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**The Identity Work of Glocalization**  
The Case of European Science Policy

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# Preface and acknowledgements

A few years ago I had the pleasure of working for one of the largest research funders in Finland, the Academy of Finland. Part of my job was to manage one of the ERA-NET entities, representing what was then a relatively new European research funding instrument that embodied great hopes for integrating Europe's research funding. At that time, I was already familiar with research on science policy, and the experience that I then gained and the challenges we later faced prompted me to investigate the work of research-funding officers in ERA-NETs more thoroughly by conducting my own research.

What motivated me to tackle the subject of research funding in the first place is the fact that European science policy is changing. It is the scene of a significant battle between national and European forces. Although science policy and funding in Europe are still largely in the hands of local and national agents, European-Union-level actors have made serious attempts to have a say. European Research Area, ERA, efforts are especially noteworthy in this regard, because they have been said to possess potential federalizing effects (Borrás 2003). Whether or not that potential ultimately gets realized, its influence on national policies certainly can be felt.

The European Union's science policy has had a rough path through history. It started in the 1960s with the goal of generating collective scientific knowledge among the Member States and achieving critical mass in domains wherein the resources of individual countries were not sufficient for competing with the United States (Borrás 2003, Lepori et al. 2014). The policies nevertheless concentrated on only a few scientific endeavors, mostly within the narrow spectrum of nuclear energy, space, and molecular biology (Gronbaek 2003, Lepori et al. 2014, Nedeva 2013).

While initial pressure for the expansion of national research spaces in Europe arose even earlier, in the 1950s, this was an agenda item primarily of the scientific communities and less of policymakers. Scientists themselves promoted the establishment of a pan-European funding organization similar to the National Science Foundation of the USA, to support basic research (Nedeva 2013). Indeed, the nuclear energy field actually was jump-started in 1952 without the aid of the European Communities. An initiative of scientists that received national governments' validation via the forums provided by UNESCO, the European Organization for Nuclear Research, or CERN,<sup>1</sup>

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<sup>1</sup> As a frontrunner and pioneering entity, CERN became a model for several other European basic-research initiatives in later years, among them the European Southern Observatory (ESO) and the European Molecular Biology Laboratory (EMBL) (Gronbaek 2003).

was established as an intergovernmental organization. Later, in 1957, the field became represented in Europe by the European Atomic Energy Community, EURATOM, under the governance of EU institutions, and the science-policy goal of a joint program was finally reached in the form of the European Commission's Joint Research Centre (JRC) in 1960.

The first steps in networking among European molecular biologists too were taken by individual researchers, when they established the European Molecular Biology Organization (EMBO) in 1964. They succeeded in gaining the necessary political and financial support through creation of a permanent international organization called the European Molecular Biology Conference (EMBC) in 1969 (EMBO (European Molecular Biology Organization) 2016). In the domain of space research, in turn, the science-policy objective resulted in founding of the European Space Agency, ESA,<sup>2</sup> another international organization independent of the EU, in 1975 (ESA (European Space Agency) 2013). Of these initiatives, the JRC and ESA can be regarded as the first joint programs, with both of them having their foundations in international treaties and being managed by international agencies funded by participating countries (Lepori et al. 2014). That said, there was no true coordination of national policies; their main purpose was to gather national funds and directly fund national performers (Lepori et al. 2014).

Actual coordination of European science policies started a decade later, in the 1970s. This took place through creation of the European Union committee for scientific and technological research, or CREST,<sup>3</sup> and, in 1974, the European Science Foundation, ESF (Kastrinos 2010). In this era, programs with broader scientific scope were developed and the focus shifted toward networking (Gronbaek 2003, Lepori et al. 2014). The design of calls and selection of projects for funding were delegated to supranational agencies, such as the European Cooperation in Science and Technology (COST) program (created in 1971), the ESF, and EUREKA,<sup>4</sup> yet funding was managed at the national level, without cross-border flows of monetary support (Lepori et al. 2014).

The intentions behind them notwithstanding, these initiatives resulted in only a very limited amount of science-policy coordination. The next noteworthy step in European science policy was taken in 1984, when the European Framework Programme (FP) was introduced, and strengthened in 1987, when this program gained a legal basis via adoption of the Single European Act (Gronbaek 2003), a revision of the Treaty of Rome. According to Borrás (2003), this marked a real move towards multinational projects in programming form, along with a stronger, development-focused approach to research and technology. Yet another notable change in policy emphasis soon occurred, in the mid-1990s, when innovation policy became the European policy paradigm and the new ambition was to foster European competitiveness and support employment in the region (Borrás 2003).

The most recent step in science-policy coordination among Member States took place in 2000, with the European Research Area initiative.<sup>5</sup> Concurrently, the European Union introduced several systems promoting links among Member States, encompassing national research funding. One of these was ERA-NETs. The particular point behind the ERA step was that there should not be one European policy in addition to the 15 national policies existing at the time (Kastrinos 2010); rather, the ERA should provide a framework to incorporate all policies in a coordinated fashion. This meant a substantial change in strength with regard to coordination objectives. More recently, similar programs, such as Joint Technology Initiatives (JTIs)<sup>6</sup> and Joint Programming (JP) partnerships,<sup>7</sup> have been launched. Another significant reform seen in the 21st century was the founding of the European Research Council (ERC), in 2007, to stimulate scientific excellence (Commission of the European Communities 2007a). For domain experts, the ERC marks a major step in the process of science- and research-organization-building at European level, because it succeeded in breaking the strong insistence on national autonomy in research funding. It can therefore be seen as a victory in the continuous struggle to expand the national research spaces in Europe particularly promoted by science elites, a success largely enabled by conformance at the level of national research-funding policies and structures (Nedeva 2013).

This past trajectory shows the aim for the ERA to be ambitious in light of history. That goal is to unify Europe from the standpoint of conducting, funding, and steering research (Commission of the European Communities 2007b). The means are implementation of Europe-level research, elimination of barriers to knowledge-sharing and researcher mobility, updates to infrastructure, finding and identification of new research directions and priorities, establishment of norms for successful operations, and promotion of coordination among national funding agencies (Commission of the European Communities 2000a, 2007b). The idea of the ERA was fruit of decades of

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<sup>2</sup> This agency was the successor to the European Space Research Organisation (ESRO) and the European Launcher Development Organisation (ELDO), both established in 1964 (Gronbaek 2003).

<sup>3</sup> CREST is a high-level advisory committee linking the European Commission and the Council of Ministers.

<sup>4</sup> EUREKA is a publicly funded intergovernmental network that aims to enhance European competitiveness by fostering innovation-driven entrepreneurship in Europe, through collaboration among small and large industry players, research institutes, and universities. Launched in 1985, it now has 41 countries as participants. Also among its members are the European Union as represented by the commission and three states with associate-member status: Canada, South Africa, and South Korea (EUREKA 2016a, 2016b).

<sup>5</sup> Proposed by European Commissioner of Research & Development Philippe Busquin and endorsed by Member States.

<sup>6</sup> JTIs are long-term public-private partnerships designed to support large-scale multinational research projects in areas of major interest to European industry and society (Lepori et al. 2014).

<sup>7</sup> The objective for the Joint Programming process is to pool national research efforts for purposes of addressing common European challenges more effectively in a few key areas and to make better use of Europe's public R&D resources (European Commission 2013b).

efforts to persuade nation-states to open up their research spaces. This path has been a rough one, even in the years since the ERA work was launched. The first efforts toward an ERA were made by the EU and its member states not long after 2000, but after just a few years, the commission declared that strong national and institutional barriers were preventing the ERA from becoming a reality. Hence, in 2007, it sought answers for further development (Commission of the European Communities 2007b) and a year later launched new ERA initiatives (Council of the European Union 2008a, 2008b). In consequence, ERA political governance was enhanced by the “Ljubljana Process” and the vision for the ERA was revitalized via the European Research Area Vision 2020– plan.

As one might expect, such developments in European science policy have attracted a large amount of academic discussion and research. It is worth noting that much of the previous research concentrates on either the policy level – by which I mean the policies decided upon (or forms of policymaking) or even political objectives – or the performance level, referring to research and how it has been affected by the policies. Research that deals instead with the funding level is scarce. More precisely, several studies have investigated funding, but these have concentrated for the most part on the amounts of money allocated to individual research instruments and the changes in amounts distributed by various policy actors over time. My perspective is different. Having worked for a research-funding agency for several years before commencing my own research, I knew there to be more actorhood behind the funders’ actions than scholars had yet recognized. This experience, in combination with the fact that very little is explored in and, hence, known about the actual practices and motivation of funding agencies involved with European research-funding instruments, steered me toward this particular angle for my work.

Finally, I should stress that, while European science policy is interesting in its own right, my dissertation project has examined it only as an illustration of a larger phenomenon, one that can be detected in various policy areas, around the world. As timely, fascinating, and inexhaustible research objects, the European science policy and research funding that are currently being shaped and formed serve as perfect ground for studying how global flows of policy ideas, discourses, and phrases are manifested in national policymaking and, at the same time, why there is local variation in the change. The standpoint applied here is that of agent identities of policymakers and research funding officers. When considered in conjunction with the aforementioned issues, it enables me to study reasons for the popularity of current European funding activities. From these vantage points, I am happy to guide you to my research results, which I hope will unveil some aspects of research-funding officers’ work that have remained mysteries so far. I hope similarly that they offer a new way of understanding why and how globalization – or, more precisely, glocalization – takes place.

# Summary

The European Union and its member states have articulated a close link between the development of European science policy and national economic growth. It is indeed in the manifest interest of European nation-states to implement science-policy models and practices that help their domestic economies grow and prosper. In this connection, it is interesting, however, that separate nation-states, regardless of the evident economic differences between them, have ended up adopting similar science-policy practices, ideas, and policies. In addition, this is true beyond intra-European-Union level. Strong science and knowledge lie at the heart of several key strategies of the union and are thought of as contributing specifically to Europe's economic prosperity and competitiveness. Yet the European Union seems to fall in line with discourses and models that are globally shared and have already been implemented elsewhere, despite Europe's substantial differences from other continents and political alliances.

Existing European science-policy literature, based on rationally oriented explanatory models, is not able to explain this phenomenon fully. Firstly, the concordant and concomitant policy discourses used and choices made throughout Europe cannot be explained by functional arguments. Differently structured economies and those of different sizes are likely to differ in the challenges they face, and if policy choices were based on their respective needs, the similarities currently discernible among nation-states in their decisions, preferences, and actions would be unlikely. Secondly, rational arguments based on an assumption that calculative action stems from national interests have an uphill battle vis-à-vis the reality. If they were valid, careful decisions made by national actors would be followed by consequent actions. In reality, contrastingly, one of the ultimate goals for cooperative European research-policy activities, Europe-wide integration of research funding, which has been strongly endorsed by the European heads of state since 2000, has not materialized: national actors in charge of research funding have not reached the goals their own chief public representatives have set. Hence, one may question whether the decision was carefully planned beforehand and attention then redirected to execution.

Furthermore, the aforementioned rationalist argument would predict that experience from earlier actions would steer later decisions. While the failure of European integration of research funding is abundantly apparent, meaning that, for instance, financial gains through common research funding have not been achieved, nation-states' enthusiasm

to participate in European research-policy activities has not declined accordingly. This finding indicates that rational calculation cannot explain why national actors are keen to take part in common research-funding initiatives. It points instead to there being other motivations for the national agents' participation in European research-funding activities than executing carefully calculated decisions and pursuing nationally relevant financial and material goals. Also, because nation-states' participation in this policy field is based on voluntary activity, and coercive power imposed from the direction of the European Union towards its member states hence cannot explain the uniformity of national behavior with respect to science policy either, there is an obvious need for a new, more pertinent explanation to the puzzle of why the Member States apply a uniform science-policy discourse and national actors are so keen on taking part in European research-funding activities despite some of the main political, European objectives not being reached.

The dissertation presents a sociologically and culturally oriented viewpoint for explaining the aforementioned mysteries. Nation-states, national policy actors, and national research-policy agents are understood as culturally scripted actors embedded in social structures surrounding and constructing them. This cultural understanding, some of which is globally shared and creates a world culture, both constrains and enables these actors, and it supplies them with more and less profound institutional rules, scripts, and principles, which they need to follow in order to gain and maintain their socially admitted positions. The existence of this kind of behavior pattern – highlighted by world society scholars and based on the school of sociological institutionalism – is able to explain why common policy models, ideas, and discourses spread and yield conformity across the field of nation-states when rationalistic explanations fail.

The dissertation goes further, introducing a contribution to world society theory by specifying in more detail how local policy actors position themselves and motivate their endeavors for themselves as well as others. For such a purpose, in-depth analysis is devoted to how national actors bearing agency on behalf of a nation-state identify themselves and how such identifications and identity work demystify what may seem conformism but is, in fact, best explained as pursuit of interests as long as these agents' identity categories are taken into account. What may from a bird's-eye view seem to be mindless conformism is really articulation of different interests, attached to multiple identity categories. Therefore, the work examines how identity work makes globalization, transnational spreading of ideas, and the synchronization of local policy choices possible. In the course of this analysis, it addresses the theme of glocalization, signifying that the global and the local are intertwined.

Answers are sought for three questions: Why does global policy language become domesticated, adopted, and cultivated on local level, and what is the role of identity

work in the process; what is the role of identity work in facilitating European science-policy cooperation among national agents; and how does identity work shape the form of global policy diffusion and enable decoupling?

To investigate these questions empirically, firstly the local use of the knowledge-based economy discourse and the term “information society” are analyzed. Consequently, attention is turned to how these global key ideas framing European science policy since the mid-1990s are utilized in the process of creating “proper” national actorhood in Finland. Secondly an analytical classification of the identity categories used by research-funding professionals working in ERA-NETs (ERA-related research-funding instruments) is constructed, and the indicated interests attached to each identity category are analyzed for purposes of disentangling who the agents represent and what their motivations are for participating in European research-policy cooperation. Then, informed by these two steps, an empirical answer is formulated as to how it is possible that the ERA-NET cooperation continues even though it does not lead to meeting of its pan-European objectives. Thirdly, the work empirically examines how identity work is manifested in research-funding professionals’ description of their work and how it affects the process of formation of actual co-European research-funding practices in ERA-NETs.

The dissertation concentrates on local agentic actors’ motivations, rationales, and social realities, alongside linguistic and behavioral strategies that contribute to policy harmonization and lead to worldwide spreading of ideas and concepts. For these purposes, qualitative analysis methods have been used, with discursive institutionalism and social identity theory drawn on especially. From the standpoint of discursive institutionalism, national agents’ motives for using globally spreading ideas, discourses, and catchwords are studied, as are ways in which they benefit from these and from the underlying social and institutional scripts that construct, enable, and steer towards such behavior. In the process, both the substantive content of the discourses and the interactive process involved are studied, for bringing out two sides of institutional behavior: the ways in which agents re-create and maintain institutions by means of their “background ideational abilities” and ways in which they are able to change those institutions by using the “foreground institutional abilities.” At the same time, the actor level of globalization is opened for analysis, especially the process of local–global interaction that shapes the globalization process as it proceeds. Concurrently, agents’ social identity categories – who they are and what makes sense to them in various situations – are examined. These categories inform the agents about the discourses they take part in, which restrict their choices as they are used. Furthermore, these identifications reflect shared conceptions of a collective self and therefore make such identities about “we” more than “I.”

This identity-building in research funders’ work is examined mainly via methodological tools provided by linguistic analysis, especially in relation to the ways

they use personal pronouns in their speech. The categories “we” and “they” shed light on how these agents construct themselves and their identities within a social structure they experience around them, what those identities are exactly, what interests are attached to them in regard to the European research–funding cooperation, and in which context these identities are used and switched. In addition, employing multiple measurement techniques, from rhetorical, narrative, and discourse analysis, illuminates what is done through actions such as using, or constructing, a particular identity in a certain context. These techniques are presented throughout the dissertation in the analysis of ERA-NET agents’ talk, but their particular importance is highlighted in the context of policy documents. For example, to situate a particular discourse, such as that of the knowledge-based economy, some of its distinctive characteristics (especially concepts it encompasses) are used, to locate its use. After the discourse is identified and located in text, narrative and rhetorical analysis are applied, allowing one to say more about how and for what purposes it is used.

The dataset for the research consists of policy documents and interviews. The document-form data consist of the European Union, OECD, G8, and Finnish public policy documents from 1995–2005 dealing with the knowledge-based economy and the knowledge and information society; the Finnish government ministries’ “future reviews” from 2006 and 2010 (in which they describe the most central short- and mid-term challenges and action alternatives in their respective policy fields); and internal documentation of three distinct ERA-NETs that were active in the latter half of the previous decade, pertaining to their research-funding calls and how they were conducted. The other part of the dataset consists of interviews with ERA-NET agents in several countries and ERA-NETs. The participants interviewed were individuals representing research program owners – typically ministries or regional authorities defining research programs – or program managers such as research councils or other research-funding agencies managing research programs. In total, 20 ERA-NET agents, from eight nation-states, 11 distinct organizations, and 10 individual ERA-NETs, were interviewed, in 2009–2012. The interviews were constructed around thematic questions all having to do with the ERA-NET, European, international funding system and working in ERA-NETs.

The results of the research show that global policy language is embodied in adoption and adaptation at local level because it serves as a useful instrument in the actors’ identity work. For instance, the “information society” concept, which is part of the knowledge-based economy discourse, provides Finnish ministries with a socially convincing yet flexible affordance to reaffirmation of their social and political importance in Finland. Its roots as a renowned international catchphrase lend the concept social assertiveness, rendering it a resource that ministries can fruitfully employ in making their claims

about how important they are in the national state. Furthermore, the research illustrates that European science-policy cooperation is used as a vehicle for positive identity construction by national research-funding organizations. It brings forth how the studied ERA-NET cooperation can continue even if it has not reached some of its main, material, goals because in the current era actors have a need to be portrayed as rational, advanced, international players. The ERA-NETs act as a useful tool for reaching this goal. Participation in the trendiest, most convincing and politically supported forms of international cooperation is in itself a sign that an actor is acting internationally and rationally; hence, participation is socially rewarding.

The ongoing identity work also shapes the form of policy diffusion in ways that lead to harmonization yet not isomorphism. It affects the process through which global ideas gain form on the local level and steers it in the direction of glocalization. Identity work manifests itself in situations in which agents define themselves, and their sending organizations, as being certain kinds of actors or belonging to a certain “we” group. It also entails situations in which agents switch among these identity categories continuously in order to take new subject positions and communicate associated interests or institutional restrictions. This identity work and simultaneous use of several identity categories enables agents to draw on different institutional sources creatively and to construct new kinds of understandings. For example, agents’ opportunity to switch back and forth between global and local identity categories enables them to interpret global ideas from local viewpoints, stretch the boundaries of global principles to fit local features, and hence construct glocalized realities. These realities include both global and local elements for which identity work leads to relatively simultaneous diffusion of global ideas, yet the outcomes are locally distinctive.

At the same time, identity work enables decoupling by offering agents opportunities to follow various institutional rules at the same time. This institutional identity repertoire may lead to difficult situations but also enables agents to construct socially acceptable approaches for escaping awkward situations strategically. When certain institutional requirements turn out to be situationally too difficult to meet, agents are able to activate other identity categories and use attached scripts as a socially acceptable way to escape the situation. This finding opens a new window for understanding the process of decoupling from the standpoint of agentic actorhood. From this perspective, decoupling is not so much an act of discontinuity with the stated norm as a timely conversion to other norms, just as socially acceptable and hence important, that can be used to justify the turn in action.

Together these results indicate that policymaking, both European and national, is largely informed by globally circulating and timely changing ideas and scripts. Therefore, policy actors’ and policymakers’ actions or motivations cannot be fully

understood without consideration of this culturally constructed reality. In addition, it shows that research on international policymaking must take a closer look at its own analytical categories of national and global. If one readily assumes that states are the central pillars of regulation and governance within and across national borders, and such an assumption steers the research design, it creates a real risk of the research failing to recognize larger structures that construct nation-states and national preferences and that thereby steer states' governance. A researcher who, on the other hand, concentrates exclusively on transnational structures may come to the ill-judged conclusion that the nation-state has come to an end or is not in any way a relevant actor in international cooperation or governance. The argument developed for the dissertation is positioned between these two extremes. Its methodological stance is that it is possible and, in fact, analytically most fruitful to understand a nation-state as a politically separate entity but at the same time a global construction.

The research also highlights that globalization does not just happen; it is institutional agents, people, that produce globalization. As internationally operating and transnationally constructed representatives of organizations and professions, these agents have gained functions and responsibilities for which they are allowed to create, adopt, enact, shape, and globally spread world-cultural scripts. It is particularly this activity, positioned between the global and local, that is leading to synchronization of national policies and, in this, what is often considered to be globalization. The change may not be a hundred percent isomorphic, but it is temporarily consistent and noticeable. It comes and goes in wavelike trends. One trend sweeps across the world only to weaken gradually, after which ebbing another is born, which in its turn flows over the globe, and so on. Synchronically constantly moving and turning, nation-states constitute a recognizable unit that consists clearly of interdependent, not independent, actors.

## Summary in Finnish

Euroopan unioni ja sen jäsenvaltiot ovat tuoneet viime vuosina toistuvasti esiin, että eurooppalainen tiedepolitiikka on yhteydessä taloudelliseen kasvuun. Eurooppalaisten kansallisvaltioiden intressissä onkin nykyään noudattaa sellaisia tiedepoliittisia malleja ja käytäntöjä, jotka edesauttavat niiden taloudellista kasvua ja kukoistusta. Tässä kehityksessä erityisen kiinnostavaa on, että valtiot ympäri Eurooppaa ovat omaksuneet keskenään samankaltaisia tiedepoliittisia ajatusmalleja, käytäntöjä ja politiikkoja, vaikka niiden taloudelliset tilanteet ja rakenteet ovat erilaisia. Kyseessä on maailmanlaajuinen trendi. Tiede ja tieto ovat lukuisten Euroopan unionin strategioiden ytimessä ja niillä nähdään olevat erityinen rooli eurooppalaisen menestyksen ja kilpailukykyyn kehityksessä. Euroopan unioni yhtyy siis globaaleihin tiedepoliittisiin diskursseihin ja siirtyy muualla aiemmin käyttöönottettuihin malleihin, vaikka EU on omanlaisensa verrattuna muihin maanosiin ja poliittisiin liittoutumiin.

Eurooppalaista tiedepolitiikkaa koskeva usein rationaalsiin selitysmalleihin pohjautuva tutkimus ei pysty täysin selittämään tätä ilmiötä. Ensinnä funktionaaliset selitysmallit eivät kykene selittämään yhdenmukaista ja samanaikaista eurooppalaista poliittisten diskurssien ja valintojen kehitystä. Taloudelliselta rakenteeltaan ja kooltaan erilaiset yhteiskunnat kohtaavat erilaisia haasteita. Jos poliittiset valinnat vastaisivat yhteiskuntien yksilöllisiä tarpeita, olisi todennäköistä, että ratkaisut, mieltymykset ja toimenpiteet eroaisivat toisistaan. Toisaalta rationaaliset selitysmallit, jotka lähtevät siitä oletuksesta, että valtiot tekevät laskelmoituja valintoja kansallisten intressiensä pohjalta, eivät perustu todellisuuteen. Jos perustuisivat, kansalliset toimijat noudattaisivat työssään niitä päätöksiä, joita heidän päätöksentekijänsä ovat kansallisten intressien pohjalta tehneet. Käytännössä kuitenkin yksi merkittävimmistä eurooppalaisen tiedepolitiikan tavoitteista eli tutkimusrahoituksen yhdyntyminen, jota Euroopan jäsenvaltioiden valtionpäämiehet ovat ajaneet yhdessä 2000-luvun alusta asti, ei ole toteutunut. Kansalliset tutkimuksen rahoittajat eivät siis ole toteuttaneet niitä tavoitteita, jotka heidän omat päätöksentekijänsä ovat eurooppalaisella tasolla asettaneet. Näin ollen näkemys huolellisen laskelmoinnin pohjalta tehdystä kansallisiin intresseihin perustuvasta suoraviivaisesti täytäntöönpanoon etenevästä päätöksenteosta voidaan kyseenalaistaa.

Rationalistinen selitysmalli ennustaa, että kokemus aiemmista toimenpiteistä ohjaa päätöksiä tulevaisuudessa. Kun yhteiseurooppalainen tutkimusrahoitus on jäänyt vähäiseksi, myös sen mukanaan tuoma ennakoitu taloudellinen hyöty

on jäänyt toteutumatta. Tästä huolimatta Euroopan jäsenvaltioiden halukkuus ottaa osaa tiedepoliittisiin yhteistyömuotoihin ei ole vähentynyt. Tämä havainto osoittaa, että rationaalinen, materiaalisiin ja taloudellisiin hyötyihin keskittyvä laskelmointi ei täysin selitä kansallisten osapuolten halukkuutta osallistua eurooppalaiseen tutkimusrahoitusyhteistyöhön. Koska tiedepoliittinen yhteistyö perustuu vapaaehtoisuuteen, eikä Euroopan unionilla ole välineitä pakottaa jäsenvaltioitaan toimimaan yhdenmukaisin tavoin, ei ilmiötä voida selittää pakolla. Tarvitaan siis uudenlaisia tapoja ymmärtää, miksi jäsenvaltiot käyttävät politiikoissaan yhdenmukaisia tiedepoliittisia diskursseja, ja miksi kansalliset toimijat ottavat innokkaasti osaa eurooppalaiseen tutkimusrahoitusyhteistyöhön sen epäonnistumisista huolimatta.

Tässä väitöskirjassa näihin mysteereihin esitetään kulttuurisosiologiseen näkökulmaan pohjautuva selitys. Kansallisvaltiot, kansalliset poliittiset toimijat ja tutkimusrahoituksen toimihenkilöt nähdään kulttuurisia käsikirjoituksia noudattavina toimijoina, jotka sulautuvat sekä heitä ympäröiviin että heidät rakentaviin sosiaalisiin rakenteisiin. Tämä ymmärrys, josta osa on globaalisti jaettua maailmankulttuuria, sekä rajoittaa että mahdollistaa heidän toimintansa. Se tarjoaa heille joukon tärkeitä institutionaalisia sääntöjä, käsikirjoituksia ja periaatteita, joita heidän tulee noudattaa saavuttaakseen ja säilyttääkseen oma yhteiskunnallinen asemansa. Käsikirjoitusten olemassaolo auttaa selittämään, miksi poliittiset mallit, ideat ja diskurssit leviävät tuottaen ylikansallista yhdenmukaisuutta, kun rationaaliset selitysmallit eivät siihen kykene.

Sosiaalisesti jaettujen käyttäytymismallien ja käsikirjoitusten esiintuominen on tyypillistä erityisesti maailmanyhteiskunnantutkijoille ja sosiologiseen institutionalismiin perustuvalla tutkimuksella. Tämäkin tutkimus pohjautuu näihin perinteisiin, mutta esittää niihin täsmennyksen tuottamalla entistä tarkempaa tietoa siitä, miten paikalliset toimijat motivoivat toimintansa itselleen ja muille. Tutkimus vastaa kysymykseen analysoimalla, miten kansalliset toimitsijat identifioivat itsensä ja miten heidän tekemänsä identiteettityö tarjoaa tarkemman selityksen prosessille, joka maailmanyhteiskunnantutkimuksen makroperspektiivistä näyttää mukautumiselta. Tutkimuksen tuottamien tulosten valossa tarkoituksettomalta näyttäytyvä mukautuminen eli konformismi onkin itse asiassa identiteettikategorioiden yhteydessä olevaa päämäärätietoista, intresseihin perustuvaa toimintaa. Samalla tutkimuksessa osoitetaan, miten paikallisten toimijoiden identiteettityö mahdollistaa globalisaation, ideoiden ylikansallisen leviämisen ja paikallisten politiikkojen harmonisaation. Tutkimuksessa käsitellään globalisaation teemaa tähdentäen sitä, miten globaali ja lokaali kietoutuvat toisiinsa.

Tutkimuksessa etsitään vastauksia kolmeen kysymykseen: 1) miksi globaali politiikan kieli tulee kotoutetuksi, omaksutuksi ja kehitetyksi paikallisella tasolla, ja mikä on identiteettityön rooli tässä prosessissa, 2) mikä on identiteettityön rooli kansallisten toimijoiden eurooppalaisessa tiedepoliittisessä yhteistyössä ja etenkin sen toteuttamisessa,

ja 3) kuinka identiteettityö muokkaa globaaleja politiikan virtauksia ja johtaa siihen, etteivät päätökset johda aina vastaaviin toimenpiteisiin (ns. irtikytkeminen, ”decoupling”).

Näiden kysymysten empiirinen tutkimus alkaa tietotalousdiskurssin ja tietoyhteiskuntakäsitteen paikallisen käytön analyysillä. Analyysin avulla havainnollistetaan, miten näitä globaaleja ja eurooppalaista tiedepolitiikkaa 1990-luvun puolivälistä hallinneita ajatusmalleja käytetään rakentamaan oikeanlaista yhteiskunnallista toimijuutta Suomessa. Toiseksi tutkimuksessa tuotetaan analyttinen luokittelu identiteettikategorioista, joita tutkimusrahoittajien edustajat käyttävät työskennellessään ERA-NET:eissa (ERA-NET on EU:n ERA-politiikkaan liittyvä tutkimusrahoittajien yhteistyö- ja rahoitusmuoto). Samalla tutkimuksessa analysoidaan kyseisiin identiteettiluokkiin liittyvät intressit ja esitetään, keitä nämä toimijat edustavat ja mitkä ovat heidän motivaationsa ottaa osaa eurooppalaiseen tiedepoliittiseen yhteistyöhön. Näiden kahden empiirisen analyysin avulla vastataan lopulta kysymykseen, miten on mahdollista, että ERA-NET-yhteistyö jatkuu, vaikka se ei ole saavuttanut eurooppalaisia tavoitteitaan. Kolmanneksi työssä käsitellään empiirisesti sitä, miten identiteettityö näkyy tutkimusrahoituksen ammattilaisten kuvauksissa omasta työstään ja miten se vaikuttaa yhteiseurooppalaisten tutkimusrahoituskäytäntöjen muotoutumiseen ERA-NET:eissa.

Tutkimuksessa käytetyt laadulliset tutkimusmenetelmät pohjautuvat erityisesti diskursiiviseen institutionalismiin ja sosiaaliseen identiteettiteoriaan. Diskursiivisen institutionalismin näkökulmasta tutkitaan kansallisten toimijoiden motiiveja käyttäen maailmanlaajuisesti leviäviä ideoita, diskursseja ja muoti-ilmauksia. Lisäksi tarkastellaan, miten kansalliset toimijat hyötyvät heitä rakentavien, heidän toimintansa mahdollistavien ja sitä ohjaavien sosiaalisten ja institutionaalisten käsikirjoitusten käyttämisestä. Työssä tutkitaan sekä diskurssien sisältöä että niihin liittyvää interaktiivista toimintaa. Näin ollen tuodaan esiin institutionaalisen toiminnan kaksi eri puolta: tavat, joilla toimijat uudelleentuottavat ja ylläpitävät instituutioita hyödyntäen ”taka-alan käsitteellisiä kykyjään” sekä tavat, joilla he kykenevät muuttamaan näitä instituutioita käyttämällä ”etualan institutionaalisia kykyjään”. Samalla avataan mahdollisuus tutkia globalisaation toimijatasoa, etenkin paikallisen ja maailmanlaajuisen vuorovaikutuksen prosessia, joka muokkaa globalisaatiota sen edetessä. Sosiaalisen identiteettiteorian pohjalta keskitytään puolestaan toimijoiden sosiaalisiin identiteettikategorioihin: keitä toimijat ovat ja mikä on heille järkeenkäypää eri tilanteissa. Kategoriat informoivat toimijoita käytettävissä olevista diskursseista ja siitä, miten ne rajaavat heidän toimintamahdollisuuksiaan. Lisäksi kategoriat tuovat mukanaan käsityksen jaetusta minuudesta, minkä vuoksi niihin viitataan muodossa ”me” sen sijaan, että puhuttaisiin ”minästä”.

Identiteettien muodostamista tutkimusrahoittajien edustajien työssä tutkitaan lingvistisen analyysin keinoin, etenkin kiinnittämällä huomiota siihen, miten he käyttävät puheessaan persoonapronomineja. Luokat ”me” ja ”he” tuovat esiin, miten he

rakentavat itsensä ja identiteettinsä suhteessa ympäröivään sosiaaliseen rakenteeseen: mitä identiteetit ovat, mitä eurooppalaiseen tutkimusrahoitusyhteistyöhön liittyviä intressejä niihin sisältyy ja missä kontekstissa identiteettejä käytetään ja vaihdetaan. Lisäksi työssä tutkitaan retorisen, narratiivisen ja diskurssianalyysin keinoin, mitä toimijat tekevät käyttäessään ja rakentaessaan tiettyjä identiteettejä tietyissä konteksteissa. Menetelmiä käytetään siis analysoitaessa ERA-NET-toimijoiden puhetta, mutta erityisen keskeisessä asemassa ne ovat analysoitaessa politiikkadokumentteja. Esimerkiksi julkishallinnossa käytetyn tietotalousdiskurssin paikantamiseksi käytetään hyväksi sen erityispiirteitä kuten siihen sisältyviä käsitteitä. Kun diskurssi on paikannettu, käytetään narratiivisen ja retorisen analyysin keinoja sen tutkimiseksi, miten ja mitä varten diskurssia käytetään.

Tutkimuksen aineisto koostuu politiikkadokumenteista ja haastatteluista. Dokumenttiaineisto koostuu kolmesta osiosta: 1) tietotaloutta sekä tieto- ja informaatioyhteiskuntaa käsittelevistä Euroopan unionin, OECD:n, G8:n ja Suomen valtionhallinnon julkisista asiakirjoista ajanjaksolla 1995–2005, 2) suomalaisten ministeriöiden vuosien 2006 ja 2010 tulevaisuuskatsauksista, joissa ministeriöt esittävät toimialansa keskeisimmät lyhyen ja keskipitkän aikavälin haasteet ja toimintavaihtoehdot, ja 3) kolmen ERA-NET:in sisäisestä dokumentoinnista koskien niiden yhteiseurooppalaisia rahoitushakua 2000-luvun jälkimmäisellä puoliskolla. Toinen aineiston osa koostuu eri maiden ja eri ERA-NET:tien edustajien haastatteluista. Haastateltavat henkilöt edustavat tutkimusohjelmien omistajia – tyypillisesti ministeriöitä tai alueellisia viranomaisia, jotka avaavat tutkimusohjelmia – sekä tutkimusohjelmien hallinnoijia kuten tutkimusneuvostoja ja muita tutkimusta rahoittavia virastoja. Tutkimukseen haastateltiin vuosina 2009–2012 kahtakymmentä ERA-NET-edustajaa kahdeksasta maasta, yhdestätoista organisaatiosta ja kymmenestä ERA-NET:istä. Haastattelut rakentuivat temaattisesti ERA-NET:tejä, niissä työskentelyä sekä eurooppalaista ja kansainvälistä tutkimusrahoitusjärjestelmää koskevien kysymysten ympärille.

Tutkimuksen tulokset osoittavat, että paikalliset toimijat käyttävät ja muokkaavat maailmanlaajuista, globaalia politiikan kieltä, koska se tarjoaa hyödyllisiä välineitä toimijan omaan identiteettityöhön. Esimerkiksi käsite ”tietoyhteiskunta”, joka on osa tietotalousdiskurssia, tarjoaa suomalaisille ministeriöille sosiaalisesti vakuuttavan mutta joustavan työkalun, jolla ne kykenevät uudistamaan omaa poliittista ja yhteiskunnallista asemaansa Suomessa. Käsitteen ylikansallinen tunnettuus tuo sille sosiaalista vakuuttavuutta, jolloin siitä muodostuu resurssi, jota ministeriöt pystyvät käyttämään hyväkseen rakentaessaan ja kommunikoidessaan omaa kansallista ja yhteiskunnallista tärkeyttään. Lisäksi tutkimus osoittaa, että tutkimusrahoitusorganisaatiot käyttävät eurooppalaista tiedepoliittista yhteistyötä välineenä oman identiteettinsä rakennusprosessissa. Tutkimuksen mukaan identiteettityö selittää myös osaltaan, miksi ERA-NET-yhteistyö voi jatkua,

vaikka se ei ole saavuttanut tiettyjä materiaalisia päätavoitteitaan. Nykytoimijoiden tulee kyetä esittämään itsensä rationaalisina, kehittyneinä ja kansainvälisinä pelaajina ja ERANET:it ovat hyödyllisiä keinoja tämän tavoitteen toteuttamisessa. Osallistuminen trendikämpiin, vakuuttavimpiin ja poliittisesti tuettuihin kansainvälisen yhteistyön muotoihin on merkki siitä, että toimija on kansainvälinen ja rationaalinen. Osallistuminen on näin ollen itsessään sosiaalisesti palkitsevaa.

Tutkimuksessa osoitetaan, että toimijoiden jatkuva identiteettityö muokkaa politiikka-toimenpiteiden leviämistä niin, että se tuottaa paikallista harmonisaatiota täydellisen yhdenmukaistumisen sijaan. Identiteettityö siis muokkaa prosessia, jolla maailmanlaajuiset ideat saavat paikallisen muotonsa ja ohjaa muutosta kohti globalisaatiota. Identiteettityö ja useiden identiteettikategorioiden samanaikainen käyttäminen mahdollistaa, että toimijat käyttävät yhtäaikaista useita institutionaalisia resurssilähteitä rakentaen niistä luovasti uudenlaisia ymmärryksiä. Esimerkiksi edustajien mahdollisuus vaihtaa maailmanlaajuisesta identiteetistä paikalliseen ja takaisin mahdollistaa sen, että he tulkitsevat globaaleja ideoita paikallisesta näkökulmasta ja venyttävät niihin sisältyviä periaatteita niin, että ne sopivat yhteen paikallisten realiteettien kanssa. Näin ollen he luovat globaaleista malleista glokaaleja todellisuuksia. Nämä todellisuudet sisältävät sekä globaaleja että paikallisia elementtejä, minkä vuoksi identiteettityö johtaa melko samanaikaiseen globaalien ideoiden leviämisprosessiin kuitenkin niin, että paikalliset lopputulokset eroavat jonkin verran toisistaan.

Identiteettityö myös mahdollistaa tavoitteiden ja toimenpiteiden irtikytkemisen. Sen ansiosta toimijoilla on mahdollisuus noudattaa useita institutionaalisia sääntöjä samaan aikaan. Tämä institutionaalisten identiteettien repertuaari ja niiden luova käyttö saattaa johtaa yhtäältä hankaluuksiin, mutta toisaalta myös mahdollistaa pakenemisen vaikeista tilanteista sosiaalisesti hyväksytyillä tavoilla. Kun tietyt institutionaaliset vaatimukset käyvät liian hankaliksi toteuttaa, edustajat pystyvät ottamaan käyttöön toisen identiteettikategorian ja hyödyntämään siihen sisältyviä sääntöjä sosiaalisesti hyväksytyinä keinona tilanteen kiertämiseksi. Tämä tulos avaa uuden, aktiivista intressipohjaista toimijuutta korostavan näkökulman tilanteisiin, joissa päätökset ja toimenpiteet eivät vastaa toisiaan. Tästä näkökulmasta käsin toiminnan irtikytkentä ei ole niinkään irtisanoutumista tietyn normin mukaisen käytännön toteuttamisesta vaan tilannekohtaista vaihtamista toisiin normeihin, jotka ovat yhtä lailla sosiaalisesti hyväksytyjä, perusteltuja ja tärkeitä.

Yhdessä tutkimuksen tulokset havainnollistavat, miten kansallinen ja eurooppalainen poliittinen toiminta saavat läheisesti vaikutteita maailmanlaajuisesti leviävistä ja ajallisesti muuttuvista ideoista ja käsikirjoituksista. Koska näin on, poliittisten päätäjien ja toimijoiden toimia ja perusteita ei voida täysin ymmärtää ottamatta tätä kulttuurisesti rakentunutta ulottuvuutta huomioon. Kansainvälisen poliittisen toiminnan

tutkimuksen täytyykin kiinnittää entistä tarkemmin huomiota omiin analyttisiin kansallista ja globaalia käsitteleviin kategorioihinsa. Jos tutkija itsestään selvästi olettaa, että valtiot ovat tärkeimpiä kansallisen ja kansainvälisen säätelyn ja hallinnan toimijoita, hän saattaa jättää huomaamatta laajemmat rakenteet, jotka rakentavat kyseiset kansallisvaltiot ja kansalliset mieltymykset, ohjaten siten kansallista hallintaa. Toisaalta tutkija, joka keskittyy pelkästään ylikansallisiin rakenteisiin, saattaa tulla siihen hätköityyn johtopäätökseen, että kansallisvaltio olisi katoamassa tai että se ei ole kansainvälisen yhteistyön tai hallinnan merkittävä toimija. Tässä väitöskirjatyössä kehitetty väite sijoittuu näiden kahden ääripään väliin. Sen metodologinen kanta on, että on mahdollista – ja itse asiassa analyttisesti kaikkein hedelmällisintä – ymmärtää kansallisvaltiot poliittisesti erillisinä, mutta samalla maailmanlaajuisina rakenteina.

Tutkimuksen väite on, että globalisaatio ei vain tapahdu – ihmiset institutionaalisina toimijoina tuottavat sen. Kansainvälisesti toimivina, ylikansallisesti rakentuneina organisaatioiden ja professioiden edustajina nämä aktiiviset toimijat ovat saaneet osakseen tehtäviä ja vastuuta, joissa heillä on mahdollisuus luoda, omaksua, ottaa käyttöön, muokata ja levittää maailmankulttuurisia käsikirjoituksia. Nimenomaan tämä globaalin ja lokaalin välimaastoon sijoittuva toiminta tuottaa kansallisten politiikkojen synkronisaatiota, ja sitä myöten sitä, mikä ymmärretään globalisaatioksi. Muutos ei välttämättä ole sataprosenttisen yhdenmukainen, mutta ajallisesti yhteneväinen ja huomattava. Tämä muutos tulee ja menee aaltomaisina trendeinä – yksi pyyhkäisee läpi maailman heiketäkseen hiljalleen, minkä jälkeen tulee toinen kulkeakseen ylikansallisen matkansa ja niin edelleen. Synkronisesti jatkuvasti liikkeessä olevat ja muuttuvat valtioiden politiikat muodostavat yhdessä merkille pantavan yksikön, joka muodostuu yhteydessä olevista mutta silti erillisistä toimijoista.

# List of abbreviations

ERA	European Research Area
ERC	European Research Council
ESF	European Science Foundation
EU	European Union
FP	European Framework Programme
IGO	International Governmental Organization
INGO	International Non-governmental Organization
JP	Joint Programming
JPI	Joint Programming Initiative
JRC	Joint Research Centre
JTI	Joint Technology Initiative
OECD	Organisation for Economic Co-operation and Development
OMC	Open Method of Coordination
R&D	Research and development
SHOK	Strategic Centres for Science, Technology and Innovation
SIT	Social identity theory
UNESCO	United Nations Educational, Scientific and Cultural Organization
WST	World society theory

# Introduction

The European Union and its member states have articulated a close link between the development of European science policy and national economic growth. It is indeed in the manifest interest of European nation-states to implement science-policy models and practices that help their domestic economies grow and prosper. In this connection, it is interesting, however, that separate nation-states, regardless of the evident economic differences between them, have ended up adopting similar science-policy practices, ideas, and policies. In addition, this is true beyond intra European Union level. Strong science and knowledge lie at the heart of several key strategies of the union and are thought of as contributing specifically to Europe's economic prosperity and competitiveness. Yet the European Union (EU) seems to fall in line with discourses and models that are globally shared and have already been implemented elsewhere, despite Europe's substantial differences from other continents and political alliances.

From the beginning, European research policy has been governed in accordance with the subsidiarity principle. National science policies in European countries are governed independently, and all Europe-wide undertakings are ultimately based on voluntary efforts.<sup>8</sup> Therefore, the European Community's role has been merely to *stimulate* and *support* program coordination and joint activities conducted at national or regional level, as well as among European organizations. Nevertheless Europe-level transnational public research and development (R&D) programs have become very popular, and transnational research-funding cooperation among EU member countries has increased over the years in various forms, through diverse programs (Commission of the European Communities 2006, European Commission 2013a). At the same time, the Member States' national science policies resemble each other. For instance, some fashionable concepts, such as that of the knowledge economy, have spread throughout the various countries' science policies, research funding is allocated via competitive calls for projects, and institutional funding is increasingly linked with assessment of research performance (European Commission 2013a). The dissertation addresses this particular phenomenon and provides an explanation for national science-policy synchronization.

One prominent line of theory explaining national science-policy solutions in the EU is a set of rationalist approaches such as liberal intergovernmentalism and rational-choice institutionalism. In these approaches, it is assumed that nation-states act in pursuit

of their national interests and adopt models that are considered useful and effective with regard to their policy objectives. In the context of European science policy, this means that nation-states calculate which European-Union-provided policy instruments are in line with their national interests and base their decisions to participate on such calculations. For instance, Cuntz and Peuckert (2015) argue thus that countries' decisions on whether or not to participate in European joint funding are based on their interest in attracting foreign money. According to their study, those countries that are more likely to attract and host high-performance scientists are more likely to be involved with open European research-funding instruments, just because they are more likely to succeed. Similarly, Kastrinos (2010) argues that differences in national resources and structures affect the ways in which individual countries participate in European Research Area (ERA) actions. Countries with no intermediate research-funding agencies are less able to benefit from European-level initiatives and hence are less interested in taking part in them than are bigger, forerunner countries with well-established agencies and programs<sup>9</sup> (Kastrinos 2010).

Another line of research explains national science-policy choices on the basis of neo-functional arguments. This line of inquiry too relies on assumptions about rational utility-maximizing actors, yet at some point the functional logic takes over, leading to further integration at European level (Risse 2009). Such an argument is presented, for example, by Edler and Kuhlmann (2012) in their examination of the integration of European research systems. They argue that Europe's knowledge production is entering a post-national age – building a European research identity and enabling pan-European cooperation. They point to developments such as institutionalization of European reference systems, learning forums, and the Open Method of Coordination (OMC) and assert that the OMC reviews, based on an analysis concept that has been uniform for all countries, have led to a convergence of views and instruments. Moreover, they argue that the OMC has limited the maneuvering room of national policymakers at the working level: on account of the

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<sup>8</sup> So far, the governance mode for European science policy has been based on the subsidiarity principle, and the European Community's role has been restricted to means of soft governance: incentive-oriented structures and non-legal sanctioning methods (Falkner et al. 2005: 9). The Lisbon Strategy supported the subsidiarity principle by stating that “[a] fully decentralised approach will be applied in line with the principle of subsidiarity,” and it introduced an open method of coordination as “the means of spreading best practice and achieving greater convergence towards the main EU goals” (European Council 2000: (38), (37)). However, there have been serious attempts on the part of the EU to unify Europe from the standpoint of conducting, funding, and steering research by creating a single European Research Area (see Commission of the European Communities 2007b). The Horizon 2020 framework can be interpreted as having opened the possibility of a more centralized type of EU governance in science policy by announcing that “[s]ince the objectives of this Regulation [...] cannot be sufficiently achieved by the Member States but can rather [...] be better achieved at the level of the Union, the Union may adopt measures, in accordance with the principle of subsidiarity as set out in Article 5 of the Treaty on European Union” (European Parliament and the Council of the European Union 2013: (48)).

<sup>9</sup> By speaking of joint programs (referred to as “programmes” in EU parlance), I, similarly to Lepori et al. (2014), refer to programs of research funding that are managed jointly by at least two countries, possibly with the participation of the EU (Lepori et al. 2014).

OMC as adopted, they are limited to using the same language, telling similar stories, using the same benchmarking indicators, and legitimizing their national policies in terms of the European goals (Edler & Kuhlmann 2012). This, the authors submit, has meant that the European discourse exerts both rhetorical and normative pressure on them. National actors still make the authoritative decisions shaping the EU system, but the proactive activities of a supranational organization and the growing density of transactions and rules reduce the capacity of the Member States to control outcomes (Edler & Kuhlmann 2012).

A similar neo-functional basis is to be found in the research of Lepori et al. (2014). In their endeavor, they analyze how interaction between social institutions and actors' strategies and interests is shaping European integration in research policy. They argue that the normative environment created by the EU pressures participating states to adapt to similar solutions. The EU provides a normative environment that promotes integration and regulatory models, which assist in consolidating national commitments. According to their description, this normative environment was initially based on the need for internationalization and driven by several social groups, such as industry and the scientific community. Finally, once a certain level of institutionalization was reached, the task was taken on by the EU and key actors such as the European Commission, who, in turn, exert normative power on Member States and promote integration of science policies. This pressure, Lepori and colleagues posit, drives nation-states to participate in joint programs and thereby leads to greater homogeneity among national participants.

To fight the overtly rationalist assumptions of the mainstream theories, particularly liberal intergovernmentalism, a third theoretical approach, social constructivism<sup>10</sup> entered studies of the European Union in the late 1990s (Checkel & Moravcsik 2001, Risse 2009). By applying this theory, scholars strove to expand their era's rather narrow focus from allegedly self-contained, natural, and independent nation-states. The existing approach had largely overlooked transnational cultural structures influencing nation-states and hence affecting international cooperation, so it could not explain why nation-states do not always behave in rational ways. To redress the balance, they concentrated on theretofore ignored constitutive cultural aspects of the cooperation and attempted to highlight structures in which some or all nation-states are embedded and that both define them as agents and determine their preferences.

Constructivism resists the idea of human agents existing independently from their social environment or its collectively shared systems of meanings and culture (Risse 2009). Social constructivists thus insist on the mutual constitutiveness of social structures and agents, hence taking the social environment to define and constitute social beings while, at the same time, human agency creates, reproduces, and changes culture through daily practices (Risse 2009). Although European science-policy studies with this perspective are much scarcer than those opting for rationalist assumptions, such arguments are used, for

instance, by Rodríguez et al. (2013), who trace the extent to which the EU research-policy system integrates socio-economic and socio-ethical issues but also industrial and public perspectives into research and development activities. By studying integration discourses in nearly 2,500 research solicitations from the last three Framework Programmes (FPs) for R&D, they show that requests for socio-technical integration in research have increased over time. Their results support claims of increasing institutionalization of integration within European research policy, while also rendering visible the qualified evolution in socio-technical integration. According to Rodríguez and colleagues, integrated solicitations increase progressively as FPs progress, in trends that correlate with some but not all high-level policy discourses and legislation related to FP5, FP6, and FP7. Moreover, they argue that the proposition of integrating science with society at the research project level implies changes in both structure and agency with regard to how science is justified, organized, and conducted.

While possessing obvious advantages in creating new knowledge about the emergence and development of European science policy, the aforementioned rationally oriented explanatory models especially are not able to explain fully why national actors take part in European joint funding activities. Firstly, the rational arguments based on calculative action stemming from national interests have an uphill battle vis-à-vis the reality. If they were true, decisions made by national actors would be followed by consequent actions and experience from earlier actions would steer later decisions. In reality, contrastingly, the ultimate goal for the activities, European integration of funding, which has been strongly endorsed by the European heads of state since 2000, has not materialized. As Kuhlmann and Edler (2003) noted more than a decade ago, notwithstanding the good intentions, most of the public initiatives were developed in national policy arenas and addressed to national beneficiaries, with coordination and harmonization of national activities remaining a hollow treaty clause. The situation has not improved much since. For example, one of the ERA research-funding flagship initiatives, ERA-NETs,<sup>11</sup> has

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<sup>10</sup> In this context, I use the term employed by political scientists, “constructivism,” because it encompasses studies such as these. The alternative term, which is more sociologically oriented, is “social constructionism.” It has been applied to mark a clearer distinction from the psychological theory of constructivism than the political scientists’ term does. Later in the dissertation, when directing the discussion to sociological studies, including my own, I will return to the more familiar term in this field and apply the concept of constructionism instead of constructivism.

<sup>11</sup> The ERA-NET action is one of the EU-initiated and FP-supported voluntary instruments for creating the ERA. The ERA-NET system was launched in 2002 as part of the Sixth Framework Programme (FP6), and it proved extremely popular. There were 71 Coordination Action (CA) ERA-NETs and 26 Specific Support Action (SSA) ERA-NETs set up during its program period (SSAs were set up to aid in establishment of new ERA-NETs, whereas CAs supported the activities of the ERA-NETs themselves) (Commission of the European Communities 2006, CORDIS 2016). The FP6 ERA-NET system’s initial indicative budget for the Community contribution was for 148 million euros, rising eventually to 183 million (Commission of the European Communities 2006). The estimated budget for ERA-NETs in FP7 was set at 320 million euros for the period 2007–2013, with 150 million euros of this earmarked for coordination and 170 million for the top-up funding of calls implemented with the ERA-NET Plus actions, and there were 51 new ERA-NETs started under it, which resulted in 122 distinct ERA-NET topics under FP6 and FP7 (European Commission Directorate-General for Research & Innovation 2012).

been repeatedly criticized for failing to contribute to the ERA. Even though there have been over 100 ERA-NETs since their launch in 2002 and several countries in and beyond the EU have taken part in them, the vast majority of the research funding has remained national (Commission of the European Communities 2005b, Edler et al. 2003, European Commission 2010: 7).<sup>12</sup> While this failure is abundantly apparent, nation-states' enthusiasm to participate in ERA-NETs and in other ERA activities has not declined. This finding indicates that rational calculation pertaining to, for instance, financial gains through common research funding cannot explain why national actors are keen to take part in common research-funding initiatives.

