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Security and the discourse of risk in European space policy

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Introduction

> *Space-based information infrastructures are an increasingly important component of the information society and space-technology enabled applications are being integrated in every aspect of our daily lives. What is really at stake is a degree of independence and sovereignty not only in critical technologies but also in a full range of applications. (European Commission, 1999: 6)*

> *Security forms an integral part of European Space Policy. Space–based assets and systems are critical to ensuring security on Earth (security from space). At the same time, these assets need to be protected in the difficult environment of outer space (security of space). (European Commission, 2018)*

The argument that space is central to the lives of citizens of the EU is routinely advanced and is illustrated by the quotes above. The ever-increasing importance of space means that space policy can function as "a kind of multi-purpose policy for the EU i.e. progress in space policy should contribute to progress in a lot of other EU policies" (Kenneder, 2017: 86). Commissioner Maros Šefčovič, Vice President for the Energy Union, has commented that

> [w]e have to examine and discuss potential new initiatives to address the global challenges in areas such as space, defence and security and climate change. And finally, we want to look into the conditions for autonomous European access to space. As a global political player, access to space is a priority for the EU and will become even more so in the future…It is clear to me that if we want to be a global player, we must also be a global space player. The two go hand in hand. (European Union, 2016b: 2)

In the foreword to the *Global Strategy for the European Union's Foreign and Security Policy*, the High Representative of the EU for Foreign Affairs and Security Policy, Frederica Mogherini, stated:

> The purpose, even existence, of our Union is being questioned. Yet, our citizens and the world need a strong European Union like never before....As a Union of almost half a billion citizens, our potential is unparalleled...[Our] partners expect the European Union to play a major role, including as a global security provider. (European Union, 2016c: 3)

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The 'enabling' role that space can play in the lives of citizens as well as the EU as a global actor is detailed in the Council Conclusions on *Space as an Enabler* (European Union, 2019). It notes that *inter alia* space is an enabler for social and economic benefits; that space plays an essential role for Europe's autonomy. It recognises that "European space infrastructures… need to be…protected" and

> [a]cknowledges that it is necessary for Europe to maintain a secure, autonomous, reliable, cost-effective and affordable access to space, reiterating the strategic importance of independent access to space, therefore contributing to an innovative and competitive European space sector, and reinforcing the global role of Europe. (European Union, 2017: 6)

The securitisation of society, essentially a process or processes involving a pronounced concern with the identification and response to threats, has been considered in respect of European integration (Favell and Guiraudon, 2011: 205). Space has similarly been securitised (see Peoples, 2010, 2011). This chapter considers how security is constructed in the official texts of the European Union. Specifically in the policy statements relating to European space policy. Security is a "prime goal" of states (Hall, 1993: 643). 'Existential threat', that is, a threat to life, or rather, a way of life, informs a discourse of risk within European space policy. Way of life includes the developing economy of the EU as well as well as the polity.

The structure of the paper is as follows: following this brief introduction, a limited review of identified key literature relating to the concept of 'security', specifically 'space security', is presented to situate the study of how 'security' is constructed within EU policy texts. This is followed by a description of the methodology and method of data collection. The data, excerpts from the policy documents, and the preliminary findings are then presented. The findings presented are preliminary. The existence of a "contextual web" (Fisher, 1986) between European space policy and the European Union's Common Defence and Security Policy (CDSP) within the EU's Global Strategy (European Union, 2016) are noted but not explored in this paper. Similarly, the issues about dual-use, that is, military and/or civilian–use of space services and applications is not addressed. The purpose of the study is to explore how the concept of 'security' is constructed in the official texts relating to European space policy.

Security in European space policy

Securitisation, the pronounced concern with the identification and response to threats (Favel and Guiraudon, 2011), is one element in considering issues relating to the security of space. Mutschler and Venet (2012), assessing the role of the EU as an actor in space security, distinguish between the concepts of space militarisation and space weaponisation and note:

> whereas space is militarized, it is not yet weaponized. Space systems are used to enhance the performance of weapons on Earth but, so far, no weapons have been deployed in space, nor is there a full-scale development of weapons to project force into space. (2012: 119)

They comment, however, that "although it is clear that there is a linkage between the militarization and the weaponization of space", their focus in this paper is on the issue of space weaponisation, which is associated with the term 'space security', and not on the militarization of space, also often labelled 'space and security' (ibid).

Bowen simply defines weaponisation as "placing weapons in space" and notes "[a]rguments about the weaponisation of space become a debate unknowingly gravitating around competing and often unquestioned definitions of space security" (2014: 51). 'Space safety' is a further concept considered in the literature (see Bowen, 2014 and Marchisio, 2016).

