

Journal of Contemporary European Research

Volume 11, Issue 1 (2015)

Introduction

New Horizons in the Europe of Knowledge

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Citation

Chou, M.-H. and Ulnicane, I. (2015). 'Introduction: New Horizons in the Europe of Knowledge', *Journal of Contemporary European Research*. 11 (1), pp. 4-15.

First published at: www.jcer.net

This special issue introduces the themes and dynamics of European integration in an increasingly important and rapidly evolving policy domain on the global political agenda: *knowledge* policies. Knowledge policies such as research and higher education remain under-examined issue areas in mainstream European studies. Yet their centrality to the governance of academic life, economic growth, market positioning, innovation capacity in Europe and beyond have only grown in significance throughout the last decade. Hence, to work in academe and to understand Europe, it is essential to know the Europe of Knowledge in the making.

This editorial introduces the notion of the Europe of Knowledge and places it in the European integration research agenda. We first describe what the concept means before suggesting how to approach the Europe of Knowledge as a new case for investigating European integration dynamics. This discussion revolves around the evolution of policy developments in research and higher education to show how knowledge policies are compound and manifest distinct dimensions of differentiated integration and experimentation, both fruitful theoretical research agendas. We then summarise the articles to show the respective Europe of Knowledge themes they highlight. We conclude by considering how the Europe of Knowledge in the making encourages testing established empirical and analytical assumptions about European integration and experimenting with emerging ideas about regional cooperation from around the world.

BOUNDARIES OF THE EUROPE OF KNOWLEDGE IN THE MAKING

The phrase “Europe of Knowledge” is a veritable ‘complex and malleable term’ (Elken et al. 2011: 5). While we can trace its political and supranational origin to the European Commission’s 1997 Communication on ‘Towards a Europe of Knowledge’ (European Commission 1997), national and supranational policy actors have, in the main, interpreted the term differently since then. For instance, in the 1997 Communication, we see the European Union (EU) executive referring to the Europe of Knowledge as ‘an open dynamic European educational area’ (European Commission 1997: 2), while in 2000 it used the term ‘Europe of innovation and knowledge’ as a synonym for the European Research Area (ERA) (European Commission 2000). By contrast, national policy actors such as the European education ministers, at their signing of the 1998 Sorbonne Declaration, contrasted the Europe of Knowledge against the “Europe of the Euro” (Sorbonne Joint Declaration 1998). As Meng-Hsuan Chou and Åse Gornitzka (2014: 8) conclude, at least four visions can be associated with the Europe of Knowledge: ‘as the basis for a knowledge-based economy [or society]; as an instrument for invigorating and increasing the competitiveness of European science; and as a tool for informed policy-making and implementation’.

So how can we begin to understand and study the Europe of Knowledge? We argue that it is best to approach it as “an area in the making” with contested boundaries. Specifically, we delineate three sets of boundaries as useful starting points for investigation: *policy* boundaries (research vs. higher education vs. others); *political* boundaries (national vs. supranational vs. transnational); and *geographical* or *membership* boundaries (EU vs. “Europe” vs. global). Below, we discuss how each set of boundaries has changed over time. It is at these boundary intersections that European integration students would find most interesting for theoretical examination and experimentation – a point to which we shall return in the concluding section.

Policy boundaries

Which policy sectors make up the Europe of Knowledge? The conventional understanding is that the Europe of Knowledge has two main policy pillars, each also a “European area” in the making: the European Research Area and the European Higher Education Area (EHEA) (cf. Elken et. al. 2011; Chou and Gornitzka 2014). The argument goes that ERA and EHEA policy developments constitute the formation of the Europe of Knowledge. Yet knowledge policies are not so clear-cut. Several European research and higher education initiatives (e.g. Framework Programmes, FP; Scientific Visa) are closely related to, or implemented in, other EU policy sectors (regional; information and communication technology; enterprise; migration; development; or external action). Moreover, from a sequential perspective, the emergence and evolution of the Europe of Knowledge can be debated. Indeed, the ideas of creating a common “scientific” space (Guzzetti 1995; Chou 2014) or a “European University” (Corbett 2005) have been in circulation since the beginning of European integration. Furthermore, the Innovation Union agenda has included the “delivery of the ERA” as part of its overall objectives since 2010 (European Commission 2010). Our narrative about the Europe of Knowledge does not aim to settle these debates. Instead, we provide the broad strokes of these developments and invite readers to investigate the details of these stories.

