

WHAT EVER HAPPENED TO THE EU'S 'SCIENCE DIPLOMACY'? THE LONG MISSION OF EFFECTIVE EU-MEDITERRANEAN COOPERATION IN SCIENCE AND RESEARCH

| 103 |

JERNEJA PENCA

Euro-Mediterranean University, Slovenia

Across the policy discourse and academic literature, the popularity of the concept of 'science diplomacy' has overshadowed its utility. This article challenges the portrayal of 'science diplomacy' as a straightforward strategy through the examination of the foreign policy-scientific cooperation nexus in the EU-Southern Mediterranean neighbourhood. Through a policy documents analysis, the article traces the development of the external dimension of the EU's science policy, i.e. the shaping of the EU's science policy beyond its borders, and the inclusion of science into its foreign policy agenda in the South Mediterranean. The analysis reveals that the EU's enthusiasm for 'science diplomacy' can be related to the EU's internal political goals, rather than any significant change in the policy objectives or policy tools. Moreover, a strong cooperation in science and research between the EU and its Mediterranean neighbours was contingent on friendly relations, rather than capable of improving conflicts and tensions. The conclusion suggests to focus on building the practical (civilian) impact of genuine scientific cooperation in the aftermath of an uncritical promotion of 'science diplomacy'.



Key words: EU foreign policy; Southern Mediterranean; external science policy; scientific cooperation; science, technology and innovation; Euro-Mediterranean.

INTRODUCTION

Over the past decade, the notion of ‘science diplomacy’ has seen a rise, but recently also its demise. The term ‘science diplomacy’ describing any activity concerned with international aspects of scientific cooperation was introduced by the UK Royal Society and the American Association for the Advancement of Science in 2010, and quickly found supporters. A key one among them was the EU during the Juncker Commission in the period 2014-2019, particularly in its relationship with the Mediterranean region (EC, 2017). ‘Science diplomacy’ was used to both describe existing efforts and to aspire ambitions as diverse as those of increasing visibility of science globally, exerting economic influence on other major actors and using scientists to enhance peace. The scholarly literature engaging with the term has moved from endorsing and mapping the concept (Berg, 2010; Dolan, 2012; Turekian et al., 2015; van Langehove, 2016a; van Langehove, 2016b; López de San Román and Schunz, 2017; Ruffini, 2017) to gradually developing more nuanced appraisals of the rhetoric surrounding the concept (Copeland, 2016; Moro-Martín, 2017; Rungius and Flink, 2020; Flink, 2020). This recent literature has revealed the fuzziness of the term and the inaccurate assumptions enshrined in it, and has warned from expectations that science serves as an idealized cure to the multiple complexities shaping the world’s societal and socio-ecological interactions.

What has so far remained under-explored in the literature is an account of how (once) discrete fields of science policy and foreign policy interacted over time. This is valuable because it depicts the ‘operationalisation’ of science diplomacy and bridges the gap between the high-level policy statements propounding ‘science diplomacy’ and a conceptual analysis of its discourse. It contributes to the academic literature dealing with the policy nexus between foreign and science policy (Wagner, 2002; Wagner and Leydesdorff, 2005; Flink and Schreiter, 2010; Geeraert and



Drieskens, 2016; López de San Román and Schunz, 2017; Ruffini, 2017), particularly by offering new findings on the causal relationship between the diplomatic efforts and international scientific cooperation, and highlighting the role of power, interests and norms in the types of foreign policy tools. This is all the more relevant, since the EU's cooperation between science and foreign policy has been far from systematic (Stein, 2002). Moreover, also the influential literature on the EU's Southern neighbourhood policy (Bicchi and Gillespie, 2011; Bicchi and Lavenex, 2015; Gillespie and Volpi, 2017) has so far paid only marginal attention to the role of scientific relations in political relations (Cf. El-Zoheiry, 2015).

| 105 |

This article explores the evolution of 'science diplomacy' in the context of the cooperation between the EU and its Southern neighbourhood region.¹ It traces the development of the external dimension of the EU's science policy (the shaping the EU's science policy beyond its borders) and the inclusion of scientific cooperation into the EU's foreign policy.² The article focuses on

- 1 The region is composed of states surrounding the Mediterranean Sea. The coverage of Turkey is not as detailed in this article because while Turkey is part of the EU's foreign policy for the Mediterranean, it has also pursued a bilateral relationship with the EU. Its Accession negotiations started in 2005 and are currently stalled, subject to the EU's condition that Turkey applies the Additional Protocol of the Ankara Association Agreement to Cyprus. In the context of this overview, it is interesting that the only chapter that has been closed is the one on Science and Research.
- 2 An examination of the EU's policy in the South Mediterranean is complex from the point of view of legal accuracy and terminology. The EU's institutions and legal basis have changed over time and so have competences in the area of relations with countries and actors outside the EU. The article is focussed on examining the relevance of science in the relationships between the EU and South Mediterranean, to which both the terms 'external relations' and 'foreign policy' should be applied, given the applicable legal base at the time. However, to enhance clarity in the context of the purpose of the article, a generic use of 'foreign policy' is applied (e.g. European Parliament. Fact Sheets on the European Union: Foreign policy: aims, instruments and achievements. Available at: <https://www.europarl.europa.eu/factsheets/en/sheet/158/foreign-policy-aims-instruments-and-achievements>. The deployment of 'external science policy' relates to the implementation of a science policy outside the EU borders.