In 'The Securitization of Outer Space: Challenges for Arms Control', Peoples (2011; see Bowen 2014) suggests that while the concepts of militarization and weaponization dominate debates on space security, this debate fails to capture what she terms the "vagaries" of space policy. She suggests that due to the reliance on satellite technologies, it is now more accurate to say that outer space is becoming "ever more" securitised: that is, access to space is now commonly framed as essential to the military, economic, and environmental security of leading states and international organizations (Peoples, 2011: 76).

Of note is the recognition in the academic literature of the wide-ranging nature of the concept of security; Salmon refers to its meaning as "broad" (2005: 378) and Bowen has referred to a "*cascading and seemingly unstoppable widening* of the definition of space security [that] is occurring in academia to include every hazard as a security threat to satellite systems and national security" (2014: 47, emphasis added). For current purposes, it suffices to note that there is a robust debate between scholars (including that between the Welsh School and Copenhagen schools, see Bowen, 2014). The current approach focuses on the texts of European space policy,

charting the increasing concern with security relating to space from the first European Commission Communication, *The Community and Space,* in 1988 and noting the phrases and words used in descriptions of 'security'.

Notwithstanding the academic concern to define the meaning of 'space security', the explicit focus on, or attention to, 'security' in European space policy has expanded over the course of its development from 1988 onwards. In his review of the evolution of European space policy, Reillon situates the focus on the "security and defence aspects of space policy, space infrastructure security, autonomy and access to space and the 'non-dependence' of the European space sector" as gaining "importance" after the 2007 update of the 2003 space policy (2017: 1). However, mapping the key priorities in Commission communications indicates that considerations of space for security issues, defence and dual-use, are present in significant terms from the 1990s onwards and attention to secured space infrastructures is a particular feature from 2011 onwards, with the Communication on space surveillance and tracking (SST) issued in 2013 (European Commission, 2013).

Key responses to security have included an EU industrial policy for space and a programme on space surveillance and tracking to protect European space infrastructures. Reillon notes that discussions began on the governmental satellite communications (Govsatcom) and these initiatives have been "integrated" into the European space strategy adopted by the European Commission in October 2016. He notes the change to EU-European Space Agency (ESA) relations following the Lisbon Treaty (2007). The Treaty brought with it a competence for the EU in the area of space, through Article 189 and the creation of the European External Action Service. Reillon's conclusion is instructive in situating the issue of security:

> In an evolving environment, where the private sector is developing strong capacities and playing a more active role, the EU, ESA and their member states face key challenges if Europe is to keep its position as a space power: maintaining independent access to space, increasing efficiencies by developing synergies between civil and defence space programmes, securing space infrastructures, ensuring uptake of space data and services and adopting a long-term vision and financial commitment to increase private investment in the sector. (Reillon, 2017: 35)

This conclusion indicates the key issues relating to security for the EU– in relation to its investments, its industry and its autonomy. In 2016, before the adoption of the space strategy for Europe by the European Commission in October, the European Parliament adopted a resolution

on space capabilities for European security and defence (European Parliament, 2016a) and its Committee on Industry, Research and Energy, ITRE Committee, released a report on space market uptake (European Parliament 2016b). This resolution and study focused on non-dependence in access to space and critical space technologies and on supporting the (industrial exploitation of the data produced by Galileo and Copernicus (Reillon, 2017: 21). The European Parliament's review of the industry, security and defence aspects of European space policy (European Parliament, 2016c) focused on

> [a]utonomous space capabilities [playing] a key role…in enhancing situational awareness, response to complex crises (natural disasters, management of natural resources (water, forests), delivery of services (health, energy, transport, communication, weather forecasting) and national security. (2016c: 1)

The theme of 'security' also been addressed by the Space Council, the joint EU –ESA body, which met periodically over the 2004 -2016 period. Key points in the policy timeline include the decision at the 5th Space Council meeting on the development of a space situational awareness (SSA) programme in 2008; the 6th Space Council (2009) recognized the need for a future SSA capability as an activity at European level. At its 8th meeting, in 2011, it stressed that "space assets can contribute to the objective of the common security and defence policy", and noted the agreement between ESA and the European Defence Agency in June that year (Reillon 2017: 23-24).

Alongside these statements, the European Commission Communications were being adopted: for example, the 2011 Communication on the space strategy, *Towards a space strategy of the European Union that benefits it citizens* (European Commission, 2011), marked the beginning of the work to establish a SSA at the European level.