Secondly, there is no coercive power imposed from the direction of the EU towards its member states that could explain their uniform behavior with respect to science policy. Instead, nation-states' behavior, participation, and ways of framing their policies are all based on voluntary activity. Therefore, the explanation according to which the EU drives its members to join common European funding initiatives does not hold water. Furthermore, because there is not such a determinative policy environment, arguments about "pressure" exerted from EU level at the national level would need to be illustrated and the mechanism explained in more detail before they could be judged and understood. The same applies to the claim that nation-states are "limited to" using certain language. How can such a force operate in a context wherein there are no negative sanctions that nation-states would face if not doing so? Because of such shortcomings, this line of literature fails to explain why, for example, certain discourses of European science policy, such as that of the knowledge-based economy, and concepts such as the information society have become global policy ideas constituent to framing of national science (and other) policies both across Europe and in other parts of the world. There is no multinational, pan-European, or other actor exerting power that leads to conformism, nor does a model relying on rationalist explanations suffice, because evidence as to the economic validity of the knowledge-based economy concept and its impacts has always been uncertain, as I will discuss in more detail later.

The best explanation put forth by previous studies for mysteries of these types is offered by neo-institutional world society theory (WST), which is part of the constructivist school of thought. Literature based on this theory argues that actors constructed by the same world culture<sup>13</sup> enact the same models because they want to be like all the rest. As conformists, they do not want to deviate from the models adopted by others (Meyer 2004). From this perspective, rationality is manifested as just a script of rationalism: the models actually adopted are justified as being rational because actors want to be perceived as rational, and rational actors have to justify their choices on rational grounds. National – and other – actors are good at stating rational reasons for what they do, although these may not be the ultimate causes for their actions. What they actually do is follow global

rationalist and universal scripts according to which scientific and ecological principles are universal and hence transferable to any national surroundings. When policy choices are based on such a viewpoint and one choice has already been recognized as a rational one in a specific environment, similar choices become cast as a rational choice anywhere, even in obviously divergent environments. Hence, nation-states follow others in order to seem as rational as others are, for purposes of fitting within the desired group, of proper, rational, actors (Meyer 2010).

The existence of the behavior pattern highlighted by world society scholars is able to explain why common policy models, ideas, and discourses spread and yield conformity across the field of nation-states when rationalistic explanations fail. Through various case studies, discussed in more detail later, these scholars have succeeded in demonstrating the spread of common models and discourses also in situations wherein rationalist models do not hold. They have found that, instead, links to the sources of common world culture can explain the development witnessed. That is why world society theory's perspective is employed in this dissertation for approaching the phenomena at hand: national actors' adoption of common discourses and concepts in their policymaking, thereby creating a wave of global policy synchronization, and their continued participation in common European research-funding initiatives in ERA-NETs, contributing to similar behavior patterns although the level of common funding in these has remained low.

The dissertation goes further, introducing a contribution to world society theory. It is made by specifying in more detail how local policy actors position themselves and motivate their endeavors for themselves as well as others. The original idea of the nation-state as Babbitt (see Meyer 2004), firstly, implies that a nation-state is intrinsically a single, indivisible actor and, secondly, may give an impression of policy actors as somewhat clueless and their activities as rather passive. In light of these two factors, the specific aim with the present work is to analyze in greater depth how national actors bearing agency on behalf of a nation-state identify themselves and how such identifications and identity work demystify what may seem conformism but is, in fact, best explained as pursuit of interests as long as these agents' identity categories are taken into account. What may from a bird's-eye view seem to be mindless conformism is really articulation of different interests, attached to multiple identity categories. Therefore, I will discuss how identity work makes globalization, transnational spreading of ideas, and the synchronization of

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<sup>12</sup> The outcome has been noted by the European Commission: "The European Research Area is still far from being a reality and progress has sometimes been slow since the launch of the first initiative in 2000. It is estimated that in 2008 only 4.5% of the national R&D budgets of the EU Member States was allocated to trans-nationally coordinated research (4.3% in 2007)" (European Commission 2011b: 8).

<sup>13</sup> The term "world culture" refers to a socially shared symbolic and meaning system that is embedded in objects, organizations, scenes, actors, structures, and people and that is presented – and seen by those who absorb it – as globally relevant and valid (Lechner & Boli 2005). According to Boli and Thomas (1999b), this world culture, as all cultures do, becomes embedded in social organizations, especially those that operate on the global level.

local policy choices possible. In the course of this analysis, the work addresses the theme of glocalization, in Robertson's (1992) use of the term, as signifying that the global and the local are intertwined. Ultimately, the dissertation answers the question of what role identity work plays in the spread of global ideas and discourses.

## Previous research

The triumph of science has affected our understanding of the world and our lives so profoundly that it has been even argued that science made the modern world and it is science that shapes modern culture (Shapin 2008). Indeed, at the global level the modern world system has witnessed an explosion of scientific and professional activity (Meyer 2010: 240). Western-style science has expanded in its scope and centrality over the past two centuries, especially so in tandem with rapid globalization after the Second World War (Drori et al. 2003c, Schofer 1999, 2003, 2004), and the number of scientific and professional organizations has rapidly increased consequently, as have the investments and numbers of personnel involved (Meyer 2000, Schofer 1999). From such a standpoint, it is no wonder that science has been studied from multiple viewpoints, touching on such themes as science as a knowledge system, science (practices) as a culture, gender issues in science, boundaries of science, politics of knowledge, and policy agendas of science (see, e.g., Jasanoff et al. 1995, Leicht & Jenkins 2010).

In consequence, the organization of science and research policies has increased on the national level, and this development has taken strikingly similar patterns (e.g. Drori et al. 2003a, Drori et al. 2003b, Jang 2003, Schofer 1999). This and other, similar developments showing patterns of isomorphic, parallel policy changes among nation-states have increasingly caught political scientists', policy researchers', and sociologists' attention. Research studying actors adoption of the same worldwide models (Lechner & Boli 2005) has become a rising area of interest for global and transnational sociology, and researchers are paying greater attention to global governance steering public policy in national states (e.g. Armingeon & Beyeler 2004, Deacon 2007, Djelic & Sahlin-Andersson 2006c, Nagel & Robb 2007). Stress has been given, for example, to the numbers of similar organizations arising around the world (Schofer & Meyer 2005), policy paradigms' spread across nations (Béland 2005), and the importance of the contributions of international governmental organizations (IGOs) and international non-governmental organizations (INGOs) to the phenomenon (e.g. Boli & Thomas 1999a, Murphy 2007, Porter & Craig 2004).

Generally, such studies paying attention to policy change, with regard to increases in either the similarity or the distinctiveness of organizations, can be grouped under three

major theoretical, neo-institutional approaches: historical institutionalism, rational-choice institutionalism, and sociological institutionalism (Boxenbaum & Jonsson 2008, Hall & Taylor 1996). In the first of these, scholars seek first and foremost to explain the distinctiveness of national policies, and they see the institutional organization of the polity or political economy as the principal factor structuring collective behavior and generating distinctive outcomes (Hall & Taylor 1996). From this theoretical viewpoint, institutions are formal or informal procedures, routines, norms, and conventions embedded in the organizational structure of the polity or political economy (Hall & Taylor 1996). The approach is typically closely associated with a perspective on historical development and applied by proponents of an image of social causation that is path-dependent (Hall & Taylor 1996). From this angle, it is argued that the effect of operative forces is mediated by the contextual features of a given situation often inherited from the past, and institutions are seen as relatively persistent features of the historical landscape and one of the central factors pushing development along a set of “paths” (Hall & Taylor 1996). Historical institutionalists expect multiple conjectural causations that occur in an timely order or are explained by path-dependency, and they avoid functionalist explanations for the emergence of institutions (Amenta & Ramsey 2010, Pierson & Skocpol 2002). Hence, they highlight long-standing institutional differences among countries.

In the second category, rational-choice institutionalism (including rational-choice theory), institutions are depicted as exogenous constraints creating an exogenous given game form: rules of a game that shape human interaction (Shepsle 2006). Institutions hence are limited in that they steer and limit human behavior – for example, as a script that names the actors, their behavioral repertoires or strategies, actor preferences, and so on – but are not constitutive of the actors themselves (Shepsle 2006). As a micro-level theory, it relies on methodological individualism, which in the case of national policy convergence studies leads to methodological nationalism – the assumption that the nation-state or society is the natural social and political form of the modern world (about methodological nationalism, see Beck & Sznaider 2006, Chernilo 2006, Wimmer & Glick Schiller 2002) – and is built on a realist assumption of a subject-independent world and existing natural entities (about realism, see Hammond et al. 1991). Accordingly, from this viewpoint, nation-states are understood as natural, purposive, and rational actors, and states’ actions are explained as reflecting their inherent needs and interests. Use of this theory is popular among political scientists. It underpins the field of international relations and one of its most popular theories: neorealism.

The third tradition in examination of policy change, especially when it takes the form of convergence or diffusion, is based on sociological institutionalism (Boxenbaum & Jonsson 2008). From this viewpoint, the institutional environment is understood as a

much richer, more complex, and more decisive structure. The institutional environment in this tradition is made up of complex cultural meanings and organizational structures forming a meaning system that writes and rewrites scripts for actors and that constructs agency, identity, and activity. Accordingly, actors, such as nation-states or individuals, are constructed entities and even players in a theater acting out institutional scripts (Meyer 2010). Adherents to this tradition seek to avoid methodological nationalism and pay attention to larger cultural structures constructing nation-states and thereby affecting their policy choices on a deeper level. The theory relies on phenomenological assumptions of reality and rejects the idea of natural, objective truth beyond the first-person point of view (about phenomenology, see Hammond et al. 1991). The stance is thus macro-phenomenological, and theory in this category has been applied especially by sociologists, for which reason the branch of theory is also called sociological institutionalism.

There are European science-policy studies relying on all of these theoretical traditions; however, the research field addressing science-policy change, particularly in Europe, is dominated by rational-choice institutionalism. This is mainly because political scientists have held a dominant role in EU studies overall (Favell 2007, McGowan 2009).<sup>14</sup> This discipline traditionally utilizes rational theories and state-level analysis, with researchers often taking international relations (IR) theory as their vantage point on European processes (Favell 2007, McGowan 2009). With respect to national responses to the European science-policy instruments, especially the opening up of national research funding in Europe (one of the ERA objectives), rationalist arguments stress the potential risks that the policy change brings countries and careful calculation to determine whether new practices will cause them losses or gains. Studies of this nature have, for example, shown that in the event of opening their national research-funding processes, national actors may face additional costs, loss of influence and control, “unjust” returns, and difficulty in ascertaining the national added value (Edler 2012b, Svanfeldt 2009: 51). Hence, they argue, national actors are interested primarily in ensuring that national money is used nationally (or at least that this use is compensated for) and a situation therefore arises in which funding agencies within those nation-states having a stronger science and innovation base – both qualitatively (in terms of research output) and in quantitative terms (by number of researchers) – are more likely to engage in international coordination via mutual opening of funds (Cuntz & Peuckert 2015). Consequently, funding agencies in nation-states with a strong research base are more likely to participate in open joint research funding than others, because the net outflow of their national funds is likely to be smaller (Cuntz & Peuckert 2015).

Such literature, concentrating on openness of national research funding in the EU and on the fact that it has not been realized, no matter the various attempts made,

has succeeded in bringing systemic and econometric knowledge about how to identify determinants of the level of openness of a given nation-state's research funding (see, for example, Cuntz & Peuckert 2015). Researchers of the associated school have come to the conclusion that the desire for scientific quality and performance stemming from the local (national) research space speaks in favor of the openness of that space's funding programs and eligibility of non-residents but not of greater national integration into European funding mechanisms or collaboration on R&D. In parallel considerations, Caswill predicts that responses and effects of the new ERA policy will vary, and that large countries may derive the greatest financial benefit from the new policy whereas smaller EU members can be expected to worry about being marginalized (Caswill 2003: 74).

The last argument presented above illustrates well why studies based on rational-choice institutionalism do not succeed in explaining situations wherein multiple countries, differing in their political, economic, and social realities, end up making similar policy choices. This phenomenon is characteristic of current science-policy development in Europe. In reality, very different countries all over Europe make similar policy choices such as that to take part in ERA activities or be involved with ERA-related research-funding instruments, such as ERA-NETs, which are aimed at opening up national research funding. If countries make well-calculated, rational decisions on whether or not to carry out certain policy changes in light of their unique national needs and their individual possibilities to "win the game," it is highly unlikely for them to arrive at exactly the same decisions – just as Caswill (2003) and others predict. Instead, with some countries being likely to benefit more than others, they should end up making unlike decisions. The aforementioned reality of countries making remarkably similar choices although they are diverse in various terms therefore rules out historical institutionalist explanations also, because works in this vein are designed to explain distinctive trajectories of national policies and must turn to either rational-choice institutional or sociological institutionalist models when expressing a stand on policy

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<sup>14</sup> The approaches, research questions, and answers in this work clearly represent the disciplines that have dominated EU studies so far. The associated issues have formed the playground especially of those political scientists who approach European processes from the perspective of international relations theory (Favell 2007, McGowan 2009). Having partly shifted from rationalistic neo-functionalism towards the rationalist/constructivist debate of new regionalism studies or even the "new regionalism approach" (NRA), the domain of EU studies has started to gather multiple viewpoints under its umbrella. Some scholars of this research field nevertheless do not welcome very much change: they want to maintain the rationalist social science ontology and epistemology that dominates the United States mainstream and continue creating research that is compatible with it (for discussion, see Warleigh-Lack 2007). In the meantime, it is slightly surprising that sociological research in this arena has been scarce. Favell (2007) argues that this is because sociologists are still wedded to the idea of society (namely, the nation-state) as the principal unit of analysis, leading to methodological nationalism. The same can be said, however, about the number of academics applying the intergovernmental theoretical perspective for studying the EU (for discussion, see Mörth 2005, Puchala 1999). Mörth (2005) characterizes the intergovernmental approach as based on a traditional Weberian state concept; it is focused on the organization of authority within the state and assumes that governments control political processes also on the international level.

conformism among different nation-states (see, e.g., Jabłeczka & Lepori 2009, Lepori et al. 2007).

Conformity processes of this sort are better explained by sociological (neo-) institutionalism. Sociological institutional theory, which employs general phenomenological perspectives,<sup>15</sup> contends that environments create standards that actors<sup>16</sup> adopt “mimetically,” reflecting taken-for-granted standards (Meyer 2008). In this view, actors are not just affected by the wider environment but constructed in and by it, in an equivalent to what political scientists call constructivism (Meyer 2008). Hence, rationalized actors are creatures of rationalized environments (Meyer & Rowan 1977), and, as such, they are not bounded, purposive, and sovereign. Actorhood is seen rather more as a role or identity as in a theatrical world, scripted by institutional structures (Frank & Meyer 2002). Meyer (2008) cites an example by stating that where several people come together to assemble an organization, they do not do so from scratch. Instead, they draw on various models put in place around them by law, ideology, culture, and diverse constraints and opportunities, and they are likely to install these in the organization they are building with little thought or deliberate decision (Meyer 2008). Few, he argues, actually take time to decide to adopt these institutions. This makes their behavior “mimetic”. While the term is imprecise, partially since people adopting new structures are often able to articulate rationales legitimating this action clearly, as if there were thought-through purposes, the essence is that the purposes actually are bundled with the models adopted and are thus scripted (Meyer 2008: 795). Thus, sociological institutionalists emphasize that much modern rationalization has mythic functions encouraging the formation of organizations (Meyer 2008).

Alongside the latter key idea of sociological institutionalism, there are, according to Meyer (2008), three other important explanatory ideas at its center. The second one is the idea that expansive modern institutionalized models of states are commonly generated, not only by interested actors but also by what they call “Others”: collective participants such as professions,<sup>17</sup> social movements, and non-governmental structures (Meyer 2008). The role of Other is an actor role, just as that of an interested actor is, but the Other adopts a legitimated posture of disinterest and tells more interested actors how to be and what to do (Meyer 2008). This entails accepting the higher calling of agency for universal truths and the collective good, as successful nation-states do when offering themselves to their competitors as models for proper conducting of business. Alternatively, the role may be taken on by consulting firms, therapists, advisers, researchers, and other creatures seemingly possessing greater purity when telling others how to be more virtuous and effective or how things work and how they should be developed. Associations too may be Others, when they represent whales or other ecological elements of the distant future or when they fight for human rights in the most far-off places (Meyer 2008).

The third core idea in sociological institutionalism is to emphasize the likelihood of decoupling of more formal structures from practical adaptation (Meyer 2008). Decoupling occurs because of the social environment, consisting of not only the aforementioned highly standardized institutionalized models but also variable local life in practice. For example, Meyer (2008) argues, nation-states promote world norms with which they have no capacity to conform at home. Such phenomena are explained by the fact that people and groups are eager to be actors, able to produce assertions of actor identity even in the absence of any actual actor capability (Meyer 2008). In short, people may devote more effort to being actors than to acting. Fourthly and finally, sociological institutionalists assume that institutionalized models are likely to have strong diffusive or wave-like effects on the orientations and behavior of all sorts of participants in organizational life (Meyer 2008). This happens whether or not these are enshrined in formal policies and without any coercive power and control by environments (Czarniawska & Sevón 1996, Meyer 2008). The waves rise in world discourse, promulgated by professional consensus and associational advocacy, after which actors such as nation-states adopt them with a probability that might depend on their linkage to the world organizations and professions involved (Meyer 2008). In other words, actors, be they nation-states, organizations, associations, or groups of people, pick up the new world or national storylines, in a pattern independent of any organized actor at all creating change. That change flows through diffusive waves – waves created by conforming, non-decision-making followers on institutional currents (Meyer 2008).

One of the most renowned schools of research leaning on sociological institutionalist theory is world society theory. Sometimes also labeled world polity theory, WST involves research on worldwide belief systems and on models for forming of actors, actor identities, and national policies. It is a perspective on globalization developed by John W. Meyer and colleagues at Stanford University in the 1970s and 1980s. Scholars of WST have drawn on sociological institutionalism to generate an expansive theoretical and empirical agenda stressing the importance of global institutions and culture in shaping

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<sup>15</sup> There are actually several flavors of sociological institutional theory, which vary in their position along the realist–phenomenological axis (Meyer 2008). I will concentrate here on the more phenomenological version of the theory.

<sup>16</sup> In this tradition, actors are seen as “entitled and empowered beings with the rights to have goals and the capacities to be agents in pursuit of those goals,” be they the actor’s own needs and goals or the collective, general, or universal good, in which case their agency is collectively legitimated and conditioned (Meyer 2008).

<sup>17</sup> The concept of a profession has been given various definitions over the long history of professionalism studies. Here, I will use Abbott’s (1988) definition, according to which professions are exclusive occupational groups applying somewhat abstract knowledge to particular cases. For Abbott, the characteristic of abstraction is an important one. He states that abstraction sets occupations apart from professions and is also the quality that distinguishes inter-professional competition from competition among occupations in general. In effect, abstraction enables survival in the competitive system of professions. Furthermore, he asserts, only a knowledge system governed by abstractions can redefine its problems and tasks, defend them from interlopers, and attack new problems – all well-known activities of professions.

the structure and behavior of nation-states, organizations, and individuals worldwide (Schofer et al. 2012).

Not a large amount of research into European science policy is conducted from this standpoint, but science policy in general and, especially, science in the broad sense are popular topics of research among WST scholars. For example Jang's (2003) quantitative analysis of nation-states that have made science ministries a part of their government structure shows that in the case of founding of science ministries around the world, internal functional conditions, such as the level of science and technology activity, predicted adoption of science ministries at the beginning of their spread while these conditions no longer predicted adoption once the global spread process was well on its way. This exemplifies that, though policy changes, such as establishing of a new ministry, may at first be justified clearly by local needs and conditions, the first adopters' succeeding in what they wanted to accomplish legitimates a new standard simultaneously, which is then recommended to other actors by influential international organizations (such as the OECD and UNESCO) and professional communities. After this standardization and legitimization process, others who share the relevant identity (of nation-state in this case) and hence perceive themselves as similar to the early adopters, follow, regardless of their internal need (Finnemore 1996, Jang 2003). The shared image of success and the concomitant birth of a new standard would not be possible, however, without a shared understanding, a discourse, to which the policy act appeals. For example, in the case of science ministries' founding, appeals are made with reference to the long-established discourse of science for national development (Drori et al. 2003a, Jang 2003) and it is given a governmental form, which is then easily understood and adopted by others sharing the relevant identity and that discourse. Therefore, Jang (2003) argues, the impact of external and institutional factors, as opposed to the internal and functional factors, on the founding of science ministries increase over time.

There are scholars of WST all around the world, and, as any school of research is, it is developed further by various researchers and groups. For instance, the Tampere Research Group for Cultural and Political Sociology in Finland, TCuPS, has sought to make a contribution to the theory (see, for example, Alasuutari 2009, 2011a, 2011b, 2011c, 2016b, Alasuutari & Qadir 2013, Qadir & Alasuutari 2013, Rautalin 2013a, 2013b, Syväterä & Alasuutari 2013, Syväterä & Qadir 2015). They have come to highlight especially the actor perspective on the local or domestic level and argue from their empirical studies that a) from the actors' perspective, what is happening when ideas, models, and policies spread around the world is not so much conformism and imitation as pursuing interests by appealing to international models and comparisons, which in the end leads to the adoption of similar models worldwide; b) as actors appeal to the international community, local actors simultaneously create an understanding

that “our” solution is different from others’ and springs from our own, local tradition; and c) the models and ideas are not in their final form before they are adopted but, rather, are constructed as they spread, hence diverging between countries or locations in various respects (Syväterä & Qadir 2015). Research employing WST shares these underpinnings with domestication theory, which will be discussed in detail later.

Syväterä (2016) has applied this particular perspective for studying science policies around the world. In his work considering the global spread of national bioethics committees (NBCs), he illustrates that very different countries around the globe have made the science-policy decision to set up these committees nationally. He shows that between the mid-1980s and the turn of the millennium, almost all industrialized countries established such a body, with the wave rapidly spreading throughout the developing world since then (Syväterä 2016: 16). He interprets this phenomenon as part of the general expansion of expert policy advice across all fields of policy, and he shows how, although rationalism-rooted theories based on the assumption of means–ends calculative actions of national actors leading to functional arguments cannot explain such phenomena, the functional imaginary does play a role in why policy convergence takes place. He and Alasuutari (2013) argue that the functionalist narrative is, in fact, just one of the legitimating narratives that policymakers use to justify the establishment of NBCs in their countries, and the narratives are derived from world-cultural ideas of the national interest and modernization. Consequently, they do not so much make a rational choice as enact world-cultural scripts, specifically a script that hence occupies a decisive role in national policymaking (Syväterä & Alasuutari 2013). These studies, among others, have shown that sociological institutionalism is better at discerning and explaining the global phenomena linked to a policy trend extending across nation-states than rational-choice institutionalism is.

Via my analysis of discourses, concepts, principles, and practices within the sphere of European science policy, I will contribute to world society literature and the work of TCuPS by examining whether the arguments as to actor conformism vs. pursuing of interests hold water in my study case, that of European science policy and research funding. Further, I will investigate the ways in which local actors appeal to international or global ideas, along with whether those ideas are “ready” to begin with or instead are constructed and domesticated as they spread. While doing so, I will concentrate especially on identity work of agentic actors and strive to offer arguments pertaining to conformism and decoupling that are complementary to those offered by world society scholars in earlier literature.

Studying science policy from this perspective is relevant firstly because it is important to understand how national perceptions of the social importance of scientific knowledge and its management are constructed and, simultaneously, how the currently socially

significant activity represented by research – which is among the core elements that inform many policy sectors – is managed at national and transnational level. Research pertaining to this particular aspect of policy in the EU is especially timely amid today's significant structural changes to European science policy. The EU has an express desire to coordinate national policies, yet these continue to be managed separately on the basis of the principle of subsidiarity. This situation has led to a power struggle of sorts between the EU and its member states. Knowing how and why the tension manifests itself is critical for understanding national policymaking in Europe. Furthermore, examining the work of the research-funding agencies' representatives in this context enables well-informed study of science-policy objectives and discourses of knowledge production, alongside, especially, how they get transformed into real-world practices through which research is produced. These practices are a key part of the process of supporting and producing research in Europe, and fuller understanding of that process enables us to discern the role of research-funding professionals in the picture. They constitute an important agent group in the process, and understanding them can help us uncover why and how certain kinds of research are supported at any given time.

## **Expansion of world society theory**

Although world society theory has proven useful in explaining global policy trends, especially when compared to rational-choice institutionalism or historical institutionalism, there are still a few blind spots into which WST has not previously delved. These pertain to the following elements, which I will examine in the dissertation: 1) the nature of local processes through which global scripts get enacted on a local level and thus spread, 2) the ways in which social identity categories play a role in the process of global policy convergence, and 3) a fuller picture of decoupling between global ideas and local practices: in what ways decoupling is an understandable result in the processes of policy convergence.

World society theory has repeatedly demonstrated how nation-states adopt similar policies all over the world, leading to policy convergence. What has been given less attention is what happens at the receptor site when a global model or idea is adopted (or formatted; see Syväterä & Qadir 2015) and implemented in the local policymaking process. Instead, world society literature has many times relied on the theory of diffusion or what Simmons et al. (2006) call emulation: an unthinking act of decision-makers that is based, for example, on recommendations by experts (epistemic communities, NGOs, etc.) or social pressure created by them or on observation of reference-group behavior and emulation of the behavior of self-identified peers, even when those adopting

the new policies cannot ascertain that doing so will be in their best interest. Because prior literature has concentrated mainly on demonstrating how such an explanation is more plausible than those relying on coercion or rational choice, the research designs have failed to reveal the local processes through which global models are adopted and implemented at local level, even though the phenomenon of policy convergence among diverse nation-states is clearly showcased.

My inspection will create new knowledge that can be used to fill this remaining gap. To do so, I will apply domestication theory, which steers my focus to local processes of adopting, using, and modifying world-cultural ideas. Domestication theory examines global social change from the angle of national actors and explores how they implement exogenous policy models on a local level; it thus links global phenomena with local social context and local activity (Alasuutari 2009). In addition, domestication theory pays attention to local-level discourses and framing and to how non-critical emulation is concealed by arguments, appealing to local idiosyncrasy and specialty, that assert the policy choice to be, in fact, independent and different from what has been done elsewhere (Alasuutari 2011c).

The term “domestication,” which originates from anthropology and consumption studies, has been used in other fields as well, such as the study of information and communication technologies (ICT) (Alasuutari 2009). It refers to practices of making something new and previously unknown fit for local purposes, and it pays attention to the processes of “taming” an unfamiliar element to the local level. Such activity involves more than just bringing, for instance, a new machine or an animal home; domesticating requires active procedures to make the new element part of local practices and cultivate it as such. This cultivation affects the symbolic and material status of the original element; it is given a new, local meaning (Alasuutari 2009). The theory also emphasizes that the act of domestication is so efficient that the foreign source of the domesticated element ultimately disappears. No longer seen as external or strange, it becomes natural and domestic, almost as if it had always been part of the new surroundings (Alasuutari 2009).

The domesticated element can be anything from an animal or a machine to a policy model, idea, or catchphrase. For example, Qadir and Alasuutari (2013) have studied how worldwide terms are claimed, contested, and domesticated by a range of national actors in the public sphere. They have demonstrated how local actors use these terms as capital in the domestic political field and simultaneously influence the existing discourse, nationalizing and naturalizing it (Qadir & Alasuutari 2013). In a similar vein, Syväterä and Alasuutari (2013) have examined the domestication of the idea of “ethical policy advice” in addition to the concept of the NBC in Finland and come to the conclusion that national actors utilize global policy trends as a justification for policy reform of

their own countries. The existence of a trend among other countries is employed as proof of attendant modernization, which is then presented as a normative argument via implication that failing to support the trend would impede or halt their own country's development (Syväterä & Alasuutari 2013).

The main point made in domestication studies is that actors do not adopt global models or ideas just to become similar to their peers. They do so because they believe that a model already implemented in peer countries has appeal to national decision-makers and voters. In using such a model, they are not actually unthinking or mindless but pursuing their own interests, although constituted by the institutional environment. Global isomorphism arises in consequence of such activity spanning numerous, different national states.

Besides creating more detailed knowledge about the adoption processes at the local level, I will shed light on issues related to agentic actor identities. The processes through which identity categories play a role in the global spread of policy ideas and models have been noted in world society theory but not studied in much detail. My interest lies in the identity work in which the local and global (such as globally defined objects of identification) intertwine.

The term “identity work” enables inquiry into dynamic processes through which identities are accomplished (Simpson & Carroll 2008).<sup>18</sup> The process of identity work entails identity construction and even “mental planning” to connect with the various roles that inform the work, and it is engaged in particularly in situations wherein the routinized reproduction of a self-identity in a stable setting is discontinued (Alvesson et al. 2008). By studying identity work, one can gain knowledge about how individuals endeavor to construct a sense of self and deal with their complex and often ambiguous and contradictory experiences of work and organization. For example, Sveningsson and Alvesson (2003) use the identity work approach for investigation of the dynamic aspects and ongoing struggles surrounding creation of a sense of self and provision of temporary answers to the question “who am I?” (or “who are we?”) and of what I (or we) stand for. In attempting to answer these questions, an individual crafts a self-narrative by drawing on, for instance, cultural resources (Alvesson et al. 2008, Sveningsson & Alvesson 2003).

The social reality in which European science-policy professionals have worked since 2000 or before offers them multiple social identity categories to draw upon and to deal with. These social categories are attached to the changing policy sphere, which currently has European, regional, and national dimensions. Furthermore, there are both global and local elements to identify with. For instance, although research-funding officers have local commitments and role expectations (since they typically work for national offices), they are constantly in connection with the global structure of a specific profession, the global profession of science-policy officer, which brings forth its own

globally distributed, created, and shared scripts as to proper ways of thinking and acting. They are, as Kauppi and Madsen (2013: 5) put it, “[t]ransnationally constructed, partly as a product of their national origins and partly as a reaction to new global structures.” Thus they are not just nationally restricted actors but actors sharing an episteme – that is, adherence to a certain set of values and model of validity (Kauppi & Madsen 2013). It is their property of being “a network of professionals with recognized expertise and competence in a particular domain” (of science policy in this case), as well as “an authoritative claim to policy-relevant knowledge within that domain or issue-area,” that makes them an epistemic community (Haas 1992: 3). They are not only national, or European, but a transnational and global epistemic community, with international beliefs and goals shared throughout that community (see Kauppi & Madsen 2013). Finally, they are, therefore, neither entirely European nor national in nature but rather transnational and reliant on both national and international resources and forms of capital (Kauppi & Madsen 2013)

The fundamental idea behind my viewpoint on the identity work stems from how Meyer (2008), among others, understands agency and actorhood. I proceed from Meyer and Jepperson’s (2000) idea that the modern “actor” is a historical and ongoing cultural construction rather than a natural entity. From this perspective, the actorhood of individuals, organizations, and nation-states is an elaborate system of social agency, and the cultural system constructs the modern actor as an authorized agent for various interests (Meyer & Jepperson 2000). Therefore the “interests” that I am examining are also institutional in nature: they are scripts to be acted out by institutional agents. And, as Meyer and Jepperson (2000) remind us, on account of the constant rationalization of perceptions of nature, human beings, or national states, there are larger numbers of interests to be pursued, new functions (such as new social problems) are constantly recognized, and new “interests” and “rights” are manufactured. At the same time, this phenomenon creates ever more room for new actors, agents, and “Others,” who are pursuing goals not their own but some others’ (Meyer & Jepperson 2000).

Science-policy actors, as any other professionals do, adopt agentic roles as representers of certain nation-states, organizations, and ideologies. As “agents,” these individuals enact roles enabled by institutional roles (Hironaka 2014). In turn, when becoming legitimated agents for underlying interests, they embody the highly rationalized and hence also standardizing responsibility to enact imagined moral and natural principles, consequently becoming agents that operate under very general rules, applicable to

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<sup>18</sup> The viewpoint emphasizes the narrative, discursive, and constructed views of identity construction, thereby paying attention to the “becoming” rather than the “being” of identity. Distinct from the more traditional functionalist view, as seen in the symbolic interactionism and systems approaches (which see the role as a prop in the staging of identity performances or as a context-determined, evaluative tool that specifies required identities), this more contemporary reformulation of identity and identity construction embraces the possibilities of emergence, plurality, discontinuity, polyphony, and the social embeddedness of identity processes (Alvesson & Willmott 2002, Simpson & Carroll 2008).

almost anywhere (Meyer & Jepperson 2000). In the extreme case, they have potential to represent something beyond a recognized entity or interest – they become purely agents of principle, the authoritative voice of the sciences and professions with a claim to speak for wider truths and standards, beyond any local situation or interests (Meyer & Jepperson 2000). Simultaneously they become one with a shared, communal identity. By enacting these identities, agentic actors sign up to certain scripts and interests, proper ways to think and act, and ways of reproducing those identities.

Finally, I will take a stand on decoupling. Previous literature has shown that modern world actors need to adopt various world-cultural rationales, scripts, and principles if they are to become “proper” actors (Meyer 2004). These scripts are part of the wider world culture, which is exhibited, created, and transmitted by highly legitimated, global actors such as INGOs. The latter offer an arena for identifying with world-cultural values, ideas, and frames, and they have potential to “shape the frames that orient other actors, including states” (Boli & Thomas 1999b: 15). International non-governmental organizations are able to subscribe to this central role on account of their nature as disinterested, non-responsible, and therefore culturally free actors (Lechner & Boli 2005). They, then, press other actors, such as countries, to conform to notions of a “proper” nation, with principles such as economic efficiency, peaceful cooperation, democracy, and human rights (Meyer 2004). It may, however, be too laborious to enact these high policies in their most elaborate forms. This is because, in practice, actors are faced with limited resources and with other (local and variable) constraints (Meyer & Jepperson 2000). Previous research describes multiple cases in which decision-making discourse is disconnected from decision-making, and both the discourse and decision-making from actual action (Brunsson 1989); nation-states’ constitutional claims and policies are decoupled from practices (Boli 1987); etc. In all cases, Meyer and Jepperson (2000) argue, the efforts of a highly agentic actor, immersed in general principles of agency, are only loosely coupled with the structures of acting. According to them, any specific decoupling and inconsistencies follow from this underlying structural feature (Meyer & Jepperson 2000).

My research is aimed at creating more detailed knowledge about how decoupling is possible for individual agentic actors responsible for enactment of world-cultural scripts, discourses, and principles. I will argue that these individuals subscribe to active identity work in order to construct a sense of self to connect with the various roles that inform their work. At the same time, they work within the social reality of the modern world, which, among other things, imposes a strong need to be rational and act rationally. What is more, the experienced self-coherence requires that these individuals continually strive toward order and self-differentiation (Budd 1993). In their day-to-day work, they attempt to manage their self in a way that results in a rational, coherent, and consistent

agentic actor. Decoupling does not fit this picture very well. Therefore, I will take a closer look at the acts of decoupling from the identity work point of view and show how identity work can be – and actually is – used to manage the situations wherein actual decoupling is required. For example, I will argue that a single agent can simultaneously support and eschew a certain interest by switching between identity categories, and these agents are able to define themselves, the assigned world-cultural principles, and the chosen practices in such a way that neither of these elements contrasts against the current shared scripts and principles. In consequence, “proper” agency does not get jeopardized – even in situations in which the contradiction seems obvious. Such an outcome is possible, first and foremost, because of active and creative identity work. Social identities are applied in this work as a resource to maintain the rational sense of self and one’s work, even in cases that from a distance seem nothing but an act of careless decoupling.

## Research questions

This dissertation examines the place of identity work in national policymaking. I ask these questions:

- 1) Why does global policy language get adopted and cultivated on the local level, and what is the role of identity work in this process?
  - i. To examine this question empirically, I analyze how the knowledge-based economy discourse and the term “information society,” both global key ideas that have framed European science policy since the mid-1990s, are used at the national level to create “proper” national actorhood.
- 2) What is the role of identity work in facilitating European science-policy cooperation among national agents?
  - ii. To find an empirical answer to this question, I examine what identity categories are used by research-funding professionals working in ERA-NETs, why they participate in European research-policy cooperation, and how it is possible for the ERA-NET cooperation to continue even though it does not lead to the project’s pan-European objectives.
- 3) How does identity work shape the form of policy diffusion and enable decoupling?
  - iii. To tackle the final research question, I empirically analyze how identity work is manifested in research-funding professionals’ description of their work and how it affects the process of formation of research-funding practices in ERA-NETs.

By answering these questions, I contribute to the debate on what explains the worldwide spread of world-cultural ideas and concepts, and I make a contribution to

institutional theory by examining how identity work is carried out in the domestication process creating glocalized realities at the local level. Moreover, I hope to shed light on the identity categories that transnationally operating science-policy agents use in their work and on the associated interests they aim to pursue. My general aim through answering these questions is to reveal more fully how identities, identity work, and the contents and sources of institutional interests attached to identity categories constitute central elements in transnational policymaking. More in-depth knowledge of these aids in understanding some of the mysteries that have heretofore remained unsolved, such as that of the motivation behind participating in cooperation that does not seem to achieve its main goals and that of the decoupling of shared principles from practical policy choices and activities.

## **Methodology and key concepts**

This dissertation concentrates on local agentic actors' motivations, rationales, and social realities, alongside linguistic and behavioral strategies that contribute to policy harmonization and lead to worldwide spreading of ideas and concepts. The objective of concentrating on a local-actor perspective means that methods similar to those traditionally used in WST studies cannot be employed. Usually scholars who subscribe to the institutional tradition and examine globalization and its effects on nation-states have adopted a statistical approach to the endeavor. In their quest to trace the evolution of the world polity, the global shared culture, and developments in the international sphere over time, they take "the world" as their unit of analysis. Their research concentrates on the historical variations over time, for which they use substantial global datasets, made up of data gathered from various nation-states and other sources, and they apply quantitative and statistical approaches to their studies (Schofer & McEneaney 2003).

The approach and research objectives chosen for this dissertation deviate from those of such previous research. Accordingly, also different methods and another sort of dataset will be utilized. Here the unit of analysis is the local agentic actor, or agent: the individual who faces, adopts, uses, and potentially modifies global ideas and principles, thereby contributing to their spreading. For getting to the sources of these individuals' motivation and behavior, qualitative analysis methods will be used. Methodologically I will draw on discursive institutionalism and social identity theory (SIT).

Discursive institutionalism is based on constructivism (this term is usually applied interchangeably with "constructionism"; I will use the latter word from now on to be true to the sociological heritage by which I am influenced). Constructionism refers to a presumption that reality is socially constructed and that the constructions become visible

and are reconstructed and disseminated in and through language (Berger & Luckmann 1967, Burr 1995). Hence, language is the basis and the means of understanding; i.e., the way of understanding reality operates through concepts and categorizations that are linguistic constructions. How the language is constructed also is constitutive of experiences and consciousness. Hence, conducting research on language involves researching not only the data but the reality; it is about examining understanding and institutions that get reproduced and produced by individuals. All the analysis hence is directed towards language – whatever the type of data used – and, through language, the reality or even the “world” in which these agents work.

Discursive institutionalism is an approach that contributes to our understanding of political action and focuses on questions such as how, when, where, and why ideas and discourse matter. Accordingly, the main focus is on discourses: selectively used argumentation realities that include, among other elements, the stories, narratives, and condensed storylines in which realities become structured. Discourses are often shared (at least to some extent) spheres of concepts and ideas that create a meaning to social and physical phenomena (Hajer 2006). In so doing, they reduce the number of sets of argumentation that can be applied at any given time because only some of them are rendered reasonable, sane, and convincing by the discourse. Scholars who have adopted the approach of discursive institutionalism examine these ideas and discourses seriously in their institutional context. It is important to note at this juncture that discourse, in this tradition, consists not only of ideas or “text” (what was said) but also of context (where, how, and why it was said), which means that the term refers both to structure (what was said, or where and how) and to agency (who said it to whom) (Schmidt 2008).

Moreover, what is emphasized from this particular viewpoint is a dynamic view of change. The limits of other new institutional approaches have been said to be their difficulty of explaining change. According to Schmidt (2008), institutions are seen in these theories as being in stable equilibria, with fixed rationalist preferences (in rational-choice institutionalism), self-reinforcing historical paths (in historical institutionalism), or all-defining cultural norms (in sociological institutionalism) (Schmidt 2008). In discursive institutionalism, institutions are instead viewed as simultaneously structures and constructs, which are firstly internalized by agents and secondly used by them. This allows a more dynamic, agent-centered approach to institutional change (Schmidt 2008). Hence, Schmidt (2008) argues, discursive institutionalism is an approach that contributes to our understanding of political action in ways that the other brands of new institutionalism are unable to. It is useful too that the various perspectives can be combined where appropriate.

Discursive institutionalism is, in fact, a methodological approach that can complement other institutionalist approaches by treating the results of these as background

information (Schmidt 2008). For example, the theoretical background of my work lies in sociological institutionalism and world society theory, yet adopting the discursive institutionalist methodology enables me to take the next step from what previous studies conducted from this standpoint have taught us. I will do so by asking what the actual discourses are that motivate agents to behave so uniformly in the modern world (see Alasuutari 2015).

In my work agents' motivations to use globally spreading ideas, discourses, and catchwords are studied, and so are ways in which they benefit from these and from the underlying social and institutional scripts that construct, enable, and steer towards such behavior. How do agents perhaps modify those ideas, for what purposes, how do they use them, and in which situations? Finally, what do they do to and with them, and for what and whom? Asking these questions from discursive institutionalism's point of view and hence analyzing both sides of discourse – the substantive content of it and the interactive process of it – brings out two sides of institutional behavior: the ways in which agents re-create and maintain institutions by means of their “background ideational abilities” and ways in which they are able to change those institutions by using the “foreground institutional abilities” (Schmidt 2008). At the same time, the actor level of globalization is opened for analysis, especially the process of local–global interaction that shapes the globalization process as it proceeds.

Concurrently, I will examine agents' identity categories. These categories inform them about the discourses they take part in, which restrict their choices while they are being used. To do so, I concentrate on the social identities that allow the agents to say who they are and what makes sense to them in various situations. Such social identities are institutional in nature and feature scripts determined by the institutional environment (e.g. Berger & Luckmann 1967, Djelic & Sahlin-Andersson 2006c, Jepperson 1991, Meyer 2010). This means that, for example, the identity of a priest is attached to the institution of the Church and comes with a socially shared, more or less imperative, understanding about rules, restrictions, and goals linked with what a priest is and what a priest does. The same applies for other occupations as well, such as research-funding officers. Those working in the area of science policy as funders have to take into account their professional identity, and they must respect the rules and restrictions of such a position.

This also means that their interests are not freely chosen and are based not on personal preferences but on institutional scripts, which they are expected to follow (Berger & Luckmann 1967, Jepperson 1991). And in referring to interests, I mean agents' views about the ultimate and substantive policy outcomes, whereas policies or strategies are taken to be the means of reaching these (see Moravcsik 1997). While it is, of course, hard to tell whether a way of acting is itself an interest or instead a policy (as in the case

of funding for basic or applied research), my decision to speak of interests has a solid foundation. It stems from how they are talked about. For example, basic or applied research is deemed an interest because the agents do not merely fund such research when needed but describe funding and “supporting” such research in particular as their organizational purpose.

I base my examination of social identities on social identity theory for sound theoretical grounds (Ashforth & Mael 1989, Owens et al. 2010, Turner 1982). First and foremost, the theory emphasizes how social contexts elicit certain identities and shape their meanings. According to Turner (1982), social categorizations are divisions of the social world into distinct classes or categories, and social identification is the process of locating oneself within this system. The theory recognizes that individuals have multiple social identities and that these are harnessed situationally in relevant social contexts. What is more, according to Owens et al. (2010), when a category membership becomes salient (relevant to the social context), self-perception and conduct become in-group normative and perceptions of other groups become out-group stereotypical. Therefore, social contexts are a particularly important aspect of social identity categories and examining them. The theory focuses on how consensual cultural meanings associated with identities are imported by actors into local interactions and how situational environments shape the localized meanings of the situationally relevant identities (Owens et al. 2010). The situation and the culture within which it is embedded are more central than any internalized aspect of the actor (Owens et al. 2010).

The “social” aspect of institutional identities is, in fact, highlighted in this dissertation mainly for drawing readers’ attention to the individual’s self-concept, derived from that individual’s knowledge of his or her membership of one or more social groups (Tajfel 1981). Social identifications reflect shared conceptions of a collective self and therefore make such identities about “we” more than “I” (Thoits & Virshup 1997). For example, Herrmann and Brewer (2004: 5–6) refer to Abrams and Hogg’s (1990, 1999) definition of social identity as “the psychological link between individuals and the social groups or communities to which they belong.” Thanks to the belongingness aspect of social identities, social identities allow us to say who we are and what makes sense to us in various situations (Laffan 2004: 83). In fact, there are three distinct yet interrelated cognitive and analytical levels of social identity (Herrmann & Brewer 2004: 6). Firstly, there is the composition of group identity: “Who is us?” That is, which people belong to the in-group, what defines the boundaries of the group, and who does not belong? The second is the content of group identity, “what are we?” This includes attributes, symbols, and values describing the exemplar of a member of the group and the defining content of the group more generally. The final level is that of the role identity – how social identity is used to refer to the relationship between the in-group and out-groups within

a structured network of social groups (Herrmann & Brewer 2004: 6). I will analyze all three levels.

On account of their institutional nature, social identities have behavioral implications. Attachment to a certain social group, such as a particular nation or Europe, leads to loyalty and group obligation (Herrmann & Brewer 2004, Risse 2010). That is why the question about identities is neither marginal nor merely theoretical. For example, in Europe, as Kohli (2000) argues, the EU polity revolves to a large extent around the question of how much political control should be turned over from national to supranational level, and from this perspective the depth of attachment to Europe is highly significant. What is at stake in the ongoing “politics of identity” is nothing less than sovereignty and legitimacy (Calhoun 2001, Risse 2010: 7). Hence, one can expect that through the adoption of a certain identity an agent subscribes to all sorts of ideas, principles, and interests etc., which then may have an effect on policymaking. Studying identities thus highlights the potential significance of attached and shared principles, norms, goals, and new roles (see also Laffan 2004).

For purposes of this dissertation, I choose also to use the term “identity,” or, at some points in the analysis, “subject position,” as opposed to “role.” I do so for the following reasons. In my work, I understand role, in the manner of Kunda (1992) or of Sveningsson and Alvisson (2003), as a social prescription for behavior. That is, role consists of explicit and systematically enforced prescriptions for how, for instance, organization members should think about themselves and their work (Sveningsson & Alvisson 2003). But, as Kunda (1992) argues, although there are ready-made roles within organizations that communicate how individuals should think and act, potential remains for dynamic identity construction in that individuals choose the extent to which they embrace or distance themselves from these roles at a given time (Simpson & Carroll 2008). Hence, roles are crucial input to identity work and, while most certainly connected to each other, do not refer to the same aspect of the social world. Roles may or may not become partially, or even fully, internalized as identities. Roles come with social expectations of behavior related to the relevant role, but identity is a matter of self-understanding (Simpson & Carroll 2008).

In a similar vein, subject position can be seen as having the same externally constructed dimension that role has, but I will use said term in this dissertation where I wish to refer to particular narrative constructions in the agents’ talk. Hence, subject position is used as an analytical concept and viewed as an affordance that may be drawn upon as a resource for the understanding and enactment of various subjectivities (Hardy et al. 2000). Finally, my intention in choosing these concepts (subject position, identity, and social identity, along with identity work) is, first and foremost, to bring out the agency aspect of the use of social categories.

## Research methods and data

In the methodological choices I have made for the parts of the work in which I examine several aspects of identity-building in research funders' work, I mainly use tools provided by linguistic analysis. This is done by examining how these funders use personal pronouns in their speech. First of all, by studying the categories "we" and "they," I am able to examine how agents construct themselves and their identities within a social structure that they experience around them. Secondly, I am able to investigate the (potentially multiple) identities used by individual agents, and, thirdly, I can examine in more detail the exact points and contexts of both use and switching of categories. Finally, the linguistic-analysis-based method enables me to use the categories "we" and "they" to explore in greater depth the interests attached to identity categories and, further, alliances between the groups thereby constructed. Such a research approach provides me with relevant tools to render visible the – multilayered, in flux, and messy – institutional and social reality within which internationally operating professionals act.

"We" and "they" are pronouns that can be used to refer to various groups of people. Typically, pronouns are linked in some way to a noun before or after them. For example, as Wilson (1990) puts it, in "John is late, he always is," it is clear to an audience that "he" refers to John. Sometimes, though, pronoun resolution may become more problematic. For example, personal pronouns such as "we" may be used in ambiguous ways that force the members of the audience to ask themselves who exactly is being referred to as "we." This quality of personal pronouns enables their use in multiple ways, also for multiple rhetorical purposes (Wilson 1990). For example, "we" always implies some sort of relationship between the speaker and one or more others; however, the distance between the "self" and the "rest" may differ. Wilson speaks of a scale of distancing between the speaker-inclusive "we" and the speaker-exclusive "we" (Wilson 1990: 48). The speaker-inclusive use refers to a pair or a group of people of which the speaker is clearly one, whereas the speaker-exclusive "we" is a wider and more ambiguous group such as "the nation" or even "humanity."

In sociological terms, "we" is an especially important word when it comes to institutional scripts and identities. It says much about the social reality we live in. Working from previous literature, one can find at least four ways in which it is used to construct social reality. Firstly, a shift from "I" to "we" may reveal a point where institutional speech begins. When a person is representing someone, the personal voice encoded in "I" is exchanged for the institutionalized voice encoded in "we" (Wilson 1990: 63). Institutional identities are thus connected to real or imaginary collectives that are constructed, enacted, and drawn on when "we" is used (Owens 2003: 227).

The second manner of use of the institutional “we” is its employment for rhetorical and pragmatic purposes. For example, Goffman (1981) has argued that in everyday talk the use of forms such as the exclusive “we” serves to distance the speaker from what it is that is being said. For example, by the use of “I” the speaker specifically indicates that he or she is the instigator of the action, while instead choosing “we” implies that the speaker may have played a part in it but leaves the degree of responsibility less clearly delineated (Wilson 1990: 48–49).

Thirdly, the use of the institutionalized “we” is often ambiguous: in many cases, “we” is used such that – and sometimes so that – the object of indication remains unclear, and the audience needs to engage in interpretation, inferring the referent. Therefore, a certain context of the use of “we,” coupled with how it is used, invites inferences about its content, but such inferences are not guaranteed. This quality provides an opportunity for several interpretations and also for the speaker’s escape from those interpretations. In consequence, the meaning of “we” may be manipulated for pragmatic effect (Wilson 1990: 56–57). Fourthly, the boundary work between “us” and “them” is one of the basic means by which humans understand the social structures and social reality around us (Bauman 1990). Therefore, examining the ways in which the groups of “we” are constructed tells us about how ERA-NET participants create social alliances and position themselves in the social structures affecting their work. In such analysis, it needs to be remembered also that, although the boundary between “us” and “them” always indicates a separation and a distance, this separation is not irreversible and the distance has no normative scale. Generally, “they” may, for example, be used to refer to groups and individuals other than the speaker and the addressee. This way, “they” may be used to distance “self” and others belonging to the group of “we” from other specified groups (Wilson 1990: 67–68). The distance between “self” and “they” is always instance-specifically created and used (Wilson 1990: 70).

What is sociologically another interesting part of “them” is how it not only separates from but also connects to the “we.” From a sociological standpoint, the members of “they” always form a group that is meaningful to “us”: “they” are needed for understanding who “we” are and what makes us “we” (Bauman 1990). Thus, boundaries come with both distinction (from) and connection (to). This means that when the distinction between “us” and “them” is made, it creates a purposeful separation between the two but at the same time a relationship between them. There is something highly relevant in “them” that makes exactly that group useful in relation to “us,” and that relationship connects the two groups together. This is why the separation between “us” and “them” (or “the Other”) can be seen as one of the basic ways to understand the social reality around, and within, us. Therefore, and in order for us to understand the social reality in which ERA-NET agents work, it is meaningful to examine both the “we”s and the “they”s that they use.

The aforementioned research approach, to study how policy agents use the words “we” and “they” in their talk, enables me to study the situational use of identity categories. This entails investigating naturally occurring<sup>19</sup> boundaries and contents of identity-categorization systems. The categories may be used very consciously or much less so, yet either way they tell us about the identity categories research-funding professionals use when they describe their work and, accordingly, regard as relevant. In practice, I shall locate the moments at which interviewees used the pronoun “we” and examine more closely what precisely they meant by it at each of those particular moments. I will also inspect the contexts in which alternative identity categories are used: what are the funders talking about when a particular identity category is used? Finally, I will take a look at how the talk has been employed, to what end: how the identity category was used, and for what.

In addition, by employing multiple measurement techniques from rhetorical, narrative, and discourse analysis, I am able to shed light on what is done through actions such as using, or constructing, a particular identity in a certain context. These techniques are employed throughout the dissertation in the analysis of ERA-NET agents’ talk, but their particular importance is highlighted in the context of policy documents. For example, to situate a particular discourse, such as the knowledge-based economy one, I use some of its distinctive characteristics, especially concepts it encompasses, to locate its use. After identifying and locating the discourse in text, I apply narrative and rhetorical analysis, allowing me to say more about how and for what purposes it is used.