The Founding Fathers saw research policy cooperation as essential for European integration, especially as the “engine” for Europe’s then economic recovery and subsequent industrial growth. Indeed, we find references in the Paris and Rome Treaties for European research and technology policy cooperation. The member states were, however, keen to retain control over this cooperation and thus pursued joint collaboration on selected thematic areas (e.g. health, environment, agriculture, energy). They alone, sitting in the Council of Ministers, decided the range and scope of European research policy cooperation; the European Parliament and the Commission would play limited advisory roles (Chou 2012). By January 1974, the research ministers adopted four resolutions that led to the creation of the Scientific Technical Research Committee (now European Research and Innovation Area Committee) – an advisory body; the European Science Foundation (ESF) outside of the supranational framework; a research programme for forecasting, assessment, and methodology; and an initial outline programme in science and technology (de Elera 2006: 561). Álvaro de Elera (2006: 561) concludes that ‘For almost a decade the cooperation in the field of research was to be based on these four resolutions: a feeble basis that brought similarly feeble results’.

It is important to point out that the European governments established many multilateral research collaborations *outside* of the supranational framework. For instance, joint research infrastructures (reactors, accelerators, telescopes, laboratories) and funding schemes such as the: European Organization for Nuclear Research (CERN) in 1954; European Southern Observatory (ESO) in 1962; European Space Agency (ESA) in 1964; Institut Laue-Langevin (ILL) in 1967; European Cooperation in Science and Technology (COST) framework in 1971; European Molecular Biology Laboratory (EMBL) in 1974; EUREKA intergovernmental organisation for market-driven industrial research and development in 1985; European Synchrotron Radiation Laboratory (ESRF) in 1994; X-ray Free Electron Laser (European XFEL) and the European Spallation Source (ESS) currently under construction (Hallonsten 2012).

The intergovernmental nature of European research policy cooperation notably changed in the 1980s when the Commissioner for Industry proposed bundling up existing programmes into the multi-annual research Framework Programme. Known sequentially (FP1, FP2 etc.) up to 2014, the “Horizon 2020” became the eighth FP with a budget of nearly €80 billion to be distributed until 2020. This “programmed” approach to European cooperation, according to Thomas Banchoff (2002), consumed the Commission Directorate-General (DG) of Research’s bureaucratic capacity. He argues that this, together with the research community’s enthusiasm for European funding, made reforming European research policy beyond the FP structure difficult (cf. Banchoff 2002; Chou 2012). The ERA initiative,

which the Commission launched in 2000 with the member states' support, sought precisely to usher in the reforms that would change European research policy from a "spending policy" to one that regulated research practice. The EU executive's attempt failed early on (see below) and a "softer" multi-layered and partnership approach has been preferred to this day.

The EU has no regulatory competence in education policy, which the Founding Fathers saw as central to constructing their nations and cultivating civic belonging among their nationals. The Treaty on the Functioning of the EU continues to uphold this subsidiarity principle:

The Community shall contribute to the development of quality education by encouraging co-operation between Member States and, if necessary, by supporting and supplementing their action, while fully respecting the responsibility of the Member States for the content of teaching and the organisation of education systems and their cultural and linguistic diversity (Official Journal of the European Union 2010: C 83/120).

How then do we account for the EU's growing involvement in the education policy sector? Chou and Gornitzka (2014: 9) tell us that 'One pathway of European involvement in higher education was through its policy towards mutual recognition of professional degrees and free movement of skilled manpower'. European integration scholars would be familiar with the spill-over effects as a result of realising the four freedoms. Most scholarly works on European higher education policy cooperation trace this competence "tug-of-war" between EU member states and the Commission, and credit task expansion (Neave 1984; De Wit and Verhoeven 2001) and policy entrepreneurs (especially the Commission) (Corbett 2003; 2005) in paving the way for further supranational intervention.