In 2013, the Commission Communication (European Commission, 2013) proposed the establishment of a space surveillance and tracking (SST) support programme. A Communication, *Towards a more competitive and efficient defence and security sector* (European Commission 2013b) directs attention to, *inter alia*, the issues of governmental and military satellite communications capacities and of satellite high resolution imagery to support security policies.

Reillon notes that, in 2014, the European Council recognised new priorities "in pursuing synergies in space, security and defence activities" (2017: 24). Non-dependence is identified as a key strategic goal of the 2016 *Space Strategy for Europe* (European Commission, 2016):

> Space activities have an inherent international dimension linked to the development of space infrastructures…the defence and security aspects of space and the fact that space is a policy tool in diplomatic relations. (Reillon 2017: ibid)

Non-dependence enables autonomous access and unfettered development and exploitation of its investment, ensuring no disruption to services.

Reillon's overview of European space policy identifies as key challenges the following:

> maintaining independent access to space; increasing efficiencies by developing synergies between the civil and defence space programmes, security space infrastructures, ensuring the uptake of space data and services… (2017: 34)

Of note in this review of European space policy is that 'security and defence' *per se* is taken for granted. The perceived *risk* to EU access to space and exploitation of its investment, through a space related industry and through its infrastructures, is tacit.

Methodology and method of data collection

As noted in the introductory chapter of this book, in recent years, the popularity of discourse analysis in international Relations and European Studies has increased (an example, is Schmidt's discursive institutionalism, 2010, 2018). Verluis *et al* text on methods of analysis of European Union policy processes defines discourse analysis as "the analysis of language and rhetoric: how political concepts, ideas, terminology, behaviour and institutional arrangements are loaded with assumptions, perceptions and understandings" (2011: 88). To this definition can be added the broad understanding that meanings are constructed in and through discourses; discourses do not reflect an external social reality, but produce and re-produce specific meanings:

> …a discourse [is defined] as an interrelated set of texts and the practices of their production, dissemination and reception, that brings an object into being...In other words, social reality is produced and made real through discourses, and social interaction cannot be fully understood without reference to the discourses that give them meaning. (Philips and Hardy (2002), cited in Bryman 2016: 540)

The explication of meaning is therefore at the heart of the discourse analytic endeavour.

The variant of discourse analysis advanced in this chapter draws on the framework informed by Laclau and Mouffe, presented in the Introduction (Hoerber and Forganni, 2020, 'Introduction') but has a strong ethnomethdological character. In particular, the approach adopted emphasises the ethnomethodological approach to culture, that is, as a system of shared understandings (Sachs and Moerman, in Silverman, 1986: 118). It espouses a methodological prescription for sociological description that no category of sociological description should be adopted as part of an attempt to explain behaviour without first focusing on the common-sense ways in which members of society themselves use this – and other- categories (see Sacks, 1963). The relevance of this methodological orientation is its requirement that the analyst first explores the concept as it is used; that is, to treat as topic something which is routinely used as a resource (see Garfinkel, 1967). For current purposes, this methodological approach means that the analysis seeks to identify and explicate how the texts construct 'security'.

The approach of Laclau and Mouffe, as presented in the Introduction of this book, represents one variant of discourse analysis. In particular, the focus on antagonism, hegemony and nodal points provides reference points for a qualitative analysis of the construction of a discourse of risk in the texts on European space policy. Attending to these reference points is productive in providing an overview of key features of European space policy. The first reference point is *antagonism*. In the texts of European space policy, a focus on what Hoerber calls 'historical antagonism' (see Hoerber and Forganni, ibid) directs attention to the Cold War and is used in particular ways to distinguish existing approaches to those of the 1950s and beyond, but also 'to remember' the state of the relations between states.   The second reference point is *hegemony:* This refers to the dominance of particular ways of thinking about security. In analytical terms, it directs attention to issues of power. This understanding underscores the dominance of particular ‚ways of seeing'; the dominance of particular meanings of events and decisions. As Chris Weedon has commented,

> [c]ommonsense consists of a number of social meanings and the particular ways of understanding the
> world which guarantees them...These meanings, which inevitably favour the interests of particular social
> groups, become fixed and widely accepted as true. (1987: 77-78)

Weedon foregrounds the way in which decisions or choices or descriptions of courses of action are presented as 'natural', and, crucially, are accepted as 'natural'. That is, they are not contested. The European space policy texts embody rationales for and justifications of, courses of action and decisions. They include claims to legitimacy of action, in particular, citizens' wellbeing in accordance with the Lisbon Treaty (2007). The third reference point is *nodal points*: In relation to security, a nodal point is 'sovereignty'. This element of the reference framework directs attention to the European space policy as a site of contestation. Access to and use of space are negotiated. The history of the development of space law (i.e. the treaties) is noted (see Lyall and Larsen, 2018).