By employing methods of narrative analysis, I concentrate specifically on the cultural framing of actions through use of the discourse. Via these methods, I am able to uncover the argumentative rationality of the documents, and the framing of actions, to which end I examine how the definition of the reality and political problems stands in relation to the particular narrative in which it is discussed. Here the focus is on the narrative and how it constructs reality. Moreover, to illustrate certain narrative constructions, I use Greimas’s actantial model, which aids in reconstructing the basic actors of the narrative and the associated tasks (Greimas 1971, Greimas & Porter 1977). Hence, the narrative analysis reveals the structure of the logic used by the speakers and the subject positions that the speakers give to various actors within.

Additionally, policy documents are political in that their purpose is to convince a universal audience, for which purpose rhetorical means are among the tools used (Perelman & Olbrechts-Tyteca 1969). Language is a means of affecting other people’s understanding of the reality. Accordingly, by analyzing the rhetorical means embodied

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<sup>19</sup> By “naturally occurring,” I refer to the identity categories the interviewees used in talking about their work when not asked about identities or attachments. The interview questions consisted of general questions about European science funding and ERA-NETs, such as whether the interviewee considers European cooperation in science policy important, why, and what the most important future steps for European science funding are. At no time did I ask the interviewees who they were working for or regarded themselves as representing.

in the documents, mainly at the three levels of rhetorical analysis identified by Perelman (1982) (ethos, pathos, and logos), I search for the ways in which policy actors attempt to convince their audience to accept the discourse at hand. In consideration of this methodological context, I argue that discourse and narrative analysis of the selected documents allow me to find out how policy actors construct political problems and social reality, how they position themselves within these, and what consequences are thereby created. Furthermore, the rhetorical analysis enables me to ascertain how the agents strive to convince the reader or the listener to accept and adopt the reality they are constructing.

The dataset for my research consists of policy documents and interviews. The primary source of document-form data, used mainly in the knowledge-based economy discourse analysis, consists of the OECD, EU, G8, and Finnish public policy documents from 1995–2005 dealing with the knowledge-based economy and the knowledge and information society and the Finnish government ministries' "future reviews" from 2006 and 2010 in which they describe the most central short- and mid-term challenges and action alternatives in their respective policy fields. The Finnish Future Review documents are produced by the ministerial staff every four years, just before Parliamentary elections, to communicate to the political parties about the kind of actions required in their policy field to contribute to the positive development of Finland. Therefore, the documents are targeted at potential funders of the ministries and of their actions. Concurrently, they serve as good material for analyzing how and for what purposes the discourse of the knowledge-based economy is used by Finnish ministries.

Another set of document data is used in the analysis of practice formation in ERA-NETs. The data consists of internal documentation of three distinct ERA-NETs that were active in the latter half of the previous decade, pertaining to their research-funding calls and how they were conducted. This data source was used to find the most difficult stages of designing a common research call, with these findings then being complemented with related interviews, and together the data sources were analyzed to answer questions such as how agents use their social identity categories in practical situations, how they cope with situations in which they have to apply contradicting institutional requirements, and how they combine global scripts with local requirements. All the documental data were produced prior to my study.

The other part of my dataset consists of interviews with ERA-NET agents in several countries and ERA-NETs. The choice of ERA-NETs to be the object of study in this work arose from their special standing with regard to European science policy. Firstly, the ERA-NET action came into being as one of the early, key EU-initiated instruments for creating the ERA. Hence, it can be regarded as representing a new science-policy governance mode in Europe, one based on the idea of an open method

of coordination, proposing that European objectives be incorporated into national science policies, and aimed at coordination of previously separate national policies. This entails a practical challenge for policy professionals, for whom it necessitates finding new ways to collaborate on the European level and work together to, for example, build common research agendas, procedures for calls for research, and joint funding practices. Secondly, it serves as an interesting site for examination of the reasons for which a policy instrument that is less than successful has remained popular irrespective of its noticeable shortcomings. Thirdly, the ERA-NET action is a context for fruitful study of the possible existence and use of both national and European identity categories rooted in agents' multi-level engagements as national actors working on a European platform. Correspondingly, research-funding organizations' representatives were selected for interviews because they are the key actors in the ERA-NET system, their multi-level attachments offer fertile ground for studying social identity categories, and tasks they perform turn policy agendas into concrete practices. The latter work forms a stepping stone to examining also the frequently overlooked practice-formation level, in both the local and the European domain, with respect to institutionally and organizationally imposed interests, policy discourses, and professional principles.

The participants interviewed were individuals representing research program owners – typically ministries or regional authorities defining research programs – or program managers such as research councils or other research-funding agencies managing research programs. For example, the ERA-NETs in FP6 involved more than 1,000 representatives, from 38 countries, and participants were drawn from ministries (38%), agencies (28%), and research councils (23%) (Commission of the European Communities 2006). Thus, ERA-NETs are enacted by research-policy and funding professionals all over Europe, for which reason they are also called “research funders.” Together, and with the assistance of an appointed coordinator, they meet and work for a number of years to accomplish tasks, which may, for example, involve transnational research-funding calls, workshops on thematic research-policy areas, or common research databases. The objectives for the tasks are to learn from each other in order to find best and common practices and, secondly, to find opportunities and overcome barriers to common research agendas, joint research-funding initiatives, and opening up of national research programs.

The empirical data were gathered via interviews with ERA-NET agents, individuals representing research-funding organizations, around Europe. In total, 20 ERA-NET agents from eight nation-states, 11 distinct organizations, and 10 individual ERA-NETs, were interviewed during the period 2009–2012. The interviews were constructed around thematic questions all having to do with the European, international ERA-NET funding system and working in ERA-NETs. Additionally, two cooperative meetings, lasting five working days in all, were attended and recorded, but these data were only

used for background information on the important issues and discussion evident at ERA-NET meetings. The interview data were used for studying what the identity categories of science-policy professionals are, how these categories are used, for what in which situations, and what sorts of interests are attached to the identities. Attention was paid also to matters such as the science-policy principles expressed and how they were turned into practices and why. In addition, expressions of nation-state borders and other national issues were given a closer look, for revealing how national issues played a role both in general and particularly in designing of international, European research calls.

The body of data I work with is suitable for in-depth qualitative but not statistical analysis. It is the insights offered by the reading more than the quantity read that is the empirical focus of my work. This means that I have data gathered from a good number of appropriately chosen informants who had all taken part in one or more ERA-NETs and had inside information about operating in them. Anonymity was promised to the research-policy and funding professionals interviewed, for which reason I will refer to the information gained from the interviews by interview codes. I include a list of interviewees, presenting the country represented, the type of funding organization represented, and their role in the particular ERA-NET the interview dealt primarily with (see Appendix 1). The categorization by funding-organization type is my own, and it refers to one of the main organization interests, which will be discussed in the body of the dissertation. The representatives' words about the organization's interests and, when needed, description of the organization from the ERA-NET Web pages were the grounds for the typology. The interviewee list indicates as the ERA-NET role either the current or the main role about which interviewees were speaking during the interviews. Some interviewees talked about various positions, in which case all positions are mentioned. For reasons of anonymity, the text uses "she" and "her" in all references to interviewees' gender.

All interviews were audiotaped and later transcribed. The interviews focused on certain general topic areas, which were discussed with each interviewee, dealing with working in ERA-NETs, their experiences in ERA-NETs, the prospects for the ERA and ERA-NETs, etc. The interviews were structured loosely enough that the interviewees had considerable freedom to develop the topics and steer the conversation as they wished. Interviews were conducted in Finnish or English, one of the two being either the first or the second language of both the interviewer and, in most cases, the interviewee. All analysis was conducted with reference to the original language. However, the reporting of the results is in English, which inevitably raises questions about the validity of the analysis and reporting. Translating language always involves the question of translating meaning and culture, which is never an easy task to accomplish. My solution was to have the Finnish-language excerpts translated by a professional translator, after which they

were checked by me to ensure that they correctly convey the meanings (and concepts) of the conversation. After this, the excerpts were checked once more, by another professional translator, to ensure that they were correctly translated.

Only minor changes were made from the spoken language to increase readability. The **boldface** in the extracts is mine, applied to indicate a word or utterance section with particular analytical significance. The following further special notation is applied in their transcription:

- , (Micro) pause
- ... An interrupted or continued statement
- Breaking off mid-word or mid-phrase
- underlined A word or utterance section given particular emphasis by the speaker
- [...] Elision of some speech by the researcher
- [brackets] Researcher's comment, amendment, or replacement of a word (for anonymity); also, non-verbal communication by the interviewee or translation of non-English phrases

## Organization of the dissertation

This dissertation consists of four separate analyses, creating knowledge about different aspects of identity work and identity use in situations in which national policies are harmonized. The four distinct analyses enable me to reveal and showcase the significance of social identities and identity work in the process of glocalization.

The dissertation begins with analysis of the use of one of the most popular discourses that has marked science policy in the EU, and in various nation-states, for the past 20 or so years. In Chapter 2, I will examine how the knowledge-based economy discourse was transferred from academic discussions to the realm of politics and how it became one of the most influential frameworks of thought on a global scale. After this, I will show how one of the key terms in this discourse (namely, "information society") was adopted in Finnish-level political argumentation in Finnish ministries. By analyzing the use of the concept via methods of discourse, narrative, and rhetoric analysis, I will demonstrate how the term was used for building the national identity of a ministry as a policy actor, its existence, and its significance but also why the term worked so well in the accomplishment of this. At the end of the chapter I will consider more fully what the purpose of global and internationally well-known catchphrases is for policy actors and how their global spread can be understood from the standpoint of self-definition. The chapter also shows that, although science policy forms its own policy sector, some

of its key discourses and ideas have permeated political discussion at large. This shows the salience of knowledge, education, scientific knowledge, research and development, and technological development in our times across all policy sectors and throughout nation-states.

After this grounding analysis, in which I take a stand on general phenomena contributing to national policymaking and policy change, I will move on to take a closer look at actual science-policy and research-funding practices in the EU. In the following three chapters, I therefore concentrate on studying research-policy professionals and their work in ERA-NETs. In Chapter 3, I will analyze interviews with research funders and present the kinds of social identity categories they use in their talk, along with how they differ from each other. In the fourth chapter, I will continue the discussion by examining in more detail the interests attached to each of these identity categories, and by investigating their contents I will seek an explanation for national agents' participation in ERA-NETs in the puzzling situation in which ERA-NETs have remained popular notwithstanding their only modest results. Consequently, I will contemplate the source of national interests in that chapter and show how they are distinct yet common at the same time.

In Chapter 5, I will then investigate how these identity categories and attached interests are used by research funders in actual research-funding practices in ERA-NETs. I will introduce five strategies funders use by which they are able to pursue their national and organizational interests also in situations in which global principles of science policy run counter to pursuing such interests. The study shows, firstly, that these agents clearly possess institutional, discursive, and rhetorical abilities not only to comply with (new) institutional rules but also to change and stretch these rules in creative yet still socially acceptable ways. Secondly, the chapter offers knowledge about what happens on the actor level when global principles are seemingly decoupled from action and how, once again, examination of social identity categories and identity work can yield more nuanced comprehension of such situations. Finally, in the concluding chapter, I will recapitulate the findings from the study and discuss their empirical and theoretical relevance.

# Domesticating the knowledge-based economy in Finland

Political scientists, policy researchers, and sociologists are showing increased interest in isomorphic, parallel change among nation-states. The burgeoning field of global and transnational sociology asks why and how actors are adopting the same worldwide models (Lechner & Boli 2005), and researchers are paying greater attention to how global forms of governance steer public policy in nation-states (Armingeon & Beyeler 2004, Deacon 2007, Djelic & Sahlin-Andersson 2006c, Nagel & Robb 2007). These associated studies stress the increasing quantity and expanding role of similar national-policy-oriented organizations (Schofer & Meyer 2005), policy paradigms spreading across nations (Béland 2005), and the importance of international governmental and non-governmental organizations in contributing to the phenomenon (Boli & Thomas 1999a, Murphy 2007, Porter & Craig 2004). They give us a macro-level view of how broad policy changes occur on a global stage. However, less research effort is devoted to the investigation of processes triggered locally by the introduction of a transnational model (Alasuutari & Rasimus 2009, Lechner 2007). Because global policy research tends to draw on large, global statistical datasets, we know little of how models actually become adopted nationally and the processes that lead national actors to incorporate externally formulated policies into the national dialogue.

One example of isomorphic change around the world is the notion, commonly accepted nowadays, that the global economic environment has shifted towards being dependent on knowledge and innovations. One of the concepts exemplifying this trend is that of the knowledge-based economy, representing a worldwide phenomenon. One country, region, and international coalition after another has announced itself to be a knowledge-based economy or, alternatively, knowledge society (Casey 2006, European Council 2000, G8/7 1999, OECD 1996). Even though concepts such as knowledge society and information society focus on other parts of the process, they too express a connection between knowledge and economy.<sup>20</sup>

The golden age of economic knowledge discourse, or the model of the knowledge-based economy, came at the dawn of the 21st century. For example, the European Union

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<sup>20</sup> I argue that, although knowledge society and information society are separate concepts from knowledge-based economy, they are parts of the same discourse. For instance, in an important OECD document (1996), the discussion of economic knowledge combines two forms of knowledge, human capital and technology, and anchors them firmly within the sphere of economics, economic productivity, and growth. Alongside the knowledge-based economy, this discourse includes concepts such as information society, learning economy, and network society also, all entailing assumptions of economic growth though concentrating on separate actors, structures, and impacts. See Appendix 2.

used the concept of a knowledge-based economy in its policy documents for the first time in 1995, and in 2000 it was adopted as a key underpinning of EU strategy, after which its use in EU policy documents exploded, from one document in 1999 and 90 in 2000 to 161 documents in 2001.<sup>21</sup> A similar trend can be seen elsewhere. For example, in Finland, where the concept of the knowledge-based economy never gained such an important role in national policymaking, the concept of the information society<sup>22</sup> found an equivalent sort of success. The latter concept was already in use in 1991, and in 1996 mention of it was found in 14 acts, peaking finally in 2004, when the term “information society” was used in 107 government acts<sup>23</sup> (see Figure 1). In both cases one can see also that the popularity of the concepts started to decline not long after this, in Finland in 2005 and in the EU in 2007.

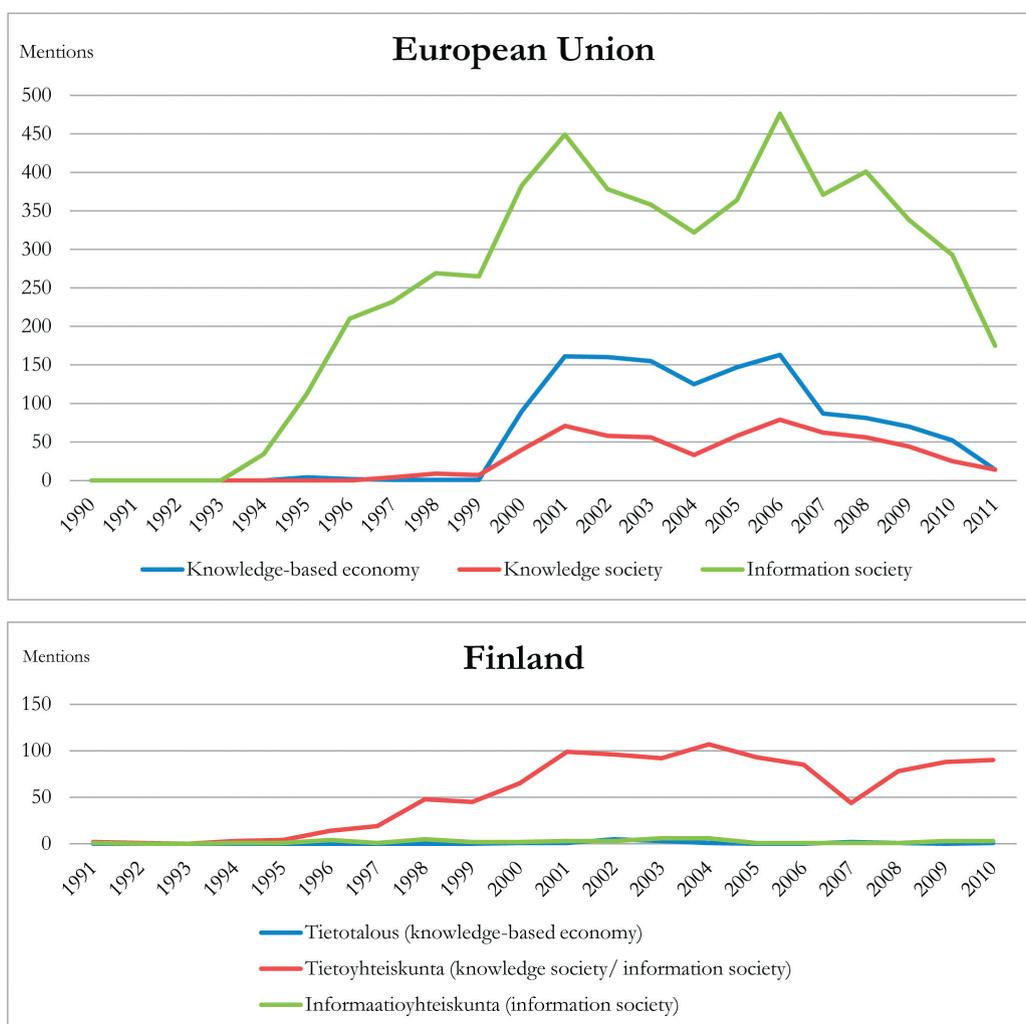


Figure 1: Popularity of the core terms in supranational and national documents.

All in all, knowledge, including the elements of education, information technology, research, development, and innovation, is highlighted in strategies and reform programs all over the world not only in the industrial sector or education policy but in all sectors as contributing to the competitiveness and economic growth of nation-states. How can the spread of the idea of the knowledge-based economy and the related discourse be understood? What explains the success of it around the world; why has it spread so intensively and so far?

Unlike many other transnational or neo-institutional studies, the present work is designed to develop an explanation at the local level. The isomorphic change nation-states exhibit by adopting the same worldwide model is examined by concentrating on its domestication process in a nation-state (see, e.g., Alasuutari 2009, Lechner & Boli 2005: 35). The term “domestication” refers to the ways in which a global model is adopted and modified to fit the local context (Rautalin & Alasuutari 2009). A fruitful setting for investigation of such a domestication process is Finland, a country that has been cited by several of its own ministries and other government bodies as one of the forerunners and leaders in the information society. To answer the question of why the knowledge-based economy discourse has spread to Finland, I studied national Finnish sectoral policy documents to ascertain what policy actors do by their use of this discourse, how it is domesticated, and how actors benefit from domesticating it to their policy field.

I begin by discussing the appearance of the knowledge-based economy discourse, in the mid-1990s: its origins and use within international organizations such as the OECD and the EU. Then, I take a closer look at how the discourse is domesticated to Finnish policies and in which distinct ways the discourse has been used in recent history by the Finnish ministries. Finally, the empirical results are interpreted and discussed within the lines of broader perspectives offered by world culture, world polity, and domestication theories.

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<sup>21</sup> Source: Publications Office of the European Union (2011). A word search was performed on all EU policy documents since 1990.

<sup>22</sup> The concept in Finnish is tietoyhteiskunta. A literal translation of the concept would be “knowledge society,” but the translation used in various government acts and documents is “information society.” For example, the Government Policy Programme called the Information Society Programme in English is referred to as “Hallituksen tietoyhteiskuntaohjelma” in Finnish. The concept of information society in English (e.g., in the EU documents) has its own meaning separate from – though related to – that of knowledge society or knowledge(-based) economy. Yet the use of these terms in Finnish documents is different. In Finnish documents, the terms “tietoyhteiskunta” and “tietotalous” are used to refer to the content of the English terms “knowledge society” and “knowledge(-based) economy,” but when the Finnish documents are translated into English, the Finnish notion of tietoyhteiskunta is rendered in English as “information society.” Hence, when Finnish documents translated into English speak of the information society, the meaning very often still is “knowledge society” or even “knowledge economy,” since the term “tietotalous” (“knowledge-based economy”) is only rarely used in Finnish documents. Such a mixed use of the concepts supports the choice of handling them as part of the same discourse.

<sup>23</sup> Source: Finnish Parliament (2011). The term search covered all Parliamentary documents since 1991.

## Knowledge from economics and New Growth Theory in the media

Knowledge has forcefully entered strategies and policies of both international and national governments over the past two decades. This *per se* is nothing new, because knowledge has for centuries been an important factor in nation-states' production of, for example, new technologies for industrial development and warfare, but the role of knowledge as a societal and economic factor changed in the mid-1990s, generating new roles and responsibilities.<sup>24</sup>

Conventional economic theory takes economic growth to be a result of two factors: labor productivity and labor-supply growth (Solow 1957). Productive inputs such as labor quality and capital enable increases in productivity, and that economic growth that is not explained by these two is referred to as multifactor productivity, or the Solow residual. Growth in multifactor productivity results from technical progress and improved efficiency (Powell & Snellman 2004: 207). Nowadays, it is widely recognized that knowledge or the ability to know is productive in its own right. This type of argument was first introduced back in the 1960s (see Machlup 1962), but it would be 30 years before it became a major concern for economists and a key theme of their research (Vähämäki 2009: 73–76).

In the early 1990s, knowledge generated with the emergence of rapid technological development, information technology, and global markets shook up the field of academic economics and challenged some of the main theories relied upon thus far. In consequence, the traditional neoclassical model faced criticism for not including some important factors in long-run growth. The old theory lost some of its apparent plausibility, and new explanations to perceptions were sought. As a result, a new economic theory explaining growth, New Growth Theory, was introduced. Among other amendments to the traditional growth models, it features extension of the concept of capital to include both physical and human components comprising skills and a stock of knowledge, and it gives a bigger role in growth outcomes to accumulation of capital (Crafts & Toniolo 1996: 15).

The strong performance of the US economy in the 1990s greatly affected the New Growth Theory debate. That the US was doing better than others at that time motivated economists to seek explanations for such phenomena. The economic development of the US was generally offered as evidence that there exists at least one economy in which the notion of the New Economy holds true (Pohjola 2002b).

With New Growth Theory, new attention was given to the role of knowledge in contributing to the competitiveness and economic growth of entire nation-states. It entered strongly into economics discourse. From the discourse perspective, one can say that in the 1990s the economic development of the US, which could have not been

explained by the old economic theories, was reframed by a new theory, which gave meaning and plausible interpretation to the evident events and facts. Without such a frame, too many remarks would have seemed irrational and unattached. New Growth Theory did what traditional neoclassical-model theory could not do anymore: explain and give meaning to economic development that could be measured in the US.

As the economic discussion of growth and knowledge started to change, the media too seized on the phenomenon, and many employed a new kind of economic narrative based on New Growth Theory arguments. Consequently, in the mid-1990s the business press coined the term “New Economy,” for a phenomenon that was said to be able to benefit from two trends shaping the world economy: the globalization of business and the revolution in information and communication technology (Pohjola 2002b). In the New Economy narrative, it is argued that the benefits from these trends should accrue in the form of improvements in productivity and economic growth, with information and knowledge belonging to the group of essential raw materials (Bukh et al. 2005, Pohjola 2002b). A new economic narrative connecting knowledge, information technology, globalization, and economic growth together via causal links was born.

## **New Growth Theory and the knowledge-based economy in international policymaking**

Shortly after the first debates on New Growth Theory in economics and the New Economy in the media, international organizations, such as the G8/7, the UN, the OECD, and the EU, adopted the narrative and replicated it in the realm of politics. In consequence, they started to employ this narrative to promote societal change. In doing so, they introduced new concepts such as information society, knowledge society, and knowledge-driven or knowledge-based economy, all found within the same knowledge-based economy discourse yet focusing on slightly different aspects of it (see Appendix 2).<sup>25</sup>

The influx of this discourse into the realm of international politics was rapid and showed extensive parallelism. For example, the G8/7,<sup>26</sup> which has been meeting annually since 1975 to deal with major economic and political issues, held the Ministerial

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<sup>24</sup> Many classical economists, such as Adam Smith, Friedrich List, Karl Marx, Joseph Schumpeter, and Friedrich Hayek, have discussed knowledge as an economic factor, yet it was seen as having an exogenous role in relation to productivity; traditional production functions focus on labor, capital, materials, and energy, whereas knowledge and technology are external influences on production. Such an idea dominated economics until the 1980s (Vähämäki 2009: 73–76).

<sup>25</sup> According to Pohjola, many concepts, such as those termed “post-industrial society,” “information society,” “innovation economy,” “knowledge economy,” “network economy,” “digital economy,” “weightless economy,” and “e-economy,” all describe the same, ongoing transformation of the economy (Pohjola 2002b).

<sup>26</sup> The heads of state or government of the major industrial democracies, including the President of the European Commission.

Conference on the Global Information Society in 1995 in Brussels and discussed the importance of information technology in its communiqué of the same year. In 1996, it committed itself to the New Global Economy, by which it meant the cohesive impact of information technology and economic globalization. Finally, in 1999, it stated that it supports the development of the knowledge-based society around the globe (G8/7 1995, 1996, 1999). Simultaneously, the OECD, which works in close connection with the G8/7 and provides policy analyses, statistics, and policy recommendations for governments committed to democracy and the market economy around the world, published the report *The Knowledge-based Economy* in 1996. In that document, the OECD makes an unambiguous statement that knowledge is the new driver of growth:

Knowledge is now recognised as the driver of productivity and economic growth. Leading to a new focus on the role of information, technology and learning in economic performance. The term “knowledge-based economy” stems from this fuller recognition of the place of knowledge and technology in modern OECD economies. (OECD 1996: 3)

Soon afterwards, the EU followed the trend of promoting the knowledge-based economy, along with guidelines presented in the OECD (1996) report. Some of the most visible and probably most effective of its knowledge-economy policies have been the original and revised form of the Lisbon Strategy (Commission of the European Communities 2005a, European Council 2000), in which elements of the knowledge-based economy are integrated into the main objectives set for European development. For example, in 2000 the EU set itself a new strategic goal for the next decade:

[T]o become the most competitive and dynamic knowledge-based economy in the world. (European Council 2000)

In its strategies, the European Commission employs the narrative of the knowledge-based economy and combines it with narratives of competition and competitiveness, which are familiar ways of justifying policy actions and excluding politics from political matters (Kantola & Seeck 2011). In this storyline, the opponents of Europe are the powerful economic areas of North America and Asia, which are presented as increasing in productivity more rapidly and investing more in research and development (Commission of the European Communities 2005a: 4). For winning the productivity and growth competition, the commission calls for assistance via knowledge and innovation, which are presented as “the beating heart of European growth” (Commission of the European Communities 2005a: 4).

The coherent overall storyline of the revised Lisbon Strategy (2005a) and especially the role of knowledge in it is presented by means of the Greimas’s actantial model in

Diagram 1, below.

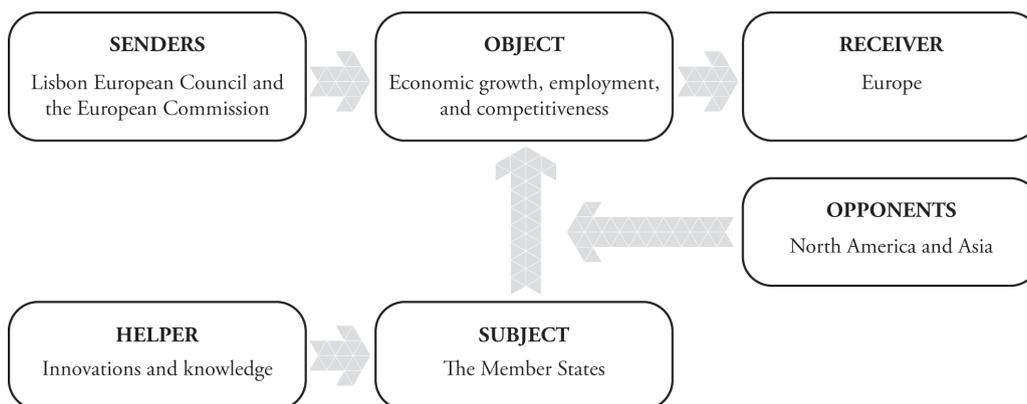


Diagram 1: The storyline of the revised Lisbon Strategy (2005a) and the role of knowledge in it analyzed through the use of Greimas's actantial model.

The knowledge-based economy narrative is presented in the documents as a strong premise, a new state of economics that Europe needs to face in order to stay competitive in the global growth competition. The situation is presented as critical in a number of ways, such as in saying that Europe is lagging behind North America and Asia. A political choice to invest more in research, education, technology, and innovations is then presented not only as beneficial for the member countries but as essential and almost mandatory if the whole of Europe is to be helped to compete together, as a unit, against stronger economies and its main competitors.

## Domestication of the knowledge-based economy in Finland

Finland was an early adopter of the knowledge-based economy discourse, embracing it in the 1990s. The main concept of the whole narrative used in Finland has been that of the information society, probably due to the strong influence of information technology; industry; and, most of all, Nokia in the development of the Finnish economy at the time.<sup>27</sup> Use of the concept<sup>28</sup> in the public sector began a rapid increase in the early 1990s, peaking in the first half of the 2000s in its inclusion in 347 policy documents (in the 2003–2006 government term), then started a slow decline. The concept of the knowledge-based economy never gained such popularity; between 1991 and 2010, the

<sup>27</sup> See Figure 1.

<sup>28</sup> In Finnish, tietoyhteiskunta.

Finnish translation of “knowledge-based economy”<sup>29</sup> and of “information society”<sup>30</sup> were used in connection with, in all, only 15 and 45 documents, respectively.<sup>31</sup>

Information-society matters have been taken seriously in Finland, and the country has, in fact, been named by several of its governments and ministries as one of the forerunners and leaders in the information-society realm. The roots of the discourse, though, can be traced even further back, to the 1980s, and to the private sector, which was first to react to the increasingly global nature of the economy. A national knowledge base then became seen as crucial for Finnish companies’ survival in the new situation, which led to investments in research and development. Only later, in the mid-1990s, was the concept of the knowledge-based economy adopted in the public sector and – while still reflecting mainly the needs of industry, information-technology development, and Nokia – treated as a model to guide science and technology policy (Schiensstock 2004, 2007).

Finland was the first OECD country to apply the national-system-of-innovation approach as a basis for national policymaking. Today, information-society development in Finland has been institutionalized in a number of forms, such as laws, strategies, and advisory bodies. All in all, after the 1990s, Finland’s economic specialization has been shifting further from a raw-material-, energy-, and capital-intensive structure towards knowledge-intensive high-tech fields (Schiensstock 2004: 288–310).

When it comes to producing and distributing economic knowledge in Finland, the role of the Ministry of Finance is especially important. This ministry produces knowledge about the development of the economy and needs related to it, along with ideas and viewpoints for further economic discussion and decision-making. It has an important role in selecting new economic theories and introducing them in the national context.

The ministry’s strategic documents from the first years of the 2000s show that the Finnish storyline of the knowledge-based economy resonates strongly with the storyline used by international organizations. It is nevertheless interpreted and modified a bit to fit the national context and national policies better. For example, in the early 2000s, the storyline of the knowledge-based economy was structured on the basis of two arguments: that of a shift from an investment-oriented economy to a new, innovation-led development phase and one of recent economic success, which the Ministry of Finance explains by the use of new technology, ICT, and supporting infrastructure (Ministry of Finance of Finland 2001: 10–11, 97). The economic competition among highly developed industrial countries is described as being merely a competition of innovations, technologies, and related know-how (Ministry of Finance of Finland 2001: 10), and Finland’s strengths in this competitive arena are said to be its science and technology environment, R&D investments, and level of human capital<sup>32</sup> (Ministry of Finance of Finland 2001: 9–10).

The New Economy theory was made visible a year later, in 2002 (Ministry of Finance of Finland 2002), when the ministry openly pondered its accuracy. It produced a document

that discussed the theory in great depth, presenting its origins and premises, and even some hesitation about its accuracy is expressed:

Esimerkkinä teollisuusmaiden talouden uudesta vaiheesta pidettiin 1990-luvulla Yhdysvaltojen talouskehitystä, jota leimasi myönteinen työllisyyskehitys, matala inflaatio ja nopea talouskasvu. Näiden saavutusten on katsottu perustuvan suurelta osin uuden informaatioteknologian mahdollisuuksien tehokkaaseen hyväksikäyttöön. Talouskasvun hidastuminen vuonna 2001 on kuitenkin asettanut uuden talouden monien mielestä kyseenalaiseksi. Väitteet uudesta taloudesta perustuvat toistaiseksi lähinnä vain 1990-luvun jälkipuoliskon kokemuksiin, ja tämän takia ilmiöön on suhtauduttava varovaisesti. Viime aikoina keskustelu uudesta taloudesta on selvästi laantunut. Selvää ei ole, onko se jo ohitettu ilmiö vai valmistautumassa uuteen tulemiseen. (Ministry of Finance of Finland 2002: 16)

Examples of the new stage of the economy of the industrialized countries were taken to be the US economic development in the 1990s, which was characterized by positive industrial development, low inflation, and fast economic growth. These achievements have been considered to be largely based on the efficient exploitation of the options afforded by the new information technology. In the opinion of many, however, the slowing of economic growth in 2001 called the idea of the new economy into question. Claims about the new economy are based so far on the experiences of the latter half of the 1990s, and hence the phenomenon should be approached with caution. Discussion of the new economy has recently abated. It is not clear whether it is already over or gearing up for a second coming.

The theory and the storyline of the knowledge-based economy were nonetheless not discarded. Quite to the contrary, two new narratives were merged into it. The first of them is a national narrative of the aging population of Finland, and the other is globalization, more explicitly the new phase of global change. Both are used in the storyline of the knowledge-based economy, as two simultaneously influential and intensifying threats: external powers that need to be faced and struggled with when it comes to competition for economic growth.<sup>33</sup> Once again, the answer provided is adjustment to the change, and exploitation of technology (Ministry of Finance of Finland 2004: foreword). Also, the nationally important narrative of the welfare society was utilized in the new storyline of the

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<sup>29</sup> In Finnish, tietotalous.

<sup>30</sup> In Finnish, informaatioyhteiskunta.

<sup>31</sup> Source: Finnish Parliament (2011).

<sup>32</sup> Finland is described as being developed as “an education society” (Ministry of Finance of Finland 2001: 9).

<sup>33</sup> The current situation is described as being a challenge on account of the new questions surrounding economic growth, which need to be answered in a situation wherein the Finnish action environment is undergoing radical changes and the key to increasing employment and productivity lies in its ability to adjust to changes in the global economy and in the exploitation of technology.

knowledge-based economy. For example, the Information Society Council represented Finland in 2006 as a recently developed information society able to reach such a high growth rate that decreasing unemployment and safeguarding the foundation of a welfare society can be carried through (Ministry of Finance of Finland 2007: 26).

In 2005, the storyline of the Finnish knowledge-based economy was presented to the EU in the National Reform Programme, published by the Ministry of Finance's Economics Department (2005). The basic and simplified storyline of the National Reform Programme of Finland in 2005 is depicted via the Greimas's actantial model in Diagram 2. It shows in a simple manner the structure of the storyline of the Finnish knowledge-based economy constructed by the Ministry of Finance. The objective for Finland and its policies is to reach sustained competitiveness, although aging, globalization, technological progress, and international division of labor are factors that hamper the endeavor. Moreover, Finland's geographical location and the small size of Finnish markets are making development difficult. Increasing human capital, innovations, and know-how will, however, aid Finland in this task, and the EU, together with its individual member countries, will thrive, inasmuch as Finland will succeed.

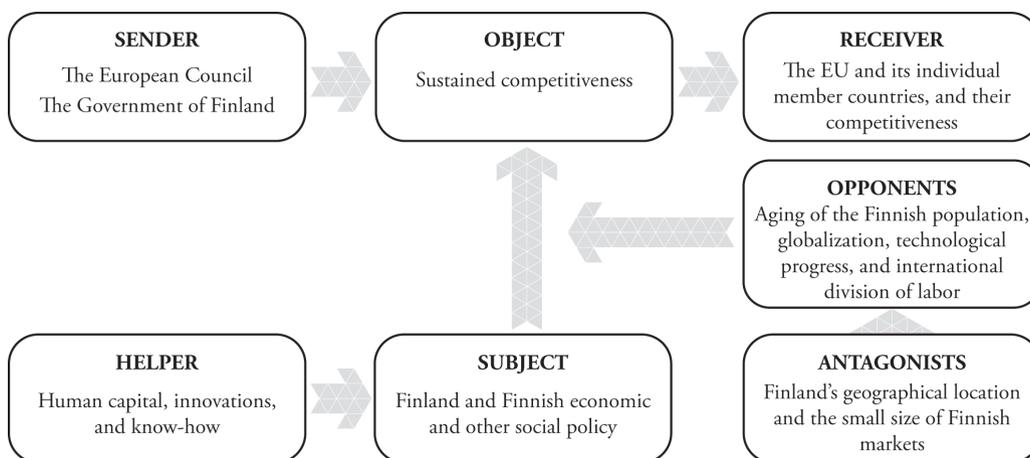


Diagram 2: The storyline of the knowledge-based economy in the Finnish National Reform Programme (2005).

This story-making by the Ministry of Finance makes Finnish policies visibly recognizable and understandable from the standpoint of the knowledge-based economy. It does so by plugging national Finnish economic development figures into the internationally recognized idea of the knowledge-based economy. Consequently, Finnish characteristics get reframed by the use of the discourse, creating new ways to understand the (economic) reality. Such a reconstruction of Finland as a knowledge-

based economy serves a twofold purpose. Firstly, it at least reinforces the apprehension that the overall idea of the knowledge-based economy is valid. It does so by showing that Finnish investment in education and ICT (which is measurable) and Finland's economic success (also measurable) are parallel developments, just as the idea of the knowledge-based economy, or the New Growth Theory behind it, argues. At the same time, it seems to prove that Finland is such a knowledge-based economy. The fact that Finland invests in education and ICT is presented as proof that Finland is, or is at least swiftly becoming, a knowledge-based economy.

As the Finnish Ministry of Finance domesticates the knowledge-based economy narrative to the realm of national politics, it naturalizes it via nationalization. It makes it measurable and visible and adds to its trajectory. Simultaneously, Finland increases in credibility as an international actor and as a member of the EU: it joins the club of knowledge-based economies. All this is done by using numerical, national parameters and indicators, and key here is the amount of investment in certain policy sectors, which is given a new meaning.

## **Local use of the knowledge-based economy discourse**

The discourse of the knowledge-based economy is used with diligence by the ministries in Finland. Seven ministries out of 12 used the concept of the information society in their future reviews in 2010, five of the 12 did so in 2006, and all ministries have used it in one or more of their other public policy documents published in 2001 or later. The knowledge-based economy discourse is also used in many ways and for several purposes. The storyline of economic growth based on knowledge and innovations is apparent and consistent throughout. By using the discourse as commonly shared reality, the ministries disseminate it, re-establish it, and add to its trajectory, making it even harder for others to resist. The tone of voice adopted in doing so is to enlighten instead of hesitant or pondering. Nowhere can a challenge to the idea of the knowledge-based economy be found expressed; quite the contrary. The discourse and national storyline are well agreed on and built upon. To understand the purpose for which it is used, I concentrate on how it is used as part of political activity in the future reviews of the Finnish ministries from 2010/2006.

## Naturalizing the knowledge-based economy discourse

First of all, the knowledge-based economy discourse is naturalized by Finnish ministries. Naturalization refers to speech acts that enhance the naturalness of an argument and the sense that it is beyond dispute. These are rhetorical ways to convince the audience to agree with one, for an ultimate of impression of “of course” or “naturally.” Creation of such a character for an argument enables its use for other purposes later, thanks to its unquestionable or undeniable nature. This can be done on two different rhetorical dimensions. Firstly, on the *énonciation*<sup>34</sup> level, an author can create the kind of a relationship between the implied author and the implied reader which increases the credibility of the arguments (Aro 1999: 23, Sulkunen & Törrönen 1997: 100). Secondly, on the *dictum* level, an author may use several elements to increase the message’s credibility.

The Finnish ministries use five distinct tools of rhetoric to convince the audience and to naturalize the discourse of the knowledge-based economy. Two are on the *énonciation* level: creating an asymmetrical relationship between the author and the reader by using the tone of “telling” and employing the passive voice in the arguments. On the *dictum* level, they naturalize the storyline by referring to shared authorities, using numerical information and international comparisons, and utilizing allegories.

Firstly, on the text’s *énonciation* level, the ministries use a rhetorical choice called “telling.” Telling means that not all the premises encompassed by the logical reasoning of the argument are explained; not all the information is shared, and it is implicit that the elements not included go without saying. By using this method, the author adopts a position above the reader, thereby generating a situation wherein the relationship between the implied author (the construction of the author itself) and the implied reader (the audience assumed by the author) is unequal (Aro 1999: 25, see also Gusfield 1976: 21–22). Consequently, the author gets authority over the issue dealt with. For example, the next extract reflects such a telling act. The ministry tells the reader how things are: that information and communication technologies play an important role in growth and productivity, and that the role is considerable. There is no room for deliberation.

Tieto- ja viestintäteknologioiden merkitys kasvun ja tuottavuuden parantamiseksi on huomattava. (Ministry of Transport and Communications of Finland 2010: 16)

The significance of information and communication technologies in the improvement of growth and productivity is considerable.

Secondly, the nature of the knowledge-based economy storyline as a self-evident fact is constructed through the narrator's use of the passive voice. This choice guides the reader to see things from the same perspective as the author of the text. A passive narrator asks the audience to examine things from an external position, from a distance, impersonally and usually without passion (Aro 1999: 26), as is the case here:

Tieto- ja viestintäteknologian tehokkaammalla hyödyntämisellä voidaan vastata mm. väestön ikääntymisestä ja työvoiman vähenemisestä sekä julkisen talouden velkaantumisesta aiheutuviin haasteisiin. (Ministry of Transport and Communications of Finland 2010: 16)

More efficient utilization of ICT makes it possible to respond to, among other things, population aging and reduction of the labor force, and also to the challenges posed by the indebtedness of the public economy.

Thirdly, the plausibility of the storyline is increased via references to authoritative producers and providers of knowledge. Because the storyline has its origins in an academic debate, one would suppose that economists or other scientists would also be mentioned, but this is not the case. As the extract below illustrates, the ministries refer only to politically relevant knowledge-producers such as the European Commission or the OECD, or to unspecified experts.

Euroopan komission arvion mukaan tieto- ja viestintäteknologia selittää 50 prosenttia EU:n tuottavuuden kasvusta. (Ministry of Transport and Communications of Finland 2010: 16)

According to a European Commission estimate, ICT accounts for 50 percent of the growth in EU productivity.

Fourthly, the storyline is naturalized by means of numerical information and international comparisons, which make theoretical ideas more concrete and measurable while also helping to, as it were, exclude politics from politics:

Erot teollisuusmaiden taloustilanteissa selittyvät suureksi osaksi tieto- ja viestintäteknologiainvestointien, -tutkimuksen ja -käytön määrillä sekä tietoyhteiskunta- ja mediatoimialojen kilpailukyvyllä. (Ministry of Transport and Communications of Finland 2010: 16)

Differences in the economic situations of the industrialized countries can largely be explained by the amount of ICT investment, research, and use, likewise their knowledge-society and media competition abilities.

Fifthly, the ministries employ allegories to make the development more understandable and familiar to the reader. The discourse of the knowledge-based economy includes new,

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<sup>34</sup> The énonciation level is that of communication patterns constructed within the text, whereas the dictum is what is said concretely.

unfamiliar assumptions about, for example, the social importance of the ICT sector. The social importance of, by contrast, steam power or electricity is widely acknowledged. Comparing information and communication technology with steam power and electricity in the evolution of history, as is done in the case below, creates an illusion of an analogy between them, which helps the audience to commit to the argument.

Tieto- ja viestintäteknologia on osoittautunut höyryvoiman tai sähkön kaltaiseksi yleiskäyttöiseksi teknologiaksi, joka luo edellytykset yhteiskunnan toimintaedellytysten ja talouden rakenteellisille uudistuksille. (Ministry of Transport and Communications of Finland 2010: 16)

Information and communication technology (ICT) has proven comparable to steam power or electricity as a technology in general use that creates the preconditions for the operating conditions of society and for structural reforms of the economy.

## Nationalizing the knowledge-based economy discourse

In tandem with being naturalized, the knowledge-based economy discourse is nationalized by Finnish ministries. The storylines of the knowledge-based economy discourse are presented as being not only economic facts but also national facts, which means that the premises and the storylines are also nationalized.

Finland is fitted into the storylines of knowledge-based economy discourse by the ministries in two ways. Firstly, national parameters, trends in social development, and other national problems and strengths are merged into the storylines. Finland thus becomes visible in relation to the storyline, and concurrently the storyline becomes proven and concrete within the Finnish context. The aging of the Finnish society, which was already illustrated above (and will be again below), serves as an example of this kind of act.

Secondly, a specific preparatory storyline is created in which the position of subject is given to the change (into a knowledge-based economy / information society) while Finland is presented as the object that has no choice but to adjust or obey. A preparatory narrative is used to motivate the actors and actions within the story, after which the main narrative solves the problems that motivated the actors to take the action in the first place (Aro 1999: 32, Sulkunen & Törrönen 1997).

The various ministries use two kinds of preparatory narrative to motivate certain types of political actions in Finland. In the first one, information-society development is an external, imperative force that poses a threat to Finland. This narratological choice creates political “needs” and “has to”s in the storylines, because Finland is put in a

position where it has no choice but to act, as can be seen in the next two extracts.

Siirtyminen digitaaliseen maailmaan edellyttää, että Suomi pysyy eturivin maana laadukkaiden viestintäverkkojen rakentamisessa ja käyttöönotossa. (Ministry of Transport and Communications of Finland 2010: 16)

Going digital entails Finland continuing to be on the front lines in the construction and introduction of high-quality information networks.

Tietoyhteiskuntakehityksessä mukana pysymiseksi ja täysimääräiseksi hyödyntämiseksi Suomi tarvitsee edelleen panostusta tieto- ja viestintäteknologian tutkimukseen, mutta myös vahvaa otetta sen soveltamiseen. (Ministry of Employment and the Economy of Finland 2010: 16)

For keeping up with the information-society development and taking full advantage of it, Finland continues to need investment in research on ICT but also a firm grasp of its application.

In the second preparatory narrative, the knowledge-based economy or information-society development is presented as a desired objective, an opportunity that can be realized via certain actions. In such a storyline, Finland becomes an actor that has to make the correct choices in order to attain the status of information society – preferably before other countries do, as can be seen here:

Vuoteen 2015 mennessä väestö vanhenee ja julkisen talouden kestävyys joutuu koetukselle. [...] Ikääntyvän väestön haaste voidaan kääntää Suomelle eduksi. Suomi voisi olla edelläkävijä arjen tietoyhteiskunnan tuomisessa ikääntyvän väestön ulottuville. (Ministry of Transport and Communications of Finland 2006: 35)

By 2015, the population will be aging and the sustainability of the public economy will be put to the test [...]. The challenge of an aging population may prove an advantage for Finland. Finland could be a pioneer in bringing the everyday information society within the grasp of an aging population.

Hyvä verkkoinfrastruktuuri avaisi suuria mahdollisuuksia palvelutuotannolle ja julkisille palveluille ja loisi Suomeen maailman ensimmäisen tasa-arvoisen arjen tietoyhteiskunnan. [...] Panostus merkitsisi Suomen tietoyhteiskunnan infrastruktuurin nostamista maailman kärkeen. (Ministry of Transport and Communications of Finland 2006: 36)

A good Net infrastructure would open vast opportunities for service production and public services and make Finland the first in the world with an everyday information society with equality [...]. The effort would mean raising the information-society infrastructure of Finland to the level of best in the world.

The preparatory narratives, which render the information-society development as either a threat to or an objective of Finland, are also designed to appeal to the audience's feelings. In Aristotle's *Rhetoric*, emotions, in fact, play a big part (Aristoteles transl. 1997). After a credible narrative of the reality has been created, attempts are made to activate the reader's assertiveness and compulsiveness through appealing to the audience's emotions. Support for the *logos*, the logical construction of the arguments, is backed up by favorable emotions, *pathos*.

In the ministries' future reviews, supporting emotions are elicited also via merging of the storylines of the knowledge-based economy discourse with other widely appreciated world-cultural ideas or principles. Examples can be found in discourses of competitiveness, of climate change, and/or of modernization, along with values of newness and progress, equality, quality of life, and evidence-based policy. Thereby, the probability of positive emotions is increased; the audience is likely to agree with at least one of the many predominant values, if not all, which should most certainly bring support for the author's arguments.

For example, the Ministry of Transport and Communications, all in a single document, argues for the importance of investing in ICT by stating that this would contribute to economic growth, productivity, problem-solving, competitiveness, innovation, social development, savings, and climate-change mitigation, while also sustaining and creating solid welfare (Ministry of Transport and Communications of Finland 2010: 18–24). Finally, the ministry comes to the illustrative conclusion that Finland could not function without what the ministry can provide: information and communication structures. The same rhetorical measure is used by other ministries, as can be noted from the extracts below.

Tietoyhteiskunnan kehittymistä pidetään yhtenä osaratkaisuna maapallon ekologisiin ongelmiin, erityisesti ilmastonmuutokseen. (Ministry of Finance of Finland 2010: 12)

The development of the information society is deemed one partial solution to the ecological problems of the world, especially climate change.

Yhteiskuntamme ei toimi ilman tieto- ja viestintäjärjestelmiä. (Ministry of Transport and Communications of Finland 2010: 24)

Without ICT, our society does not function.

Tieto- ja viestintäteknologioiden tehokkaan käytön perusedellytyksenä ovat laadukkaat, edulliset ja kaikkien saatavilla olevat viestintäpalvelut. Kyse on kansalaisten yhdenvertaisuudesta ja elämänlaadusta. Tieto- ja viestintätekn-

nologian käyttö ei ole itseisarvo, vaan väline hyvinvoinnin ylläpitämisessä ja lisäämisessä. (Ministry of Transport and Communications of Finland 2010: 18)

The basic precondition for the efficient utilization of ICT is communications services that are of high quality, low-cost, and available to all. This is a matter of people's equality and quality of life. The use of ICT is not a value in itself; it is a tool to sustain and increase well-being.

Julkisen päätöksenteon tulee perustua vankalle tietopohjalle. [...] Suomi kuuluu johtaviin tietoyhteiskuntakehityksen maihin. Tulevaisuuden strategiamme sekä valtiovallan, elinkeinoelämän että muun yhteiskunnan piirissä perustuvat leimallisesti tietoon ja osaamiseen. (Ministry of Justice of Finland 2006: 17)

Public decision-making should be based on a solid information base [...]. Finland is among the leading information-society countries. Future strategies of the state, business life, and the rest of society are characteristically based on knowledge and know-how.

On the other hand, supporting emotions are evoked by employing urgency and threat within the storylines. For example, the Ministry of Education and Culture below refers to the development as unpredictable. All these emotions guide the reader to take the storylines and the discourse seriously, because the discourse at the same time promises good things and cites serious threats, which both highlight exactly the correct actions to be realized.

Tietoyhteiskuntakehitys jatkuu voimakkaana ja saa uusia, ennakoimattomiakin muotoja. (Ministry of Education and Culture of Finland 2010: 7)

The information-society development continues in a strong manner and is assuming new, even unpredictable forms.

Turvallisuuden (security, safety) merkitys yhteiskunnan kaikilla osa-alueilla kasvaa. Uudet teknologiat, tietoyhteiskunnan kehittyminen, kansainvälistyminen ja väestön ikääntyminen lisäävät turvallisuuden tarvetta. (Ministry of Employment and the Economy of Finland 2010: 15)

The importance of security/safety in all sub-areas of society is increasing. New technologies, the development of the information society, internationalization, and population aging increase the need for security and safety.

## Creating subject positions by the knowledge-based economy discourse

Finally, the ministries create subject positions for themselves and others by using the knowledge-based economy discourse. The rhetorical methods presented above naturalize the storyline of the knowledge-based economy and nationalize it as a Finnish phenomenon. Yet there is another dimension to using the discourse: the way it highlights the importance of the ministries themselves. By means of these story-making methods, the actions and objectives of the ministries become important actors within the nationalized storylines of the knowledge-based economy discourse.

When it comes to defining their own subject positions, the ministries use preparatory narratives in which the position of subject within the story is assigned to the development (of the knowledge-based economy or information society). In the narratives, the development causes something, either positive or negative effects on the policy sector that the author ministry is in charge of. For example, here the Ministry of Justice states that various global and national trajectories are causing certain changes, and in the next extract the Ministry of Transport and Communications tells of what the information-society development offers to Finland:

Tuomareihin kohdistuvat ammatilliset vaatimukset ovat viime vuosikymmeninä kasvaneet. Lainkäytön kansainvälistyminen, oikeuden nopea muuttuminen, tietoyhteiskunnan kehitys ja tuomioistuinmenettelyn uudistuminen ovat tuoneet tuomioistuimille ja tuomareille uusia haasteita. (Ministry of Justice of Finland 2006: 22)

The professional demands imposed on judges have increased in recent years. The internationalization of jurisprudence, rapid legislative changes, the development of the information society, and the reform of court procedure have presented the courts and the judges with new challenges.

Tietoyhteiskuntakehitys tarjoaa uusia keinoja ja ratkaisumalleja liikkumisen helpottamiseksi, liikenteen ja logistiikan ongelmien poistamiseksi sekä koko liikennejärjestelmän palvelujen kehittämiseksi. (Ministry of Transport and Communications of Finland 2006: 10)

The development of the information society offers new ways and model solutions to facilitate mobility, to remove problems in traffic and logistics, and to further develop the entire transport system.