Mobility and training programmes such as "Erasmus" and "Marie Curie", incorporated into the FP structure in the 1980s, came to symbolise European higher education policy cooperation until the 1990s. Similar to other aspects of the FPs, negotiations for their renewal were slow and laborious. Through these programmes, the Commission/EU incentivised students, university staff and academics, stakeholder associations (e.g. European University Association), transnational expert communities and national administrations to see the supranational dimension as legitimate in the education sector (Beerens 2008; Gornitzka 2009). This is not to say that the Commission did not attempt to push for more supranational intervention earlier. Indeed, it proposed a Memorandum on Higher Education in 1991 (European Commission 1991), but the member states 'opposed the economic orientation and utilitarian view of higher education supposedly permeating this document' (Chou and Gornitzka 2014: 10). The Commission was seen to be trespassing on nationally sensitive policy issues (e.g. teacher training).

What is remarkable about research and higher education policy developments is that they generally proceeded within their organisational domains, especially in the Commission DGs. This meant that, unless policy coordination was enforced, these constituent knowledge policies operated within their own "sectoral vacuum". This resulted in what Chou and Gornitzka (2014: 4-7) called "inter-sectoral" or "horizontal" tensions when the Lisbon Strategy, adopted in March 2000, sought to improve policy coordination between knowledge policies so that the EU can become the – much quoted – 'world's most competitive and dynamic knowledge-based economy'. As we shall see next, this debate also concerns delineating the Europe of Knowledge's political boundaries.

Political boundaries

Who are the key decision-takers in the Europe of Knowledge? Are they nationally rooted (i.e. European research, education, or innovation ministers)? Or do they have a supranational affiliation (e.g. European Commission) or a transnational status (stakeholder groups)? Do their roles change

depending on the knowledge policy venue where discussions and decisions take place even though their affiliation remains the same? These questions go to the heart of identifying the Europe of Knowledge's political boundaries and, as students of EU policy developments know well, animate European cooperation. By political, we refer to the question of regulatory competence classically phrased as: Who governs? Chou and Gornitzka (2014: 3) identified the tensions resulting from redrawing jurisdictional boundaries as "vertical" tensions, which reflect 'prevailing ideas about common problem-solving capacity across member states and in different societal sectors, and the legitimacy of governing modes'.

Prevailing ideas about education policy were made most apparent in 1998 when the German, French, Italian and the British higher education ministers signed the Sorbonne Declaration, launching the Bologna Process in 1999 outside of the supranational institutional framework. Through the mechanisms of comparable degrees and a two-cycle system for improving student mobility and employability, the Bologna Process sought to establish an attractive EHEA by tackling a most sensitive issue: diverse degree structures (Ravinet 2009; Gornitzka 2010). While remaining a transnational process, the Bologna Process has changed over time (see also membership below). Participation is voluntary, but Pauline Ravinet (2009) tells us that Bologna's non-binding characteristics and modes of translating agreed objectives have achieved far more than what the Commission could have ever considered feasible within the EU's institutional structure. Its effectiveness, in terms of contributing to policy convergence among Bologna member states, should not be automatically assumed (Witte et al. 2009). Indeed, as Martina Vukasovic (2014) finds, governments and universities alike have explored the ambiguities of Bologna implementation to usher in various domestic reforms (see "Bologna brand" in Scott 2012).

The EU member states' reluctance to cede regulatory competence to the supranational institutions is also visible in the research policy sector. Indeed, even following the launch of the European Research Area in January 2000, which sought to move away from what the Commission designated as the "15+1" approach (i.e. the then number of EU members and the Commission), the member states only endorsed the Open Method of Coordination (OMC) for constructing the ERA. The OMC is a "soft" approach to policy cooperation, relying on voluntary compliance following agreed objectives, benchmarks, and guidelines [see special issues on the OMC in the *Journal of European Public Policy* (2004) and *Journal of Contemporary European Research* (2006); on "soft modes of governance" in the *Journal of European Integration* (2007)]. The OMC's effects on European research policy cooperation have been mixed (cf. Chou and Real-Dato 2014; European Commission 2014).

