and more threatening to constitutionalism and the rule of law than the state of exception? Under which conditions do democracies remain democratic under the exceptional? What happens when the exceptional becomes the normal? These questions are fundamental cornerstones of the debate around the rise of the number of targeted killings. The number of drone strikes carried out during the outgoing Obama Administration are ten times higher than the ones carried out during the previous Bush Administration. The numbers precise related to this practice are difficult to calculate due to the secrecy that involves the drone strikes, covering both the decision-making process and the aftermath of the attacks. Additionally, the information provided officially is either non-existent or, at best, highly incomplete, and ground reports by victims are often misleading and can be exaggerated. Therefore, investigative journalism organizations and other NGOs such as The Long War Journal, the Bureau of Investigative Journalism, Arwars.org, or Drone Wars UK, are widely perceived as the most reliable sources for providing data. According to the Bureau of Investigative Journalism, there were 373 strikes in Pakistan between 2009 and January 2017, causing between 2,499-4,001 casualties. As for Yemen, the US covert action has materialized in 143-163 confirmed drone strikes with a total of 592-860 casualties. In Somalia, where US covert action started in 2007, there were 32-36 drone strikes with a death toll of 242-418. And in Afghanistan, from 2015 only, there are reported 1308-1309 strikes having killed 2,390-3,050 people. A big percentage of these casualties are confirmed civilians². As for Israel,

2 All the numbers were retrieved from <https://www.thebureauinvestigates.com/category/projects/drones/drones-graphs/>. They were lastly updated on 20 January 2017.

Falk (2015) provides a list with 12 of the most relevant targeted killings carried out by Israel between 2000 and 2010. How can we understand these dynamics?

It can be argued that inter-state conflict has severe costs, not only financial, but also political and social ones. Starting a conflict is a difficult and extreme decision because it implies troop and warfare deployment, casualties, political pressure, and a high financial burden. None of these aspects is observed to the same extent when the conflict is against individuals or smaller groups and the tactic used is targeted killings via drones. This manifestation of Beck's individualization is reinforced by the secrecy that involves these practices. It can be argued that the smaller (financial, political and social) costs involved in targeting individuals as opposed to targeting states contribute to the normalization of exceptional security measures. But this explanation is highly incomplete. In a different social context, in a different time, the numbers revealed above would have created outrage and social mobilization from Western constituencies. What are the forces that explain this absence of self-reflection and the continuation of such a practice?

Understanding the way modern societies relate to the unknown provides new elements to answering that question and for understanding the way that drone technology is changing the nature of war and conflict. As mentioned by Coker (2009), risk became the language of war in everything but the name. The way we think about war – when it is justified, how it should be fought and how it is perceived – is now fully dominated by the notion of risk management. In this sense, the characteristics of drone technology (at least considering how it has been used outside battlefields) impact the nature of modern conflict, expanding the battlefield to a global scale without observing principles of last resort, imminence of threat, and proportionality. By becoming the language of war, then, risk and drones facilitate the state of exception, challenging principles of international law. It is this line of reasoning that led Kessler and Werner (2008) to understand targeted killings as a form of risk management, blurring categories of peace and war, legal and political, and going beyond established mechanisms of accountability. I will proceed now to show that the implications of these actions also affect fundamental principles of constitutionalism.

Constitutional Challenges

The vast majority of targeted killings observed in the last years took place in Pakistan, Yemen and Somalia, countries with which the attacking country is not at war. Being outside the state of war has several legal implications. One of them is that the engagement on those specific conflicts and the authorization for those killings do not follow the constitutional procedures that, in liberal democracies, ensure the exceptionality of war. War, or the resemblance of it, is not exceptional anymore. The laws of war (McMahan, 2009) were made *by states for states*, and the political

systems of liberal democracies created mechanisms making war against other states an exceptional event. When the agents of insecurity become the individual, those constitutional checks and balances that ensure the exceptionality of war are not observed. Although it should be underlined that international law does not prohibit targeted killings per se, the tight criteria established for allowing that practice are often not observed. And even though the debates on the legal interpretation of those criteria are complex and not consensual, it is beyond discussion that many attacks are straightforwardly illegal, many cause illegitimate collateral damage, and many are decided in the absence of enough information on the target.

The Separation of Powers' Dimension

Decision-making on targeted killings challenge liberal conceptions of separation of powers, a principle that has been a pillar of constitutional democracies for more than two centuries. By relying on Presidential/executive power, they do not engage the judicial branch in a process that is seen by many as extra-judicial execution. Issues such as fair trial, right to defense and right to be heard, assured in civil courts, are not observed in the case of targeted killings using military drones. Parliamentary/legislative control (or Congress control, in the case of the US) is also highly disregarded, leading to the non-verification of the dynamics of checks and balances (Bradley and Goldsmith, 2005). Even though the due process clause can be alleviated in exceptional cases, many international lawyers would argue that it cannot be ignored on a systematic way (Fiss, 2015).

Efficiency, cost reduction, and autonomy are presented as positive features of drone usage. The combination of these characteristics allowed the US to decimate the Al-Qaeda leadership in the Af-Pak region, for example. But it also led to a massive number of casualties that are not justifiable. It led to an exponential increase of extrajudicial killings, therefore having the executive branch overtaking functions of the judicial. In the words of Peter Singer (2012):

“America’s founding fathers may not have been able to imagine robotic drones, but they did provide an answer. The Constitution did not leave war, no matter how it is waged, to the executive branch alone.”

The Legitimacy of the Targets

US drone activity has also expanded the notion of “legitimate target” to a point not supported by international law, especially with regards to the so-called “signature strikes”, by which unidentified militants are targeted on the basis of their network and behavior. At the same time, it has inverted the burden of proof in the definition of what constitutes a militant, presuming that someone of a given age and of a given sex in a particular context is a militant and therefore a legitimate target.

The authority in which the outgoing Obama Administration found itself invested is far broader than what the Constitution and international law allow. As advocated by the American Civil Liberties Union, outside of armed conflict, both the Constitution and international law prohibit targeted killing except as a last resort to protect against concrete, specific, and imminent threats of death or serious physical injury. An extrajudicial killing policy under which names are added to CIA and military “kill lists” through a secret executive process and remain there for months is plainly not limited to imminent threats.

Drones are Appealing to Democracies

From a different perspective, it is worth noting that the majority of the countries possessing drones are well-established democracies. At first sight, this may not mean anything new. Democracies such as the US, Israel, France and the UK possess the most advanced weaponry available, including nuclear devices. Therefore, having the most advanced drones does not come as a surprise. From a theoretical point of view, though, there could be more sophisticated explanations for why the checks and balances, as well as the separation of powers typically observed in democratic states, are not observed in the cases of targeted killings using these weapons.

Frank Sauer and Niklas Schörning argue that drones are particularly appealing to democratic states because their advantages are precisely related to the reasons why democracies go to war so exceptionally. These authors claim that “the specific interests and norms that are conventionally taken to be pivotal for democratic peacefulness – the need to reduce costs, the short-term satisfaction of particular ‘risk-transfer rules’ for avoiding casualties, and the unkeep of a specific set of normative values – constitute the special appeal of unmanned systems to democracies” (Sauer and Schörning, 2012, p. 365). When combined with a broad perception about the need for precautionary action, all these factors come together and turn something highly exceptional (a decision to kill an individual) into a tool like any other. The numbers presented in this article reveal that targeted killings have become normalized at the expense of strong constitutional breaches. The nature of war and conflict has now fundamentally shaken liberal democratic societies. To conclude with the words of Christopher Coker (2009, p. 26, emphasis in the original):

“The logic of risk colonisation since 9/11 has fundamentally changed traditional concepts of security. It has led to the concept of a ‘long’ or ‘never-ending war’, an *astrategic*, tactically driven risk management policy which locks the West into an endless process of risk management. A risk society is necessarily a safety society, one that is permanently on the defensive.”

Conclusion

This article advances four theoretical arguments. In line with the literature on risk, the first one sustains that contemporary societies' relation with the unknown offers a possibility for illiberal security practices to flourish. The second argument is that these illiberal practices are also facilitated by the individualization of insecurity, a process that allows the executive power to escape the democratic checks and balances that (used to) make war and conflict an exceptional event. Thirdly, I expand Kessler and Werner's argument that targeted killings are better understood as a risk management technique, a practice normalized after 9/11; this normalization was made possible because 9/11 was a critical juncture that enabled forms of extreme coercion by expanding the outreach of the 'state of exception'. Finally, drawing on the literature on risk and exception, the article shows how the general practice of targeted killings with drone strikes presents fundamental challenges to democratic constitutionalism; this happens because technological developments occur at a quicker pace than legal and constitutional change, and because the democratic constitutional procedures regulating the state of war had interstate war as a framework of reference and are not easily transferable for the majority of the scenarios brought about by contemporary non-state conflict.

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Visibility and Politics: an Arendtian Reading of the US Drone Policy

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Abstract

This article analyses the critical connections between drones as lethal technological devices, visibility, and the very possibility of politics. Drawing on Hannah Arendt's core postulates on politics, modern security and society, it problematises the political implications of using drones as a prominent security instrument in contemporary life. This reading is unpacked through the concept of visibility as a critical reference to analyse how security policies are dealt with politically. It suggests that drones have operated as an instrument of double invisibility, both to those living in the contexts where they are employed, and to those under whose name they are being used. The consequences of this invisibility for political life and the practice of security are also discussed in the light of the policy under the Obama administration.

Resumo

Visibilidade e Política: Uma Leitura Arendtiana da Política de Emprego dos Drones pelos Estados Unidos

Este artigo analisa as ligações cruciais que existem entre drones enquanto equipamentos tecnológicos letais, visibilidade, e a possibilidade da política. Com base nos pressupostos fundamentais de Hannah Arendt relativamente à política, à segurança e às sociedades modernas, problematiza-se as implicações políticas da utilização de drones. Esta leitura é articulada através do conceito de visibilidade, enquanto referência crítica para analisar a forma como as políticas de segurança são geridas politicamente. Sugere-se que os drones têm atuado como um instrumento de dupla invisibilidade, tanto para os que vivem nos contextos em que os drones são usados, como para quem eles são usados. As consequências desta invisibilidade para a vida política e para a prática da segurança são também discutidas à luz da política seguida pela administração Obama.

Introduction

Technology is radically changing security practices across the world and nothing exemplifies it better than the intensive use of unmanned aerial vehicles (UAVs) by the United States (US) in multiple theatres of operations across the world. As President Obama's "weapon of choice", these so-called drones have been used for different purposes such as surveillance and tracking, but also as a killing weapon in counter-terrorist and counterinsurgency contexts. In a three-page internal assessment released for the first time by the Obama administration on July 2016, the drone programme was defined as:

"a combination of both independent and overlapping efforts overseen by the military and the CIA – with support from other intelligence community agencies such as the NSA [National Security Agency] – that vary in intensity and management depending on the country" (Devereaux, 2016).

Effectively, the US Armed Forces and the Central Intelligence Agency (CIA) have been using lethal drone strikes since 2001 to disrupt and eliminate organisations labelled as terrorist such as Al-Qaeda and, more recently, the Islamic State (IS). This implies that drone strikes have occurred in countries other than those in which the US had a direct military engagement, as long as the presence of Al-Qaeda (or IS) affiliates can be verified, including countries such as Afghanistan, Iraq, Pakistan, Somalia and Yemen (Barrinha and da Mota, 2016).

This drone programme, whose intensity and management is so loosely defined by the US government, has been severely criticised and documented by legal scholars and Non-Governmental Organizations (NGO's), particularly in relation to non-combat contexts such as Pakistan or Yemen (HRC, 2010; O'Connell, 2010; Stanford and NYU, 2012; Reprieve, 2014; The Bureau of Investigative Journalism, 2015). By extension, the use of drones by the CIA has been censured as well, as the overall secrecy of these operations raises important questions of accountability and legitimacy.

The wider mental configuration of the drone policy seems to occur within what Wiebe Bijker (2006) has identified as the dominant paradigm, among politicians and practitioners, of technological determinism, which favours a standard image of technology as being positive, comforting and that mostly contributes to solving problems:

"technology is viewed as a sufficient end in itself and [...] the values of efficiency, power, and rationality are independent of context. The standard view accepts that technology can be employed negatively, but in this view the users are to be blamed, not the technology" (Bijker, 2006, p. 683).

The perspective that users are to be blamed may be found in much of the literature on the ethics of unmanned military technology (Strawser, 2013); accordingly, intelligence failure or poor decision-making are responsible for operational mistakes (Shane, 2015).

This article aims to discuss the ultimate political consequence of a deterministic mode of thinking, according to which technology “cannot be subject to ‘outside’ control in the form of policy-making or political debate” (Bijker, 2006, p. 683). This article draws on Hannah Arendt’s core postulates on politics, modern security, and society to problematise the political implications of using drones as a prominent security instrument in contemporary (and future) life. The starting point of this reflection is that drones are an instrument of double-invisibility: they are invisible to those that live in the areas where they are employed and invisible to those under whose name they are being used. As it will be seen, such invisibility has important consequences in terms of how political life unfolds and, ultimately, on how security as a political practice is decided and executed.

In terms of structure, the article will first unpack the idea of “visibility” as central to the study of drones and their impact upon politics, power and security. Visibility, we argue, is crucial to understand the fundamental distinction that Arendt offers in her work between the private and the public sphere, which ultimately also sheds light on the complex dynamics of political secrecy and legitimacy underlying the use of drones. The article will then analyse how drones materialise in their invisibility and discuss what that means politically. The third part will focus on the US drone policy during the Barack Obama tenure in the White House and the recent positions he adopted before leaving office. Here, it will be shown that his discourse on making the drone policy more accountable seems to express the idea of partial repent, in an attempt to give the issue more visibility on the public realm.

Arendt and the Political Condition of Visibility

Hannah Arendt’s work became popular (and controversial) during the 1960’s with the publication of *Eichmann in Jerusalem: a Report on the Banality of Evil* in 1963. She was by then a well-established political thinker, having published *Origins of Totalitarianism* (1951) and *The Human Condition* (1958), among other important works. Arendt’s work has been progressively applied to international relations in the last decade (Lang and Williams, 2005; Owens, 2007; Frazer and Hutchings, 2008; Berkowitz *et al.*, 2010; Buckler, 2011) in particular by authors concerned with the conceptual and philosophical connections between war, politics, and ethics. Although Arendt is not commonly associated with the study of security – much less with the specific issue of drones about which so much has been written in the last few years – her work offers important insights on the role and the dangers of technology in society. As we are moving more firmly towards the technologically-enabled fuzziness between internal and external security (Lutterbeck, 2005), Arendt, as the philosopher of plurality and political freedom, certainly assumes an increasingly prominent role in assessing the impact that technology has in the definition and implementation of security policies.

In *Human Condition*, Arendt establishes a connection between technology and politics, when she considers that the direction of scientific and technological progress, with its subsequent consequences for the future of human nature on Earth, result from a *political choice* (1998 [1958], p. 4). Politics, in her view, should dictate the normative fate of technology, drawing on the utilitarian assumption that “[e]very tool and implement is primarily designed to make human life easier and human labor less painful” (ibid., p. 151). Politics is defined as the ultimate public arena where the possibility of freedom lays collectively, and where all must be heard or seen (ibid., p. 50). In the public realm of politics, individual freedom cannot be thought outside of a collective polity, as politics becomes the public arena of struggle and freedom for collective actors. This has to do with Arendt’s conception of politics as *action*, whereby action is described as the only activity directly driven by men without the intermediation of things, meaning to take an initiative, to undertake, in order to make something work, move or change (ibid., p. 177).

Accordingly, Arendt suggests, if man is a social animal, action presupposes society, and politics cannot be practiced in loneliness. The true basis of politics is the freedom of coming together and discussing issues of public interest. Arendt’s concern was with this possibility of sharing plurality, more than with the result, or the form of the discussion¹. This understanding of politics is placed against that of tyranny, in which there is no political conflict and no political consensus, but simply the elimination of the possibility of both. Following Montesquieu, Arendt (2007, p. 724) argued that it is the principle of fear that is at the core of tyrannies: “[t]he tyrant acts because he fears his subjects and the oppressed because they fear the tyrant”.

Political deliberation on the use of technology, or any other matter within a polity, should obey the same principle of public, collective debate, and be subject to struggle and discussion. But in the particular case of technology, Arendt’s view suggests that the discussion is:

“not so much whether we are the masters or the slaves of our machines, but whether machines still serve the world and its things, or if, on the contrary, they and the automatic motion of their processes have begun to rule and even destroy world and things (1998 [1958], p. 151).

The object of politics should not be human mastery over technology, but its actual practical, normative effect upon human life. Arendt is concerned with the possibility that the automation of destruction depoliticises technology, thus overruling the collective, political debate and human capacity for decision. In this sense, “visibility” unfolds as the ultimate political condition for technology to remain

1 Her work has been criticised for its lack of consideration for strategic action. For Amy Allen (2002, p. 143), “Arendt’s attempt to exclude strategic action from the domain of the political altogether paints too rosy a picture of our political life”.

within the public realm and within the possibility for human freedom. It is noteworthy how Arendt's predicaments on the political challenges posed by technology were an early elaboration of what contemporary technology studies have come to develop. For instance, Wiebe Bijker (2006, p. 689) discusses the notions of politics and democracy as used in technology studies, and highlights the centrality of knowledge, transparency, and accountability within the political system of modern democracy. Technology is now seen as "producing and upholding a modern democratic concept of *visible power* whose exercise appears *publicly accountable* to the large public" (ibid., p. 690; italics added).

Related to the concept of visibility is that of violence. For Arendt, violence as an instrument of coercion can destroy power, but power can never grow out of it: "power and violence are opposites; where the one rules absolutely, the other is absent" (1969, p. 56). Actually, the particular use of violence to promote fear signifies the absence of power. The use of violence tends to be opposite to politics, as it usually leads to the silencing of plurality. Contrary to power, violence can only be politically used if justified, for it must be a means to a given (political) end – war or violence in general cannot be justified in any other terms, such as morality².

Violence is only justified if used briefly and in order to establish new political spaces (Beardsworth, 2008, p. 507). In *On Violence* (1969), Hannah Arendt defines two contexts in which violence is justified – as a response to extreme injustice, and as an opener for political space. The use of non-violence requires, as a pre-requisite, that there already is some space for politics. As she suggests, Gandhi's campaign would not have succeeded in anti-political places such as Nazi Germany or Stalin's Soviet Union (Frazer and Hutchings, 2008, p. 102). In that sense, violence is never political, but it can open the space for its creation. As explained by Elizabeth Frazer and Kimberley Hutchings (2008, p. 104):

"Arendt certainly wants to say that [violence] is not political, strictly grammatically speaking. But there seems to be no particular reason, on just this account, why political actors should reject non-political (strictly speaking) actions if they bring about desired political effects. Such as the one that she has in view – making the public world in which political action is possible. Of course, for the most part Arendt argues that violence is politically ineffective. However, the concession that violence might be the only way significantly weakens this strand of her argument."

Although visibility appears as a fundamental condition for politics and plurality, Arendt accepts as an exception to the public realm, that the public going private is

2 Regarding morality in politics, Arendt follows the Schmittian critique, by refusing to acknowledge its role. As Patricia Owens (2007, p. 508) concludes: "[b]oth Schmitt and Arendt shared a belief that morality in political and international affairs could only lead to disillusionment and the further intensification and brutalization of war".

beneficial for things that need to be hidden from publicity. Private property is “the only reliable hiding place from the common public world, not only from everything that goes on in it but also from its very publicity, from being seen and being heard” (Arendt, 1998 [1958], p. 71). Within the protective security of four walls, humans meet a location, a space that is reserved for concealment.

In Arendt’s view, visibility is an essential criterion for the practice of politics, but invisibility is no less important as a space for reclusion, where one can get on with the aspects of life that are not politically relevant, or what Arendt calls “life processes”. As mentioned by Patricia Owens (2011, p. 16):

“The dominance of security does not reside in empowering the sovereign to decide the law and exceptions to the law [...]. The dominant discourses and practices of security are exemplary instances of the modern rise of the social, as understood by Hannah Arendt. The social is the realm where the ‘life process’ has achieved its own public domain; the discourse of security has provided the central justification and mechanism for the expansion of the ‘life’ of society under capitalism and the related modern belief that life is the highest political good.”

Arendt sees this rise of the social as “the modern discovery of intimacy” (1998 [1958], p. 69), in which the private realm dissolved. This represents an intrusion into the public space, because the fixation of the social with the life process of mankind sacrifices *action* – as the work in concert of a collective (Gordon, 2001, p. 100). As a consequence, both public and private spheres are ruined: “the public because it has become a function of the private and the private because it has become the only common concern left” (Arendt, 1998 [1958], p. 69). To Patricia Owens (2016), this phenomenon equals to “household governance”, a form of governance based on the “ministration of life processes” in which populations are essentially domesticated and depoliticised – an understanding that is not far from Michel Foucault’s biopolitics (2000). In all, the rise of the social makes discourses and practices of security more visible, but only to the extent that they exacerbate life’s necessities of security, thereby overcoming the private realm, and minimising the security of concealment for the sake of social control. In other words, although security is provided by, and through, high visibility, it remains fundamentally depoliticised and disregards the freedom of populations.

As the next sections will show, it can be argued that the use of drones produces an inversion of this visibility-invisibility relation: the politics of security and its execution become invisible to the public eye, whereas the notion of a secure private environment disappears from the areas in which drones are operating. In that regard, drones invert the relation between visibility and politics: they hide what is political and highlight what is supposed to be private.

Drones and Low Visibility: the Security of American Life over Politics?

This section highlights how the low visibility of drone policies results from a “disassembled”³ (Abrahamsen and Williams, 2009) relationship between control and outsourcing that has been managed by the Obama administration in terms of covertness and political secrecy. Within that ambiguous equation, political visibility has become secondary to the provision of security in the name of North American citizens, and has affected both the public realm of other countries, and the very possibility of freedom for the citizens in foreign territories where drones are used as lethal weapons. In this sense, depoliticisation occurs due to an accentuation of the US private realm as the realm of freedom, and to the preoccupation with the life process (Gordon, 2001, pp. 105-106) within the security of the US’ four walls.

Secrecy and deception have been recurrently used throughout history as a “means to achieve political ends”, and can therefore be seen as “justifiable tools” (Arendt, 1972, p. 4). However, Arendt raises the question of to whom is concealment destined. Is it ever aimed at the enemy, or is it destined to domestic consumption? (ibid., p. 14) Are there any tactical considerations for secrecy⁴, concealment, or lying? As Katharine Kindervater shows (2016), the covert use of military technology is not uncommon in the evolution of Western warfare, often combined with different techniques of intelligence, surveillance and reconnaissance. In this context, the role and involvement of the CIA in the US drone programme is nothing particularly new or surprising. Although it has never been clearly acknowledged or held accountable, “the highly classified CIA program to kill militants in the tribal regions of Pakistan [...] is the world’s worst-kept secret” (Bergen and Tiedemann, 2010). The insistence on maintaining CIA’s actions non visible has effectively been endorsed by Barack Obama, who has referred to legal arguments such as the “state secrets privilege” to deflect inquiries into the government’s use of lethal force in foreign countries from the beginning of his presidency, and has never forced the Agency to publicly answer for the deaths of non-Western civilians during the eight-year covert bombing campaign (Devereaux and Emmons, 2016). As Simon Chesterman explains:

3 Rita Abrahamsen and Michael C. Williams (2009) draw on Saskia Sassen’s notion of state “dis-assembly”, according to which national states disassemble and develop new global assemblages incorporating privatisation and globalisation, to approach the growth of private security within broader shifts of global governance. They show how the public-private and global/local distinctions and relationships have been re-articulated into what they term “global security assemblages”.

4 In the US, secrecy is no novelty. In 1969, for instance, President Nixon and Henry Kissinger decided to bomb Cambodia without any notice to Congress or the public, and the raids were conducted in deepest secrecy (Cockburn, 2015, p. 429).

“Intelligence services have a chequered history of abuse, but their legitimate activities tend to be justified in established democracies by reference to their grounding in the rule of law – a relatively recent requirement in some countries – and the existence of an accountability chain to democratic institutions” (Chesterman, 2008, p. 1069).

Not only is this political secrecy a real challenge to visibility and accountability, as it is reinforced by the “scientific development and knowledge production and practices of killing and control” (Kindervater, 2016, p. 234). Security increasingly depends on a form of specialised and technical knowledge that can only be provided by a restricted epistemic community of experts, such as in the fields of information systems, engineering, robotics, and cybernetics. Many notions and procedures from those fields are unknown to most of the policymakers and require very specific skills and information. Such form of knowledge is so technical that it is not meant to be public, in the sense that it is not understood or mastered by a vast majority of individuals.

Therefore, developing technologies such as drones, and applying them in contexts of warfare, counter-terrorism or counterinsurgency, can ultimately be considered as a sophisticated form of contemporary social and political control that is “much better symbolized by manipulation than coercion, by remote and invisible limits than by guns or handcuffs”, implying “being more covert, embedded and remote, and often without the awareness or consent of its subject (Bijker, 2006, p. 687). For the Obama administration, this lack of publicity began in the very decision-making process designed for drone strikes. Every week during his presidency, Obama held a meeting in the White House Situation Room with two dozen of security officials, during which he was given a list, or PowerPoint of suspected terrorists, and approved each individual name to become a target to kill, based on the suspects’ personal biographies (Becker and Shane, 2012). According to the “Drone Papers” – a series of secret military documents disclosed by *The Intercept* in 2015 – there was a kill list with selected individual targets for assassination, according to which the President only approved the targets, and not each individual strike. As for the CIA, it is reported that it has created its own list and rules for strikes, meaning that there are additional strikes and deaths to those authorised by the kill list that occur in the shadow (Currier, 2015).

Politically, the apology of the use of drones is made in reference to their effectiveness, and sustained by a discourse of rationality in risk avoidance:

“Our actions are effective. Dozens of highly skilled core Al-Qaeda commanders, trainers, bomb makers, and operatives have been taken off the battlefield. Plots have been disrupted that would have targeted international aviation, US transit systems, European cities and our troops in Afghanistan. These strikes have saved lives” (The White House, 2013).

This kind of security decisions are part of “reflexive politics” (Rasmussen, 2001), as a politics in which meaning is constantly constructed in a rationalisation of risks, in

order to manage them despite their latent inexistence. This move promotes preemptive action according to “pre-active politics” (Beck, 2009, p. 41), which privileges prevention, expert knowledge and technical solutions over problem-solving properly said (Abrahamsen and Williams, 2007, p. 135). As threats such as terrorism are hardly controllable or eliminated, governments prefer to act by anticipation than run higher risks by not intervening (Coker, 2002, p. 62).

The targeting and subsequent killing of Anwar al-Awlaki in Yemen in 2011, an American citizen, has been one of the most controversial cases to date, giving rise to much questioning and partial attempts at public justification by the Obama administration. Andrew Cockburn exposes the case as follows:

“Anwar al-Awlaki, for example, billed for a time as “the most dangerous man in the world,” was publicly nominated to the CIA’s kill list in April 2011. Awlaki had already retreated to the heartland of his tribe, the Awalik. It was easy to believe that the fugitive was hidden in the desert fastness, but in fact, as Guardian reporter Ghaith Abdul-Ahad discovered when he visited the tribe’s ruling Sultan, although everyone in the neighborhood knew where the notorious preacher was living, no one seemed interested in arresting him. “The government haven’t asked us to hand him in,” Sultan Fareed bin Babaker told the reporter. “If they do then we will think about it. But no one has asked us.

A few weeks before this conversation took place, a pair of Justice Department lawyers in Washington had obligingly provided the Obama administration with a secret legal justification for summarily executing Awlaki, accepting as a premise that he posed an ‘imminent’ threat and that his capture was “infeasible” (Cockburn, 2015, p. 3907).

The fact is that, further to a lawsuit filed by the *New York Times* and two of its reporters, the US federal court has refused to require the Department of Justice to disclose a legal justification for the targeted killing of Awlaki (Liptak, 2013). The motivation behind this lawsuit was to question US government and to know its legal position on the use of targeted killings against persons having ties to terrorism. To the lawyer of the *New York Times*, Jameel Jaffer, this ruling “denies the public access to crucial information about the government’s extrajudicial killing of US citizens and also effectively greenlights its practice of making selective and self-serving disclosures” (Liptak, 2013). Ultimately, this is related to what was mentioned earlier as the intromission of security in the individuals “life processes” (Owens, 2011).