The contextual web (Fisher 1986) is foregrounded by Laclau and Mouffe's work; this emphasises that discourses and the texts and documents that embody them are bound by linkages; each exists within a context. It is beyond the scope of the current preliminary study to perform this level of analysis, but it is indicative of the wider challenge to locate texts within their historical and social context. For European space policy texts, the context of their production and reception is critical (see Ryan, 2017).

Materials and analysis

The analysis undertaken sought, as a starting point, to explore how security matters were constructed in the official texts of the European Union, relating to European Space Policy from *The Community and Space: A Coherent Approach* (European Commission, 1988) to the current policy, *European Space Strategy* (European Commission, 2016)). The dataset constructed for this study also included documents from other institutions of the European Union, such as the European Parliament and the European Council. The latter, with the Council of Ministers of the European Space Agency, forms the Space Council, and its (published) Conclusions were included in this study. The official texts were read and re-read with the guiding preliminary research question: what is being said about 'security'? Attention was given to how statements about security are constructed and to whether particular features/words or metaphors used can be discerned in the descriptions provided? Such questions are routinely employed in policy analysis, for example, Bowen asks "what is security? What is to be secured"? (2014: 51). In the current case, the concern is to understand how the concept of security is used in the texts.

An inductive process of reading, and re-reading the texts, extracting sections dealing with 'security' and identifying themes as they arose, characterised the analysis of the texts. This

approach is in the broad tradition of grounded theory; my reading of the texts was informed by the literature on the concept of space security (e.g. Peoples, 2010, 2011; Bowen, 2014; Marchisio, 2015)); the analyses of the EU as a global actor (e.g. Béclard, 2013; Novotná, 2017); and of European security and defence policy development (Salmon, 2005) and general literature on the European space policy and security (Mutschler and Venet, 2012). As will be illustrated below, European space policy and related texts are characterised by broad, non-specific references to danger or threat; there is a lack of reference to everyday events, a feature that functions to 'hinting at' risk. The vague references to threat and danger construct 'risk' in ways that are tacitly understood, that is, risks are unelaborated; they are what everyone knows, a social 'common-sense'.

Preliminary Findings

The approach proceeded in two steps: firstly, the texts were read and 'relevant' excerpts were extracted (that is relevant to an understanding of what security 'is', that is, what is covered by the concept of 'security'). There were two broad categories of findings: firstly, the centrality of 'autonomy' and 'integrity' to discussions of space policy; secondly, the identification of risks that are multiple in nature and related to different sources of hazards, both naturally occurring and intentional/human-made. In addition, instances illustrating the utility of the framework of antagonism, hegemony and nodal points are presented; these highlight the situation of the EU *vis-a-vis* its competitors; its appeals to legitimacy of action and key organising concepts.

The corpus of materials included texts of the EU, from 1979. It is of note that in the first European Parliament resolution in 1979 (Resolution on Community Participation in Space Research), there was no reference to security. There was, however, reference to the growing economic and political importance of space; from that time, further Resolutions, European Commission Communications, directly refer to security, as Reillon (2017, above) has detailed.

   (i)   Autonomy

Initially, the analysis suggested that the European space policy was constructed in relation to claims for autonomy and the protection of integrity of systems. The analysis sought to explicate the processes within the texts, seeking to explicate the themes of autonomy and integrity; to assess how threat and risk are presented and to consider the policy fields affected. The discourses were identified by theme. The theme of 'autonomy', of 'non-dependence', and relatedly, an appeal to sovereignty, was identified throughout the texts reviewed. Selected

excerpts were drawn upon to illustrate the process. The autonomy of the EU related to non-dependence in terms of access to space, but also to the development of its own space infrastructure, such as Galileo, to ensure non-dependence on the US. The Communication, in 1996, *The European Union and space: Fostering applications, markets and industrial competitiveness*, spoke of how:

> [d]ue to public investment amounting to ECU 10bn for the supply of GPS [Global Positioning System], backed up by substantial orders for military terminals, the US has dominated the satellite navigation market. This experience has been used to draw up de facto standards in national bodies and [is] already being used to construct equipment. There is a danger that these will be adopted as international standards under pressure from current users. *Urgent action is needed to strengthen the European standardisation process with a view to adopting a common European Position in critical areas.* […] Certification of a space system issues new challenges to regulators…Relevant authorities must decide on their certification policy for GNSS1 [Global Navigation Satellite System] which depends ultimately on a system or systems…which are under the ultimate control of the military authorities of the US and Russia. By consequence, deployment of a European specific contribution to GNSS-2 offers the appropriate way for Europe to maintain *its sovereignty* in the area of satellite navigation. (1996: 18, emphasis added)

