Universidad de Deusto
Deustuko Unibertsitatea
University of Deusto

FACULTY OF SOCIAL AND HUMAN SCIENCES
PHD PROGRAMME IN HUMAN RIGHTS: ETHICAL, SOCIAL AND POLITICAL CHALLENGES

RESEARCH AND MULTI-ACTOR COLLABORATION IN TERRITORIAL DEVELOPMENT POLICYMAKING.

Insights for an increasingly complex policy field in an increasingly complex policy world

PhD Thesis

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21 November 2018

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‘Whether categorising, labelling, framing or measuring, or developing an analytical framework for understanding certain phenomena, our intellectual technologies are all forms of intervention and means to certain ends, and as such they have intended but also unintended consequences’ (Morlacchi & Martin, 2009, p.580).

Acknowledgments

To my supervisor James Wilson, thank you for your time, for your knowledge, for your enormous understanding and your endless patience. My deepest gratitude for guiding me through this process while letting me stay true to myself and for making me believe that I could, and that I would, do it. Miren Larreari, lan honetako lehendabiziko zuzendariari, urte hauetan guztietan alboan, zurekin –zu ikustetik, zuk erakutsitakotik, eta zurekin pentsatu eta eztabaidatuz– ikasitakorik gabe tesi hau ez litzatekeelako posible izango.

A mis otros co-autores (y mucho más que eso), Susana, Miren E., Edu y Jon Mikel, por ser parte de este camino conmigo. A Manuel González y Koen Bartels por la oportunidad.

Orkestrari eta Marijo Arangureni batik bat, babesa, laguntza eta konfiantza emategatik. Gipuzkoako Foru Aldundiari eta Bizkaiko Foru Aldundiari, bereziki Gipuzkoa Sarean eta Bizkaia Orekan proiektuetako taldekide guztiei. Eskerrak, baita ere, prozesu hauetan parte hartu duten eta parte hartzen duten eragile guztiei. Esker berezia Xabier Barandiaran, Ander Arzelus, Pedro Iturbe eta Ugaitz Iturberi. Eskerrak zuen eskuzabaltasunagatik eta zuengandik eta zuekin ikasitakoagatik.

A todos mis compañeros de Orkestra, por el apoyo, las reflexiones y el interés mostrado, por las preguntas y los consejos, las sonrisas y las risas, por hacer que el día a día de la tesis fuera menos duro. A Silvina, la mejor compañera en este camino de doctorado que hicimos juntas, por los aprendizajes y las frustraciones compartidas, los lloros y las carcajadas, los vinos y los viajes, por hacerme crecer y por estar ahí siempre. A Susana, por también estar ahí siempre, por el incondicional apoyo, por la gran paciencia y por ser la voz de la conciencia, por la generosidad, el desinterés y tu sentido de justicia; y también, por los vinos. A Miren E. y a Edurne por, entre otros, ayudarme a pensar y darme claves imprescindibles para el inicio y el cierre de este trabajo. A los compañeros de Compromiso, gran fuente de aprendizaje y también, de terapia colectiva. A Iñigo (qué grande eres), a Patricia (compañera de penas finales, siempre dando y transmitiendo ánimos), a James K. (thanks for encouraging me and making me reflect) y a Pablo (por la energía). A Amaia (por la comprensión) y a

Mercedes (por enseñarme a relativizar). Elsa, Idoia, Lorea, Megan, Rakel…mil gracias por sacarme de mi reducido mundo y hacerme siempre mantener un pie en las cosas de la vida. A Rakel, también además por aguantar todos mis altibajos en este camino.

To all scholars and academics, including my colleagues, who through their writings opened my eyes, my ears and my mind and made me reflect and learn. To Hendrik Wagenaar, Deborah Yanow and many more academics who not only write with rigour and wisdom, but also with beauty.

Pako Garmendia zenari, ezagutza nahia eta herriarekiko konpromisoa pertsonifikatuz erreferente izan zenari, bere begietan eta hitzetan ikusi nuelako lehen aldiz tesi bat egiteko gai izan nintekeela.