Within the context of the US drone policy, concealment is a principle destined to the enemies of the US – as in the case of the CIA operating in foreign sole – but it is also intended for domestic consumption when the criteria for drone targeting are not transparently discussed in the public realm. What we also see with the use of drones overseas is a transformation of both the private and public sphere of the countries subject to US drone strikes, where contestation or discussion is absent from the public view, and where the principle of safety of “private life” is taken as a disposable principle even in non-conflict settings. In Pakistan, for instance, the security of

four walls is something that has virtually ceased to exist, as the number of citizens subject to the fear of drones largely exceeds the number of potential terrorists (Stanford and NYU, 2012; Allinson, 2015). As argued by Barrinha and da Mota (2016), drones have produced fundamentally uninsurable security subjects in the territories in which they operate: they are subjects perceived as not being entitled to any form of secure or securable life. The ultimate consequence is the depoliticisation of those contexts (Bijker, 2006, pp. 693-694).

The Expiation of Obama: Attempting to Regain the Political

As seen so far, the drone programme under the Obama administration has been surrounded by secrecy, covert decisional processes, obsolete congressional oversight and public silence, outdating to great extent the political condition of visibility, and eluding a parcel of US public space and freedom. This section focuses on how, as its mandate approached to the end, the Obama administration became aware of the negative consequences of that political invisibility, and, using Patricia Owens (2001, p. 28) words, attempted to re-create a “political island of security” by reconstituting the idea that political promises had been kept, thus re-securing a “space for freedom”. These notions are offered by Hannah Arendt as well, and help reflecting on the possibility for Barack Obama’s presidency to regain the political in what regards its drone policy. To Owens, “securing a space for freedom” (2011, p. 18) enables a public space of speech and action, in which islands of security can be created by making and keeping promises. To sustain this idea, one may illustrate Obama’s promises prior to his mandate about how he envisioned his administration would conduct counter-terrorism and counterinsurgency. Back in 2007, Obama stated:

“I will not hesitate to use military force to take out terrorists who pose a direct threat to America. This requires a broader set of capabilities [...]. I will ensure that our military becomes *more stealth, agile, and lethal in its ability to capture or kill terrorists*. We need to recruit, train, and *equip our armed forces to better target terrorists*, and to help foreign militaries to do the same” (Obama, 2007; italics added).

In retrospective, it may be considered that the drone programme implemented during Obama’s two mandates respected scrupulously what he had planned – the lethality in capturing and killing terrorists, but also civilians by extension. Accordingly, the number of drone strikes increased very significantly under the Obama administration. Although the data officially released in 2016 indicate that between 64 and 116 civilians were killed by US drone strikes in Pakistan, Yemen, Somalia and Libya during the two terms of Obama’s presidency, and 2,372 to 2,581 combatants, it is estimated that the Obama administration conducted nearly nine times more strikes than his predecessor Bush (Devereaux, 2016). However, these numbers remain very far from the most conservative estimations presented by

investigative journalists and independent researchers, as they contrast with the estimations of at least 200 and as many as 1,000 civilians killed by American drone strikes by organisations like the Long War Journal or the Bureau of Investigative Journalism (Devereaux and Emmons, 2016).

In 2006, still as Senator for Illinois, Obama had been publicly critical of the Congress overseeing its responsibilities regarding Guantanamo, as he defended the fundamental human rights of the detainees as being “bigger than politics” (Obama, 2006). Later, as a candidate to presidency, Obama referred that the Bush counter-terrorist policy had become “an excuse for unchecked presidential power”, and that America’s “most precious values” had been compromised (Obama, 2007). In this sense, he promised he would act differently from George W. Bush in terms of political visibility, foretelling the need to foster the capabilities of intelligence and law enforcement agencies without undermining the Constitution and freedom (Obama, 2007). These political promises help to understand how:

“Sooner or later, U.S. officials and diplomats toiling to implement what they believed was American policy came to realize that there was really only one issue at stake: the domestic U.S. political fortunes of the Obama administration. ‘No bombs on my watch,’ that’s all they wanted to be able to say,” explained one former Obama White House official to me. “Drones were a cheap, politically painless way of dealing with that. No one even talked about it very much” (Cockburn, 2015, p. 3799).

Seemingly, the drone programme might have been painless and uncontroversial within the political arena of partisan opposition, but it rapidly became extremely controversial among scholars, investigative journalists, and humanitarian organisations. As Arendt says, “there always comes the point beyond which lying becomes counterproductive” (Arendt, 1972, p. 7). Many reports were published throughout Obama’s presidency, denouncing the illegality, disproportionality, and overall wrong-doings of drone targeting (O’Connell, 2010; HRC, 2010; HRW, 2012; Stanford and NYU, 2012; Reprieve, 2014; The Intercept, 2015). The US kept defending, throughout Obama’s tenure, its drone programme, rebuffing the accusations of secrecy and significant death of civilians in Pakistan and elsewhere.

During this period, there were, however, two changes worth mentioning. The first regards the significant reduction in CIA’s drone operations, which saw its activities curtailed in places such as Yemen and Syria, with the White House openly preferring the Joint Special Operations Command (JSOC) to undertake drone lethal operations whenever possible (Miller, 2016). The second has been unfolding since last summer, when the administration released the internal assessment of the drone policy in July 2016. This was justified in terms of the nation’s imperative commitment to comply with its obligations under armed conflict, “including those that address the protection of civilians, such as the fundamental principles of necessity, humanity, distinction, and proportionality” (Devereaux, 2016).

Later in October 2016, Obama granted an interview to Jonathan Chait of the *New York Magazine* that is essential to understand his attempt at regaining the political before he went out of office. In it, he acknowledges, among other things, the institutional constraints preventing him from discussing more freely issues related to the US drone programme: “we can’t advertise everything that we’re doing without inhibiting our effectiveness in protecting the American people” (Chait and Obama, 2016). About his drone policy he argued that although he does not want the US “to get to the point where we’re that comfortable with killing”, he thinks people “don’t always recognize the degree to which the civilian-casualty rate, or the rate at which innocents are killed, in these precision strikes is significantly lower than what happens in a conventional war” (Chait and Obama, 2016). After avowing his discomfort with the practice of targeted killing based on a list, Obama basically justifies the civilian deaths by minimising their rate in comparison to conventional warfare. Ultimately, there is a consequentialist rationale at play that justifies and legitimises everything else. In spite of that, this interview displayed Obama’s attempt to “institutionalize rigorous debate and an attitude of aiming before you shoot”, and his overall concern with “constructing greater transparency” in an effort to institute accountability measures for future presidents to come:

“I haven’t lost my preference for good old-fashioned debate, bills, and the democratic process. If there’s one wish that I have for future presidents, it’s not an imperial presidency, it is a functional, sensible majority-and-opposition being able to make decisions based on facts and policy and compromise. That would have been my preference for the majority of my presidency. It was an option that wasn’t always available. But I hope the American people continue to understand that that’s how the system should work” (Chait and Obama, 2016; italics added).

This statement contains all the elements essential to the realisation of political action within the public realm, as Arendt idealised – debate, democracy, political pluralism, compromise. However, it seems this was a promise that was not available for Obama to keep, and that by speaking of it after all the political shortcomings were taken, it is a way of re-bonding with the political. To Naureen Shah, director of national security and human rights at Amnesty International:

“What’s so interesting is that President Obama acknowledges this problem – that future presidents will be empowered to kill globally, and in secret. What he doesn’t acknowledge is how much of a role his administration had in making that a bizarre normal” (quoted in Devereaux and Emmons, 2016).

Regardless of Obama's personal views on the topic, and late measures in order to curb some of the most pernicious effects of his policy, he set the template of how drones can be used in international affairs. Obama himself recognises he:

“could see, over the horizon, a situation in which, without Congress showing much interest in restraining actions with authorizations that were written really broadly, you end

up with a president who can carry on perpetual wars all over the world, and a lot of them covert, without any accountability or democratic debate" (Chait and Obama, 2016; italics added).

The minor changes implemented in the last few years of his tenure do not over-trump the fact that the new president of the US will be able to continue the same policy without needing to provide any significant political justification for it.

Conclusion

This article suggested looking into Obama's drone policy from an Arendtian perspective. By doing this, it enhanced the critical connections existing between a contemporary technological device of control and killing, material and political visibility, and the very possibility of politics.

When exploring the conceptual and philosophical possibilities of visibility for technology in the first part of the article, it was seen that visibility is fundamental for the public realm to exist, for politics to work on behalf of human freedom and agency. Arendt helps understanding that the application of technology in society is to conform to that very principle of visibility, meaning that it should be thought and debated having public interest as an ultimate goal. Moreover, when considering the violence that may derive from technology such as drones, a central concern arises with the possibility that gratuitous acts of destruction through technological devices could fundamentally depoliticise violence. What this implies for the way security policies are defined is that the invisible application of invisible technology denotes the total absence of any political choice, understood as a collective transparent action *of men to men*.

These utterances were sustained in the second part of the article, when approaching more specifically the overall drone policy of the Obama administration. Indeed, it was seen that the violence drones entail has not been used as a response to extreme injustice, or as an opener of political space. On the contrary, the environment of institutional secrecy in which drones have evolved as a security policy indicate an ambiguous interplay of visibility, as they both hide the visibility of politics domestically and externally, and expose the lives of civilians, guilty or not, across the globe through constant surveillance and threat of lethal action. As a consequence, with drones, it is the privilege of a few to know how, and to have access to, their functioning, their effects, and their actual contribution to enhance security or freedom.

Finally, the last section of the article provocatively suggested that Obama's late attempt at acknowledging some of the political frailties underlying his drone policy was in fact an attempt at "regaining the political". Despite Obama's effort to promote accountability measures and make sure presidents after him follow a different practice than his, the reality is he still set a blueprint, whose consequences escape

his control in the future. Remarkably, looking at another work from Arendt, *The Origins of Totalitarianism*, one cannot dismiss the boomerang effect within history. Racism and the practice of bureaucratically organised violence were initially materialised outside Europe by Western imperial powers but would eventually return to the metropolis to haunt them. This is a warning from history that one should carefully consider.

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Glimpses of Tomorrow: the Coming Age of Autonomous Air Warfare

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Abstract

Although future cannot be predicted, it is imperative to exercise a long term prospective view aiming to capture important trends in the security environment, which can improve the understanding of the nature and character of future war, thus assisting the definition of strategy, defence and operational planning. Throughout the short history of Air Power, we have witnessed a change of the relationship of man with the machine. This essay will describe the current state of play regarding these changes, exploring competing arguments, in order to demonstrate the potential shift to a new military paradigm. The analysis of autonomy and the main drivers towards autonomous systems will be confronted by the challenges and implications of Lethal Autonomous Weapon Systems. This will highlight the implications of specific mission tailored autonomous systems, thus aiming to regulate its development and employment. The main thesis presented emphasizes the need to leverage the human-machine interface, which can provide the best immediate benefits, while further consideration should be given before embracing full autonomous operational templates.

Resumo

Reflexos do Amanhã: a Ascensão da Guerra Aérea Autônoma

Embora o futuro não possa ser previsto, é obrigatório exercer uma visão prospectiva de longo prazo com o objetivo de capturar as tendências importantes no ambiente de segurança, por forma a melhorar a compreensão da natureza e do caráter da guerra futura, ajudando assim, na definição da estratégia, no planeamento de defesa e operacional. Ao longo da curta história do Poder Aéreo temos assistido a uma mudança da relação do homem com a máquina. Este ensaio irá debruçar-se sobre o estado atual destas tendências, explorando argumentos concorrentes, a fim de demonstrar o potencial de mudança para um novo paradigma militar. A análise da autonomia e dos principais fatores potenciadores do desenvolvimento e emprego de sistemas autónomos será confrontada com os desafios e as implicações dos sistemas autónomos letais. Isso irá destacar as implicações de sistemas autónomos em tipologias de missão específicas, permitindo assim antecipar a regulação do seu desenvolvimento e emprego. A principal tese apresentada enfatiza a necessidade de aproveitar os benefícios imediatos proporcionados pela colaboração homem-máquina, enquanto uma análise mais aprofundada deve ser iniciada antes de abraçar por completo os modelos operacionais autónomos.

Introduction

It is always important to identify, describe and understand future military implications of strategic and operational change. These dynamic and volatile changes will dictate the way military forces adapt and innovate, shaping the contours and establishing the trends of future military transformation. Although future cannot be predicted, it is imperative to exercise a long term prospective view aiming to capture important trends in the security environment, which can improve the understanding of the nature and character of future war, thus assisting the definition of strategy, defence and operational planning.

Within these important trends, and focusing our analysis on capability development driven by technology evolution, we may foresee drastic changes in the character of future war and a potential shift to a new military paradigm. Throughout the short history of Air power, we have witnessed a change of the relationship of man with the machine. First, man was the machine, using his motor skills to propel a heavier than air object. Then, man started controlling the machine, gaining a basic understanding of its capabilities. Soon after, begun exploring the qualities of the machine and employing it in combat. As technology progresses, man observes the machine executing tasks in an increasingly automated way. Therefore, throughout the last century of aviation, we have witnessed extraordinary evolutions regarding the human-machine relationship. Slowly, the human value within this equation has been qualitatively changing from the physical dimension to the cognitive and ethical domains.

Considering the drivers of technology, the strategic environment and the operational advantages of autonomous systems, it is not difficult to foresee a future where a drone might “fire a weapon based solely on its own sensors, or shared information, and without recourse to higher, human authority” (MoD, 2011, pp. 5-4). Therefore, this study sets as an underlying assumption that autonomous air warfare will begin to emerge, introducing profound challenges to war as a human endeavour. Furthermore, the degree of human input into machines’ actions will continue to decrease, influenced by diverging international approaches and interests. In order to avoid repeating past mistakes, we are at the right time to question the nature of this revolution, addressing its concerns, and purposefully choosing the most tolerable future.

Within this overarching framework, we will try to describe the current state of play by exploring the competing arguments, in order to demonstrate the potential shift to a new military paradigm. This main objective can be achieved by answering three fundamental questions: What do we mean by “*Autonomy*”? What are the main drivers towards autonomous systems? What are the challenges and implications of Lethal Autonomous Weapon Systems (LAWS)?

Our perspective is that we need to move away from the “*all or nothing*” discussion about autonomous systems and spend more time addressing the implications

of specific mission tailored autonomous systems, aiming to regulate its development and employment. Therefore, the emphasis should be on leveraging the human-machine interface, which can provide the best immediate benefits, while further consideration should be given before embracing full autonomous operational templates.

In order to narrow the scope of the discussion, this essay will focus on airborne autonomous systems, adopting a western perspective to the problem, namely the United States of America (USA), as the major researcher, developer and user of this technology, and as such, setting the trends for future warfare innovations.

Autonomy

Currently, there is no international consensus regarding the definition of an “*autonomous weapon*”, which increases the complexity of the analysis¹. This brings some confusion between terms like “*autonomy*” and “*automation*”. From a semantics perspective “*Autonomy*” is derived from the Greek terms “*Auto*” (himself) and “*Nomos*” (rules or laws). That is, the one that dictates the rules of conduct independently from others. Within the framework of the decision cycle, it means that the machine is able to observe, orient, decide and act without external human assistance. Thus, the term predictability distinguishes both concepts. An automated system follows a set of instructions to complete a task in a predictable way, while a stand-alone system can adaptively react to unexpected events, having its response options only limited by a set of basic rules, pre-installed in its operating system.

So, for the purpose of this discussion we can define the concept of autonomy as the system’s ability to perform a sequence of actions, seeking the best solution for a given situation, without human interference. However, to capture its essence we must look at autonomy as a spectrum influenced by several factors such as the complexity of the mission, the adaptability to the operating environment, and the level of collaboration with the human element. Doing so, it will be possible to identify dramatic changes on the output of the machine. Therefore, several scales and taxonomies can be used to take into account those factors and outputs². Within this framework we can differentiate four basic levels of autonomy (US DoD, 2011, p. 46).

1 The United States Department of Defense, the International Committee of the Red Cross, and the United Nations Special Rapporteur for extrajudicial, summary or arbitrary executions all use similar definitions, but there is no standard definition that is universally embraced. In order to help clarify, as a prerequisite to examining legal, moral, ethical and policy issues, what an autonomous weapon is, how autonomy is already used, and what might be different about increased autonomy in the future see (Scharre and Horowitz, 2015).

2 See Melzer (2013, p. 6); US DoD (2011, p. 46); MoD (2011, pp. 2-2/2-3); and Ramage *et al.* (2009, p. 2-1).

Level 1, or Human Operated (i.e. Remote Control), wherein a human operator makes all the decisions and the system reaction depends on input from the operator. Therefore, the system has no autonomous control of its environment although it may have information-only responses to sensed data. For example, the remotely controlled Predator drone fits under this category.

Level 2, or Human Delegated, in which certain autonomous reactions rely on pre-programmed functionalities. Still, the system cannot adaptively react to new situations. The vehicle can perform many functions independently of human control when delegated to do so. This level encompasses automatic controls, engine controls, and other low-level automation that must be activated or deactivated by human input and must act in mutual exclusion of human operation. A typical example is an auto-pilot system existing in commercial aircraft.

Level 3, or Human Supervised, where the behaviour of the system depends on a set of pre-defined rules, enabling definition and implementation of new procedures. The system can perform a wide variety of activities when given top-level permissions or direction by human. Both the human and the system can initiate behaviours based on sensed data, but the system can do so only if within the scope of its currently directed tasks. The surveillance drone Global Hawk has autonomy levels between Level 2 and Level 3 and can perform a selection of tasks without human interference, such as altitude and route control and adjust its mission in accordance with changes in the environment, like weather conditions or traffic avoidance.

And finally, the Level 4, of Fully Autonomous, where the system receives goals from humans and translates them into tasks to be performed without human interaction, but where the machine behaviour is bounded by a set of inviolable rules. A human could still enter the loop in an emergency or change the goals, although in practice there may be significant time delays before human intervention occurs.

By translating these levels of autonomy into the ability to employ lethal force, that is, select and engage targets, we can better understand the impact of the human interference in the process. From a decision making perspective, when we refer to the paradigm of "*man-in-the-loop*", it ultimately means that the final decision to use lethal force resides in the human decision maker. Within this control type, the machine may provide the target list but a human selects which target will be attacked. In the "*man-on-the-loop*" control type, man supervises several machines that select targets which will be approved by a human before being engaged by machines. This targeting process may only allow for a limited decision time. Passing the threshold of full autonomy, the system has the authority to use lethal force, while the human factor is relegated to an "*out-of-the-loop*" function. Under this framework, the human interference in the use of lethal force will be restricted

to the definition of governing laws of the autonomous systems (or Rules of Engagement – ROE) which could bound machines' behaviour.

Drivers for Autonomy

The employment of drones capable of applying lethal force, under human remote control, is a known fact of modern conflict³. Additionally, if we consider the taxonomy presented, there are already several examples of automatic weapon systems, including the decision-making capability to employ lethal force. For example, a Tomahawk missile makes its flight and hits the target without human intervention. The Patriot missile system is capable of automatically intercept an approaching missile more than 50 km away (McDaniel, 2008, p. 40). The Phalanx close-in weapon system installed on board of frigates, for ship's close protection against missile attacks, performs an automatic decision, according to a criteria defined by the human element, on which targets to attack (Olsthoorn and Royakkers, 2011). Also, the USA Navy Aegis combat system is capable of autonomously tracking and attacking enemy aircraft.

Therefore, at the present moment, at least 30 countries have in their portfolios several systems with autonomous modes capable of engaging targets at machine's speed, but under human-supervision, and in relatively limited contexts (Scharre and Horowitz, 2015, p. 18). These are mostly human-supervised autonomous weapons to defend against short-warning saturation attacks from incoming missiles and rockets (CNAS, 2016, p. 4). The level of autonomy is still low because they are supervised in real time by human operators who can manually disable the system in the event of a malfunction, communications failure or cyber-attack.

However, an increasing number of countries including China, Russia⁴, France, Germany, Israel, the United Kingdom and the USA are currently developing systems for greater autonomy in combat situations⁵. In a recent survey, Roff and Moyes (2016a), identified 256 weapon systems with varying degrees of autonomy, ranging from independent movement ("*Self-Mobility*"), employment of weapons ("*Self-Direction*"), and the ability to autonomously modify or set goals ("*Self-Determination*").

3 The contemporary political preference for Remote Air Warfare can be verified in practice, noting that in late 2011 the USA employed armed drones, simultaneously and continuously in six different theaters: Libya, Iraq, Afghanistan, Pakistan, Yemen, and Somalia.

4 The Russian chief of General Staff, Gerasimov, was recently quoted as saying that, "in the near future it is possible a fully robotized unit will be created capable of independently conducting military operations." (Freedberg, 2015).

5 Besides Nations, also International Organizations such as NATO are recognizing the nature and magnitude of this revolution and have already started assessing the potential legal, ethical and strategic impacts of LAWS. As an example, see Kuptel and Williams (2014) and JAPCC (2016).

As the global trendsetter, the USA, with its ambitious Third Offset Strategy⁶, offers some glimpses about future autonomous warfare. As an operational template, it is centred in human-machine collaborative networked environments, aiming to obtain military advantages against likely adversaries (Work, 2015)⁷. Therefore, it postulates that advances in artificial intelligence and autonomy are going to enhance a new era of human-machine collaboration and combat teaming (Work, 2016). This aims to merge the tactical acuity of a computer to enhance human decisions with the employment of manned and unmanned systems. Confronted with anti-access and area denial (A2AD)⁸ adversary weapons, the USA seeks to develop the means to offset the proliferation of advanced technologies.

Driven by the political direction of travel, research continues to accelerate the development and fielding of weapon systems with growing autonomy levels. Some of the publicly disclosed examples include the prototypes for future combat drones such as the USA Navy X-47⁹ or the UK Taranis (Heyns, 2013, p. 45), which will have the capability to autonomously search, identify and locate enemies, but can only engage with a target when authorized by mission command. They will also have the capability to defend itself against enemy aircraft. Other innovations include autonomous ammunitions (US DoD, 2013, p. 78) and drones¹⁰ which can loiter over the battlefield covering a wide area while waiting to take out high-priority targets

6 The Third Offset Strategy intends to replicate the military-technical advantage, against a peer competitor, of the two previous offset strategies – nuclear deterrence in the 1950s and the guided munitions regime in the 1970s. The first offset strategy leveraged US nuclear superiority to compensate for the numerical inferiority of ground forces in Europe. As Soviet Union reached nuclear parity, the second offset strategy leveraged USA monopoly of advanced technologies to develop long-range precision strike weapons (Jackson, 2015).

7 Judging by FY2017 budget outlook, this reform is starting to take shape (Mehta, 2016).

8 Anti-access strategies aim to prevent USA forces entry into a theater of operations, while Area-denial operations aim to prevent their freedom of action in the confines of the area under an enemy's direct control. Prospective adversaries are developing and fielding military capabilities that will place USA forces operating from large, fixed forward bases, and in the littoral regions, at increasing risk. These threats include actions by an adversary in the air, on land, and on and under the sea to contest and prevent USA joint operations within their defended battlespace (Krepinevich *et al.*, 2003).

9 The X-47B is a tailless, strike fighter-sized unmanned aircraft developed by Northrop Grumman as part of the USA Navy's Unmanned Combat Air System Carrier Demonstration program. Under a contract awarded in 2007, the company designed, produced and is currently flight testing two X-47B aircraft. In 2013, these aircraft were used to demonstrate the first ever carrier-based launches and recoveries by an autonomous, low-observable relevant unmanned aircraft. In April of 2015, the X-47B once again made aviation history by successfully conducting the first ever Autonomous Aerial Refueling of an unmanned aircraft (Northrop Grumman, 2016).

10 For example, Israel's Harpy is a "Fire-and-Forget" autonomous weapon system designed to detect, attack and destroy radar emitters (Israeli-weapons.com, 2016).

such as mobile air defences, mobile surface/surface missile launchers and long-range rocket systems.

It is possible to assume that current technological trends point towards a qualitative shift beyond autonomous mission *execution* to autonomous mission *performance* (US DoD, 2013, pp. 66-67). The difference lies on the ability of a machine to go beyond a pre-programmed activity and allow the system to self-decide how to operate itself to accomplish the human directed mission goals. That means the capability to optimize their behaviour in unforeseen situations in order to find the optimal solution. And of course, with the development of the autonomy levels, several new mission sets and operational concepts can emerge which will open the way for a shift in the air warfare paradigm.

These new operational templates include, for example, the “*loyal wingman*” concept, where fully automated drones fly alongside a manned aircraft to perform several tasks. Under this scenario, we can imagine an F-35 orchestrating an attack with 20 drones that are weapons-equipped and that the F-35, with all its sensors and communications, is essentially an orchestrator (Clark, 2014). This example can also be applied to a Special Operations Aircraft that will use drones as scouts in order improve its survivability (Swarts, 2016). The testing of the robot wingmen will begin as early as 2018 in order to introduce it as a validated operational template in the 2020s timeframe (Axe, 2016).

In a more disturbing, but promising perspective, drones with fully autonomous capabilities work in collaboration within a “*swarm*”. Although we are still on the early stages of development, we can forecast the operational implications of such concepts. For example, the USA Navy Low-Cost UAV Swarming Technology (LOCUST) is intended to launch up to 30 small swarming drones, that once airborne, start sharing information with each other, enabling autonomous collaborative behaviour in either defensive or offensive missions (Smalley, 2015). The resilience of the swarm allows it to self-reconfigure and autonomously change its behaviour to complete the mission. Thus, the operational concept of “*swarming*” can fulfil a multitude of tasks, such as monitoring large areas through multi-sensor information integration, search, identification and tracking of several targets, search and rescue missions, identification of enemy threats and convoy protection, or the saturation of opposing anti-aircraft threats with multiple targets. Ultimately, it may serve as an asymmetric technology against advanced air defence systems, in which hundreds of drones deny the effectiveness of unmanned weapons systems and batteries of surface to air missiles. As scheduled, the LOCUST proof of concept was achieved in the summer of 2016 with a demonstration by the USA Navy (Matthews, 2016, pp. 38-41).

Similar advances of Artificial Intelligence promise to unveil dramatic changes to the human interference in the tactical domain, introducing new and unmatched

lethality to air-to-air combat. For example, within the context of air-to-air combat, the time delays associated with the use of remote operation of unmanned platforms constrain critical decisions (Byrnes, 2014, p. 49). However, focusing on the improvement of real-time decision making capabilities, recent experiments have demonstrated an Artificial Intelligence algorithm that controls flights of Unmanned Combat Aerial Vehicles in aerial combat missions within an extreme-fidelity simulation environment (Ernest *et al.*, 2016). This simulation allowed drones to repeatedly and convincingly “defeat” a human pilot during several Beyond Visual Range engagements (Reilly, 2016).

Although still in the research phase, this technology can have great implications, for example, in providing inputs/advice to manned operators or acting as the basic decision tools for drones when faced with a new situation and unable to communicate, as well as, allow a single operator to coordinate swarms of unmanned combat platforms. “Within this operational template, a human can give general inputs and guidance to the swarm, and be confident that in general, relying on advanced computational capability, the swarm will behave as required” (Deptula quoted by Clarke, 2016).

Judging by other initiatives that have been reported by the media, revealing the operational interest on “swarming”, it is reasonable to expect that covert projects are being developed and that further capabilities will start to emerge and be employed in near future conflicts (Lamothe, 2016).

After discussing the meaning of autonomy and having a look at current and future capabilities and operational templates, it is possible to summarize some of the arguments in favour of increasing autonomy, in particular regarding LAWS.