In the main narratives, the counter-subjectivity is then given to the values, actions, and objectives of the author ministry. This means that if, for example, the development

of the information society poses a threat in the sector of law and justice, it is the actions of the Ministry of Justice – for instance, better legislation – that can resolve the situation and overcome the threat. And the benefits of resolving the situation are described as extending throughout Finland, not only to the ministry’s own policy sector, which increases the national importance of the actions, an idea that can be noted also in the extracts below.

[O]ikeudenmukainen yhteiskunta perustuu luottamukseen ja yhteistoimintaan. Tällainen yhteiskunta kestää kriisit ja muutosten aiheuttamat paineet. [...] Sen tärkeitä rakennusosia ovat kuitenkin aidosti kansanvaltainen ja avoin yhteiskunta, hyvä lainsäädäntö, tehokas ja kohtuuhintainen oikeusturva, rikosvastuun toteuttava inhimillinen kriminaalipolitiikka sekä riittävän pysyvä ja ennakoitava kansalaisten oikeussuhteita koskeva perustuslainsäädäntö. (Ministry of Justice of Finland 2010: 11)

[A] just society is based on trust and joint activity. Such a society withstands crises and the pressures caused by changes [...]. The most important elements, however, are a genuinely democratic and open society, good legislation, effective and reasonably priced legal security, humane criminal policy implementing the responsibility for crime, and a sufficiently stable and predictability-yielding body of basic legislation on citizens’ relations before the law.

Tieto- ja viestintäteknologioiden merkitys kasvun ja tuottavuuden parantamiseksi on huomattava ja niiden tehokkaammalla hyödyntämisellä voidaan vastata moniin yhteiskunnan haasteisiin. Tietoyhteiskuntakehityksellä ja digitalisoinnilla on merkittävä rooli koko Suomen kilpailukyvyyn ja hyvinvoinnin ylläpitämisessä ja parantamisessa kiristyvässä globaalissa kilpailussa. Tieto- ja viestintäteknologian kehitys sekä teknologian hyödyntämisen mahdollistamat uudet innovaatiot, palvelut ja toimintatavat synnyttävät merkittävää kehityspotentiaalia kaikille yhteiskunnan sektoreille. (Ministry of Transport and Communications of Finland 2010: 18)

The significance of ICT in improving growth and productivity is considerable, and using ICT more effectively can be the answer to many of the challenges in society. The information society and digitalization have an important part to play in sustaining and improving Finland’s overall competitiveness and welfare amid intensifying global competition. The new innovations, services, and modes of operation enabled by the development in ICT and the utilization of technology create significant potential for all sectors of society.

Another way for the ministries to create their own subject positions is by reframing. Social values and discourses change over time, which creates pressures to be able to justify old duties of the ministries in new situations. For example, the old institution of

the postal service has served Finnish citizens for centuries, but the society around it has changed vastly in the meantime. Nowadays, the postal service has probably lost some of its value and rationality because e-mail has replaced some of its functions. Hence, the postal service is in danger of being deemed outmoded and of being lost if its existence cannot be justified anymore, in the new situation. Successful reframing of the old duties reconstructs them as (still) important actions that need to be supported and appreciated. Fitting such old duties into the new, convincing storyline, in this case the storyline of the information society, re-forms their value and importance as part of the societal infrastructure.

Reframing of duties is done in three, quite different ways. Firstly, they are relocated in the new storylines as they are.

Postipalvelut ja fyysinen jakeluverkko ovat osa tietoyhteiskunnankin perusinfrastruktuuria. (Ministry of Transport and Communications of Finland 2010: 23)

Even in the information society, the postal service and the physical distribution network are basic infrastructure.

Secondly, new concepts are devised to merge traditional duties into the new storylines of the knowledge-based economy discourse. These new concepts are attached to the discourse by means of its storylines, making them almost as new limbs of it. For example, the Finnish Ministry of Transport and Communications is in charge of developing transport and traffic, which in a way can be taken as at cross-purposes to the values and storylines related to climate change or the information society, in which the preferred mode of mobility is pollution-free and virtual. To overcome contradictions of this sort, the ministry employs the new concept of “i-traffic,” intelligent traffic that combines the spheres of information technology and traffic, thereby merging the old duty and the new framework in a way that brings new prestige to the old infrastructure.

Älyliikenteellä voidaan tukea liikennepoliitiikan lisäksi ainakin tietoyhteiskuntapolitiikan pyrkimyksiä samoin kuin ilmasto- ja ympäristöpolitiikkaa. (Ministry of Transport and Communications of Finland 2010: 17)

Intelligent traffic can be used to support not only traffic policy but also at least efforts at information-society policy, likewise climate and environmental policy.

Tulevaisuuden koulu on ”älykoulu.” (Ministry of Education and Culture of Finland 2010: 7)

The school of the future is an “intelligent school.”

Voidaan puhua ”e-tieteestä.” (Ministry of Education and Culture of Finland 2010: 7)

We can speak of “e-science.”

Thirdly, metaphors are used to reframe the ministries’ duties. For example, the Ministry of Transport and Communications explains the current meaning and value of the Finnish Broadcasting Company (YLE), established in 1926, as “the memory of the nation,” concurrently giving it a new purpose and meaning within the new discourse. In conclusion, by using reframing – relocation, new concepts, and metaphors – the ministries are able to fit their duties into the changing discourses constructing a foundation for political legitimacy. Such an action to modernize their old duties may well be a requisite for political legitimacy.

Yleisradio Oy:n julkinen palvelu televisio- ja radio-ohjelmistoinen ja muine sisältöpalveluineen on tärkeä osa tietoyhteiskuntaa. [...] Yhtiön roolia ”kansakunnan muistina” voidaan myös kehittää käyttäen julkisen palvelun mahdollisuuksia täysimääräisesti hyväksi tietoyhteiskunnan toteuttamisessa. (Ministry of Transport and Communications of Finland 2010: 20)

The YLE public-service broadcasting on television and radio and other content services are an important part of the information society [...]. The role of the company as “the memory of the nation” can also be developed by using the opportunities of public-service broadcasting to the full in the implementation of the information society.

The ministries define also other subject positions than their own. One further subject position that is defined in the documents is the subject position of the enabler. The future reviews of the ministries are targeted at the political parties right after the elections and before they start, to negotiate about the new Government Programme. They are targeted at decision-makers who will soon judge which social functions and projects are important and, accordingly, will get funded. In such a context, it is not surprising that the role of the enabler is given to the implied audience, the funders of the ministries’ work.

I have shown earlier how the author of the documents constructs a preparatory narrative of the knowledge-based economy or information-society development posing a threat or an opportunity to a particular political sector and the main narrative of the author ministry acting as a savior or a doer. There is still one more twist in the narrative, one that creates a subject position for the incoming government leaders as well. This is done through a statement declaring that the saving or the doing by the ministry cannot be realized without an external input: money or other required resources. Thus money, or the actor in charge of the allocation of that money, the funder / the government, is

presented as the only possible actual trigger for the positive line of consequences of the narrative, by providing funding. The government becomes the enabler. Simultaneously it may be implied that trouble will occur for the whole society if the enabler does not fulfil its duties. This measure is used, for instance, by the Ministry of Transport and Communications below as it tells the reader how investments in the policy field that it is in charge of may lead to tremendous social benefits.

Investoimalla tieto- ja viestintäteknologiaan voidaan saavuttaa huomattavia säästöjä hyvin pienillä muutoksilla ja toisaalta valtavia hyötyjä muuttamalla rakenteita digitaaliseen toimintaympäristöön sopiviksi. Asiantuntija-arvioiden mukaan hyödyt yhteiskunnalle voisivat olla vuositasolla jopa miljardiluokkaa. (Ministry of Transport and Communications of Finland 2010: 18)

Investments in ICT can achieve major savings with very slight changes and, at the same time, great benefits by changing structures to suit the digital operating environment. According to expert assessments, the benefits to the society could reach billions on the annual level.

Thus the rhetorical and narrative choices of the ministries finally enable them to ask for money without directly asking. Getting money, being funded, is only a reasonable conclusion once one has taken into account the narratives constructed by the ministries. In the carefully constructed situation, the ministries can in a way stand back and just state that providing money is the solution for Finland – seemingly regardless of their own interests or intentions.

Tietoyhteiskunta- ja digitalisoitumiskehityksessä on varmistettava kulttuurin ja tieteen digitaalisten tietovarantojen tehokas ja laadukas hallinta, jakelu sekä säilyttäminen. [...] Tämä edellyttää rahoituksen järjestämistä kirjastoja, arkistoja ja museoita koskevan Kansallisen digitaalisen kirjaston toteuttamiseksi. (Ministry of Education and Culture of Finland 2010: 23)

The development in the information society and digitalization must ensure the efficient and high-quality administration of digital information, its distribution and conservation [...]. This entails arranging funding in order to realize the National Digital Library pertaining to libraries, archives, and museums.

## **Actors' intentionality and the processes of domesticating a world-cultural model**

In this chapter, I have explored the process of domestication of a world-cultural model, the discourse of the knowledge-based economy, which has its roots in academic

economics and was later adopted and modified by international and national policy actors. I have shown how local actors, Finnish ministries, use the discourse in their policy documents, which are locally targeted and distributed. Proceeding from empirical rhetorical and narrative analysis, I have come to the conclusion that the ministries, by using the discourse, firstly naturalize it by creating storylines, *logos*, of the social situation at hand. They increase the storylines' credibility by using several rhetorical and story-making methods, such as referring to authoritative knowledge-producers; using measurable, numerical information; and employing allegories. The ministries also create a credible image of themselves, *ethos*, to increase the power of their message. Secondly, the ministries nationalize the discourse by relocating it to the local national context. This is done by completing the storylines with local elements that imbed them in the Finnish context. To increase the rhetorical force of their arguments, ministries also appeal to supportive emotions, *pathos*, by adding local problems and other world-cultural values to the storylines. The storylines constructed by these methods create a coherent picture of a global-local development that the audience is able to understand, perceive, and believe in. Then the ministries relocate themselves and their values, objectives, and duties to the storylines, adding to their own significance as national policy actors. Finally, they give the role of enabler to the coming government, which enables the ministries to ask for funding for themselves without directly asking.

To conclude the empirical analysis, I argue that, by using various rhetorical and narratological measures, the ministries construct a reality in which their own existence and also their old and new duties become or stay important. Rhetorical devices are applied to reframe the actions and the role of the ministries in a favorable way, and the knowledge-based economy discourse and the concept of the information society play a crucial role in this storytelling act. The reframing of actions and roles is done to construct an argumentative rationality that in a number of ways supports a sense of the existence, objectives, and actions of each ministry as being important. The discourse acts in this endeavor as an affordance that can be easily utilized by ministries. It works well in such an enterprise because it is at the same time vague enough to be flexibly modified and convincing enough to bring persuasiveness to arguments. It is used because it delivers almost limitless possibilities to justify the existence of the ministries and may be employed to support several, even contradictory, objectives.

The nature of the discourse as flexibly bringing prestige to its users enables it to function as ammunition in the constant battle among ministries, all of which need to fight for their existence and share of resources in Finland every four years, if not more often. The discourse serves as a tool for the various policy actors playing against each other in the game of sustaining their existence so as to gain funding and prestige. In general, the world-cultural models may lose their power over time as new values and

models arrive onstage and replace them. Concurrently, authors shift to other affordances and employ new discourses and storylines to remain convincing. These findings provide one explanation addressing the question of what makes world-cultural ideas so powerful and why local actors are so keen on domesticating them to their own policy argumentation without any external pressure. The variety and usefulness of the global knowledge-based economy discourse in justifying ministries' existence, objectives, and duties shows that the most interesting aspect of policy documents lies in the frameworks by which ministries' actions are argued for, and those frameworks may have a global dimension. This interpretation of the use of the world-cultural models adds one possible viewpoint in attempts to understand their attractiveness and the reasons for which they are employed locally, concurrently and without any coercive power being brought to bear.

A key concept used in this process of adopting the global discourse and using it for local purposes is domestication. There are, in fact, two domestication processes introduced. Above, I have elaborated more upon the ways in which the Finnish ministries domesticate the political, European and global knowledge-based economy to their own policies and how this endeavor may be understood; however, there is another process of domestication attached to the phenomenon, discussed only briefly in this chapter. The model of economies based on knowledge was, in fact, domesticated from the sphere of academic economics, brought into the policymaking sphere even before it became a concern for Finland's ministries.

The relationship between academic economics and policy implications is an interesting aspect. While in the 1990s economists began to adopt the new idea, a theory that knowledge and information technology have a bigger and unfamiliar role where economic growth is involved, they still were not sure how to understand, explain, or measure it. Scientific evidence was sought from the development of the ICT sector and related fields mainly in the US, but evidence remained scarce and the debate was far from over (see Pohjola 2002a). Yet the idea of the New Economy was for some reason so tempting, and without doubt plausible, already in the latter half of the 1990s that it was quickly adopted and further developed by INGOs such as the OECD. To this end, the OECD used empirical research, studies conducted mainly in the United States (e.g. Rubin & Huber 1984), and redirected its gaze towards certain new societal regimes and indicators, which it believed to provide a better picture (both proof and trajectory) of the ongoing progress. It did express concern, however, about the difficulty of measuring the performance of the knowledge-based economy, though not about whether the theory itself was valid. According to the OECD, there were (only) systematic obstacles to the creation-of-intellectual-capital accounts to parallel the accounts of conventional fixed capital (OECD 1996: 31–32).

My intention is not to take a stand in the debate on whether the idea of the New Economy is valid or the stock of knowledge in a society can be measured but to show how the nature of ideas changes when they become separated from their origins and appropriated for another purpose, for politics and policymaking in this case. The process here has some similarities with the process of introducing management fashions into politics (Kantola & Seeck 2011). First of all, the sphere of academic theory-making and discussion is full of uncertainty and debate, with the New Economy theory being no exception (with regard to the source, availability, and comparability of data; the variables used to indicate the phenomenon; selection of a theory and its robustness empirically and contextually; etc.), whereas in policymaking such uncertainty is removed: shifted to other aspects of the phenomenon or totally left aside. Consequently, the buzzwords derived from the original economic idea are made into strong premises, matters of fact, when they are useful for steering politics, and policymaking.

Secondly, as the theory – or, more accurately in this case, buzzword with origins in an economics debate – is domesticated to the sphere of policymaking, it is explained much more vaguely than in the original sphere of academic discussion, if at all. This way, it remains amorphous enough to be interpreted in many ways and available for use for various purposes, while still remaining strong enough to sound convincing. Thirdly and partly linked to the first two elements described, a whole storyline is suggested and employed as concepts from other spheres are transplanted to the sphere of politics. For example, the concept of the knowledge-based economy has an attached set of consequences: needs and effects, risks, future developments, possibilities, etc. on various levels and in various policy sectors. Also, those developments having to do with the new situation are not explained in more detail; the texts merely imply or state that the situation is too obvious to be explained. Consequently, the buzzword becomes useful for affecting various developments at the same time; one need only mention the buzzword and the whole storyline (or, in fact, thanks to the inherent vagueness, several of them) with power to justify policy conclusions will follow.

The fact that the political knowledge-based economy discourse is grounded in scientific knowledge adds to its credibility and to its usefulness in political application, because it appeals also to the principle of evidence-based policy – another of today's widely shared belief systems. Widely appreciated, shared, and accepted discourses and frameworks provide convincing ways for their users to justify their actions as important and speak to a need to support them. The discourse of the knowledge-based economy in this case functions as convenient, already tested, and valid reasoning and argumentation, justification that provides validation for policymakers' aims. This is possible because of the discourse's widely accepted premises about how society and the economy work, and if policymakers implant their aims successfully within the framework provided by the

discourse, their aims too become valid (Perelman 1982, Perelman & Olbrechts-Tyteca 1969).

These two domestication processes are introduced here as important parts of the spread of global models in policymaking. Domestication theory takes into account the purpose and intentionality of actors. This choice may be seen as slightly contradictory to the phenomenological viewpoint in world polity studies, which separate themselves from the rationalist standpoint, from which actors are seen as natural purposive entities with interests (see Meyer 2010). I would like to take this kind of use of domestication theory as a useful addition to phenomenological world-polity studies. Although the theory steers the researcher to pay attention to the intentionality of the actors, it does not necessarily assume actors to be natural entities outside the institutional order. Quite clearly, the actors' intention may well be to act in a way that fulfils the institutional requirement to be such an actor. As I have attempted to show in this chapter, it is precisely this that helps to explain the ministries' use of the global knowledge-based economy discourse. The purpose of the ministries is to be and continue being ministries, policy actors that must be able to politically maintain their social position. And in this endeavor, world-cultural models such as the discourse of the knowledge-based economy are used and are domesticated. By being rendered locally understandable, the model becomes something more than just a global model – it becomes locally relevant, often to such an extent that its worldwide roots become blurred and less relevant than its meaning on the local level. Finally, these local processes are relevant to local actors, entities that want to be appreciated and to remain actors. This is how I find domestication theory to aid in combining both intentionality with institutionality and local with global.

# Multiple identities of European research-funder representatives – the use, change, and formation of institutional identities

I turn my attention now to the practical level of European science policy. In the forthcoming chapters, I will introduce analyses pertaining to actual research funding, particularly the social reality of research-funding professionals who both affect and implement national policies, in the course of which work they represent different countries and organizations while operating on the European level in ERA-NETs. Firstly, I want to tackle a question about their institutional identities. Who are these research funding agents who represent us as nations yet are obliged to create common European research-funding procedures? Are they European cosmopolitans who no longer mind national borders, or are they national agents complying with European norms at surface level only? Are nations disappearing, or is Europe, in fact, just an illusion?

Such questions, which touch on issues of the emergence and existence of European and national identities, are traditionally studied by means of large-scale surveys such as the Eurobarometer, which gathers data about public opinion and reports on the degree to which people across Europe view themselves as Europeans (Fligstein 2009, Kohli 2000). These studies give information about longitudinal changes in identity-formation and attachments. However, the data from them are not suitable for examining the use of multiple identities or the situations in which multiple identities are evoked and the moments in which they are switched (see Kohli 2000). This is relevant since a need for such studies has been expressed. For example, Fligstein (2009) admits that multiple identity categories are used by various actors and that studying these in action would yield a more precise and lively picture of the reality. He states, “One can predict that most of the time, most of the population who live in Europe will see things from either a nationalist or [a] self-interested perspective. But occasionally, issues will arise that will bring together majorities of the population around a European perspective” (Fligstein 2009: 140).

All in all, European science policy is a relatively new realm of transnational governance. Although this policy – in contrast to, for example, the European Union’s Cultural Policy (see Sassatelli 2002) – may not be an instrument expressing strong intent to build a common cultural identity for Europe, it does share a foundation built partly

on symbolic initiatives creating a sense of common belonging, while simultaneously respecting boundaries of nation-states. There is, for instance, political will expressed by the European Commission to create a common European Research Area with its own rules and objectives symbolically transcending the borders of nation-states: the ERA concept encompasses as one element “a European ‘internal market’ for research, where researchers, technology and knowledge freely circulate” (Commission of the European Communities 2007b: 2). On the other hand, European science policy still largely follows the subsidiarity principle, under which nation-states are allowed to be the paramount decision-makers for their science policy while the EU only coordinates work on certain issues: The ERA concept also includes “effective European-level coordination of national and regional research activities, programmes and policies” (Commission of the European Communities 2007b: 2).

On the practical level, such a double pressure of belonging simultaneously to the EU and to a nation-state means that day-to-day practices of science policymakers and funding professionals potentially include processes of identity-related script-writing and later script-editing. Taking part in European cooperation may, accordingly, mean that the partakers are acting on the basis of multiple sets of institutional scripts simultaneously. There are potentially both common (European) and separate (e.g., national) identities involved, and this duality has an effect on what is done on the European level. Whether such a situation actually exists has not yet been empirically studied. Therefore, in this chapter I shall take a closer look at identities of research-funding professionals and how they are used by those who concretely work for the project of creating and opening the common European Research Area. In this chapter, I will answer three questions: 1) Who are the research-funding professionals working for in the European research-funding cooperation, 2) in which contexts are the identity categories used, and 3) for what? Such analysis sheds light on the institutional and social reality in which the funding professionals are working and that steers this work. Simultaneously, it forms a foundation for the more detailed analysis of institutional interests presented later in this dissertation.

The context in which the funding professionals studied work are ERA-NETs. All of the individuals interviewed have experience of ERA-NET duties as representatives of organizations that manage, steer, or fund research. The ERA-NET initiative was launched in 2002 as part of the Sixth Framework Programme (FP6) and is one of the EU-initiated and FP-supported voluntary actions for creating the European Research Area. In practice, it is a European platform for science policy, research management, and funding organizations’ representatives to meet under a thematic topic and negotiate common research-funding practices; to learn from each other in order to find best and common practices; to overcome barriers to common research agendas, joint research-

funding initiatives, and opening up of national research programs; and to address other research-related issues.<sup>35</sup> The participants in these actions are program “owners,” typically ministries or regional authorities defining research programs, or program “managers,” such as research councils or other research-funding agencies managing research programs.

The general idea of the ERA-NET action is to “step up the cooperation and coordination of research activities carried out at national and regional levels in the Member States and Associated States, through the networking of research activities, including their mutual opening and the development of joint activities” (Commission of the European Communities 2006: 1). It was designed by the European Commission especially to improve the coordination of national and regional research activities and policies in order to restructure the research in Europe (Commission of the European Communities 2006). The approach is bottom-up and admits any area of research and a wide range of topics. The European Commission has funded 122 ERA-NETs since they entered existence, under FP6 and FP7 (European Commission Directorate-General for Research & Innovation 2012). The ERA-NETs funded have involved all Member States and associated states in one way or another, and they are meant to lead ultimately to launching fully transnational programs that are funded commonly by more than one country (Geyer 2005). In practice, the European Commission mostly provides compensation for the ERA-NET participants’ wage and travel costs, whereas the potential research funded within the ERA-NETs is supported mainly by the participating organizations themselves.<sup>36</sup>

## Categories of social identity

The social structure of European research funding in ERA-NETs can be revealed by examination of the uses of a “we”/“they” dichotomy. Such an analysis shows who the agents represent and who the relevant others are when such an identity category is used. It appears from my analysis that the ERA-NET agents use seven distinct categories of “we” in their boundary work relative to other collectives, “them” (see Table 1). These “we” categories are 1) Europe, 2) the member countries of the EU, 3) a pan-European project such as an ERA-NET, 4) the nation-state, 5) the nation, 6) the organization, and 7) a smaller part of an organization – here referred to as a sub-unit of the organization. These groups are formed with the aid of several “they” groups, shown in the table below, and used in combination with these. I refer to the seven “we” categories as social identity

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<sup>35</sup> ERA-NETs may have included the following activities to foster coordination and cooperation between programs: systematic exchange of information and best practices; strategic activities, implementation of joint activities; and transnational research activities (European Commission 2011a).

<sup>36</sup> An exception is the type of ERA-NET called “ERA-NET Plus,” in which the EU provides financial support to facilitate joint calls for proposals between national and/or regional research funders/ programs.

categories. These can be divided into three main categories: European, national, and organizational. The European category has three individual modes, whereas the national and the organizational each have two. In the following discussion, I will describe in more detail how these categories come into existence and how they are used.

Table 1: Dichotomies that ERA-NET agents create in boundary work between external collectivities and those including the self

WE	THEY
<b>European</b>	
European territory	Other parts of the world
EU member states	The European Commission
European project: an ERA-NET	Other European projects: a JPI
<b>National</b>	
The nation-state	Other nation-states
The nation	The national government
<b>Organizational</b>	
The organization	The European Commission / the EU
	The national government
	Scientists/researchers
	The coordination of the ERA-NET
	Other ERA-NET partners
	Other research funders
A sub-unit of an organization	Another sub-unit of an organization

## The European identity

A large amount of Europeanization literature ponders whether European identities are likely to appear next to the national identities that already exist. Without taking a stand on the original question, which would be impossible to support with my data, I can make another remark. I conclude from my data that it is not meaningful to talk about just one European identity, for there are several forms and levels of European identity. Europe can – and actually does – refer to any of the European territory, the member countries of the EU, and a European project.

A good starting point in pinpointing an identity category is to have a look at its inverse: the space against which its boundaries get drawn. Who are the ones who are not European as “we” are? Clearly, this is still a meaningful group – the “them” against which

Europeanism gets constructed. Such apparent contradiction says much about what the identity category “we” means.

But, on the other hand, I think that when **we** are spending so much research money in Europe to increase **our knowledge** of climate change and how to adapt to climate change, even if the conditions are very different in **developing countries**, for example, I can imagine that some of the things that **we learn** can be useful. So, to me it's logical to- if you do a particular project for a lot of money, that you actually consider the possibilities of transferring that knowledge to **regions outside Europe**. (interviewed worker (iw): 5)

**Europe** has many common problems that are much more different from other sides', like **the States**', for instance. And, again, only the unified solutions can solve the [shared] problems, so I think. And I don't think that all the countries are going to invest in the European troubles if the troubles are just belonging to Europe, right? So, climate change in Europe probably has some very common things [with] climate change in the States. But **we** should organize **ourselves** to compete, because competition is the best way to do things [laughs], but if **we** compete as 27 separate countries, **we** are losing. **We** should compete just- at least trying to unify and making a continent competent. (iw: 17)

The extracts above showcase how a European identity is created and used as opposed to other parts of the world. What Europe is set against is other regions, outside Europe: in the first case, Europe gets compared to developing countries, and in the second it is contrasted against the United States. Thus the viewpoint is almost geographical in the location references: Europe is seen as *a territory* or a region and one opposite other regions or constellations of countries. In this talk, “we” are Europe and “they” are other parts of the world.

Further analysis reveals that there are three rhetorical choices used in such an identity formation. These are naming a common threat, naming a common goal, and naming a common opponent or competitor. When attached to a supporting narrative, these elements create an illusion of a united Europe, which can be applied for other purposes. For example, in the latter extract, the funder representative talks about 1) “common problems” or “European troubles” brought by climate change. The second element is seen in her description 2) “unified solutions can solve the unified problems,” expressing what seems to be the mission of the united Europe. Finally, she states that 3) “we should organize ourselves to compete” against “the States,” making the US a common opponent. Through these elements, the agent is able to create a solid narrative of a reality in which there is a threat (problem/trouble) facing “us” all, a goal (solution) that will benefit “us” all, and an opponent (the US) that needs to be defeated in pursuit of the goal. As a result, it seems that the only way to win is to unite as a territory. By means of

the narrative, Europe is evidently a natural entity, a common body that not only exists but must exist, and one that must act if its survival is to continue.

In this kind of talk, Europe is generalized to the extent of creating a reality wherein economic decisions, knowledge production, and a certain learning process are conceived of as generally European. This can be seen, for example, in parts of the first extract that describe the unit spending money as “Europe” and the people who are learning as “we” in “Europe.” It is clear to anyone that not everyone in Europe handles the money or becomes familiar with the new knowledge, yet such generalizations are commonly used in agent talk. By using the European “we” category, the interviewee says that the money the research-funder representatives are taking part in deciding upon is European money, belonging to Europeans as a group, and that the knowledge produced via use of that money is European knowledge, which can be used for the common good in Europe.

In the first extract, Europe is described as being the more developed party: “even if the conditions are very different in developing countries, for example, I can imagine that some of the things that we learn can be useful.” “They” are developing countries, while “we” are not, meaning that “we” are developed countries. Giving such a position to Europe plays a narrative role. It renders it possible to give Europe higher standing in the world, as acting for loftier goals than just furthering the European good. Namely, as a developed territory, Europe, which devotes a substantial amount of money to research that finds solutions to common problems, can act as a helper or savior on a global scale. By making investments in research, Europe can help other parts of the world adapt to a global threat. In consequence, it not only benefits Europe to invest in these tasks but, in fact, benefits the whole world, especially regions less able to do so themselves. Acting for the less fortunate or those that cannot act themselves appeals to the current world-cultural values of unselfishness and altruism (Meyer 2010). Such a narrative is likely to garner support for European research funding.

Curiously, when Europe is set against not less developed but equally or more developed parts of the world, as is the case in the latter extract, the role of Europe is no longer that of a savior. It becomes a contender instead: while climate change in Europe probably has some elements very much in common with climate change in the US, “we should organize ourselves to compete, because competition is the best way to do things.” As in the first extract, this one casts common problems and a common team of Europe as useful for finding common solutions. This time, however, teamwork is used for a different purpose. In this case, Europe works not in order to help itself as well as others but in order to compete with the US.<sup>37</sup> Competing with less developed countries would not make a lot of sense, but competing with at least equally developed ones would. According to the argumentation above, the European team needs to be unified and pull together in order to beat the US – that is, to be as good or better in creating knowledge.

It is clear that Europe can be either a helper or a rival; its role depends on how the Other is constructed. In both cases, Europe has a substantial and a necessary role, for which common European research funding becomes especially important.

Yet another remark on the common goal can be made. The first extract illustrates well how Europe and European problems can be made both common and unique at the same time: “Europe has many common problems that are much more different from other sides’, like the States’.” With this wording, the funder representative says that European problems are common to all the European countries yet different from those in the US. They are, thus, at the same time common and unique. In this narrative, both commonality and uniqueness have rhetorical significance. I have already shown how commonality creates a need for joining together for a common purpose. According to the logic described, it is, because of the uniqueness of the European problems, specifically the job of the European team to find the solutions. That is because actors in other regions are not interested in solving them – why would they, these being in any case “our” problems? It follows that no one else saves “us,” so “we” need to do something. Hence, in this case, particularly European research needs to be funded. The uniqueness of the task herewith creates favorable feelings (*pathos*) towards “us” the European team, taking ownership of “our” common problems along with an obligation and commitment to work for solutions that no one else is interested in working on. It also makes the work of European research funders important.

On the other hand, the interviewee also says that the problems are also partly common with those in other parts of the world, again the US: while climate change in Europe probably has some elements very much in common with climate change in the US, “we should organize ourselves to compete.” It is thanks to such universality that Europe is able to compete with those dealing with the same troubles. In fact, while common European problems are used as motivation to unite within Europe, the troubles shared with other parts of the world are used as a motivation for competition. The logic of the argumentation goes thus: if two teams play the same game in order to accomplish the same goal and win against each other, they work harder to get there because they are fueled by the spirit of competition and, hence, the likelihood of one or more reaching the goal becomes higher. In this sense, not just uniqueness but also universality is used as a motivation for Europe to unite and to compete jointly against other teams in efforts to find global solutions. Both uniqueness and universality are used as rhetorical means in creating a narrative that supports a common European identity and gives Europe an important task in which the research funders themselves play a significant role.

The European-territory talk is nevertheless not the only way to project Europe in speech. Whereas in the foregoing talk Europe is expressed as a common team with

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<sup>37</sup> Whether by pure coincidence or not, the US is also mentioned as Europe’s competitor in the European Commission policy paper as motivation for the European Research Area (Commission of the European Communities 2000b: 4).

a common goal of acting as savior, helper, and competitor, there is another way of seeing and thinking about Europe. This is not as a unified front but still conceived of as European. Used in a different manner, this European constellation consists of *member states of the EU*:

**We** are not [the] United States. **We** are 27 member countries with different objectives. And one commission, and researchers, which are much more likely to cooperate in programming. And funding agencies or countries need to be aware of this, and take it easy. (iw: 1)

When “we” are the Member States, the highest-level components of the EU, the inner group of “we” no longer includes the whole of Europe. It has an internal division. In this talk, “we” are the states together constituting Europe while “they” are the European Commission (see Table 1). Thereby, the separation in this case is based not so much on geographical terms as on boundaries in political power relations. An alliance of Member States is created as opposed to the commission.

And you can imagine that the **Member States** from the beginning already knew that it was just for the period of funding that they were going to act as a research-area network, and then just, let’s say, maybe let it disappear a little bit or work together with some of the partners once the commission is not funding it anymore. If the commission hoped or aimed that **they** just start a network and then the network grows or is maintained later on, then **we** didn’t succeed. Because too many networks are disappearing afterwards. (iw: 3)

This sort of European talk of “us” the Member States and “them” the European Commission, which can be read in this extract too, makes visible the fact that ERA-NETs are a joint effort of the Member States, together with the commission but separately because they have their separate roles. The roles that Member States, on one hand, and the commission, on the other, play in this mechanism are interesting in their own right.

The agents interviewed describe one of the cornerstones of ERA-NETs as being that they are member-country-driven. What this means is that, although the commission opens up the call for ERA-NETs and in the beginning has a clear say in their themes and contents, they are still constructed by the member countries themselves, agreed on by them and applied by them. And for the funder representatives interviewed, one of the advantages here in comparison to, for example, Framework Programme funding seems to be that when the commission and the Member States agree on an ERA-NET being funded, the decisions made within one are based on member countries’ own interests (as long as the agreed work plan is followed). Thus the European Commission has no say, or very little, in, for example, the kind of research that gets funded within and by the ERA-NET. Instead, the ERA-NET partners are allowed to specify the kind of research

that should be funded in Europe. For this reason, the ERA-NETs are seen as a bottom-up system, in contrast to some other research-policy or funding mechanisms in Europe, as the funder representative quoted below describes:

This mostly works such that **we** hear what the EU currently wants and what is coming from **them**, but now that **we** are part of this ERA-NET instrument, researchers can be a stronger influence as themselves [...]. It provides a greater sense of independence to research organizations and countries and shared problems, so in a sense you could say it is a more democratic operating model when it works like this. (iw: 2)

Yet, although the ERA-NET system is praised for its nature as a bottom-up instrument, the agents are well aware that it is not fully member-country-driven. Here, an agent describes how the European Commission's funding changes something that may be truly Member-State-driven into something that is not:

[The] issue is very simple. Whether they are ERA-NETs or joint programming or whatever the commission has to come up with, which is the concept, and say this is Member-State-driven, and Member States can all round up – that's Member-State-driven. And then suddenly [they say], "Well, we need to coordinate this." The commission calls up again and says, "Now we can give you money for coordination actions." These coordination actions [...], it's [the] commission giving money [...]. And then it's no longer Member-State-driven if the commission has a say in [it] when they are evaluated. (iw: 1)

Consequently, according to this agent's description, the commission has a significant amount of power in relation to ERA-NETs so long as it supports them financially, because it evaluates the ERA-NET coordination system's proposals and decides which are to be funded. And this aspect of ERA-NETs is why "we" the member countries need to collaborate with "them" the European Commission while, in equal measure, trying to use the ERA-NET instrument to further not only common European interests but also interests of the member countries of the EU.

In a sense, the relationship between the Member States and the commission is described in some respects as comparable to that of a child and a parent: early in a case of ERA-NET cooperation, the Member States are dependent on the commission and its funding but intend to use the providence for gaining more independence from the commission's steering power.<sup>38</sup> The ERA-NET partners seem not to be in favor of granting any more power to the European Commission when it comes to ERA-NETs.

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<sup>38</sup> Such a relationship was highlighted especially well at one ERA-NET-meeting I attended. During a lunch break, I talked with several partners about the commission's role in ERA-NET work, and one of the participants amusedly said that "the commission is our enemy," whereupon they all laughed. Although this was, in part, just a light joke, one side of what was said was clearly intentional. In ERA-NETs, although the commission is respected and has a large role as a provider and funder of the system, the participants oftentimes "gang up" as proudly independent Member States wishing to have a say in European research policy and funding.

Quite the contrary:

Interviewer: How about within ERA-NETs – how have they reacted to the authority of ERA-NETs with regard to funding or research funds? Would it be possible to increase the commission's authority to determine what sort of research is funded?

Respondent: No. I can tell you “no” straight away because we have had quite a lot of feedback saying that the way this works now is good, and the commission gives out money according to its own framework program and its own rules. And you can see here that ERA-NETs have been flexible with clients, so they don't want the commission to get involved in that to any greater extent. This way, we get to focus on themes that are not decided on in larger European political arenas, but, rather, here we are looking at what – at the grassroots level – is really significant, so “no” to the commission having a stronger role. (iw: 12)

Thus what is done with the member country identity is to express the power relationship between the European Commission and the member countries and to stress that more power and independence need to be gained. This is set in opposition to the oppressive ruling power of the commission. For said objective, the ERA-NET action seems to have been a relatively good instrument, according to the words of the agents interviewed.

In a similar manner to the first European-identity category discussed, a Europe of Member States is created by the use of cooperation and competition. A difference between the European-territory talk and the European-states talk is that when competition is used in demarcation between “us” and “them,” the competition is between not Europe and the rest of the world but the European countries and the European Commission. Put another way, the difference is that in the territory talk the European Commission is included in the “we” but in the second case the commission is, in fact, “they.” Here, the common European goal is the goal of the member countries and the commission is the one to be beaten. That makes the European Commission the opposite side, a competitor or rival: “This way, we get to focus on themes that are not decided on in larger European political arenas [...] so ‘no’ to the commission having a stronger role.” Just as in the European-territory talk the identity categories are delineated by the use of an external threat – in this case, the threat is of the commission having too much power over European research funding. And cooperation among “us” is used for overcoming the problematic situation, for succeeding in what is important to “us.” Additionally, there is another kind of power relationship expressed by use of these identity categories: “they” are leading and “we” are following; “it's no longer Member-State-driven if the commission has a say in [it] when they are evaluated.”

Cooperation among European states is justified by arguments similar to those seen in

the European-territory case: European countries face common problems, which need to be solved, and coherent efforts are needed for doing so. But this time it is not so much a common European project. More clearly, it is a cooperative project among separate European countries. In consequence, the borders of nation-states are more present in what is said. For example, here a representative of a research funder describes the need to resolve common European problems through joining together of the member countries:

Local investment in research is very nice, but Europe has now huge troubles, problems that really deserve to [be] allocate[d] a lot of money. And the[se] amounts of money **we** should allocate together. There is no[t] any country that has the possibility to provide added value [on] their own, right? Only if Germany, France, Italy put together the efforts could solve the big troubles that **we** have already to all of **us**. So I think only the joint effort is going to solve these troubles in Europe. (iw: 17)

At the rhetorical level, when “we” are the countries of Europe, it is agreed that the member countries need to join together as a team in order to reach their goal, because no single country can be successful on its own in fulfilling national or European goals. Collaboration and cooperation of the member countries is presented as a requirement for success, but what must be noted here is that the collaborators are at the same time described as independent member countries with national interests. Therefore, one can say without hesitation that pan-European cooperation would be very easy if it were built solely on the European-territory-team talk as characterized above, with a common Europe having a single, common task. In that case, the interest was described by interviewees as a consistent across the entirety of Europe, and the common goal was a truly common pan-European interest. But a different picture emerges when one takes into account the viewpoint presented by the agents when they use the identity category of member countries, in which there are multiple member states within the EU, all with their own interests and objectives, working together. From this angle, finding common goals gets much more difficult. This difficulty is familiar to the agents too, as can be seen in the following two extracts.

I think **we** are very old countries and the idea of joint programming, [a] joint call is still at the beginning. But I think everybody’s getting aware that it’s working nice [...]. There are many examples now showing that working together produces much more benefit. But still it’s too early, but I think this is the only way. I mean the only way to be much more efficient or to evolve properly is just making joint calls, joint things and unifying efforts. (iw: 17)

Most times, the national – **our** Member States – focus on their **own** country to spend their [research money]. **We** have to cross that boundary. [...] I think

that's the only way to go, because **we** have to respect the national priorities in the research in the field, and there is an enormous living research community within the Member States, but especially in the [ERA-NET theme]. It's not a national question. It's a question **we** have to solve together in the European context. (iw: 15)

In this talk, the bridge metaphor is powerful, for it captures the main element of this particular identity category: the category "we" consists of independent units joined together by a bridge that does not meddle with national borders yet connects the units together. The bridge can be used when it serves a good purpose and not used when it is not needed. It does not cause any changes to national borders from the identity or interest standpoint but does allow communication, cooperation, and collaboration when suitable for all. Here is how one representative describes such a bridge:

European organization is just creating this bridge among different countries to work together – that's the idea. The ERA-NET or the Joint Programming, the innovation partnerships, all these are tools to create different bridges that allow that the people can work together. (iw: 17)

Consequently, the talk appeals at the same time to three audiences. Firstly, it is directed to meeting the requirements set by the European Commission, which encourages the various states to coordinate their actions in, for example, the field of research funding. Agreeing that there is a need to do so and expressing a will to take part in such action is enough to construct a national policy according to which a nation-state sees rational advantages in European cooperation that are similar to those the commission has expressed. A nation-state with such a policy that puts an effort into realizing the accordant actions becomes a member country fulfilling its European duties. Secondly, the talk is directed to fellow member countries: by means of an argumentation structure focused on agents having signed up for a common cause, which is to put national effort and resources into addressing not only national but also other countries' national problems. The talk refers to an altruistic side, and agents using that talk are able to align themselves with the higher moral value of a common commitment to direct national resources – time, money, and scientific know-how – to solving problems that other countries in Europe are facing.

Thirdly, the talk obviously meets national requirements and can be directed well to national audiences. The part of the narrative according to which national interests need to be met before cooperation can be realized is employed for convincing national audiences that national resources will not be used for anything other than meeting national goals in the best and most efficient manner possible. Accordingly, European cooperation is presented as sometimes the only way to reach national goals and as in

some cases the most efficient way of getting there. When the agents use the member-country-level identity, the national viewpoint is always present. By using the identity category, the agents are thereby able to combine the European requirement with the national in a convincing manner that casts them as both important European and rational national agents. Just as the funder representative in the second-to-last extract above states, “we have to respect the national priorities” but at the same time “have to cross that boundary” in order to find an answer to “a question we have to solve together in the European context.”

Finally, several smaller groups are activated in European-identity talk found in the data. At these levels, European identity is linked to smaller groups than the sum of all Member States but still is “European.” For example, “we” may be the group of agents in *a particular European project* – such as an ERA-NET in this case (see Table 1). In a parallel to what is found with the general identity of Europe, an ERA-NET is seen as “we” when considered to be a group with a common goal and handled as one. Once again, there are two distinguishable motivations for such use: collaboration and competition.

The ERA-NET identity is employed in two, quite different contexts. Firstly, it is used in speaking about the ERA-NET groups’ internal tasks and objectives. This is a quite self-evident type of use: all groups need to talk about their obligations etc. and the group identity is used in doing so. When agents use the inner ERA-NET category, the topics of the speech and comments are kept at a very general level. They talk about ERA-NET duties such as deliverables and work packages, and about how the group members work together in order to complete their tasks. In such cases, “they” are either the European Commission, which funds and follows up on the progress of ERA-NETs, or other ERA-NETs if they, for example, make a common call together.

The second type of use of the “we the ERA-NET” identity showcases more solid demarcation between “us” the ERA-NET and the others, outside. The context in which this strengthening of the category happens is competition. Competition against an external “threat” at one’s own level seems to fuel use of the common ERA-NET identity, which in other contexts readily disintegrates into separate categories on the basis of, for example, organization or nation. “They” in this case are other European projects, fighting for the same European Commission money that is used for funding ERA-NET cooperation activities – in the form of Joint Programming Initiatives (JPIs) (see Table 1).

At the time of the interviews, there was a considerable amount of confusion among ERA-NET agents about JPIs, another research-funding program created and partly funded by the commission. The ERA-NET partners were more or less uneasy about what the JPIs, and later Joint Programmings (JPs), would be and how they would be related to ERA-NETs. Because of the possibility of both platforms being funded by the

European Commission and managed by the same research-funding organizations, there was uncertainty as to whether the platforms would compete with each other or not and about whether ERA-NETs were going to disappear as JPIs entered the picture. The juxtaposition between ERA-NETs and JPIs, though causing anxiety and uncertainty for some, did prompt the ERA-NET agents to think more about what exactly the distinguishing characteristics of ERA-NETs were in comparison to JPIs.

Consequently, a common ERA-NET identity began being used in agents' talk. The "we" of an ERA-NET group was activated in this context of competition, thereby bringing the participating agents together, uniting them, and creating an alliance that encouraged internal solidarity. It is remarkable that, as the interviewee in the above extract says, the competition did not exist before the commission decided to start funding JPIs as well. Accordingly, the competition was and is fundamentally about commission funding. The next extracts illustrate discussion wherein the ERA-NET system is set in opposition to the JPI as another European platform for uniting national research programs.

I think the role of the JPI or the initiative of the JPI made the chances of the [...] ERA-NET lower than if there were no JPI. So it's not **their** intention to be competing, but in reality sometimes **they** just are. And the mode or the way that the new [...] JPI is working, **they** use the expertise of the former ERA-NET and some things like that. So, it's already a way of follow-up and using it. But even there, I think, "why are **we** just competing [with] each other?" because in reality that's what **we're** doing. In the beginning it wasn't because [the] JPI was funded by the Member States. And after two years there was nothing on the table [...]. So **they** decided, "Oh, let's go to the commission and ask for support in how to deal with that." And in that moment, **we** became competing organizations. (iw: 3)

People are confused all over Europe, and they are a little bit in doubt about the political goals of the commission. They think, "Well, maybe we have to join it, because maybe that's- in future, that is the way to get funding of the European Commission." Well, that was not clear when they started this vision about the Joint Programming Initiatives. It was not fully clear if it was the intention of the commission to combine it with budget. It appears now to be an instrument to spend the budget. So **we** have to discuss that with the Member States. **We** are not in the position in this context, in this ERA-NET context, to influence those decisions. (iw: 15)

So, as in the case of the two European-identity categories already discussed, in the talk of "we the ERA-NET" competition and collaboration are the two main motivators to use and create a certain identity category. The common goal in a European project, whether an ERA-NET or something else, is to perform the tasks decided upon with

the European Commission beforehand, while competition may occur with, for example, other European projects over “European” money. In the case of competition, the “we the ERA-NET” category enables agents to compare the two projects and, for instance, highlight the good work done by “us.” All in all, it is noteworthy and well worth acknowledging that these two motivations clearly are behind choosing and using a certain identity category and applying it in a specific context. A clear threat or an antagonist aids in establishing clear and strong lines of who “we” are and why “we” (should) exist.

My analysis above has illustrated that there are various European constellations within what is generally called Europe. It seems that earlier studies have too often neglected that there are more complex constellations of in- and out-groups in European public policy and cooperation than just a choice between two identities: one’s individual nation-state and Europe. The European Research Area, probably along with many other European projects, is an interesting mix of power relations and competencies between the commission and the member countries, and these relations become visible in the ERA-NET agents’ talk in several contexts.

The uses of the three European-identity categories discussed above also show that the main drivers for competition seem to be knowledge, influence or power, money, and existence. When the agents regard themselves as part of the European territorial team, they are competing against other parts of the world to gain the best scientific knowledge, and when they think of themselves as EU member states as opposed to the commission, they are striving for more influence for their national say in European research policy and funding. Lastly, when they express themselves as an ERA-NET that is competing with another European funding instrument, issues of money and existence are on their minds. At the same time, all groups are described as being on a mission to create much-needed things for other parts of the world, Europe, and the EU members. All European institutional agents presented in this chapter are thus constructed as important, rational, and partially altruistic agentic actors of the modern world (see Meyer 2010).

## **The national identity**

The national identity category in my data has, in a similar manner to the European identity, two variations: the nation-state and the nation (see Table 1). And for the identity category “we *the nation-state*,” the Other is another nation-state. Talk of this nature is typical in situations wherein national objectives are spoken of within an EU context. In that context, different national interests, cooperation, ERA-NET tasks, and learning from others are the subject matter. In this case, “we” as the nation-state encompasses

both the national government and the people, while “they” are other nation-states. The nation-state is seen and described as a single unit of policy, which makes it possible to compare separate nation-states, how they are doing things, and how activities can be improved. For example, here two agents use their national identity category as a unit for science policy, describing “national” ways of doing things, how they differ from each other, and hence how nation-states can learn from each other:

But that’s something **we** learned. That’s something that I learned in [the ERA-NET], that it’s easier to do it that way. Because I’ve seen how **other** countries do it and I’ve seen how **we** do it. (iw: 1)

I always think that I learn a lot just seeing how things are happening in other countries. **They** frame problems differently, the questions are different, [and] you get completely fresh ideas. Because if you’re working in a very small country like the Netherlands, with a long history also in how to do research, I think you miss a lot of opportunities for doing things differently, [to] stimulate innovation. (iw: 5)

Secondly, there are situations in which “we” refers to *the nation* and the Other is the national government of the same country. “We the nation-state” is difficult to distinguish empirically from this other national identity category, “we the nation,” and the two can many times be read as referring to the same category. They are differentiated best on the basis of the Other, which only in the case of “we the nation” is the national government, the state leaders within the nation-state.

Although the identity categories of nation-state and nation overlap somewhat, the content of the talk differs greatly, depending on which one is used. In fact, the context in which the “nation” category is used has to do with issues such as changing political atmosphere within the nation-state or the allocation of tax money on the national level. The gaze of the speaker is in these cases directed inward, to the speaker’s own country instead of international playing fields, and national politics is the issue at hand. Specifically, it is typically allocation of money that is talked about, as is the case in the next extract, in which the agent disagrees with the government’s rationale. This leads her to separate “us” the nation from “them” the current government.

Actually, during- in the course of developing the program and also even the implementation, the focus of attention, political attention, changed in **our** country. **We** used to be a frontrunner in terms of environmental policy and even climate policy. That has now completely changed. There’s almost no attention at all anymore [...]. **We** have a kind of, you could say, right-wing government, and **they** are all for- well, the environment is just constraining economic growth in **their** view, and climate change is a nonexistent problem. But what **I** do see is

that what **we** need also to overcome the financial crisis is growth and innovation.  
(iw: 5)

The boundaries of “we” and “them” seem to follow the lines of political agreement. This can be seen in the above extract, with this paraphrasing: we used to do something in our country (at the time when there was an agreement), but now we have a different government, which changed the policy (so now there is no agreement any longer). The example shows also that the national policies too get contested by the agents sometimes, and when they do, they use the national “we” in the sense of a nation as opposed to the state. Alternatively, the voice of the personal “I” may be employed for such a critique, though this is rarely seen. Simultaneously, the national government, which steers the policies and national money-allocation, becomes the Other.

Finally, one can conclude that the national identity has two separate forms. The first one includes both the people and the government or state, and the second encompasses only the people, the nation, while the government is excluded, relegated to the outside. Both forms are used as natural identity categories. Use of the national category is very common and occurs in various ways. Its use and construction seems not to require any sort of external threat or common competitor, unlike in the case of constructing the European teams. The nation-state just is, and agents often use the national identity category in expressing that they are the nation-state, that they are representing the nation-state in their work as internationally operating research-funding professionals. This is exemplified in the extracts below.

Actually, to a limited extent, there is almost regular exchange of information between the Netherlands and Germany that originated from the [ERA-NET] context [...]. Actually, those links are quite close now, and I think that’s basically through the contacts that were established during [the previous ERA-NET].  
(iw: 5)

And in practice [...] I go there and we go through this, this stack of papers here [laughs], and then Finland is there as one of the participants and I explain Finland’s task and what Finland is hoping for and intending to do with this.  
(iw: 2)

“We” in these cases refers to the nation-state as a certain kind of research-policy actor, and agents’ activities in ERA-NETs are described as closely related to national policies. What is emblematic of the use of the national identity category is that different national characteristics are taken as a requirement for international cooperation but, on the other hand, also as a reason for withdrawing from it. The extracts below illustrate how, for example, the smallness of an individual country or sub-region of the EU may

be cited as a reason for international cooperation while simultaneously research-funding money is described as national property and therefore a resource that should not be used in international activities. At the same time, the agents use a generalized image of their own countries' national R&D policy and others'. From this standpoint, the nation-state is described as having a single line of policy and there are clear national characteristics in how things are done.

We're also quite small as a region, so the added value is also that you can have more and different case studies in the same project, and you can benefit all together from one project without duplication. So, for example, if we wanted to do something on tidal areas, here we only have the River Scheldt, but the results you have in a specific case study, are they relevant on a European scale? (iw: 3)

[I]t's a discussion in the different Member States: OK, we only have a certain amount of resources; we now need to focus on a few Joint Programmings. So where do we see the biggest needs, and where are we going to put our research-our scarce research funding into? (iw: 4)

The national research community very often complains that resources are scarce anyway so we should not put it into transnational projects. (iw: 4)

When [one is] preparing a research program, there are several small things that need to be agreed upon. And, of course, compromises must be made: no one country can push an agenda of "everything must be done exactly as we want it," but rather are all forced to make compromises. Even some national regulations have had to be compromised on, or some solution found to move past them. So that was certainly the most important thing, to be able to agree on matters. (iw: 7)

In all of these cases, the nation-state plays a role in why something is done, or not done: "we" are a small region so need to cooperate internationally to get more reliable knowledge; "our" research-funding resources are scarce, so they should not necessarily be used in international projects; or "we" need to concentrate on "our" biggest needs, focusing attention on certain areas for research funding. In these examples, one thing agents describe is how much their nation-state needs to cooperate on the European level for policy reasons, yet they state that the national money should not be used for European cooperation. The explanation for these two, quite different outcomes within the national talk is the division between the national research-policy point of view and the national resource-allocation point of view – for policy purposes, cooperation is preferable, but for purposes of resource allocation things must not be seen that way.

As a matter of fact, analysis of the themes of speech in which a "we the nation-

state” identity is used reveals two especially noteworthy contexts in which this identity category is utilized: compliance with national policies and the rules for using national tax money. When these issues are talked about and simultaneously the national identity category is used, the common team (who is the actor in this talk) is not European but national, and it works towards a common national goal. The goal is described as set by a national government and not so much by the agents themselves. In consequence, the agents say, they carry out a national task and need to follow the guidelines set out by national policies. Their mission is to realize national interests and, while doing so, take into account national restrictions.