Lagun guztiei, absentziak barkatu eta lagun izaten jarraitzeagatik, urte hauetan gehien behar izan nuenean hor egon zaretelako eta orekari eusten lagundu didazuelako.

Nire familia guztiari.

Anaiari, etxekoen etengabeko sostengu izanez, tesirako gauzarik preziatuena erregalatu didazulako, lasaitasuna eta denbora.

Gurasoei, aitari eta ama zenari, hainbestegatik… guztiagatik.

Eskerrik asko denoi, bene-benetan.

Ainhoa

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List of tables[2]

[2] Tables of the articles presented as part of the thesis are not included in the list.

List of acronyms

AR – Action research

ARTD – Action research for territorial development

EPA – Empiricist policy analysis

IPA – Interpretive policy analysis

NPG – New Public Governance

R&D – Research and development

RIS – Regional innovation systems

RIS3 - Research and innovation strategies for smart specialisation

List of publications

Four articles are included in the thesis:

1. Arrona, A. & Zabala-Iturriagagoitia, JM. (2018). On the study and practice of regional innovation policy: the potential of interpretive policy analysis. *Innovation: the European Journal of Social Science Research*. DOI: 10.1080/13511610.2018.1528141

2. Arrona, A. & Larrea, M. (2018). Soft resistance: Balancing relationality and criticality to institutionalise action research for territorial development. In K. Bartels & J. Wittmayer (eds.). *Action Research in Policy Analysis: Critical and Relational Approaches to Sustainability Transitions* (pp. 135-152). London, UK: Routledge

3. Arrona, A., Franco, S. & Wilson, J. (2018). Public innovation through governance in place-based competitiveness policymaking. Under review in *Competitiveness Review*.

4. Arrona, A., Estensoro, M., Larrea, M. & Sisti, E. (2018). When collaborative development meets New Public Governance: the case of Etorkizuna Eraikiz Territorial Development Lab in Gipuzkoa. *European Public and Social Innovation Review, 3*(1), 33-45.

CHAPTER I. INTRODUCTION

'Without physical presence and absent an engagement
—intellectual, surely, but at times also emotional—
with members of the setting being studied,
and even with its texts and other material objects,
sense-making would hardly be possible'
(Schwartz-Shea & Yanow, 2012, p.98).

1.1. Introduction

Reason and Marshall (1987, p.112) state that all research should always be '*for me, for us* and *for them'* (emphasis in original). The motivations and aims that have driven this thesis respond and speak to three audiences and thus it is in effect *for me* and hopefully also *for them* and *for us*.

The initial motivation behind this dissertation is strictly individual: I started working on my doctorate as a personal challenge with no further goals and ambitions other than to prove to myself that I could write a thesis. Once I started, the principal driver has also been personal: I wanted to understand better my work experience, the context in which I have been working and the work of those –policymakers- who I work with. It was my personal thirst for knowledge and understanding that drove the initial steps of this work.

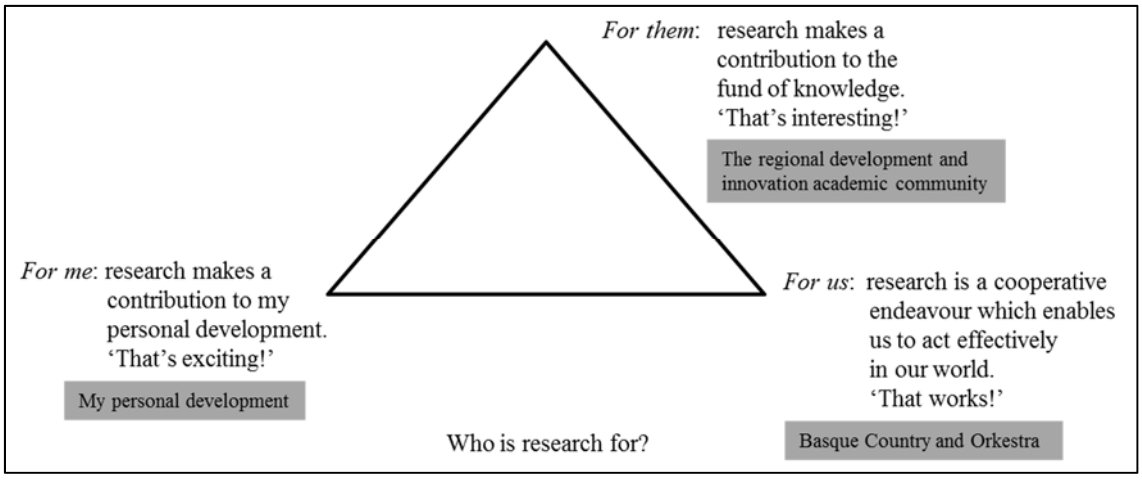
This initial motivation later led to two goals. Since this is an academic work, first and foremost the thesis aims at contributing to the research community and it aims to do so by combining theoretical insights with my practice. I believe that knowledge derived from experience is also rich and must be valued and converted into a source for academic knowledge construction. Thus, not only the academic community can contribute to practice, but also vice versa.