The drivers for autonomy have to do mainly with operational efficiency. That is, the need to perform increasingly complex and risky military missions with lower costs (human and economic) determines the growing interest in autonomous weapons systems. From an operational perspective, the human interference over the machine has some disadvantages on the machine’s efficiency. Also, remote control of drones requires constant communication between the platform and the control station, as well as an increasing volume of information and bandwidth. Thus, information volume and the dynamics of the battle space will require faster reaction times, beyond man’s capability. This vulnerability can be minimized, either resorting to internal processing in flight, partially or completely autonomously or acting cooperatively with other platforms. In most ambitious visions, such machines are able to identify friend from foe, in static or dynamic scenarios. Additionally, drones have aerodynamic advantages that theoretically give them a higher degree of survival as a result of their manoeuvrability and stealth capability. Moreover, the proliferation of vehicles in the battle space favours the autonomous option because there are not enough operators to control

the existing platforms. Some would even argue (Arkin, 2009) that LAWS can be more human in battle than the soldier himself, contributing to an increase of ethics on the battlefield, where human limitations on combat effectiveness do not limit the performance of the machines (e.g. physiological aspects, cognitive exhaustion, emotions or fatigue, including susceptibility to error). Furthermore, we must also think about the preservation of the scarce friendly human resources in war.

In summary, within this technophile benign perspective, by extracting man from the decision cycle, we are improving its efficiency. We are standing before an operational template, conducted in a networked environment, which emphasizes the importance of the speed of the decision cycle; the ability to maximize the power and lethality of combat through the use of interoperable, joint and combined forces; the ability to collect and analyse information, acting quickly, accurately, and in a discriminate fashion, preserving civilian casualties and infrastructure. This “Western Way of War” has exposed several challenges such as the prevention of fratricide and collateral damage; information sharing; the scarcity of bandwidth and the integration of the common operating picture. Considering these requirements and operational challenges, it is apparent that a greater autonomy of air platforms could be an appropriate solution for increasingly complex operating environments (Ramage *et al.*, 2009, pp. 2-12). Within this framework, long-range autonomous systems capable of independently navigate, identify and attack mobile targets will offer a major conventional deterrence, particularly if considering future scenarios dominated by opposing A2AD strategies.

Challenges and Implications of Lethal Autonomous Weapon Systems

The USA Department of Defense Directive on Autonomy in Weapon Systems (2012) is the first publicly disclosed policy, by any country, regarding the use of lethal autonomous systems which lays the guidelines and assigns responsibilities for the development and employment of these weapons. Additionally, it recognizes and establishes guidelines to minimize the probability and consequences of failures in autonomous and semi-autonomous weapon systems that could lead to unintended engagements, as well as, unacceptable levels of collateral damage beyond those consistent with the Laws of War, ROE, and commander’s intent. However, this raises some questions regarding the ability to fully test these systems against adaptive, unpredictable enemies, as well as minimizing the risk of unanticipated situations on the battlefield (Sharkey, 2013, pp. 8-11). Although it restricts autonomous weapon systems to apply non-lethal, non-kinetic force, such as some forms of electronic attack against materiel targets; however, it allows the waiver of restrictions by high level approval in cases of urgent military operational need.

History has taught us, sometimes in a cruel manner, that the introduction of a new weapon system in the battlefield, whose impact had not previously been evaluated, can transform war and humanity itself. Given this perspective we may anticipate that the gradual transition to autonomous systems will be conditioned by two key factors: technological capability and human acceptance for machines to make lethal decisions. Assuming that technology will continue to evolve and that operational necessity will follow, then we will have to discuss in greater depth the reasons that influence human acceptance for such a change.

International Humanitarian Law was created to ensure that there are limitations on the methods and means used to wage war. Influenced by this framework, the main objections to the use of autonomous systems in war come from the inability to fulfil the universal ethical and legal standards, particularly that LAWS miss the inherent human qualities of intuition, compassion, common sense, and judgement. Although rather effective when performing quantitative assessments, they have limited qualitative abilities, which are crucial when dealing with human life (Heyns, 2013, p. 10). This will be most important in the ability to distinguish between combatants and illegitimate targets¹¹, in particular in complex urban environments, as well as, in meeting the requirements of proportionality, or even addressing other key aspects of the International Humanitarian Law such as “*superfluous injury*” or “*unnecessary suffering*”¹². Judging by the “*unintended*” consequences of the recent employment of remote operated drones under the operational template of “*targeted killings*” (Davis, 2016), it is reasonable to expect that those challenges could be significantly higher if we consider complex systems that run without human supervision. This means that, no matter how robust the Artificial Intelligence may be, it is impossible to predict how swarms of systems will behave when confronted with each other. Therefore, currently, and in the near future, it is reasonable to say that the subjective nature of morality seems difficult to codify in software (Asaro, 2014, p. 219).

In a semi-autonomous system, currently more common, the process of “*man-in-the-loop*” is nothing more than the requirement for a human to authorize weapon engagements. In this way, the human element can be held liable for eventual errors, as in the case of collateral damage or breach of ROE. In the case of an autonomous system how can we ensure the compliance with this principle? Who will be responsible for any error? The commander, the engineer, or the programmer? Therefore,

11 Some critics highlight the insufficient discrimination between combatants and non-combatants and the lack of proportionality of the response, as main dissociative factors to the emergence of LAWS (Sharkey, 2013, pp. 8-11).

12 Rule 70 of customary international humanitarian law: The use of means and methods of warfare which are of a nature to cause superfluous injury or unnecessary suffering is prohibited (ICRC, n.d.).

accountability becomes more difficult to determine as man moves away from the decision cycle¹³.

In order to address this accountability gap, along with the moral responsibility and controllability challenges, many argue for the need to submit the LAWS to the requirement of “*meaningful human control*”, before, during and after employment in conflict.¹⁴ This concept has three essential components, or “*minimum necessary standards*”, that could ensure better informed decisions and actions, as well as, reducing the potential for mistakes (Horowitz and Scharre, 2015, p. 4; Garcia, 2014).

First, human operators are making informed, conscious decisions about the use of weapons. Thus, they must have full contextual and situational awareness of the target area and be able to perceive and react to any change or unanticipated situations that may have arisen since planning the attack. Second, human operators have sufficient information to ensure the lawfulness of the action they are taking, given what they know about the target, the weapon, and the context for action. That means that there must be active cognitive participation in the attack and sufficient time for deliberation on the nature of the target, its significance in terms of the necessity and appropriateness of attack, and likely incidental and possible accidental effects of the attack. Third, the weapon is designed and tested, and human operators are properly trained, to ensure effective control over the use of the weapon. In reality, there must be means for the rapid suspension or abortion of the attack.

Therefore, assessing LAWS’ compliance against such cumulative principles – confidence in the information that is guiding the human judgements being made; clarity of human action and potential for timely intervention; predictability, reliability and transparency in the technology – could ensure legitimate target selection and proportionate response, while guaranteeing a sufficient framework of human accountability throughout the use of lethal force (Roff and Moyes, 2016b).

Although the concept of “*meaningful human control*” may be useful, since it deals with the theme of informed action by a human, the real challenge is to determine what constitutes appropriate human control over autonomous systems and what level of information will be required to make a decision. However, the level of information required is scenario driven and as such, is influenced by multiple

13 For a detailed study about the challenges of accountability see (Human Rights Watch, 2015).

14 Topic first addressed by the non-governmental organization “Article 36” in a 2013 report on how the United Kingdom is thinking about autonomous weapon systems. For a comprehensive discussion about the “*meaningful human control*” concept, its strengths and weaknesses, as well as, other conceptual and policy-oriented approaches that address these concerns see UNIDR (2014), Horowitz and Scharre (2015), Roff and Moyes (2016b).

variables like weapons used, targets engaged, ROE, etc. Therefore, the context in which a weapon is employed changes how the control of that weapon is exercised by humans. For example, it is not possible to compare the degrees of “*meaningful human control*” between an air-to-air engagement, where computer systems play a significant role both in helping the pilot find a target and in guiding weapons to their targets, with an infantry soldier engaging an enemy combatant (Horowitz and Scharre, 2015, p. 12).

Currently, whether one uses the term meaningful, adequate, effective, or some other term, there seems to be a consensus about the requirement for some level of human qualitative control over the use of force by LAWS (Scharre, 2015). However, assuring human control of LAWS, thus reducing the operational efficiency, may be seen as a constrain to some countries with lower ethical and moral thresholds. Therefore, further discussion will be required in order to reach an agreement about the universal principles which may govern the development and employment of LAWS.

Furthermore, viewing war as the utmost political choice, one may conclude that the proliferation of autonomous systems may contribute to reduce, even further, the threshold for waging it, to the extent that it lowers the operational and social costs of employing the military instrument. Therefore, by lowering the costs to achieve national objectives it will further contribute to disengage society from the employment of autonomous systems. This will in turn create an erosion of the accountability of political action, thus favouring the political willingness to use force as first resort and increasing preventive military postures. Additionally, it may promote further breaches of state sovereignty, and with it, an increased risk of a less secure world. Hence, by increasing the frequency of war, so will the potential danger to civilians.

Moreover, controlling the proliferation of autonomous systems will be a challenge. Given the advances of commercial off the shelf technologies, it is reasonable to expect the proliferation of small, smart, cheap, and long-range drones capable of carrying lethal payloads (Hammes, 2014). Therefore, this tri-dimensional proliferation will develop horizontally between States and vertically, from states to non-state actors, adding a new portfolio of effects to warfare. Considering that the Western higher standards for targeting could inhibit the fielding of cheap LAWS, it is possible that, given the proliferation of technology, less technological advanced actors, with fewer ethical constrains, will have an initial advantage and motivation to field those systems, allowing them to affect a wide range of targets. So, the perspective of employment of these systems by rogue nations, non-state actors or even single individuals, heightens the possibility of producing massive effects, including terrorist attacks. Consequently, the use of LAWS could become a future alternative, free of sacrifice, to the suicide

bomber¹⁵. Hence, the West will be confronted with an emergent paradigm shift, from the exquisite and very few to the cheap and very many, thus creating additional incentives for the most advanced states to adopt the preventive development of LAWS, while they can maintain an asymmetric advantage.

Having those challenges in mind, public perception will be the key factor for the acceptance of autonomous systems. As technology matures and more civilian and military artificial intelligence applications are being introduced, so will the trust increase and the acceptance of increasing levels of autonomy. The public acceptance will start on the civilian domain technologies and it will gradually expand to the military applications arena. Any urgent operational requirements, like the ones seen during the Afghanistan and Iraq conflicts which have catapulted armed drones, may accelerate the development of LAWS to a point of no return.

As the trajectory toward autonomy and complexity accelerates, so does the risk that autonomous weapon systems will, eventually fail. Considering the employment of LAWS in a defensive role, such as the interception of ballistic missiles, it will be easier to accept the risk of possible failures. However, the legal and ethical concerns will increase if employing such systems in complex, rapidly changing and inherently difficult urban environments, under an offensive role posture (Boothby, 2014, p. 207). Under the latter scenario, and within the current framework which requires all states legally to evaluate weapons before fielding them, offensive LAWS should be rejected (Idem). Thus, rather than a revolution towards the development of fully autonomous systems, we will see initially, an evolution thru the introduction of limited versions of the technology, which will in turn require a readjustment of the policy. Eventually, as technology matures, allowing for the full compliance of war's legal principles, we will witness a spread towards more complex environments and functions, making the proliferation of LAWS unavoidable.

Conclusion

Although revolutionary in its magnitude and effects, the emergence of autonomous air warfare will be rather evolutionary, developing in an insidious way. For the moment, despite current systems possessing advanced sensors, they still lack the ability to process the information in real time and act according to its outcome. Likewise, testing autonomous systems continues to be a problem, insofar as there is no way to submit the system to all possible situations found in the real world.

15 On 2 October 2016, in Irbil, Iraq, a drone flown by ISIS killed two Kurdish soldiers and two French paratroopers. The attack is possibly the first where a drone fitted with an improvised explosive device has inflicted casualties on troops from a Western nation (Atherton, 2016).

Additionally, interoperability is a complex challenge when attempting to interact with different systems without existing common protocols. Thus, the technological challenges of operating groups of autonomous vehicles with similar decision-making capability to humans are still unresolved. After all, and from the military perspective, so that a system can be called truly autonomous, it must be able to achieve the same level of situational awareness as the human being. Despite numerous developments in order to provide greater autonomy levels, these technological constraints still impede their full development to all air power activities, including the most complex and dynamic functions like air combat. However, given the exponential progression of technological change that we are living in, it is reasonable to assume that these limitations will be overcome in the future, as some were in the past, as the operational requirements arise.

So, in a probable future, as technology matures, and aiming to ensure greater political and public acceptance, we may envision the employment of rudimentary LAWS in attack missions with non-lethal weapons, and in areas where there are only confirmed military adversaries. Additionally, parallel control systems that guarantee "*meaningful human control*" requirements must be developed. As commanders establish their command intent and the ROE to frame the actions of combatants, in the future, the same will apply to LAWS. Hence, systems will be programmed based on the commander's intent, while commanders retain the ability to set the desired level of autonomy depending on the various stages of a mission. Accordingly, the autonomous operation will take place within previously established levels, while man will supervise the execution of operations and retain the ability to change or cancel any unwanted behaviour.

Considering that automation is at the heart of the Pentagon's ambitious Third Offset Strategy, and that both Russia and China, amongst others, are investing heavily in robotics and autonomy, one may expect that this, for now, probable future, will insidiously transform itself into a possible future.

The emergence of LAWS will be driven first and foremost by political endorsement rather than by purely technological achievements. Currently, states don't publicly support the removal of humans from life and death decisions, citing, at a minimum, the need to ensure accountability on the battlefield. Additionally, it is generally agreed that LAWS should be governed by International Humanitarian Law and that commanders would also have command responsibility for their robots, as they do for their soldiers. Therefore, the emphasis, for now, is on the enhancement of human-machine collaboration. However, as the technological equalization emerges between adversaries, so will the drivers increase to develop fully autonomous systems. Sooner or later, the proliferation of advanced technologies will increase the social and political appetite for removal of the moral constraints of autonomous air warfare. Some may even consider that keeping man

within the decision cycle could become a strategic disadvantage against a military-technical superior adversary.

From a pessimist perspective, after briefly assessing the opportunities but also the challenges, and having history as a guide, one may conclude that as technological maturity increases, so will the public confidence, thus encouraging politicians to allow the development of a new range of applications with direct impact on war. When, and if, this happens, we will be faced with a fundamental transformation of war.

In addition to changing the way we fight, expressed in capacity, lethality and operational efficiency, also changes the fighter prototype, the human interference and the experience of war itself, both individually and as a political instrument, thereby altering the relationship with society. Ultimately, this revolution will bring with it a redefinition of the human role in air war: from a doer, to a supervisor, and ultimately to an observer, hopefully reserving for himself the final authorization to use lethal force.

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Portuguese Air Force Research, Development and Innovation Centre (CIDIFA): RD&I in the Area of Autonomous Unmanned Aerial Systems

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Abstract

The article describes the Portuguese Air Force Research, Development and Innovation (RD&I) programme, carried out since 2006 by its RD&I Centre (the CIDIFA), in the domain of Unmanned Aerial Systems. It focuses especially on the set of activities that ultimately led to the operationalization of the UAS in this branch of the Armed Forces, for maritime surveillance and search and rescue missions.

Portugal has an extensive maritime domain, which assumes a substantial economic role in the country. As a result, maritime surveillance and monitoring activities, which are considered a priority, are deemed to be effectively carried out by UAS at the service of the Portuguese Air Force and Navy.

Motivated by the successful results of the RD&I programme, as demonstrated by the high technological maturation already achieved, the CIDIFA will lead the process of industrialisation of the UAS, in collaboration with the National Defence Technological and Industrial Base.

Resumo

O Centro de Investigação, Desenvolvimento e Inovação da Força Aérea Portuguesa: Investigação, Desenvolvimento e Inovação na Área dos Sistemas Aéreos Autónomos Não-Tripulados

Descreve-se, neste artigo, o programa de investigação, desenvolvimento e inovação (ID&I) que a Força Aérea Portuguesa, através do seu Centro de Investigação, Desenvolvimento e Inovação (CIDIFA), vem desenvolvendo, desde 2006, no domínio dos Sistemas Aéreos Autónomos Não-Tripulados. Em particular, são focados os aspetos relacionados com a operacionalização deste tipo de tecnologia, no contexto daquele Ramo das Forças Armadas, para utilização no âmbito da vigilância marítima e da busca e salvamento. Tendo em conta a grande extensão do domínio marítimo Português, bem como a sua importância a nível económico, torna-se prioritário proceder à sua vigilância e monitorização, atividades que, tendo em conta as características dos dispositivos UAS, podem ser levadas a cabo, de modo altamente flexível e eficiente, utilizando este tipo de tecnologia. Em conformidade, considera-se da maior prioridade que as nossas Forças Armadas e, em particular, a Força Aérea e a Marinha, venham a utilizar estes sistemas para a vigilância e a monitorização do Espaço Marítimo Português, em complemento dos atuais meios tripulados.

Mostra-se que o programa acima referido atingiu já níveis de maturação tecnológica muito elevados, o que lhe permitirá, a nível nacional e em colaboração com a Base Tecnológica e Industrial de Defesa, liderar o processo global envolvendo todas as valências conducente à industrialização daqueles sistemas.

Introduction

To achieve the objectives of the Portuguese Air Force (PtAF) in the domain of Unmanned Aircraft Systems (UAS) it is necessary to develop the operational capability of such systems, envisioning their application for maritime surveillance and Search and Rescue (SaR) missions, as a type of operation that complements the current fleet of manned aircraft in these specific missions. By teaming up with the National Defence Technological and Industrial Base (NDTIB), the PtAF will benefit from having: (1) a considerable increase in the operational capability of its means and aircrafts; (2) a cost effective operational capability and mission strategy; and (3) the ability to potentiate the growth of the NDTIB, and the development of a “Defence Economy” in Portugal.

In fact, the previous statement is aligned with the “*Strategic Vision*” of the PtAF, presented in its manual MFA 500-12, published under the title of “*Strategic Vision for Autonomous Unmanned Aircraft Systems*”. This document details the framework for the development and operationalization of UAS by “setting the ground for a strategic vision for the development, integration and usage of UAS in the PtAF, with the goal of attaining a fully operational capability of these systems, therefore guaranteeing the successful execution of both military and public interest missions” (EMFA, 2013, pp. 1-2).

In order to plan and carry out the objectives highlighted in the MFA 500-12, the PtAF entrusted its Research, Development and Innovation Centre (CIDIFA) with the responsibility of establishing active collaboration with the NDTIB to design, produce and operationalize the use of UAS capabilities – up to NATO classification standard Class-II¹ – to integrate the operational fleet of this branch of the Armed Forces, complementing the manned aircraft fleet capabilities in the maritime surveillance and SaR (Borrego and Morgado, 2015). The CIDIFA is integrated

1 The taxonomy used in this article follows the North Atlantic Treaty Organization (NATO) classification for UAS (NATO, 2010). In this context, UAS are classified in three classes: (1) Class-I, which includes the systems with a maximum take-off weight (MTOW) under 150kg, further divided into 3 levels: nano and micro (<2kg), mini (2-20kg) and small (>20kg); (2) Class-II, which corresponds to tactical systems with MTOW between 150 and 600kg, characterized by their ability of being deployed from unprepared runways with auxiliary launch and recovery systems. Their operational altitude (up to 10.000ft) and range are better suited for tactical use (e.g. Shadow), and benefit from having a lighter logistic and support need, when compared to the higher class; (3) Class-III, corresponding to strategic UAS, with MTOW greater than 600kg. Such systems have a large operational range and endurance, capable of operating up to 45.000ft (MALE – Medium Altitude Long Endurance, e.g., the Predator series) and up to 60.000ft (HALE – High Altitude Long Endurance, e.g. Global Hawk), carrying out assignments across the entire spectrum, requiring, however, prepared runways for the launch and recovery, as well as complex logistics and support components.

in the Engineering and Programs Directorate of the Command of Logistics of the PtAF.

It is worth mentioning that the CIDIFA stemmed from the Portuguese Air Force Academy Research and Development Centre (CIAFA), which gathered and fostered the research, development, integration and operationalization of UAS since 2006. The CIDIFA, currently gaining a position of excellence in the development and operationalization of UAS in Portugal, focuses on establishing effective collaborations with the NDTIB on attaining the industrialization of the aircraft systems developed within the PtAF, envisioning their future commercialization, both at a national and international levels, therefore contributing to a “Defence Economy” in this field (Governo, 2015, p. 53).

This article aims at providing a background and insight into the activities that have been developed within the PtAF, through the CIDIFA, in the area of UAS. It focuses on presenting the phases of development, as well as the ongoing national synergies and NDTIB collaborations for the industrialization and operationalization of UAS technology with the goal of further increasing the operational capabilities of the PtAF fleet in the context of maritime surveillance and SaR.

Framework of the CIDIFA: Research, Development and Innovation Activities in the Field of UAS

The Research, Development and Innovation (RD&I) activities carried out by the PtAF in the area of UAS were initially created at the Portuguese Air Force Academy (AFA), in September 2006. Such activities were integrated in the first RD&I centre of the PtAF, the AFA Research Centre (CIAFA), created in 2009.

In 2015, the RD&I activities were transferred from the AFA to a more centralized – and specially created – Research, Development and Innovation Centre (CIDIFA), under the Engineering and Programs Directorate of the Logistics Command of the PtAF. This transfer involved a transfer of all resources from the CIAFA to the CIDIFA, ranging from human resources to technology, including the ongoing high impact projects.

This change took place in order to increase the efficiency of the ongoing research projects, to further potentiate and facilitate the synergies with the NDTIB, ensuring a faster transition of technology to the industry, as well as bringing the UAS one step closer to the integration in the PtAF operational fleets.

The mission, strategy and structure of the CIDIFA, and its collaborations, both at national and international levels are detailed below, as well as the main technological, operational and doctrinal accomplishments of that Centre, with a special focus on the considerable body of work carried out since 2006. The final section concludes this article with the main achievements and future goals of this strategy.

Mission, Strategy and Structure of the CIDIFA and its Main Collaborations at National and International Levels, in the Field of UAS

Mission

The CIDIFA is the main RD&I Centre of the PtAF and its mission is to: (1) develop aeronautical projects, both at a national and international levels, ensuring that the technology is developed and delivered with a high level of maturation, i.e., a high Technology Readiness Level (TRL²), with the ultimate goal of transferring the technology for its operational use; (2) be the link between the PtAF – and consequently the Portuguese MoD (National Defence Ministry – MDN) – and the NDTIB, the European Defence Agency (EDA) and NATO, in the activities of RD&I in the domain of aeronautical Defence; and (3) promote the operationalization of the UAS technology within the PtAF, as well as within other branches of the Armed Forces and civil entities, whenever possible.

Although the CIDIFA is designed to provide a RD&I structure with the capability of performing and carrying out projects in a broad aeronautical sense, it is especially fit to be a Reference Centre in the area of UAS, both at national and international levels. In this context, the CIDIFA focuses in the areas of scientific, technological and operational development of UAS, keeping a close connection with the doctrinal and the operational Divisions of the PtAF, respectively, the Division for Operations of PtAF (DIVOPS-EMFA) and the Air Command (CA), for military and dual application missions.

Strategy

The main technological and operational developments were carried out from September 2006 – initially within the CIAFA and carried on by the CIDIFA – essentially oriented for the industrialization and the commercialization of UAS, referred to as technology transfer. These activities were heavily leveraged in January 2009, following the approval of an RD&I project financed by the MDN: the PITVANT project³.

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- 2 This parameter is used by the US Department of Defense to measure the level of maturation of technology currently under development. The TRL levels of a given technology may vary between 1 and 9, where the former indicates that only the basic (design) principles are observed and the latter which is where the technology is approved under operational and real-life testing. The CIDIFA aims at having its technology development cycle deliver technology with TRL comprised between 7 and 9. (7 – prototype systems for demonstration in operational environment; 8 – full system approved for tests and demonstrations; 9 – approved system for operational environment). For more details, see Mankis (1995).
 - 3 For a detailed description of the PITVANT project, see Morgado and Sousa (2007), Morgado (2008), Morgado and Sousa (2009), Morgado *et al.* (2013), Morgado (2015), Borrego and Morgado (2015b), Borrego and Morgado (2015c).

At the core of the PITVANT project was the need for implementing a RD&I methodology, specially centred in the development of UAS. Accordingly, the project strategy and its execution focused on concentrating the technical and technological resources onto the sole goal of developing, integrating and operationalizing UAS technology within the PtAF, namely for maritime surveillance and SaR missions. In parallel, other dual type, i.e., non-military mission scenarios, were also studied, to ensure the successful integration of UAS systems with different operators in Portugal.

The management, standardization and integration capabilities are also strategic cornerstones for the CIDIFA. These three areas have the power to sustain and guarantee the efficient execution of ongoing projects, as well as the ability to go beyond the initial objectives and surpass the requirements. In this regard, efforts are persistently made, since the beginning of the CIDIFA, in terms of standardization and agreement, ensuring that the ongoing projects: (1) follow correct project management (IEEE, 2011)⁴; (2) guarantee a sustained project management, according to systems engineering (IEEE, 2005); (3) guarantee the required interoperability of systems and subsystems under development (STANAG-4586, 2012); (4) guarantee the instruction and training of the UAS operators (NATO ATP-3.3.8.1, 2016); (5) make the required progresses in order to ensure the airworthiness certificates for all systems (STANAG-4671, 2009).

Furthermore, the CIDIFA successfully implemented what can be seen as the perfect collaboration between academic research and the operationalization of the developed technology. This collaboration worked in a (nearly) perfect manner, as proven by the successes of all projects developed in this Centre. In particular: (1) the CIDIFA collected information from the Operational and Doctrine Directorate Divisions about the needs of the PtAF and the country in terms of UAS suited missions; (2) reformulated those needs into a list of operational requirements; (3) addressed the operational requirements by developing academic and technological short term projects and scientific theses; and (4) used the outputs of the research to develop, integrate, test and improve the technology; and (5) provide the results to the *Operational* and *Doctrine Divisions*. This proved to be a win-win situation for the PtAF, its RD&I projects and, consequently, all external (to the PtAF) collaborations.

In the context of work methodology, the research areas the CIDIFA is currently focusing on are: (1) aeronautical design, materials and aircraft construction; (2) software engineering; (3) decision and control systems; (4) vision and image processing; (5) system navigation and data fusion; (6) maintenance and reliability; (7) aircraft certification; and (8) operations.

⁴ IEEE – Institute of Electrical and Electronic Engineering.

In addition, it should be stressed that the CIDIFA works closely with the National Aeronautical Authority (AAN) in order to assure that all UAS technology produced and tested in this Centre is certified and airworthy, satisfying all mandatory regulations and legislation, therefore ensuring a more effective integration and operationalization of the systems.

In accordance with the intentions of the PtAF, expressed by in its MFA 500-12, the CIDIFA focused its efforts on developing UAS technology with high TRL, in order to enable its integration in the PtAF fleet, as well as to allow the PtAF to act as a contractor for UAS missions for external entities or agencies.

Structure

The CIDIFA is subdivided into the following five interdependent centres, which provide the required structure to execute, with maximum flexibility and resource savings, the technological and operational activities mentioned above.

The Nucleus of Research, is the entity primarily responsible for the coordination and execution of the RD&I, as well as for the preparation of the project proposals to be submitted to external (to the PtAF) financing entities. The projects have been typically financed by the Portuguese MoD, the 7th Framework Program and the QREN (Quadro de Referência Estratégica Nacional, National Strategic Reference Framework). This nucleus is now preparing project proposals to be submitted to the Horizon 2020 and Portugal 2020 programs.

The Nucleus of Operation, responsible for the testing and operation of the UAS. A considerable portion of the field tests were carried at the CIDIFA operational test site, located at Ota, about 40 km North of Lisbon. This test site, one of the best test sites in Europe, is equipped with building infrastructures, logistic and catering support, runway, and segregated airspace (picture 1).

Besides the validation tests, the operational and integration demonstrations are performed by this nucleus at different locations, both in the mainland and offshore regions of Portugal (e.g., Portimão and Santa Cruz aerodromes and Porto Santo Island international airport).

The Nucleus of Production and Quality, responsible for the manufacturing and integration of the different parts that compose a UAS. This nucleus works in close connection with the AAN, providing all ground, connection, communication and failsafe testing results to that authority, for the emission of the certificate.

The Project Management Department, in charge of the legal, administrative, management and support tasks, both for ongoing projects, as well as new project proposals.