By contrast, the OMC had a strong impact on the (higher) education policy sector when the EU adopted the work programme on "Education and Training 2010"; its renewal as "Education and Training 2020" in 2009 continues to shape the "modernisation" of European (higher) education systems. DG Education saw the OMC as 'a method for us' because the Commission now has an entry to Bologna coordination, which was 'enlisted as an integral part of the education sector's contribution to Lisbon [now renewed as Europe 2020]' (Chou and Gornitzka 2014: 15). Finally, a Europe of Knowledge's defining feature is the presence of transnational actors who mobilise across policy venues (e.g. from Bologna to the EU) and, in so doing, contribute to re-drawing its political boundaries (cf. Elken and Vukasovic 2014). These networks of (academic) experts, stakeholders, and agencies (e.g. quality assurance) are promising empirical cases for generating testable hypotheses concerning the role of expertise in complex multi-level governance and integration dynamics [see special issue on 'The Role of Expert Knowledge in EU Executive Institutions' in *Politics and Governance* (2015)].

Geographical boundaries

Does the Europe of Knowledge refer to a specific geographical area? If so, to where does it extend? These questions concern membership and access to European policy cooperation – its benefits as well as costs. Similar to EU membership criteria, the membership to the Europe of Knowledge is not strictly defined by geographical location. Indeed, many initiatives concerning the Europe of Knowledge are manifestations of differentiated integration where ‘the territorial extension of European Union membership and EU rule validity are incongruent’ (Holzinger and Schimmelfennig 2012: 292). For instance, FP7 included EU member states and 13 Associated Countries (European Commission 2013: 29). In addition, third countries also participate in specific FP funding schemes such as the ERA-Net scheme for facilitating coordination among national research funders; in a survey carried out in 2006, 20% of the responding ERA-Nets had at least one non-EU partner (Edler 2010: 142). If we consider the many intergovernmental initiatives in the research policy area, membership becomes very complex.¹ Similarly, members of the Bologna Process (and thus the EHEA) include 48 states, the European Commission, and eight Consultative Members.

Taken together, the geographical spread of the Europe of Knowledge goes far beyond the EU and wider Europe to encompass Israel, Central Asia (e.g. Kazakhstan) and even Russia. If we add to this the inter-regional initiatives the Commission launched with other regions (e.g. with Latin America and the Caribbean – ‘Towards the EU-LAC Knowledge Area’) and FP initiatives such as ERA-Nets, which include collaboration with China and Canada, its reach can be considered global. While membership to the Europe of Knowledge (inclusion, exclusion², and suspension³) would certainly interest most scholars (see forthcoming special issue on ‘The terrains of the Europe of Knowledge’ in *European Journal of Higher Education*), we hope that the policy and political boundaries discussed here would in particular engage those working on regional integration – in Europe and beyond.

SPECIAL ISSUE OVERVIEW

The six research articles, two practitioners’ commentaries and three book reviews in this special issue complement each other to provide a broad overview of the topical issues on the Europe of Knowledge. Together, these contributions represent an interdisciplinary effort to draw on the theories and approaches from European studies, political science, science and higher education studies, sociology and law. Multiple data sources (surveys, interviews, official documents, and case studies) as well as research methods (qualitative and quantitative) are used to reveal the contested policy, political, and geographical boundaries of the Europe of Knowledge.

The first three articles address changing concepts, ideas, and values in European research policy. Mitchell Young opens with an account of how the concept of “excellence” has changed from FP7 to Horizon 2020. Through the role of “excellence” on issues of distributive justice and quality management, Young finds that its conflicting conceptualisation has contributed to a more divided Europe of Knowledge. Continuing, Inga Ulnicane analyses how the main objectives of the European Research Area have changed from its launch in 2000 to 2014. Applying a research policy framing approach, Ulnicane argues that ERA’s ideational framework has broadened from its initial focus on economic competitiveness to include ideas of scientific excellence and societal challenges; relationships between these diverse policy ideas is an important question for future European research policy. Combining a legal and policy perspective, Andrea Gideon demonstrates how shifting research policy ideas may lead to unintended (legal) consequences. Showing the growing “commodification” of research in Germany, the Netherlands, and England, Gideon suggests that blurring the boundaries between public and private sector funding could subject the research carried out in higher education institutions to EU primary law. She argues that this may require higher

education institutions to behave more like commercial entities, which could intensify existing tensions between the economic and social rationales of public policies.