(ii) Integrity

A second theme that is evident in the texts is the concern with maintaining the coherence or wholeness of systems, of the space infrastructure; that is the 'integrity' of systems. The need to ensure that systems were unaffected so that business activities and citizens' lives were not disrupted is recurrently expressed:

> Space activities…often have a direct impact on citizens' daily lives. In this context, space policy is an instrument serving the Union's internal and external policies and responds to three types of need:
> Social: the citizens' well-being depends on space policy in areas such as the environment, combatting climate change, public and civil security […] Strategic: space serves to cement the EUs position as a major player on the international stage and to the Union's economic and political independence.
> As regards security, space infrastructure acts both as an instrument and an asset. *As an instrument, it can serve the European Union's security and defence interests; as an asset, it requires protection.* (European Commission, 2011: 1, 4- 5, emphasis added)

Figure 1 provides an overview of how the data were initially presented. For each theme, an attempt was made to chart the key features of the identified discourses of autonomy and of integrity by reference to different affected areas, for example, the effects on the autonomy of the EU to access space or on the capacity of EU's space infrastructure to function (integrity).

<insert Figure 1 here>

Methodologically, this initial approach was limited. A particular flaw was that it drew on the concepts of 'autonomy' and 'integrity' but these were in turn linked to 'risk'. The organizing concept was not 'autonomy' or 'integrity' but 'risk' and the identification of a discourse of risk as a particular feature of European space policy marked a departure from the initial analysis.

(iii)   Risks

On return to the texts, it became evident that the security dimension of European space policy is structured by a discourse of risk. In link with the broad grounded theory approach of Glaser and Strauss, (Glaser and Strauss, 1968), I returned to the literature on risk in order to sensitise the reading(s), and re-readings, of the texts. The sociology of risk literature was briefly drawn upon, with a particular focus on how different risks might be presented: as Beck comments: "Risks are defined as the probabilities of physical harm due to given technological or other processes" (Beck, 1992: 4). While Beck's work on the treatment of risk in the modernist project is central to the sociology of risk, my use of his work was limited to drawing on his characterisation of risk in late modernity as *risks of modernisation; "they are a wholesale product of industrialisation, and are systematically intensified as it becomes global"* (1992: 20, emphasis added).

An illustrative example of this position is found in a statement in a European Commission Working Document *Towards a Coherent European Approach for Space* (European Commission1999) in which it is noted that

> Since the end of the Cold War, the stakes in the race have been shifting from prestige and military supremacy towards market shares and dominance for applications, notable information services and content … A European go-ahead for the development of Galileo will be an implicit recognition of the urgent need to protect oneself from a monopolistic situation for global strategic infrastructure. (1999: 5)

Beck further elaborates his definition of risk in the following comments:

> The concept of risk is directly bound to the concept of reflexive modernisation. Risk may be defined as a *systematic way of dealing with hazards and insecurities introduced by modernisation itself.* Risks, as opposed to older dangers, are consequences which relate to the threatening force of modernisation and to its globalisation of doubt. They are politically reflexive. (1992: 21)

In addition, Beck suggests that risks are "open to social definition and construction" (1992: 222-3). In the security literature, assessment of risk is based on the analysis and aggregation of threat, vulnerability and consequences (see Cox, 2008: 1750).

Addressing the texts through the lens of a 'discourse of risk' enabled the analysis to proceed in a more productive way; that is, the reading of the texts used the concept of 'risk' to identify the rationale for security. The discourse of risk is multi-dimensional. It is structured on two axes: non-human and/or human created/intentional hazard and draws on the oft-noted security *in* space and security *from* space distinction (see Antoni et al, 2019: 96ff):

> (I)   non-human/unavoidable hazards A: risk to EU-funded infrastructure in space (space weather);
>
> (II)   non-human/unavoidable hazards B: risk to EU citizens on earth from natural hazards (space weather);
>
> (III) Human hazards A/intentional: risk to EU funded infrastructure in space (space debris)
>
> (IV) Human hazards B/intentional: risk to EU citizens on Earth, bodily risk and economic/employment risk cyberattacks).