Picture 1 – Nucleus of Operation: a) Main test site, at Ota (white circle – support, hangar and squadron building; black circle – advanced ground launch and recovery station); b) Hangar building; c) UAS Operation team, with mobile command and ground control station (GCS); d) Team training and instruction at the GCS; e) Flight testing of a UAS prototype Class-I (MTOW of 25 kg) (take-off); f) Flight testing of a UAS prototype Class-I (MTOW of 150 kg) (landing)



a)



b)



c)



d)



e)



f)

The Aeronautics Laboratory, located at the AFA campus, in Sintra, is the main facility of the CIDIFA for the development, manufacturing, integration and ground testing of all sub-systems and final systems. It possesses the technical and physical infrastructures required for the previous activities (e.g., wind tunnel, computer numeric control machinery, composite preparation, assembly and oven facilities) (picture 2).

Picture 2 – Aeronautics laboratory: a) Wind tunnel; b) UAS manufacturing facility



a)



b)

National and International Collaborations

The CIDIFA has maintained active collaborations, on a basis of reciprocity and complementarity, with several national and international entities of great prestige in the area of UAS. Within these entities, we highlight:

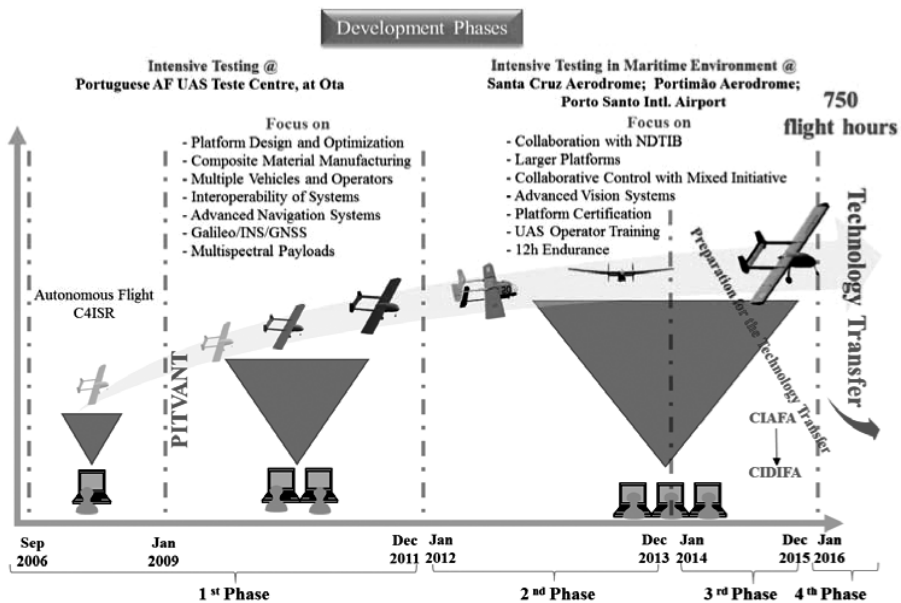
At government level, the Portuguese Navy (Marinha Portuguesa – MP), the Portuguese Army (Exército Português – EP), the National Republican Guard (Guarda Nacional Republicana – GNR) and General Directorate for the Policy of the Sea (Direção Geral de Política do Mar – DGPM). At NDTIB level, connected with Academic and RD&I entities: the Higher Technical Institute (Instituto Superior Técnico – IST), the Faculty of Sciences of the Lisbon University (Faculdade de Ciências da Universidade de Lisboa – FCUL), the Faculty of Engineering of the Oporto University (Faculdade de Engenharia da Universidade do Porto – FEUP), the Beira Interior University (Universidade da Beira Interior – UBI), the National Laboratory of Civil Engineering (Laboratório Nacional de Engenharia Civil – LNEC), and more recently the Institute for Telecommunications (IT). At NDTIB level, connected with business and corporate entities: the Centre for Excellence and Innovation of Automotive Industry (CEiiA), the following companies: Critical Software, UAVision, Deimos-Engenharia, OPTIMAL, INOVAWORKS, INESC-Inov, Portugal Telecom Innovation and Systems (PTInS) and Energias de Portugal – Inovação (EDP – Inovação). And prestigious international entities such as the University of California at Berkeley, University of Salzburg, University of Munich, Delft University of Tech-

nology, the University of Warsaw, and, more recently, the European Maritime Safety Agency (EMSA) which has its headquarters in Lisbon.

Main Achievements of the CIDIFA: Development Phases

The doctrinal, technological and operational developments, as well as the transfer of technology at the CIDIFA were implemented in four consecutive phases, as presented in figure 1.

Figure 1 – Development Phases carried out by the CIDIFA

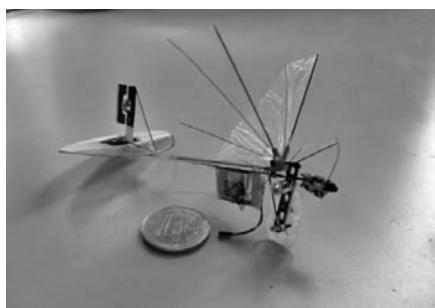


First phase (September 2006 to December 2011) – mainly defined as the ground setting phase, this first implementation phase is characterized by the definition of the initial structure, integration and standardization framework. Over the course of five years, the CIDIFA (formerly CIAFA) gained and consolidated the technological and technical know-how in the design, production and operation of UAS that fall within the first three classification levels, inside Class-I (see pictures 1 e) and f), with MTOW <150kg, see UAS NATO taxonomy mentioned in footnote 1). Over 250 flight tests were conducted, up to 3,500ft, with UAS prototypes developed at this research centre. The instruction and training of the operational team (see picture 1 d) set the ground for the exploration of different concepts of operation (ConOps) that were tested for the first time in Portugal (e.g., night flight, multi UAV operation in the same airspace, catapult launch, UAV handover between different GCS, auto-

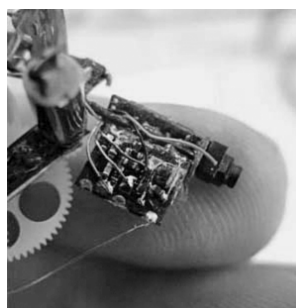
matic ground and maritime target tracking and path following, SatCom with flights beyond line of sight (BLOS)). All tests and demonstrations were performed within PtAF Air Force bases, namely at its Ota UAS test site.

In parallel with the development of fixed wing UAV, the CIDIFA initiated the development of state of the art Flapping Wing Micro Air Vehicles (FWMAV), in a close collaboration with Europe's largest Aerospace University – Delft University of Technology (TUDelft). The PtAF focused on the development of novel and miniaturized micro and nano UAS⁵ inspired in nature, for intelligence and defence-related missions. This collaboration was supported over the course of phases 2 and 3 (described below), resulting in over 20 scientific publications and the development of novel FWMAV capable of stealth autonomous flight, live video streaming and obstacle avoidance.

Picture 3 – a) DelFly Micro, with only 3 grams; and b) onboard camera and live video streaming hardware (DelFly, 2014)



a)



b)

Second phase (January 2012 to December 2013) – during this two-year phase, and as a direct consequence of the excellent results achieved in the first phase, the development and testing focused on achieving an even higher maturation and TRL. For the first time, real mission scenarios were tested in a maritime environment. In particular, the UAS were launched and operated from aerodromes located at strategic points close to the shoreline, focusing on maritime surveillance and SaR, in what can be referred to as a symbiotic cooperation with the Portuguese Navy. The operation in maritime environment assumes a prime importance on the course of the CIDIFA activities, starting from this phase, envisioning a quick and efficient integration of UAS in the maritime surveillance and SaR missions carried out by the PtAF.

5 See UAS NATO's taxonomy mentioned in footnote 1.

Noteworthy, during this phase a CIDIFA's UAS prototype was used in flight testing in the Berchtesgaden Galileo test site (see picture 4), in the South of Germany, to assess the precision of this global positioning system for aerial vehicles. These were pioneering UAS tests performed in these European facilities.

Picture 4 – a) Panoramic view of the Berchtesgaden test site (IFEN, 2017); and
b) CIDIFA UAS prototype during flight testing



a)



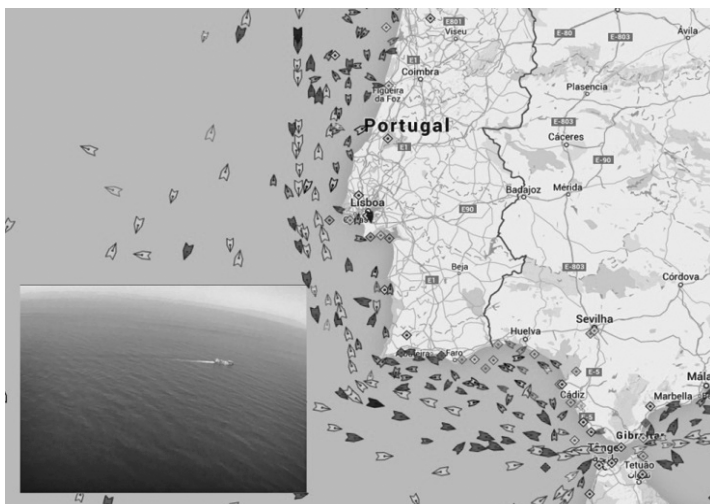
b)

Over 500 flight hours were accumulated during this phase, representing the greatest operational leap of UAS within the CIDIFA and Portugal. Also during this phase the CIDIFA participated in the Portuguese Navy's operational exercises, the Rapid Environmental Picture⁶ (REP), with the operation/testing of UAS in the context of maritime surveillance. Furthermore, the CIDIFA operational facilities were adapted to the mobility requirements imposed by the missions at hand. In particular, new mobile ground control stations (see picture 1 c) were acquired to support the operation of larger UAV and rapid deployment concepts of operation. In terms of high impact operational developments, the second phase is characterized by the development of vision-based control strategies, automatic target detection using the combination of stochastic determination programming and vision,

⁶ For more information, see Morgado *et al.* (2013, pp. 147-160).

Galileo testing, and the integration of high precision differential GPS systems – which allow for fully automatic precision landings. Furthermore, this second phase was characterized by UAS operations over the maritime shipping corridor, offshore of mainland Portugal, using the information from the Automatic Identification System (AIS) – see picture 5. It was also possible to have the UAS Command and Control (C2) station on board of Navy ships, with direct live video link, as well as successful automatic hydro-carbonates spot detection tests, in cooperation with EMSA and the Maritime Police.

Picture 5 – Maritime Navigation Corridors off the shore of Mainland Portugal; overlap of the detection and localization of a cargo ship at about 40km from the shore line, obtained from a CIDIFA Class-I UAS (CIDIFA and Google Data, 2015)



Third phase (January 2014 to December 2015) – This phase can be described as the maturation phase, where the technology was subjected to operational testing within real mission environments, in different locations in the country. In particular, we witnessed a leap in terms of collaboration for operational exercises and missions, namely with EMSA, DGPM, CEiiA, EDP, UAVision, OPTIMAL and TUDelft.

In particular, the following set of activities were conducted, at different scenarios and with different collaborations: (1) planning and execution of the *Sharpeye* exercise, which was designed to be the biggest and most important UAS exercise in Portugal – performed on a yearly basis⁷; (2) integration of UAS collected data on the

7 For more information, see Borrego and Morgado (2014).

Picture 6 – Class-I UAS (UAS30) developed in collaboration with CEiiA (from NDTIB) for the monitoring of electrical power lines: a) take-off; b) net recovery; c) UAS30 at the EDP’s electrical line interference laboratory; d) assessing the electrical interferences on onboard sensors and control systems



a)



b)



c)



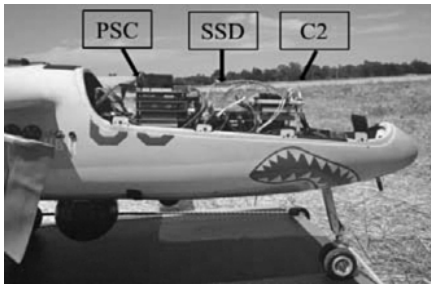
d)

Integrated Maritime Data Environment (IMDatE) and the NIPIM@R information systems, respectively belonging to the EMSA and the DGPM, the latter developed by National entities, among which Inovaworks (from the NDTIB) should be highlighted. It is worth emphasizing that the NIPIM@R is implemented to provide the EU maritime situational awareness to aid on the operational decision making, under the Common Information Sharing System (CISE), making it a fundamental tool for the operationalization of the EU Maritime Police (Richardson, 2015, p. 82) and (Ribeiro, 2016); (3) instruction and certification of PtAF Operators, with direct involvement of the Directorate of Instruction, Centre of Psychology and the Centre of Aeronautical Medicine of the PtAF, under the syllabus described in the official Instruction Program (PDINST) 144-19 and 144-20 (PDINST, 2014); (4) design, construction and testing of a Class-I UAS, the UAS30, in close collaboration with CEiiA and EDP-Inovação, specially designed for low level and low speed inspection of medium voltage electricity lines (see picture 6); (5) the technical study for the creation of a UAS test infrastructure in Portugal, open to European countries, for the

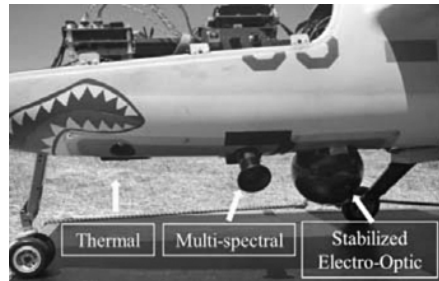
instruction, training and testing of UAS systems and teams up to Classe-III systems; (6) collaboration with UAVision, in the flight testing of their commercial Class-I UAS; (7) development of an onboard computational architecture, fundamental for the future integration of new onboard sensors, including hyper-spectral thermal cameras and radar (see picture 7); (8) integration and testing of a Synthetic Aperture Radar (SAR), from the Warsaw University of Technology; (9) operational testing of the UAS capabilities for terrain military force detection and maritime targets using SAR technology in the ZARCO operational exercise, organized by the Portuguese Armed Forces (see picture 8).

This third phase was marked by the accumulation of almost 700 flight hours and the debut of a consortium between the PtAF and the NDTIB for the design, production and operationalization of a Class-II UAS. Furthermore, strict maintenance and reliability planning was developed and implemented within the structure of the CIDIFA.

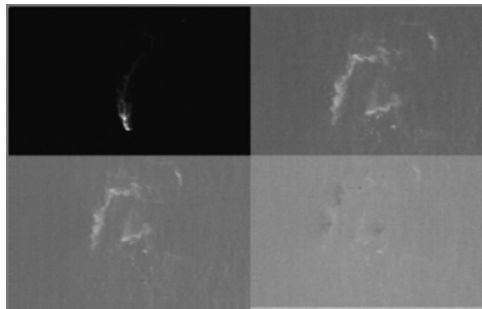
Picture 7 – a) Hardware Architecture, with Payload System Computer (PSC), Command and Control System (C2) and the solid state drives (SSD) for onboard HD recording; b) view of the payload bay, with onboard cameras; c) fish oil spill captured with the electro-optic and the hyper spectral cameras



a)



b)



c)

Picture 8 – Images of the ZARCO exercise, in Porto Santo. a) take-off of a CIDIFA UAS prototype (just under 150kg) from the Porto Santo international airport equipped with electro-optic and Warsaw University’s SAR payloads; b) optical image of forces in the field; c) pass over the Navy ship Bartolomeu Dias, and respective radar imagery (radar imagery is copyright from Warsaw University of Technology)



a)



b)



c)

Fourth Phase (January 2016 – ongoing) – in this phase, the CIDIFA aims at promoting the technology transfer of the UAS Class-I and Class-II developed and thoroughly tested in the previous phases. In particular, for the Class-I, the CIDIFA aims at promoting the industrialization and commercialization of the UAS30 (see picture 6), for civil activities, *viz a viz* compound and perimeter monitoring, inspection of critical infrastructures, e.g., power lines, dams, industrial parks, railways or shorelines, as well as aerial footage or air pollution monitoring – in this regard, the CIDIFA is currently preparing project proposals for the “Portugal-2020” funds, in collaboration with different non-governmental industries.

Moreover, on the UAS30 system type, the CIDIFA will promote testing in the context of the other branches of the Armed Forces, particularly for maritime monitoring, artillery shooting calibration, detection of unexploded ordnance (UXO) and support for demining activities, with operational tests on those activities planned

for 2017 and 2018 within the TROANTE project⁸. In the context of security forces, the UAS30 has a strong potential for crisis situation monitoring, ensuring the surveillance of public gathering and crowd control, as well as the surveillance and control of borders.

In the case of Class-II systems, the PtAF is planning its production, in collaboration with the NDTIB, under the guidelines of the DIVOPS-EMFA directives, with the goal of integrating this system in the PtAF operational fleet by 2018/2019, for maritime surveillance and SaR support. Should this be deemed as a successful and cost efficient solution, the exporting of such systems for external markets is also considered to be a valid option.

Envisioning the transition of technology, the PtAF will provide, in collaboration with the NDTIB companies UAVision and Deimos-Engenharia, services of maritime pollution (atmospheric) monitoring for the EMSA, already starting at the first semester of 2017. In fact, the EMSA, is promoting this type of UAS application due to the following facts (EMSA, 2016, p. 29):

- a) Atmospheric pollution caused by passing cargo ships that use basic oil derivatives, found to be extremely noxious – in particular the ones that contain sulphur. Furthermore, recent research has revealed that maritime traffic contributed to about 60,000 early deaths for populations living close to the coastline, with a special incidence in Europe and South Asia (Antunes, 2014);
- b) The evidence identified in a) has resulted in the creation of Controlled Emission Zones in the North and Baltic seas, in which the navigation of polluting vessels and ships is highly controlled and restricted;
- c) Aligned with a) and b), the EU has established the maximum levels of sulphur in the fuel emissions of the ships that navigate in European seas in its directive 2012/33 of 21 November 2012.

These facts suggest the urgent need to conduct monitoring and surveillance tasks of off coast ship corridors in Europe, as identified by the EMSA. To address these concerns, this agency launched an international public call, in the first semester of 2016, with the goal of selecting a limited group of service providers for this type of mission, in which a consortium led by the PtAF – in collaboration with Deimos and UAVision – was selected first, among several other European entities and consortiums. This is the realization of the dual capability of the PtAF Unmanned Aircraft Systems, and solid proof that the strategy adopted by the CIDIFA was the most efficient way of congregating Academia, Research Centres and Industry capabilities for the in-house development of systems capable of responding to military and civil mission requests, both in National and international settings.

8 For more information about the TROANTE project, see Morgado and Ruivo (2014).

At the acme of this fourth phase, we highlight that the CIDIFA is promoting the creation and development of a *National Strategy* which foresees the creation of a true *Defence Economy* in Portugal, as far as UASs are concerned, which aims at providing the means for (Morgado, 2016): (1) answering to the requirement established by the “National Strategy for the Sea” (ENM13-20) and the extension of the National Continental Platform; (2) the creation of a UAS testing framework and structure in Portugal, open to Europe and NATO; (3) the foundation of a Centre for Integrated Development of UAS in Portugal, to provide the common ground for the collaboration of national and international industries, research centres and end users.

Conclusions

This article presented, for the first time, the Research, Development and Innovation strategy of the Portuguese Air Force Research, Development and Innovation Centre in the context of Unmanned Aircraft Systems. This strategy was guided by the persistent will to satisfy the needs and aid in the missions of both military and civil operational organisations.

In particular, the research conducted in the CIDIFA stemmed from the PITVANT project in 2009, with the goal of creating collaborative control strategies of small tactical UAS, which evolved to the current remarkable landmark of more than 750 flight hours logged by Class-I UAS, with MTOW ranging between 12kg and 150kg. Furthermore, the CIDIFA set the ground for the development of a Class-II UAS with MTOW up to 600kg, envisioning its operational use in the context of the PtAF as early as 2018/2019. This strategy focused on an active collaboration with NDTIB, as well as national and international academic and industrial organizations, with the ultimate objective of promoting the transfer of technology in the short term.

The effective strategy developed by the CIDIFA has proved to be capable of serving as the basis for the planning of a National Strategy that fosters the establishment of a “Defence Economy” in Portugal in the field of UAS. In fact, and as has been shown in the present article, Portugal currently has privileged conditions for the Industrialization, Commercialization and Testing of this kind of technology.

It is now important, in light of the experience and knowledge acquired in the meantime, to promote and develop a “National Strategy” in the field of UAS focusing on: (1) the National Strategy detailed in ENM13-20 and the extension of the concomitant Continental Shelf; (2) the establishment of a Test Framework for UAS in Portugal open to Europe and NATO, taking advantage of the unique conditions that Portugal has for this kind of tests in the European context; and (3) the creation of an Integrated Development Centre for UAS, under the auspices of the PtAF. Furthermore, the definition of the “National Strategy” will guarantee the creation of a true *Defence Economy* in Portugal in the UAS context.

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Extra Dossîe

Uma Matriz Teórica da “Segurança Interna” da União Europeia

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Resumo

O artigo é um contributo para a compreensão, explicação e debate teórico das matérias de “segurança interna” no plano europeu. Analisa a evolução do Espaço de Liberdade, Segurança e Justiça e o impacto que esses desenvolvimentos trouxeram para os Estados-membros e a União Europeia.

A investigação recorre ao quadro teórico das teorias da integração europeia. Explicam-se as razões da evolução e criação da “segurança interna” europeia, e os seus efeitos no campo normativo e político. Conclui-se que um conjunto de acontecimentos de ordem externa e interna ao processo de integração europeia contribuíram para a emergência e comunitarização da “segurança interna” europeia, a qual se desenvolveu de forma incremental até possuir uma lógica supranacional, mas sem uma dimensão estratégica sustentada, o que faz da União um ator incompleto em “segurança interna”.

Abstract

A Theoretical Matrix of European Union “Internal Security”

This article is a contribution to the understanding of theoretical debates orbiting the issues of “internal security” within the European Union. Its analysis is focused on the evolution of the Area of Freedom, Security and Justice, as well as, how this developments influenced the State Members and the European Union.

The research is based on a conceptual framework of the theories of European integration. Through this theoretical lenses it is explained the reasons for the development and creation of European “internal security” and its impact in the legal and political fields.

It is argued that a series of occurrences, both domestic and external to the European integration process, were involved in the emergence and communitarisation of European “internal security”. Its development was gradual and a manifestation of a supranational logic. However there is a lack of a sustainable strategic dimension, making the Union an incomplete “internal security” actor.

Introdução

Na génese do presente artigo está o interesse associado à frágil abordagem académica das questões de segurança interna da União Europeia (UE) mais no âmbito nacional que internacional. Dessa forma, escora-se esta análise nas teorias da integração europeia para explicar a criação e evolução da “segurança interna”¹ no âmbito da UE, procurando coalescer diferentes ângulos de análise numa perspetiva que procuramos que seja coerente, mas sem ter o escopo de criar uma *mainstream*.

O artigo tem como propósito o incremento da compreensão e explicação das matérias de “segurança interna” no plano europeu e os seus inerentes impactos no padrão clássico da segurança interna a nível nacional. Em guisa introdutória evidenciam-se alguns conceitos centrais desta investigação.

Enquanto a segurança é um “estado” ou “condição”, a segurança interna é entendida como uma atividade desenvolvida por regra pelas Forças e Serviços de Segurança no interior de um Estado soberano, tendo em vista genericamente a manutenção da ordem e a garantia da preservação de bens e pessoas. Todavia, este conceito tem vindo a ser “capturado” e aplicado ao nível da União, não apenas por esta abarcar gradualmente estas matérias, mas igualmente devido ao evoluir da UE e da tendência comunitarizadora do Espaço de Liberdade Segurança e Justiça (ELSJ).

Essencialmente por influência de alguns acontecimentos que revelaram um enfoque maior da ameaça terrorista em geral e dos EUA em particular, tem sido veiculado por estes o conceito de *Homeland Security*, a qual tem tido uma absorção e integração ainda tímida na UE, em parte devido às idiossincrasias dos Estados-membros e ao permanente receio de perda de soberania por parte destes. Mas estes também não devem temer perder aquilo que já não têm de facto. A mera ilusão de pensar ter o que não possuem, não representa objetivamente a posse de capacidades para garantir a sua soberania e segurança.

Interligado umbilicalmente com estes dois conceitos operativos está a questão das fronteiras e a forma como estas são entendidas. Muitas vezes, através de exercícios de tergiversação, o conceito de fronteira não é devidamente explicitado ou enquadrado no seu contexto. Destarte, parece-nos notório que o termo em si continua a ter o mesmo significado, pese embora no espaço europeu fruto de mutações jurídicas e de ajustamentos políticos no processo de integração europeia, estas sejam encaradas de outra forma, a qual não significa que deixassem de ser o que eram, pois não podemos confundir o termo “fronteira”, com o método e o local onde são garantidos os controlos, na prática com a sua gestão.

Nessa linha, também após o final da Guerra Fria ficou demonstrado que o Estado não era o único objeto referente de segurança, nem este é apenas alvo de ameaças,

1 Usamos a expressão “segurança interna” quando nos referimos à vertente europeia, uma vez que não é unânime o uso deste termo neste âmbito e para a distinguir da segurança interna estatal.

como não é o único fornecedor de segurança. O ambiente de segurança desse período criou uma oportunidade que favoreceu explicitamente a *actorness* de segurança da UE (Brandão, 2016, pp. 122-123). Até porque como referiu Freire (2015, p. 41) “vários atores têm agências e capacidade de participação na produção de (in) segurança e que a concentração no Estado, enquanto ator central, é limitadora”.

Contudo, sem os Estados ainda não é possível a existência da segurança interna, pois esta é vista como uma área sensível e central da sua soberania, e um “obstáculo” ao seu desenvolvimento (Mitsilegas, Monar, Rees, 2003, p. 7; Trauner e Servent, 2015a, p. 11), em virtude da variedade de interesses nacionais, e de sistemas legais e operacionais que este campo envolve (Monar, 2015, p. 8). Com efeito, não nos surpreende que o processo de integração europeia seja caracterizado por um elevado nível de contestação, tendo-se tornado a sua comunitarização num objeto de estudo em si mesmo (Kaunert, 2010; Wolff, Goudappel e Zwaan, 2011; Trauner e Servent, 2015b, p. 5 and 2016, p. 1418).

Até ao início dos anos 90 a segurança interna era um tema monopolizado pelos governos nacionais e preservado como um assunto reservado da soberania. A partir deste período, fruto dos acontecimentos internacionais/europeus de então e da implementação da Justiça e Assuntos Internos (JAI) pelo Tratado da União Europeia (TUE) assistiu-se a um alargamento “geográfico” destas matérias e a um conjunto de maiores preocupações com a segurança, nomeadamente ao nível da “segurança interna”, a qual passou a ocupar gradualmente um espaço mais proeminente na agenda da UE (Bigo, 1998, p. 56; Mitsilegas, Monar e Rees, 2003, p. 1; Kaunert e Leonard, 2012; Puetter, 2014, p. 8).

Assim, inicialmente destinada a reforçar a cooperação em matéria de “segurança interna” nas fronteiras comuns da UE para compensar a criação de uma área de livre circulação na Europa, o domínio da política de “segurança interna” da UE alargou consideravelmente o âmbito e a cobertura geográfica (Schroeder, 2012, p. 38).

O rigor de análise científica não implica procurar uma explicação simples para algo complexo, mas sim explicar fenómenos complexos de forma simples. Nesse sentido, sem querer subalternizar ou sobrevalorizar determinados acontecimentos sem justificação sustentada, consideramos que, dentro do vasto conjunto de acontecimentos/factos que influenciam atualmente os desenvolvimentos da “segurança interna” da União, dois fenómenos possuem uma encimada relevância: o terrorismo e as migrações. Estas duas tipologias vão ser concatenadas à questão das fronteiras, que dará origem à criação de uma gestão integrada de fronteiras externas da UE, tendo estas repercussões posteriores na “segurança interna” europeia e dos Estados-membros a nível teórico e prático.

Com esta análise esperamos contribuir para o levantar de um conjunto de questões de ordem teórica que conduzam a uma reflexão e abordagem complementar destes fenómenos, bem como concorrer para uma melhor explicação dos mesmos através

de um exercício de sinédoque teórico-analítico. Do ponto de vista prático, procuramos auxiliar uma maior prolepse no exercício das funções de segurança interna, no campo político e operacional.