An important theme seen in agent talk employing the national identity category in connection with discussion surrounding use of national tax money is the possibility of “common-pot” funding in ERA-NETs. One of the original objectives for ERA-NETs was to gather national money from those countries that take part in a funding call and distribute the sum to the best research projects from a certain funding call, regardless of the countries in which the research groups are based or where the research would be conducted. This funding mechanism is referred to as “the common pot.” It has proven difficult and only seldom been realized. Instead, ERA-NETs commonly use a mechanism called “the virtual common pot,” by which those countries that take part in a research call as funders fund only researchers and research groups that work in their own country. Such a practice brings with it a number of practical issues that need to be addressed, but still this mechanism has gained more support than funding from a borderless common pot.

Talking about this issue with the ERA-NET research funding agents seems to evoke multiple rhetorical measures. Firstly, agents use the development narrative (see Alasuutari & Qadir 2016) to create a moral underpinning that favors common-pot funding. Those agents that are in favor of the common pot tend to use the development discourse, describing who is “there” already and therefore ready to support the common pot and who is “still not ready yet.” Against the latter backdrop, being in favor of common-pot funding signifies a more modern, more advanced science-policy actor:

Well, that is more laborious and expensive and complicated, so that is why many of these organizations **haven't yet gone for that**... And, of course, there was the thought that we've always worked this way. And then perhaps the fear that they are handing over decision-making power about their money to outsiders, so there were partners involved who did not even explain their reasoning but just said “no, no way,” that no steering committee was going to decide about their money. That was the thinking [...]: in a sense, you can collaborate sincerely and with good intentions up to a point, but at some point money comes up and that always causes these problems. And some were really... I mean, I remember a meeting where someone – I don't remember who it was – had a 20-minute rant,

roughly saying, “You don’t understand that this is against our country’s laws and I’ll end up in court for this, so this is what I’m going to do and I can’t just sign this, even though I want to”... and after that everyone just seemed to accept it, like “okay, got it.” (iw: 14)

Secondly, national rules are used as a rhetorical means of distancing oneself from the decision to take part in transnational funding. They are used to explain why something cannot be done, and the issue is described as being out of the agent’s hands: the agents do not have the power to alter such restrictions. An example can be found in the anecdote of the funder representative in the final extract above: “you don’t understand that this is against our country’s laws and I’ll end up in court for this, so this is what I’m going to do and I can’t just sign this, even though I want to.”

Such distancing is enabled by a more substantial, socially agreed element of the national talk: immunity. Here, I refer to the fact that every time an agent, so to speak, plays the nation-state card verbally (e.g., appealing to national rules, laws, or policies), others accept the argument without a word to the contrary. Such a situation is described in the previous extract where the agent describes the “20-minute rant” about national law and the ensuing acceptance by everyone present: “okay, got it.”

In fact, this immunity seems to exist by such strong silent, social agreement that it matters little whether the national rules and restrictions appealed to are real or not. The nation-state card seems to be accepted regardless. For example, in the next extract, a representative of a research funder tells about an occurrence demonstrating that national rules can be resorted to in argument either for or against transnational funding. It all depends on who is talking and where.

I was amused when I was invited to another ERA-NET to talk about our common pot, and there was this Norwegian there who said that Norway had declared that they could not join the common pot [...]. So I asked him, “Why on earth not? Of course you can, since we already have permission from you.” [whispering] “We don’t want to get involved. Don’t say that; don’t tell anyone.” [laughter] You can also use it like this... But the Norwegian administrative director, he had been involved in planning our [ERA-NET], so he seemed to really support what we were doing. (iw: 8)

So, national rules are used as an excuse to withdraw from European collaboration even in cases wherein there are no real obstacles (or at least when others have been able to find ways to bypass them). That is an indication of a social rule according to which national sovereignty is not to be “tampered with” by others, even if only in the form of discussion, and consequently agents are allowed to use national arguments as an escape in situations in which they for some reason do not want to state the real reason for declining to collaborate. The “nation-state card” thus seems to be a strong

rhetorical tool with implications of force of action on the European level. National rules are sometimes used purely as an excuse, and others may even be aware of the illusory nature of this obstacle. Even so, the social rules clearly restrict anyone from questioning such an argument out loud. My dataset features several instances of agents referring to similar situations in which national rules, restrictions, or interests were used as a prohibiting argument, and without exception such arguments were silently honored. This phenomenon probably stems from the nature of ERA-NETs as a bottom-up mechanism one of whose cornerstones is respect for national restrictions – even in cases wherein they are only “rhetorical” or, as in the case described below, when different national offices seem to interpret the rules differently:

Interviewer: I’ve understood that you are the only country who is willing to fund researchers also in other countries than in France.

Respondent: Yep.

Interviewer: Why is that possible in France?

Respondent: Why? It’s [a] French rule; I don’t know why.

Interviewer: Has it always been?

Respondent: No. In France, we apply this rule. We have a restriction: we cannot fund research if there is no French team, in the group, first. And [a] second one: the French team should be the coordinator of the project. So there are it is not necessary that the coordinator is a French one, but the institution should be a French one. And according to that, it’s possible to fund other countries.

Interviewer: Is it the law or in ministry rules or...?

Respondent: I think it’s an interpretation of the rules [laughs] [...]. I know that the question occurred also with the ANR, the national agency for research, which funds the main, the big, projects in France [...]. A huge agency depending on the French ministry for research, and the agency saw international, different rules. For instance, there’s [a] department [that] can fund other external teams, foreign teams, and the other one didn’t want to. So that depends on the, also on the authority of the department. You see? (iw: 19)

Another theme frequently brought up by agents when they were using the national identity category in the context of national resource allocation is the financial crisis. At the time of the interviews, the crisis was ongoing in Europe, and it was seen to have an impact on international research funding also. According to what the agents described,

the crisis was going to affect national policies and, consequently, the amount of money available for international projects. The general feeling seemed to be that there would be less and less money for international research funding since countries would prefer to allocate their scarce money nationally, for solving national problems.

We have the luxury of not being one of the smallest countries. I think the ones that suffered most in the crisis, Portugal or Latvia or even Slovenia now, if they still manage to do these things then I'm really, really impressed. (iw: 20)

However, those agents who see pan-European cooperation as a national interest express a view that international research funding and cooperation can be used to solve also national, economic, and growth problems. I will return to this aspect of argumentation in the following chapter, in which interests are discussed in more detail.

## Organizational identity

The third type of identity category is the organizational identity of the agents. The way the ERA-NET agents use “we the organization” set in contrast to several Others shows the many viewpoints they need to manage within their institutional identities. As representatives of organizations alone, they must be able to absorb and communicate numerous aspects of being “we,” aspects resulting from connections and relations to several relevant Others.

The organizational “we” refers either to the whole organization or to a smaller part of the organization. The main context in which the entire-organization identity category is used involves political power and authority in combination with the main task of the organization. There are six Others the agents refer to when using that particular “us.” These are 1) the European Commission or the EU, 2) the national government, 3) researchers or scientists, 4) the coordination staff of the ERA-NET, 5) other partners of the ERA-NET, and 6) other research funders in general (see Table 1). When, on the other hand, the organizational “we” refers to a sub-unit of an organization, the identity category is used to narrow down the organizational task even further and to explain struggles or negotiations the agents need to deal with within their own organizations. There may be several units in the organization, with slightly different duties and viewpoints (for example, thematically), and when the views become visible on account of their differences, “we” narrows to a specific unit, while other units or other parts of the organization do not belong to the inner group anymore. These become “them.”

When the identity category of *the whole organization* is used, it is political power and authority, first and foremost, that connects the inner and outer groups together.

When the inner group is the organization and the outer group is either the European Commission or the national government, the agents talk mainly about how political power relations are constructed at the moment and what the organization's position is in such a power constellation. In this talk, both the commission and national governments are described as actors who have expectations of funding organizations and in some cases also give these organizations direct orders. The organizations are portrayed more or less as politically steered or at least accountable for their actions with regard to political objectives set by others. This distinction shows institutional and political power relations on the national and the European level both, and, of course, these relations vary with the part of Europe and within nation-states.

On the other hand, **we** are experiencing [...] pressure from the government that **we** more actively publish our researchers' SHOK [Strategic Centres for Science, Technology and Innovation] connections, explain what they are [...], because it is Finland's national policy at the moment. (iw: 2)

So then **we** have this, Finland's SHOK action [...], this forest SHOK being one in the background, so it is probably the strongest national program that influences this at the moment. There is a strategy-based reason to continue this, and taking this national R&D to international fields even more strongly – particularly taking industry to international projects – is a strategic goal of SHOK action as well. (iw: 10)

Interviewer: Are you involved in [a Joint Programming Initiative] personally?

Respondent: Not personally. On the national level it's different. The environment agency, **we**'re not managing a research program anymore, and the ministry was outsourcing the work for joint programming to a university, where **they** have direct influence on the university because it's a part of the ministry. Or it's like the second level under the ministry, so they have a direct influence, whereas the environment agency is rather related to the Ministry of Environment, and so it comes back to the national differences and priorities. But also the biggest funding program is running under the Ministry of Environment and [Ministry of] Innovation, and the Chancellery and the Ministry of Economics. So, the Ministry of Research is outside that loop, and now with joint programming **they** want to find another way to be- to take the lead again on the national level in [topical] research. (iw: 4)

The power and authority relationships have much to do with the organization's interest. I use "interest" in this case to refer to the kind of research they are expected to fund, in connection with which directions are given to them both nationally and at European level, with the extent of detail varying. Organizational agents seem to turn

such expectations into an identity, of a certain kind of research funder – at least when the new expectations fit well with how they are used to seeing their organizational role: “we” fund this, and “they” fund that. The organizational identity, in relation to others, is constructed primarily via references to differences in interests between groups of organizations. One of the fundamental ways in which agents compass differences between research-funding organizations entails describing each body in terms of whether it funds basic research or instead applied research. Such a division is commonly used by the interviewees.

Yes, of course, [the organization’s] interest is in what sort of research is undertaken and whether it is scientific and responding to a significant need. So, of course, **we** have an interest, because **we** aim to fund high-quality research. So there’s that – maybe the main focus of [the organization] is not so much on whether it is practically applicable, because that sort of research has its own facets for research and support for practical applications. (iw: 2)

**Our** program is purely in applied research. **We** are a funding agency for [a ministry], so **our** program [...] deals with applied research [...]. That’s different for some of the other funders in the ERA-NET [...], so that’s just for **us**. (iw: 20)

And in the ERA-NET context, the agents describe how organizational assignments to fund either basic or applied research influence their cooperative activities. In cases wherein the Other is either the ERA-NET coordination entity or other partners of the ERA-NET, the agents speak of certain differences in roles within the ERA-NET or institutional rules and restrictions of the sending organizations. It is evident to ERA-NET agents that the various participating institutions are subject to diverse institutional rules and restrictions that affect cooperation by creating barriers and possibilities. In fact, ERA-NET agents seem to feel that they need to know the boundaries of other organizations as well as their own, in order to be able to negotiate with others. These institutional boundaries between organizations’ “us” and “them” are made visible especially in relation to negotiations about concrete research calls or funding decisions. The extracts below provide examples.

My Belgian colleagues asked, “No, you have to narrow down the topic and **we** see if it fits or not,” while others [in the ERA-NET] are asking, “No, keep it as wide as possible.” So that means that **we** also have to follow the thematic rules for tendering and offers, which is much less flexible than, for example, the Science and Innovation Department has. (iw: 3)

For example, [with] the Environment Agency in England, **we** share quite a lot of topics. There are no obligations that **we** have to follow **them** or **they** have to

follow **us**, but we just inform each other very regularly. Let's say at least every year there comes up a topic [such] that you say, "Oh, is this also high on **your** ranking list? For **us** as well. Maybe we can try to see how we can influence each other or we can do something together." (iw: 3)

The last Other for a funding organization consists of scientists or researchers. When this category is employed, the agents talk mainly about interests with regard to the kind of research that needs to be funded. The level of speech is different, however, from that of basic vs. applied research as characterizing the organization's role. In this talk, the agents speak more about whether they need to take a strong stand on what kind of research they want to fund or instead let the researchers determine the contents. Because such a task has implications for the role of the scientific community in a given funding process and especially because there are different possible stances on what it should be, the organizational identity is sometimes used also for convincing other ERA-NET participants, along with the client, of the need to use a bottom-up or, instead, top-down approach in determination of what research is to be funded.

The agents tell stories about what kind of research the scientists themselves want to conduct and what kind of research the funding organizations want to fund. In cases wherein the organization presents its identity as very close to the scientific community or even describes itself as "representing the scientific community," the interests may be quite similar, but at other times there may be a more substantial difference between the funder's and researchers' interests. In these cases too, power relations become visible in the talk, and agents highlight their need to steer research in the direction they desire. For example, in the next extract a funder representative explains how using a bottom-up approach within the ERA-NETs may result in a situation in which researchers get to conduct research on issues that interest them but ministries do not get answers to questions that interest them.

We have results from the bottom-up approach. So, the scientific profile: what **they** are doing, [what] **they** want to do and do not want to do something else, or slightly different. You see? Then, finally, **we** have not the answer to **our** questions. So I realized that, and so I changed the way [...] the content of the call, and I went to the scientists, and I said, "You have to" [...]. So all the best French scientists are gathered to answer the question of the ministry. (iw: 19)

On the rhetorical level, the organizational identity is used in a declarative manner, leaving no room for negotiation. The organizational interests are described as binding rules and responsibilities assigned by someone else, someone who has to be obeyed (the national government in most cases). The link to the decision-maker responsible for the organization's objectives and decides on them is national, without exception, for which

reason there is always a national echo in organizational talk. The declarative talk of the “musts” and “needs” of research funding is thus directed both to the other ERA-NET participants (to delineate clearly the binding boundaries of what one can and cannot fund) and to the national audience in one’s own country (to convince that the national task is being taken care of as assigned).

Why does the ministry for the environment have this research program? That means that **we** need to push research to policymakers. For policies, to help policymakers to take decisions. This is the reason **we** are (here). (iw: 19)

All in all, the organizational identity is the “first” step, closest to the person, in which the self is distanced from the action. What is actualized by a single agent in ERA-NET negotiations is not a personal commitment but an organizational one, and a corresponding feature is present when the interviewees speak about how they study what the organization is going to do in a meeting before attending the meeting as an organizational representative. The same can be seen also when they describe, sometimes in very illustrative ways, what “they” need to do in light of the organization’s task and instructions. Such talk can be seen as directed as much to other audiences as to oneself when one is trying to learn and master the kind of role one needs to play as an organizational agent.

Mostly, **we** need to introduce our **own** tasks within and during the [ERA-NET], what they consist of. So I have prepared myself by taking a look at what [the organization] is going to do. (iw: 2)

When organizational identity work is being done in speech, there are no signs of competition between organizations to be found. Instead, the constellation of organizations is constructed as a web of differences and similarities, which together form a coherent whole. According to the narratives of the agents, the most basic division between funding organizations is between those that fund basic research and those funding applied research. Most nation-states have both types of organizations, so the viewpoint is not a national one but organizational. Organizations that fund basic research and those that fund applied research are seen as having such different tasks and roles that they are not similar enough to compete with each other. Quite to the contrary, they are described as complementing one another. Diverse funding organizations are presented as making up a web of funders, a jigsaw puzzle in which each actor has its own place without competitors and without duties that overlap others’ – or at least that seems to be the ultimate European goal.

Analyzing *sub-organizational* talk uncovers another interesting dimension of institutional identity categories. At this level of granularity, one sees how such categories

are not only used in “business as usual” but also constantly questioned, reformulated, and stretched. At sub-organization level, these agents show clear signs of such boundary work as not present when other identity categories are used: while they learn new things in ERA-NET cooperation, they ponder and negotiate things such as “who ‘we’ are really,” “who ‘we’ should be,” and “could ‘we’ be something else?” Such identity work seems to be an essential part of being able to work in ERA-NETs, where institutional boundaries and barriers need to be overcome if common solutions are to be found. This work is nevertheless done not so much in opposition to other ERA-NET partners (as in “should we be like they are?”) as within the sending organizations (“should we be this way, or, knowing what we know now, should we do something else?”). For example, here one of the ERA-NET agents explains her need to assure another department in her organization about the kind of research she wants to get funded via an ERA-NET, which differs from what the entity has grown used to funding:

Ninety percent of the research **we** fund [...] the majority of the tasks are set by the [...] managers, by the policy departments. But, on the other hand, **we** see it as **our** role to do research that there is no request for. Which means that, for example, **we** think that a topic could become very important in the next 10 years. **Our** [...] managers [...] are not aware at this moment of the problem, but at a specific time **we** are going to offer **them** and say, “This is research **we** are doing, and this is why it can be interesting in the future for you, so this is why **we** want to do this.” And **they** also have to, because **they** have to give **us** funds as well; **they** also have to support that financially, because it can become important in the future. (iw: 3)

Organizational negotiations such as these show the potential for ERA-NET work to influence those institutional rules and regulations that otherwise could slow down the common funding process. It seems that the change needs to be implemented within the organizations initially and only after that in institutional identities, through the organizations. This conclusion is based on the observation that none of the ERA-NET agents interviewed indicated willingness to act against the institutional rules and restrictions of the sending organizations.

Organizational and sub-organizational identities and interests are important for European cooperation in two respects: firstly, the objectives – from European all the way to sub-organizational – need to be conducive to common research funding if it is to be realized, and, secondly, if change in objectives is required for rendering European research-funding cooperation possible, the sub-organizational identity is the closest to a single agent and possibly the only one that the individual potentially has a say in. Change, if it depends on the agents who take part in the daily activities of ERA-NETs, is most likely at the sub-organizational level.

At this level, one can see some of the same techniques of constructing the identity of “we” and Others that are used with the European and national identities, but the overlap is not total. The team of “us” is constructed in the same manner, as a common team with a common task of funding a certain kind of research and with certain means of doing so, while Others fund something else and have other kinds of measures to do so. However, there is not as much competition or external threat to be found in the talk as in the European case. Those organizations with funding as a common task are regarded as collaborators more than competitors. If there is any competition among them, it can be said to exist between the basic-research funders and applied-research funders, but even in cases wherein funding organizations need to influence how strongly one or the other is stressed in a research call, the contestation is subtle. The most competition over research money seems to take place on the national level (which country’s researchers get more research funding than others’ – I will come back to this in the following chapters) rather than the organizational. At the organizational level, all funding representatives seem to appreciate the fact that there are different interests related to what kind of research is supported and that their standpoints are best furthered in parallel with each other. In such a constellation, everyone becomes an important agent with a unique, important research-funding task.

## Switching of identities

So far, my analysis has illustrated that research funding agents use multiple identity categories in their work with the international platform and that there are multiple European, national, and organizational categories. Which agents, then, choose the European identity, and which the national? Which regard themselves as European research funding agents, and who is more likely to stick with the role of national-level agent?

My analysis indicates that such questions are, of course, irrelevant. As the reader probably has already discerned, the question is not so much about who as about when. My data show that the agents’ identity categories are constantly changing while they speak. That is, these agents use several identity categories and work for balance among them constantly. In accordance with what they are talking about, they may represent Europe, an ERA-NET, a nation-state, an organization, or a sub-unit of an organization and so on.

The collective is assigned different contents in different parts of the talk, and all this work proceeds very smoothly, without the agents having to think about or explain it in any way. For example, in the next extract, the funder representative begins with the ERA-NET identity category, to talk about what has happened in the ERA-NET (“We had ministries that didn’t use the money”), then switches briefly to an organizational

identity, in order to give an example of the kinds of organizations in an ERA-NET (“because they are a different kind of agency: either a funding foundation – for example, as we are [...] – or an environmental protection agency”), and finally switches back to the ERA-NET identity to talk about the ERA-NET’s current situation (“And it’s easier for those kinds of institutions to use it than for a ministry itself, in many countries. We have one example.”).

Respondent: **We** had ministries that didn’t use the money of [the ERA-NET] because they couldn’t, because the salaries are already paid from their normal running process management. The trips also have to be paid for, because it is a ministry. So they didn’t in the end use the money.

Interviewer: And is it easier for the managers, then?

Respondent: It’s easier usually for the managers, because they are a different kind of agency: either a funding foundation – for example, as **we** are [...] – or an environmental protection agency that, although it is linked to a ministry, doesn’t have the power to sign off the research money, for example. They’re just managing it. And it’s easier for those kinds of institutions to use it than for a ministry itself, in many countries. **We** have one example. (iw: 1)

Another illustration is provided below. Here, the agent at first uses the national identity category, to describe how small the country is and why it needs to cooperate with other countries (“Because we are small, we have to work together to have the necessary capacity”), then switches to the organizational identity when she describes ERA-NETs as a good way to collaborate with others (“this is an easy way to new contacts for us as a research institution and a funder here”).

Because **we** are small, **we** have to work together to have the necessary capacity, the necessary quantity. There are few universities and- there are quite a lot if you just count them, but if you look at the number of students, the number of researchers they have, they are rather small. So, **we** just cannot do anything on our own. And then, this is an easy way to new contacts for **us** as a research institution and a funder here but also for those who are funded in projects to widen their network. (iw: 3)

In the next extract, the agent can be seen starting with the organizational identity to describe (as was asked of her) how the organization has formed new collaboration alliances in an ERA-NET (“before [the ERA-NET], we did not, for instance, have this sort of funding collaboration with anyone other than [...]”) and then, after the second question, about the reasons for larger-scale collaboration activities, takes on the ERA-NET identity in order to depict how an ERA-NET works (“if we have 14 countries, only one

organization is responsible and organizes it” etc.), before adopting a European identity in order to cite the ERA program as a motivation for the European cooperation (“there is a movement throughout Europe toward us all having a shared research area” etc.):

Interviewer: As the number of partners [the organization] has expanded through [ERA-NET], have you gained new collaboration partners through it?

Respondent: Certainly, as far as I know, before [the ERA-NET], **we** did not, for instance, have this sort of funding collaboration with anyone other than the Nordic countries, Great Britain, and Germany. Now **we** are part of a consortium that at present includes 14 European countries and Canada, so, of course, collaborative work has greatly increased. [...]

Interviewer: Why are these broad collaborative networks so appealing today?

Respondent: Probably just because organizing an application round between two partners requires a lot of work. In that case, it's the two organizations that organize the round of applications, whereas if **we** have 14 countries, only one organization is responsible and organizes it. Anyway, on a larger scale, throughout Europe **we** are moving toward this, that **we** should have a common research area, this ERA. So the whole of Europe is a shared research area; everyone is cooperating with everyone else and allying with one another. (iw: 7)

Although the switching of identity categories displays great fluency, it may cause confusion every now and then – because, for example, it might be hard to keep the attached interests in line from one level to another. For instance, the agent quoted below seems to make conflicting statements when responding to two questions, asked one after the other. Of course, conflicting statements are nothing new for anyone who works with interview data, because life in general is messy and it is only human to make contradictory statements every once in a while, especially when the statements are separated by time and by at least one change of discussion topic. This occurrence was a bit different, however. The contradictory statements were made one right after the other in a context in which I expected the interviewee's expression to be more consistent.

Interviewer: So there are various subdivisions in the [ERA-NET], for instance [...] funding for potential research-funding application rounds, then there was sharing various best-practice methods and creating and networking with funders in other countries, **disseminating research information**, communication with political decision-makers, and so on and so forth. From the [organization's] perspective, which area or areas are the most interesting?

Respondent: I'm pretty sure that for everyone – that is, for the institutions in Finland that are participating – it's **the dissemination of information**: that this message is projected to the citizens to show what is happening and

what should be happening in people's own lives, what commitments Finland should be making. I really believe that it is exactly this that is most important, getting communication to work so that the secretive air about climate change is dissipated.

Interviewer: Why is exactly this area so important?

Respondent: Well, it has to do with all the IPCC's [the Intergovernmental Panel on Climate Change] recent actions. Climate change is starting to be seen as some sort of big hoax in a way. Popular opinion can easily adopt that view, and in many countries, it has been noticed that this sort of singular, sporadic information directs popular opinion in a way that prevents us from actually having an influence on the actions of citizens.

Interviewer: Which one of these subdivisions is least interesting to the [organization]?

Respondent: Would you list them again [laughs]?

Interviewer: Well, there was funding these rounds of applications, sharing best practice and creating networking with funders from other countries, disseminating research information, and communication with political decision-makers.

Respondent: Well, some funding organizations look at **disseminating research information** as not really part of their job. I would look at it as not exactly **our** job but, rather, see our aim as helping **our** clients, who are researchers – particularly good researchers – [to get] good funding. That is our task. So that idea of **disseminating research information** is perhaps [laughs]... it sounds like it might not be our number-one priority. (iw: 2)

Why does she say at first that the most important element out of all the options, stated and otherwise, is related to dissemination of research information (meaning knowledge produced by research) only to say barely a minute later that the least interesting is dissemination of information, which is the same thing? This question, which provided motivation for the entire chapter, got its answer only after intensive analysis of all the identity categories presented above. I can now finally say that the answer, of course, lies in the small but important word “we” and in the identity categories. The respondent switches the identity category from which she is considering the question and, accordingly, answers from two distinct vantage points and ends up giving two, quite different answers.

At first, although asked to answer from the organization's viewpoint, the respondent takes a national viewpoint ("for everyone – that is, for the institutions in Finland that are participating") and talks about the nation needing to gain more knowledge about the issues that are studied in the ERA-NET by funded researchers ("this message is projected to the citizens to show what is happening and what should be happening in people's own lives, what commitments Finland should be making [...]. [I]n many countries, it has been noticed that this sort of singular, sporadic information directs popular opinion in a way that prevents us from actually having an influence on the actions of citizens"). After the third question, she switches to the organizational identity category ("some funding organizations look at disseminating research information as not really part of their job. I would look at it as not exactly our job") and answers from that viewpoint, thereby giving a statement that ultimately contradicts the earlier one. To conclude, one can say, therefore, that without awareness of the fact that institutional agents need to balance among several identities, such a situation would be difficult to understand. The extract serves as a perfect example of how studying identities opens up a whole new world of institutional reality without which it would be impossible to understand what it is like to work in an international arena – and how to understand the interests this work brings with it.

International research funding agents use and, more than that, need to master multiple identity categories in their work connected with international cooperation. They balance different identity categories, taking a stand in keeping with one of them in one situation and switching to another in another situation. They are people learning to balance their multiple memberships in a manner that constructs a coherent reality (Stryker 1980). The finding is interesting but, when one takes into account human reality, not surprising. Balancing between perspectives is common in human life and a common finding for researchers working with interview data. Nonetheless, when it comes to examining international cooperation, balancing between identities is not necessarily always taken into account. Someone with a strict rational approach to international cooperation may argue that any given agent has a single standpoint, entailing one set of clear interests. My work and other studies employing discourse analysis can readily show such an assumption insufficient. National agents in international cooperation are also human beings and work in a demanding institutional and social environment that designates multiple identities for them. Consequently, they are able to use various identity categories and attached interests and restrictions as rhetorical mechanisms in a situation wherein they need to retreat from or support European cooperation – or in any other activity, for that matter.

## **Multiple identities of European research-funder representatives, providing perspectives on decoupling and agency**

My investigation shows that European research funding agents taking part in ERA-NETs use several identities as part of their institutional identity repertoire. They apply three distinct European-identity categories, two national identities, and two organization-based identity categories in their talk. In the realm of the European-identity categories, the first, a European-territory-linked identity, is used to express importance of the European cooperation by casting it as an action of saving and helping the whole of Europe along with other parts of the world and of enabling competition with other developed regions of the world. Secondly, the category referring to European countries is, in turn, activated to make European research funding an act of gaining more political power within the EU. Thirdly, the ERA-NET identity is used for taking part in a competition with other, similar European projects for European Commission funding. As for the national identities, a fourth identity, that of the nation-state, is utilized for expressing the importance of the agents' role in terms of national duties and restrictions that accompany use of national taxpayers' money. The fifth identity category, that of the nation, is used to contest the very same national politics that the nation-state agent must obey. Sixth, by using the organizational identity category, the agents manifest yet another level of authority and make visible a power constellation in which they are either subservient or the ruler and create divisions between funders of basic research and of applied research. Both the national and the organizational identities are treated as natural and binding identities with strict externally imposed mandates and limits. Finally, with sub-organizational identities, they reveal even more details of organizational boundaries and restrictions, along with potential for change in institutional rules.

Each of these identities comes with its own unique idea of a common polity with a common goal to be pursued. Likewise, each brings its own restrictions and barriers. The analysis also shows that larger polities entail more abstract objectives and hence more room for flexibility. For example, the European territorial identity is constructed from the idea of Europe as a common polity with common and geographically unique problems that the polity should solve via a united front. The organizational identity, in contrast, comes with an objective of funding only certain kinds of research, which deal with certain topics. Here, the idea of polity is no longer geographical but functional, and it hence becomes institutionally much more restrictive than the more abstract European identity is. The European identity – merging diverse nationalities and national interests into one polity of European people via discourse – exists, yet its level of use as an identity

seems to be restricted to taking part in the cooperation and creating agendas and sharing knowledge. When funding decisions are involved, at least according to my case study, the national and the organizational arguments get expressed as more restricting and decisive.

The agents are fluent in use and switching of identities to argue for different interests. This finding is well in line with schools of social identity theory that stress the complex nature of identities (Herrmann & Brewer 2004). Having multiple identities gives agents tools for flexibility yet may cause confusion and mistrust due to inconsistent communication. This is because, since each of the identities comes with its own set of interests, which sometimes collide with each other, their talk and actions may at times seem decoupled. An agent might support something from the European viewpoint while from the national perspective withdrawing from it. The ultimate outcome depends on which identity category the relevant person chooses and feels free to act upon. Such opportunity to take into account the flexibility and room for personal preferences explains the conclusion that the individual also matters in institutional settings, even though barely present in the constellation of roles.

Thus, understanding multiple and changing institutional identities of agents also helps to explain why their actions do not always follow the principles argued for. This process, which may be interpreted as decoupling, becomes comprehensible when multiple identities are taken into account. Funding of European research takes place in a complex social field accompanied by diverse interests, arguments, and possibilities. Thanks to having multiple identities and standpoints, ERA-NET agents are able to express appreciation and support for principles that favor the creation of a European Research Area and common European research funding but at the same time find reasons for which participating in certain funding is “impossible.”

There is a line of literature, mainly in the field of cosmopolitan studies, that foresees the birth of a global or European identity that some expect to replace or subsume national identities and interests (Giddens 1990, Ohmae 1995).<sup>39</sup> My empirical findings reveal that such a European identity is indeed in use, but there is no support for the argument that it has replaced national identities or is doing so. European and national identities exist side by side, and there are other identity units involved too. These involve not larger units but smaller ones, as with organizational identities. From my results I would say that the cosmopolitan identity has not replaced the national identity and agenda but, instead, created a new subject position, adding room for new objectives and justifications (along with political and practical flexibility) in international negotiations. What is more, it seems inaccurate in light of my research to refer to national identity as an “old” and fixed category in a contrast to European identities that are more in contact with modern world-cultural flows. I return to this argument in the chapters that follow.

The identities of European professionals may well be more multifaceted than one would imagine from the situation described in much of the previous literature. In particular, my data show that frequently discussed identity categories such as “European” and “national” are too hard-edged to describe and encompass all the institutional viewpoints that agents need to take into account in their work. For example, there are multiple constellations of the European identity and diverse views on how Europe is governed and by whom. Therefore, speaking of a single European identity does not represent the social or political reality of the EU very well. There is not a monolithic European identity or only one national identity. There are several. The national identity can, for example, be used from either the statist or the civil-society point of view (i.e., to stress the state or the nation within a nation-state), and the viewpoint influences how the mode of governance is understood. This, in turn, has several effects on how interests and activities are considered.

Finally, it is important to remember that the agents, research-funder representatives in this case, retain some space to contest institutional identities and their restrictions. Without such room, institutional scripts could never change and new modes of action, and cooperation, would not be possible. In my data, this space becomes visible at the level of sub-organizational identity, and there are examples of internal negotiations surrounding institutional rules and objectives. This finding is important for understanding the role of the individual and his or her free will in relation to an existing institutional structure.

Consequently, I argue that agents are both enactors of institutional scripts and script-writers themselves. Funding agents are not just mindless enactors of a national or organizational mission but players with ability to move across and between identity categories, use them fluently and flexibly, and thereby create a somewhat coherent reality despite the mismatch of identities and interests. In addition, they are institutional developers and creative script-writers. There is proof that they take advantage of the room left for individualistic application of strategies: for example, an agent is, within certain limits, able to choose which identity’s institutional attachments to apply. One can say with confidence that, with seven identity categories and perspectives on European research-funding cooperation, there is ample cultural material for working one’s way around a barrier or two if one so desires.

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<sup>39</sup> Although cosmopolitanism has moved beyond the nationalism versus internationalism dichotomy since (see Delanty 2005). 119

# Distinct yet common interests of European research funders

With this chapter, I explore the nature of institutional interests in order to develop a better understanding of nation-states' participation in a European research-funding mechanism that shows only modest results. By so doing, I strive to reveal institutional explanations for the fact that joint European research funding in bottom-up funding systems such as the ERA-NET action has faced difficulties. I have already shown that European research-funder representatives take on (and work with) European, national, and organizational identities alike. This chapter extends the discussion to interests attached to those identity categories, to shed light on the decisions and choices that these agents make in their work. Agents' national interests are compared with their European interests to show how restrictive national preferences are, relative to the common European interests. Whereas European interests encourage agents to cooperate, national interests are often activated to preclude cooperation if it is not in line with national preferences. Finally, such interests are examined from a more theoretical perspective, for laying the groundwork needed to understand a major paradox of European research-funding cooperation: why, then, do the research funders participate in European cooperation?

The setting for this chapter is theoretically motivated. An existing body of work on European research policy and funding cooperation explains the European project and its modest results by considering institutional assumptions, especially those behind the national path-dependency model. For example, Langfeldt et al. (2012) takes the governance structure of Norwegian research policy as an explanation for national research-funding themes diverging from the objectives of common European funding. Similarly, Lepori et al. (2014) regard, firstly, the internal pressure to pursue national interests and, secondly, the externally imposed requirement to "internationalize" as a twofold explanation for a certain model of joint European programs growing in popularity in Europe.

Although such research designs make obvious contributions to understanding European research-funding cooperation, certain of their assumptions can be questioned. The research designs (and, according to Finnemore, most theoretically oriented approaches in the domain of international relations), in fact, share one or both of the following assumptions in the study of state interests: 1) state preferences are unproblematic, meaning that states know what they want and the associated preferences are readily

discernable to researchers, and 2) that the source of state preferences is situated within the state (Finnemore 1996). Such approaches do not explain state behavior in which there are no clear interests to begin with, and hence they fail to recognize the important process of constructing those interests in the course of international cooperation, a process that may serve as an end purpose in itself.

I begin the discussion with an analysis of the interests attached to the categories of European, national, and organizational identities. I will refer to these, respectively, as European, national, and organizational interests. The analysis yields knowledge about the individual interests attached to each of the identity categories and hence makes visible the institutionally ambiguous nature of working in a European project as a national actor. It also aids in forming a better picture of the reasons behind national agents taking part in European research-funding cooperation in ERA-NETs.

This discussion is followed by presentation of another level of analysis, to avoid the methodological trap described by Finnemore, I turn to my data once again. In doing so, I examine whether there is more to the interface between global and local, or international and national, than I have highlighted thus far. While the first step involves examining the differences among the European, national, and organizational interests, the second one entails turning my attention to finding possible similarities between the stated national norms and interests. The objective behind the second-stage design is a better understanding of the dynamics of preference construction and of the connections between the national and the international.

## **European, national, and organizational interests**

The interests of European, national, and organizational agents differ in accordance with the identity category used at the time. In general, one can say that the European interest is in producing Europe-wide benefits, the national interest is in generating national-level benefits, and organizational interests involve acting on the basis of the relevant organization's goals. If we leave aside the interest in greater political power within the European Union (discussed in the previous chapter), the European interests can be described as in building the European Research Area and in finding common solutions to common European problems. In contrast, the national interests lie in producing benefits for the national economy or state-level society and in allocating research funding for the researchers who work within the relevant country. Finally, the organizational interests involve funding either basic research or applied research, as the organization's objectives dictate. Other organization-level objectives are to support the highest quality of research in the scientific sense and to produce knowledge for decision-making or

other societal processes. The three main categories of identity and the attached interests are presented in Figure 2. For the analytical purposes of this chapter, I will concentrate on European and, especially, national interests. Organizational interests are discussed more thoroughly in the following chapter.

IDENTITY CATEGORY	INTEREST
Europe as a territory	To build the European Research Area
European states	To find common solutions to shared problems
European states	To gain power with respect to the European Commission
Nation-state	To produce benefits for the national economy or national-level society
Nation-state	To allocate research funding to researchers working within the country in question
Organization	To support the highest-quality research or to produce knowledge for decision-making / other social processes
Organization	To fund either basic research or applied research

Figure 2: The three main categories of identity and the attached interests.

In the research-funder representatives' talk, the European interests are used in an enabling manner overall, whereas national and organizational interests seem to be more limiting in their nature or activation. For example, a commonly expressed interest – particularly when agents use the European territorial identity category – is that of creating the ERA. Within the ERA as conceptualized, any researcher would be able to cooperate with any other researcher, wherever the two come from, and research would be a European rather than national property. The ERA concept, created and politically furthered by the European Commission, is well known among research funders and commonly shared. The pair of extracts below shows how research-funding officers refer to the ERA and use the common European “we” when doing so, as is especially apparent in the first extract.

On a larger scale, throughout Europe **we** are moving toward this, that **we** should have a common research area, this ERA. So the whole of Europe is a shared research area; everyone is cooperating with everyone else and allying with one another. (iw: 7)

There are resources that can be used, and the question is now, we should use it the best way to support actually the research community. Because for whom are we doing that? Not only for ourselves; it's, we want the European research area and we need to do that for the research community. (iw: 4)

The idea of the ERA is built on another common European interest in European research funding: the interest in finding common solutions to common problems. Talk connected with this is very common, especially when Europe is taken as a constellation of member countries. The argument, in a nutshell, is that “we” Europe need to work jointly in order to find joint solutions to mutual problems. In the next extract, the agent expresses this particular interest and connects it with a need to pool economic resources: “we” the European countries need to pool “our” money in order to create volume and added value, and thereby find solutions to common problems.

Local investment in research is very nice, but Europe has now huge troubles, problems that really deserve to [be] allocate[d] a lot of money. And the[se] amounts of money **we** should allocate together. There is no[t] any country that has the possibility to provide added value [on] their own, right? Only if Germany, France, Italy put together the efforts could solve the big troubles that **we** have already to all of **us**. So I think only the joint effort is going to solve these troubles in Europe. (iw: 17)

Nevertheless, such talk about joint cooperation, common European research, and communal solving of shared problems gives way to careful calculation based on economics and national political preferences when agents switch to using their national identity category. That is because the national interests lie in generating benefits for the national economy or the nation-state’s society and in allocating research funding for the researchers who work within their country’s borders. This perspective yields a totally different picture of what the research funders are doing in ERA-NETs. While from the standpoint of European identity there is inherent value in European collaboration, from the angle of national identity there must be specific benefits at the national level with an ERA-NET in order for such Europe-level cooperation to be considered worthwhile (i.e., profitable), just as a funding professional outlines in the next extract.

If we think of this [ERA-NET], it is related to a [specific] field, which is central to the economy and business of Finland, and increasing know-how is a really central and important concern there [...]. I think it would never have even occurred to [the organization] to say that we don’t want to be involved in that sort of ERA-NET, that we’re not one bit interested. But then if you think about an ERA-NET that was focused on palm plants or, let’s say, anything else like that that isn’t in any way related to **our** actions or Finnish or Finland, then we would probably weigh it up and decide we probably shouldn’t get involved with that. This is the way it works. These are the criteria. (iw: 6)

National interests play a huge role in international cooperation for reasons of money. Whereas the European Commission’s funding for ERA-NETs is to ensure that national actors form such networks in order to coordinate their activities and that European

interests are taken into account when they are formed, national money – allocated by the funders to research via ERA-NETs – is, according to the agents, to be used for national purposes. There are three specific arguments employed to justify funders' allocation of the money in line with national preferences in this venue for European cooperation. The first arises from the fact that the money is national tax money. National interests need to be taken into account in how money generated via taxation is used. Secondly, many of the research-funding institutes are more or less publicly funded offices and hence allowed to use the budgeted money only for those activities chosen politically, on the basis of national politics. Finally, there are national laws and rules that are said to restrict what can be done within ERA-NETs. In consequence, each decision and activity is examined carefully through nationally tinted lenses, and agents often withdraw from joint research funding by appealing to national interests.

For example, in the next extract, a representative of a research funder argues that the organization faces pressure at the national level, in this case, from the national research community. She concludes that the scarce money should be used nationally. The extract presented after this goes further, giving a funding officer's description of what happens when common funding interests are striven for in ERA-NETs. Here, she describes a particular case in which agents went through lists of national and organizational interests in attempts to find a theme that would be supported by enough funders for "critical mass" to be achieved. If such a theme was found in such cases, a research call was created. It seems clear that, in practice, what agents do is try their best to find a common denominator among national and organizational interests: a theme that meshes with at least a decent number of funders' interests. An approach of this sort is a far cry from the European perspective, from which the problems, and therefore the interests, are shared and ERA-NETs are a means of finding solutions to such problems.

The national research community very often complains that resources are scarce anyway so we should not put it into transnational projects. (iw: 4)

Interviewer: What kind of procedure do you use to overcome those different interests?

Respondent: Well, it's- you can't really overcome them. You can try to work with them and to adapt to them. What **we** did in the beginning was draft a long list of possible topics, and then we worked through this list and looked at one topic: How many people would like to do something on this one? Could it be enough interest to develop it into a joint call or, once we had an expert workshop and they realized there's nothing we can do, too few people or too few countries. That's why not all the topics have developed into joint calls. (iw: 20)

Seemingly in even more striking contrast with the European objectives is the national interest in allocating research funding to one's "own," domestic, researchers. Instead of considering European research to be joint property, as is the case from the European-identity viewpoint, the national interest is prominent in allocating research funding to researchers who work within the relevant country. One key national interest lies in supporting and yielding profits for national research: individual countries have an interest in funding "their" researchers and getting others to fund them too; in producing new collaboration opportunities for "their" researchers, in order to increase the level and quality of research at the national level; and so on. Such a national interest is elaborated upon well in the next three extracts.

The purpose of ERA-NETs is more to ensure that countries can guide research funding to their own researchers and shared European research in a way that most optimally supports the aims each country has for research. (iw: 2)

I think for several countries it is still the point of view that it's national taxpayers' funds, so it also needs to be available for the national research community. (iw: 4)

[A research-funding] agency in Portugal [...] only funds foreigners if they are employed by a Portuguese research institution, for example. In the normal calls, then, they have some specific calls and bilateral agreements, of course. But there is still some closing up. The way of thinking is "Okay, we are funding national research. It's for national researchers or for foreigners working in Portugal," and I know that this happens in many other European countries. (iw: 1)

All in all, money seems to lie at the heart of national interests, restrictions, and desires in more ways than one. The message is clear: national money, according to my interview data, needs to be used for national purposes, even in European cooperation. In addition, getting other funders' money also directed into one's own country is seen as a successful outcome. This seems quite a deviation from the idea of a common European Research Area with a common European market for research. Instead of these common lines, national borders and national-level benefits dominate the funder representatives' speech, even to the detriment of other European states. In fact, the apparent need to justify the use of money from the national point of view is so strong that even in the rare cases in which "foreign" researchers are funded, national interests are cited in justifying the allocation of funding. The argument, as can be seen in the next extract, is that the benefits of funding foreign researchers return to the national level anyway. This can be seen in the story the interviewee tells about another country, which decided to fund a group of researchers that had members from other countries. She describes that country

as a *forerunner* in that it funds foreign researchers too and consequently creates true benefits for its “own” researchers.

I would say in that sense they are really advanced. Yeah, I think it is a good way of supporting their own research teams, and supporting the national research teams in that sense, to really focus more on transnational collaboration. I think it is an added value for the national research teams. (iw: 4)

Such a strong urge to safeguard national interests in European cooperation leads to situations in which common European goals cannot be realized if national goals are not met simultaneously. European preferences do not seem to suffice as motivation for national agents to act – instead, if national goals are met by European cooperation, the result may be more successful.

This finding raises a question about the purpose of international cooperation: why do national agents even take part in European cooperation, in the ERA-NETs? What explains cooperating at all in a situation wherein national interests clearly play such a significant role? What is the national benefit of international cooperation? To answer these questions, I return to the data and consider the nature of national interests in more detail, to pinpoint what the national interest in producing benefits for the national economy or national-level society more specifically entails. This should aid in casting aside the veil obscuring what the agents are looking for with European cooperation and why.

## **Material national interests in European cooperation**

Traditionally, state interests are seen as a combination of power, security, and wealth. These interests have been a starting point for a body of international studies undertaken especially often by neorealist and neoliberal scholars (for more about the discussion, see Finnemore 1996, Waltz 1986). These interests of nation-states have to do with basic needs such as acquiring resources, solving problems, and ensuring peace – all rational and reasonable interests that have, without question, provided a qualified model to explain state activities and international cooperation over the past decades. Furthermore, realist theories assume that state behavior is grounded in material resources, and inter-state interaction varies with control over those resources (Legro & Moravcsik 1999: 18).

In this chapter, I refer to traditionally addressed state interests of this nature as material. The label is not entirely fair, since, for example, seeking power belongs to this group but is not material. However, the term remains useful for referring mainly to the theoretical background: materialist assumptions in realism. My intention is to find out whether such

interests still lie in the background of state behavior in European cooperation – firstly, because such interests are many times seen as a reason for inter-state cooperation while a lack of such interests is taken as reason to withdraw and, secondly, because there has been criticism of such a stance: the current international structure may function on a foundation of motives entirely different from those occupying this position historically.

From my analysis, I can state that also current European research-funding cooperation is justified on the basis of material interests with more or less tangible, measurable outcomes. European research funding agents employ several arguments based on money, along with other resources, when explaining the benefits of European cooperation. The objective of drawing other European countries’ money for research conducted in the funder’s own country can be seen as one motive in this class. The rational, calculative viewpoint is discernible also in figures of speech and metaphors employed by the agents: phrases such as “added value” or “win-win situation” are commonly used. Both of these examples refer to clear rational (assimilated) interests with potentially measurable, often economic or otherwise calculable, outcomes.

When it comes to specific rationales, three clear ones that are frequently employed for justifying European cooperation can be identified through discerning such tangible elements from funding professionals’ speech. Firstly, they see that European cooperation results in more efficient use of (national) money; secondly, they recognize an increasing level of (national) research capacity as a likely outcome; and, thirdly, they see the benefit in finding solutions for both national and European problems. These rationales are summarized in Figure 3. At least the second and third of these benefits are seen as resulting from joint funding of international research consortia.

<b>MATERIAL NATIONAL BENEFITS OF ERA-NET COOPERATION</b>
Using (national) money efficiently
Increasing (national) research capacity
Solving common problems

Figure 3: The three material rationales employed for justifying European cooperation in ERA-NETs from a national standpoint.

Firstly, European cooperation in research funding is justified by the argument that cooperation enables funders *to use their national money more efficiently* and wisely and that, in consequence, they become able to fund more and better research. From this angle, making research-funding decisions jointly with European-cooperative partners is

rational even when the economic situation is tight, as it was at the time of the interviews. This argument is employed, for example, by the funder representative quoted in the next extract. She argues that countries can save money via cooperation because cooperating with other countries enables creating synergy with the restricted amount of money being used, which results in more efficient research.

We are in a crisis, economic crisis, at the moment, and it is difficult [...]. People are very afraid now [about] how to allocate the money and to which area should be- this money be allocated. Probably, countries cannot do much in the way of allocating more money, but the way to explain it is that **we should try to synergize the money that each country is putting into a topic of research – in other words, to save on each side: save money.** I think the way that Europe is now trying to move is just to validate new tools for making the research much more efficient from the point of view of the investment. (iw: 17)

According to this rationale, international cooperation in research funding actually saves national money instead of wasting it. The mechanism is described as being twofold: the first aspect is focused on avoiding overlapping funding and the second one on combining and concentrating resources for a common purpose. The basic rationale surrounding “synergizing” national resources encompasses the latter two variations.

If we take a closer look at the suppositions about research and research funding that are implicit in those arguments, we find that the argument about avoiding overlaps in funding is based on the idea that research is to be regarded as a common resource for creating universally usable knowledge. According to the rationale, research anywhere, funded by any country, can be utilized anywhere and, therefore, the same kind of research need not be funded “twice,” by different states. Instead, research results funded in one part of Europe can be obtained and utilized in another, and, accordingly, the other actors can save the money that they had intended to use themselves for such research and will hence be able to fund something else with it instead.

The argument about avoiding overlapping funding also encompasses a normative presumption according to which research funding is a means of research production that needs to be used in a diversified manner in order to produce as much usable knowledge in Europe as possible. Such a rationale and corresponding behavior of nation-states and their research funders is thought of as creating more possibilities to cover a certain research area fully with the amount of money available in Europe. Coordinated and diversified funding efforts increase the coverage of funding for research that creates knowledge to be utilized all over Europe. Both of these suppositions are visible in the next extract, in which a funding officer describes the benefits of avoiding overlap in funding and how European cooperation in ERA-NETs assists in doing so.

The founding members of the ERA-NET [...] were then the ones that covered most of the European research in [research field] [...]. **For us, the main reason was to avoid double funding**, because, although, of course, when we get proposals handed in by academia or industries, we try to get an impression of what's going on in Europe, it's not that easy to get this kind of overview just by, you know, surfing the Web or something like that. And we found the first part of the ERA-NET [work] very helpful already; that was information exchange [...]; **especially in the smaller countries but also in larger countries like France or Germany, it's not even possible to cover everything. So I think all countries benefit from this mutual exchange of knowledge and expertise [...]. I think we profit from work that's been done in Sweden in the past couple of decades, and in other fields they profit from our research, what we've done, so it's of mutual benefit.** (iw: 20)

The second variation of the rationale, according to which European cooperative research funding saves national money, focuses on concentrating funding efforts as opposed to diversifying them. According to this argument, joining together and pooling research funding is sensible in a situation in which one country alone is not able to afford the amount of investment needed for a certain acquisition. The requirement for such a joint effort is that the investment directly benefit research and researchers in all the funding nation-states, as is the case, for instance, if certain research equipment is funded that can be used by researchers across Europe. In such cases, the nation-states will be able to benefit from the research and its results respectively. Such an argument for European cooperative research funding is used by an agent in the following extract.

I think that a national Member State has to be free in the choice of how to spend its national budget. And I will plead in my country that it is very wise to invest in European cooperation [...]. A specialist in the Netherlands has convinced me that if you will have the possibility to put a step forward, then you have to invest in very expensive hardware. And you come to the situation now that there is no country, maybe except for Germany, who has enough money to invest huge amounts of money in hardware. I'm talking about a budget of millions, millions a year [...]. **If you join together, then you can collect the money, and then you create the possibility of having those enormous amounts of money to invest in the hardware.** (iw: 15)

So, in general, the rationale according to which it makes financial sense to cooperate on the European level is based on the idea that research in Europe is borderless and creates a universal set of activities and collaborative opportunities, and that the knowledge produced by such activities can be used all over Europe. The sum total possible for research funding in Europe is seen as too small for irresponsible use to be tenable, with the result that funding efforts need to be coordinated if that sum is to cover as many

important research questions as possible. Additionally, a single country is regarded as too small a unit to possess enough resources for reaching all of its research-related goals and therefore needs to cooperate with others.

This rationale draws together the “European” needs for borderless research with nationally motivated funding efforts. It does this in such a manner as to permit a large amount of essential scientific knowledge to be produced for the nation-states’ use. By applying this rationale, the agents admit that individual nation-states are not able to reach all of their own national goals alone. Instead, European cooperation on research funding is needed in order for their resources to be used more efficiently and to reach goals that would remain unreachable at a purely domestic level. Simultaneously, the geographic area of a national state gets contested in the more abstract concept of an area of research. While the former is thought of as having borders, the latter does not.

The second rational argument employed for European cooperation on research funding continues with the thematic element of individual nation-states being too small to be appropriate units for the desired funding. But it concentrates on their researchers as opposed to funders or funds. In this argument, in a similarity to the one discussed above, research is regarded as a universal structure and a common European resource, and the idea is that funding cooperation renders the nation-states able *to increase their own national research capacity* and knowledge base while also enabling them to create networks and, through these, critical mass. Below are two quotes from funder representatives who use this kind of rationale to justify European research-funding cooperation in ERA-NETs.

We want to work together with the whole world [...]. **Because we are small, we have to work together to have the necessary capacity, the necessary quantity.** There are few universities and- there are quite a lot if you just count them, but if you look at **the number of students, the number of researchers they have, they are rather small. So, we just cannot do anything on our own.** (iw: 3)

Finnish researchers, like in one ERA-NET, approached us and brought up the fact that “this kind of network is being built in Europe and could [the organization] join it?": “It would be very important for us to be able to exchange information with other European researchers so we could build more critical mass here” [...] **those were sufficient grounds for us to create the possibility so that the researchers could build their knowledge base.** (iw: 6)

The research capacity argument relies on the idea that, though the agents regard their national norm as funding only their “own” researchers, it is in their interest that those researchers work with other researchers across nation-state borders. That is due to the assumption that within a single nation-state’s boundaries there is not enough capability

to reach the desired level of research – or at least there are more and better opportunities for increasing the level of capability when researchers collaborate on the European level. The reverse is deemed to apply also: European cooperation makes the national research funders able to facilitate international research networks for their researchers, and, accordingly, the greater research capacity and other beneficial impacts create positive results for the nation-states just as much as for their researchers.