The next three articles turn to European (higher) education policy developments and the role of “ambiguity” in policy implementation. Mari Elken examines the policy instrument adopted in 2008 for increasing the transparency of educational qualifications: the European Qualifications Framework (EQF). Identifying this instrument’s “vertical”, “horizontal”, and “internal” tensions, Elken explains how ambiguity was essential for its implementation across heterogeneous national systems. She concludes that, although the EQF’s impact has been uneven, its gradual acceptance points to successful EU intervention in a nationally sensitive policy area. Continuing, Amélia Veiga, António Magalhães, and Alberto Amaral study the Bologna Process as an instrument for establishing the European Higher Education Area. They extend the concept of differentiated integration to include policy translation or “enactment”; this analytical extension allows them to account for how national and institutional factors contributed to the emergence and subsequent evolution of the EHEA. Finally, Laura Cruz-Castro and Luis Sanz-Menéndez analyse the implementation of Spanish university reforms in the last 15 years. They show how Spanish universities responded differently to common policy pressures even though the general trend concerning academic human resources has seen a rise in temporary employment contracts.

Two commentaries from practitioners anchor this special issue on the Europe of Knowledge. Drawing on his former experience as a scientific advisor to the then President of the European Research Council (ERC), Thomas König tells us how the tensions between scientific and administrative expectations were reconciled in the ERC’s day-to-day activities. As a British academic in a world-leading university in the Europe of Knowledge, Julie Smith reflects on her experiences concerning research networking, funding, and assessment. She highlights the ever-growing tensions between attempts to deliver “excellence” and “impact” that would be familiar to colleagues who underwent the recent UK Research Excellence Framework.

Lastly, the three book reviews offer glimpses into the broader research conducted on the Europe of Knowledge: vocational training and higher education in Austria, Germany, and Switzerland; the role of global university rankings and the many challenges they pose for European higher education (policy and practice); and comparing European research and higher education policy developments from an institutional perspective. Together, the contributions in this special issue address questions concerning the three sets of “boundaries” of the Europe of Knowledge as well as raise new ones for future research.

RESEARCHING THE EUROPE OF KNOWLEDGE: AN EMERGENT AGENDA

What does the Europe of Knowledge in the making offer to practitioners and students of European integration? This special issue’s contributions have emphasised the increased significance of heterogeneity. Countries and universities differ considerably in their historical traditions and performance (European Commission 2014). Consequently, European research and higher education policies have had different effects on participating countries (Sharp and Pereira 2001), research groups, and scientific disciplines (Primeri and Reale 2012). Even in instances where national knowledge policies converge, the need to pursue tailor-made approaches for country-specific challenges is highlighted (Izsak et al. 2014). Analysing European research and innovation funding in times of crisis, Reinhilde Veugelers (2014: 2) identifies ‘an increasing intra-EU split, with the stronger countries forging ahead and the weaker countries further cutting their R&I support’. Similarly, Ulnicane (2015) finds that the recent global economic crisis may further widen the performance gap between the “leading” and “catching-up” countries. The heterogeneity of actors and policy initiatives

in the Europe of Knowledge has many forms and effects that range from beneficial interactions to unresolved tensions and potentially detrimental polarisation.

A *leitmotif* of European integration is how heterogeneity and integration is reconciled or lead to (further) reconfiguration. This makes the Europe of Knowledge a particularly interesting case for on-going theoretical debates about European integration. For instance, as noted earlier, the changing membership to the Europe of Knowledge offers opportunities to conceptualise the causes and effects of differentiated integration; specifically, to refine models of multispeed Europe, flexible integration, and variable geometry (Holzinger and Schimmelfennig 2012). Similarly, those interested in the concept of experimentalist governance would find the design and implementation of OMC instruments in the Europe of Knowledge to be new empirical grounds for assessing multi-level governance as ‘a recursive process of provisional goal setting based on learning from the comparison of alternative approaches to advancing them in different context’ (Sabel and Zeitlin 2012: 169). Indeed, experimentalist governance can be a very promising approach to studying the Europe of Knowledge as an iterative cycle that ‘transforms diversity from an obstacle to integration into an asset for its advancement’ (Sabel and Zeitlin 2012: 175).