A investigação está estruturada da forma seguinte: uma introdução, onde abrimos a temática que vamos tratar e apresentamos algumas notas metodológicas; no segundo ponto, expomos o quadro teórico utilizado; de seguida, realizamos um enquadramento normativo; posteriormente, analisamos os principais desenvolvimentos destas matérias à luz do quadro teórico-concetual atinente; por fim, apresentamos as principais conclusões da investigação.

Quadro de Abordagem Teórica

Existe uma profusão de abordagens teóricas e ângulos de análise relativos a matérias setoriais do ELSJ, nomeadamente realizadas pelos estudos de segurança. Porém, a grande maioria foca-se em áreas particulares (e.g. terrorismo, imigração, asilo) que concorrem para a compreensão da “segurança interna”, embora levem a uma fragmentação das análises.

Sobre as diferentes tipologias de abordagem ao campo da “segurança interna” encontramos no artigo de Bossong e Rhinard (2013b) um levantamento sintético das diferentes perspetivas teóricas que ancoram esta temática de uma forma global ou apenas algumas das suas componentes, embora o foco dessas análises seja ainda colocado na vertente da cooperação da “segurança interna” europeia e não no prisma da integração/supranacional, o que limita a sua análise. Por sua vez, encontramos em Trauner e Servent (2016) um levantamento das principais obras que se dedicaram ao estudo do ELSJ no sentido da sua comunitarização e das políticas setoriais que contribuem para esse processo.

Bossong e Rhinard (2016) procuram sintetizar e reunir um conjunto de abordagens teóricas de um grupo íncrito de autores, que, de uma forma global, constituem as correntes principais dos estudos da “segurança interna” europeia: a securitização que configura um elemento central da “Escola de Copenhaga” (Balzacq); uma abordagem da “Escola de Paris” (Bigo); da governação e cooperação europeia em matéria de “segurança interna” (Bossong e Lavenex); uma perspetiva teórico-jurídica destas matérias (Mitsilegas); e por fim as abordagens do neofuncionalismo (Niemann) e do institucionalismo (Servent e Kostakopoulou).

Assim, dois grandes grupos compõem a arquitetura teórica desta temática: os estudos de segurança e as teorias de integração europeia. Apesar da importância dos primeiros, vamos dar primazia às segundas por serem aquelas que melhor explicam o processo de integração europeia e a “segurança interna” da UE.

Para os realistas e intergovernamentalistas (Milward, 1992; Moravcsik, 1993; Grieco, 1998; Lequesne, 1998; Peterson e Bomberg, 1999), os interesses nacionais, as negociações interestaduais e as restrições sobre a reforma da União, representaram as

principais linhas orientadoras do ritmo e da direção da integração europeia, bem como a autonomia e influência dos líderes nacionais *vis-à-vis* a UE. Esta corrente realça o menor denominador comum dentro das negociações do processo de tomada de decisão da UE (Kirchner, 1992, p. 33). Estes consideram que os governos agem dentro da cena internacional para prosseguir interesses concretos, mas que estes são construídos sobre a base de objetivos definidos no nível doméstico (Moravcsik, 1993, p. 481).

Para os clássicos do intergovernamentalismo, o Estado é o único capaz de prover a segurança contra ameaças externas e internas. Assim numa perspetiva estritamente estado-cêntrica a “segurança interna” europeia não existe, nem a UE é um ator neste domínio. Todavia, temos de ter em linha de conta que a UE é um ator único e atípico, sendo necessários outros ângulos de análise, além dos modelos clássicos.

Pelo contrário, a perspetiva neofuncionalista dá ênfase à importância dos atores supranacionais e dos grupos de interesse transnacionais no processo de integração. Esta corrente deu também atenção à importância das tarefas de novos atores em novos setores e dá realce à construção de interesses comuns e ao papel do conjunto (Kirchner, 1992, p. 33). Esta teoria, inicialmente desenvolvida por Haas (1958) e depois por outros autores (Schmitter, 1969; Lindberg e Scheingold, 1970, Rosamond, 2000) destaca também a transferência de assuntos/poderes de índole política para um espaço tecnocrático, e concentra-se especialmente sobre o papel central das elites nacionais e a expansão funcional.

É com o neofuncionalismo que vai surgir o conceito de *spillover* ou engrenagem. O efeito *spillover* confere ao processo de integração uma “expansão automática”, arrastando progressivamente as diferentes áreas para um nível superior de integração, o supranacional. O *spillover* funciona como uma força propulsora capaz de fazer arrastar e desenvolver outras áreas através de uma engrenagem lógica de outras integrações (Lobo-Fernandes e Camisão, 2005, p. 36).

Para Rosamond (2000, p. 73) o postulado desta corrente “reside fundamentalmente no efeito *spillover*, que corresponde às externalidades criadas pelos processos de integração que otimizam as condições para a delegação de poderes soberanos e permitem o aprofundamento da integração. Essa teoria contribui para explicar a densidade institucional da UE para além de mera existência de um sistema de Estados e da ênfase realista na prossecução de políticas de poder”.

O conceito de *spillover* assume três dimensões: funcional, política e de aculturação. O conceito na sua primeira dimensão centra-se na vertente económica, na emergência e acréscimo da integração europeia, na “burocracia supranacional”, na qual a Comissão Europeia assume um papel fundamental. A segunda significa que as elites vão ser conduzidas a transferir o jogo político para o “nível de Bruxelas”, favorecendo mais a integração como forma de resolução de problemas emergentes no âmbito supranacional, em que o método negocial promove os interesses comuns. A

terceira refere-se ao papel central das instituições supranacionais (Comissão e o Tribunal de Justiça da UE – TJUE), enquanto fomentadoras de mais integração (Schwok, 2005, pp. 59-60; Conceição, 2016, pp. 21-22).

O institucionalismo fundado por Keohane (2002), cuja importância teórica lhe foi dada também por vários autores, como Hall e Taylor (1996), Aspinwall e Schneider (2000) e Pierson (2004), aceitava as premissas do realismo, as quais eram o ponto de partida para o formato do institucionalismo da escolha racional dos atores políticos e para as investigações acerca dos efeitos do longo prazo relativamente às decisões iniciais, sublinhando a natureza dos seus efeitos contingenciais. Para esta abordagem, os resultados políticos deviam ser interpretados à luz das escolhas institucionais passadas (Krasner, 1984 e 1988; Bulmer, 1994; Thelen, 2003; Fernández, 2008). A abordagem da escolha racional congrega um conjunto de pressupostos básicos adicionais de suposição substantiva, nomeadamente a natureza dos atores, as suas preferências e os ambientes institucionais ou estratégicos em que interatuam (Pollack, 2007, pp. 33-34), mas normalmente fazem com que os atores acreditem que é provável que estes obtenham os melhores resultados (Jupille, Caporaso e Checkel, 2003, p. 11).

A ênfase para esta abordagem é colocada na exploração das preferências dos atores, a qual adota a teoria do principal-agente ao estudo da integração europeia (Pollack, 2007). Esta tem como base uma lógica de consequências e de custo-benefício, em que os atores são egoístas e concentram-se nos recursos materiais de que dispõem (Jupille, Caporaso e Checkel, 2003, p. 12).

O institucionalismo sociológico (Olsen e March, 1989) constitui a primeira alternativa teórica ao institucionalismo da escolha racional, sobre a emergência, desenvolvimento e consequências das instituições políticas interpretadas extensivamente. Esta corrente concebe o desenvolvimento institucional como um processo, onde as preocupações com eficiência têm uma prioridade baixa, em relação às preocupações de legitimidade (Tallberg, 2006, p. 216). Para esta perspetiva, a integração depende crucialmente da cultura e das variações cognitivas, e conseqüentemente do impacto dos valores e identidade dos atores (Aspinwall e Schneider, 2000, p. 21). A estrutura das instituições transformam o comportamento dos atores, sendo estes condicionados pelos procedimentos e métodos edificados pelas instituições, que conduzem à socialização dos mesmos.

Por sua vez, o institucionalismo da escolha racional concentra-se sobre o curto prazo racional (Pierson, 1996), enquanto o sociológico (e histórico) preocupa-se com o longo prazo (Bulmer, 1994), sendo que as normas são internalizadas, incluindo a identidade (Aspinwall e Schneider, 2000, pp. 5-6).

A cultura é a força mais importante que conduz a institucionalização do comportamento humano. A legitimidade surge também como um conceito crucial do institucionalismo sociológico. A perspetiva do institucionalismo da escolha racional vê o

comportamento humano como utilitário no sentido de o maximizar, de acordo com as suas preferências (Aspinwall e Schneider, 2000, pp. 8-10).

Os modelos organizacionais que os Estados adotam não são escolhidos porque representam uma questão de eficiência num determinado contexto, mas porque refletem uma conceção social que tem por base a legitimidade e um desenho institucional adequado. O institucionalismo sociológico rejeita as reivindicações racionalistas acerca da eficiência institucional adotada enfatizando, por sua vez, a rigidez de modelos institucionais e a lentidão do processo de ajuste às novas exigências funcionais (Tallberg, 2006, p. 216).

No entanto, de acordo com Monar (2015, p. 9) as instituições refletem plenamente a natureza da UE enquanto construção criada e baseada nos Estados-membros. Estas podem desenvolver dinâmicas institucionais que refletem os seus interesses e a legitimidade, mas estes estarão sujeitos e entrelaçados com a constelação de interesses nacionais.

Esta corrente tem vindo a tornar-se cada vez mais relevante nos estudos europeus, em muito devido ao papel das instituições europeias e da comunitarização do ELSJ. Assim as mudanças institucionais podem ter um impacto sobre as crenças dos atores e o sistema de normas (Trauner e Servent, 2015a, pp. 12-22), como teve por exemplo a introdução do procedimento de codecisão e as interações entre a Comissão e o TJUE (Trauner e Lavanex, 2015, pp. 235-236).

Na linha construtivista, o Tratado de Lisboa deu mais autonomia e relevância às instituições europeias, o que conduziu cumulativamente a uma maior interdependência entre os diferentes atores (Parlamento Europeu – PE –, TJUE, Comissão, Estados, Agências), como demonstrou Checkel (2005).

De uma forma geral, segundo Wendt (1995) e Adler (1997) o construtivismo parte do pressuposto de que a “realidade internacional é socialmente construída pelas estruturas cognitivas que dão sentido ao mundo material”. Para o construtivismo a ênfase é colocada sobre o processo de interação entre os agentes e as estruturas (Jupille, Caporaso e Checkel, 2003, p. 14; Checkel, 2007, pp. 57-58). O comportamento adequado é conduzido pela aprendizagem e pelas dinâmicas de socialização (Risse, 2000).

O processo de socialização europeu não significa transferência de lealdade, do nível nacional para o europeu, mas um possível entrelaçamento de identidades – nacionais e europeias, e de interdependências institucionais.

Os desenvolvimentos das políticas do ELSJ foram analisados e explicados pelo construtivismo o qual se desenvolveu na década de 1990, emergindo como uma teoria das Relações Internacionais, mas é cada vez mais usada na análise jurídica (Kubáková, 1998; Cristol, 2011; O’Neill, 2015, p. 439).

A relevância das jurisdições, onde novas práticas e instrumentos legais emergem, conduz a um processo de socialização, a qual constrói também “uma nova reali-

dade social” (O’Neill, 2015, p. 440), sendo o ELSJ “uma parte constitucional da autoridade da UE” (Gibbs, 2011, p. 83; O’Neill, 2015, p. 440), em virtude do contexto pragmático e das práticas sociais nas quais os atores estão inseridos (Kratochwil, 2011; Bremberg, 2015, p. 674).

Apesar das diferenças das abordagens, nomeadamente quanto ao papel dos Estados e das instituições na formação de identidades e interesses, o diálogo teórico entre ambas é desejável e alcançável, o qual deve prosseguir através de um conjunto de estudos empíricos com proposições teóricas (Jupille, Caporaso e Checkel, 2003, pp. 16-17), desiderato que procuramos alcançar com este artigo.

Enquadramento Normativo e Gênese da “Segurança Interna” da União Europeia

O TUE definiu um conjunto de “matérias de interesse comum” (e.g. asilo, imigração, fronteiras externas da UE) e criou a JAI, com uma natureza eminentemente intergovernamental, da qual decorria a atribuição de poderes significativos aos Estados-membros e um papel limitado para as instituições europeias. A Comissão Europeia teve de partilhar o poder de iniciativa legislativa com os Estados-membros e era apenas associada ao trabalho desta área política. O PE era informado regularmente e consultado nos casos do desenvolvimento da política JAI, sendo as decisões tomadas no Conselho genericamente por unanimidade (Kaurnert, Léonard e Pawlak, 2012a, pp. 7-8).

Apesar da institucionalização dos assuntos de “segurança interna”, estes eram dominados pelos Estados. A corrente que melhor explicava estas matérias era o intergovernamentalismo. Mas em virtude dos desenvolvimentos desta área começou a emergir o embrião para o desenvolvimento de outras correntes de explicação neste domínio: neofuncionalismo, institucionalismo e construtivismo.

O Tratado de Amesterdão trouxe um novo arranjo institucional na história da integração europeia (Puetter, 2014, p. 19) e alargamentos significativos, nomeadamente a comunitarização de algumas áreas (ex. controlo externo das fronteiras, imigração, asilo e a política de vistos) e um conjunto de aspetos de flexibilidade em relação aos acordos de Schengen, a qual resultou inclusive na sua incorporação no sistema legal da UE. Estes desenvolvimentos tiveram ainda um impulso maior com o Conselho de Tampere, devido ao contributo dado neste domínio para o funcionamento do mercado único (Mitsilegas, Monar, Rees, 2003, p. 2; Kaurnert, 2010; Kaunert, Léonard e Pawlak, 2012a, p. 8). Estes progressos contribuíram para uma “internalização” das normas europeias e, posteriormente, para a adoção de um “comportamento adequado” dos atores.

Schengen tem sido assim um “laboratório governamental”, em parte devido ao papel da Comissão que tem procurado “puxar” por esta área, na qual vê também uma oportunidade para incrementar o seu papel dada a elevada capacidade de *expertise* que possui nesta matéria. Por sua vez, a qualidade deste “laboratório” tem

ofuscado a separação entre uma forte integração da UE para uma Europa mais fraca no seu território, pelo impacto nas matérias de identidade. No entanto, problemas complexos de ação coletiva neste campo requerem inevitavelmente uma centralização do *decision-making* (Zaiotti, 2010, p. 110; Boswell, 2012; Parkes, 2015, p. 63), embora nestas matérias, o efeito *spillover* no sentido da supranacionalização se encontre limitado pela natureza intrínseca das mesmas.

Nesse sentido, a “supranacionalização dos ministros do interior” resultou também num impasse ideacional. Ironicamente, esta vitória abriu uma janela de oportunidade para a Comissão (Guiraudon, 2000; Monar, 2001; Boswell, 2003; Kaurnet, 2010). Enquanto o PE se preocupa bastante com a questão dos imigrantes, os ministros do interior impõem uma narrativa nacional e restringem a agenda. Por sua vez, a Comissão apresenta a sua experiência técnica de maneira desligada das preocupações dos governos nacionais e do PE (Parkes, 2015, p. 69).

Com efeito, podemos referir que o grau de socialização alcançado começou a ter reflexos nas matérias de “segurança interna” e assim a perspectiva construtivista encontra terreno propício para aventar a sua explicação, bem como o institucionalismo sociológico, pois esta é fruto do papel das instituições, da participação dos agentes nas mesmas, dos seus princípios, regras e valores comuns. Também do ponto de vista do neofuncionalismo, temos de ter em linha de conta o crescente papel das instituições europeias e do *spillover* das outras matérias conexas, como a “segurança interna” que “é um produto derivado da construção europeia” (Bigo, 1998, p. 60), constituindo o ELSJ um teste ao papel das instituições da UE (Monar, 2015).

Atualmente, a nível normativo, a UE tem competência partilhada com os Estados-membros no âmbito do ELSJ, de acordo com a alínea j), n.º 2 do art.º 4 do Tratado do Funcionamento da UE (TFUE). Cabe ao Conselho Europeu definir as orientações estratégicas da programação legislativa e operacional (art.º 68 do TFUE). Por sua vez, de acordo com art.º 71 do TFUE, o Conselho, através do Comité Operacional de Segurança Interna assegura a promoção e o reforço da cooperação operacional nesta matéria.

O n.º 3 do art.º 4 do TUE estabelece o princípio da cooperação leal entre Estados-membros e a UE, que conciliado com o n.º 1, do art.º 77 do TFUE, tem implicações profundas para a caracterização da UE, dos Estados-membros e do próprio projeto de integração europeia. Ao abdicarem dos controlos internos, os países provocaram uma considerável mutação nas suas responsabilidades tradicionais de Estados soberanos. Por outro lado, aproxima a UE de uma federação dotando-a de uma fronteira externa coletiva, a defender e eventualmente a fortalecer (Piçarra, 2012).

As fronteiras institucionais e legais da UE movimentaram-se para além do círculo dos Estados-membros (Lavenex, 2004, p. 683), criando um espaço para o exercício

da “segurança interna” no plano europeu, embora os atores a operar sejam os mesmos do plano nacional. Por outro lado, estas fronteiras deixaram de ser policiadas da maneira tradicional. Os controlos não são levados a cabo por uma autoridade central, mas pelas autoridades policiais nacionais, com a participação de uma instância central de coordenação (Piçarra, 2012). Esta complexidade de redes pode ajudar a um maior diálogo, partilha de valores comuns e a um processo de socialização, na linha dos construtivistas; ao incremento destas temáticas através de um efeito *spillover* político, de acordo com o neofuncionalismo; ou a um bloqueio intencional do sistema *ab initio* pelo Estados, segundo o institucionalismo da escolha racional ou o intergovernamentalismo.

De acordo com o argumento de Geddes (2003) os Estados-membros, ao desfocarem as suas identidades nacionais e ao criarem novas estruturas de poder social e político, fixam ao nível intra-UE a “livre circulação” e os imigrantes como “cidadão da UE” (Parkes, 2015, p. 55). Nesse sentido, não podemos esquecer que providenciar “segurança interna” aos seus cidadãos é um “bem público”, a qual era apenas um papel do Estado, inclusive como uma das suas principais fontes de legitimidade (Mitsilegas, Monar, Rees, 2003, p. 6; Bossong e Rhinard, 2013b). Mas hoje também é da UE, embora com a participação de autoridades policiais dos Estados-membros.

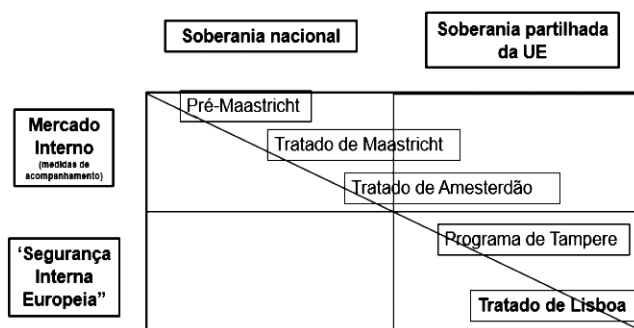
Na linha de Smith (1981, pp. 191-192), no âmbito da delimitação das fronteiras, o mais importante não são questões de segurança, mas a ideia de identidade, que revelam as fronteiras nacionais (Pawlak, 2012, p. 24). A UE vê-se, assim, diretamente envolvida nas questões de identidade, controlo e segurança interligadas com o conceito de fronteira (Piçarra, 2012), que reflete um dos pontos centrais da integração europeia, a imbricação dos sistemas políticos nacionais e europeus.

As identidades segundo os construtivistas também podem ser criadas (Checkel, 2001; Risse, 2010) desempenhando as instituições um papel importante na sua conceção, de acordo com o institucionalismo sociológico, embora para o institucionalismo racional estas apenas sejam fruto do prolongamento dos interesses dos Estados.

Do Tratado de Lisboa resulta como facto evidente e uma novidade destas matérias, o enquadramento do mercado interno pelo ELSJ. Por outro lado, procurou envolver mais os Parlamentos Nacionais e o PE, sendo que os primeiros devem participar no ELSJ (alínea c), do art.º 12 do TUE). Assim, antes do TUE não se falava formalmente de “segurança interna” europeia, após “Lisboa” passamos a ter uma “segurança interna” da União, com a participação e entrelaçamento das ações de vários atores. O Tratado de Lisboa conferiu personalidade jurídica à UE e cumulativamente incrementou o potencial de desenvolvimento desta área, com elevado crescimento nos últimos anos (Kaurnet, 2010; Brandão, 2016). Dentro destes elementos destaca-se o papel que a Comissão passou a ter no processo de construção do ELSJ, através de

alianças com outras instituições no sentido de uma aceitação e uma “soberania nacional partilhada” com a UE, de que resultaram importantes desenvolvimentos. Estes progressos normativos conduziram a um crescimento da “vertente estratégica” no cômputo da “segurança interna” da UE, como verificamos na figura 1 (Kaurnet, 2010; Kaunert, Léonard e Pawlak, 2012a, p. 8; Bossong e Rhinard, 2013a, p. 46; Huber, 2015; O’Neill, 2015; Schumacher, 2015; Steindler, 2015, pp. 403-406; Boer, 2015, p. 121; Brandão, 2016, pp. 118-122).

Figura 1 – Matriz de Normas do ELSJ



Para os construtivistas, a legalização é particularmente importante para os modos hierárquicos de interação, socialização, confiança mútua e a existência de um *ethos* (Benyon 1996; Boer, 2005; Lavenex e Wichmann, 2009, p. 98). Por outro lado, esta tem um efeito *spillover* nas suas três dimensões.

O Tratado de Lisboa colocou sob a alçada do método comunitário os elementos do ELSJ, os quais ainda se encontravam sujeitos ao procedimento intergovernamental – cooperação policial e judiciária em matéria penal e a aproximação das legislações penais e processuais-penais dos Estados-membros. Estes, num quadro Schengen, podiam ser vistos como “medidas compensatórias” ou de “alargamento” da supressão dos controlos de pessoas nas fronteiras internas da UE (Piçarra, 2010, p. 964; Trauner e Servent, 2016, p. 1428).

As políticas de “segurança interna” da UE desenvolveram-se baseadas numa confusa definição de *road maps* setoriais e programas para uma década, com soluções *ad hoc* para desafios emergentes ou resultantes de interesses organizacionais específicos. Nenhum dos dois programas (Tampere e Haia) pode ser qualificado como uma declaração unificadora e visionária dos interesses da UE relativamente à “segurança interna”. A própria Estratégia de Segurança Interna (ESI) é uma tentativa de unificar um conjunto de documentos num quadro concetual coerente, no sentido de promover uma abordagem europeia comum de combate às ameaças à “segurança interna” (Schroeder, 2012, pp. 43-47).

A ESI serve como linha orientadora normativa quanto à ação de segurança preventiva e à erosão entre segurança interna e externa. Por outro lado, os discursos que realcem um conjunto de ameaças podem ser utilizados para promover o fortalecimento dos executivos governamentais e para deixar de lado objetivos alternativos para o desenvolvimento de uma ordem de segurança equilibrada e baseada na lei ao nível da UE (Bigo, 2010; Bossong e Rhinard, 2013a, p. 48).

Neste âmbito, a noção de “segurança interna” a nível europeu é forjada de uma configuração política e de segurança, pouco a pouco ajustada ao controlo do crime, ao controlo da imigração e das fronteiras (Bigo, 1998, p.59), aceite pelos Estados-membros, dado que a liberdade de movimentos e a segurança estão interligadas com o ambiente doméstico (Mitsilegas, Monar e Rees, 2003, p. 2).

Na linha do art.º 3 do TUE, portanto, em vez do objetivo de criar uma grande plataforma de apoio para os países europeus, a UE vê-se como a única responsável pela prestação da segurança – o “guardião do povo” (Mitsilegas, Monar e Rees, 2003). Com efeito, leva-nos a categorizar a UE como uma organização política, em que é menos que uma federação mas mais do que um mero regime, a qual vem colocar em causa o monopólio do poder do Estado e cria uma Europa de geometria variável, com vários *opt-outs* e *opt-ins* e acordos intergovernamentais. Evidenciam-se assim os desafios da integração europeia assente em diferentes “genealogias” e ideias subjacentes à sua evolução que, por sua vez, dificultam as tentativas de definição do território da União (Piçarra, 2010; Pawlak, 2012, p. 23; Kaunert, Léonard e Pawlak, 2012a, p. 5; Parkes, 2015, pp. 60-62).

De acordo com art.º 72 do TFUE “o presente título não prejudica o exercício das responsabilidades que incumbem aos Estados-membros em matéria de manutenção da ordem pública e de garantia da segurança interna”, uma vez que neste contexto a “segurança interna” é entendida como uma função de padronização da aplicação da lei (O’Neill, 2015, p. 443)² e não no sentido de limitar ou avocar competências dos Estados neste domínio.

A criação da cidadania europeia (art.º 9 do TUE e art.º 21 e 22 do TFUE) ou o princípio da solidariedade (art.º 77 a 80 e 222 do TFUE), embora muitas vezes considerados como simbólicos, trouxeram uma contribuição importante para a emergência da *Homeland European*. Estes elementos conciliados com os atentados terroristas de 11 de setembro e posteriormente em Madrid e Londres criaram entre os decisores políticos europeus um ímpeto para a emergência e uma maior integração ao nível europeu da ideia da “segurança interna” (Pawlak, 2012, p. 28; Trauner e Lavanex, 2015, p. 236), em parte também por influência dos EUA, na qual a União passou ser

2 Antes do Tratado de Lisboa não havia referências a estes termos. Este Tratado recorre à expressão “segurança nacional” quando se refere à segurança interna dos Estados-membros, para fazer a distinção da “segurança interna” da UE.

um destinatário de “normas de segurança” vindas da outra margem do Atlântico (MacKenzie, 2012, p. 99).

Esta integração pode ser feita a nível legislativo permitindo prosseguir um duplo objetivo, aproximação dos elementos substantivos da legislação penal e simplificação dos aspetos de procedimentos da cooperação judicial e penal (Lavenex e Wichmann, 2009, pp. 87-88). Porém, as implicações destes progressos levou a que alguns Estados ficassem de fora, uma vez que ficariam sujeitos ao método comunitário.

Embora com um conjunto de singularidades, a “segurança interna” teve desenvolvimentos de primeira monta, sem colocar em causa os elementos essenciais dos Estados, não obstante os afete.

Desenvolvimentos da “Segurança Interna” da União Europeia

As políticas de segurança interna e externa fazem parte das funções centrais do Estado, mas na atualidade já não são exclusivas destes. Neste campo, ao abrigo da propalada mudança no ambiente de segurança foram várias as transformações que se procuraram encetar no plano pragmático e teórico.

Todavia, ao nível da UE, continuamos a sofrer de um problema comum inerente às (novas) instituições europeias, ou seja, a sua instabilidade experimental (Steindler, 2015, p. 404), bastante evidente no campo da segurança interna/externa ou, como recorrentemente tem sido referida esta problemática – de segurança “abrangente”, “global” ou “holística” – que, independentemente dos termos usados serem potencialmente mais integradores, não deixam de ser um mero exercício de palimpsesto, que representa vulgarmente uma atividade incompleta e insuficiente, até porque a segurança é ontologicamente incindível.

O ELSJ é a política setorial que melhor reflete o processo de integração europeia. A sua evolução decorreu de acordos *ad hoc*, a nível informal, fora do acervo comunitário, numa base de cooperação intergovernamental, para evoluir para uma política gradualmente supranacional ao longo das sucessivas alterações aos Tratados. Com efeito, estas mudanças institucionais representaram um avanço significativo da integração europeia nas matérias de “segurança interna” (Kaunert, Léonard e Pawlak, 2012b, p. 169; Trauner e Servent, 2015a, pp. 11-12), pese embora a comunitarização do ELSJ não se tenha traduzido numa mudança política de fundo, dado que os Estados continuaram a controlar os elementos fundamentais destas matérias (Trauner e Servent, 2016).