Thirdly, the benefit of European cooperation is also spoken of with the rationale that common, national but at the same time Europe-wide problems need *Europe-wide solutions* and the only way to find such solutions is to try to arrive at them together, through research. In practice, the funders are not the ones finding the solutions – the researchers are – and the funders need to fund the kind of research that is likely to result in solutions, as is described, for example, in the following extract.

There are many examples now showing that working together produces much more benefit. But still it's too early, but I think this is the only way. I mean the only way to be much more efficient or to evolve properly is just making joint calls, joint things and unifying efforts. And identifying troubles together, common troubles, and putting bright people together to solve them. (iw: 17)

The problem-solving-oriented rationale is, in fact, so appealing that it is even adopted by organizations that traditionally pursue the funding of basic instead of applied or policy-oriented research. In these cases, the argument about finding solutions for common problems is linked to the interest in increasing the quality of science – a specific interest of such organizations, as is evident from the following extract. According to this argument, conducting research on Europe-wide problems, and resolving such issues, results in higher-quality research.

It is quite sure that the researchers can get the possibility to participate and receive funding for such problems which reach beyond the Finnish national boundaries, as the most important problems often reach beyond all national boundaries. **Finnish researchers can have the possibility to participate and apply for funding that would address common European problems.** That will affect us in that it will not be a short-term domestic undertaking and **we will benefit, as the research will receive funding and will address larger problems, and will also result in higher-quality research, which it will surely do in addition to solving practical issues.** (iw: 2)

One can also note that this particular argument links the rationale for European research funding to the more general idea of building development capacity. This capacity-building refers to transnational cooperation aimed at tackling problems related to policy and methods of development. It is most commonly referred to as a uniform

interest in tackling the development problems of the global South, and such an interest is indeed described – as it is in the next extract – as shared by several nation-states.

Countries, many countries – for example, the Nordic countries – stated very clearly that the global perspective of [...] sustainable development at a global level; cooperation with developing countries; and knowledge transfer, for example, to developing countries would have to be addressed in the proposal. And why? Because it's a national priority [...]. And if the global is ranking high, like it is right now [...], if that's ranking high in several countries, then it should rank high on the ERA-NET, because it's a common topic. (iw: 1)

## **The common script of thinking rationally and acting nationally**

In brief, the underlying rationale of all the arguments I have introduced above stems from the idea that the agents are strongly advocating national goals and these goals cannot be met by working alone, only through joint efforts with other nation-states. In this rationale, rational national agents cooperate internationally and hence are able to use their national money more wisely and efficiently and can fund more and better research. This, in turn, should lead to increasing national research capacity and higher-quality research. Simultaneously, agents are able to further the common goal of solving major social problems by producing research that finds and creates solutions. The following extract is a perfect example of how this family of arguments is employed in justifying European cooperation in research funding, referring to how joint efforts in the end create national-level benefits.

These funded research and development projects have to be productive in respect to the national objectives we have. If we look at it from [the organization's] viewpoint, we want to have the kind of research that is relevant for the competitiveness of the Finnish industry, and in this respect we have to realize that these projects bring new know-how to Finnish research institutions and companies through these kinds of [international] cooperation and that the Finns have to receive new knowledge from their foreign partners. And when we consider that all countries pay for their own stuff, this kind of benefiting from other countries' research and development is a real win-win situation. I believe that in different countries the thinking is the same, that here is a situation where we can benefit from research and development work paid for by the respective countries via the active involvement of our own country. (iw: 10)

MATERIAL NATIONAL BENEFITS OF ERA-NET COOPERATION		SOCIAL MEANING
Using money efficiently	sends a social signal that the actor is	rational
Increasing research capacity		rational
Solving common problems		rational

Figure 4: Material national benefits reaped by the research funders in European cooperation.

All the rationales, presented graphically in Figure 4, reflect common principles of rational, agentic actors in the modern world. Overall, the rational rationale of the research funders consists of two parts. The first is that the benefits need to be clearly distinguishable and be visible on the national level foremost. In practice, the benefit might be anything from using national money more efficiently to increasing the standard of the research, but the outcome still needs to benefit the nation-state, and, for this to happen, the nation-states need to be sovereign and free to use their money in accordance with their own interests.

The second part of the rationale is that nation-states are entities that are too small to reach their goals alone. Numerous expressions along the lines of “we are too small to...” are to be found in the data, and they are linked with the argument that the amount of money that any one nation-state can use is too little, the number of researchers is not large enough, or research conducted solely within that nation-state is unable to evaluate the extent to which the results can be generalized. This argument for the rationality of the interests emphasizes the area and population of a nation-state in contrast to the whole of Europe, with talk of European problems, the total amount of money available in Europe, the research in Europe, and so on. The speech acts express a paradigm according to which research as an institution is borderless while resources (in this case, monetary ones) have limits and do, in fact, follow borders. Instead of opening the national funding borders, the representatives’ solution is to cooperate internationally and facilitate international research endeavors in order to benefit from all the research in Europe.

## Conceptual national interests in European cooperation

Recent studies on international cooperation have shown that material interests, such as the ones I have introduced above, represent merely a subset of nation-states’ motives

for international cooperation today. There are also other, more symbolic or conceptual, motivations, and research designs that do not pay attention to these may yield a distorted picture with regard to international processes. According to Finnemore (1996), it is, therefore, important to consider the conceptual purpose of international cooperation additionally. The conceptual aspect of state interest is examined for its potential to unpack the fact that states do not always know what they want. Instead of treating preferences as something derived from within the state as a result of material conditions and function-based needs, the conceptual approach reveals other kinds of motivations. International cooperation might be used less toward a clear objective and more, for example, as a learning platform: nation-states are known to be receptive to learning about which actions are appropriate and useful ones to take (Finnemore 1996).

This kind of value attributed to being involved is, indeed, also expressed by European research-funding professionals in my data. Three kinds of symbolic motivations can be observed. The first is the use of cooperation for defining common problems and national goals to be pursued. A second motive involves learning and teaching about how to do things better. In the third, participating in European cooperation is seen as having value in its own right: no matter its outcomes, it sends a positive signal to others about what the participating actors, the nation-states represented by the agents, are like. These national benefits are shown in Figure 5.

<b>CONCEPTUAL NATIONAL BENEFITS OF ERA-NET COOPERATION</b>
Defining common problems and national goals
Learning and teaching (best practice)
Participating in European cooperation

Figure 5: The three conceptual rationales employed for justifying European cooperation in ERA-NETs from a national standpoint.

The ERA-NETs do not merely consider funding research that finds solutions. To research funders they are just as much about *defining the common problems* to which solutions are later going to be sought. This objective to which European cooperation is put is illustrated well in the next two extracts, in which representatives of research funders explain how they worked with others towards finding common European issues in an ERA-NET.

Because if you go to Finland or Portugal, the priorities are different. But there are some common points. Forestry, for example: although the problems may

be different – forest fires here [in Portugal] and sustainable management in Finland, for example – we can combine efforts into a forestry priority. And we can combine or align those priorities with the overall agriculture or forestry commission's approach, or the European Commission's, the European Union's perspective on it. (iw: 1)

So [the common research agenda] is a common problem. If we would, for instance, identify the same problem in Italy, Germany, and even in Sweden, we would try to initiate research [addressing the problem] and it would be then crossing borders and not so that we would artificially include East-European countries and arrange a common round [...] of applications for them. (iw: 2)

Also here, the underlying motive seems to be rational to the agents themselves in that they seem to share an understanding that common problems exist and can be identified. However, joining together and striving to uncover common problems is also an objective in itself. Much of the work goes into defining European problems and the goals for cooperation, and my data indeed show that the common problems and goals are not just “found” but come into existence through a lengthy process of defining, constructing, learning, negotiating, and compromising.

Although the process of defining common problems in ERA-NETs could be seen as a mere act of combining *ex-ante* national interests, I am not convinced that it explains the reality with sufficient precision. As it happens, such an argument is not supported by my data either. In fact, the negotiations about common problems are used also for *figuring out national goals*. To be able to combine national priorities, participating agents need to know what those priorities are, yet negotiations are often employed for actually ascertaining national interests, as is described by a research-funding officer in the next extract. Similarly, in the subsequent extract, another officer illustrates how the purpose of international cooperation itself may be formulated only after or during such cooperation: the agent joined the ERA-NET to find out how it, potentially, could be used for said funder's objectives.

For instance, we had a work program and priority-setting that was never meant to become a joint call. **That was more a strategic action among the funding agencies, because we all have to do priority-setting,** so it was more an appropriate learning exercise, a knowledge exchange for us. (iw: 20)

**We have to consider how our SHOK program and the ERA-NET-activity are linked together in international respects. It is a strategic issue for us,** since the SHOK program works between the public and the private sector while the ERA-NET is the SHOK program's international component or instrument. **How do they link together?** (iw: 10)

Therefore, it seems that taking part in international processes is undertaken to ascertain what should be done. And not just “what” but also “how,” which shows in funders’ willingness to use ERA-NETs as *learning* platforms. In fact, in my data, learning is regarded as a valuable motive for international research-funding cooperation. It is thought of as having two functions: learning is needed if agents are to be able to find ways to act together and for developing national or organizational practices.

The first type of learning in ERA-NETs occurs among the participating agents, and its purpose is to find ways to work together and to design common calls. Here, for instance, a funder representative describes how learning from participants’ policies is a necessity for enabling collaboration:

So, all these different landscapes, when coming together, obviously have conflicts of interest. And the way of solving them, first, is to understand how the other ones are working, how to use their processes and merge them with ours and fund transnationally, which is not easy. But to do that, I need to know what’s going on in Finland, in Austria, in Spain, or how they are managing their science, how they are managing their research funding, and then the need to collaborate in a way that we find one common way of doing it, which is a conflict of interest. (iw: 1)

Such a learning need and the requirement to find common practices is evident if one considers ERA-NETs as a form of transnational network governance, one that transcends the traditionally relevant institutional boundaries. The institutional void in them can lead to institutional ambiguity with no coherent set of goals, rules, and culture (Hajer & Versteeg 2005, 2008). Agents in such situations must learn to know each other, as representatives of organizations and countries, and become familiar with each other’s restrictions and interests, while simultaneously creating common ones. By serving these purposes, each ERA-NET, in fact, creates a culture of its own, as is described by the funder representative quoted below.

It’s quite funny, because when I first realized that there was a bit of an overlap between [two ERA-NETs] [...] and we started thinking about maybe having a joint call, it seemed quite easy. But when we got down to the basic structures and really getting our hands dirty, so to say, **we realized that ERA-NETs do develop a culture**. So, you know, just the way decisions are made, small processes go, it’s... Yeah, it’s quite different from ERA-NET to ERA-NET, which makes it more difficult. It was really a lot of work and a lot of strain, because there were small misunderstandings [...]. And that is quite difficult if you’re managing more than one ERA-NET, because they would be used to different things, different procedures, different people as well. (iw: 20)

The second type of learning from one another entails developing local and national practices. It may, for example, mean finding solutions to local and national problems, or developing national policies in a better manner. Work following this general idea forms an essential part of solution-based learning for the ERA-NET agents too, as can be seen in the next extract. Here, an ERA-NET participant describes how the relevant ERA-NET offers a platform to learn from other countries how to deal with issues similar to those newly arising in her country.

I discussed with my colleagues in Italy “You are accustomed to very hot periods and we are not. How do you manage that? What is it like? Why it is so that your people in Naples or in Rome can stand the heat and there’s no problem at all and when we have a heat wave in Holland, it causes a lot of extra deaths? **So we can exchange an experience – how do you manage that?**” (iw: 15)

The idea here is connected to concepts such as “benchmarking,” “good practices,” or “best practices,” all also favored by the European Commission in its policies. This sort of learning, although a vague principle and one that does not necessarily lead to material benefits, is based on a highly rational worldview. Finding the best practices and learning from other nation-states is based on the idea that policy models and practices are universal enough to be transferred from one context to another, and that nation-states, as actors, are moving along the same path of development, just with leaders and laggards. If such a path did not exist in all the agents’ frame of thought, it would not be possible to try to find the “best” practices or to compare states with each other with respect to how well they are doing. In fact, though, comparing is a usual thing to do and frequent both in the context of international organizations and among national actors within their own internal political processes. National policies are often justified with reference to comparative information and to what other countries are doing (Alasuutari 2011b, Syväterä & Alasuutari 2013). Such a learning process is an openly expressed interest in my data too and also a pivotal motivation for cooperation. What is more, the socially constructed need and desire for international comparisons in national politics is so self-evident that asking about its importance begets amusement, as can be seen in the next extract.

Respondent: The added value is clear already, what’s happened to the other countries. Of course, when we take a decision in France, there is always a reference to what’s happened in the other countries. **So the context of comparison is important. That is added value because we can learn from the other countries, could sometime find a solution from the way to solve this.**

Interviewer: Why is that important, to know what is happening in other countries?

Respondent: I don't know. It's a way, sort of a French mental thing [laughs]. We, I mean, of course it's necessary to know what is- if it's possible to do something else. And so, what are they doing *autre* part [elsewhere], another thing, another way to arrive to the same goal [...] as I said before, we are modest. We would like to know how we are – [...] the country are – doing. (iw: 19)

The third type of learning that is evidenced in my data remains vague and illustrates the general anticipation of, and trust in, being able to learn from others in order to do things better. Experience from one country is seen as an opportunity for progress in another, and the other side of the coin in this mindset is *teaching*. That is another topic brought up by funder representatives. Namely, sometimes they regard their own countries as leaders with respect to something and express willingness to share their practices with others, should anyone be interested in learning. This should be expanded upon for clarity: Teaching as such is seen as inappropriate, and no one wants to take the role of a self-appointed teacher. Although a mindset acknowledging positions of leaders and laggards is evidently shared by the agents and this makes teaching and learning possible, it remains socially unacceptable to impinge on other countries' sovereignty in any way – for example, by proactively teaching others how to do things better. In contrast, agents are more than happy to share their practices if a counterpart voluntarily expresses a desire to learn.

The next four extracts show how agents employ the notion of a development continuum, which incorporates an idea of less and more developed countries (see Alasuutari & Qadir 2014). The representatives quoted here describe what their country is good at and how it can benefit others. The obvious hesitance surrounding teaching others is shown in the final excerpt, in which the ERA-NET partner tries to find a way to formulate “teaching” in an appropriate way.

In Finland's innovation atmosphere, **we have a relatively well-developed program culture, if I may say so myself [...]. And that is what we here have tried to bring to the ERA-NET world** and to the organization of European events. (iw: 10)

Things which we in Finland consider quite ordinary [...]. Thus, via this ERA-NET cooperation, the effect and its experience can be regarded positively in those countries where such a chain of innovation and the corresponding unity of thinking about the connection between science and business is less familiar. (iw: 10)

**I think that it's very worthwhile to continue that type of research and combine it with the knowledge in the Northern countries. For example, in**

**my country, we are very good in urban and regional planning**, because we are such a little country with so many people. So we have to take care of our scarce space. And if you combine that with climate-related goals, then that is a good way of talking and that's a good way of acting. (iw: 15)

[The organization] is in the forefront in the respect that political, I suppose, consideration is pretty minimal if you compare it to many other agents [...]. **“Teaching” is, of course, kind of a difficult word, in the sense that no one I mean how could you start teaching other countries?** But in that sense, I think [the organization] has got around that well. That the focus is more on the content rather than – what should I call it? – political correctness or, I guess, well, the sort of political- the ways in which the political side can influence those funding decisions are, after all, quite minor in [the organization]. **So I think it is sort of good practice** that good practices are in [the organization] at a good level. **Whether that should be taught to others is, of course, another question altogether, but at least then others can learn from the example, even if [the organization] does not necessarily actively teach the others [laughter].** (iw: 16)

Finally, there are statements in my data from ERA-NET research-funder representatives that point to just *being involved in cooperation* as valuable *per se*. In other words, the cooperation does not have to result in anything more than making a funder a participant. “Internationalization” is something research funders must do; therefore, merely participating in European research-funding collaboration sends a signal to other agents that the participant – or, in fact, the associated nation-state, as is the case in the extract below – is “international,” promoting “internationalization” and thereby a distinguished actor.

This is part of where one lists [organization's attributes]: that it has to cooperate internationally, and the ERA-NETs are always mentioned as an important section. At some stage, they have been almost the only place [the organization] has been cooperating internationally. And yes, **outwardly it shows how Finland operates. It certainly seems that when one judges Finnish research [...], one judges also how Finland's most important research-funding organization operates and whether it operates within the country or carries out European cooperation** and whether it attempts to improve the quality of research and improve the funding possibilities for good research. (iw: 2)

Such an easy reward is nevertheless coupled with counter-talk. My data also include occasions on which the conceptual reward of just taking part is admitted but not stressed. In fact, it seems that agents are reluctant to acknowledge that such a reward can be a motivation for European cooperation in itself. Instead, material outcomes are claimed

to be the “real” or the “ultimate” goals. Such a finding indicates that argumentation based on material gains is the more convincing and the socially more acceptable path, even though such interests are not always fulfilled. Hence, arguments along the lines of “participation is reward enough” cannot provide sufficient explanation for nation-states’ participation in international cooperation for the funders themselves, just as the next extract reveals.

It is also important to learn more, but how do we define the furthering of internationalization anyway? When learning what its price is, it is worth considering [...] the international cooperation [to be] of no value in and of itself if one is left empty-handed in the end. [The organization] could have cooperated, poured money into themes that didn’t have any importance for Finland [...], but since one belongs to [the ERA-NET] anyway, in my opinion it makes sense that one [conclude] that **it would not be reasonable for Finland to belong to any international undertaking purely because it was international in nature if it does not serve Finnish research through its themes and subjects.** Thus, [the organization], in my view, should primarily further the customer base’s interests, which in this instance are [those of] Finnish researchers, and they should thus be served, in some way. (iw: 14)

## Becoming a rational, advanced, and international research funder

Above, I have examined the conceptual, as opposed to material, interests for participating in European research-funding cooperation. By analyzing my data, I have found three such motivations, presented in Figure 6.

CONCEPTUAL NATIONAL BENEFITS OF ERA-NET COOPERATION		SOCIAL MEANING
Defining common problems and national goals	sends a social signal that the actor is	rational
Learning and teaching (best practice)		advanced
Participating in European cooperation		international

Figure 6: Conceptually oriented national interests of the research funders in European cooperation.

Firstly, funders participate in ERA-NETs in order to set European and national goals. The analysis of my data has shown that agents do not always have clear, predetermined goals for the cooperation and may enter it to ascertain suitable goals. Policymakers today are expected to be rational and to have clear objectives and find the best measures for reaching them. The European platform with distinguished agents, in turn, provides such new, legitimate goals to pursue. The goals then can be pursued on the European or national level because striving for “internationally recognized” goals has special political prestige on the national stage and the goals hence can be “imported” to national-level discussions. It has indeed been shown that an “international” model, by its very existence, serves as a sufficiently convincing reason for national policy reforms these days (Alasuutari & Qadir 2014, 2016, Alasuutari & Rasimus 2009, Syväterä & Alasuutari 2013). Furthermore, goals always create opportunities for actorhood, which means that defining certain kinds of problems helps funders validate and renew their mandate, and hence their existence in both European and national communities.

A second aim of research funders in ERA-NETs is to learn and teach. These activities help agentic actors to portray themselves as, again, rational players that, by constantly striving for the best policies, help their countries or organizations evolve. Both ideas (that of learning and that of teaching) are linked to the aforementioned idea of a development continuum, on which all European countries can be situated, between the least and the most developed or advanced. With the goal of a modern, rational actor being to become advanced and to move along the continuum accordingly by finding the best possible practices, research funders in ERA-NETs are among those constantly trying to find the best policies, in order to do things better – to become more rational and advanced. Meanwhile, teaching others, or being the one from which others want to adopt ideas, is even better, because it constitutes acknowledgement that the teaching party lies near the “most advanced” end of the continuum, among those from whom others want to learn. Yet such validation, while socially rewarding, is fleeting, because development never stops and the competition never ends. Therefore, constant learning is a necessity for any modern, rational, and advanced actor.

Thirdly, research funders “just want to take part” as ERA-NET participants because doing so sends a signal that they are “international.” Being international is yet another attribute of a “proper” policy actor in today’s Europe, and it is a goal in itself as a sign of being just such an actor and of being advanced and distinguished. It is hard to think of a respected and convincing research-funding organization, or country, that would choose to participate in no international activities whatsoever. For the research funders, being active through, for instance, European cooperation platforms is therefore a necessity. At the very least, standing on the international stage is necessary for gaining recognition as a serious actor in research funding and science policy.

All these conceptual motivations to take part in ERA-NETs are, in analytical terms, as real and present in the data as the material ones are. Accordingly, I find no reason to believe that they would be less important than the ones with more material underpinnings. Becoming a rational, modern, advanced, and international research funder and maintaining said status may well be just as important to the participants as the more material calculation of interests illustrated in the previous section. It might actually be that pursuit of the more material interests would not even be possible if the funder in question were not already recognized as such an actor. Either way, ERA-NETs clearly play a conceptual role – they offer funders a platform upon which to develop and renew their national and European actorhood.

Finally, it has to be noted that, whether the gains are material or instead conceptual and hence cultural and social, the agents themselves subscribe strongly to the idea that they must be rational above all else (see Figure 7, below).

INTEREST		SOCIAL MEANING
Using money efficiently	sends a social signal that the actor is	rational
Increasing research capacity		rational
Solving common problems		rational
Defining goals		rational
Learning and teaching (best practice)		advanced
Participating in European cooperation		international

Figure 7: National interests of the research funders in European cooperation.

The research-funding agents are more than capable of citing rational reasons for their cooperation, be they related to a more efficient way of using taxpayers' money or becoming international and thereby proper and distinguished actors. Taking part for a "real" (tangible and preferably financial) reason is, accordingly, the dominant blueprint for these agents in their work to justify their participation, although there are clear signs that even the agents are not always sure why they act the way they do, as is illustrated well by the next extract. Whether or not European cooperation will lead to fulfillment of material interests or the research funders are sure what the cooperation is going to be about in the first place, they join in, because that is what a proper actor does and because others are doing so.

**Every time that there is high political commitment, countries will have to go to wherever the commitment is. Even if they don't know what it's about.** So, just like in the beginning, there were institutions, including my own institution, which went to all ERA-NETs because it was the new thing. Now with the joint programming it's the same. If they now have to choose between an ERA-NET or to support the JPI, they'll support the JPI even if they don't actually understand the difference. It doesn't really matter. **When the country next to them is going, the others will join. They say it's important,** because it's- it works like that in every area; it's not just research. (iw: 1)

## **How well rational means–ends calculation explains the nation-states' decision to take part in ERA-NETs**

Returning to my original question, I can state on the basis of my analysis that material interests do play a significant role in European cooperation and that they seem to be clear and based on rational thinking, but are they rational in the sense of means–ends calculation? It is noteworthy that all the material rationales presented above are subsidiary to joint funding. National money cannot be used more efficiently if the cooperation does not result in joint European funding. Neither can national research capacity be increased or policy problems solved without it. So, if the nation-states have made a rational choice to participate in the cooperation in order to pursue these interests, how can one explain those ERA-NETs that have failed in terms of joint funding? Why do some nation-states withdraw from common funding even though that cooperation is in their interest and within the realm of possibility and the sphere of opportunity?<sup>40</sup>

If material objectives actually did explain ERA-NET participation, ERA-NETs most likely would have long ago ceased to be. There are quite a few examples of ERA-NET cooperation that has not resulted in joint funding even though that funding was the very objective set for the cooperation. The European Commission has, for example, stated that the level of fund alignment at the EU level in ERA-NETs has remained low and that progress of the ERA initiative has been uneven across its various dimensions. The implementation of joint programming remains especially sluggish, and levels of competition are still inadequate (European Commission 2012). Furthermore, in the commission's view, the level of alignment across individual sources of national and other funds at the EU level is too low, at only 0.8% of government budget appropriations or outlays on R&D (GBAORD) in 2010 (European Commission 2012). Clearly, joint

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<sup>40</sup> Some have argued that the reason is that there is no real possibility, because national laws and organizations' rules prohibit transnational funding. I hold such an explanation to be insufficient because there have been several cases in which such funding has proven possible in the presence of genuine will. My analysis also shows that the argument of prohibiting rules is, in fact, used consciously by agents as an excuse to withdraw for other reasons (see previous chapter).

funding, though showing an increase, has remained scarce, which means that many of the stated national interests have not been fulfilled. Thus, ERA-NETs have proven a poor mechanism from a material interest point of view and would be expected to decline in popularity if the decision to participate were based on those interests alone. Yet participation in this funding system continues and is even being developed further.

The foregoing analysis does not support the assertion that nation-states have clear goals for their cooperation in advance either. The ERA-NETs do not merely consider funding research that finds solutions. For research funders, they are just as much about defining the very problems to which solutions are later to be sought. Such behavior highlights the question of whether ERA-NETs really are about solving problems or, in fact, more to do with constructing them. Social scientists (as one might argue that everyone living in the modern world does) readily turn to rational explanations, thereby supposing that problems to be solved just “are” and that the real work revolves around solving them. Such a standpoint can be seen in the ample literature demonstrating processes in which nation-states adopt external solutions for national problems (e.g. Hecló 1974, Ikenberry 1990). The mechanism hence has long been endorsed throughout the social sciences. At the same time, recent research has added another layer to how we understand international learning mechanisms. It has illustrated that problems themselves may be, and many times are, adopted from external sources (Alasuutari & Alasuutari 2012, Finnemore 1996, Qadir & Alasuutari 2013, Syväterä & Alasuutari 2013, 2014). Studies in that stream of inquiry show how international structure provides legitimate goals for actors to pursue nationally, simultaneously creating a need for the actors (agents) and their work.

Proceeding from the analysis presented thus far, I hence argue that international cooperation cannot be explained entirely by nation-states’ strategy of applying rationally rooted methods as the best means for reaching their material goals. That does not mean, however, that rational interests and arguments are not relevant here. They are just employed for another purpose. For these agents, being portrayed as rational and being able to offer rational arguments for the cooperation may, in fact, be important in its own right. By using these tools and simultaneously behaving in line with their conceptual interests, they are able to define themselves, and their sending organizations, as rational, advanced, and international actors, doing and saying the things that are required of proper science-policy actors in a national state of today’s era. This actor-constitutive nature of international cooperation may help to explain why ERA-NETs have been so appealing even while one of their main targets, joint funding of European research, has seldom been met. This failure notwithstanding, they serve a social purpose, which may be just as important to national and organizational actors.

## The source of national preferences

Finally, I turn to the source for national preferences in order to consider yet another layer of their nature. Are they inherently of national origin, as has been presumed by many researchers? The results of my investigation do not provide support for this assumption. In fact, there is reason to think quite the opposite. Throughout this chapter, I have presented national interests, and while I have distinguished between material and more conceptual interests, the difference does not matter greatly in this connection: they have all been expressed explicitly as national objectives. At the same time, it should be apparent from the examples given that the same objectives, and rationales attached to them, are echoed by numerous agents, from numerous countries. Quotations from several countries' representatives refer to identical national objectives, and the dataset includes plenty more statements in the same vein. One can conclude then that all, or at least many, European countries seem to share the same national objectives.

For example, the general willingness of nation-states to join together in order to seek global solutions to common problems, a national interest expressed by the agents, is mentioned by several national agents in my data. It is also one of the most important stories of the late twentieth century (Martello & Jasanoff 2004, Miller & Edwards 2001). Nation-states have worked together since the 1970s to resolve many common issues, such as acid rain, ozone depletion, marine pollution, and climate change (Martello & Jasanoff 2004). In addition, the idea of an international research network as creating critical mass, which was also mentioned as a national interest, can be traced to work by Everett Rogers first published in 1962 (Rogers 1995). What is more, giving researchers and science the position of a problem-solver, as the agents do, points to technocracy, which is another globally shared framework of thought. In this approach, decision-making is steered by scientific expertise and problems are seen as something that can be solved via application of pure and scientific logic.<sup>41</sup> In this set of views, science possesses practical utility and is instrumentally linked with social development (Drori et al. 2003b). Consequently, the research-funding professionals' idea that through research one can find solutions to ecological or political problems is based on a considerable amount of trust in rational thinking (e.g. Fischer 2000). Such power being accorded to scientific knowledge and expertise is seen by many theorists as one of the special

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<sup>41</sup> There has also been ongoing theoretical discussion about whether pure and rational science can solve problems that rarely can be resolved by means of rational thinking alone and whether science is actually, or even should be, a universally rational activity without any stance on values and norms (see, e.g., Bocking 2004, Fischer 2000, Habermas 1971, Jasanoff & Martello 2004, Jasanoff & Wynne 1998). In fact, according to twentieth-century cultural anthropology, "localism" is concerned as much with particular ways of knowing things as with being in particular places (Douglas 1970, Martello & Jasanoff 2004), and copious literature has been amassed that testifies to the importance of local ways of knowing as opposed to general scientific knowledge and science-based technological practice, with, for instance, the claim being made that indigenous practices in handling of natural resources can be more effective than imported scientific methods (see, e.g., Brokensha et al. 1980, Fairhead & Leach 1996, Shiva 1993).

features of today's world, as is evident from the rationales expressed by the science-policy professionals in my data.

All of these shared rationales and discourses appear to me to be a sign that the “national” does not mean something unique or nation-specific. Rather, nations seem to think along quite similar lines. This, in turn, prompts me to wonder whether nation-states’ decisions about their interests are truly based on country-internal social structures and needs. I consider it fairly unlikely that, at least in some policy areas, different nation-states throughout Europe, with different-sized economies and distinct ways of organizing their research funding, arrive at exactly the same interests through strictly internal processes. However, the agents express national interests that are uniform. In particular, rationally rooted gains on the national level such as more efficient use of national tax money, increased research capacity, and solving common problems through research are all “national” interests shared across Europe. The obvious question that arises about the origins of such interests can be answered in terms of the agents having subscribed to the same world-cultural principles (Lechner & Boli 2005, Thomas 2009), leading to similarities in the rational arguments by which they explain their reasons for cooperating. There is a highly apparent frame of thought that is shared throughout Europe, and it shapes a standardized way of thinking for the national agents involved in European science-policy cooperation.

Such a finding is supported by world society theory, according to which nation-states tend to agree on globally accepted principles, values, and frameworks. This means that national interests are not there just to be found but are constructed through social interaction, and that interaction is global (Finnemore 1996). This line of thought seems to be a useful theoretical underpinning for explaining why the interests of science-policy agents as expressed in my data are so consistent from one nation to another and why there are obvious links with rationales mentioned elsewhere (in other policy spheres, literature, or research). National actors do not operate in isolation or construct their interests in a vacuum; they are in constant interaction with world culture, which gives them – and everyone else – common models for social order (Meyer 2010), a social structure of favorable ideas, models, and interests that, overall, have social acceptance. In consequence, the world society creates common models of national identity and purpose (McNeely 1995, Meyer 2010), and in such a structure thinking rationally is a script that policymakers need to master. They must be capable of citing rational reasons for cooperation even when matters are unclear or no reasons actually exist.

# **“Neutral” international research funding and funders’ strategies for safeguarding their interests**

In this chapter, I examine how new international research-funding practices are designed by research-funder representatives in ERA-NETs. As a form of network governance and a potentially formative institution, ERA-NETs are required to develop common practices that serve as a foundation enabling research funders to perform their funding activities cooperatively. These practices encompass all the steps needed for research-call management, such as decisions about the thematic scope of a call for research, procedures for evaluation of research-project proposals, and steps related to how funding decisions are ultimately made. Curiously, such practices have proven to be unexpectedly hard to form, with lengthy negotiations and unsuccessful outcomes resulting. In fact, sweeping general ideas and overall principles for applications in science policy and research funding seem much easier to agree on than seemingly simple procedures and practices on the basis of which the research calls are carried out.

The difficulty of forming common practices has been explained in terms of legal and administrative barriers facing the cooperation partners (AMPERA ERA-NET 2006, MarinERA 2007, WoodWisdom-Net 2006). For example, certain national laws or organization-level rules may be interpreted as prohibiting adoption of new practices. From this angle, the normative environment need only be modified so as to support the new cooperative activities. In this logic, according to which practices consist just of mechanical solutions employed in organizing action, all problems are hence solved. In this chapter, I will prove such explanations insufficient. On many occasions, solutions have been jointly developed for arranging cooperation in ways that are new and shared without any need for altering the existing national and organizational norms. In fact, funder representatives frequently agree that almost any barrier can be overcome whenever there is a true will to do so. Therefore, I take an alternative angle of approach here, in order to uncover new knowledge about the situation and how it could be understood.

Here, policy-related practices are approached as a distinct dimension of politics, not merely mechanical execution in pursuit of objectives that are formulated elsewhere. A practice has its own logic, associated standards of knowing, orientation to the world,

and image of society (Wagenaar & Cook 2003: 141). In fact, practices are not detached from contextual understanding or frames (Goffman 1974, Wagenaar & Cook 2003: 153–156); instead, they always incorporate certain criteria, standards and warrants, emotions, values, and discourse (Wagenaar & Cook 2003: 153–156). As Rein (1983, cited in Wagenaar & Cook 2003: 141) puts it, “we only know that we are dealing with a frame once we know what actions a policy actor favours.” By this he means that frames always give organization to action. Practices are made up of theory, activities, interests, purposes, facts, and values. Accordingly, they are not just a technical solution for organizing activities. Very much on the contrary, they are inseparable from personal views, preferences, and interests.

In this chapter, the negotiations in formation of common practices are studied in light of power, interest-linked struggles, and “battles.” Because of differences in national and organizational rules and the divergences in ideas and interests, the process of developing common procedures is full of negotiation and power struggles. Therefore, transnational governance is not merely considered as expressing cooperation and networking here: I also view it as involving real struggles and actual power (see also Djelic & Sahlin-Andersson 2006c). Negotiations are hence interpreted as battles in which actors with separate interests fight for central positions, to gain greater influence. What is at stake in this is the advancing of national and organizational interests. Funders need to make sure that the end result of the funding process satisfies such interests (e.g., enough research being done nationally or nationally relevant knowledge being produced via the funded research).

I explore funder representatives’ shared professional principles and particular interests within the context of common practices’ formation for purposes of illuminating how it is possible to advance both at the same time. The starting point for the chapter is my observation that when European research-funder representatives are involved in an international research call, they seem to follow two sets of blueprints at the same time, which are mutually contradictory. The first of these is shared by all, and it is derived from the global principles of science policy. These principles are connected with the idea of independent science (science free from political influence or personal bias), and following them is conceived of as safeguarding the excellence of science and scientific development. Without such principles, the credibility (and quality) of the funded research and of science in general would be placed in jeopardy. This blueprint can be seen as a world-cultural framework for the policy actors involved, and it outlines a way of thinking that is suitable for someone working in the field of science policy (about institutional actors and blueprints, see Meyer 2010, Meyer & Jepperson 2000).

The second set of blueprints has to do with statist, political and national, interests in international cooperation. When working to this set of two main blueprints,

funder representatives strive to fund research that fulfills national interests, whether in producing nationally relevant knowledge, raising the level of national research, or simply providing new funding opportunities for one's "own" researchers.<sup>42</sup> In other words, their national role brings national interests into the picture, interests that the first blueprint indicates should not exist. In the arena of research funding, these two mindsets represent a contradiction in logic also because from the first point of view national borders do not matter while in the second set of blueprints they are highly important. Proceeding from this key observation, I will discuss the ways in which agents pursue their organizational and national interests when designing a common research call. I am interested in how they do so without apparently violating global principles of science policy, such as that of scientific objectivity of the evaluation process and of funding only the best scientific research.

The analysis in this chapter is based on the results presented in previous chapters. In this analysis, two categories of social identity introduced earlier in the work – namely, organizational and national identities – are explored in action, together with attached ideas and norms. Both identity categories steer agents towards appreciating and funding a certain kind of research. Additionally, as I will show later, agents need to master a third set of principles and norms, those attached to a global identity of the science-policy professional. To show how this takes place, I will now take a closer look at three prominent stages in designing a call for research,<sup>43</sup> with the aim of illuminating how agents describe those stages and how they explain their preferences with respect to particular practical decisions.<sup>44</sup> The three stages I consider for the purposes of my analysis are those in which the agenda is set for the common research call, reviewers are selected, and the research call is marketed to potential applicants (researchers). I have selected these parts of the research-call process for closer examination because they are among the ones in which my interview data reveal strong and quite different stances

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<sup>42</sup> "Our researchers" is a phrase commonly used by the agents themselves in my interview data. With this phrasing, they refer to researchers who work in their country.

<sup>43</sup> The source data for the chapter consist of interviews and documents related to three distinct ERA-NETs whose operations were carried out in the latter half of the first decade of the 2000s. The people interviewed all represented funders and/or coordinators of the three ERA-NETs, and I will refer to them below in this capacity. They took part personally in designing the calls for research and also ended up funding at least one of them. Documentary material related to the calls was used to reveal where the most difficult stages in designing a common research call are to be found, and in the interviews, informants were asked questions specifically dealing with these stages.

<sup>44</sup> I employ two distinct means of analyzing the interview- and document-based data for this chapter. Firstly, I use the factist perspective to ascertain the overall landscape of research-call management practices (Alasuutari 1995: 47–62). The term "factist" refers to using the dataset to study the reality "out there" as the data represent it. Reliability of the data is increased through the use of only original documents written by actual participants in the processes prior to my research and multiple interviews of key informants in significant roles. Secondly, I employ methods of discourse analysis to uncover ways in which the interviewees talk and define the concepts. This perspective brings more depth to the analysis and enables understanding how definitions and other aspects of constructed reality are understood. Attention is paid, for example, to the science-policy principles expressed, how they are translated into practices, and why. Also, I take a closer look at expressions of nation-state borders and other national issues, in order to reveal the role that national issues play in designing of a call.

among funders.<sup>45</sup>

The findings illustrate how policy practices are not just technical solutions for cooperation but also, in fact, a reflection of three separate blueprints, each including its own set of interests. Drawing together the findings shows how practice-formation can be interpreted as a constant battlefield of defining “good science” in ways that are favorable for some and not for others. The case explored here also serves as fertile ground for elaboration on the idea and level of actorhood among institutional actors (see Meyer 2010). On a practical level, it demonstrates why seemingly small decisions may be the hardest ones to make.

## **Designing an international research call: Wedding the principles of science policy with interests of policymaking**

Designing a common international research call is an interesting process from the standpoint of institutional interests. The reason is that research-funding officers need to act in line with the two aforementioned – quite different and, as described more fully below, mutually contradictory – sets of blueprints at the same time, one with roots in the norms of science policy and the other rooted in the norms of policymaking. Thus wearing two hats, national science-policy actors need to respect both sets of institutional requirements: that of disinterestedness and the independence of science, on one hand, and those of the statist, political and national, interests on the other. In the arena of making funding decisions at the international level, the two logics are contradictory. Under the first, the research that is best – according to scientific criteria – should be funded, wherever it is conducted. According to the second, national research should get the funding.

These two orientations are illustrated well in the following two extracts from an interview with an ERA-NET coordinator. She stresses here that funders in a particular ERA-NET wanted to fund only the best research, regardless of its country of origin, yet she later describes the agents as calculating afterwards which countries “lost” and which “gained” money in the call:

For us, it was precisely that: we emphasized that we want to fund the best scientific projects and not focus on what country the researchers come from and what country has funding returned, and which one loses money, in a way. (iw: 7)

Then it certainly provoked discussion after the round of applications had been carried out – then we wanted to know how much funding each country got from

the program and how much they had invested in it. So, in a sense, we looked at whether a country gained extra funding for itself or lost funding. (iw: 7)

The interest in “winning” and not “losing” national money in a research call shows how very influential national frames of thought are: researchers are divided into “our” and “other” researchers on the basis of the country they work in, and funders wish “their” researchers to receive (or “win”) most of the money. And all this is done by funders who at the same time agree that they “want to fund the best scientific projects and not focus on what country the researchers come from.”

Funders’ national and organizational interests have been discussed in more detail in earlier chapters. For convenience, the most relevant elements for the present discussion are presented in Figure 8. The main national interest is in getting as much money back as the organization invests in the call – in other words, researchers working in the relevant country receiving that money in the form of funding for their research. The organizational interest, in turn, lies in either funding the best basic research, in the case of a basic-research funding organization (whose “client” is academia), or funding applied research, in that of an organization that funds mainly applied research (i.e., whose client is society). The third “interest,” in turn, is based on the global standards of science and principles of science policy.

<b>THREE SETS OF INSTITUTIONAL INTERESTS ATTACHED TO THE INSTITUTIONAL IDENTITIES</b>	
<b>THE MAIN CLIENTS OF THE ORGANIZATION:</b>	
Academia	Society
<b>ORGANIZATIONAL INTERESTS:</b>	
Funding basic research	Funding applied research
<b>NATIONAL INTERESTS:</b>	
Funding domestic research	Funding nationally relevant research
<b>The global interest of science policy, stemming from global principles of science policy:</b>	
Funding the scientific research that independent, impartial expert peer-reviewers judge to be best	

Figure 8: Interests and principles in international research funding, constructing an institutional framework for policymakers and research funders.

<sup>45</sup> Marketing of a call is not among the stages in which there are strong disagreements, but it is a relevant stage from the perspective of interests, as I will show in more detail later in the chapter. 151

In addition, before the actual evaluation process can take place, research-funding officers need to agree on the common principles according to which reviewers of the proposals are to be selected. As the extract below illustrates, they agree on a list of values to be adopted in a call, but the values are vague and leave considerable room for interpretation.

Interviewer: If I remember right, there were some shared values somewhere [...].

Respondent: Well, I think these were directly translated from [the organization's]. At least these sound so familiar and I think... Actually, it says here that these are “adapted from [the] European Commission’s own set of rules,” yes [...]. But these are largely the same as the ones [the organization] has. So scientific excellency is number one and then there is transparency in the evaluation process and then... These are ethical issues [...]. But it could be that these are just accepted, and that’s why there hasn’t been much discussion about them, since these likely appear as this kind of list in several places, so it’s difficult because these are universal, just like fairness and impartiality, so [...] since these don’t bind you to anything, like that to execute point 5, you would have to do a certain thing. (iw: 14)

Nevertheless, when it comes to the process of choosing reviewers, funders seem to agree on two things: firstly, that the reviewers must be *disinterested* and, secondly, that they need to be *experts*. These two attributes are shared, prerequisite features to describe the right kind of reviewer. Therefore, they can be regarded as global world-cultural principles of science policy (about world culture, see Lechner & Boli 2005): beyond question and taken for granted as indisputable qualifications for a “proper” reviewer. Simultaneously, they restrict funding officers’ selection of other kinds of reviewers – for example, amateur reviewers.

The first attribute, disinterestedness, has to do with reviewers’ motives and highlights the supposition that evaluation always needs to be unbiased and as objective as possible. The second attribute, expertise, is related to the reviewers’ know-how and highlights the supposition that only distinguished specialists in science are able to determine what good research is and to recognize it. A further part of the paradigm is that the knowledge of such experts needs to be respected by those who make the final funding decisions. It comes to pass that peer-reviewers are indeed regarded as the supreme authorities with respect to assessing scientific quality.

Hence, funders must use strategies that enable them to mesh their national and organizational interests with these global science-policy principles in practice. This is particularly necessary in the international environment that has recently emerged, which requires funders to adapt to a new situation and just as much to the objectives of other countries, so that they can together reach the objective sought. In this new

environment, they can no longer act in line with the methods they are used to following in other contexts, such as national research funding under bilateral agreements. They have to adjust old practices and find new ways to combine efforts to reach their organizational and national goals in a manner fitting the new environment, all in such a way that they do not violate global principles.

When one takes into consideration all the institutional interests and expectations and the institutional blueprints that are beyond dispute, the task of research-funding officers seems quite a challenge. In practice, they need to be able to prepare a call in which researchers respond with exactly the kind of research the funders want to fund (basic or applied research), after which fully independent, impartial peer-reviewers evaluate and rate the applications, then recommend as much domestic research for funding as the country in question wishes to fund and precisely the kind of research that the particular funders involved prefer to fund. If such an outcome is ultimately reached, all the institutional requirements are met: the requirements of independent science and of national and organizational interests. But how can such an outcome come about?

The outcome is reached, or at least pursued, by means of several funder strategies presented in this chapter. I will describe a number of strategies used in discourse and practice that funders employ in order to achieve a marriage between seemingly contradictory institutional requirements. There are some differences in strategies between the organizations that are interested in funding basic research and those seeking to fund applied research; however, both are able to combine the idea of funding only the best scientific research, as measured by impartial scientific criteria, with national interests in funding domestic or nationally relevant research. I will show how.

## **The first strategy: Defining expertise**

All of the funder representatives interviewed agreed that expertise is something a good reviewer must possess and that, on account of his or her expertise, the expert is able to find and select the best research from among numerous proposals. When reading such expressions, one cannot overlook the fact that expertise in general is only rarely explained or described in more detail. The funding officers talk a lot about experts, expertise, and the importance of it but only rarely give any further information on what exactly they mean by expertise. However, close reading of the contexts in which the concept is used reveals that there are several ways of using the term, giving it slight variations in content. The difference has to do with aspects of research that the experts need to have expertise in.

The first is *scientific expertise*. Defining expertise in this sense is seen especially among agents who represent organizations interested in funding basic research. From this perspective, experts have expertise in a certain research field or topic and are respected top-level scientists working with that particular field or topic themselves. These experts are, first and foremost, able to evaluate scientific excellence. For example, in the next two extracts, agents use the concept of expertise in this sense.

It's the same discussion that [the organization] had about 10 years ago but that we've understood to get rid of, that if the research is good then it must look good, as long as the international reviewers are – as they should be – **experts in that field**. (iw: 14)

In [research area], there's a lot of domains and topics and very different thematic [elements]. And we then need **experts in each field**. Now we have to combine all of that. How do we do that? We do need a discussion [by] a common group, the project[s] sent to the expert in their field. We do need several experts. But, of course, the expertise is just valuable on the specific topics of the projects, not on the all, overall project. Not possible.(iw: 19)

Secondly, there is *societal expertise*. The corresponding definition is used particularly by representatives of those organizations that are interested in funding applied research. A reviewer with this sort of expertise is highly familiar with the social reality in which the research takes place and/or that is the object of the research. Such an expert is able to evaluate whether a proposed research project is societally needed and whether it takes into account a specific social context: societal limitations and affordances that affect, or should affect, the research design. Hence, a societal expert can evaluate the society-specific relevance of research just as the agent in the next extract indicates.

So there were no international reviewers; it was just national reviewers from other countries [...]. Because very often the question was also “**what is the national relevance** of that project?” and it's very difficult to reply to that as an American or Canadian reviewer. (iw: 4)



Figure 9: Two definitions of reviewer expertise, by type of funding organization.

The need to define expertise as either scientific or societal seems to arise from the kind of research the organizations value the most (see figures 9 and 10). This being the case, the definitions differ from each other. Those that value basic research appreciate scientific expertise, and the organizations that value applied research respect societal expertise. In addition, there is a third commonly used definition of expertise: expertise in the research call itself. This sort of expertise is applied by all organizations. Such an expert knows about the larger objectives of a call and about its aim. He or she can, for example, tell whether a given proposed research project is similar to another one and whether several proposals overlap or instead complement each other, jointly forming a desirable research program. Such an expert can thereby evaluate the relevance of a proposal in relation to the call itself. This kind of expertise is described well in the next two extracts.

To have independent international experts relevant to the themes of the call for proposals, they are the expert panels, and this strategic network development is used in building them, all of the networks that we have available, and we've aimed consciously to search for the sort of all-round experts who are independent, [...] people **who will understand the themes of the call for applications and its overall aims and relevance** as well as possible. (iw: 10)

And this **overall evaluation** is done by a scientific group, because the scientific group gathers all the expertise [at] the same time. (iw: 19)

		VALUES	
		QUALITY OF SCIENCE	RELEVANCE OF RESEARCH
INTERESTS	ORGANIZATIONAL (global)	<p><b>Funding basic research and increasing the quality of science</b></p> <p><i>Clients: Researchers and the scientific community</i></p>	<p><b>Funding applied research</b></p> <p><i>Clients: Society, policymakers, and industry</i></p>
	NATIONAL (local)	<p><b>Funding domestic researchers and increasing the quality of research within the nation-state</b></p> <p><i>Clients: Domestic researchers and the nation-state's scientific community</i></p>	<p><b>Producing nationally relevant, usable knowledge</b></p> <p><i>Clients: The nation's society, its policymakers, and industry</i></p>

Figure 10: The values underlying various funding organizations' evaluation practices and their organizational and national interests.

The first strategy for meshing standards of science with organizational interests is hence to give different definitions to the concept of expertise. Under the global principles and logic of impartial science, expert evaluators need to assess applications, but the kind of experts is not specified. In consequence, organizations interpret the term in the ways that benefit them the most. Those who want the funding to go to the highest-quality basic research support the selection of evaluators who possess scientific expertise and are able to recognize such research, people who will most likely also give said research the highest scores. Those wishing to fund applied research support evaluators who have social expertise, can identify corresponding research, and are likely to give it high scores.

The key consequence of the difference in definitions, in practice, is that the country of origin of the peer-reviewers becomes relevant. The attribute attached to experts in this context is externality. When funders use the term “external,” they mean standing outside the funding country and/or applicants’ countries – that is, “foreign.” The opposite is “internal” or “domestic.” Funders use these terms in describing how they affect the level of expertise a potential reviewer may have. The next extract illustrates nicely how the reviewers’ country of origin is seen as affecting their level of expertise. In this extract, the funding officer describes initially selecting reviewers so as to ensure that there was one from each funding country, then, the next time around, making a conscious decision that the reviewers’ country of origin should not matter. Nonetheless, the interviewee could name the countries the reviewers came from.

In a [specific] program, we took **an expert from each of the [ERA-NET] funding countries**. But then in [another] program, we didn’t look at all **at what countries the experts were from** but tried to find the best possible international experts. And that did include experts from [ERA-NET] countries, Germany and England, probably others too, I think from Holland, but then there were some from outside Europe – there were Americans. But it was not the case that there shouldn’t be a reviewer from an [ERA-NET] funding country [...]. But no, **nationality wasn’t a factor**. (iw: 7)

Whether foreign experts are seen as having a higher or lower level of expertise than domestic reviewers depends on the organizational interest of the funder in question. For example, in the next extract, the funding officer, who represents an organization that funds basic research, describes her organization as favoring foreign reviewers because finding good experts from abroad is not a problem. The extract illustrates a type of argumentation according to which a scientific expert can recognize good research wherever it is conducted. The reasoning proceeds from the fact that scientific criteria are seen as universal and applicable whatever the location of the research – or of those reviewing it. All in all, when the scientific-expertise discourse is used and the issue is reviewer expertise, the reviewer’s country of origin seems to be deemed irrelevant.

But for the others it was an issue, they saw it as – and I think that was to do with this same discussion – being even stranger, like, “oh, foreigners, who know nothing about our research?” [...] **if the research is good then it must look good, as long as the international reviewers are – as they should be – experts in that field.** (iw: 14)

A different argument is used by officers who represent organizations that fund applied research. In the social-expertise discourse, used mainly by organizations aiming to produce knowledge that is usable and relevant for societal purposes, the reviewers' country of origin is argued to have an effect on their expertise. This is because, for these funders, expertise entails ability to understand a specific cultural and societal context. Hence, the stance is that domestic (internal) reviewers have more expertise than do foreign (external) reviewers. This claim is justified by an argument in which domestic reviewers have more knowledge about the social and cultural context in which the research will take place. Such a stand can be seen in the next extract.

So [using external reviewers] is recommended because it brings a fresh input into the evaluation, although [using internal reviewers] is understandable, I think, because **an external [reviewer] might be very good scientifically but might not know the country or specificities.** (iw: 1)

Consequently, from the expertise point of view and depending on how expertise is defined, either the reviewers' country of origin is deemed insignificant or domestic reviewers are valued more than foreign ones, and expertise can mean ability to recognize either high scientific quality or societal relevancy of research in a particular cultural and societal context. From the scientific quality point of view, reviewers' country of origin does not matter. The only thing that matters is their ability to recognize scientific quality, which is thought of as revealed via a universal set of indicators that do not depend on where the research is conducted (or reviewed). When expertise is evaluated instead in terms of societal knowledge, domestic reviewers are considered to be better than foreign reviewers, for their ability to understand the cultural and societal context of research. In this specific frame of thought, domestic reviewers possess nationally relevant know-how so are able to evaluate national specifics better than foreign reviewers, who possess no such contextual knowledge.

		Experts' origin	
		Domestic/internal	Foreign/external
Type of expertise	Scientific	No effect	No effect
	Societal	Higher	Lower

Figure 11: The effect of reviewers' country of origin on their level of expertise.

The end result is that the representatives of the organizations have to negotiate about evaluators' country of origin. For the basic-research funding agencies, country of origin does not matter,<sup>46</sup> but to those funding applied research it does. In the end, the participants quarrel not so much about the reviewers' home country as about whether the organization's interests in research get realized: whether the right kind of research, basic or applied, that produces nationally relevant information gets funded. The reviewers' expertise and hence their country of origin plays a role. Therefore, discussing reviewers' country of origin is commonly relevant for international research funding.