the Euro-Mediterranean region as a case in point, considering it as a foreign policy object of the EU (Bojinović, 2015) and acknowledging that it has been specifically targeted by the ambitions of the EU's science diplomacy (Moedas, 2017). The analysis examines the EU strategic policy documents relating to its internal science policy (mostly the Framework Programmes outlining multi-year plans for science and research) and to its foreign policy in the EU's Southern neighbourhood region, to discover how science was envisaged to be used for foreign policy purposes and how foreign policy was meant to be used to support science. More concretely, it seeks to identify references to an international dimension in the EU's science policy and remarks regarding science in the EU's foreign policy documents. The analysis of documents does not seek references to 'science diplomacy', but instead attempts to construct the meaning of it. It asks what place have policy domains of science, technology, research and innovation had in the EU's relations in its neighbouring region; how have they shaped or been shaped by the EU's foreign policy; and whether the ideas introduced by 'science diplomacy' have brought or promise to bring any novel approaches or progress to the agenda. It is appropriate to note that within the EU, the policy of science has undergone various transformations and marriages with other popular terms, such that references to science and technology (S&T), research and development (R&D) and science and innovation can all be found (Science and Public Policy 2002; Borrás 2002). Following this introduction, the next section (2) offers a narrative on the interplay between science and foreign policy in the EU-Mediterranean relationships. The subsequent section (3) reflects on the impact of the emergence of the term 'science diplomacy' on the incumbent interactions. The conclusion highlights the questions implied in the nexus between science and foreign policy that deserve more attention than they received so far.

GROWING INTERPLAY BETWEEN SCIENCE AND FOREIGN POLICY

A period of partnership

The early attempts by the European Communities (now the EU) to coherently engage with the Mediterranean date to 1970s, when Global Mediterranean Policy encompassed a series of bilateral trade and co-operation agreements with most third Mediterranean countries. However, it was the 1995 Barcelona Declaration and the establishment of the Euro-Mediterranean Partnership (EMP) that represents a milestone for the EU's relations with the Southern Mediterranean countries.³ The EMP was a foreign policy initiative running in parallel to the process of preparing Central and Eastern European States for accession, replacing bilateral relations between the EU Member States and the South Mediterranean countries with a multilateral policy and a common approach to the region. The EMP can be praised not only for conceiving 'neighbours' beyond those linked to the EU by land (Barbe, 1996), but also for its ambition of conducting friendly and truly cooperative Euro-Mediterranean relations. The principles of joint ownership, dialogue and co-operation stood at the centre of the policy, with the objective of creating a Mediterranean region of peace, stability and shared prosperity (Barcelona declaration, 1995).

The ambition of the EMP encompassed scientific cooperation. The latter was part of the EMP both as a means for advancing science and socioeconomic development, and as conducive to bringing "peoples closer, promoting understanding between them and improving their perception of each other" (Barcelona declaration, 1995). Cooperation in science between the EU and the South Mediterranean countries was built, "taking account of the principle of mutual advantage", and envisaged instruments, such as "joint research projects". Although the then valid

| 107 |

3 The intention to establish a new framework for its relations with Mediterranean countries was launched at the European Council in Lisbon in June 1992.



Framework Programme (FP4) was offering a platform for co-operation, the EMP states had no obvious preference for EU's instruments and appeared to leave the policy open to a joint vision. This is fully in line with the principle of "mutual benefit" which was central to the FP4 in relation to third countries and international organisations.

The EMP's conception of science both as an end in itself and as a medium to foster people-to-people relations is reflective of the optimistic political outlook at the time and was possible because of that context. A truly fruitful multilateral scientific cooperation, as could be read into the EMP, was dependent on and a product of a considerable political effort. The launch of the EMP coincided with the hopes for the Arab-Israeli reconciliation, attempted through the later ill-fated Oslo Peace accords. It was just then that the idea of the Arab-Israeli scientific collaboration was born, eventually leading to the region's first synchrotron light source – SESAME (Synchrotron-light for Experimental Science and Applications in the Middle East)⁴, modelled after the European Organization for Nuclear Research (CERN) (Sesame 2018).

The commitment to promote scientific and technological co-operation internationally, both to reinforce Community capacities and those of the partners, was scaled up in the subsequent Framework Programme (FP5, covering the period between 1998 and 2002) with more instruments, funds and vigour. The Mediterranean countries constituted a specific group among the EU's 'third countries' and science and technology represented the core of the EMP. The thematic priorities for research were selected through a dialogue between all the countries involved and encompassed themes, such as socio-economic modernisation, preserving and using cultural heritage and regional environmental sustainability. Expected outcomes of cooperation in this period were increased training opportunities for researchers,

4 SESAME is a partnership between Bahrain, Egypt, Israel, Iran, Jordan, Pakistan, the Palestinian Authority, and Turkey that aims to create top research career opportunities in the region and serves as a prime model for interstate scientific collaboration.

research in support of regional collaboration activities as well as tools and decision support systems, all geared towards a progress of the region as a whole.