A “segurança interna” na UE evolui muito numa base tecnocrática e burocrática, em matérias policiais, pertencentes tradicionalmente ao núcleo duro da soberania. Por vezes estas matérias foram tratadas numa base técnica, quando a sua natureza é eminentemente política, como seja a questão das fronteiras. Com efeito, podemos afirmar que alguns elementos da corrente neofuncionalista fornecem-nos elementos explicativos da evolução desta área, pela prevalência das matérias num domí-

nio técnico, pelo efeito *spillover* e devido ao grau de supranacionalização alcançado. O desenvolvimento do processo de integração europeia potenciou a emergência da “segurança interna” europeia. Por outro lado, as novas dimensões de territorialidade resultaram da erosão da autoridade e soberania do Estado. Nessa medida, uma solução poderia ter sido uma abordagem global, mas torna-se difícil à luz dos elementos históricos, ideológicos que a abordagem de “segurança interna” tem gerado nas audiências domésticas. Por fim, a ideia europeia de *Homeland* tem também uma forte componente normativa, definida principalmente pelo equilíbrio entre a justiça, liberdade e segurança (Pawlak, 2012, pp. 32-33).

A ideia de “segurança interna” é mais política do que geralmente aparenta. Esta não congrega apenas conceitos fundamentais como território, soberania ou fronteira, mas integra também a aceitação pela sociedade de medidas políticas que, em circunstâncias diferentes, teriam sido amplamente criticadas pela sua intromissão nas liberdades civis (Pawlak, 2012, p. 15).

Com efeito, na linha do pensamento de Bigo (1998) e Boer (2011) o conceito de “segurança interna” reflete essa evolução globalizante e permite concebê-la sob a forma de um contínuo de atividades que antes estavam compartimentadas. Por outro lado, a emergência da UE como ator de “segurança interna” tem também um enorme significado no processo e integração europeia (Mitsilegas, Monar e Rees, 2003, p. 6), atendendo a que segundo Kirschner e Sperling (2007) esta constitui uma das funções da segurança.

Para a corrente construtivista, a adesão a valores comuns, culturas jurídicas semelhantes e perceções da partilha de problemas pode facilitar a cooperação para uma aplicação da lei com sucesso. Por outro lado, as redes de assistência técnica estão a ser usadas como uma ferramenta para “socializar” os países (terceiros) com os padrões europeus comuns de aplicação da lei, a qual é verificável através do nível “meso” (ex. redes de oficiais de ligação em matéria penal, troca de informações), “micro” (ex. trabalho conjunto entre autoridades policiais e judiciais para fazer cumprir a lei num ambiente transfronteiriço) (Benyon, 1996; Lavenex e Wichmann, 2009, pp. 88-98).

Contrariamente à Política Comum de Segurança e Defesa, as instituições de “segurança interna” tiveram muito pouca atenção a nível político e académico. Esta foi desenvolvida a nível informal, numa base técnica e legalista, o que conduziu a que, de forma fragmentada e incremental, se tivesse procedido a uma mera aproximação dos sistemas nacionais de justiça criminal, em vez de se implementar uma estratégia *top-down*, como ocorre no plano estadual (Schroeder, 2012, pp. 36-40). Com o efeito, a UE reduzia-se praticamente a uma espécie de “fabricante de normas” (Mackenzie, 2012, p. 97), inclusive em assuntos do foro estratégico e de segurança.

Um dos principais traços caracterizadores da abordagem de “segurança interna” foi o facto de não ter havido praticamente nenhum esforço por parte dos decisores

políticos para mobilizar a sociedade para a defesa da “segurança interna”. Por sua vez, tem havido esforços mais sustentados no sentido da definição de um território da UE, através do desenvolvimento de uma ampla gama de práticas de controlo nas fronteiras (Kaunert, Léonard e Pawlak, 2012a, pp. 4-5).

Estes fenómenos conduziram a uma integração assimétrica da UE, a qual tem gradualmente alterado a responsabilidade pela gestão das fronteiras a nível europeu de várias formas, criando uma mistura de políticas, que combinam diferentes configurações institucionais com características intergovernamentais e supranacionais (Berg e Ehin, 2006; Wolff, 2008; Geddes e Taylor 2013; Sarto e Steindler, 2015, p. 371).

Por outro lado, de acordo com Boin e Ekengren (2009, p. 287) a segurança como um “objetivo estratégico” existe apenas em setores políticos específicos; a legislação é orientada para riscos conhecidos em setores pré-estabelecidos; os programas globais que combinam diversas iniciativas são evitados, na pior das hipóteses, ou são estritamente voluntários, na melhor das suposições. Apesar da natureza eminentemente política das questões estratégicas e de segurança, as políticas europeias neste domínio foram prosseguidas a um nível técnico e não político (Schroeder, 2012, pp. 53-54). Todavia, a UE tem acumulado um determinado acervo estratégico nas matérias da área policial, criminal, justiça e segurança das fronteiras (Bossong e Rhinard, 2013a, p. 45), em parte devido ao efeito *spillover* dos acordos Schengen. Para o desenvolvimento do ELSJ contribuíram, de forma indelével e direta, alguns acontecimentos exógenos ao processo de integração europeia, como sejam os atentados de 11 de setembro de 2001, nos EUA e em solo europeu, o 11 de março de 2004 em Madrid e o 5 de julho de 2005 em Londres.

Na linha de Boswell (2007, p. 589) o 11 de setembro forneceu uma janela de oportunidade para a securitização das migrações, bem como para a promoção de uma participação mais forte da UE na luta contra o terrorismo (MacKenzie, Kaunert e Leonard, 2015). Por outro lado, esta passou a assumir um papel maior nas matérias de *high politics*, como seja na implementação de medidas de reforço da “segurança interna”, onde se inclui o controlo externo de fronteiras (Boer e Monar, 2002; Monar, 2005, p. 147; Mitsilegas, 2007, p. 362; Léonard, 2012, p. 150).

A partir desse momento o controlo das fronteiras passou a ser uma prioridade elevada da União, por forma a detetar terroristas, redes de imigração ilegal e tráfico de seres humanos (Conselho Europeu, 2001, ponto 42; Joffé, 2008; Cassarino, 2012; Bellanova e Duez, 2016, p. 27). Segundo Boswell (2007) as instituições da UE passaram a criar uma “securitização” em torno das ligações ao terrorismo, à segurança, às migrações e às fronteiras, criando uma nova perceção da ameaça (Boer e Monar, 2002). Embora de acordo com Neal (2009, p. 334), a criação da FRONTEX, se numa primeira leitura aparenta ser o resultado daquela securitização, em rigor representou o seu fracasso, contrariamente ao defendido por Léonard (2010).

Também em 2015 os ataques terroristas em Paris e Bruxelas trouxeram uma renovada janela de oportunidade para a aceleração de um conjunto de propostas controversas ligadas à gestão das fronteiras (Bigo, *et. al.*, 2015), nomeadamente a introdução do *Passenger Name Record* (PNR) pelo PE (Servent, 2015). Todos estes acontecimentos influenciaram o quadro jurídico e político da União na área da “segurança interna” e a sua ligação com a temática das fronteiras. Assim, os eventos externos inesperados têm sido muitas vezes indicados como fatores que influenciam o processo de integração europeia no domínio da “segurança interna”, levando os Estados a reforçar esta dimensão europeia (Monar 2007; Trauner e Servent, 2015b, pp. 7-9; 2016, pp. 1420-1421).

No entanto, apesar destes avanços, sobretudo na dimensão técnica e das mudanças institucionais terem contribuído para um conjunto de mudanças políticas, a direção e prioridade política dada à segurança não foram significativamente influenciadas por estes acontecimentos, visto que os Estados continuam a ocupar uma posição central no sistema político europeu (Fink, 2012; Rijpma e Vermeulen, 2015; Sarto e Steindler, 2015, p. 370; Trauner e Servent, 2016, p. 1428).

Por outro lado, na linha de Monar (2001) os períodos de crise conduziram a uma maior saliência destas matérias e à necessidade de congregar forças conjuntas. Por isso, se compreende que os principais impulsos do que é hoje a Agência Europeia de Gestão da Cooperação Operacional nas Fronteiras Externas (FRONTEX) tenham sido dados, em 2002 (após os atentados ora referidos), pela Comissão e pela Alemanha e Itália³ para a criação de uma Guarda Europeia de Fronteira, que conduziu à criação da FRONTEX em 2004, aquando da adesão de dez novos Estados-membros (Neal, 2009, pp. 338-340; Piçarra, 2010; Léonard, 2012, pp. 150-152; Parkes, 2015, p. 60). Por sua vez, em 2016, é criada a Guarda Europeia de Fronteiras e Costeira, pelo Regulamento (UE) 2016/1624 do PE e do Conselho, de 14 de setembro de 2016, em virtude dos atentados em solo europeu e dos fortes fluxos migratórios que têm assolado o território europeu. Segundo Couto (2016), estes fluxos foram planeados e, por isso, visam objetivos estratégicos.

Mesmo a tragédia de Lampedusa em 2013, que provocou um clamor público e uma reversão das políticas de asilo e de controlo das fronteiras na UE, embora tenha desencadeado uma série de respostas políticas imediatas, como viagens de políticos da UE para Lampedusa, a necessidade de uma realização mais rápida do projeto de vigilância das fronteiras (EUROSUR) e o aumento do orçamento para as operações no Mediterrâneo, não contribuiu para alterar qualquer dos pilares constitucionais da política de asilo e do controlo das fronteiras da UE, na medida em que os Estados-membros continuaram a ter o papel fundamental na determinação

3 Integrou este projeto a Alemanha, a Bélgica, a Espanha e a França, sob a liderança italiana.

da profundidade e do alcance das mudanças políticas no ELSJ (Trauner e Servent, 2015b, p. 10; 2016, p. 1429; Trauner, 2016, p. 318).

Assim, de acordo com a teoria da escolha racional e do intergovernamentalismo, não se afigura plausível argumentar que o desenvolvimento desta área foi fruto de um interesse estratégico, racional e a longo prazo dos Estados-membros. No limite, poderíamos afirmar que estes aproveitam o contexto para desenvolver e potenciar esta área, por uma questão de custo-benefício. Apenas agiram quando confrontados com o problema, dado que teriam vantagem em criar/desenvolver alguns projetos/políticas comuns europeias nestes domínios, bem como criar a perceção nas populações de que estavam a resolver situações problemáticas e, concomitantemente, a salvaguardar os interesses nacionais.

Se tivermos em linha de conta que o Conselho JAI é dominado pelos ministros do interior, e que estes continuam a considerar a cooperação europeia como, na pior das hipóteses, um mal necessário, e na melhor das suposições, um meio para incrementar a discrição governamental para prosseguir o controlo da migração, constatamos que, apesar da comunitarização do ELSJ, esta é usada para proteger e expandir os poderes governamentais, dado que os Estados dominam as (sub) políticas nucleares deste Espaço (Parkes, 2015, p. 54; Trauner e Servent, 2016, p. 1429).

Os membros do PE, por vezes, olham para o projeto europeu como tendo tanto de liberal, como de uma função pós-nacional e mais chauvinista de construção do Estado em si mesma (Hollifield, 2004), através da criação de fronteiras a um nível europeu, o que desafia o poder simbólico do Estado-nação, mas também se repercute em toda a UE. Neste campo, a Comissão tem uma posição politicamente neutra, com uma presença nos debates tecnocráticos. Por sua vez, os ministros do interior, já têm uma vertente ideológica no âmbito destas matérias (Parkes, 2015, p. 54; Trauner e Servent, 2016, pp. 1417-1418), o que se entende uma vez que esta área está associada tradicionalmente à componente doméstica e ideológica dos Estados, firmada em tradições legais, normas constitucionais aceites durante longos períodos, em conceitos de administração da justiça e de manutenção da ordem, como fazendo parte exclusiva dos Estados (Mitsilegas, Monar e Rees, 2003, p. 10; Trauner e Servent, 2016, p. 1417).

Do ponto de vista do intergovernamentalismo e do institucionalismo da escolha racional, os ministros do interior procuram maximizar os interesses dos Estados, mesmo em matérias comunitarizadas. Por outro lado, estamos perante um eventual paradoxo, dado que passamos a ter decisões centralizadas (nível supranacional) e ações descentralizadas (nível estatal), na medida em que a operacionalização dessas políticas está dependente das capacidades e vontade dos Estados.

Com efeito, o nível europeu é visto como um canal para incrementar o seu controlo sobre o outro, dado que este pode ser melhor alcançado através de um elevado grau de supranacionalização (Parkes, 2015, p. 56), sem proceder a mudanças políti-

cas de fundo (Trauner e Servent, 2016), preservando o interesse nacional pela via europeia.

De acordo com o modelo vestefaliano de fronteira, estas delimitavam o território, a autoridade do Estado e a nação, porém, atualmente o seu controlo já não pertence exclusivamente a estes. As fronteiras foram afetadas pela globalização e pelo surgimento de novas formas governações (ex. UE), a qual conduziu a sociedades menos homogéneas e a um controlo menor do Estado sobre as suas fronteiras. Com efeito, podemos afirmar que a desagregação das fronteiras da União caracterizam a UE e resultam do próprio processo de integração europeia (Bigo, 1998, p. 66; Sarto e Steindler, 2015, p. 371), mas, por outro lado, conduziram ao aparecimento de novos atores e de novos campos de atuação.

A *Homeland Security* (“segurança interna”) é um termo que ficou largamente ausente dos debates políticos europeus, tendo apenas alguns desenvolvimentos nos últimos anos, e que podemos considerar como um conceito adequado para analisar os desenvolvimentos que as várias políticas europeias tiveram no domínio da segurança, apesar dos Estados-membros não terem adotado ainda uma “estratégia global” para a “segurança interna” da UE (Kauert, Léonard e Pawlak, 2012a, pp. 2-3), contrariamente ao que existe para a vertente externa e de segurança (União Europeia, 2016).

Todavia, a Comissão passou a ter um papel maior na construção dos assuntos de “segurança interna”, em virtude de passar a atuar no âmbito supranacional. Esta tem usado um conjunto de meios de *expertise*, que acaba por apossar o domínio nacional (Boswell, 2012; Kauert, Léonard e Pawlak, 2012a, p. 5; Parkes, 2015, p. 57), passando a funcionar como um elemento central no seu desenvolvimento, o que reforça os argumentos explicativos da abordagem neofuncionalista e do institucionalismo sociológico.

Se, por um lado, a comunitarização tem contribuído para um processo de socialização no Conselho (Beyers, 2005) e assim partilhar e prosseguir o interesse europeu, por outro lado, segundo Trauner e Servent (2016) o Conselho continua a ter uma posição privilegiada, capaz de manter soluções que beneficiem o *status quo*, uma vez que já tinha o controlo de várias (sub) políticas do ELSJ. Desta forma, assume-se como a principal instância de legitimidade neste domínio, ficando assim dependentes da vontade deste para eventuais alterações de fundo nestas matérias.

A “segurança interna” da UE é um processo que emergiu de forma não planeada, incremental e tardia, e não de uma configuração estratégica, como derivação de um processo tradicionalmente hierárquico e *top-down* de estruturação de uma estratégia nacional⁴. Assim, esta desenvolveu-se através de um processo de *bottom-up*, em

4 Ver acerca da conceção/compreensão do entendimento de estratégia: Dias e Sequeira (2015); Fernandes (2011).

que os intervenientes da UE se concentraram em expandir as formas estabelecidas de cooperação em matéria de “segurança interna” na Europa, sem prestar muita atenção a questões estratégicas mais vastas (Schroeder, 2012, pp. 35-37).

Por outro lado, distingue-se dos processos tradicionais de desenvolvimento de estratégias nacionais *top-down*, na medida em que as estratégias de segurança nacional geralmente definem a estrutura geral da força e as decisões de aquisição necessárias para cumprir a missão descrita. Nesse sentido, no domínio da “segurança interna”, o desenvolvimento de estratégias claras é raro e a definição de prioridades estratégicas tem frequentemente assumido a forma de planos de ação, quadros políticos ou outros documentos concetuais (Schroeder, 2012, pp. 35-37).

Nessa aceção as capacidades de “segurança interna” e externa da UE foram construídas antes que os Estados-membros chegassem a uma conclusão sobre os fins que estas capacidades e instituições deveriam servir. Por outro lado, o desenvolvimento de várias estratégias setoriais conduziu a um processo paralelo e fragmentado, que levou a falhas nas políticas de segurança da UE e a um pensamento estratégico fracionado (Schroeder, 2012, pp. 35-37).

O crescimento das competências da UE na gestão da segurança resulta de um agravamento de décadas em torno do tema da coerência institucional, bem como da desregulação das fronteiras clássicas dos Estados (Gauttier, 2004; Hillion, 2008; Sarto e Steindler, 2015, p. 369), na medida em que o controlo das fronteiras é, possivelmente, dos temas de soberania mais sensíveis (Mitsilegas, Monar, Rees, 2003, p. 9; Burguess, 2009, p. 315; Bigo, 2014, p. 220; Trauner e Servent, 2016, p. 1417). Mas, de acordo com a abordagem construtivista, a “desconstrução” de uma pode levar à construção de outra(s).

Por sua vez, o conceito de “segurança interna” não tem sido muito bem recebido (Dubois, 2002), como foram os termos tradicionais da JAI/ELSJ, que ainda são predominantes, pela carga simbólica associada à soberania dos Estados e conseqüentemente a um alegado modelo europeu federal/supranacional, que o termo pode acarretar. Este conceito está a emergir e como possui um âmbito temático e institucional mais amplo do que o ELSJ tem contribuído para preservar a imagem da “segurança interna” europeia como uma área altamente desintegrada a nível político, funcional e académico (Kaunert, Léonard e Pawlak, 2012a, p. 6).

A “segurança interna” da UE não se caracteriza por uma organização piramidal de responsabilidades, mas sim por um conjunto de iniciativas e de papéis de atores que emergem da prática e em resposta a diferentes crises/situações de segurança (Bossong e Rhinard, 2016). Com efeito, a UE tem-se desenvolvido como um ator de “segurança interna” tortuoso e incompleto (Mitsilegas, Monar e Rees, 2003, p. 67).

Por outro lado, podemos aventar que existe mais do que um nível em que as atividades de “segurança interna” são desenvolvidas: o nacional e o europeu (UE).

Assim, pelo facto de haver mais do que um nível, tal não exclui o outro. A existência de uma “segurança interna” europeia, não elimina o nível nacional, embora o afete. No caso da defesa, os países também participam em organizações de defesa coletiva (ex. NATO) e os Estados não deixam de ter defesa nacional. O mesmo princípio se pode aplicar à “segurança interna”.

Enquanto no nível nacional esta integra uma estrutura hierárquica, em regra piramidal, no caso da europeia o sistema é bastante mais complexo e não apenas vertical, dado que inclui a participação de vários atores com natureza diferenciada em distintos patamares de decisão/execução. O que ambas têm em comum é que no fim da linha, quem torna as atividades de “segurança interna” efetivas são os mesmos elementos (os polícias dos diferentes Estados).

Conclusão

A “segurança interna” da UE desenvolveu-se de forma gradual, tímida, incremental, reativa e *ad hoc*, numa base técnica e primeiramente informal, para posteriormente evoluir de uma institucionalização intergovernamental para uma natureza globalmente comunitária, passando atualmente a ser um dos motores e áreas que melhor refletem o processo de integração europeia.

A “segurança interna” da UE emergiu da evolução interna da construção europeia e de acontecimentos externos à União. Todavia, o maior impulso (e obstáculo) ao desenvolvimento desta, veio sobretudo do interior da própria União e dos seus atores centrais, apesar da importância que teve a dimensão externa da UE e tudo o que se desenvolveu no seu exterior, a qual abriu janelas de oportunidade e potenciou o seu desenvolvimento.

Por outro lado, os controlos nas fronteiras da e na UE foram sucessivamente alterados, em virtude do mercado interno, da implementação/alargamento do acervo Schengen e da sua integração no *acquis* comunitário, bem como da criação de novos instrumentos para proteger as fronteiras externas comuns.

Estas mudanças interferiram na identidade dos países, que, por sua vez, influenciaram a conceção e o *modus operandi* da “segurança interna”. Assim, os Estados veem afetados alguns dos seus elementos fundamentais – soberania, identidade, fronteira e segurança interna – enquanto a UE fortalece a sua dimensão de “segurança interna”, embora sem um pendor estratégico associado a este desenvolvimento, dado que esta continua a refletir os interesses dos Estados.

Se recorrermos à teoria do neofuncionalismo podemos aventar que existe um *spillover* que tem conduzido a uma maior proeminência da “segurança interna” europeia, em virtude do mercado interno, dos acordos Schengen, da abolição das fronteiras internas, da gestão comum das fronteiras externas, do papel das instituições supranacionais, a qual tem incrementado o desenvolvimento da “segurança interna” da UE no domínio técnico.

Também sobre a lente do institucionalismo sociológico podemos compreender a evolução da “segurança interna”, dado o aumento do número de órgãos/agências neste domínio e o reforço das competências das instituições europeias (Comissão/PE/TJUE), o qual, conciliado com a perspectiva construtivista, fruto do grau de socialização dos diversos intervenientes, da internalização das normas, do respeito pelos valores da União, contribui para o assumir de um “comportamento adequado” e o desenvolvimento desta área.

Os elementos do intergovernamentalismo também não são despreciados para explicar o desenvolvimento da “segurança interna”, especialmente dada a natureza e o que esta área representa para os Estados. Mas esta corrente não serve apenas para justificar o porquê desta não evoluir ou não progredir no grau desejado, em virtude do interesse nacional dos Estados. Este também pode ser melhor salvaguardado com o reforço desta dimensão a nível europeu, conforme o caso e no âmbito almejado. Assim tanto podemos aplicar a grelha analítica desta corrente pela via de um intergovernamentalismo “negativo”, da inação, como pela via “positiva”, da ação.

Até porque o Tratado de Lisboa, no domínio da segurança, procedeu a transformações paradoxais, fruto do equilíbrio de poderes dos intervenientes. Assim, ao nível da vertente externa e de segurança da UE, foram concentradas no Alto-Representante e no Presidente Permanente do Conselho Europeu matérias do foro intergovernamental, mas com uma supranacionalização dos cargos. Contrariamente ao ELSJ, a qual passou a ser do domínio comunitário, mas permite aos Estados-membros influir o *agenda-setting* nestas matérias, através das Presidências rotativas do Conselho, dado que neste campo não assistimos a uma supranacionalização dos atores chave mas apenas a uma comunitarização pela via técnica de matérias políticas, através também de uma proliferação de agências supranacionais, mas dependentes do apoio/papel dos Estados para poderem funcionar. Desta forma, os elementos do institucionalismo da escolha racional também nos são úteis para compreender estas transformações.

A nível teórico, estamos perante um alegado paradoxo, pois as diferentes explanações teóricas aventas aparentam contradizer-se, uma vez que a validade de uma, contradiz a(s) outra(s). Contudo, consideramos que a explicação assenta precisamente na aplicação de uma grelha de análise teórica lata em que é possível concenar, confrontar e complementar diferentes ângulos explicativos.

Do ponto de vista *de jure*, a UE é um ator de “segurança interna” dado que assenta numa natureza supranacional; tem uma “estratégia”, mas sem fins claros a atingir; possui um conjunto de capacidades e órgãos/agências que atuam neste domínio, conquanto o seu grau de autonomia esteja fortemente dependente dos Estados-membros. Porém, carece de coerência, continuidade e eficácia na sua atuação.

Assim, podemos afirmar que a UE é, tendencialmente e em potência, um ator de “segurança interna”, com um grau de socialização gradual, mas com um carácter

limitado de autonomia, dependente de uma complexa rede de instituições e processos internos e, acima de tudo, da necessidade, vontade e meios dos Estados-membros.

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Ser Polícia: a Minha Escolha

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Resumo

A natureza social da função policial ancorada na importância da sua imagem e reputação organizacionais, sujeita a uma enorme visibilidade, contribui inequivocamente para a necessidade de uniformização de crenças, valores e comportamentos entre os seus constituintes. Esta intensa captura por parte da organização policial das identidades dos seus membros, leva-nos a presumir que os candidatos devem, de alguma forma, sentir-se ligados a esta profissão, antes mesmo da sua escolha.

Neste pressupor, e porque sempre nos interrogamos sobre as motivações daqueles que concorrem às forças de segurança, em virtude do risco associado a esta atividade profissional, o artigo visa identificar os motivos apresentados como as razões da escolha da profissão de polícia e tornar conhecida a natureza e organização cognitiva dos candidatos ao Curso de Formação de Agentes da Polícia de Segurança Pública em Portugal.

Abstract

Being a Police Officer: My Choice

The social nature of the police function anchored in the importance of its image and reputation, is subjected to a huge visibility. This contributes to the need for uniformity of beliefs, values and behaviors among their constituents. This intense capture by the police organization of the identities of its members, leads us to assume that candidates must, somehow, feel connected to this profession, even before their choice.

Under this reasoning, we always have questioned the motivations of those who compete to enter the security forces, because of the risk associated with this professional activity. The article aims to identify the reasons given for the choice of the police profession, analyzing the nature and cognitive organization of the candidates to the training course for agents of the Public Security Police in Portugal.

Introdução

A segurança das pessoas é, na sociedade contemporânea, um elemento estruturante e fundamental na organização dos Estados, a sua intrinsecamente dimensão social revela-se nas implicações públicas das políticas de segurança, em particular hoje em dia, em que o grau de ameaça potencial é global e percebido como real pela população em geral. Os distintos princípios reguladores da atividade das polícias, a quem compete assegurar a normalidade e imperturbabilidade da vivência comunitária, são vitais para o desenvolvimento económico e para o progresso social e cultural da sociedade.

A garantia e defesa da ordem é apanágio de um conjunto de profissionais, a quem, no mundo globalizado, onde impera a transitoriedade, a diversidade e a complexidade, é requerido um esforço constante na procura da estabilidade dos aspetos que visam, por um lado, assegurar a concretização dos deveres institucionais e, por outro, confirmar a identidade de atuação policial, onde são constantemente exercidos tipos inéditos de pressão. A consciência da natureza marcadamente perigosa da atividade das forças policiais e a recorrência de incidentes com consequências devastadoras, muitas vezes com o sacrifício da própria vida do elemento policial, leva-nos a questionar as motivações daqueles que de forma livre e informada, se voluntariam e esforçam para ser polícia.

O contributo essencial deste trabalho vai no sentido de, para além da descoberta dos motivos da escolha da profissão de polícia, ser o próprio candidato a fundamentar a importância dos motivos enunciados e assim ordená-los numa cadeia hierárquica. Esta técnica é uma forma de recolha de dados cujo mérito se deve à liberdade do inquirido de registar as “suas” razões, uma vez que não se encontra vinculado a uma lista pré-definida de motivos, onde a sugestão ou a escolha forçada podem enviesar os resultados.

A metodologia utilizada revelou-se adequada não obstante ser mais complexa e igualmente rica, comparativamente com os métodos de recolha tradicionais. A literatura neste campo socorre-se, por via de regra, de listas predefinidas de motivos – *e.g.* White, *et al.* (2010) –, limitando-se a identificar o peso de cada uma das razões elencadas no processo de decisão, deixando de lado um aspeto particularmente relevante na motivação, que consiste em identificar para além da mera ordenação desses motivos, a análise do padrão de relações que se estabelecem entre si, ou seja as ligações entre motivos. Estas ligações materializam a razão da escolha de determinado motivo e são a sua explicação, e permitem a construção de mapas cognitivos, através dos quais é possível conhecer o sistema interpretativo dos novos polícias, ou seja, o racional que os conduziu à escolha desta profissão não obstante a exigência dos requisitos e a natureza complexa e arriscada da função policial.

Os requisitos para o desempenho da função policial obrigam a um moroso e exigente processo de seleção dos candidatos e torna relevante a recolha e análise de

informação, designadamente, sobre: (1) as dimensões da personalidade essenciais para o exercício da profissão, tais como, por exemplo: o cinismo, a agressividade, a impulsividade, a compulsividade, o dogmatismo e o autoritarismo; (2) as atitudes em relação a grupos específicos na sociedade, tais como as minorias, jovens, juízes e jornalistas; (3) as aptidões cognitivas e motoras; (4) a idoneidade; e por último (5) a destreza física (Van Maanen, 1975).