This special issue’s contributions have also highlighted the roles of ideas, values, and “ambiguity” in constructing the Europe of Knowledge and why research on the cognitive dimension is needed. Evaluation has become an important part of accountability in today’s academia and research funding, but it is crucial to reflect on the underlying aims of research and higher education policies – national or European. For instance, is the increasingly quantitative approach to knowledge production and assessment, as exemplified by global university rankings and the UK’s Research Excellence Framework, meeting student needs or solving “grand” societal challenges? Another fascinating area of research would be investigating how European policy ideas interact with the (self-)interests of involved actors, organisations, and countries. In his study of large-scale European science facilities, Olof Hallonsten (2012: 303) finds that ‘most countries realize that collaboration is necessary to achieve goals beyond the reach of any one of them, but strong traditions of sovereignty create a constant tension between self-interest and the common good’. To what extent is this also the case for universities, research groups, individual researchers, and scholarly networks?

Finally, this special issue identifies the Europe of Knowledge in the making as part of a global phenomenon of knowledge policy governance. This is hardly surprising given that grand challenges rarely acknowledge national or regional boundaries. The launch of new initiatives (e.g. Global Research Council for coordinating global knowledge policy governance in 2012) and the rise of emerging economies⁴ on the global higher education and research landscapes suggest that it is essential to look beyond Europe. Indeed, it is necessary to compare regional initiatives and examine the roles of cities, universities, research institutions, large-scale research facilities, public and private research funding, university rankings, and scholarly networks in the global governance of knowledge. How Europe adjusts to these myriad factors and actors could very much be the future of European integration.

Acknowledgements

Most articles in this special issue have been presented in panels organised by the University Association for Contemporary European Studies (UACES) collaborative research network on the European Research Area in 2013. We appreciate all the participants who have commented and provided insights that led to this volume. We would like to thank the JCER editors, especially Simona Guerra for her unflinching awesome support, and the reviewers who have made this possible. Diana

Beech contributed significantly in preparing this special issue's proposal. Meng-Hsuan Chou gratefully acknowledges the research support of Nanyang Technological University, Singapore under its NAP grant. Inga Ulnicane acknowledges support from the Institute for European Integration Research EIF, University of Vienna.

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¹ For instance, CERN, EMBL, and ESRF each has 21 member states; ESO has 15; ESA has 20; ILL has three founding countries and 12 members; XFEL has 10 partner countries; COST has 35 members; EUREKA has 41 member countries (including the EU); and ESF has 66 member (research funding and performing) organisations from 29 countries. Sources: organisational websites. Accessed 4 January 2015.

² Israel has twice applied to become a member to the Bologna Process (in 2007 and 2008), but its application has been rejected on the basis that it has not signed the European Cultural Convention (a membership criteria).

³ In 2014, the EU temporarily suspended discussions with Switzerland concerning its participation in Horizon 2020 when a Swiss referendum (50.3 per cent) supported the reintroduction of quotas on the free movement of EU nationals. Source: <http://www.bbc.com/news/world-europe-26225121>. Accessed 6 January 2015.

⁴ The OECD (2014) estimates that around 2019 China would become the world's top research and development spender, overtaking the EU and the United States.