Development of an external science policy

The EMP was supplanted by the European Neighbourhood Policy (ENP) in 2003.⁵ The introduction of the ENP presented more than a semantic change in the EU's foreign policy approach in preparation for the EU's internal changes, namely its biggest enlargement to come in 2004.⁶ The stated ultimate objective of the ENP was similar to the one of the EMP: the new policy aspired to create in the neighbouring region 'a ring of friends' – sharing everything with the Union but institutions (Prodi, 2002), and creating a "zone of prosperity and a friendly neighbourhood" (EC, 2003). With the exception of Turkey, which had the prospect of the EU's membership, the status of the countries in the Mediterranean (Algeria, Egypt, Israel, Jordan, Lebanon, Libya, Morocco, Palestine, Syria and Tunisia) remained unaffected. Nevertheless, the ENP represented also a change in style.

The ENP's approach in accomplishing the same policy goals departed from one based on the principle of partnership. Heavily influenced by the security issues and political events in the aftermath of the terrorist attacks on 11 September 2001, the ENP was built on the premise that "[t]he EU has a *duty*, not only towards its citizens and those of the new member states, but also towards its present and future neighbours, to ensure continuing social cohesion and economic dynamism" (EC 2003). Contrary to the language of cooperation and dialogue propounded earlier, the tone reflects a stronger sense of EU's determination to deliver its pre-set goals and impose expectations on its partners. The

5 In parallel with the ENP, the EU conducts bilateral policies with the neighbouring countries. They can be parties to the Partnership and Cooperation Agreements (PCA) (some of them to become parties to Association Agreements with the EU) or to Euro-Mediterranean Association Agreements (EMAA).

6 The enlargement to Bulgaria and Romania that followed in 2007, was also already foreseen.



EU's policy in the Mediterranean became much more prescriptive and more of a one-way process. While the principle of common ownership continued to underlie the drafting of the principal instrument in the ENP – the so-called “action plans”, there were effectively limited opportunities for their bilateral negotiation because the objectives and means of cooperation had to correspond to the options available in the EU's framework offer. In addition, the EU introduced a much contested ‘conditionality’ approach (known also as ‘more for more’ approach), on which better compliance was rewarded with more funds (Kelley, 2006).

Scientific cooperation within the ENP played a role of a tool in achieving regional and sub-regional cooperation, whose final purpose was to contribute to stability, security and sustainable development (EC, 2003), with the first two objectives increasingly taking the lead (EC, 2009). The primary tool for implementing the cooperation with neighbouring countries in the field of science and technology was the formation of the European Research Area (ERA). ERA was built as an EU internal tool and was also at the focus of the 6th Framework Programme for Research and Technological Development (RTD), covering the period 2002 to 2006. At the general level, support was to be concentrated on the structural and institutional capacity-building activities.

The implementation of the EU's ambition in scientific cooperation revealed its clear preference to deploy its own structures in that policy field and thereby to retain full control over that cooperation. The cooperation with the Mediterranean countries begun to be conceived within the extension of the EU's internal science policy – through making them eligible for funding in the new Framework programme and including them in the ERA. The ENP expressed a commitment to a common political language of ‘shared values’, namely “democracy, respect for human rights and the rule of law” (EC, 2003). But the EU *presupposed* that the shared values underlied all of the actions and goals in the ENP, rather than seeking them through policies. Only gradually, the EU came to recognise that the achievement of ultimate objectives – political association, deeper economic integration, access to the EU internal market, increased mobility and more

people-to-people contacts – depended precisely “on the extent to which common European values [were] effectively shared by the neighbouring countries” (Petrov, 2015: 291). The potential role of scientists for advancing those shared values, however, went long unnoticed. Not even when the EU resorted to a more cooperative tone in the implementation of the ENP in 2004 (EC, 2004) that the EU recognised the scientists’ potential for building trust. Furthermore, when the EU sought alternative ways to ‘conditionality’ in order to advance fundamental reforms in countries that lacked political will, it relied on civil, economic and social actors as the more obvious partners (EC, 2015), but did not mention the scientists explicitly.

| 111 |

During the process of bilateral negotiations between the EU and the Mediterranean countries during 2003–2005, research and development (or science and technology) were regularly flagged as a priority of the neighbouring countries. The EU committed to developing an ‘ambitious’ cooperation in this field with the ultimate goal being “sustainable and equitable economic development” (Commission of the European Communities, 2005). To achieve it, the priorities for the EU were the integration of the partner countries’ research entities in the ERA, education reform, university exchanges and scholarships (ibid.). Among those harmonising actions, a curious diplomatic plan can be found for “integrat[ing] former weapons of mass destruction scientists into the international science communities and support[ing] the civilian application of their sensitive knowledge” (ibid.). These can be seen as the first shapes of the EU’s active attempt to situate the scientific cooperation within its high politics and the security issue.