No que respeita à sua natureza, a função policial exhibe três importantes variáveis que influenciam o desenvolvimento de maneiras próprias de encarar a realidade por parte dos elementos policiais (Skolnick, 1975), que são: (1) o perigo; (2) a autoridade; e (3) a pressão constante. Estes três elementos caracterizadores do “ser polícia” propiciam, por sua vez, solidariedade, isolamento e conservadorismo.

O elevado grau de solidariedade emerge da vivência de situações de perigo e da forma de lidar com as tensões inerentes à profissão; “o polícia vive no meio do perigo e sob uma constante necessidade de salvaguarda da integridade física, tanto sua, como do seu colega ou da vítima” (Waddington, 1993, p. 157). Os sinais de perigo recorrentes e imprevistos tornam os profissionais de polícia especialmente atentos e até desconfiados e, não raras vezes, são fatores causadores do isolamento social. Por sua vez, o elemento autoridade tende a enfraquecer o relacionamento social dos elementos policiais, evitando, desta forma, sentirem-se pressionados a minimizar a sua autoridade. No entanto, Skolnick (1975) defende que o indivíduo que convive eficazmente com o perigo, por norma, não condescende face aos arquétipos de conduta moral, revelando, contudo, conservadorismo moral e social, proveniente do simbolismo e salvaguarda da autoridade intrínseca.

A dimensão axiológica que molda a atuação policial, onde os valores de isenção, sentido de dever e responsabilidade são sustentados pelo elo emocional do novo polícia à sua profissão, é vinculada e constrói-se através de estratégias institucionais, vincadamente fortalecidas na fase inicial de entrada na Instituição, constituindo um elemento estruturante da socialização destes profissionais. Como refere Obi (2008), o processo de socialização auxilia a formação do vínculo profissional nos novos polícias, e, particularmente, as atitudes que irão desenvolver em relação à atividade policial. A preponderância que revelam as atitudes e comportamentos dos polícias, prendem-se com a suscetibilidade da sociedade tender a utilizá-los para efetuar julgamentos sobre a atuação das forças policiais, o que nos alerta para a importância da identificação com a função, da satisfação no trabalho e da implicação afetiva destes profissionais, dado constituírem uma faceta crucial para a qualidade do relacionamento com o público e para a imagem pública da instituição policial (O’Leary-Kelly e Griffin, 1995).

A exigência dos requisitos de entrada nas forças policiais, as aptidões específicas exigidas aos profissionais, o rigoroso processo de seleção a que são sujeitos e o exi-

gente processo de aprendizagem do trabalho, associado a uma forte socialização organizacional, são requisitos que imprimem uma dinâmica muito própria ao ambiente policial e conjuntamente visam fomentar a construção e desenvolvimento de uma forte identificação com a profissão (Obi, 2008) capaz de influenciar positivamente os resultados da atuação policial.

Esquemas Cognitivos e a sua Relevância na Escolha de uma Profissão

O estudo da motivação ocupa-se de processos complexos que movem os indivíduos em direção a determinados objetivos e tenta compreender as forças que os impelem para a ação. Diversas teorias afirmam que a motivação pode ser baseada numa necessidade básica; num objetivo; ou mesmo ser atribuída a razões como o altruísmo ou a moralidade¹. Para compreender as necessidades dos indivíduos, o que impulsiona a ação, e perceber os motivos e objetivos, torna-se necessário conhecer o seu sistema interpretativo (D´Andrade,1992).

Segundo Fiske e Taylor (1991), os indivíduos desenvolvem modelos cognitivos ou esquemas sobre quais os comportamentos apropriados para desempenhar o seu papel. Assim, para melhor predizer os comportamentos, é necessário conhecer os motivos específicos do contexto e não as necessidades ou objetivos genéricos, ou seja, devem identificar-se quais os objetivos que são importantes para o indivíduo num determinado contexto.

Os esquemas cognitivos constituem padrões de pensamento-sentimento, aprendidos e internalizados que medeiam tanto a interpretação da experiência em curso como a reconstrução das memórias. Um esquema é uma organização hierárquica de conhecimento num domínio específico, o qual inclui categorias e interconexões entre elas. Como tal, os esquemas capturam a estrutura de conhecimento do indivíduo. O processamento de nova informação baseado nos esquemas é feito de forma holística, num primeiro momento essa informação é categorizada e só posteriormente se dá a ativação do esquema. Os esquemas podem ser representados em estruturas hierárquicas (Fiske e Taylor, 1991).

Uma importante função dos esquemas é a sua potencial força motivacional, instigadora da ação, podendo funcionar como objetivos. A base da força motivacional dos esquemas reside no envolvimento ativo e identificação com um papel específico. Deste modo, os fins desejados servem como objetivos e são representados na mente como unidades cognitivas (Strauss, 1992b).

Tendo por base a literatura sobre esquemas cognitivos, podemos afirmar que qualquer objetivo central pode ser relacionado com motivos que desencadeiam a ação e representado através de uma hierarquia tripartida. O objetivo principal pode ser

1 Ver, para uma revisão Jelencic (2010).

considerado o centro da cadeia hierárquica e responde à questão “o que é que eu quero atingir?”. Os motivos subordinados² constituem os meios para atingir o objetivo central e respondem à questão “como posso atingir esse objetivo?”. No topo da hierarquia estão os motivos supraordenados, os quais respondem à questão “por que razão quero atingir este fim?” (Carver e Scheier, 1990)³.

Desta forma, os motivos supraordenados são razões abstratas para agir de determinada maneira, no sentido de alcançar o objetivo central. D’Andrade (1992) denominou-os de *master motives*. Por sua vez, o objetivo central está num nível intermédio de abstração entre os motivos abstratos supraordenados e os objetivos concretos subordinados, os quais são comportamentos direcionados aos objetivos ou atos instrumentais.

Para que determinada aspiração ou desejo funcione como objetivo, o indivíduo deve possuir uma estrutura cognitiva que é ativada e que instiga à ação; a pessoa não precisa de estar consciente da interpretação que instiga a ação, mas esta deve existir para que a ação possa ser impelida. Teoricamente, os impulsionadores são uma fonte de ativação de esquemas – afetos, estímulos externos e outros esquemas –, e a rede de conexões entre os objetivos e os impulsionadores envolve múltiplas ligações pelo que as relações são tão intrincadas que raramente podem ser determinadas empiricamente (D’Andrade, 1992).

Partindo da ideia de que os objetivos possuem força motivacional consegue-se resolver um conjunto de problemas que anteriormente fragilizaram a análise motivacional, como é por exemplo o caso da explicação dos motivos que estão relacionados com determinados tipos de comportamento. A abordagem a este problema pode ser feita através da análise das ligações meio-fim, uma vez que, as relações estabelecidas nas cadeias meio-fim são análogas àquilo a que a psicologia cognitiva chama conhecimento procedimental e expressam na memória proposições “se-então” (D’Andrade, 1992).

Por último, considerando que a hierarquia de motivos relacionados com a escolha da profissão, quando devidamente alinhados com a natureza do trabalho a desempenhar contribuem para a construção do vínculo profissional. Torna-se por isso importante conhecer o papel do sistema interpretativo dos indivíduos, na medida que estes esquemas ao constituírem padrões de pensamento-sentimento aprendidos e internalizados medeiam a interpretação das vivências no contexto de trabalho. Nesta medida, as organizações deverão ser capazes de desenvolver no colaborador uma atitude de responsabilização no desempenho da função,

2 Estes motivos podem ser considerados ações concretas no que os investigadores denominam de *program level* na teoria do controlo (Powers, 1983).

3 O objetivo central é explicado pelo seu motivo supraordenado e é atingido através da prossecução de motivos subordinados.

fomentarem o compromisso de agir ética e moralmente e, ainda, de facilitarem o surgimento de sentimentos de orgulho para com a profissão escolhida (Van-Zandt, 2011).

A Teoria da Autodeterminação e a sua Importância na Regulação Comportamental

Os objetivos de trabalho e de carreira que se desejam alcançar, são outro dos aspectos a considerar no estudo da escolha profissional. Definir objetivos é motivador do desempenho e uma força impulsionadora da ação (Neves, 2001), esta aceção tem subjacente a crença que os indivíduos que têm objetivos definidos irão desenvolver os esforços necessários para alcançarem os resultados que desejam.

A variabilidade dos estados motivacionais é resultado da interação entre as variáveis individuais e situacionais, num esforço do indivíduo, orientado no sentido e com o objetivo, de alcançar ou satisfazer uma necessidade individual. Para que possamos prever o desempenho individual torna-se necessário, não apenas, conhecer as razões que determinam os resultados que se procuram alcançar, mas também o que incita à mobilização do esforço necessário, para se obterem tais resultados (Neves, 2001) e, assim, podermos antecipar o seu impacto nos comportamentos individuais em contexto organizacional.

As teorias da motivação baseadas no processo de orientação por objetivos, sofreram múltiplos desenvolvimentos ao longo dos anos, desde Murray (1938) que identificou vinte e dois motivos principais, passando por McClelland (1987) que mantém, à semelhança de Maslow (1943), a classificação das necessidades em ordem superior e ordem inferior e, mais recentemente, Novacek e Lazarus (1990), ao identificarem um conjunto de motivos que se consideram relevantes, para a escolha da carreira profissional: (1) fatores afetivos; (2) fatores associados à tarefa; (3) fatores cognitivos; (4) fatores relacionais; (5) fatores organizacionais subjetivos; (6) procura de sensações; (7) procura de poder; (8) crescimento pessoal; (9) relacionamento e evitamento de fatores de *stress*; e (10) outros fatores motivacionais.

Não obstante o reconhecido mérito das teorias da motivação enunciadas baseadas no processo de orientação por objetivos, apontam-se-lhe como desvalor, por um lado, a sua incapacidade de previsão de ações específicas e, por outro lado, a sua incapacidade de apontar estratégias particulares para influenciar o comportamento. Ainda que apontadas diferenças entre as teorias da motivação, estas afiguram-se semelhantes, no sentido em que especificam motivos genéricos, que se presumem transversais aos diferentes contextos profissionais (Bagozzi, Bergami e Leone, 2003).

Para explicar as motivações e objetivos no comportamento e trajeto da vida profissional, recorreremos à teoria da autodeterminação – *Self-Determination Theory* (SDT) – de Deci e Ryan (1985), que proporciona um quadro de referência adequado para

descrever as variáveis em jogo na construção do vínculo profissional, explicar o seu poder motivacional e a sua interação com o *self*.

Central na SDT é a distinção entre motivação autónoma e motivação controlada (Deci e Ryan, 2008). A motivação autónoma envolve agir com vontade e autodeterminação, ou seja, os indivíduos dedicam-se a uma atividade porque a acham interessante, desempenham-na inteiramente de livre vontade e por sua escolha, manifestando a autodeterminação das suas ações. Contrariamente, a motivação controlada envolve agir sob um sentimento de pressão, um sentido de necessidade para desenvolver uma determinada ação, para pensar, sentir ou comportar-se de determinada maneira; nesta forma de regulação externa o comportamento é função de contingências externas de recompensa ou castigo. É uma regulação impulsionada por fatores externos, como por exemplo, a necessidade de aprovação, o reforço da autoestima ou para evitar sentimentos de vergonha ou inferioridade. As primeiras pesquisas realizadas sobre o uso de recompensas extrínsecas, dizem-nos que estas são utilizadas para induzir a motivação controlada.

Tanto a motivação autónoma como a motivação controlada são intencionais, impulsionam e direcionam o comportamento, mas diferem em termos dos processos regulatórios que lhe estão subjacentes e sugerem que os comportamentos podem ser caracterizados em função do seu grau de autonomia, e estão relacionados com a satisfação das necessidades psicológicas básicas.

Esta teoria propõe diferentes níveis de regulação da motivação extrínseca, ao longo de um *continuum* (Gagné e Deci, 2005). Neste *continuum* de desenvolvimento da autodeterminação, a análise da motivação de um indivíduo pode ser classificada em três grupos: desmotivação, motivação extrínseca e motivação intrínseca. Em primeiro lugar, a desmotivação, como o próprio nome indica, é caracterizada pela ausência de motivação, ou seja, o indivíduo não apresenta intenção ou comportamento proactivo, e observa-se uma desvalorização da atividade e a percepção da ausência de controlo pessoal. Por sua vez a motivação extrínseca subdivide-se em quatro tipos de regulação comportamental: (1) regulação externa, o indivíduo age para obter recompensas ou evitar punições, é a forma menos autónoma de motivação; (2) regulação introjetada, neste caso o indivíduo gere as consequências internas consoante o efeito das pressões externas, como, por exemplo, sentimentos de culpa e ansiedade; (3) regulação identificada, este tipo de regulação é mais autónoma do que as anteriores, já há interiorização, ainda que a razão para agir seja de origem externa. Esta motivação é instrumental, consequentemente, extrínseca, mas identifica-se com a razão para agir; e (4) regulação integrada, que ocorre quando existe coerência entre o comportamento, os objetivos e os valores do indivíduo. É a forma de motivação extrínseca mais autónoma, embora o foco esteja ainda nas recompensas pessoais resultantes da realização da ação. Finalmente, na motivação intrínseca, o indivíduo tem interesse e prazer na

realização da tarefa, sendo a atividade vista como um fim em si mesma (Gagné e Deci, 2005).

A SDT baseia-se na concepção de que a motivação se relaciona com a satisfação de três necessidades psicológicas básicas, a saber: autonomia, competência e relacionamento, determinantes do comportamento intrinsecamente motivado, uma vez que fornecem a base para prever quais os aspetos de um contexto social que serão o suporte para a motivação intrínseca e facilitam a internalização da motivação extrínseca. Esta teoria postula que as necessidades psicológicas são universais e essenciais para o desenvolvimento humano ideal e integridade, devendo ser satisfeitas para um desempenho eficaz e para garantir a saúde psicológica do indivíduo. Daí que, em razão da natureza universal destas necessidades básicas, as diferenças individuais não têm a sua origem na força da necessidade mas sim no grau em que estas tenham sido satisfeitas ou frustradas (Gagné e Deci, 2005). Neste pressuposto, as necessidades de competência, autonomia e relacionamento são consideradas importantes para todos os indivíduos, daí que a SDT se centre, não sobre as consequências da força dessas necessidades para os diferentes indivíduos, mas sobre as consequências da medida em que os indivíduos são capazes de satisfazer tais necessidades em ambiente social.

A SDT aborda a questão das diferenças individuais do ponto de vista da orientação dos indivíduos relativamente à autodeterminação e autorregulação do seu comportamento. As orientações gerais de causalidade (Deci e Ryan, 1985) sugerem o grau para o qual cada indivíduo propende em termos da sua orientação em contexto social: se para uma orientação de autonomia, uma orientação de controlo orientado, ou uma orientação impessoal. A orientação de autonomia reflete a tendência do indivíduo para ser autónomo e autodeterminado; a orientação de controlo reflete a tendência geral para controlar e ser controlado; e a orientação impessoal reflete, em regra, o ser amotivado ou desmotivado. Pesquisa neste campo – *e.g.*, Deci e Ryan (1985) – mostrou que a orientação de autonomia está positivamente associada com a autorrealização, autoestima, desenvolvimento do *self* e construção de boas relações interpessoais; que a orientação de controlo está associada a um padrão de comportamento defensivo, o indivíduo dá demasiada importância ao salário e outros motivadores extrínsecos; e que a orientação impessoal está relacionada com o *locus* de controlo externo, ou seja, a crença de que o indivíduo não pode controlar os seus próprios resultados, e está relacionada à depressão e autoanulação.

De acordo com Gagné e Deci (2005), na SDT, tanto a motivação intrínseca como a internalização que, na sua forma mais completa, é a integração, são processos naturais que, para ocorrerem, requerem a satisfação das necessidades psicológicas básicas.

Compromissos externamente regulados não são consistentes com o *self*⁴ e são apenas mantidos enquanto as pressões de controlo externo, estiverem presentes, como, por exemplo, as estratégias utilizadas para a conformação na fase do processo de socialização. Como tal, pode argumentar-se que compromissos externamente regulados não podem ser considerados verdadeiros compromissos nem parte da identidade do indivíduo. Tais compromissos não são internalizados e, por isso, não são utilizados pelos indivíduos para se definirem a si próprios (Ryan e Deci, 2003).

A Escolha Profissional: Ser Polícia, Uma Opção

A linha de investigação sobre a motivação para ingressar na polícia, tem, ao longo dos anos, inspirado grandes debates, não apenas pela sua importância ao nível comportamental, como também em virtude da relevância social desta profissão. Por detrás das decisões de carreira encontram-se uma multiplicidade de razões de diversa natureza. Segundo Blau (1994), as motivações que conduzem à escolha de uma profissão são múltiplas, apesar de a sociedade em geral desconhecer as principais razões que levam homens e mulheres a optarem pela carreira de polícia, ou até mesmo, a permanecer na profissão durante um longo período de tempo. São, na opinião de Blau (1994), muitas as pessoas que pensam que os polícias são atraídos para a profissão devido ao poder que esta lhes confere.

Os sentimentos que os indivíduos nutrem relativamente a determinadas profissões desempenham um papel importante nas escolhas de carreira. E, tal como referido por Martin (1982), estes sentimentos podem ser respeitantes a fatores intrínsecos, relacionados com a natureza do trabalho, por exemplo, ou a fatores extrínsecos, como o ambiente de trabalho, o salário, o prestígio da função e os benefícios auferidos. Apesar das diferenças nas motivações para se tornarem polícias, os alunos das academias de polícia e os recém-formados, evidenciaram particulares semelhanças, designadamente, tendem a perceber a profissão de polícia atrativa relativamente à diversidade e natureza das atividades que desenvolve, com ampla variedade de oportunidades, e uma profissão que oferece segurança e respeito na comunidade (Blau, 1994).

A investigação no campo das motivações para ser polícia, tem revelado que apesar dos indivíduos terem procurado na sua profissão, exercer poder e controlo, eram também orientados por um elevado desejo de segurança no trabalho (Harris, 1973; McNamara, 1967). Harris (1973, p. 16), por sua vez, observou que “ (...) pelo menos dois terços dos novos polícias juntavam-se às forças de segurança por razões de ordem material ou outra de natureza extrínseca”. Alinhado com os resultados de

4 Na SDT, o *self* é visto como um processo natural e inato, que orienta o indivíduo para um funcionamento mais integrado e ideal, e a identidade como o conjunto de características, valores, aspirações e representações que as pessoas usam para se definir.

Harris, também Lester (1983) verificou que o salário e a segurança constituíam as principais razões para a escolha da profissão de polícia.

De forma adicional, o desejo de ajudar os outros e a natureza do trabalho policial são outras das motivações muitas vezes citadas pelos indivíduos (Cumming, Cumming e Edell, 1965). Van Maanen (1973; 1975), por exemplo, observou que os recém-admitidos referiram como importantes, a oportunidade de realizar tarefas num papel percebido como relevante, e as qualidades de risco e aventura que caracterizam o trabalho policial. Harris (1973) constatou que um quarto dos polícias mencionaram a ambição desde criança ou o altruísmo como as principais fontes de motivação para ingressar na polícia. Um dado importante encontrado por Lester, Arcuri e Gunn (1980), foi a associação positiva entre o desejo de fazer cumprir a lei e o desejo de ser útil às pessoas.

Outros estudos desenvolvidos em contexto policial mostraram que os indivíduos que ingressaram na polícia fizeram-no após experimentarem outros empregos, muitos dos quais se revelaram insatisfatórios (Harris, 1973).

Recentemente, novas investigações sobre os motivos da escolha da carreira policial têm mostrado alguma congruência com os estudos iniciais. White, *et al.* (2010) afirmam que, apesar da existência de estudos que evidenciam a atração pela profissão de polícia de indivíduos com personalidades autoritárias, isto é, indivíduos com apego a valores convencionais, e identificação com figuras poderosas a par da preocupação com demonstrações de força e poder, outros estudos comprovam que a atração por esta profissão é motivada pela importância que o indivíduo atribui à segurança no trabalho e à conquista de um lugar na sociedade, bem como da sua relação com o respeito e a autoestima (Bourn, 1980).

Num estudo realizado na Índia, os investigadores constataram que, além da estabilidade do trabalho, também os modelos de papel a seguir estão relacionados com as motivações que levam os indivíduos a tornarem-se polícias. Neste aspeto, é importante saber se tanto os homens como as mulheres conhecem pessoas na força policial ou se foram influenciados por alguém. Neste mesmo estudo, o conhecimento sobre o trabalho demonstrou ser um fator motivacional importante, facto particularmente relevante nas mulheres que decidem realizar um trabalho dominado pela população masculina (Sahgal, Indiresan e Chanana, 2005).

Numa investigação realizada nos EUA, constatou-se que os motivos mais citados pelos novos polícias na escolha da carreira policial foram o desejo de ajudar os outros, a estabilidade do trabalho, o estatuto que a carreira de polícia oferece e o salário e benefícios associados a esta profissão (Ridgeway, *et al.*, 2008).

Em suma, não obstante a diversidade dos contextos sócio históricos em que foram realizadas estas investigações, e a variedade de motivações e diversidade no padrão de relações estabelecido entre os motivos enunciados, verifica-se que tanto na Europa, como na Índia ou nos EUA, os candidatos apresentam um conjunto de razões comuns para a escolha desta profissão. Pelo que, apesar da diversidade de

fatores de natureza individual, social, organizacional ou cultural, que simultaneamente influenciam as motivações dos candidatos para concorrer à polícia, estas são um meio de satisfazer as próprias necessidades, isto é, os indivíduos definem os objetivos que querem atingir, acreditam nas suas capacidades para os alcançar, estão conscientes das recompensas que obterão após o cumprimento desses objetivos e consideram que as recompensas valem o esforço envolvido (Armstrong, 2011).

Quanto os efeitos de gênero nas motivações para ser polícia, os resultados da investigação neste campo não são consensuais. A este propósito Meagher e Yentes (1986, p. 321) afirmaram que “as razões expressas pelos polícias de ambos os gêneros não diferem grandemente”. Para Powers (1983), as mulheres têm a mesma probabilidade dos homens de desejarem poder e autoridade, contrariamente à crença amplamente aceita que são os indivíduos do gênero masculino os que têm maior motivação para o exercício do poder, do controlo e da autoridade. Quanto aos motivos segurança no trabalho e ajuda aos outros, estes revelaram ser mais citados pelas mulheres-polícia no estudo de Charles (1982), enquanto no estudo de Milton (1972) o salário e a oportunidade de ser útil foram os motivos principais. De acordo com Bridges (1989), tanto os homens como as mulheres consideraram, o salário e a progressão na carreira como fatores motivacionais relevantes. Perlstein (1972), por outro lado, verificou que as mulheres apresentavam tendência a escolher a profissão devido a um desejo de ajudar os outros, enquanto Bridges (1989) referiu que as mulheres colocam mais ênfase que os homens no orgulho, na realização pessoal, nos desafios pessoais, na autonomia e na independência.

No entanto, mais recentemente, a pesquisa tem demonstrado que as motivações de homens e mulheres para ingressar na polícia tendem a ser idênticas, apesar de algumas diferenças na ordem de importância das razões apresentadas, para a escolha desta profissão. A este propósito, Raganella e White (2004) descobriram que os homens e as mulheres polícias relatam os mesmos motivos para ingressarem na polícia, no entanto divergem na importância atribuída. De acordo com estes autores, os principais motivos para ingressar na polícia são: (1) a oportunidade de ajudar as pessoas – primeiro motivo quer para homens, quer para mulheres; (2) a segurança no trabalho – em primeiro lugar para os homens e em terceiro para as mulheres; (3) benefícios no trabalho – em segundo lugar para os homens e em terceiro para as mulheres; (4) oportunidade de progressão na carreira – em terceiro lugar para os homens e em segundo para as mulheres; (5) reforma antecipada – em terceiro lugar para os homens e em quarto lugar para as mulheres; (6) desafios do trabalho – em quarto lugar nos homens e em sexto lugar nas mulheres; e (7) combate ao crime – em quinto lugar para ambos. De forma adicional, no que respeita aos fatores menos importantes na opção da profissão de polícia, tanto os homens como as mulheres revelaram que a falta de alternativas de carreira, o salário, o poder e autoridade, e a estruturação militar, pouco peso tiveram nas suas escolhas profissionais.

Em síntese, apesar de existirem algumas diferenças entre homens e mulheres no que concerne à opção pela profissão de polícia, pode considerar-se que as mesmas são inexpressivas, visto que, apresentam motivos similares para a escolha da profissão.

Metodologia

Amostra

Participaram no presente estudo 753 indivíduos do total de recém-admitidos. A caracterização da amostra está patente na tabela 1.

Tabela 1 – Caracterização Sociodemográfica da Amostra

Distrito de Residência		Género	
Aveiro	5%	Masculino	91,2%
Beja	1,9%	Feminino	8,8%
Braga	7%		
Bragança	4,3%	Idade	
Castelo Branco	2,4%	21-23	45,2%
Coimbra	5,7%	24-26	46,1%
Évora	0,8%	27-29	7,1%
Faro	0,7%	30 ou mais	1,6%
Guarda	2,5%	<i>M</i> = 24	<i>DP</i> = 1,9
Leiria	2,9%	<i>Min</i> = 21	<i>Máx</i> = 36
Lisboa	13,8%	Estado Civil	
Portalegre	1,2%	Solteiro	98,1%
Porto	16,2%	Casado	1,8%
Santarém	5,2%	Divorciado	0,1%
Setúbal	8,1%		
Viana do Castelo	1,9%	Habilitações	
Vila Real	3,6%	11º Ano	25,0%
Viseu	6,8%	12º Ano	74,4%
Açores	5,8%	Bacharelato	0,3%
Madeira	4,1%	Licenciatura	1,3%

Instrumento

Os motivos subjacentes à escolha da profissão dos recém-admitidos ao Curso de Formação de Agentes (CFA) foram identificados através do questionário, *Elicitation of Motives Questionnaire*, desenvolvido por Bagozzi, Bergami e Leone (2003), devidamente traduzido e adaptado para a língua portuguesa. Este questionário comporta cinco cadeias de ligação meio-fim, sendo que em cada uma o inquirido regis-

tava três razões que explicavam a importância dos motivos que o levaram a ingressar na Polícia de Segurança Pública (PSP).

Procedimento

Os motivos foram medidos no início do período de formação, através da aplicação do questionário *Elicitation of Motives Questionnaire* (Bagozzi, Bergami e Leone, 2003). Antes da aplicação do questionário, foi realizada uma explicação detalhada do seu objetivo e das regras relativas ao preenchimento. Deste modo, era pedido aos participantes que identificassem os motivos que os levaram a candidatarem-se à polícia numa cadeia de ligações meio-fim, isto é numa estrutura hierarquizada, na qual os principais motivos são precedidos das suas justificações.

No final do preenchimento dos questionários, os inquiridos deveriam apresentar um total de 15 justificações que os levaram a candidatarem-se à PSP.

Para a identificação das categorias de motivos procedeu-se a uma análise de conteúdo temática, sendo que, ao fim de 150 questionários, foram encontradas as 35 categorias do presente estudo. Seguidamente, codificaram-se os restantes 603 questionários através da aplicação das 35 categorias emergentes da análise dos primeiros 150 questionários, uma vez que, subsequentemente, não foram encontradas novas categorias.

Após codificação, foi instruído um grupo de juizes independentes – um sociólogo, um gestor financeiro e um estudante de mestrado em psicologia – para que procedessem à classificação dos motivos, baseando-se na sua semântica, tal como se encontram nos dicionários portugueses. Assim, pediu-se aos juizes que avaliassem cada termo como pertencendo a uma das 35 categorias de motivos. Por exemplo: as expressões: “um emprego fixo”, “estabilidade profissional”, “trabalho estável” e “estabilidade em termos de emprego”, foram todas codificadas como pertencendo à categoria “segurança profissional”.

Resultados

Os 753 participantes mencionaram 11.392 motivos como explicação para a decisão de ingresso na polícia, donde emergiram as 35 categorias identificadas através da análise de conteúdo (ver Tabela 2). Foram ainda observadas 10.896 ligações entre os motivos enunciados.