## The second strategy: Defining impartiality

The second aspect of defining what constitutes a good reviewer is a similar kind of battle, one in which different definitions of reviewer "disinterestedness" are featured. This brings in the second strategy for bridging apparently contradictory institutional requirements. Funders seem to agree that reviewers need to be neutral, disinterested, independent, and unbiased – free of any self-interest or group-based interests. Furthermore, funders are of the shared opinion that an external reviewer is better than an internal one because the former is more likely to be disinterested and unbiased.

**The review really has to be independent, so we were always trying to find reviewers out[side] of the different funding countries [...].** It's very difficult to find a competent person that's not biased. But in the end it's one of the criteria for the review, that you are not biased and you're also signing that, so if you don't have... Yeah, stating that you don't have a conflict of interest with anything. (iw: 4)

The matter seems simple: an external peer-reviewer is more likely to be impartial than an internal one. Still, this ideal is not mirrored in practice in many ERA-NETs. In fact, they use many internal (domestic) reviewers in their calls. To explain why, I will

describe one particular ERA-NET in which there was a large amount of talk about these issues during and after preparation of the calls. The starting point for the calls was stated in the written general guidelines of the ERA-NET, which take a stand on what kind of reviewers should be used: “All efforts to find external evaluators outside contributing call partners are strongly recommended.”

Even so, an evaluation report produced later by the ERA-NET management itself shows that each of the calls within that particular ERA-NET involved a separate way of choosing reviewers. There were three calls for research, differing in scope. One of the calls used only reviewers who were external to all the applicants’ countries, and one used only reviewers from within the applicants’ countries. At the same time, all funders agreed that evaluators must be unbiased and that this can be ensured through the use of external reviewers.

To understand why different practices were adopted no matter the underlying common principles, I conducted several interviews with the funding officers who took part in the individual calls involved. I wanted to know how and why they ended up choosing the reviewers they did. When I was interviewing one particular funding officer, who took part in the call in which only internal (domestic) reviewers were used, I expected her to defend the decision to use domestic rather than foreign reviewers. Instead, she started by explaining the need to use *external* reviewers, as this extract shows:

Interviewer: [W]hen I was reading these reports, I noticed that there were some differences between [your] call and [another] call.

Respondent: Yep.

Interviewer: For example, something about using external reviewers. Can you say something about that difference?

Respondent: About the external review, what do you mean by external reviewers? **Because we used external reviewers, of course, yes. The peer-reviewers. So they are external.** [...] we have external reviewers that provide a report, then the report is discussed within the scientific committee [...], so it’s completely similar with [the other call], similar. (iw: 19)

This response was surprising. The evaluation report by the management clearly indicated that the call used only peer-reviewers from the applicants’ countries, yet the informant claimed that external reviewers had been used. The explanation emerged shortly, when the interviewee described the kind of external reviewers who were used for bringing impartiality to the evaluation process:

Interviewer: So you think that external and individual [i.e., not a panel of] reviewers are a must?

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<sup>46</sup> They may favor external reviewers for other purposes, though, as I will show next.

Respondent: Yeah [...], sure. That is a necessity.

Interviewer: What does it assure? Why is it so important?

Respondent: Why?

Interviewer: Yeah.

Respondent: Oh. Um [thinks for a few seconds], for me there are several reason[s] why it is important. Because we are talking about non-fact, and, of course, there are several groups which are interested by the project to push their own project, or their own community. Not good [...].

Interviewer: Ah, okay. Right.

Respondent: So, it's absolute: **we need to have an external review from the point of view of the scientific team. External from the laboratory.** (iw: 19)

The extract shows that, similarly to “expert,” the term “external” can be defined in a number of ways. To this particular research funder, and for purposes of the call she represents, “external” meant not externality from the applicants’ countries but externality to the research group or organization applying. With this definition, although the reviewers came from the applicants’ countries, they were still external: they were external to the applying team and any associated laboratory.

Accordingly, one can say that in both of these calls, in which different practices were adopted, the agents acted in line with shared principles of using external reviewers in order to secure impartiality. “External” was simply assigned different meanings in different calls. In the first call, an external reviewer was thought of as someone who was not working in any of the applicants’ countries, while in the second one the term meant externality from the applying organizations only. No matter that difference, there was, according to the interviews, commonality among all funders in feeling strongly that external reviewers should be used, and they also were confident in having done just that. The value of impartiality and externality of reviewers can hence be seen as a common, shared cultural principle in research funding. It is supported by the fact that there are no arguments in my data in which funders might state that “internal” reviewers are better than “external” ones from the disinterestedness angle. From this perspective, an external reviewer is always regarded as better than an internal one.

Distance is thought of as increasing the level of impartiality. This is why “external” is taken to indicate a more disinterested reviewer than “internal” could. However, my data show that funders differ in the interests they think reviewers need to be free of, and this

element explains the different definitions of externality presented above. Firstly, there are science-related interests and self-interest of various sorts. The previous extract refers to this type of disinterestedness. Since reviewers are often peers of the applicants and, so, scientists themselves, the funders want to make sure the evaluators are not too closely connected with the *research group* under consideration. They want to avoid a situation in which the reviewers' desire to advance their careers or those of their associates could affect their evaluation. From this angle, "external" entails either externality from the country in which the applicants work – in this respect, they are often also called "international" reviewers – or at least externality from the organizations in which the applicants work.

As for other possible interests, there is also a second way of defining externality: as externality from the *funding countries*. Why would that type of externality be relevant in choosing of reviewers? What kinds of interests are ruled out by this type of externality? Below, I present extracts showing that there are indeed other interests than those related to scientific careers that funders need to take into account when they choose reviewers:

Choosing the reviewers was a pretty interesting thing. In that [specific] ERA-NET collaboration [...] it has quite strongly been the case that each country has suggested a good reviewer from their country, and it has to an extent been a sacred thing, that there is a country-specific mandate to name **a reviewer from your own country to monitor your own country's things**. And there was some discussion regarding fitting these cultures together; we saw firstly that there is a round of applications where, if this principle is followed, then there will be too many experts and problems regarding their independence, incapacity, and with this principle. So on that discussion and justification, and also having given others a chance to suggest good experts to choose from, then I feel that we reached a good expert-panel group and got past the country-mandate reasoning. (iw: 10)

[Using external reviewers] meets [the] principle of transparency. It has the principle of equality, because **if these aren't any of the countries involved in the call, it's much less likely that he has any, kind of, even if it's not a conflict of interest, but mentally from country [...] perspective**. But if someone from [country A] is looking at [country B, he or she] might [look at it] from a different angle. And if someone from outside Europe is [reviewing] Europeans, it can be more critical. (iw: 1)

These two extracts showcase the idea that the peer-reviewers also need to be free from any national interests if they are to be impartial. When speaking of national interests, the funders mean funders' national interests or at least a national "mindset" that is thought of as affecting the result of the evaluation. From this viewpoint, external

evaluator is external with respect to the funding organizations or funding countries. Such evaluators are described as being less biased and more critically oriented. Finally, from this perspective, funders indeed favor reviewers who are from other countries than the funding countries.

	EXPERTS' ORIGIN	
	Domestic/internal	Foreign/external
LEVEL OF IMPARTIALITY	Lower	Higher

Figure 12: The effect of reviewers' country of origin on their level of impartiality.

What makes the battle over the definition of the term “external” a strategy for furthering funders’ national and organizational interests is its implications for the reviewers’ country of origin. Whether impartiality is considered in terms of freedom from bias related to the applicants (freedom from scientific-career-related interests) or instead from bias related to the funders (freedom from national interests), nation-states’ borders become relevant once again in the choice of disinterested research-proposal reviewers. The reviewers’ country of origin is important in three separate ways. Firstly, foreign reviewers are favored because they are thought of as less likely to be affected by scientific-career-related, personal, or applicants’ interests. Secondly, foreign persons are favored because they are considered less likely to pursue funders’ national interests. Finally, they are preferred because they are deemed less likely to further more abstract national, local mindsets that could affect their work as evaluators in the same manner. Geographical distance, in these arguments, enables evaluators to be more broad-minded and critical of the applications. All of these arguments support the ideal of objectivity in the process of evaluating project proposals. According to them, a good reviewer is distant, objective, disinterested, and free of locale-based restrictions of thought. The idea is depicted in Figure 12.

This conclusion fits in well with the aforementioned view expressed by funders of basic research that scientific expertise is independent of a good reviewer’s country of origin. Their combined effect is that basic-research funders are likely to favor foreign (that is, international) evaluators, since these people may – and should – be experts in their field while also sufficiently external to be independent and impartial. The implications are not the same for funders focusing on applied research. I have shown that they prefer domestic reviewers, for these evaluators’ greater ability to judge whether the proposed research is socially relevant. If domestic reviewers were seen only as “internal” and hence

biased, choosing them would be impossible for such funders from the global-standards standpoint. That is, if domestic reviewers were biased but still selected, the funders would be acting against the global blueprint of using independent, unbiased reviewers. Indeed, acting in this way is not possible, because the blueprint is determinative: agents cannot break with its norms. What they can do is follow another route, by creating definitions that allow them to, in essence, edit the rule such that they can act in ways that would otherwise be prohibited. This is what funders do when employing the strategy of giving the term “external” alternative meanings. A domestic reviewer who is external to the applying group or its laboratory is still deemed external by these funders, and thereby disinterested from the scientific and self-interest point of view. The reviewer in question is thus rendered “suitable” in relation to the norms. The definition enables choosing domestic reviewers without violating any of the institutional requirements that funders need to follow. In this way, applied-research funders become able to choose reviewers that they consider able to facilitate the fulfilling of their organizational and national interests.

## **Implications of the definitions of a good reviewer**

That is what the reviewing is [based on], that the reviewing process is definitely- that they definitely are good reviewers, able to choose the best. (iw: 8)

To summarize the discussion about choosing peer-reviewers thus far, we find that reviewers’ disinterestedness is the ultimate goal striven for. The attribute “external” is used as an indicator of disinterestedness, and hence only external reviewers are to be used in the review process. It is clear, however, that both externality and interest can be defined in several ways, for purposes of creating practical possibilities that would not otherwise exist. From the impartiality perspective, funders consider foreign, international, external evaluators better than domestic ones. This is a consequence of the idea that foreign reviewers are less likely to have self-interest or to have career-related or national interests with respect to the applications than domestic reviewers are. When, in contrast, the funders talk about expertise, they express the view that domestic evaluators are better than foreign ones or that geographical origin does not matter. These findings are compiled in Figure 13.

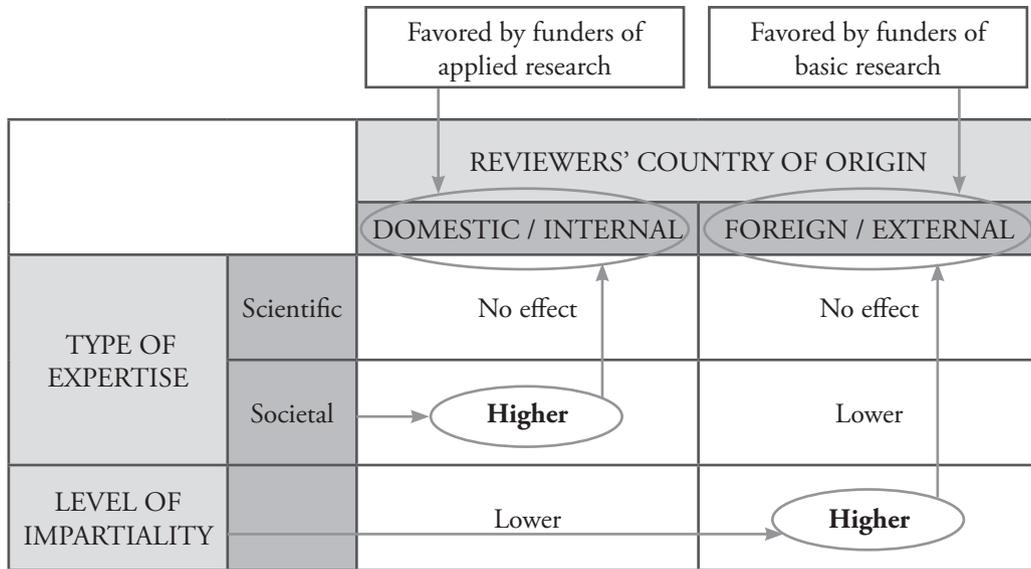


Figure 13: Reviewers' country of origin and its effect on their level of expertise and disinterestedness.

The figure can be used to present succinctly why the choice of reviewers and of where they come from is sometimes a lengthy process. It is, of course, not so much about the reviewers as a matter of funders' interests being on the line. Organizations that regard scientists as their clients and are interested in funding the highest-quality basic research, whose evaluation entails almost always using scientific criteria, tend to favor reviewers who are foreign because such people are less likely to be nationally biased and nothing precludes them from being very good scientific experts. While such experts may be found within the funding countries, the fact that they could have self-interest or other interests makes them less favorable as reviewers. Such individuals can also recognize the kind of research that these funding organizations want to support and most likely appreciate it. This increases their value to the funders. In contrast, organizations that regard policymakers or industries as the clients and want to produce usable and applicable knowledge through research prefer domestic reviewers, because such persons possess social expertise that outside reviewers most likely do not have. These funders argue that domestic reviewers too can be free from at least self-interest and scientific-career-linked interest, as long as they are external to the applying organizations or related entities. The reviewers' job is to find the kind of research that the funders want to fund, research that the other kind of "external" reviewers would not necessarily recognize or appreciate as much. With such reviewers, these funders can further their interests more readily.

When funders talk about the selection of reviewers, they are constantly navigating along an axis delimited by world-cultural principles associated with a good reviewer and

their opposites: the continuum involves external (disinterested) to internal (interested) and expert to amateur. Discourse analysis of their talk also shows that those reviewers whose perceived expertise can be maximized while perceived disinterestedness is simultaneously minimized are generally regarded as good reviewers. If “externality” brings them more expertise (makes them able to see the bigger picture, etc.), they are favored even more, while if so-called externality is felt to decrease their level of expertise, they are not regarded as good reviewers. At the same time, when internality is said to increase the danger of impartiality and interests, the reviewers in question are not appreciated, while greater value is accorded to the reviewers when a domestic origin is described as increasing their expertise instead. The analysis shows that research funders are keenly aware of the institutional blueprints they need to follow. They show a great deal of creativity in finding new definitions for the indispensable concepts they must “sign up for” in order to act in what institutional blueprints deem the proper way, thereby allowing themselves to adopt practices that otherwise would be impossible. In this battle of words, concepts and interpretation are the key to making the desired space.

## Strategies used before and after the review process

I have shown how research funders struggle for the satisfaction of their organizational and national interests by influencing where the reviewers of proposed research come from: within the applying or funding countries or from other, foreign countries. Such a battle is not always possible, though. The global principles tied to funding the best research are as much in flux as any other institutional principles. There are trends by which policies move in certain directions, and the trend as 2010 neared has obviously steered practices toward the use more and more of applicant-country-external, international reviewers. The utilization of neutral international evaluators is gaining strength as an even more compelling trend spreading in Europe, which puts pressure on those funders who have thus far used only domestic reviewers. The following excerpts show the kind of reasoning used at European Union level to increase the utilization of international evaluators in research-evaluation processes:

Member States are invited to: Ensure mutual recognition of evaluations that conform to **international peer-review standards** as a basis for national funding decisions [...]. Research stakeholder organisations are invited to: Pilot the use of synchronised calls with, where possible, single joint **international peer review evaluation** of proposals as a basis for funding decisions. (European Commission 2012: 8)

Allocating funding through open calls for proposals, evaluated by **panels of leading independent domestic and non-domestic experts (peer review)** – this incites researchers to reach internationally-competitive levels of performance. (European Commission 2012: 6)

[The EU entity] NOTES the existence of best-practice which all Member States should attain in order to overcome divergences in research performance across the EU, involving allocating scientific research funding through open calls for proposals, **evaluated by panels of independent experts, including international experts**, and assessing the quality and outputs of research-performing organisations and teams. (Council of the European Union 2012: 4)

Hence, there is evident pressure on funders to switch to using international reviewers in their funding processes, at least in European cooperation, in light of the European Commission's recommendations. The document extracts above show that such a choice is easily argued for from the perspective of scientific quality, but the situation is less clear-cut with respect to other interests in research funding. I have shown that influencing the choice of reviewers helps funders make sure that interests apart from purely funding the best-quality research are taken into account in funding decisions. The growing requirement of having an international review process means that such a strategy as the one I have described for this end may no longer be available. Funders need to find alternative ways to safeguard their interests in funding decisions. And they do. Much here involves forethought, as this extract from an interview with a funder shows:

In national decision-making [...] we don't use external review. So now that we're involved in this ERA-NET activity, we are to a great extent getting behind external review and in national funding decisions looking really at those national criteria [...], and **we are required to make sure, partially by anticipating, that our national criteria will be fulfilled in the international review.** (iw 10)

How, then, are national and organizational interests safeguarded in situations in which funders are not permitted to use national evaluators? To present the answer, I shall take an example of each type of funding organization, one funding mainly applied research, the other funding mainly basic research, and examine more closely how they handle the situation in ERA-NETs that have to use only international reviewers.

## **A third strategy: Multiple-stage evaluation procedure**

The first example comes from an ERA-NET in which both basic- and applied-research funders were involved. The decision to use international-peer-review-based evaluation

in order to increase the level of scientific quality of the research funded meant that particular reviewers could not be chosen for advancing national interests, such as funding domestic research or nationally relevant research. The funders had to find other ways to steer toward this goal. Here, a funder representative describes what was done to make sure that national interests would also come to fruition in the final funding decisions:

In this two-stage call for applications, **in the first stage**, for example, **we have to pay close attention to what projects are the ones we can't fund** in the second stage based on national criteria, even if the reviewers were to suggest them. And **we must identify these sorts of cases early enough.** (iw: 10)

The strategy was to organize a two-stage evaluation process. In the first stage, the funder representatives went through the applications themselves and eliminated the ones that did not meet their national requirements (e.g., that of producing nationally relevant information). Only the remaining applications were sent on for the “normal” scientific evaluation, conducted by foreign, international peer-reviewers. In this way, the funders made sure that both national interests and scientific interests were satisfied and that they also operated in accordance with the global science-policy rules, under which the assessment must be carried out by independent expert evaluators and funders must fund only those projects that the evaluation indicates are among the best.

## **A fourth strategy: The call agenda**

On the other hand, there is also an example showing a way in which basic-research funders ensure that their national interests are satisfied in international research calls. Their national interest is in securing funding for “their” (that is, domestic) researchers. The case entities here were involved in two distinct ERA-NETs, both of which used only foreign, international evaluators and, in accordance with the global requirement, undertook to fund only those projects assessed as best.

In the extract below, a body that funds only basic research and took part in the ERA-NET work describes the requirement to fund only research that is at the highest level scientifically. For funders of this sort, there is almost no significance to whether the knowledge produced in the projects is nationally relevant. The most important thing is that the research be of high quality.

You know when you've sat on [the organization's] panels from one year to the next, that the eternal question has been [in the organization] that it is clearly stated in [the organization's] regulations that **the scientific quality of the research is the first and only significant relevant factor**, so if, in addition to

that, it can be applied, it is not a problem, but we can't prioritize it [emphasis in the original]. So in the [organization's] call for applications every year, there were plenty of the sort of projects that aimed to and could be applied to solve some problem, an environmental issue or something, but when they didn't rise scientifically to the level of the highest-quality basic-research projects, then they were often not funded. And [the organization's] justification was always, since they are a funding body for high-quality basic research, and [...] there are different organizations that fund environmental and applied research. (iw: 14)

In an interesting development, this particular funder decided not to take part in funding one of the calls in the respective ERA-NETs they were involved in. When we discussed why not, the interviewee said that the research dealt with themes that are not important in her country. She said that the theme of the research call was linked to a particular geographical area and specific issues there, and that because the problems of that region did not affect her country in any way, the decision was to "sit out" this call and not fund it. Such reasoning was surprising, since she had only a moment earlier said that her organization's primary objective is to finance high-quality science, regardless of whether the knowledge produced is nationally relevant. On that basis, one could conclude that this funder would be interested in funding research addressing that theme too, as long as it is of scientifically high quality.

Well, one was that, yes, they were probably theoretically open and possible for [our organization] to take part in, but, if I recall correctly, **the thematic areas in those calls were focused on some [other geographic region's] issues and when [my country] does not really have [such issues], so we decided not to take part in those.** (iw: 14)

A line of argument about not wanting to fund the production of knowledge on a subject that is not nationally relevant should be expected of an applied-research funder but is surprising when coming from a basic-research funder. In the next extract, the interviewee later reveals the underlying reason for which this call's theme, alongside themes of calls for research in general, was so important from this funder's perspective. At issue was not so much that the topic of research would not lead to relevant information but the fact that the funder's country did not have high-level researchers in the associated field.

I recall that this was discussed because – and I knew it straight away that **this policymaking research**, that it's... **To be at the level that the [organization] wants to fund, there isn't necessarily much of that to be found in [my country]**. Because I have sat on those evaluation panels where there have been applications from the best of [my country], so I knew to a great extent what could be expected from there. (iw: 14)

The organization did not act as a funder in connection with that particular call because its representatives knew that the country did not have researchers at a level high enough in the field that they could succeed in the international assessment. The funder's national interest was in funding researchers in its country, and its organizational interest was in funding high-quality science, so if that country's scientists could not produce high-level research on that particular topic, they would not be able to respond adequately to the call. If the funder did participate, deciding to fund the call, and the best researchers came from other countries, this would mean giving up at least one of these objectives. The choice would have been to fund either researchers in other countries, who were the best in scientific terms, or domestic researchers, who were not among the scientifically best. Because the global science-funding norms restrict the funders from funding poor research, this funder would in practice have had to accept the former option, funding researchers from other countries and thereby going against its national interests. This explains not participating at all. The funding entity takes part only if there is excellent research on the call's theme in said funder's country and the researchers carrying it out are likely to succeed in the scientific evaluation – thereby winning the game, fair in itself, based on neutral scientific evaluation.

That is why negotiations about research calls' themes are often long and difficult. Funders need to find topics that speak to all of their interests, both organizational and national. In practice, this often means that there need to be excellent researchers from all of the funding countries working on the relevant theme who conduct both top-level basic and applied research and who thereby produce knowledge that is relevant to the funding countries. It is probably quite self-evident that the identification of such themes is not always easy.

## **A fifth strategy: Marketing**

Finally, there is one further strategy through which funders are able to increase the likelihood of "their" researchers succeeding in a research call. This strategy is marketing, pure and simple. It is manifested in practice by research funders spreading the word about the relevant call for research to local researchers who potentially could succeed in it. A country may have quite a few excellent researchers who address the theme, but they cannot win the funding, beating other countries' researchers, if they do not respond to the call. Hence, funders need to make them aware of the call, in the hope of attracting their interest. The intention is to increase the likelihood of the respective country doing well in the call, getting a large amount of funding.

In the next extract, a funding officer describes how a funder from one particular country used this strategy to avoid losing out in the second call it participated in. This strategy is well-known, in fact, and representatives of other countries actually taught it to this newcomer, to help it fare better in the future.

[Country] did very poorly in that pilot program, and they were sulking. But that was because [laughing] they had just circulated the same sort of information they would for some [national] program. And when it says “[ERA-NET]” and this is something completely new and must be from at least three of these countries, these 12 countries and like this, so I guess many people probably thought, “Oh, what’s that?” It was unbelievable [...]. And there would have been researchers in [the country in question]. But this was good because it showed that **the countries that did a lot, advertised this and had information sessions for researchers, they got more**. I mean [whispering] [another country] took half of the pot, more than half – it drew in a completely incredible amount [laughter] [...]. But [the country in question] was really left out in that and they got a bit annoyed about it. But **then we said that they have to take care of circulating information better, and then in the next [round of research applications] [...]** [the country in question] did very well. (iw: 8)

## Agents’ creativity in stretching institutional requirements for other institutional ends

In this chapter, I have explored funders’ conflicting professional principles and interests within the context of common practices’ formation for purposes of illuminating how it is possible to advance both at the same time. I have shown how research-funding representatives are able to apply three separate and partly contradictory mindsets simultaneously when designing a common international research call: one based on global principles of science policy according to which funders must fund only the best scientific research, as judged via independent expert assessments, and the other two based on national and organizational identity categories, according to which the participants need to fund certain kinds of research. I have found five strategies that funders use to enable meshing these conflicting objectives with each other: to create new definitions for terms used for describing globally appropriate peer-reviewers, 1) new definitions for the term “expert” and 2) new definitions for the term “external”; to use 3) a two-stage call procedure; to choose 4) a theme for which the country in question has top-level researchers; and to perform 5) marketing of the call to researchers in the “home” countries. These findings are compiled in Figure 14.

RESEARCH-CALL DESIGN PREFERENCES	INTERESTS	
	ORGANIZATIONAL AND NATIONAL	
	<b>Basic research / funding the best-quality research</b> Funding domestic researchers	<b>Applied research / funding societally relevant research</b> Funding nationally relevant research
<b>Reviewers' expertise</b>	Scientific expertise	Societal expertise
<b>Reviewers' externality</b>	Funding and applicant countries	Applying organization
<b>Reviewer origin</b>	Outside funding and applicant countries	Funding countries
<b>Evaluation procedure</b>	One-stage with only scientific evaluation	Two-stage with relevance and scientific evaluation
<b>Call agenda</b>	Attracting top-level researchers	Gaining nationally relevant scientific knowledge
<b>Marketing</b>	To researchers in the country	To researchers of a relevant theme

Figure 14: Funders' organizational and national interests and their effect on preferences in choosing research-call practices.

My research has shown that research funders find strategies for adapting their otherwise contradictory objectives to suit the conflicting institutional requirements. They cannot ignore the global science-policy principles' requirement to use external expert reviewers in the evaluation process, but by giving the terms "expert" and "external" new definitions, they are able to argue that reviewers from other countries are less or more expert and external, as necessary for matching their national and organizational interests. Thus they can influence who may be regarded as a suitable reviewer. For example, I have shown that domestic reviewers can be regarded as "external" and hence impartial if externality is defined in a certain way, and applying a particular definition of expertise allows certain people to be seen as having more expertise than experts from countries further afield, since they are able to assess the societal aspects of the research.

By means of such definitions, funders can choose reviewers who are able to recognize and appreciate the kind of research whose funding is in their own national and organizational interest. Thus they stretch the (in some cases new) institutional norm to fit their purposes, by working with, and not against, it. They push the norm's cultural boundaries and mobilize its potential for their own agenda. In addition, they use evaluation models that allow them to eliminate projects that do not fit their

organizational and national goals and then, in a second stage, send the scientific peer-reviewers only those proposals that are in line with their non-quality-aligned interests. In this way, they can make sure that the projects they end up funding are both in accordance with their interests and of the highest quality – that is, those judged the best of those actually submitted for the independent evaluators’ assessment. Additionally, they select only call themes for which they know that their country has top researchers, so that domestic candidates are likely to succeed in the external scientific evaluation. The objective is to fulfill their national interests simultaneously with the quality-based ones. Finally, they market the calls to researchers in their countries in order to increase the likelihood of their success in the competition for funding in accordance with national objectives.

The ways in which research funders adapt to the global demands are illustrated particularly well in the context of international cooperation. In this context, acting consistently with these principles becomes a new requirement for those funders who have not been compelled to act accordingly in the past. That is, while the requirements are already familiar to others, who are used to them, they are new to many. In any case, all agents representing funding organizations are forced to negotiate together over what kinds of new practices they will create around these common principles, because common practices in this context never existed before. Facing this new situation, the agents have to make decisions on how to respond to the principles and translate them into practices. My research shows that agents in such situations do not fight against the new principles, nor do they reject the old habits completely; instead, they seek and find strategies that allow them to adapt their old practices in a manner that apparently honors the new principles. The strategies described in this chapter show that this adaptation does not mean so much changing their old practices as stretching the new script and its principles so that the old practices mesh with them, thereby enabling continuation of the old habits.

My examination also revealed the lines of socially acceptable ways of furthering one’s interests in the context of a new normative environment. For example, I have looked at the norm according to which funders must finance only the best research and hence use external expert reviewers to assess and identify that research. Because they cannot change this norm, the funders cannot finance poor research, even if doing so fulfills some of their other interests, or base their funding decisions on their own assessment of the project applications. Instead, the only thing they can do is affect how “best” is understood in this connection, along with who is “external” and an “expert.” The norm itself does not take a stand on such practical issues, so it leaves room for a struggle over definitions and for interpretation from the perspective of each of several distinct interests. This, in turn, has practical implications for the form of funding practices. For example, all the various

definitions of expertise and externality of reviewers that I have introduced in this chapter have practical ramifications. Firstly, the chosen definition affects the stance as to who is regarded as an eligible, or the most eligible, reviewer: who has precisely the kind of expertise the funders are looking for, how great his or her expertise in the matter is, and from which countries experts may come.

Choosing reviewers is, in fact, a moment in which funders' interests are transformed into features of "good" and thereby "the best" research. If a reviewer is expert at recognizing top-level basic scientific research, he or she is likely to give more points to a proposal that he or she regards as being of high scientific quality, while a reviewer who is an expert in recognizing societally relevant research is likely to give more points to a proposal that she or he considers to represent research relevant for a given society. Since garnering many points in research evaluations is an indicator of good research, using certain kinds of experts in the review process enables funders to protect their respective interests in the evaluation process. An essential element here is whether funder and reviewer agree on what constitutes good research – in which case the more points the reviewer gives, the better the research corresponds with the funders' interests. Hence funders' interests are made synonymous with what is considered "good research," and funders are able to fund the research they consider best without violating the imperative of funding only those projects given the highest scores by independent scientific peers selected for their level of expertise. They can allocate the funding gladly, because what the reviewers consider to be best fits with their own idea of what constitutes the best research. This is how funders reconcile their wish to fund the kind of research that they want to under organizational and national rules with the requirement that they not go against the principles of independent and unbiased evaluation and of funding only the best research. This finding should not be taken as a sign of suspicious or inappropriate activity on the funders' part. Rather, it is a good reminder of the fact that there is no objective definition of good research, because of which there is an ongoing struggle over just that – not only among researchers but among funders as well. Funding the highest-quality scientific research is just as much an interest as funding socially relevant research is. Funders just need to get their own view through, which entails negotiating and finding ways to make sure such research is going to be funded.

I argue from this vantage point that funders' definition battles in designing European research calls can be interpreted as means of defining good research. Whether this has to do with choosing an agenda or specifying the kind of expertise that reviewers should have, the funders are all pursuing a common objective: for "good" research, as judged by reviewers, to correspond to what the funder is interested in funding. The funders thus are constantly negotiating about what good research is, what it is like, what the elements of it are, who is able to recognize it, and – thereby – what all the funders in the relevant

ERA-NET ought to be funding. My work shows that the idea of good or “the best” research is a socially negotiable and constantly changing construction. All interested parties want their view incorporated into the idea of what constitutes said research, and they have some room within which to strive for this. The associated battles are realized ultimately in the negotiations on forms of common practices in funders’ research calls. From this perspective, it is no wonder that common international calls for research are sometimes surprisingly difficult to construct, with special difficulty found in agreeing not on the common principles but on practical procedures.

# Conclusion

In the dissertation project, I have sought answers for three questions:

- 1) Why does global policy language become adopted and cultivated on local level, and what is the role of identity work in this process?
  - i. To investigate this question empirically, I analyzed the use of the knowledge-based economy discourse and the term “information society” on the local level, also examining how these global key ideas that have framed European science policy since the mid-1990s are utilized in the process of creating “proper” national actorhood.
- 2) What is the role of identity work in facilitating European science-policy cooperation among national agents?
  - ii. Proceeding from my interview data, I built an analytical classification of the identity categories used by research-funding professionals working in ERA-NETs. Additionally, I used that taxonomy, taken together with the related interests indicated to be attached to each identity category, to analyze their motivations for participating in European research-policy cooperation. Finally, with the foundation formed by these two analytical steps, I formulated an empirical answer to how it is possible that the ERA-NET cooperation continues even though it does not lead to meeting of its pan-European objectives.
- 3) How does identity work shape the form of policy diffusion and enable decoupling?
  - iii. For the task of answering the third question, I empirically examined how identity work is manifested in research-funding professionals’ description of their work and how it affects the process of formation of research-funding practices in ERA-NETs.

Global policy language is embodied in adoption and adaptation at local level because it serves as a useful instrument in the actors’ identity work. For instance, the “information society” concept, which is part of the knowledge-based economy discourse, provides Finnish ministries with a socially convincing yet flexible affordance to reaffirmation of their social and political importance in Finland. Its roots as a renowned international catchphrase lend the concept social assertiveness, rendering it a resource that ministries can fruitfully employ in making their claims about how important they are in the national state. They use the discourse and the concept for purposes of creating a certain picture of the current reality and the requirements it produces, and they use that picture,

in turn, for creating and increasing their own importance as “proper” actors within Finland in respect of the emerging or existing “information society.” Consequently, the concept serves as a tool for asking for, and most probably receiving, public funding by not asking directly. This makes it applicable in the toolbox for the battle for scarce national resources.

Furthermore, European science-policy cooperation is used as a vehicle for positive identity construction by research-funding organizations. Hence, ERA-NET cooperation that is not so successful from the material perspective can continue even if it has not reached some of its main, material, goals because in the current era actors have a need to be portrayed as rational, advanced, international players. The ERA-NETs act as a useful tool for reaching this goal. Participation in the trendiest, most convincing and politically supported forms of international cooperation is in itself a sign that an actor is acting internationally and rationally; hence, participation is socially rewarding. That is why the cooperation does not need to result in anything else for it to serve its purpose. In fact, although national agents use material arguments to justify their participation, pursuing the associated goals does not seem a convincing enough reason in a situation wherein such interests are only rarely realized. Instead, conceptual objectives, such as using the platform to creating a certain image of oneself, may help to explain why they remain popular regardless of their failure to meet their material objectives.

The ongoing identity work also shapes the form of policy diffusion in ways that lead to harmonization yet not isomorphism. It affects the process through which global ideas gain form on the local level and steers it in the direction of glocalization. Identity work manifests itself in situations in which agents define themselves, and their sending organizations, as being certain kinds of actors or belonging to a certain “we” group. It also entails situations in which agents switch among these identity categories continuously in order to take new subject positions and communicate associated interests or institutional restrictions. This identity work and simultaneous use of several identity categories enables agents to draw on different institutional sources creatively and to construct new kinds of understandings. For example, agents’ opportunity to switch back and forth between global and local identity categories enables them to interpret global ideas from local viewpoints, stretch the boundaries of global principles to fit local features, and hence construct glocalized realities. These realities include both global and local elements for which identity work leads to relatively simultaneous diffusion of global ideas, yet the outcomes are locally distinctive.

At the same time, identity work enables decoupling by offering agents opportunities to follow various institutional rules at the same time. Their multiple identity categories demand that agents communicate multiple, also conflicting, interests at the same time. This institutional identity repertoire may lead to difficult situations but also enables

agents to construct socially acceptable approaches for escaping tedious situations strategically. When certain institutional requirements turn out to be situationally too difficult to meet, agents are able to activate other identity categories and use attached scripts as a socially acceptable way to escape the situation. For instance, a professional agent whose operation is limited to global scripts might escape a certain inconvenient institutional requirement by switching to a national agent's identity and use its rules as a justification for the withdrawal. This finding opens a new window for understanding the process of decoupling from the standpoint of agentic actorhood. From this perspective, decoupling is not so much an act of discontinuity with the stated norm as a timely conversion to other norms, just as socially acceptable and hence important, that can be used to justify the turn in action.

## **Contributions to knowledge and research**

This dissertation has highlighted the importance of local actors' identities in mediating global policy diffusion. Although previous studies based on world society theory have offered various forms of demonstration that nation-states all over the world adopt globally shared policy ideas, models, and principles, the processes at the local level have largely remained unrevealed (e.g. Frank & Meyer 2007, Meyer 2004, Schofer 2003, 2004, Schofer & Meyer 2005). By studying national policy agents' justifications for European cooperation and behavior in situations in which their various identity categories affect the actual choice of practices, the research presented in this work has been successful in showing five key things. Firstly, there is no single actor called the "nation-state"; rather, national interests are borne by multiple, highly varied agents acting on behalf of the state. Furthermore, "national" actors have institutional commitments other than those to the nation-state as part of their identity repertoire. Thirdly, it shows that identity categories are the cultural matter that attaches local agents to universal and global scripts, which they then adopt and import to the local level in the form of practical situations. It demonstrates in addition that the global scripts and principles are not "ready" in the form in which they are adopted: they gain shape and form when they are used in practical situations. Finally, on account of their local and global attachments, agents are able to unite local and global scripts, creating glocalised varieties of them. These findings fill the gap evident from earlier WST studies by addressing what takes place on the local level when global ideas spread. They also help to explain why, while on one level ideas and principles diffuse, on the level of practice different policy solutions remain.

Consequently, the research provides new relevant knowledge to the WST field about how science policy is organized in Europe. The foundational work in WST studies

shows how science is located at the center of current world culture and how world policy affects the organization of science, but that scholarship has less to say about how science policies and practices are constructed on regional level (Drori & Meyer 2006, Jang 2000, 2003, Schofer 1999, Schofer & Meyer 2005). In its examination of common European research-funding practices in ERA-NETs and how they are affected by global discourses, catchwords, and principles and by local institutional requirements at the same time, my study demonstrates how some of the most important science-policy instruments are organized in Europe. What is more, it complements earlier investigations by TCuPS in terms of studying local actors' interests in using global policy models as justification for national policy reforms (e.g. Alasuutari 2009, 2011b, 2011c, 2016b, Alasuutari & Alasuutari 2012, Alasuutari & Qadir 2016, Alasuutari & Rasimus 2009, Rautalin 2013b, Syväterä & Alasuutari 2013). It does so by showcasing another relevant level of analysis in this process, that of national agents' identity categories and how they mediate the construction of interests. By showing how multiple actor identities substantially inform agents about, and thus shape, their objectives, the research supports the previous findings by indicating that interests do play a role in why and how global ideas are transposed to the local level and further contributes to the literature by highlighting the role of institutional identities in construction of these underlying motivations.

At the same time, the research portrays how culture and conceptual aspects of policy preferences aid in understanding nation-states' behavior within the European Union. It cannot be denied that national agents have internalized rational, material, and well-calculated interests, which they treat as a reason for European cooperation. Still, one can question whether those interests are able to explain the collaboration's existence and continuation. My research suggests that nation-states are embedded in a social reality in which symbolic currency such as images and appearances plays an important role in state behavior. Additionally, I posit that accumulating such currency may, in fact, create new, valuable national subject positions in which these countries have more political latitude to affect the development of European policies. If nation-states' aspiration, for instance, to be recognized as forerunners in handling of relevant policy matters is fulfilled, maneuvering room is created, which, in turn, enables them to disseminate their own policy models and interpretations of universal principles to others. Especially noteworthy is that this common, continuous race for development between national actors is emphatically enabled, informed, and motivated merely by an abstract, non-material, and non-factual idea that nation-states can be placed on a continuum of development (Alasuutari & Qadir 2014). The prizes in that race, though purely social and symbolic, are real to the actors.

## Science-policy professions governing European science policy

National and organizational agents negotiating on the European platform in ERA-NETs are not just negotiating but (co-)governing science policy in Europe. The role of research-funding professionals in this process has been surprisingly overlooked, as if they were only technical executors lying between policymakers with a political mandate and researchers. The research presented here proves such a judgement wrong. Research-funding professionals possess strong, although limited, power to affect what kind of research gets funded. They exercise that power especially within the context of “misunderstandings” and through their authority as a profession to define “right” understandings of abstract principles agreed upon by policymakers (Watkins & Swidler 2013).

Global science-policy principles entering national research-funding spheres through, among other channels, ERA-NETs generate misunderstandings. These common steering principles can be understood in different ways. This situation is enabled by a context in which national and organizational agents cannot draw on a framework of common meanings and shared motives (Watkins & Swidler 2013). They have to accept instead that the cooperation is characterized by ambiguous meanings and divergent interests, and still they must pursue common practices that can be made to work for everyone (Watkins & Swidler 2013). In such an ambiguous environment, a need and opportunity is generated to take matters into their own hands. On account of all the conflicting motives among the participants, they enter a battle for definition of “right” policies and practices with reference to the abstract principles. This battle is rooted in the fact that the principles are abstract enough to be understood and defined in a number of ways.

Research-funding organizations appropriate global norms and principles for their own agenda with the aid of their agents. The abstraction of the guiding principles enables the agents to interpret them to their own benefit. This activity is a conscious act of “meaning-making” with practical science-policy consequences. By creating new definitions, they organize abstract, culturally based ideas and create different models of reality. In these realities, practices differ from each other, so divergent outcomes too result. What is worthy of note here is that research-funding professionals are given a mandate to do this. The power of these agents is based not on negative sanctions but on the professions’ ontological authority over science-policy issues (about ontological authority, see Alasuutari 2016a). This form of authority works through the profession’s socially perceived ability to define the reality and the situation at hand. It is socially awarded to the profession and functions through general respect. It does not require a hierarchy or a legal right of order-giving. Instead, the profession has a culturally acknowledged

and profession-related “right” to define these issues (Alasuutari 2016a). In consequence, research-funding organizations, via their agents, carry real power to organize European research and take part in the European governance of science policy.

In practice, professional agents are able to wed global principles with local requirements on account of their role as “cultural brokers” (Evans & Kay 2008). They are brokers because they are culturally embedded in local realities and global structures and therefore able to transmit global principles to the local level. It is exactly this embeddedness that enables them to gauge the extent to which global norms can be pushed and navigate cultural boundaries in order to create new understandings of global ideas to fit local realities (Atalay 2016, Kay 2016). Consequently, they modify, tailor, and reconstruct global idea packages to fit domestic contexts and finally localize them by mobilizing their potential. All this is done in ways that allow them not to compromise their identities (Atalay 2016). In fact, this sort of micro-process of norm localization allows them to align interests of local policy actors to global, indisputable, principles in creative and insightful ways. Accordingly, they govern European science policy through glocalized definitions of global principles.

Also, the role of ERA-NETs as mediators in this process needs to be recognized. Although it has been noted many times in this dissertation that ERA-NETs have not succeeded in one of their main tasks, promoting truly pan-European research funding, they should not be regarded as a complete failure. My research suggests, in contrast, that ERA-NETs as a form of “globalization hub” mediate the governance process by operating as spaces of global norm activation (Kay 2016). The global principles are discussed by local agents within the framework of the ERA-NET platform, in which the agents also encounter other agents, other interests, and other principle definitions. Together they use the platform to share local practices with each other, explain why certain restrictions need to be taken into account, and create various definitions based on their local understanding. Then, they together accept and reject various practices based on common principles.

In addition to this function, ERA-NETs carry out creation of workspaces that provide common understanding and generate agency. In fact, although international meetings such as negotiation platforms and workshops may appear to have little effect on substantive outcomes, they may still contribute to policy changes via slow accretion of knowledge, accumulation of structure, and recruitment of relevant agents (Hironaka 2014). Agents with various interests participate in these workspaces, bringing their multiple interests together, and these encounters may be more important than the actual results of the meetings. This is because the workspaces provide an agenda and a promise of endurance with which common policy issues can be worked out. Although they are not necessarily sufficient in themselves to create change, they help to create, legitimate, and institutionalize agents that want to further handling of the negotiated, common issues as

well as cultural meanings that are essential in promoting social change (Hironaka 2014). In that sense, ERA-NETs not only provide a space of opportunity to agents but create a new kind of agency, which further promotes and steers their actions.

## **Policy synchronization as an outcome**

Agents produce globalization, and this is possible because they are institutional in nature. As internationally operating and transnationally constructed representatives of many types of organizations and professions, these agents are assigned authority by society's structures and rationalities (Meyer & Jepperson 2000). They have thus not only gained reality but also attained considerable concrete standing and gained functions and responsibilities for which they are allowed to create, adopt, enact, shape, and globally spread world-cultural scripts. It is particularly this activity, positioned between the global and local, that is leading to synchronization of national policies and, in this, what is often considered to be globalization (Alasuutari 2016b, Meyer & Jepperson 2000).

The process of synchronization and globalization is enabled by scientization of the modern world (Drori & Meyer 2006, Schofer 1999). The global processes of scientization and standardization have created an image that modern national states are to a large extent similar and can be divided into isomorphic, measurable particles. Hence, policy ideas and discourses are regarded as equally applicable anywhere. This conception has led to a shared sense that the same idea functions and is similar in effect across even very different nation-states.

Local policy actors are keen on using this global, cultural material because it serves up ready-to-use ways to become proper actors. By using the same concepts, discourses, and catchwords, they fit in with all the rest of the rational, modern policy actors, throughout the world. Choosing these particular phrases and arguments showcases that they are "on top of their game": they know where the world is going and which concepts are the latest, the most rational, and the most convincing to be used in a certain policy area. This provides evidence that they are actors in place and, in fact, helps to create such a position. Using this material portrays them as being on the crest of the global trend as well as nationally credible and important. Consequently, the same concepts and discourses travel and spread, and they are used at the same time in various places. This does not happen because local actors are forced to employ them or because they would conform to similar ways of speaking as if mindless puppets. Instead, it is in their interest to use the same concepts as everyone else.

Transformation of global ideas into local practices results in policy synchronization. The change may not be a hundred percent isomorphic, but it is temporarily consistent

and noticeable. This phenomenon does not just involve a single change to an ever extending world culture, a change that renders all the nation-states similar and then stops (Alasuutari 2016b). Instead, as the concept of synchronization better highlights, the change is constant in nature. It comes and goes in wavelike trends. One trend sweeps across the world only to weaken gradually, after which ebbing another is born, which in its turn flows over the globe, and so on (several trends do exist simultaneously, of course). Therefore, policy change ought to be viewed as though nation-states were following the pattern of a school of fish: turning in the same direction as they constantly move yet showing some variation in moment, speed, and direction. They constitute a recognizable unit that consists clearly of interdependent, not independent, actors (Alasuutari 2016b).

Finally, what makes these ambulatory frameworks of thought so remarkable is that they create a common world polity that organizes itself globally. This global material constructs authority for agency and affects the way actors, organizations, and practices are constructed around the world. At the same time, its content becomes taken for granted and invisible. Global principles start to define the “natural” way of doing things, acting, and being (Djelic & Sahlin-Andersson 2006a). In effect, they continue steering our lives in various ways and expand in impact all around the world. Even more astoundingly, while there is no single person, organization, or other ruler of the world as could command on how to think and how to behave – i.e., what to do to become a “proper” research funder (Meyer et al. 2000) – these similar principles coming and going in trends spread throughout the world and can be empirically recognized.

## **How to study European transnational governance**

As has been argued many times before, transnational governance acts through not a government but rules, regularities, mindsets, discourses, ideas, and identities. Because these elements lie at the base of organized activity and steer the construction of a more formal structure of governance (Djelic & Sahlin-Andersson 2006b), research on European transnational governance cannot create a comprehensive picture of how that governance works if it fails to recognize their importance. Yet another point needs to be made too with regard to transnational governance and how it should be studied. It is this: research, based as it is on concepts and categories, needs to be critical of its own tools of organization while creating knowledge about how transnational governance works.

In consequence, research on international policymaking must take a closer look at its own analytical categories of national and global. One readily assumes that states are the central pillars of regulation and governance within and across national borders. If such an assumption steers the research design, it creates a real risk, however, of the research failing

to recognize larger structures that construct nation-states and national preferences and that thereby steer states' governance. A researcher who, on the other hand, concentrates exclusively on transnational structures may come to the ill-judged conclusion that the nation-state has come to an end or is not in any way a relevant actor in international cooperation or governance.

The argument developed for the dissertation is positioned between these two extremes. Methodologically it states that it is possible and, in fact, analytically most fruitful to understand a nation-state as a politically separate entity but at the same time a global construction. This combination affords a good view of what is regarded as "national" in European transnational governance. From this standpoint, nation-states and national interests exist yet, as I have shown empirically, are not necessarily unique. Instead, it is possible that firstly there are specific national interests that steer national agents' work and secondly that these interests are uniform across nation-states. The argument thus pays attention to cultural constructions above the nation-state structure while not denying that structure's existence.

This stance has enabled the research at hand to recognize the features of nation-states almost as if they were identical siblings. From this standpoint, nation-states are at the same time equivalent and their own entities on account of national borders, which are constantly reminded of and redrawn. The findings hence suggest that the underlying assumption of the uniqueness of individual nation-states, or any individuals for that matter, should be questioned. We are all heavily steered by socially acceptable and appealing ways to think, act, and justify what we do, although little attention is given to this fact. Therefore, in research in which nation-states or national actors are a unit of analysis, enduring national viewpoints and arguments should not be automatically taken as a sign of "non-global" or "non-European." Instead, one should contemplate in more detail what exactly is meant by "national" in research and whether the idea of uniqueness is attached to it acritically, without empirical evidence. This is important because it could be, as can be seen in the case I studied, that national identity and national arguments are in flux and accept influence from global and European discourses. This phenomenon can and should be compassed by research.

Drawing from these insights, I claim that European transnational governance and its influence on the national level may not be explained by the two aforementioned stances. The concept of a persistent and monolithic (distinct) national cultural identity and an attached indication of decoupling does not hold water in light of the results, nor does that of emergence of a new cosmopolitan, European reality that replaces the national perspective. Neither of these, in which the national or the European level of analysis is the foundation, suffices to explain the social reality of today's Europe. Instead, one has to shake off hierarchical thinking centered on national and European, or local and global,

and study both similarity and distinction between and among identity categories in order to understand how all levels are parts of the same social reality. For example, the tendency to understand European interests as just a rhetorical tool to further national interests and that to see national interests as a delusion while actors truly ascribe to global ideas are both intriguing but not wholly sufficient for explaining European cooperation. Even though many ideas of national policymaking can be traced back to international sources, this does not nullify the fact that working under the category of a nation-state and state interests still exists. Therefore, the nature of national identities and interests does deserve some attention if it is to be better explained and understood by academia.

Proceeding from the research presented here, one can nevertheless argue that there is an ongoing process of Europeanization of nationality and national interests (Risse 2010: 25, 45). In other words, an empirically recognizable interconnectedness exists between the European and national standpoints. Firstly, this can be seen in how the European identity and interests are communicated by national agents: for them, these clearly exist. Even more importantly, it is evident in how European elements exist within national interests. I refer here to situations in which national agents state that the European cooperation is beneficial to the Member States from the *national* point of view. For instance, there have been a few occurrences in which one country has been willing to support other countries' researchers, and such a policy is argued to have national benefits. This speaks to a Europeanization of national interests. There is nonetheless still a long way to go before national actors, or their agents, truly regard all European researchers as "theirs" and would want to fund the best research in Europe without regard for where the researchers come from. Hence, while a European identity is used, one cannot say that the funders actually would have adopted a common European or cosmopolitan identity. If they had done so, they would speak of "our European researchers, whom we want to fund," which is not the case. They speak instead of "our researchers" working within the respective countries, whom they want to support, and they see the European cooperation as one of the best ways to reach that end. The framework of speech thus implies national identity and related interests but has a European dimension.

## **Local changes as a theme for follow-up research**

A theme that I have not been able to devote enough space to in this dissertation but that is worth studying in more depth in future is the compliance mechanism of European science policy on a local level. Part of this research task would be to create more detail-level knowledge of what local policy changes the EU's science-policy initiatives have led to and why. The theme has, of course, been touched upon in existing work, but its discussion

has largely been restricted to treaty reforms and socio-legal dynamics (Copeland & Papadimitriou 2012, Morado-Foadi 2008); the overall change in national research and innovation systems, often measured in quantitative terms (Kaiser & Prange 2004, Lepori et al. 2007); the effects of policy change on research (Barré et al. 2013, Defazio et al. 2009, Laudel & Gläser 2014, McGuinness & O’Carroll 2010, Toivanen & Suominen 2015); or governance of European science policy in general (Borrás & Jacobsson 2004, Borrás & Radaelli 2011, de Elera 2006, Edler 2012a, Georghiou 2001). What has not been given so much attention is how and why European policy initiatives, such as creation of the European Research Area, have led to local science-policy practices being organized in new ways.

The results presented in this dissertation suggest that policy harmonization takes place with the greatest ease on the ideational and discursive level. However, there are also signs in my data that the compliance mechanism related to European research funding lies in, additionally to what has already been pointed out, rules that Member States need to follow in order to be “eligible” for European Research Area activities. In the case of ERA-NETs at least, research funders must administer research programs in order to be eligible to participate. This is one reason for which they have initiated these programs in recent years. Moreover, there are cases wherein certain kinds of funding organizations have been established in order to enable participation. Finally, actions of the EU have had concrete local effects, some of which have been ignored in previous studies and should be explored in detail.

New research knowledge pertaining to such concrete effects at the local level would aid in understanding how current European governance, on behalf of the EU, in the domain of science policy works. Research findings so far highlight the astonishing attraction force of the EU’s European Research Area discourse and its initiatives, drawing special attention to nation-states’ need to participate even when the benefits are not clear. The situation is revealed to be even more interesting when it is compared with that of the multinational integration process in the European Community, which has time after time met with resistance on the nation-states’ part and recently even taken the opposite direction in the form of Brexit and related referenda. In light of these historical and recent events, it is astounding that at the same time as they are happening Member States are eager to be voluntarily involved in anything new that is started by the European Commission and its directorates, at least in the sphere of science policy. Hence, the quiet persuasion mechanisms of the EU, which obviously are active in this particular policy sphere and function in a manner different from the more visible and imperative engagements to which Member States are less willing to commit, demand more thorough analysis. While such “quiet” mechanisms clearly must exist, they are not fully understood and have not yet been reported upon.