As the ENP progressed, the EU expressed the desire for the policy to move beyond being a matter for officials and politicians and to have also a ‘human face’. The idea was that the ENP should offer opportunities for citizens of the EU and of the neighbouring countries “to interact, and to learn more about each other’s societies and understand better each other’s cultures” (EC, 2006a). In the context of this more ‘popular’ policy approach, the main focus in implementing the ENP in science, research and innovation was in mobility of researchers and



academics (EC, 2010a). However, it is striking to note that the EU was focused only on ways of making “it easier, cheaper and faster for our neighbours to enter the EU” and on promoting those tools that attract the EU’s partners, rather than interested in pursuing any more balanced exchange to occur more equally in both ways (ibid.). The potential of mobility was conceived exclusively in terms of mobility *into* the EU, without this being problematized or even recognised.

| 112 |

The consolidation of an expanding EU external science policy was the goal of the 7th Framework Programme (FP7, adopted in 2005, covering the period 2007–2013). FP7 aimed at increasing the number of agreements in the fields of science and technology between the EU and neighbouring countries. It also sought to ensure a more comprehensive support of ‘scientific diasporas’ of European researchers abroad and foreign researchers within Europe. Overall, some years into the ENP and at the outset of the FP7, international research programmes gradually acquired new roles – those of expanding the interaction of the EU with the researchers from the third countries (both through a further opening-up to international cooperation and through dedicated actions), based on the belief that there is mutual benefit in addressing specific global or regional issues. Additionally, international research programmes with outreach beyond the EU borders were increasingly serving also the European research excellence and competitiveness, and bolstering the image of the EU as a global actor. The Lisbon Treaty (signed in 2007) constitutionally enshrined this ambition (TEU Arts 3.3 and 3.5) and defined the tools to attain it (TFEU Title XIX; Arts 179–190).

An expanding role for science in the EU’s foreign policy was not impacted by the establishment, in 2008/2009, of the Union for the Mediterranean (UfM) as a focal point of the Euro-Mediterranean multilateralism through the interaction between the 28 European Union Member States and 15 countries from the Southern and Eastern Mediterranean. Much more than the set-up of the UfM, it was the events of the Arab Spring in 2011 that constitute the next milestone in the implementation of the ENP. The Arab Spring was interpreted by the



EU as an opportunity “for a qualitative step forward in the relations between the EU and its Southern neighbours [...] rooted unambiguously in a joint commitment to common values” (EC, 2011a). Although the EU committed to “faster and more ambitious political and economic reforms” through the launch of the “Partnership for Democracy and Shared Prosperity” (ibid.), neither the pace of reform increased nor the change has been noticeable.

The most significant impact of the renewed approach was that the EU policy effectively became divided between one led in relation to the governments and another one in relation to the civil society (EC, 2011b). The EU's determination was to “curtai[l] relations with governments engaged in violations of human rights and democracy standards, including by [...] strengthen[ing] further its support to civil society” (EC, 2011b). Interestingly, the scientists – as a parallel sphere that is institutionalised but not authoritative – were not considered to form part of the civil society. Fostering science itself was not mentioned as a priority of the EU in the region, unlike democracy, growth, job creation, microfinance and also higher education (EU, 2011).

| 113 |

Growing expectations on science and emergence of 'science diplomacy'

The process of mainstreaming international scientific cooperation was significantly accelerated by the launch of the Europe 2020 strategy (EC, 2010b), which situated research and innovation as sources of renewed growth out of the economic crisis (Ulnicane, 2016). The term 'science diplomacy' was introduced, and presented as an important instrument of soft power, a tool for improving relations with key countries and regions, and an accelerator of business opportunities as well as new market development (EC, 2012). Increased expectations of science were certainly reflected in the launch of the 8th Framework programme titled Horizon2020 (covering the period of 2014–20) (Regulation 1291/2013). The following tasks for international cooperation in science can be discerned: that it contributes to achieving the EU's internal strategy (strengthening the EU's



excellence), that it will resolve global societal challenges and also that it would support the EU's foreign and development policy objectives. More than any previous framework programmes, Horizon2020 demonstrated an ever-closer interplay between individual policies, and reconfirmed a commitment to cooperation with third countries and international organisations. Among the key activities to foster international cooperation was a full integration of four countries from the Mediterranean into Horizon2020 under the same conditions as EU Member States, namely Turkey, Israel, Algeria and Tunisia.

Interestingly, the EU's foreign policy perspective in that same period did not share the same perception of science. Both the 2015 ENP Review (EC, 2015) and the launch of the foreign policy strategy in 2016 (EEAS, 2016) not only do not use the term 'science diplomacy', but also reveal a marginal role for science as a platform for engagement, rather than a transformative factor in the accomplishment of the major goals. The renewed ENP portrays research, science and innovation as crucial in the creation of decent and sustainable jobs, but it reminds us that stabilisation remains "the most urgent challenge" and the "main political priority" (EC, 2015), to which science does not contribute in a significant way. The key factors affecting stabilisation in the EU's belief are poverty, inequality, a perceived sense of injustice, corruption, weak economic and social development and lack of opportunity (EC, 2015).