Uma vez codificados os questionários e encontradas as 35 categorias de motivos, procedeu-se à construção de uma matriz de implicação, a qual indica o número de vezes que cada motivo leva a outro. Esta refere-se a uma matriz quadrada Z em que os seus elementos (z_{ji}) refletem a quantidade de vezes que um motivo i leva a um motivo j . Cada motivo é mencionado duas vezes, uma vez nas linhas e outra vez nas colunas, sendo que os valores das tabelas refletem a incidência das sequências ordenadas. Por exemplo, o motivo 4 (altruísmo) leva ao motivo 24 (útil à sociedade) em 45 situações.

Para a construção da matriz de implicação apenas foram tidas em consideração as categorias com mais de dez ocorrências, uma vez que, ao serem considerados todos os motivos mencionados, verificou-se um elevado nível de complexidade dos dados quando considerados os 11.392 motivos, e as correspondentes 10.896 ligações entre motivos. Assim, optou-se por um nível de *cutoff* de 30 o que permitiu resultados pertinentes para o presente estudo e torna inteligível a representação gráfica da hierarquia de motivos (Anexo 1), evitando desta forma, um mapa cognitivo demasiado complexo e desordenado, difícil de interpretar, ou um mapa demasiado simplista para as explicações necessárias.

Os motivos estão organizados na tabela 2, pelo grau de abstração (*abstractness*). O índice de abstração apresenta um valor entre zero (0) e um (1), inclusive, e mede a quantidade de vezes que um motivo é o fim numa relação – a explicação do motivo. Os motivos abstratos podem ser designados por motivos de ordem superior (*higher order motives*), por oposição aos motivos de ordem inferior (*lower order motives*) ou motivos concretos. O pressuposto é o de que quanto mais abstrato for um motivo, mais provavelmente será um fim.

A abstração (AR) é calculada através do rácio dos *in-degrees* sobre a soma dos *in-degrees* com os *out-degrees*. Os *in-degrees* mostram quantas vezes o motivo é o objeto ou fim de uma relação, isto é, a frequência com que um motivo é dado como justificação para os motivos mais concretos. Os *out-degrees* indicam quantas vezes o motivo é a fonte ou origem, isto é, a frequência com que um motivo serve para explicar outros motivos.

De forma adicional, são também considerados outros dois indicadores de importância, designadamente, a centralidade e o prestígio. A centralidade (CI) reflete a frequência com que um motivo em particular está envolvido nas ligações com outros motivos, sendo dessa forma intermediário nas relações entre motivos. O cálculo da centralidade é efetuado através do rácio da soma dos *in-degrees* com os *out-degrees* para um motivo particular, sobre o número total de entradas na matriz de implicação. Por último, o prestígio (P) obtém-se através do rácio entre os *in-degrees* de um motivo em particular e o número total de ligações na matriz. Este último indicador reflete a importância do motivo na hierarquia do esquema cognitivo, o grau em que um motivo é alvo de outros motivos (Bagozzi, Bergami e Leone, 2003). Através da análise da Tabela 2, é possível constatar que os motivos “autoestima” (0,738), “estatuto” (0,690) e “desenvolvimento pessoal” (0,601) apresentam os valores de abstração (AR) mais elevados, o que significa que estes motivos são mais vezes considerados fins nas cadeias meio-fim. Em relação à centralidade (CI), os motivos “segurança financeira” (0,131), “qualidade de vida” (0,127), “satisfação” (0,108) e “estabilidade” (0,107) são os motivos que se apresentam como mais centrais, isto é, aqueles que se encontram mais vezes mencionados nas ligações com outros motivos e que, por isso, constituem motivos intermédios. Quanto aos moti-

vos com índices de prestígio mais elevados encontramos a “qualidade de vida” (0,064), a “segurança financeira” (0,060), o “útil à sociedade” (0,051), a “estabilidade” (0,051) e o “estatuto” (0,051), sendo estes motivos aqueles que mais vezes são alvo de outros motivos, ou seja, a justificação da sua importância, daí a relativa saliência destes motivos na cadeia (*network*).

Tabela 2 – Valores dos Rácios dos Motivos

Motivos	Abstração (AR)	Centralidade (CI)	Prestígio (P)
Autoestima	0,738	0,012	0,009
Poder	-	-	-
Motivação	0,534	0,087	0,047
Altruísmo	0,468	0,038	0,018
Futuro	0,496	0,067	0,033
Combater o crime	0,580	0,036	0,021
Satisfação	0,537	0,108	0,058
Outras oportunidades	0,536	0,08	0,043
Falta de alternativas	0,467	0,031	0,014
Trabalho em equipa	0,423	0,004	0,002
Bem-estar social	0,564	0,061	0,034
Carreira	0,456	0,049	0,022
Estatuto	0,690	0,012	0,008
Felicidade/ Bem-estar	0,548	0,093	0,051
Realização pessoal	0,509	0,074	0,038
Reconhecimento social	0,556	0,031	0,017
Valores	0,544	0,039	0,021
Vocação	0,330	0,033	0,011
Desenvolvimento pessoal	0,601	0,052	0,031
Qualidade de vida	0,506	0,127	0,064
Emprego	0,433	0,043	0,019
Família	0,531	0,062	0,033
Orgulho	-	-	-
Útil à sociedade	0,538	0,094	0,051
Trabalho desafiante	0,483	0,049	0,024
Estabilidade	0,474	0,107	0,051
Realização profissional	0,550	0,088	0,048
Segurança profissional	0,412	0,103	0,043
Paixão	0,416	0,095	0,039
Segurança financeira	0,455	0,131	0,060
Identificação com a função	0,472	0,104	0,049
Forma física	0,406	0,015	0,006
Diversidade funcional	0,518	0,035	0,018
Imagem institucional	0,483	0,035	0,017
Influência dos amigos	0,484	0,004	0,002

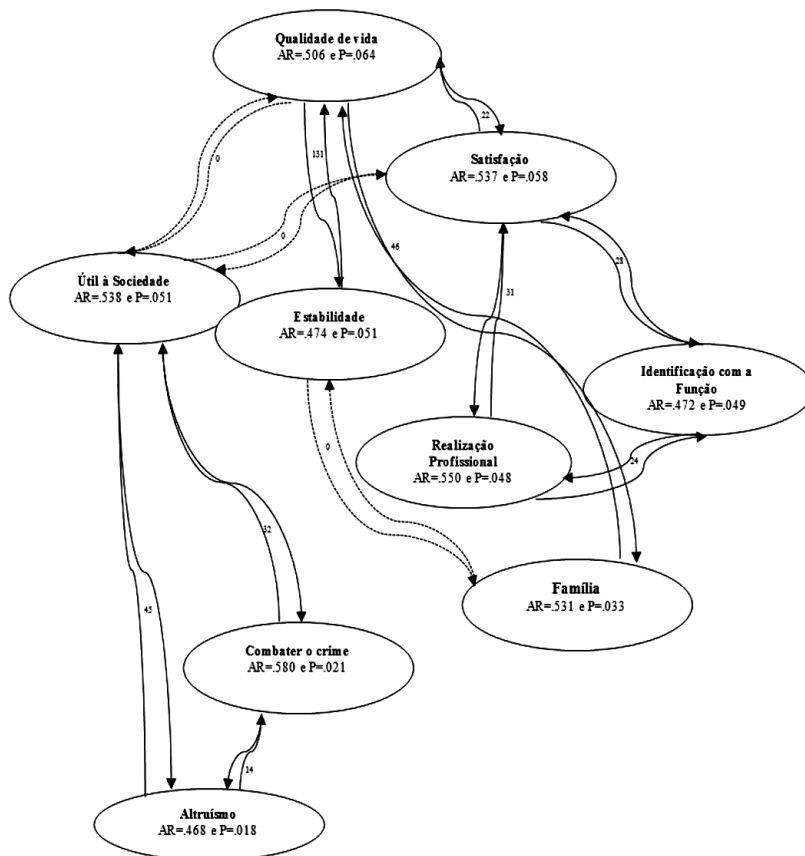
Através da análise da tabela 2, é possível constatar que os motivos “autoestima” (0,738), “estatuto” (0,690) e “desenvolvimento pessoal” (0,601) apresentam os valores de abstração (AR) mais elevados, o que significa que estes motivos são mais vezes considerados fins nas cadeias meio-fim. Em relação à centralidade (CI), os motivos “segurança financeira” (0,131), “qualidade de vida” (0,127), “satisfação” (0,108) e “estabilidade” (0,107) são os motivos que se apresentam como mais centrais, isto é, aqueles que se encontram mais vezes mencionados nas ligações com outros motivos e que, por isso, constituem motivos intermédios. Quanto aos motivos com índices de prestígio mais elevados encontramos a “qualidade de vida” (0,064), a “segurança financeira” (0,060), o “útil à sociedade” (0,051), a “estabilidade” (0,051) e o “estatuto” (0,051), sendo estes motivos aqueles que mais vezes são alvo de outros motivos, ou seja, a justificação da sua importância, daí a relativa saliência destes motivos na cadeia (*network*).

Da análise das ligações estabelecidas no mapa cognitivo (Carver e Scheier, 1990) que representam a fundamentação da escolha, podemos concluir que o esquema de pensamento que lhe está subjacente compreende, nesta ordem, motivos de natureza extrínseca, intrínseca e social, a que correspondem, respetivamente, os motivos qualidade de vida, satisfação e ser útil à sociedade, identificadas como as razões principais para a tomada de decisão dos alunos do CFA. Todavia, o peso relativo no processo de tomada de decisão do grupo de motivos de natureza intrínseca é superior à dos motivos extrínsecos, sendo as razões de natureza social as que apresentam uma importância relativamente menor na escolha da profissão de polícia.

Na figura 1, para ganhos de inteligibilidade, apresentam-se as principais razões da escolha da profissão de polícia, atendendo à múltipla natureza dos motivos que estiveram na base desta decisão, as quais têm inerente a fundamentação da importância e relevância das motivações que lhe estão subjacentes, apresentadas pelo próprio candidato.

Os novos polícias escolheram esta profissão para poderem ter qualidade de vida, sentir satisfação no desempenho da sua atividade profissional, associado ao propósito de serem úteis à sociedade. Assim, face ao reconhecido risco da função policial e à dureza dos requisitos a que faz apelo, exaltamos o grau de altruísmo que caracteriza esta escolha profissional e que se encontra patente no conjunto de razões que fundamentam esta decisão, conforme pode ser observado na figura 1.

Figura 1 – Representação hierárquica dos motivos de ingresso na PSP



Discussão

Esta análise demonstrou ser possível identificar os motivos que levaram os indivíduos a candidatarem-se à profissão de polícia e analisá-los como parte integrante de uma rede hierárquica de ligações, em vez de listagens com hierarquias autoreportadas. Assim, verificamos que os novos policiais enunciaram como principais razões da escolha da carreira policial: a segurança financeira, a qualidade de vida e a paixão por esta profissão.

Foi igualmente possível observar que as 35 categorias de motivos encontradas se agrupam em três conjuntos diferenciados, os quais funcionaram como orientadores da ação dos candidatos à PSP, recém-admitidos e, por isso, a razão da escolha desta profissão. Um primeiro grupo espelha motivos extrínsecos, que revelam algumas das preocupações relativamente às suas vidas futuras – por exemplo, família, segurança profissional, segurança financeira; um segundo grupo que se refere a motivos

intrínsecos, tais como, a paixão, a motivação e a vocação para ser polícia; e, por último, um terceiro grupo que reúne motivos de natureza social, ou seja, refere-se a motivos orientados para a sociedade e para a promoção da ordem social, como, por exemplo, combater o crime e promover o bem-estar social. Contrariamente ao teorizado por Kasser e Ryan (1996), que apenas enunciam duas categorias gerais de objetivos de longo prazo: objetivos intrínsecos e objetivos extrínsecos, que os indivíduos definem para orientar a sua vida, os primeiros, incluem construção de relações e desenvolvimento pessoal, e os segundos incluem recompensas, prestígio e atratividade.

Da análise efetuada, apuramos que o grupo dos motivos sociais é o menos representativo com 25,2% do total, neste grupo assumem maior relevância as categorias ser útil à sociedade e o bem-estar social. A segunda maior percentagem, com 28,7%, respeita ao grupo dos motivos intrínsecos onde as categorias mais vezes mencionadas são a paixão pela profissão de polícia e a satisfação. Por último, o grupo de motivos mais relevante é o que agrega os motivos extrínsecos com 46% do total, onde a qualidade de vida e a segurança financeira são as razões principais da escolha desta profissão.

Estes resultados diferem do trabalho desenvolvido por Martin (1982), que indicava apenas dois fatores para a escolha da carreira policial, os fatores intrínsecos e os fatores extrínsecos. Contudo, não obstante a relevância dos motivos extrínsecos e intrínsecos, neste estudo evidenciamos também a importância, na decisão do indivíduo para se tornar polícia, dos motivos de natureza social. Similarmente, o trabalho desenvolvido por Cumming, Cumming e Edell (1965) destaca a relevância das razões de natureza social, referindo o desejo de ajudar os outros e a natureza do trabalho policial, como os motivos indicados pelos indivíduos para ingressar na polícia. Também Harris (1973) refere o altruísmo como uma das principais razões para a escolha da profissão de polícia. O desejo de ser útil às pessoas é igualmente apontado por Lester, Arcuri e Gunn (1980).

No trabalho desenvolvido por Blau (1994) concluiu-se que os polícias recém-admitidos escolheram esta profissão por considerarem atrativo o facto de esta lhes proporcionar uma grande diversidade funcional, contrariamente aos resultados encontrados neste estudo, onde este motivo não assume especial relevo. No entanto, este autor refere que a segurança é também um fator preponderante, resultado que se encontra alinhado com a presente investigação. O motivo segurança assume uma posição destacada nos resultados, especialmente a segurança financeira, o motivo mais vezes referido, e a segurança profissional, o quinto motivo mais assinalado. A pesquisa desenvolvida por Harris (1973) e McNamara (1967) vai, também, neste sentido, dado que apontam a orientação por um elevado desejo de segurança no trabalho como o fator preponderante da escolha para ingressar na polícia. No mesmo sentido aponta Lester (1983), ao mencionar a segurança como uma das

principais razões para a escolha desta profissão e o trabalho desenvolvido por Harris (1973), quando refere que dois terços dos novos policiais ingressavam nas forças de segurança por motivos de natureza extrínseca, resultado congruente com o presente estudo, ainda que não tenha tão forte expressividade, os motivos extrínsecos representam quase metade (46%) do global das razões apresentadas por estes novos policiais para a decisão de se tornarem policiais.

Numerosos estudos têm revelado que a ênfase em objetivos intrínsecos, em relação a objetivos extrínsecos, está associada com bem-estar e melhor desempenho (Vans-teenkiste, Lens e Deci, 2006). Contrariamente, os objetivos de natureza extrínseca tendem à regulação externa, onde os compromissos assumidos podem não ser consistentes com o *self* e, sendo assim, apenas se mantêm enquanto as pressões externas estiverem presentes.

Como foi possível constatar, nas decisões de carreira confluem uma multiplicidade de fatores de natureza mais ou menos conjuntural, onde as questões relacionadas com o mercado de trabalho e as condições socioeconômicas do país são fatores críticos, a par das pressões de natureza individual, por exemplo, a exigência de garantia do sustento familiar, ou a opção ser feita apenas para agradar a um familiar, ou mesmo quando toda a sua educação foi orientada para determinada profissão e a correspondente pressão psicológica para não defraudar as expectativas dos outros relevantes. Neste sentido, à variedade de fatores que interferem na escolha de uma profissão, estão associados potenciais efeitos geradores de consequências distintas no comportamento no trabalho, na saúde e na vida do trabalhador, tendo em conta a natureza das motivações que estão na base dessa escolha.

Em suma, este estudo permite-nos concluir, num primeiro momento, que as ligações são mais fortes em termos preditivos do que os motivos *per se*, significando que, através destas, os recém-admitidos expressam as razões da escolha da profissão de polícia e, que são maioritariamente razões de cariz extrínseco que os levaram a concorrer à PSP. Não obstante a natureza das motivações apuradas, e tendo por base a literatura neste campo – e.g. Deci e Ryan (1985) –, estas poderão não constituir fator determinístico do comportamento do profissional, tendo em conta a relevância do contexto organizacional no *continuum* do desenvolvimento da autodeterminação.

A internalização do comportamento intrinsecamente motivado promove a integração dos valores e dos saberes da profissão e o seu alinhamento com o *self*, contrariamente à regulação externa, onde o comportamento é função de contingências externas de recompensa ou castigo. Existe por isso, se o contexto policial propiciar a satisfação das necessidades psicológicas básicas de autonomia, competência e relacionamento, uma enorme probabilidade das motivações de natureza extrínseca dos policiais recém-admitidos, se transformar em motivação intrínseca, tornando-os cada vez mais autônomos e competentes.

Conclusão

Neste estudo concluímos que a opção pela carreira policial se deveu, por esta ordem, a motivos de natureza extrínseca (46%), intrínseca (28,7) e social (25,2%). Os primeiros, associados a preocupações de caráter financeiro, qualidade de vida, estabilidade e família, enquanto os segundos estavam associados a fatores internos como a satisfação, vocação, identificação com a função e realização profissional e, por último, os motivos de natureza social, onde está patente a dimensão social da função, reveladora do altruísmo associado à vocação policial. No entanto a explicação da opção pela profissão de polícia, tal como apuramos, não se basta nos motivos *per se*, mas antes numa estrutura complexa de motivos de diferentes naturezas que se interrelacionam, e que tem por base a história e as vivências dos indivíduos (D'Andrade, 1992).

No esquema mental construído, a organização dos motivos é feita numa estrutura hierarquizada que tem por base, os índices de abstração, de centralidade e de prestígio, e permitiu examinar o esquema mental subjacente à decisão de se tornar polícia e, numa cadeia ordenada, atender à importância relativa de cada uma das razões apresentadas como justificações de outras que lhe antecedem. Da análise das ligações entre motivos, revela-se o sistema interpretativo dos recém-admitidos, onde os motivos "fim" nas cadeias "meio-fim" correspondem, segundo Bagozzi, Bergami e Leone (2003), aos objetivos que se pretendem atingir, de acordo com as motivações pessoais dos indivíduos. Assim, os motivos "fim" mais vezes referidos foram: de natureza extrínseca a qualidade de vida, de natureza intrínseca a satisfação e de natureza social o ser útil à sociedade.

Do conjunto dos resultados é perceptível a diversidade de razões que interferem na decisão de se optar pela profissão de polícia, não obstante a sua complexidade e os fatores de risco que se lhe conhecem. A qualidade de vida foi, pelos recém-admitidos, justificada, na medida em que permite a segurança financeira e a segurança profissional e ambas, concorrem para a promoção da estabilidade na vida do novo polícia. Este motivo foi, no conjunto de motivos extrínsecos, aquele que revelou mais prestígio, isto é, o motivo de maior importância na hierarquia do esquema cognitivo. As motivações assinaladas pelos recém-admitidos, levam-nos a supor que o mercado de trabalho, as condições socioeconómicas do país, as pressões de natureza individual, a necessidade de assegurar o sustento do agregado familiar ou garantir o projeto de vida futuro, são fatores que influem a tomada de decisão pela carreira policial, por estar associado à ideia de estabilidade que esta profissão pode garantir.

Como sabemos da literatura neste campo, as razões que interferem na escolha da profissão têm potenciais implicações distintas no comportamento em contexto profissional. As motivações de natureza extrínseca tendem à regulação comportamental externa, onde: (1) os compromissos assumidos podem não ser consistentes com o *self* e, apenas se mantêm, enquanto as pressões externas estiverem presentes e; (2) os valores da profissão não são um verdadeiro compromisso para o novo polí-

cia, nem parte da sua identidade por não terem sido internalizados e, como tal, não são usados pelos indivíduos para se definirem a si mesmos (Schwartz, Luyckx e Vignoles, 2011).

Face aos resultados apurados neste estudo, no que respeita às razões principais da escolha deste objetivo de vida – ser polícia – é à luz da SDT que se defende que, não obstante uma parcela significativa das razões apresentadas pelos novos polícias terem natureza extrínseca, o processo de integração permitirá, se o contexto na organização policial for favorável, a aquisição de um padrão de comportamento com *locus* de controlo interno, condição que implica agir com vontade e autodeterminação no desempenho da atividade policial.

É pois crítico que a instituição policial que acolhe estes profissionais tenha consciência da necessidade de criar especiais condições de acolhimento e vincadas estratégias de socialização, desde uma fase muito precoce, aptas a promover a harmonização entre as orientações motivacionais dos novos polícias e o ambiente social em que são integrados, habilitando-os a satisfazer as suas necessidades básicas em contexto policial. Esta preocupação deverá estar patente, na fase de conceção dos conteúdos e métodos utilizados no processo formativo, por forma a “criar espaço” para o ajustamento dos indivíduos, onde se estimule o comportamento autodeterminado, tornando-os indivíduos mais autónomos e competentes, evitando, por esta via, um potencial determinismo de frustração do desenvolvimento da motivação intrínseca, com as consequentes debilidades comportamentais.

Este entendimento implica a utilização de práticas por parte da organização policial, que viabilizem e reforcem a vinculação do recém-admitido à instituição, imprescindíveis para a aquisição de um comportamento intrinsecamente motivado, através da internalização dos valores e normas da profissão, baseada em estratégias de socialização individualizada, com espaços de liberdade para a manifestação da autoexpressão autêntica, promovendo a competência e a perceção de autoeficácia (Cable, Gino e Staats, 2013).

São também imprescindíveis, numa fase posterior, em que os novos polícias já se encontram em efetividade de funções, o desenho de estratégias de gestão de recursos humanos que sustentem e reforcem os níveis de motivação intrínseca, única garantia para a consolidação de uma forte orientação autónoma (Deci e Ryan, 2008). Daqui decorre, que o ambiente na instituição policial deverá ser propício à satisfação das necessidades psicológicas básicas do seu efetivo, ao longo de toda a vida ativa.

A natureza complexa das atribuições nas forças de segurança e a importância de cada elemento policial no conjunto organizacional, tornam crucial o alinhamento dos compromissos decorrentes da profissão, com os valores, aspirações e representações dos seus profissionais, ou seja, sem necessidade de sujeição a pressões de controlo externo no desenvolvimento do seu trabalho, única forma de evitar consequências negativas sobre o desempenho e saúde psicológica dos elementos policiais.

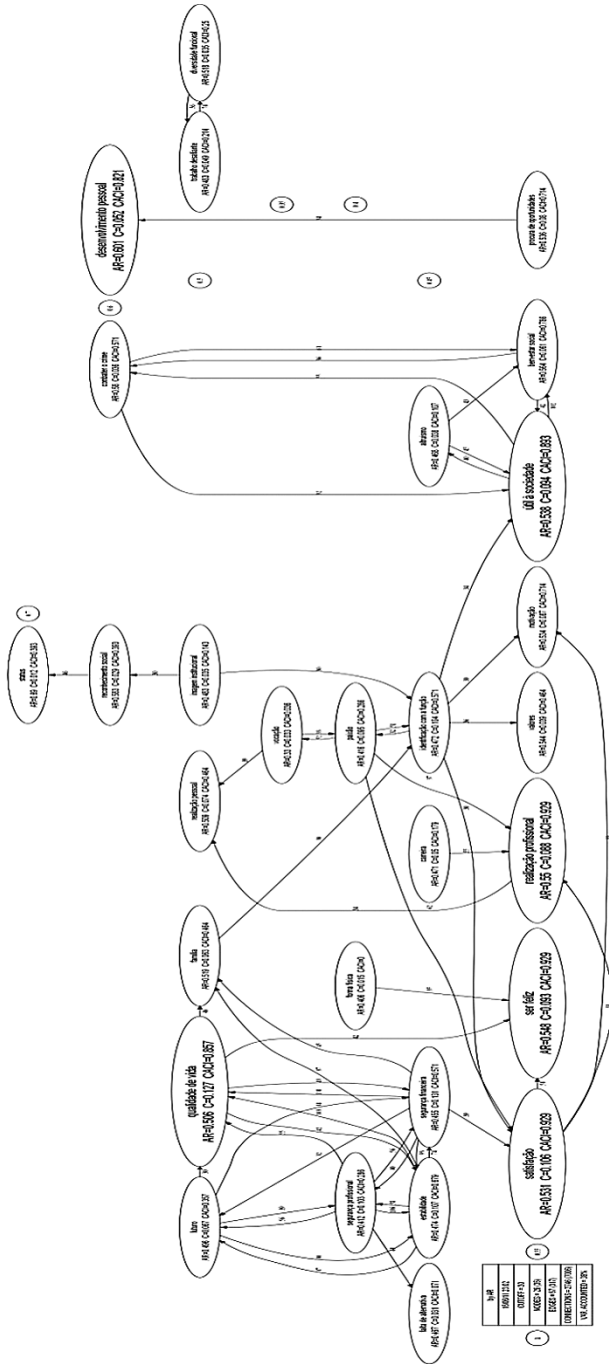
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Anexo 1 – Mapa Cognitivo sobre os Motivos da Escolha da Profissão de Polícia



REVISTA NAÇÃO E DEFESA

Números temáticos publicados

1998	84	Inverno	Uma Nova NATO numa Nova Europa
	85	Primavera	Portugal e o Desafio Europeu
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	87	Outono	O Estado em Mudança
1999	88	Inverno	Mulheres nas Forças Armadas
	89	Primavera	Portugal na NATO: 1949-1999
	90	Verão	Economia & Defesa
	91	Outono	Operações de Paz
2000	92	Inverno	Portugal e as Operações de Paz na Bósnia
	93	Primavera	Novos Rumos da Educação para a Cidadania
	94	Verão	Democracia e Forças Armadas
	95/96	Outono-Inverno	Prevenção de Conflitos e Cultura da Paz
2001	97	Primavera	Nova Ordem Jurídica Internacional
	98	Verão	Forças Armadas em Mudança
	99	Outono	Segurança para o Século XXI
	100	Inverno	De Maastricht a Nova Iorque
2002	101	Primavera	Europa e o Mediterrâneo
	102	Verão	Repensar a NATO
	103	Outono-Inverno	Novos Desafios à Segurança Europeia
	Extra	Dezembro	Cooperação Regional e a Segurança no Mediterrâneo (C4)
2003	104	Primavera	Evolução das Nações Unidas
	Extra	Abril	A Revolução nos Assuntos Militares
	105	Verão	Soberania e Intervenções Militares
	106	Outono-Inverno	A Nova Carta do Poder Mundial
2004	107	Primavera	Forças Armadas e Sociedade. Continuidade e Mudança
	Extra	Julho	Educação da Juventude. Carácter, Liderança e Cidadania
	108	Verão	Portugal e o Mar
	109	Outono-Inverno	Segurança Internacional & Outros Ensaios
2005	110	Primavera	Teoria das Relações Internacionais
	111	Verão	Raymond Aron. Um Intelectual Comprometido
	112	Outono-Inverno	Número não Temático
2006	113	Primavera	Número não Temático
	114	Verão	Segurança na África Subsariana
	115	Outono-Inverno	Portugal na Europa Vinte Anos Depois

2007	116	Primavera	Número não Temático
	117	Verão	Número não Temático
	118	Outono-Inverno	Políticas de Segurança e Defesa dos Pequenos e Médios Estados Europeus
2008	119	Primavera	Transição Democrática no Mediterrâneo
	120	Verão	Número não Temático
	121	Outono-Inverno	Estudos sobre o Médio Oriente
2009	122	Primavera	O Mar no Pensamento Estratégico Nacional
	123	Verão	Portugal e a Aliança Atlântica
	124	Outono-Inverno	Que Visão para a Defesa? Portugal-Europa-NATO
2010	125	Primavera	Visões Globais para a Defesa
	126		O Conceito Estratégico da NATO
	127		Dinâmicas da Política Comum de Segurança e Defesa da União Europeia
2011	128		O Mar no Espaço da CPLP
	129		Gestão de Crises
	130		Afeganistão
2012	131		Segurança em África
	132		Segurança no Mediterrâneo
	133		Cibersegurança
2013	134		Ásia-Pacífico
	135		Conselho de Segurança da ONU
	136		Estratégia
2014	137		Reflexões sobre a Europa
	138		Brasil
	139		Portugal na Grande Guerra
2015	140		Nuclear Proliferation
	141		Arquipélago dos Açores
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