REFERENCES

- Banchoff, T. (2002). Institutions, inertia and European Union research policy'. *Journal of Common Market Studies* 40(1): 1–21.
- Beerens, E. (2008). The emergence and institutionalisation of the European higher education and research area. *European Journal of Education* 43(4): 407–424.
- Chou, M.-H. (2012). Constructing an Internal Market for Research through Sectoral and Lateral Strategies: Layering, the European Commission and the Fifth Freedom. *Journal of European Public Policy* 19(7): 1052-1070.
- Chou, M.-H. (2014). The evolution of the European Research Area as an idea in European Integration, in M.-H. Chou and Å. Gornitzka (eds.) *Building the Knowledge Economy in Europe: New Constellations in European Research and Higher Education Governance*. Cheltenham: Edward Elgar: 27-50.
- Chou, M.-H. and Gornitzka, Å. (2014). Building a European knowledge area: an introduction to the dynamics of policy domains on the rise, in M.-H. Chou and Å. Gornitzka (eds.) *Building the Knowledge Economy in Europe: New Constellations in European Research and Higher Education Governance*. Cheltenham: Edward Elgar: 1-26.
- Chou, M.-H. and Real-Dato, J. (2014). Translating the “European Charter for Researchers and the Code of Conduct for the Recruitment of Researchers” in national arenas: Norway vs. Spain, in M.-H. Chou and Å. Gornitzka (eds.) *Building the Knowledge Economy in Europe: New Constellations in European Research and Higher Education Governance*. Cheltenham: Edward Elgar: 51-80.
- Corbett, A. (2003). Ideas, institutions and policy entrepreneurs: towards a new history of higher education in the European Community. *European Journal of Education* 38(3): 315–330.
- Corbett, A. (2005). *Universities and the Europe of Knowledge: Ideas, Institutions and Policy Entrepreneurship in European Union Higher Education Policy, 1955–2005*. Basingstoke: Palgrave Macmillan.
- de Elera, Á. (2006). The European research area: on the way towards a European Scientific Community?. *European Law Journal* 12(5): 559–574.
- De Wit, K. and Verhoeven, J.C. (2001). Higher education policy of the European Union: with or against the member states?, in J. Huisman, P. Maassen and G. Neave (eds.) *Higher Education and the Nation State*. Amsterdam: Pergamon Press: 175–231.
- Edler, J. (2010). Coordinate to collaborate: the governance challenges for European international S&T policy, in H. Prange-Gstöhl (ed.) *International Science and Technology Cooperation in a Globalized World. The External Dimension of the European Research Area*. Cheltenham: Edward Elgar: 135-160.
- Elken, M., Gornitzka, Å., Maassen, P. and Vukasovic, M. (2011). ‘European Integration and the Transformation of Higher Education’. Pre-Project: Higher Education and Professional Learning: The Effects of European Integration (The Norwegian Research Council, 197652). University of Oslo, Department of Educational Research, Oslo.
- Elken, M. and Vukasovic, M. (2014). Dynamics of voluntary policy coordination: actors and networks in the Bologna Process, in M.-H. Chou and Å. Gornitzka (eds.) *Building the Knowledge Economy in Europe: New Constellations in European Research and Higher Education Governance*. Cheltenham: Edward Elgar: 131-159.
- European Commission (1991). ‘Memorandum on Higher Education in the European Community (349 final)’. European Commission, Brussels.
- European Commission (1997). ‘Communication on Towards a Europe of Knowledge (563 Final)’. European Commission, Brussels.
- European Commission (2000). ‘Communication on Towards a European Research Area (6 Final)’. European Commission, Brussels.
- European Commission (2010). ‘Communication on Europe 2020: A strategy for smart, sustainable and inclusive growth (2020 final)’. European Commission, Brussels.
- European Commission (2013). ‘European Research Area: Facts and Figures 2013’. European Commission: Brussels.

European Commission (2014). 'Communication on the European Research Area: Progress Report 2014 (575 Final)'. European Commission, Brussels.

European Journal of Higher Education (2016). Special Issue: The terrains of the Europe of Knowledge (Guest editor: M.-H. Chou). *European Journal of Higher Education* 6(3).

Gornitzka, Å. (2009). Networking administration in areas of national sensitivity – the Commission and European higher education, in A. Amaral, G. Neave, C. Musselin and P. Maassen (eds.) *European Integration and the Governance of Higher Education and Research*. Dordrecht: Springer: 109–131.

Gornitzka, Å. (2010). Bologna in Context: a horizontal perspective on the dynamics of governance sites for a Europe of Knowledge. *European Journal of Education* 45 (4): 535-548.