However, away from the strict domain of foreign policy, the discourse on 'science diplomacy' also started developing a competitive nature, alongside a cooperative one. The EU did not shy away from promoting to its neighbours its own concepts (such as 'smart specialisation')⁷, initiatives (such as the Enterprise

7 The EU's concept 'smart specialisation' was developed in the EU's regional policy as a tool for designing innovation and investment strategies of regions, relying on an entrepreneurial and bottom-up collaboration between various sectors where they have competitive advantages. European Commission (EC) Regional Policy contributing to smart growth in Europe 2020, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, 6. 10. 2010, COM (2010) 553 final.

Europe Network) and tools (Framework programmes). While mutual interest and mutual ownership are advocated, and sustainable development represents the overarching goal, these goals are matched, if not overridden, by the EU's concerns "to reinforce, widen and extend the excellence of the Union's science base and [...] secure Europe's long term competitiveness and well-being" (CEU, 2013). There is a clear expectation that "activities at international level enhance the competitiveness of European industry by promoting the take-up and trade of novel technologies, for instance through the development of world-wide standards and interoperability guidelines, and by promoting the acceptance and deployment of European solutions outside Europe" (EU, 2013b). The EU's concern for its own influence in global policy and economic relations are just as important to highlight as its expectations over cooperation.

The EU's approach has not changed significantly with the latest science and foreign policy documents, albeit with a scarcer a reference to 'science diplomacy'. The most recent Framework programme titled Horizon Europe (covering the period 2021-27) retains a commitment to an ever-closer international cooperation beyond the EU borders. It also assumes that synergies between different EU programmes and instruments, including those relating to foreign policy, take place in the context of effective science-policy interface (EC, 2018). At similar tone and expectations are set in the new foreign policy document for the region titled *A renewed partnership with the Southern Neighbourhood: A new Agenda for the Mediterranean* (EC and HR, 2021). This sees research and innovation as having benefits for the achievement of more resilient and inclusive growth, as well as the creation of sustainable employment opportunities. It promises to step up the dedication to innovation and science as a way to creating a knowledge society and economy, mostly through the Framework Programme Horizon Europe.

A notable exception from the scientific cooperation between the EU and Southern Mediterranean being limited to the EU's tools, is the existence of the Partnership for Research and Innovation in the Mediterranean Area (PRIMA) – a €400 million partnership between some EU and certain non-EU

Mediterranean countries.⁸ PRIMA exists since 2017 (but with negotiations dating to early 2010s) and aims at supporting research and innovation actions that will result in sustainable water management and food production. PRIMA is devoted to the principles of mutual benefit, equal-footing partnerships, co-ownership, co-decision, and co-financing, as well as excellence and added value (EC, 2018). It is a role model of co-financing, as it is financed in just under 50% from the EU's Horizon 2020 funds, while the rest comes from all other participating countries. These themes for cooperation had been selected jointly as being of common interest and mutual benefit. The participating states recognised the initiative's significant potential for enhancing the stability of the region and its sustainable economic and social development (Council of the European Union, 2014).

UNDERSTANDING 'SCIENCE DIPLOMACY'

The EU's promulgation of 'science diplomacy' can be related to a specific period, rather than any significant change in the course of policy. The period corresponds to launch of the growth-centred strategy Europe2020 in 2010 and the subsequent mandate of the Juncker Commission and more particularly, its Commissioner of research, science and innovation Carlos Moedas (Moedas, 2014; Moedas, 2016; ERC 2016; EC, 2017). The term was introduced and popularised without any significant change in the use of the policy tools. None of the established approaches, such as mobility and cooperation on joint research projects, had been replaced; no new approaches had been introduced and the objectives of policies had effectively not changed. The new policy discourse laid claims to existing and running cases of effective science cooperation, such as SESAME or PRIMA, and relabelled these as 'science diplomacy'.

Rather than by introducing a new phenomenon, the enthusiasm for 'science diplomacy' as a term can be explained by the

8 There were initially 14 countries participating, but the number has since grown to 19.

political motivation to highlight that science has a place in relations with the neighbourhood. Cooperation in science and research were constitutive to the EU integration and were driving the interaction between the European and national dimensions especially in the early years of the integration (Guzzetti, 1995). Some decades later, science had been promoted as a driver of the EU's progress, for example through the concepts of "knowledge society" (introduced by the 2000 Lisbon Strategy) or "Innovation Union" (associated with the launch of Europe 2020 Strategy in 2010). As the policy field of science came to be positioned to the heart of today's EU integration project and its ambitions, this has spilled into its foreign policy. Furthermore, the rise of 'science diplomacy' is likely to be part and parcel of the Juncker's Commission's effort to create a more political role for itself: mainstreaming science into 'high politics' was a useful instrument for empowering the Commission vis-à-vis member states and the EU vis-à-vis other global players.