In the policy texts, the identified risk often includes a proposed solution. For some risks, cross-cutting solutions can be identified, such as the EU's draft International Code of Conduct for Outer Space Activities (European Union, 2014). The role of the EU as a global actor and of Europe and the EU as a key player in the industrial complex of space and related goods and services is noted in the ongoing concern with autonomous access and independence of the EU. It is notable that published space policy documents do not include references to the draft Code of Conduct, excepting the Communication, *Towards a space strategy for the European Union that benefits its citizens* (European Commission, 2011). Béclard's (2013) analysis of EU' actorness is instructive in this regard, grounding the analysis within the legal competence of the EU and governance arrangements with the European Space Agency (see also Smith, 2000 and Howorth, 2004). The severity and immediacy of risks varies, from high to low, and immediate to remote.

<insert Figure 2 here>

> *(I)   Natural hazards A: risk to EU funded infrastructure in space*

Space weather can disrupt infrastructure – this is a particular theme in the European space policy texts. The Communication, *Towards a Space Strategy for the European Union that benefits its citizens*, remarks that

> [s]pace infrastructure is critical infrastructure on which services that are essential to the smooth running of our societies and economies and to our citizens' security depend. It must be protected and that protection is a major issue for the EU that goes far beyond the individual interests of the satellite owners. Such infrastructure is at risk of damage or destruction by natural phenomena, such as solar radiation and asteroids. (European Commission, 2011: 1)

The *Space Strategy for Europe* (European Commission 2016) pays particular attention to the use of the SST (Space Surveillance & Tracking) support framework to counter the impact of space weather on satellites and on grand infrastructure is noted. It considers these risks together with risk IV) cyber- security risks:

> The Commission will reinforce the SST support framework to improve the performance and geographical coverage of sensors. It will consider extending its scope to address other threats and vulnerabilities, for example cyber threats or the impact of space weather on satellites and on ground infrastructure such as transport, energy grids and telecommunication networks. (European Commission, 2016: 9)

(II) Natural hazards B: risk to EU citizens on Earth from natural hazards

The risk of asteroids hitting Earth does not constitute a specific theme within the corpus examined. This hazard may be categorised as one in which there is popular, not policy, interest; a recent example of tabloid press coverage of such risks includes the Daily Mirror article of October 2019: "There is a 100% chance an asteroid will hit Earth if we don't act now, expert warns" (Daily Mirror, 2019).

(III) Human hazards A: risk to EU funded infrastructure in space (space debris)

The need to protect infrastructures *in* space from human activity is a common theme in the European space policy documents. The 2007 Communication, *European Space Strategy*, refers to how

> [t]he economy and security of Europe and its citizens are increasingly dependent on space-based capabilities which must be protected against disruption. (European Commission, 2007: 7)

This theme is also a concern in the subsequent 2016 *Space Strategy for Europe*:

The proliferation of space debris remains the most serious risk to the sustainability of space activities and will continue to be addressed at European and international level. The EU has dealt with this issue through the implementation of the EU space surveillance and tracking (SST) support framework which has now started delivering operational services based on a pool of Member States' capacities. (European Commission, 2016: 9)

IV) Human hazards B: risk to EU citizens on Earth (bodily risk and employment risk)

The identification of space debris, created by users of space, as a risk is well-established within policy discourse (see Hoerber et al, 2019: 120). The theme of risk to EU citizens raises matters of commercialization; the threat is a threat to Europe's competitiveness. The first Commission Communication in 1988 noted:

> …Europe is still without a cogent overall policy which incorporates technological, industrial, commercial, social and even defence aspects… For a number of years, now, the international space scene has ceased to be dominated by the United States and the Soviet Union. Although they still command the stage, pushing ahead with their major civil and military programmes…the two superpowers no longer have exclusive control of the exploitation and commercialisation of space… (COM (88) 417: 4-5).

This theme of human (created) hazards is pre-eminent in the policy texts; the Commission states

> Europe has to provide security to its citizen and to enable its companies to maintain their competitive advantage on the international market…Metrological and environmental monitoring networks are also critical. Their significance can be assessed by looking at the major impact of any shutdown of part of our spatial infrastructure would have major consequences and freeze a significant part of the economic activity as well as impair considerably the organisation of emergency services. (2007: 27, 34)

The most consistently pronounced statements arise in relation to the establishment of a space surveillance and tracking support system (SST). The *Proposal for a Decision of the European Parliament and of the Council Establishing a space surveillance and tracking support system* notes, *inter alia,* that

> [s]pace based systems…are critical for the implementation of EU policies….security related policies including the CFSP/CSDP [Common Foreign and Security Policy/Common Security and Defence Policy]. With increasing dependence on space-based services, the ability to protect space infrastructure has become essential to our society… (European Commission, 2013)

This proposal refers to the agreement that the SST is led by the EU because "it has a security dimension", allowing the gathering of intelligence on States' civil and military space infrastructure and operations, with which the EU, unlike ESA, has the competence and is equipped to deal. Of note is the reference to the results of the consultation that specifically note public opinion; "[t]he consultation also showed that the public opinion is aware of and supports the need to protect space infrastructure" (2013: 5). As public funds are allocated to space budgets, support from the public, the taxpayers, is an important consideration (see Ryan, 2017).