# Appendix 1: List of interviewees

*Interview number (in parentheses), country, whether the entity is a funder of basic research (BA) or applied research (AP), (current/main) ERA-NET role, and interview date(s)*

- (1) Portugal, BA&AP, coordinator: September 3, 2009, and March 23, 2011
- (2) Finland, BA, partner: June 11, 2010
- (3) Belgium, AP, partner: March 24, 2011
- (4) Austria, AP, partner: March 23, 2011
- (5) Netherlands, AP, partner: March 24, 2011
- (6) Finland, BA, partner: June 11, 2010
- (7) Finland, BA, coordinator/partner: June 21, 2010
- (8) Finland, BA, coordinator: October 28, 2011
- (9) Finland, BA, partner: June 21, 2010
- (10) Finland, AP, coordinator: October 28, 2011
- (11) Finland, BA, partner: November 1, 2011
- (12) Finland, AP, coordinator: October 26, 2011
- (13) Portugal, BA, partner: March 23, 2011
- (14) Finland, BA, partner: April 13, 2011
- (15) Netherlands, AP, advisory board member: March 23 and 24, 2011
- (16) Finland, BA, partner: June 4, 2011
- (17) Spain, AP, partner: March 24, 2011
- (18) Portugal, BA&AP, coordinator: March 23, 2011
- (19) France, AP, partner: March 23, 2011
- (20) Germany, AP, coordinator/ partner: February 7, 2012

## Appendix 2: Economic knowledge discourse (OECD 1996)

Knowledge-based economy is an umbrella concept referring especially to the economic effects of knowledge. It wraps together all the sub-concepts (see below) and determines their economic impacts. It is the closest concept to the economic theories of knowledge.

“Knowledge-based economies – economies which are directly based on the production, distribution and use of knowledge and information”(OECD 1996: 7)

“Although the knowledge-based economy is affected by the increasing use of information technologies, it is not synonymous with the information society. The knowledge-based economy is characterised by the need for continuous learning of both codified information and the competencies to use this information.” (OECD 1996: 13)

“OECD countries continue to evidence a shift from industrial to post-industrial knowledge-based economies. Here, productivity and growth are largely determined by the rate of technical progress and the accumulation of knowledge. Of key importance are networks or systems which can efficiently distribute knowledge and information. The knowledge-intensive or high-technology parts of the economy tend to be the most dynamic in terms of output and employment growth, which intensifies the demand for more highly skilled workers. Learning on the part of both individuals and firms is crucial for realising the productivity potential of new technologies and long-term economic growth.” (OECD 1996: 18)

Information society is a sub-concept referring to the technical part of knowledge, moreover concentrating on information and communication technologies and the codified knowledge needed for them.

“Knowledge is increasingly being codified and transmitted through computer and communications networks in the emerging ‘information society’” (OECD 1996: 7)

“It is the increasing codification of some elements of knowledge which have led the current era to be characterised as ‘the information society’ – a society where a majority of workers will soon be producing, handling and distributing information or codified knowledge” (OECD 1996: 13)

“In the emerging information society, a large and growing proportion of the labour force is engaged in handling information as opposed to more tangible factors of production. Computer literacy and access to network facilities tend to become more important than literacy in the traditional sense.” (OECD 1996: 13)

Human capital is another sub-concept referring to the part of knowledge that does not involve technology, the one embodied in human beings. It turns knowledge into a measurable commodity.

“Knowledge, as embodied in human beings (as ‘human capital’)” (OECD 1996: 9)

“Human capital indicators, particularly those relating to education and employment, are central measures for the knowledge-based economy. Measuring the private and social rates of return to investments in education and training will help point to means of enhancing the learning capacity of individuals and firms. Micro-level firm indicators on human resource requirements, employment and occupational mobility will help better match supply and demand for skills in the labour market.” (OECD 1996: 43)

Learning economy refers to an economy wherein all workers are constantly expected to increase the level and variety of their skills.

“The need for workers to acquire a range of skills and to continuously adapt these skills underlies the ‘learning economy’” (OECD 1996: 3)

“The advent of the knowledge-based economy raises questions about the efficiency and equity of education and training in what must also be a ‘learning economy’” (OECD 1996: 41)

The idea of network society refers to an economy characterized by networks that enable change and learning, where access to these networks determines the socio-economic position of individuals and firms.

“The economy becomes a hierarchy of networks, driven by the acceleration in the rate of change and the rate of learning. What is created is a network society, where the opportunity and capability to get access to and join knowledge- and learning-intensive relations determines the socio-economic position of individuals and firms.” (OECD 1996: 14)

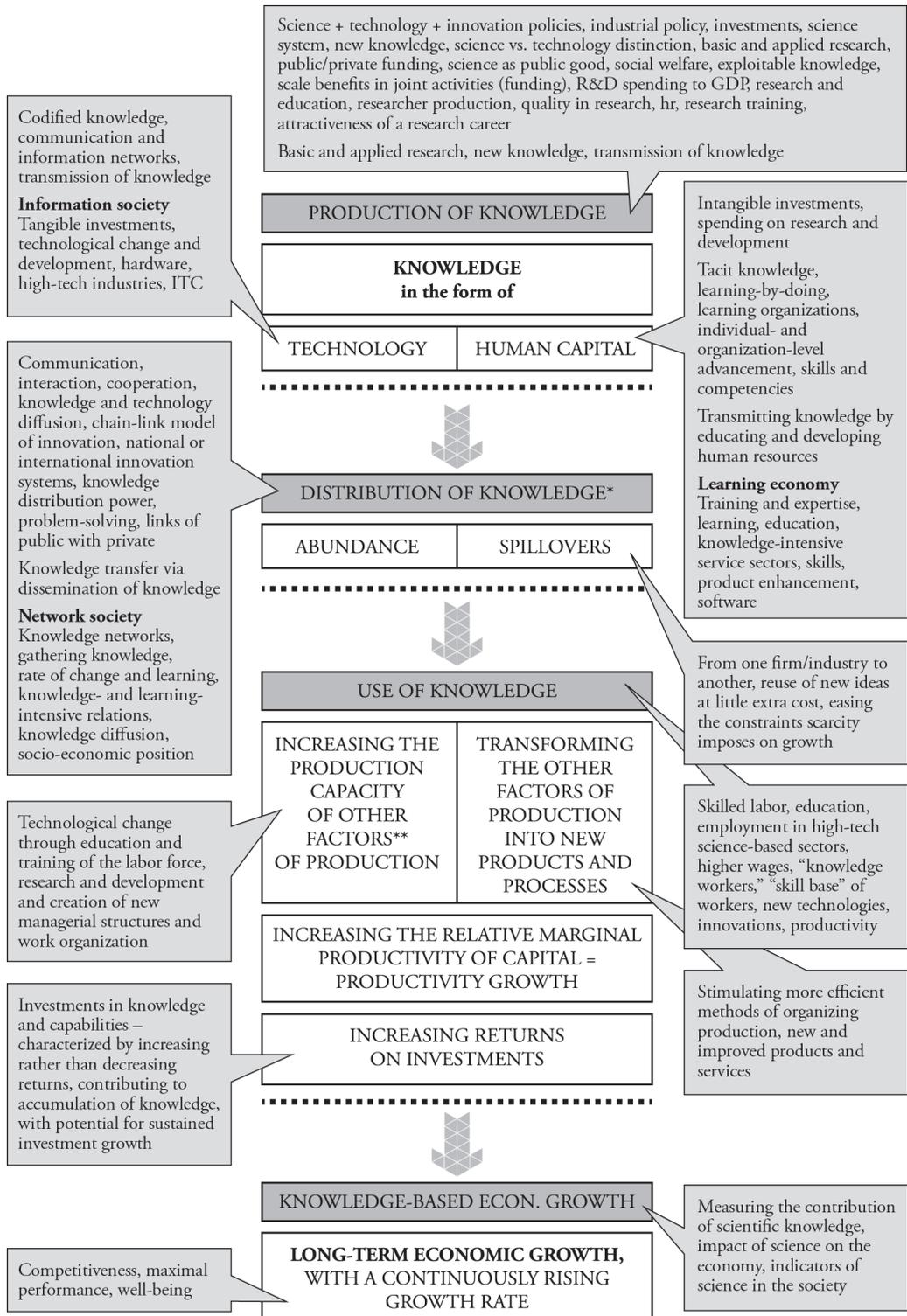
The concept of a national innovation system refers to a national constellation of industry, government, and academia in the development of science and technology.

“The configuration of national innovation systems, which consist of the flows and relationships among industry, government and academia in the development of science and technology, is an important economic determinant.” (OECD 1996: 7)

Notes to the diagram below:

\* Here, themes such as reproduction, private ownership, and apprenticeship are relevant, under new growth theory, the more freely knowledge flows, the greater the economic benefits produced.

\*\* This refers to labor, capital, materials, and energy.



## References

- Abbott, Andrew (1988): *The System of Professions: An Essay on the Division of Expert Labor*. Chicago / London: The University of Chicago Press.
- Abrams, Dominic & Michael A. Hogg (1990): *Social Identity Theory: Constructive and Critical Advances*. New York: Springer-Verlag.
- (1999): *Social Identity and Social Cognition*. Malden, Massachusetts: Blackwell.
- Alasuutari, Pertti (1995): *Researching Culture: Qualitative Method and Cultural Studies*. London: SAGE.
- (2009): The Domestication of Worldwide Policy Models. *Ethnologia Europaea*, 39(1), 66–71.
- (2011a): The Governmentality of Consultancy and Competition: The Influence of the OECD. In Solinís, G. & N. Baya-Laffite (eds.), *Mapping Out the Research-Policy Matrix: Highlights from the First International Forum on the Social Science-Policy Nexus* (147–165). Paris: UNESCO Publishing.
- (2011b): Modernization As a Tacit Concept Used in Governance. *Journal of Political Power*, 4(2), 217–235.
- (2011c): Spreading Global Models and Enhancing Banal Localism: The Case of Local Government Cultural Policy Development. *International Journal of Cultural Policy*, 1(1), 1–17.
- (2015): The Discursive Side of New Institutionalism. *Cultural Sociology*, 9(2), 162–184.
- (2016a): Power and Authority: Revisiting Weber. Conference paper at Power, Institutions and Authority Conference, August 29–31, Tampere, Finland.
- (2016b): *The Synchronization of National Policies: Ethnography of the Global Tribe of Moderns*. London / New York: Routledge.
- Alasuutari, Pertti & Maarit Alasuutari (2012): The Domestication of Early Childhood Education Plans in Finland. *Global Social Policy*, 12(2), 109–128.
- Alasuutari, Pertti & Ali Qadir (2013): *National Policy-making: Domestication of Global Trends*. London / New York: Routledge.
- (2014): Epistemic governance: An Approach to the Politics of Policy-making. *European Journal of Cultural and Political Sociology*, 1(1), 67–84.

- (2016): Imageries of the Social World in Epistemic Governance. *International Sociology*, 31(6), 633–652.
- Alasuutari, Pertti & Ari Rasimus (2009): Use of the OECD in Justifying Policy Reforms: the Case of Finland. *Journal of Power*, 2(1), 89–109.
- Alvesson, Mats, Karen Lee Ashcraft & Robyn Thomas (2008): Identity Matters: Reflections on the Construction of Identity Scholarship in Organization Studies. *Organization*, 15(1), 5–28.
- Alvesson, Mats & Hugh Willmott (2002): Identity Regulation As Organizational Control: Producing the Appropriate Individual. *Journal of Management Studies*, 39(5), 619–644.
- Amenta, Edwin & Kelly M. Ramsey (2010): Institutional Theory. In Leicht, K. T. & J. C. Jenkins (eds.), *Handbook of Politics: State and Society in Global Perspective* (15–39). New York / Dordrecht / Heidelberg / London: Springer.
- AMPERA ERA-NET (2006): *Position Paper to Be Submitted to the Appropriate Services of the Member States and of the EC, Proposing Solutions for the Effective Removal of Barriers*.
- Aristoteles (transl. 1997): *Retoriikka, Aristoteles Teokset Osa IX* [“Rhetoric by Aristotle, Opus Part IX”]. Helsinki: Gaudeamus.
- Armingeon, Klaus & Michelle Beyeler (2004): *The OECD and European Welfare States*. Cheltenham, UK: Edward Elgar.
- Aro, Jari (1999): *Sosiologia ja kielenkäyttö. Retoriikka, narratiivi, metafora* [“Sociology and the Use of Language: Rhetoric, Narrative and Metaphor”]. Tampere, Finland: University of Tampere.
- Ashforth, Blake E. & Fred Mael (1989): Social Identity Theory and the Organization. *Academy of Management Review*, 14(1), 20–39.
- Atalay, Zeynep (2016): Microprocesses of Norm Localization by Transnational Agents: Muslim Faith-based NGOs and Liberal Civil Society. Conference paper at the American Sociological Association’s 111th Annual Meeting: Rethinking Social Movements: Can Changing the Conversation Change the World?, August 20–23, Seattle, Washington.
- Barré, Remi, Luisa Henriques, Dimitrios Pontikakis & K. Matthias Weber (2013): Measuring the Integration and Coordination Dynamics of the European Research Area. *Science & Public Policy*, 40(2), 187–205.
- Bauman, Zygmunt (1990): *Thinking Sociologically. An Introduction for Everyone*. London: Blackwell.
- Beck, Ulrich & Natan Sznaider (2006): Unpacking Cosmopolitanism for the Social Sciences: A Research Agenda. *The British Journal of Sociology*, 57(1), 1–23.

- Béland, Daniel (2005): Ideas and Social Policy: An Institutional Perspective. *Social Policy & Administration*, 39(1), 1–18.
- Berger, Peter L. & Thomas Luckmann (1967): *The Social Construction of Reality*. New York: Doubleday.
- Bocking, Stephen (2004): *Nature's Experts: Science, Politics, and the Environment*. New Brunswick, Canada / New Jersey / London: Rutgers University Press.
- Boli, John (1987): World Polity Sources of Expanding State Authority and Organization, 1870–1970. In Thomas, G., J. W. Meyer, F. Ramirez & J. Boli (eds.), *Institutional Structure: Constituting State, Society, and the Individual* (71–91). Newbury Park, California: SAGE.
- Boli, John & George M. Thomas (1999a): *Constructing World Culture: International Nongovernmental Organizations Since 1875*. Stanford, California: Stanford University Press.
- (1999b): INGOs and the Organization of World Culture. In Boli, J. & G. M. Thomas (eds.), *Constructing World Culture: International Nongovernmental Organizations Since 1875* (13–49). Stanford, California: Stanford University Press.
- Borrás, Susana (2003): *The Innovation Policy of the European Union: From Government to Governance*. Cheltenham, UK / Northampton, Massachusetts: Edward Elgar.
- Borrás, Susana & Kerstin Jacobsson (2004): The Open Method of Co-ordination and New Governance Patterns in the EU. *Journal of European Public Policy*, 11(2), 185–208.
- Borrás, Susana & Claudio M. Radaelli (2011): The Politics of Governance Architectures: Creation, Change and Effects of the EU Lisbon Strategy. *Journal of European Public Policy*, 18(4), 463–484.
- Boxenbaum, Eva & Stefan Jonsson (2008): Isomorphism, Diffusion and Decoupling. In Greenwood, R., C. Oliver, R. Suddaby & K. Sahlin (eds.), *SAGE Handbook of Organizational Institutionalism* (78–99). London: SAGE.
- Brokensha, David, D. M. Warren & Oswald Werner (1980): *Indigenous Knowledge Systems and Development*. Washington, D.C: University Press of America.
- Brunsson, Nils (1989): *The Organization of Hypocrisy: Talk, Decisions, and Action in Organizations*. New York: Wiley.
- Budd, Karen W. (1993): Self-Coherence: Theoretical Considerations of a New Concept. *Archives of Psychiatric Nursing*, 7(6), 361–368.
- Bukh, Per Nikolaj, Karina Skovvang Christensen & Jan Mouritsen (2005): New Economy, New Theory – or New Practice? In Bukh, P. N., K. Skovvang Christensen & J. Mouritsen (eds.), *Knowledge Management and Intellectual Capital: Establishing a Field of Practice* (1–14). UK: Palgrave Macmillan.

- Burr, Vivien (1995): *An Introduction to Social Constructionism*. London / New York: Routledge.
- Calhoun, Craig (2001): The Virtues of Inconsistency: Identity and Plurality in the Conceptualization of Europe. In Cederman, L.-E. (eds.), *Constructing Europe's Identity: The External Dimension* (35–56). Boulder, Colorado: Lynne Rienner Publishers.
- Casey, Catherine (2006): A Knowledge Economy and a Learning Society: A Comparative Analysis of New Zealand and Australian Experiences. *Compare: A Journal of Comparative Education*, 36(3), 343–357.
- Caswill, Chris (2003): Old Games, Old Players – New Rules, New Results: Influence and Agency in the European Research Area (ERA). In Edler, J., S. Kuhlmann & M. Behrens (eds.), *Changing Governance of Research and Technology Policy: The European Research Area* (33–63). Cheltenham, UK: Edward Elgar.
- Checkel, Jeffrey T. & Andrew Moravcsik (2001): A Constructivist Research Program in EU Studies? *European Union Politics*, 2(2), 219–249.
- Chernilo, Daniel (2006): Social Theory's Methodological Nationalism: Myth and Reality. *European Journal of Social Theory*, 9(1), 5–22.
- Commission of the European Communities (2000a): Communication from the Commission to the Council, the European Parliament, the Economic and Social Committee and the Committee of Regions: Making a Reality of the European Research Area: Guidelines for EU Research Activities (2002–2006). Brussels.
- (2000b): Communication from the Commission to the Council, the European Parliament, the Economic and Social Committee and the Committee of Regions: Towards a European Research Area. Brussels.
- (2005a): Communication to the Spring European Council. Working Together for Growth and Jobs. A New Start for the Lisbon Strategy. Brussels.
- (2005b): Networking the European Research Area: Coordination of National Programmes. ERA-NET, Article 169. Brussels.
- (2006): ERA-NET Review 2006: The Report of the Expert Review Group.
- (2007a): Commission Decision on 2 February 2007 Establishing the European Research Council. *Official Journal of the European Union* (OJ L 57, 24.2.2007).
- (2007b): The European Research Area: New Perspectives. Green Paper of April 7, 2007. Brussels.
- Copeland, Paul & Dimitris Papadimitriou (2012): *The EU's Lisbon Strategy: Evaluating Success, Understanding Failure*. UK: Palgrave Macmillan.
- CORDIS (2016): Coordination of Research Activities: ERA-NET Projects, at <http://>

cordis.europa.eu/coordination/projects.htm (most recently accessed on February 18, 2016).

- Council of the European Union (2008a): Brussels European Council 13/14 March 2008/ Presidency Conclusions. Brussels.
- (2008b): Council Conclusions on the Launch of the “Ljubljana Process”: Towards Full Realisation of ERA. Brussels.
- (2012): Conclusions on “A Reinforced European Research Area Partnership for Excellence and Growth”. Brussels.
- Crafts, Nicholas & Gianni Toniolo (1996): *Economic Growth in Europe Since 1945*. Cambridge, UK: Cambridge University Press.
- Cuntz, Alexander & Jan Peuckert (2015): Openness Determinants of National Research Funding Programmes in EU27. *Science & Public Policy*, 42(4), 474–486.
- Czarniawska-Joerges, Barbara & Guje Sevón (1996): *Translating Organizational Change*. Berlin / New York: Walter De Gruyter.
- de Elera, Álvaro (2006): The European Research Area: On the Way Towards a European Scientific Community? *European Law Journal*, 12(5), 559–574.
- Deacon, Bob (2007): *Global Social Policy & Governance*. Los Angeles: SAGE.
- Defazio, Daniela, Andy Lockett & Mike Wright (2009): Funding Incentives, Collaborative Dynamics and Scientific Productivity: Evidence from the EU Framework Program. *Research Policy*, 38(2), 293–305.
- Delanty, Gerard (2005): The Idea of a Cosmopolitan Europe: On the Cultural Significance of Europeanization. *International Review of Sociology*, 15(3), 405–421.
- Djelic, Marie-Laure & Kerstin Sahlin-Andersson (2006a): Institutional Dynamics in a Re-ordering World. In Djelic, M.-L. & K. Sahlin-Andersson (eds.), *Transnational Governance: Institutional Dynamics of Regulation* (375–397). Cambridge, UK: Cambridge University Press.
- (2006b): Introduction: “A World of Governance: The Rise of Transnational Regulation”. In Djelic, M.-L. & K. Sahlin-Andersson (eds.), *Transnational Governance: Institutional Dynamics of Regulation* (1–28). Cambridge, UK: Cambridge University Press.
- (2006c): *Transnational Governance: Institutional Dynamics of Regulation*. Cambridge, UK: Cambridge University Press.
- Douglas, Mary (1970): *Natural Symbols: Exploration in Cosmology*. London: Barrie & Rockliff.
- Drori, Gili S. & John W. Meyer (2006): Scientization: Making a World Safe for Organizing. In Djelic, M.-L. & K. Sahlin-Andersson (eds.), *Transnational*

*Governance: Institutional Dynamics of Regulation* (32–52). Cambridge, UK: Cambridge University Press.

- Drori, Gili S., John W. Meyer, Francisco O. Ramirez & Evan Schofer (2003a): The Discourses of Science Policy. In Drori, G. S., J. W. Meyer, F. O. Ramirez & E. Schofer (eds.), *Science in the Modern World Polity: Institutionalization and Globalization* (100–119). Stanford, California: Stanford University Press.
- (2003b): Introduction: Science As a World Institution. In Drori, G. S., J. W. Meyer, F. O. Ramirez & E. Schofer (eds.), *Science in the Modern World Polity: Institutionalization and Globalization* (1–20). Stanford, California: Stanford University Press.
- (2003c): *Science in the Modern World Polity: Institutionalization and Globalization*. Stanford, California: Stanford University Press.
- Edler, Jakob (2012a): Research and Innovation and the Lisbon Strategy. In Copeland, P. & D. Papadimitriou (eds.), *The EU's Lisbon Strategy: Evaluating Success, Understanding Failure* (168–188). UK: Palgrave Macmillan.
- (2012b): Toward Variable Funding for International Science. *Science*, 338(6105), 331–332.
- Edler, Jakob & Stefan Kuhlmann (2012): Integration of European Research Systems: A Multi-dimensional Phenomenon. In Jansen, D. (eds.), *Towards a European Research Area* (71–93). Baden-Baden, Germany: Nomos Verlagsgesellschaft.
- Edler, Jakob, Stefan Kuhlmann & Maria Behrens (2003): *Changing Governance of Research and Technology Policy: The European Research Area*. Cheltenham, UK: Edward Elgar.
- EMBO (European Molecular Biology Organization) (2016): The History of EMBO, at <http://www.embo.org/about-embo/history> (most recently accessed on March 4, 2016).
- ESA (European Space Agency) (2013): History of Europe in Space, at [http://www.esa.int/About\\_Us/Welcme\\_to\\_ESA/ESA\\_history/History\\_of\\_Europe\\_in\\_space](http://www.esa.int/About_Us/Welcme_to_ESA/ESA_history/History_of_Europe_in_space) (most recently accessed on March 4, 2016).
- EUREKA (2016a): About EUREKA, at <http://www.eurekanetwork.org/about-eureka> (most recently accessed on March 23, 2016).
- (2016b): General Frequently Asked Questions, at <http://www.eurekanetwork.org/eureka-faq> (most recently accessed on March 3, 2016).
- European Commission (2010): Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of Regions: Europe 2020 Flagship Initiative Innovation Union. Brussels.
- (2011a): ERA-NET: Cooperation and Coordination of National or Regional Research and Innovation Activities (i.e. Programmes), at <ftp://ftp.cordis.europa.eu/pub/>

coordination/docs/era-net\_slides\_0303.pdf (most recently accessed on November 13, 2011).

--- (2011b): Innovation Union Competitiveness Report 2011, Executive Summary. Brussels.

--- (2012): Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: A Reinforced European Research Area Partnership for Excellence and Growth. Brussels.

--- (2013a): European Research Area, Facts and Figures 2013. Brussels.

--- (2013b): European Research Area: Coordination of Research Programmes, at [http://ec.europa.eu/research/era/what-joint-programming\\_en.html](http://ec.europa.eu/research/era/what-joint-programming_en.html) (most recently accessed on February 29, 2016).

European Commission Directorate-General for Research & Innovation (2012): The ERA-NET Scheme under FP6 and FP7: Statistics on ERA-NET and ERA-NET Plus Actions and their Joint Calls. Brussels.

European Council (2000): Lisbon European Council 23 and 24 March 2000. Presidency Conclusions. Lisbon.

European Parliament and the Council of the European Union (2013): Regulation (EU) No 1291/2013 of the European Parliament and of the Council of 11 December 2013 Establishing Horizon 2020: the Framework Programme for Research and Innovation (2014–2020) and Repealing Decision No 1982/2006/EC. *Official Journal of the European Union* (OJ 347/104, 20.12.2013).

Evans, Rhonda & Tamara Kay (2008): How Environmentalists “Greened” Trade Policy: Strategic Action and the Architecture of Field Overlap. *American Sociological Review*, 73(6), 970–991.

Fairhead, James & Melissa Leach (1996): *Misreading the African Landscape: Society and Ecology in a Forest-Savanna Mosaic*. Cambridge, UK: Cambridge University Press.

Falkner, Gerda, Oliver Treib, Miriam Hartlapp & Simone Leiber (2005): *Complying with Europe: EU Harmonisation and Soft Law in the Member States*. Cambridge, UK: Cambridge University Press.

Favell, Adrian (2007): The Sociology of EU Politics. In Jørgensen, K. E., M. A. Pollack & B. Rosamond (eds.), *Handbook of European Union Politics* (122–137). London / Thousand Oaks, California / New Delhi: SAGE.

Finnemore, Martha (1996): *National Interests in International Society*. Ithaca, New York / London: Cornell University Press.

Finnish Parliament (2011): The Finnish Parliament. Search services: Issue and Document Search. All Parliamentary Documents Since 1991 at <http://www.eduskunta.fi/>

triphome/bin/akxhaku.sh?lyh=%27%27?kieli=su (most recently accessed on October 16, 2011).

- Fischer, Frank (2000): *Citizens, Experts and the Environment: The Politics of Local Knowledge*. Durham, UK / London: Duke University Press.
- Fligstein, Neil (2009): Who Are the Europeans and How Does This Matter for Politics? In Checkel, J. T. & P. J. Katzenstein (eds.), *European Identity* (132–166). Cambridge, UK: Cambridge University Press.
- Frank, David John & John W. Meyer (2002): The Profusion of Individual Roles and Identities in the Postwar Period. *Sociological Theory*, 20(1), 86–105.
- (2007): University Expansion and the Knowledge Society. *Theory and Society*, 36(4), 287–311.
- G8/7 (1995): Halifax Summit Communiqué. Halifax documents of June 16, 1995. Halifax, Canada.
- (1996): Economic Communiqué: Making a Success of Globalization for the Benefit of All. Lyon Summit documents of 28 June, 1996. Lyon, France.
- (1999): G8 Communiqué Köln 1999 Final. June 20, 1999. Köln, Germany.
- Georghiou, Luke (2001): Evolving Frameworks for European Collaboration in Research and Technology. *Research Policy*, 30(6), 891–903.
- Geyer, Gerda (2005): Establishing the European Research Area in Ageing: A Network of National Research Programmes. *Experimental Gerontology*, 40(10), 759–762.
- Giddens, Anthony (1990): *The Consequences of Modernity*. Cambridge, UK: Polity Press.
- Goffman, Erving (1974): *Frame Analysis: An Essay on the Organization of Experience*. New York: Harper Colophon.
- (1981): *Forms of Talk*. Philadelphia: University of Pennsylvania.
- Greimas, Algirdas Julien (1971): Narrative Grammar: Units and Levels. *MLN*, 86(6), 793–806.
- Greimas, Algirdas Julien & Catherine Porter (1977): Elements of a Narrative Grammar. *Diacritics*, 7(1), 23–40.
- Gronbaek, David J. V. H. (2003): A European Research Council: An Idea Whose Time Has Come? *Science and Public Policy*, 30(6), 391–404.
- Gusfield, Joseph R. (1976): The Literary Rhetoric of Science: Comedy and Pathos in Drinking Driver Research. *American Sociological Review*, 41(February), 16–34.
- Haas, Peter M. (1992): Introduction: Epistemic Communities and International Policy Coordination. *International Organization*, 46(1), 1–35.

- Habermas, Jürgen (1971): *Toward a Rational Society: Student Protests, Science, and Politics*. London: Heinemann.
- Hajer, Maarten (2006): Doing Discourse Analysis: Coalitions, Practices, Meaning. In van den Brink, M. & T. Metzger (eds.), *Words Matter in Policy and Planning* (65–74). Utrecht: Netherlands Graduate School of Urban and Regional Studies.
- Hajer, Maarten & Wytse Versteeg (2005): Performing Governance Through Networks. *European Political Science*, 4(3), 340–347.
- (2008): The Limits to Deliberative Governance. Conference paper at the Annual Meeting of the American Political Science Association, August 28–31, Boston.
- Hall, Peter A. & Rosemary C. R. Taylor (1996): Political Science and the Three New Institutionalisms. *Political Studies*, 44(5), 936–957.
- Hammond, Michael, Jane Howarth & Russell Keat (1991): Conclusion: Phenomenology and Scientific Realism. In Hammond, M., J. Howarth & R. Keat (eds.), *Understanding Phenomenology* (271–278). Oxford, UK: Basil Blackwell.
- Hardy, Cynthia, Ian Palmer & Nelson Phillips (2000): Discourse As a Strategic Resource. *Human Relations*, 53(9), 1227–1248.
- Heclo, Hugh (1974): *Modern Social Politics in Britain and Sweden*. New Haven, Connecticut: Yale University Press.
- Herrmann, Richard K. & Marilynn B. Brewer (2004): Identities and Institutions: Becoming European in the EU. In Herrmann, R. K., T. Risse & M. B. Brewer (eds.), *Transnational Identities: Becoming European in the EU* (1–22). Lanham, Maryland: Rowman and Littlefield Publishers.
- Hironaka, Ann (2014): *Greening the Globe: World Society and Environmental Change*. Cambridge, UK: Cambridge University Press.
- Ikenberry, G. John (1990): The International Spread of Privatization Policies: Inducements, Learning, and “Policy Bandwagoning”. In Suleiman, E. N. & J. Waterbury (eds.), *The Political Economy of Public Sector Reform and Privatization* (88–110). Boulder, Colorado: Westview Press.
- Jabłęcka, Julita & Benedetto Lepori (2009): Between Historical Heritage and Policy Learning: The Reform of Public Research Funding Systems in Poland, 1989–2007. *Science & Public Policy*, 36(9), 697–708.
- Jang, Yong Suk (2000): The Worldwide Founding of Ministries of Science and Technology. *Sociological Perspectives*, 43(2), 247–270.
- (2003): The Global Diffusion of Ministries of Science and Technology. In Drori, G. S., J. W. Meyer, F. O. Ramirez & E. Schofer (eds.), *Science in the Modern World Polity: Institutionalization and Globalization* (120–135). Stanford, California: Stanford University Press.

- Jasanoff, Sheila, Gerald E. Markle, James C. Petersen & Trevor Pinch (1995): *Handbook of Science and Technology Studies*. Thousand Oaks, California / London / New Delhi: SAGE.
- Jasanoff, Sheila & Marybeth Long Martello (2004): *Earthly Politics: Local and Global in Environmental Governance*. Cambridge, Massachusetts / London: The MIT Press.
- Jasanoff, Sheila & Brian Wynne (1998): Science and Decision-making. In Rayner, S. & E. Malone (eds.), *Human Choice and Climate Change* (1–112). Columbus, Ohio: Battelle Press.
- Jepperson, Ronald L. (1991): Institutions, Institutional Effects, and Institutionalism. In Powell, W. W. & P. J. DiMaggio (eds.), *The New Institutionalism in Organizational Analysis* (143–163). Chicago: University of Chicago Press.
- Kaiser, Robert & Heiko Prange (2004): The Reconfiguration of National Innovation Systems: the Example of German Biotechnology. *Research Policy*, 33(3), 395–408.
- Kantola, Anu & Hannele Seeck (2011): Dissemination of Management into Politics: Michael Porter and the Political Uses of Management Consulting. *Management Learning*, 42(1), 25–47.
- Kastrinos, Nikos (2010): Policies for Co-ordination in the European Research Area: A View from the Social Sciences and Humanities. *Science and Public Policy*, 37(4), 297–310.
- Kauppi, Niilo & Mikael Rask Madsen (2013): Transnational Power Elites: The New Professionals of Governance, Law and Security. In Kauppi, N. & M. R. Madsen (eds.), *Transnational Power Elites: The New Professionals of Governance, Law and Security* (1–16). London / New York: Routledge.
- Kay, Tamara (2016): Diffusing Gender Equality Norms on the Longest Street in the World. Conference paper at the American Sociological Association's 111th Annual Meeting: Rethinking Social Movements: Can Changing the Conversation Change the World?, August 20–23, Seattle, Washington.
- Kohli, Martin (2000): The Battlegrounds of European Identity. *European Societies*, 2(2), 113–137.
- Kuhlmann, Stefan & Jakob Edler (2003): Changing Governance in European Research and Technology Policy: Possible Trajectories and the European Research Area. In Edler, J., S. Kuhlmann & M. Behrens (eds.), *Changing Governance of Research and Technology Policy: The European Research Area* (3–32). Cheltenham, UK: Edward Elgar.
- Kunda, Gideon (1992): *Engineering Culture: Control and Commitment in a High-Tech Corporation*. Philadelphia: Temple University Press.
- Laffan, Brigid (2004): The European Union and Its Institutions As “Identity Builders”.

- In Herrmann, R. K., T. Risse & M. B. Brewer (eds.), *Transnational Identities: Becoming European in the EU* (75–96). Lanham, Maryland: Rowman and Littlefield Publishers.
- Langfeldt, Liv, Helge Godø, Ase Gornitzka & Aris Kaloudis (2012): Integration Modes in EU Research: Centrifugality Versus Coordination of National Research Policies. *Science & Public Policy*, 39(1), 88–98.
- Laudel, Grit & Jochen Gläser (2014): Beyond Breakthrough Research: Epistemic Properties of Research and Their Consequences for Research Funding. *Research Policy*, 43(7), 1204–1216.
- Lechner, Frank J. (2007): *The Netherlands: Globalization and National Identity*. New York / London: Routledge.
- Lechner, Frank J. & John Boli (2005): *World Culture: Origins and Consequences*. Malden, Massachusetts: Blackwell.
- Legro, Jeffrey W. & Andrew Moravcsik (1999): Is Anybody Still a Realist? *International Security*, 24(2), 5–55.
- Leicht, Kevin T. & J. Craig Jenkins (2010): *Handbook of Politics: State and Society in Global Perspective*. New York / Dordrecht / Heidelberg / London: Springer.
- Lepori, Benedetto, Emanuela Reale & Philippe Larédo (2014): Logics of Integration and Actors' Strategies in European Joint Programs. *Research Policy*, 43(2), 391–402.
- Lepori, Benedetto, Peter Van den Besselaar, Michael Dinges, Bianca Poti, Emanuela Reale, Stig Slipersæter, Jean Thèves & Barend Van der Meulen (2007): Comparing the Evolution of National Research Policies: What Patterns of Change? *Science & Public Policy*, 34(6), 372–388.
- Machlup, Fritz (1962): *The Production and Distribution of Knowledge in the United States*. Princeton, New Jersey: Princeton University Press.
- MarinERA (2007): *Barriers to Cooperation in MarinERA Partner State Marine RTD Programmes. MarinERA Report No .2*.
- Martello, Marybeth Long & Sheila Jasanoff (2004): Introduction: Globalization and Environmental Governance. In Jasanoff, S. & M. L. Martello (eds.), *Earthly Politics: Global and Local in Environmental Governance* (1–30). Cambridge, Massachusetts / London: The MIT Press.
- McGowan, Francis (2009): The Contrasting Fortunes of European Studies and EU Studies: Grounds for Reconciliation. In Rumford, C. (eds.), *SAGE Handbook of European Studies* (545–560). Los Angeles / London / New Delhi / Singapore / Washington DC: SAGE.
- McGuinness, Nina & Conor O'Carroll (2010): Benchmarking Europe's Lab Benches: How Successful Has the OMC Been in Research Policy? *Journal of Common Market*

*Studies*, 48(2), 293–318.

- McNeely, Connie L. (1995): *Constructing the Nation-State: International Organization and Prescriptive Action*. Westport, Connecticut: Greenwood.
- Meyer, John W. (2000): Globalization: Sources and Effects on National States and Societies. *International Sociology*, 15(2), 233–248.
- (2004): The Nation As Babbitt: How Countries Conform. *Contexts*, 3(3), 42–47.
- (2008): Reflections on Institutional Theories of Organizations. In Greenwood, R., C. Oliver, R. Suddaby & K. Sahlin (eds.), *SAGE Handbook of Organizational Institutionalism* (788–809). London: SAGE.
- (2010): World Society, Institutional Theories, and the Actor. *Annual Review of Sociology*, 36(1), 1–20.
- Meyer, John W., John Boli, George M. Thomas & Francisco O. Ramirez (2000): World Society and the Nation-State. In Lechner, F. J. & J. Boli (eds.), *The Globalization Reader, Fourth Edition* (84–92). Malden, Massachusetts / Oxford: Blackwell.
- Meyer, John W. & Ronald L. Jepperson (2000): The “Actors” of Modern Society: The Cultural Construction of Social Agency. *Sociological Theory*, 18(1), 100–120.
- Meyer, John W. & Brian Rowan (1977): Institutionalized Organizations: Formal Structure As Myth and Ceremony. *American Journal of Sociology*, 83(2), 340–363.
- Miller, Clark A. & Paul N. Edwards (2001): *Changing the Atmosphere: Expert Knowledge and Environmental Governance*. Cambridge, Massachusetts / London: The MIT Press.
- Ministry of Education and Culture of Finland (2010): Osaava ja luova Suomi. Opetus- ja kulttuuriministeriön tulevaisuuskatsaus 2010 [“Competent and Creative Finland, the Future Review of the Ministry of Education and Culture 2010”]. Helsinki.
- Ministry of Employment and the Economy of Finland (2010): Haasteista mahdollisuuksia. Tulevaisuuskatsaus 8.9.2010 [“Challenges into Opportunities, the Future Review of the Ministry of Employment and the Economy, September 8, 2010”]. Helsinki.
- Ministry of Finance’s Economics Department, Finland (2005): The Lisbon Strategy for Growth and Jobs: the Finnish National Reform Programme 2005-2008. Helsinki.
- Ministry of Finance of Finland (2001): Suomen kilpailukyky ja sen kehittämistarve [“Finland’s Competitiveness and Needs for Development”]. Helsinki.
- (2002): Kestävä talous, hyvinvoinnin perusta [“Sustainable Economy, the Basis of Welfare”]. Helsinki.
- (2004): 2000-luvun kasvupolitiikan haasteet. Miten Suomi selviää ikääntymisestä ja kansainvälisen kilpailun kiristymisestä? [“Challenges for Growth in the 21st Century, How Will Finland Cope with the Ageing of Its Population and the

Tightening of International Competition?"]. Helsinki.

--- (2007): Sosiaalinen, osaava Suomi selviytyy globalisaation ja väestönkehityksen uudessa vaiheessa [“Social, Skilled Finland Will Survive the New Phase of Globalization and Population Development”]. Helsinki.

--- (2010): Hallinto hyvinvoinnin ja talouden tasapainottajana. Hallintopoliitiikan suuntaviivat vuoteen 2020 [“Administration Balancing Welfare and the Economy. The Guidelines for Governmental Policy Until 2020”]. Helsinki.

Ministry of Justice of Finland (2006): Oikeudenmukainen ja turvallinen yhteiskunta. Oikeusministeriön tulevaisuuskatsaus 2006 [“Fair and Safe Society, the Future Review of the Ministry of Justice 2006”]. Helsinki.

--- (2010): Oikeudenmukaisuus ja luottamus kestävän yhteiskuntakehityksen perustana. Oikeusministeriön hallinnonalan tulevaisuuskatsaus 2010 [“Fairness and Trust As a Basis for a Sustainable Social Development, the Future Review of the Ministry of Justice 2010”]. Helsinki.

Ministry of Transport and Communications of Finland (2006): Uuteen käyttäjälähtöiseen ja innovatiiviseen liikennepoliittikkaan. Uuteen arjen tietoyhteiskuntaan. Liikenne- ja viestintäministeriön tulevaisuuskatsaukset eduskuntapuolueille 30.6.2006 [“Towards New User-driven and Innovative Transport Policy, to the New Ubiquitous Information Society, the Future Reviews of the Ministry of Transport and Communications to the Parties of Parliament, June 6, 2006”]. Helsinki.

--- (2010): Digitaalinen Suomi, uusi liikennepoliittikka. Liikenne- ja viestintäministeriön tulevaisuuskatsaus puolueille 10.9.2010 [“Digital Finland, New Transport Policy, the Future Review of the Ministry of Transport and Communications to the Parties, September 10, 2010”]. Helsinki.

Morado-Foadi, Sonia (2008): The Missing Piece of the Lisbon Jigsaw: Is the Open Method of Coordination Effective in Relation to the European Research Area? *European Law Journal*, 14(5), 635–654.

Moravcsik, Andrew (1997): Taking Preferences Seriously: A Liberal Theory of International Politics. *International Organization*, 4(51), 513–553.

Murphy, Jonathan (2007): *The World Bank and Global Managerialism*. London: Routledge.

Mörth, Ulrika (2005): *Organizing European Cooperation: The Case of Armaments*. Lanham, Maryland: Rowman & Littlefield Publishers.

Nagel, Stuart S. & Amy Robb (2007): *Handbook of Global Social Policy*. New York: Marcel Dekker.

Nedeva, Maria (2013): Between the Global and the National: Organising European Science. *Research Policy*, 42(1), 220–230.

OECD (1996): *The Knowledge-based Economy*. Paris.

- Ohmae, Kenichi (1995): *The End of the Nation-State: The Rise of Regional Economies*. New York: Simon and Schuster, Inc.
- Owens, Timothy J. (2003): Self and Identity. In Delamater, J. (eds.), *Handbook of Social Psychology* (205–232). New York: Kluwer.
- Owens, Timothy J., Dawn T. Robinson & Lynn Smith-Lovin (2010): Three Faces of Identity. *Annual Review of Sociology*, 36(1), 477–499.
- Perelman, Chaïm (1982): *The Realm of Rhetoric*. London: University of Notre Dame Press.
- Perelman, Chaïm & L. Olbrechts-Tyteca (1969): *The New Rethoric: A Treatise on Argumentation*. London: University of Notre Dame Press.
- Pierson, Paul & Theda Skocpol (2002): Historical Institutionalism in Contemporary Political Science. In Katznelson, I. & H. V. Milner (eds.), *Political Science: The State of the Discipline* (693–721). New York: W. W. Norton.
- Pohjola, Matti (2002a): *New Economy in Growth and Development. Discussion Paper No 2002/67*. Helsinki: United Nations University, WIDER.
- (2002b): The New Economy: Facts, Impacts and Policies. *Information Economics and Policy*, 14(2), 133–144.
- Porter, Doug & David Craig (2004): The Third Way and the Third World: Poverty Reduction and Social Inclusion in the Rise of “Inclusive” Liberalism. *Review of International Political Economy*, 11(2), 387–423.
- Powell, Walter W. & Kaisa Snellman (2004): The Knowledge Economy. *Annual Review of Sociology*, 30(2004), 199–220.
- Publications Office of the European Union (2011): EUR-Lex Access to European Union law, at <http://eur-lex.europa.eu/en/index.htm> (most recently accessed on October 16, 2011).
- Puchala, Donald J. (1999): Institutionalism, Intergovernmentalism and European Integration: A Review Article. *Journal of Common Market Studies*, 37(2), 317–331.
- Qadir, Ali & Pertti Alasuutari (2013): Taming Terror: Domestication of the War on Terror in the Pakistan Media. *Asian Journal of Communication*, 23(6), 575–589.
- Rautalin, Marjaana (2013a): *Domestication of International Comparisons: The Role of the OECD Programme for International Student Assessment (PISA) in Finnish Education Policy*. Tampere, Finland: Tampere University Press.
- (2013b): The Role of PISA Publicity in Forming National Education Policy: The Case of the Finnish Curriculum Reform. In Alasuutari, P. & A. Qadir (eds.), *National Policymaking: Domestication of Global Trends* (95–110). London / New York: Routledge.
- Rautalin, Marjaana & Pertti Alasuutari (2009): The Uses of the National PISA Results

- by Finnish Officials in Central Government. *Journal of Education Policy*, 24(5), 539–556.
- Risse, Thomas (2009): Social Constructivism and European Integration. In Wiener, A. & T. Diez (eds.), *European Integration Theory, Second Edition* (144–160). Oxford: Oxford University Press.
- (2010): *A Community of Europeans? Transnational Identities and Public Spheres*. Ithaca, New York / London: Cornell University Press.
- Robertson, Roland (1992): *Globalization: Social Theory and Global Culture*. London / Thousand Oaks, California / New Delhi: SAGE.
- Rodríguez, Hannot, Erik Fisher & Daan Schuurbiers (2013): Integrating Science and Society in European Framework Programmes: Trends in Project-level Solicitations. *Research Policy*, 42(5), 1126–1137.
- Rogers, Everett M. (1995): *Diffusion of Innovations, the Fourth Edition*. New York: The Free Press.
- Rubin, Michael Rogers & Mary Taylor Huber (1984): *The Knowledge Industry in the United States, 1960–1980*. Princeton, New Jersey: Princeton University Press.
- Sassatelli, Monica (2002): Imagined Europe: The Shaping of a European Cultural Identity through EU Cultural Policy. *European Journal of Social Theory*, 5(4), 435–451.
- Schienstock, Gerd (2004): The Finnish Model of the Knowledge Economy. In Schienstock, G. (eds.), *Embracing the Knowledge Economy: The Dynamic Transformation of the Finnish Innovation System* (287–314). Cheltenham, UK: Edward Elgar.
- (2007): From Path Dependency to Path Creation: Finland on its Way to the Knowledge-Based Economy. *Current Sociology*, 55(1), 92–109.
- Schmidt, Vivien Ann (2008): Discursive Institutionalism: The Explanatory Power of Ideas and Discourse. *Annual Review of Political Science*, 2008(11), 303–326.
- Schofer, Evan (1999): Science Associations in the International Sphere, 1875–1990: The Rationalization of Science and the Scientization of Society. In Boli, J. & G. M. Thomas (eds.), *Constructing World Culture: International Nongovernmental Organizations Since 1875* (249–268). Stanford, California: Stanford University Press.
- (2003): The Global Institutionalization of Geological Science, 1800–1990. *American Sociological Review*, 68(5), 730–759.
- (2004): Cross-National Differences in the Expansion of Science, 1970–1990. *Social Forces*, 83(1), 215–248.
- Schofer, Evan, Ann Hironaka, David John Frank & Wesley Longhofer (2012): Sociological Institutionalism and World Society. In Amenta, E., K. Nash & A. Scott (eds.), *The*

*Wiley–Blackwell Companion to Political Sociology* (57–68). Malden, Massachusetts: Wiley–Blackwell.

- Schofer, Evan & Elizabeth H. McEneaney (2003): Methodological Strategies and Tools for the Study of Globalization. In Drori, G. S., J. W. Meyer, F. O. Ramirez & E. Schofer (eds.), *Science in the Modern World Polity: Institutionalization and Globalization* (43–74). Stanford, California: Stanford University Press.
- Schofer, Evan & John W. Meyer (2005): The Worldwide Expansion of Higher Education in the Twentieth Century. *American Sociological Review*, 70(6), 898–920.
- Shapin, Steven (2008): Science and the Modern World. In Hackett, E. J., O. Amsterdamska, M. Lynch & J. Wajcman (eds.), *Handbook of Science and Technology Studies: Third Edition* (433–448). Cambridge, Massachusetts / London: The MIT Press.
- Shepsle, Kenneth A. (2006): Rational Choice Institutionalism. In Binder, S. A., R. A. W. Rhodes & B. A. Rockman (eds.), *Oxford Handbook of Political Institutions* (23–38). New York: Oxford University Press.
- Shiva, Vandana (1993): *Monocultures of the Mind: Perspectives on Biodiversity and Biotechnology*. London / New York / Malaysia: Zed Books.
- Simmons, Beth A., Frank Dobbin & Geoffrey Garrett (2006): Introduction: The International Diffusion of Liberalism. *International Organization*, 60(4), 781–810.
- Simpson, Barbara & Brigid Carroll (2008): Re-viewing “Role” in Processes of Identity Construction. *Organization*, 15(1), 29–50.
- Solow, Robert M. (1957): Technical Change and the Aggregate Production Function. *The Review of Economics and Statistics*, 3(39), 312–320.
- Stryker, Sheldon (1980): *Symbolic Interactionism: A Social Structural Version*. Menlo Park, California: Benjamin Cummings.
- Sulkunen, Pertti & Jukka Törrönen (1997): *Semioottisen sosiologian näkökulmia. Sosiaalisen todellisuuden rakentuminen ja ymmärrettävyys* [“Perspectives of Semiotic Sociology, the Construction and Understandability of Social Reality”]. Helsinki: Gaudeamus.
- Svanfeldt, Christian (2009): A European Research Area Built by the Member States? In Delanghe, H., U. Muldur & L. Soete (eds.), *European Science and Technology Policy: Towards Integration or Fragmentation?* (44–63). Cheltenham, UK: Edward Elgar.
- Sveningsson, Stefan & Mats Alvesson (2003): Managing Managerial Identities: Organizational Fragmentation, Discourse and Identity Struggle. *Human Relations*, 56(10), 1163–1193.
- Syväterä, Jukka (2016): *Creation and Domestication of Global Policy Trends: The Case of National Bioethics Committees*. Tampere, Finland: Tampere University Press.
- Syväterä, Jukka & Pertti Alasuutari (2013): Conforming to Global Policy Trends:

- Legitimizing Narratives in the Case of Ethical Policy Advice. *Critical Policy Studies*, 7(1), 37–52.
- (2014): Converging National with Stakeholder Interests: Establishing a National Bioethics Committee in Finland. In Alasuutari, P. & A. Qadir (eds.), *National Policy-making: Domestication of Global Trends* (164–180). London / New York: Routledge.
- Syväterä, Jukka & Ali Qadir (2015): The Construction and Spread of Global Models: Worldwide Synchronisation and the Rise of National Bioethics Committees. *European Journal of Cultural and Political Sociology*, 2(3–4), 267–290.
- Tajfel, Henri (1981): *Human Groups and Social Categories*. Cambridge, UK: Cambridge University Press.
- Thoits, Peggy A. & Lauren Virshup (1997): Me's and We's: Forms and Functions of Social Identities. In Ashmore, R. & L. Jussim (eds.), *Self and Identity: Fundamental Issues* (106–133). New York: Oxford University Press.
- Thomas, George M. (2009): World Polity, World Culture, World Society. *International Political Sociology*, 3(1), 115–119.
- Toivanen, Hannes & Arho Suominen (2015): Epistemic Integration of the European Research Area: The Shifting Geography of the Knowledge Base of Finnish Research, 1995–2010. *Science & Public Policy*, 42(4), 549–566.
- Turner, John C. (1982): Towards a Cognitive Redefinition of the Social Group. In Tajfel, H. (eds.), *Social Identity and Intergroup Relations* (15–40). Cambridge, UK: Cambridge University Press.
- Wagenaar, Hendrik & Scott Noam Cook (2003): Understanding Policy Practices: Action, Dialectic and Deliberation in Policy Analysis. In Hajer, M. & H. Wagenaar (eds.), *Deliberative Policy Analysis: Understanding Governance in the Network Society* (139–171). West Nyack, New York: Cambridge University Press.
- Waltz, Kenneth (1986): Reflections on Theory of International Politics: A Response to My Critics. In Keohane, R. O. (eds.), *Neorealism and Its Critics* (322–346). New York: Columbia University Press.
- Warleigh-Lack, Alex (2007): “The European and the Universal Process”? European Union Studies, New Regionalism and Global Governance. In Jørgensen, K. E., M. A. Pollack & B. Rosamond (eds.), *Handbook of European Union Politics* (561–576). London / Thousand Oaks, California / New Delhi: SAGE.
- Watkins, Susan Cotts & Ann Swidler (2013): Working Misunderstandings: Donors, Brokers, and Villagers in Africa's AIDS Industry. *Population and Development Review*, 38(s1), 197–218.
- Wilson, John (1990): *Politically Speaking: The Pragmatic Analysis of Political Language*.

Oxford, UK: Basil Blackwell.

Wimmer, Andreas & Nina Glick Schiller (2002): Methodological Nationalism and Beyond: Nation-State Building, Migration and the Social Sciences. *Global Networks*, 2(4), 301–334.

WoodWisdom-Net (2006): *WoodWisdom-Net Report 1–2006: Overview on Barriers That Hinder Transnational Cooperation and Models for Future Cooperation*. The WoodWisdom-Net.

Vähämäki, Jussi (2009): *Itsen alistus: Työ, tuotanto ja valta tietäkykykapitalismissa* [“Self-Subjugation: Work, Production and Power in Information-Ability-Capitalism”]. Helsinki: Like.