The political motivation in the EU to highlight the importance of science has come after years of an ever-closer connection between science and foreign policy as spontaneous developments. Pursuing excellent science has always led to international activities (Wagner, 2002). The people's attitudes were increasingly more open to international cooperation (Bucham, 2009). While science policy was initially an internal policy, this has gradually become externalised and research objectives became integrated into the EU relations with its neighbourhood, including through the expanding EU's external competence (Bretherton and Vogler, 2004). The EU's aspiration for a coherent foreign policy is not only its political preference (CEU, 2001; EC, 2006b; EEAS, 2016), but also its legal obligation (Arts 3 and 13, TEU). This requires that research and technological development should contribute towards the economic goals of a more competitive industry (179 TFEU). These instructions are consistent with the EU's growing ambition of becoming a global actor (Ginsberg, 1999; Bretherton and Vogler, 2006; Koehler, 2010; Godzimirski, 2016; Adelle et al., 2017). As such, the use of 'science diplomacy' in regional political discourses was politically driven and is a manifestation of the EU's ambition and power to influence them.



CONCLUSION

This article has set off to discover the usefulness of ‘science diplomacy’ as a proxy to describe highly dissimilar efforts at the intersection between foreign policy and science, and has examined its value in the context of the EU-South Mediterranean relations. It depicted different phases of the EU’s engagement with its Mediterranean neighbours in the area of science, and showed how they were impacted by the EU’s growing external science policy as well as an attempt to use science as a foreign policy tool. The EU’s promotion of ‘science diplomacy’ had a limited lifespan, after which the goals and instruments of the Euro-Mediterranean relationships remain as relevant as ever, albeit influenced by a more assertive attitude to attain the EU’s competitive advantage. This article has suggested to limit the understanding the ‘science diplomacy’ predominantly to a rhetorical innovation.

A closer overview of the expectations of “science diplomacy” nevertheless reveals some insights into its operation in the Mediterranean region. The analysis has confirmed that cooperation in science and research between the EU and the Mediterranean countries appeared to be highly susceptible to the political relations: strong cooperation in science was contingent on politics, rather than capable of impacting it. At the multilateral and bilateral level, cooperation in science was best and thriving when political climate in the region was good or relations stable. To the contrary, in case of an intricate political situation in a country, such as with Libya after 2011, or across the region, such as after the 2001, cooperation among scientists was scarce and fell short of easing the tensions. The proposition that international cooperation in research and innovation have improved relations with key countries and regions, enshrined in the ‘science diplomacy’ discussions (RS/AAAS 2010), is difficult to confirm in the present case study.

An immediate policy implication of this finding is the acknowledgement that ‘science diplomacy’ may risk not delivering on the promise and may induce political expectations in the work of scientists, which in turn can invoke a backlash



(Moro-Martín, 2017). Instead of propounding the mantra, we would do better to promote more realistic expectations of science and research and exploration of the means that enable us to continue benefitting from science across a region. Does the EU's emphasis on the significance of science impact on the perceptions of the political actors and civil society, who influence the policies? (Pace, Seeberg and Cavatorta, 2009) How to better ensure that scientific cooperation, in which the EU is involved, positively impacts people's everyday lives in the neighbouring countries without resolving the political tensions? How to expand, perhaps also beyond energy, water management and food production, the mutually beneficial forms of technical cooperation with practical impacts for citizens (which justifies the advancement of science)? An obvious opportunity for effective science cooperation is the response to the emergence of the Covid-19 pandemic, which has generated an extremely dynamic and rapidly developing research landscape. Data and results sharing, including in the use of technologies such as artificial intelligence, offer a lot of scope for effective cooperation. This certainly re-opens the questions of (how to create) co-ownership, co-funding and genuine cooperation (El-Zoheiry, 2015), in place of assistance, prescriptiveness, and competition that have marked periods of the EU's past engagement with the region. These difficult questions have survived the era of enthusiasm over 'science diplomacy'.

ACKNOWLEDGMENT

The research for this article was carried out under the project EL-CSID, which received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement N° 693799. A previous version of the piece was published as Penca, J. 2018. The rhetoric of 'science diplomacy': Innovation for the EU's scientific cooperation? EL-CSID Working Paper Issue 2018/16, April 2018.