The 2016 *Space Strategy for Europe* addresses 'synergies between civil and security space activities'. It states that the Commission "will… assess further the potential of Copernicus and Galileo/EGNOS [European Geostationary Navigation Overlay Service] to meet EU autonomy and security needs and improve the EU's capacity to respond to challenges related to migration, border control and maritime surveillance." (European Commission, 2016: 5)

(IV) Framework

As noted, the discourse analytic framework of antagonism, specifically historical antagonism, hegemony and nodal points were used to identify key features of the policy texts:

Historical antagonism

As described above, historical antagonism is one reference point for the analysis of how 'security' is constructed in the policy texts. A feature of the corpus (the texts in the dataset used for this study) is the lack of reference to historical events; references to the so-called Cold War are rare in the period considered (1979 to 2019). In particular, specific security related, 'real world' events, are rarely referenced in the texts.

Examples of references to historical events include the following statements

(1) …Europe is still without a cogent overall policy which incorporates technological, industrial, commercial, social and even defence aspects…For a number of years, now, the international space scene has ceased to be dominated by the United States and the Soviet Union. Although they still command the stage, pushing ahead with their major civil and military programmes,…the two superpowers no longer have exclusive control of the exploitation and commercialisation of space. (European Commission, 1988: 4-5)

(2) In the development phase of space technology, the East/West confrontation provided a major driving force for the so-called 'space race'. To position itself during this phase, Western Europe (including both EU Member States and other European countries) combined its essentially scientific and technological ambitions in a number of technological development projects….There were other concerns for independence of access and selective issues of security (European Commission, 1999: 5)

Of note are the references to the ongoing tension between the EU and ESA: this is identified as a particular issue in the Communication *Establishing appropriate relations between the European Union and the European Space Agency (*European Commission, 2012*)*. Section 2.3 ('Asymmetry in security and defence matters') contains the following statement:

The EU's competence over security and defence matters has grown stronger with the adoption of the Lisbon Treaty and the setting up of the European External Action Service. Space capacities have often the potential to be used for civil and defence purposes. In order to contribute towards objectives of the Common Security and Defence policy, the EU has to establish ever closer and stronger links and synergies between the civil and defence dimensions of space. The collaboration of the Member States and ESA is essential in this endeavour. *However, the relations between EU and ESA are constrained by the fact that ESA's membership includes States not members of the EU, which poses an obvious problem in general and an even more acute problem when it comes to security and defence matters.* (European Commission, 2012:3, emphasis added)

The need for European autonomy, the expressed desire or aspiration to be in a position of non-dependence in terms of access to space and use of space applications, is raised in policy texts. In the Communication on *The European Union and Space: Challenges, opportunities and new actions* (European Commission, 1992), the European Commission notes the wider geo-political situation in which space policy is implemented:

The shift in geo-political relations that followed the momentous developments in the countries of Central and Eastern Europe and the former Soviet Union has enabled a reduction of the military threat that underlay East-West confrontation. At the same time, new security challenges have arisen (partly as a result of the shift in the global balance of power) bringing new international responsibilities for Europe….The Global Positioning System (GPS) is currently provided by a US military satellite network which has been made available for civil use. *However, this arrangement is voluntary and could be halted at any time…* (1992: 22, emphasis added).

European dependence on the US GPS system is noted; the need for autonomous access is a theme throughout European Union and European Space Agency statements - in 2007, the

Director General's Proposal for European Space Policy noted that "autonomous access to information relating to the environment and security is of strategic importance for Europe" (European Space Agency, 2007: 23).