Guzzetti, L. (1995). *A Brief History of European Union Research Policy*, Luxembourg: Office for the Official Publications of the European Communities.

Hallonsten, O. (2012). Continuity and Change in the Politics of European Scientific Collaboration. *Journal of Contemporary European Research* 8 (3): 300-319.

Holzinger, K. and Schimmelfennig, F. (2012). Differentiated integration in the European Union: Many concepts sparse theory, few data. *Journal of European Public Policy* 19(2): 292-305.

Izsak, K., Markianidou, P. and Radošević, S. (2014). Convergence of National Innovation Policy Mixes in Europe – Has It Gone Too Far? An Analysis of Research and Innovation Policy Measures in the Period 2004-12. *Journal of Common Market Studies*: forthcoming.

Journal of European Contemporary European Research (2006). Special Issue: The Open Method of Coordination (Guest editor: K. Armstrong). *Journal of Contemporary European Research* 2(1): 2-104.

Journal of European Integration (2007). Special Issue: Democracy and Soft Modes of Governance in the EU (Guest editors: S. Borrás and T. Conzelmann). *Journal of European Integration* 29(5): 531-633.

Journal of European Public Policy (2004). Special Issue: The open method of co-ordination and new governance patterns in the EU (Guest editors: S. Borrás and K. Jacobsson). *Journal of European Public Policy* 11(2): 181-348.

Neave, G. (1984). *The EEC and Education*. Trentham: Trentham Books.

OECD (2014). *OECD Science, Technology and Industry Outlook 2014*. OECD Publishing.

Official Journal of the European Union (2010). *Consolidated Version of the Treaty on the Functioning of the European Union* Available at: <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:12012E/TXT>. Accessed 30 December 2014.

Politics and Governance (2015). Special Issue: The Role of Expert Knowledge in EU Executive Institutions (Guest editors: Å. Gornitzka and C. Holst). *Politics and Governance* 3(1): forthcoming.

Primeri, E. and Reale, E. (2012). How Europe Shapes Academic Research: insights from participation in European Union Framework Programmes. *European Journal of Education* 47(1): 104-121.

Ravinet, P. (2009). Comment le processus de Bologne a-t-il commencé? La formulation de la vision d'un Espace d'Enseignement Supérieur à la Sorbonne en 1998. *Education et Sociétés* 24: 29–44.

Sabel, C. and Zeitlin, J. (2012). Experimentalist Governance, in D. Levi-Faur (ed.) *The Oxford Handbook of Governance*. Oxford: Oxford University Press: 169-183.

Scott, P. (2012). Going Beyond Bologna: Issues and Themes, in A. Curaj, P. Scott, L. Vlasceanu and L. Wilson (eds.) *European Higher Education at the Crossroads*. Dordrecht: Springer: 1-14.

Sharp, M. and Pereira, T.S. (2001). Research and Technological Development, in R. Hall, A. Smith and L. Tsoukalis (eds.) *Competitiveness and Cohesion in EU Policies*. Oxford: Oxford University Press: 147-178.

Sorbonne Joint Declaration (1998). Joint Declaration on Harmonisation of the Architecture of the European Higher Education System by the Four Ministers in Charge for France, Germany, Italy and the United Kingdom. Sorbonne: 25 May 1998.

Ulnicane, I. (2015). Research and innovation: Source of renewed growth?, in G. Falkner (ed.) *European integration in times of crisis: Constraining and/or facilitating effects on different policies*: forthcoming

Veugelers, R. (2014). *Undercutting the Future? European Research Spending in Times of Fiscal Consolidation*. Bruegel Policy Contribution. Issue 2014/06. June 2014. Brussels.

Vukasovic, M. (2014). Universities and Public Contestation during Social and Political Crises: Belgrade University in the 1990s. *PS: Political Science & Politics* 47(3): 616-619.

Witte, J., Huisman, J. and Purser, L. (2009). European higher education reforms in the context of the Bologna process: how did we get here, where are we and where are we going?, in OECD (ed.) *Higher Education to 2030: Volume 2, Globalisation*, Paris: OECD Publishing: 205-229.