REFERENCES

- Adelle, C., K. Biedenkopf and D. Torney (eds.). 2017. *European Union External Environmental Policy. Rules, Regulation and Governance beyond borders*. Basingstoke: Palgrave Macmillan.
- Barbe, E. 1996. 'The Barcelona conference: Launching pad of a process.' *Mediterranean Politics* 1(1): 25-42.
- Barcelona declaration, adopted at the Euro-Mediterranean Conference, 27-28.11.1995
- Berg, L.-P. 2010. 'Science Diplomacy Networks.' *Politorbis* 2(49): 9-11.
- Bicchi, F. and R. Gillespie. 2011. 'The Union for the Mediterranean: continuity or change in Euro-Mediterranean relations?' *Mediterranean Politics* 16(1): 3-19.
- Bicchi F. and S. Lavenex. 2015. 'The European neighbourhood: Between European integration and international relations'. In K.E. Jørgensen, Å. Kalland Aarstad, E. Drieskens, K. Laatikainen and B. Tonra (eds.) *The SAGE handbook of European foreign policy*. Sage.
- Bojinović Fenko, A. 2015. 'The Mediterranean Region as a Phenomenon and an Object of Analysis in the Field of International Relations'. *International Journal of Euro-Mediterranean Studies* 8(2): 75-90.
- Bretherton, C. and J. Vogler. 2006. *The European Union as a Global Actor*, 2nd ed. London and New York: Routledge.
- Borrás, S. 2003. *The Innovation Policy of the European Union: from Government to Governance*. Edward Elgar Publishing.
- Bucham, N.R. 2009. Globalisation and human cooperation. *Proceedings of the National Academy of Sciences of the United States of America* 106(11): 4138-4142.
- Council decision establishing the specific programme implementing Horizon 2020 – the Framework Programme for Research and Innovation (2014-2020).
- Council of the European Union. 2001. *Presidency Conclusions. Laeken*, 14-15 December 2001.
- Council of the European Union. 2014. *Council Conclusions, Partnership for research and innovation in the Mediterranean area, Competitiveness Council meeting*, Brussels, 5 December 2014.
- Commission of the European Communities. 2005. Implementing and promoting the European Neighbourhood Policy. Communication to the Commission.
- Copeland, D. 2016. 'Science Diplomacy.' In C. M Constantinou, P. Kerr and P. Sharp (eds.). *Sage Handbook of Diplomacy*. London: SAGE Publications: 628-641.



- De San Román, A. L. and S. Schunz. 2017. 'Understanding European Union Science Diplomacy: Understanding EU Science Diplomacy.' *Journal of Common Market Studies* 56(2): 1–20.
- Dolan, B. M. 2012. 'Science and Technology Agreements as Tools for Science Diplomacy: A U.S. Case Study'. *Science & Diplomacy* 4: 1.
- EC (European Commission). 2003. *Wider Europe – Neighbourhood: A New Framework for Relations with our Eastern and Southern Neighbours*. Communication from the Commission.
- EC (European Commission). 2004. *European Neighbourhood Policy - Strategy paper*. Communication from the Commission.
- EC (European Commission). 2006a. *Strengthening the European Neighbourhood Policy*. Communication from the Commission to the Council and the European Parliament.
- EC (European Commission). 2006b. *Europe in the World — Some Practical Proposals for Greater Coherence, Effectiveness and Visibility*. Communication from the Commission to the European Council of June 2006.
- EC (European Communities). 2009. *European Security Strategy: A Secure Europe for a Better World*.
- EC (European Commission). 2010a. *Taking stock of the European Neighbourhood Policy*. Communication from the Commission to the European Parliament and the Council,
- EC (European Commission). 2010b. *Europe 2020: A strategy for smart, sustainable and inclusive growth*. Communication from the Commission.
- EC (European Commission). 2011a. *A Partnership for Democracy and Shared Prosperity with the Southern Mediterranean*.
- EC (European Commission). 2011b. *A New Response to a Changing Neighbourhood: A review of European Neighbourhood Policy*. Joint Communication to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions.
- EC (European Commission). 2012. Communication from the Commission to the European Parliament, the Council, the European Economic and Social committee and the committee of the regions. *Enhancing and focusing EU international cooperation in research and innovation: A strategic approach*. COM/2012/0497 final.
- EC (European Commission). 2014a. Fourth Framework Programme of European Community activities in the field of research and technological development and demonstration, 1994-1998. Accessed 10 April 2021, <https://cordis.europa.eu/programme/id/FP4>.

- EC (European Commission). 2014b. Fifth RTD Framework Programme, 1998-2002. Accessed 10 April 2021, <https://cordis.europa.eu/programme/id/FP5>.
- EC (European Commission). 2015. *Review of the European Neighbourhood Policy*. Joint Communication to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions.
- EC (European Commission). 2017. *Horizon 2020 Work Programme 2016 – 2017*.
- EC (European Commission). 2018. *Proposal for a Regulation of the European Parliament and of the Council Establishing Horizon Europe – the Framework Programme for Research and Innovation, laying down its rules for participation and dissemination*.
- EEAS (European External Action Service). 2016. *Shared Vision, A Common Action: A Stronger Europe; The Global Strategy for the EU Foreign and Security Policy*.
- El-Zoheiry, A. 2015. 'Euro-Mediterranean Cooperation in Science and Innovation: 20 Years of the Barcelona Process.' *Journal of Euro-Mediterranean Studies* 8(1): 63–76.
- ERC (European Research Council). 2016. *Frontier Research and Science Diplomacy*. Accessed 10 April 2021, <https://erc.europa.eu/sites/default/files/content/events/brochure-science-web.pdf>.
- Flink, T. and U. Schreiter. 2010. 'Science diplomacy at the intersection of S&T policies and foreign affairs: toward a typology of national approaches.' *Science and Public Policy* 37(9): 665–677.
- Flink, T. 2020. 'The Sensationalist Discourse of Science Diplomacy: A Critical Reflection'. *The Hague Journal of Diplomacy* 15(3): 359–370.
- Geeraert, A. and A. Drieskens. 2016. 'Normative Market Europe: The EU as a force for good in international sports governance'. *Journal of European Integration* 39(1): 79–94.
- Ginsberg, R. H. 1999. 'Conceptualizing the European Union as an international actor: Narrowing the theoretical capability–expectations gap.' *Journal of Common Market Studies* 37(3): 429–454.
- Gillespie, R. and F. Volpi (eds.). 2017. *Routledge Handbook of Mediterranean Politics*. London: Sage.
- Godzimirski, J.M. (ed.). 2016. *EU Leadership in Energy and Environmental Governance: Global and Local Challenges and Responses*. Basingstoke: Palgrave Macmillan.
- Guzzetti, L. 1995. *A brief history of the European Union Research Policy*. European Commission.