Hegemony

The internationalisation of space policy entails a recognition that space is, inherently, globally relevant, and is linked to European Union aspirations of becoming a global actor (see Béclard, 2013). Commissioner Maros Šefčovič, addressing a conference *Europe as a Global Space Player,* held in January 2016, noted that

> Space is linked to many issues like….disaster response, border and maritime surveillance, monitoring of the ground, sea levels or the atmosphere. We have to examine and discuss potential new initiatives to address the global challenges in areas such as space, defence and security and climate change. And finally, we want to look into the conditions for autonomous European access to space. *As a global political player, access to space is a priority for the EU and will become even more so in the future…It is clear to me that if we want to be a global player, we must also be a global space player*. The two go hand in hand. (European Union, 2016b:1, emphasis added)

The EU's aim of functioning as a global actor is enunciated in European space policy; space policy may be viewed as a vehicle for wider ambitions of the Union. The aim to position itself as a 'global player' is evident in the European policy texts from the early years of the 21st century, for example, in 2005, in the Communication, *European Space Policy – Preliminary Elements,* the specific aspirations of the EU are outlined:

> Space is a tool to serve the interests of the Union, its Member States and citizens: strategic influence, scientific progress, economic growth in the knowledge economy and security. The EU is increasingly a global actor…Space is an asset of European integration, not only through its technical capabilities but also through the global adventure and challenge it represents for Europe. European security policy is developing rapidly. Space based situation awareness and reaction capability will play a substantial role in this policy…The Council of the EU has recognised that space assets could contribute both to making the EU more capable in the field of crisis management and to fighting other security threats. It has therefore approved the idea that identified and agreed upon ESDP requirements should be reflected in the global EU space policy and European space programme. (European Commission, 2005:4)

Nodal points

The analysis of the texts did not focus on 'nodal points', but notes the importance of 'nodal points' in the governance of space. The alignment of key stakeholders within 'Europe' is called for in 1988 (*The Community and Space: A Coherent Approach*), between the European Commission and ESA. This is one nodal point.

In *Space Strategy for Europe* (European Commission 2016), the opening paragraphs include reference to the changing international space context, with "new entrants […] bringing challenges and new ambitions in space" (European Commission 2016: 2). The alignment of EU interests with the interests of other actors remains an objective of current space policy, albeit with the overarching goal of having a "stronger" role.

Conclusion

The centrality of the concept 'security' to the development of European space policy has been noted (e.g., Mutschler and Venet, 2012, Béclard, 2013; Bowen, 2014, Marchisio, 2015). This chapter has charted *how* the concept has been used in the European space policy texts. It sought, within the reference framework of antagonism, hegemony and, to a lesser extent, nodal points, to explore how the policy texts have constructed 'security'. The identification of the themes of autonomy and integrity led to a consideration of 'risk'. Favel and Guiraudon in their summary of research on the new security theory of European integration, refer (in Foucauldian terms) to techniques of 'security governance' developed by the EU and note

> [t]he regulatory regime established by the EU […] is based on the assumption that shared risks are in principle manageable at the European level and that corresponding techniques of control should thus be arranged for at this level. To uphold this regime of control, the EU needs to promote a discourse of security and threat, thus leading to a kind of fortress mentality that affirms the role of European institutions and governments as the principal 'managers' in the 'governmentality of unease'. (2011: 206)

The diffuse 'risk/s' to which the policies are oriented, are categorised as human/non-human. The object of 'security' is the control of perceived risk.

European space policy is situated in a contextual web of other policies, such as the Global Strategy for the EU's Foreign and Security Policy (European Union, 2016). 'Security' is a cross cutting issue, spanning policies and, to the extent, that alignment between policies exist, the advancement of the ambitions of the EU as a global actor in European space policy is unsurprising. The preliminary findings from an analysis of key texts of European space policy

presented in this chapter illustrate how 'risk' is central to the ways in which European space policy addresses security. A discourse of risk structures security challenges. The nature of 'risk' has changed over time. However, a key, enduring, feature is the non-specificity of risk, and thus of 'security'. This is not a unique finding, but is confirmatory of earlier work by Bowen (2014) and Salmon (2015).

The analysis suggests that two, interrelated, processes can be discerned in the policy texts. These processes jointly structure how the security is addressed in European space policy. First, the appeal for 'autonomy' relates both to military defence of the European Union as a political entity *and* to the protection of the economy of the European Union. Secondly, the proposals for the management of risk(s) is one that addresses both naturally occurring and intentional human events. The impact of the risks on the autonomy of the EU relate to its borders as well as to its economy. European space policy situates risk in relation to both the EU and to the space-related economy. Sovereignty is desired for both 'state' (the polity) and 'economy'. Such references are instructive and point to the aspiration of the EU as a global actor. In this regard, EU space policy is a vehicle in which the claim to legitimacy of the EU as a global actor is advanced. The history of the Cold War, of the need to promote European values and to secure independence of access to and use/existence of its investments in space, are 'meta- policy' elements, identified in the discourse analysis framework promoted throughout this book.

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