I also hope that this work somehow contributes to the overall capacities for collective problem solving in my region, the Basque Country, and the research organisation I work for, Orkestra – Basque Institute of Competitiveness.

We have learnt from scholars that analyse the resilience of places that the capacity of places to build their development path and respond, operate and adapt to global transformations and pressing challenges lies in great part in local cumulative processes of resilience building (Christopherson, Michie, & Tyler, 2010; Simmie & Martin, 2010). It is the economic, social and political processes that operate in territories, which to a great extent, create the capacities to collectively respond to pressing crises and challenges. Besides, I believe in the strength of the collective sense of community for building shared futures of territories. Therefore, I would like to contribute to such constructions, too. I think that, if any, I do my tiny part in this endeavour primarily through my work, which is the main activity that occupies my hours. However, I also hope that this thesis contributes to my region through a better understanding of how policymaking and cooperative processes for regional development operate.

Finally, this work cannot be isolated from my immediate context. I work in an organisation that aims to do transformative research and impact our territory. What transformative research is and how it is developed has been a concern and the centre of our reflections in recent years. Thus, by focusing on the policy world that we aim to impact, and by reflecting on how research can influence it, I also hope that this work can contribute to some further reflections on those debates, to our practice, and therefore, to us as an organisation.

Figure I-1. Who is this thesis for?



Source: adapted from Reason and Marshall (1987, p.13).

1.2. Research objective

Regions and places have become increasingly important to defining and implementing development strategies, and regional and local development has merited significant scholarly attention in the last decades. The changing relationships within a globalized world, the decentralization processes together with an increasing acknowledgment of the relevance of place in economic development has placed the focus of analysis at local and regional levels (Barca, Mccann, & Rodríguez-Pose, 2012; OECD, 2009, 2010).

Indeed, a regionalist literature has been built through vast academic work that is concerned with how territorial development occurs (Dotti, 2014; Moulaert & Sekia, 2003; Pike, Rodríguez-Pose, & Tomaney, 2010, 2017). The 1980's to 1990's witnessed the emergence and growth of an increasing body of knowledge that has provided insightful frameworks and theories that guided or co-evolved with the practice of regional development policymaking (Mytelka & Smith, 2002; Sotarauta, 2012). The significance of innovation in economic development, territorial aspects of innovation and learning processes, the potential of local production systems, the relevance of social, cultural and institutional elements, such as networks, social capital and trust, all form part of the frames that have pervaded territorial development literature, policy and practice.

Regarding policies to foster territorial development, systemic and holistic approaches to competitiveness and innovation dominate the discourse (Aranguren, Magro, & Wilson, 2017a; OECD, 2010). Territorial development, it is argued, needs policy interventions that foster the interactions between businesses and their environment and between the institutions that contribute to knowledge generation and exploitation. Such policy interventions should also be systemic and thus coordinated across policy fields, public and private organisations and governance scales.