- Kelley, J. 2006. 'New Wine in Old Wineskins: Promoting Political Reforms through the New European Neighbourhood Policy.' *Journal of Common Market Studies* 44(1): 29-55.
- Koehler, K. 2010. 'European Foreign Policy After Lisbon: Strengthening the EU as an International Actor'. *Caucasian Review of Foreign Policy* 4(1): 57-72.
- Magen, A. 2006. 'The Shadow of Enlargement. Can the European Neighbourhood Policy Achieve Compliance?' *Columbia Journal of European Law* 12: 387-427
- Moedas, C. 2014. Hearing of Commissioner-Designate, 30.09.2014. Accessed at <http://www.europarl.europa.eu/hearings-2014/resources/library/media/20141022RES75831/20141022RES75831.pdf>
- Moedas, C. 'Science Diplomacy in the European Union'. *Science and Diplomacy*. 29.3.2016. Accessed at: <http://www.sciencediplomacy.org/perspective/2016/science-diplomacy-in-european-union>
- Moro-Martín, A. 2017. 'How dare you call us diplomats', *Nature*, 14.3.2017.
- Pace, M., P. Seeberg and F. Cavatorta. 2009. 'The EU's democratization agenda in the Mediterranean: A critical inside-out approach.' 16(1) *Democratisation*: 3-19.
- Petrov, R. 2015. 'The Principle of Good Neighbourliness and the European Neighbourhood Policy'. In D. Kochenov and E. Basheska (eds.), *Good Neighbourly Relations in the European Legal Context* (Brill Nijhoff): 291.
- Prodi, R. 2002. *A Wider Europe – A Proximity policy as a key to stability, Speech at the 6th ECSA-World Conference in Brussels.*
- Regulation 1291/2013 of the European Parliament and the Council of 11 December 2013 establishing Horizon 2020 – the Framework Programme for research and Innovation (2014–2020).
- Rungius, C. and Flink, T. 2020. Romancing science for global solutions: on narratives and interpretative schemas of science diplomacy. *Humanities and Social Sciences Communications* 7(102). <https://doi.org/10.1057/s41599-020-00585-w>
- Royal Society/AAAS. 2010. *New Frontiers in Science Diplomacy: Navigating the Changing Balance of Power*. American Association for the Advancement of Science
- Ruffini, P.B., 2017. *Science & Diplomacy: A New Dimension of International Relations*. New York: Springer.
- Science and Public Policy. 2002. 29(6): 402-84
- Sesame. 2018/online, <http://www.sesame.org.jo/sesame/about-us/historical-highlights.html>.

- Stein, A. J. 2002. Science, technology and European foreign policy: European integration, global interaction. 29(6) *Science and Public Policy*: 463–477.
- Consolidated versions of the Treaty on European Union and the Treaty on the Functioning of the European Union (TFEU) [2016] OJ C202/1
- Turekian, V. C, S. Macindoe, D. Copeland, L. S. Davis, R. G. Patman and M. Pozza. 2015. 'The Emergence of Science Diplomacy.' In L. S. Davis and R. G. Patman (eds.) *Science Diplomacy. New Day or False Dawn?*: 3–24.
- Ulnicane, I. 2016. 'Research and innovation as sources of renewed growth? EU policy responses to the crisis.' *Journal of European Integration* 38(3): 327-341.
- Van Langenhove, Luk. 2016a. 'Science Diplomacy: New Global Challenges, New Trend.' RSIS Commentary No. 082, 12 April 2016.
- Van Langehove, L. 2016b. Global Science Diplomacy for Multilateralism 2.0. *Science & Diplomacy*. 29.12.2017
- Wagner, C.S. 2002. 'The elusive partnership: science and foreign policy. *Science and Public Policy*' 29(6): 409-17.
- Wagner, C.S. and L. Leydesdorff 2005. Mapping the network of global science: comparing international co-authorships from 1990 to 2000. *International Journal of Technology and Globalization* 1(2):185-208.