Under these frames, governance has gained a prominent place in regional development and innovation literature, in which a range of different logics, rationales and lines of argument call for horizontal or network forms of governance. The contested nature of development and the consequent need to bring about diverging visions; to include local visions in place-based policies; the relevance of institution and local capacity building; the significance of participation to foster resilient places; the importance of tacit

knowledge and interactive learning to foster innovation; to approach development policies systemically and holistically; all provide reasons and arguments to steer territorial development and territorial development policymaking through cooperative forms of governance (Barca et al., 2012; Bristow & Healy, 2014; Karlsen & Larrea, 2014a; Laranja, 2012; OECD, 2010; Pike, Rodríguez-Pose, & Tomaney, 2007). All in all, governance is seen as a necessary element to build on local knowledge, align visions, articulate interests, coordinate policies and enable collective action in a context in which territorial development processes can be understood as a 'struggle between visions, individual interests and ideas' (Sotarauta, 2016, p.49).

This thesis also rests on this idea and it is based on the assumption that 'governance not only provides strong collective agency through its scope for coordinated and strategic action (…) but also has the potential to act as a unique connector, facilitating complex communication and cooperation between multiple agents' (Bristow & Healy, 2014, p.931). Thus, it is to this phenomenon that this thesis aims to make a contribution.

The thesis is also inspired by a relevant concern posed by recent debates that affect the fit and adequacy of regional development research as a guiding framework for regional development policies and governance. In the view of several scholars, most prescriptive literature that acts as a (theoretical) guiding framework for policy action lacks a policy orientation; moreover, the literature does not sufficiently consider the real practice of policymaking and the complexities and rationalities involved in such processes (Dotti, 2014; Flanagan & Uyarra, 2016; Flanagan, Uyarra, & Laranja, 2011; Karlsen & Larrea, 2014a; Uyarra, Flanagan, Magro, Wilson, & Sotarauta, 2017).

In this line, Uyarra and colleagues' (Flanagan & Uyarra, 2016; Flanagan et al., 2011; Uyarra et al., 2017) enlightening work raises an awareness of the lack of understanding of real policymaking processes in much of this literature and the absence of rationales, concepts and realities of the policy world in much of the prescriptive work derived from the academic work. Through their work, these scholars highlight, among others, that most literature overestimates the relevance of theoretical rationales, rational design and coordination in policy-making; and overlooks agency, ideas, policy rationales, previous policy traditions and decisions, meanings, values and interests involved in policy action, the roles of actors in policy change and institutionalisation, how actors relate to institutions and the micro-practices through which policies are enacted. Hence, in the

view of Flanagan and Uyarra (2016), a view that this work also shares, in order to conduct relevant research these issues and a better understanding of the policy process should be placed high on the research agenda.

In effect, the problem is not like some could frame it (e.g., Borrás & Edquist, 2016; Borrás & Jordana, 2016) as a problem of more intelligence and a better analysis for a stronger contribution to policy design. Rather, it could be framed as 'a problem of *poor policy comprehension of researchers* towards both the policy process and how research might be relevant to this process' (Stone, Maxwell, & Keating, 2001, p.3), which precisely questions the idea of such ideal designs.

This drives us to another relevant issue: that of the influence and impact of research in territorial development policy processes. In recent years, the role of universities in regional development has been the subject of increasing attention, leading to works that conceptualize and analyse the role of universities and research in the territories in which they are embedded from different angles and models (e.g., Harrison & Turok, 2017; Pinheiro, Benneworth, & Jones, 2012; Uyarra & Sanchez-Barrioluengo, 2017a). Similarly, action research scholars in regional development have long reflected in the role that research can play in territorial development (Gustavsen, 1992; Johnsen, Knudsen, & Normann, 2014; Karlsen, 2007; Karlsen & Larrea, 2014a; Karlsen, Larrea, Wilson, & Aranguren, 2012). However, most works focus on universities, including activities beyond research, or university-industry interactions, or frame and build on frameworks related to university-society relationships and action research. That is, the particular interaction between research and policy and the impact of the former on the latter is less explored both conceptually and empirically in this field.

It is in this overall context that this thesis frames its aim and contribution. On the one hand, it puts the focus on the governance of territorial policy processes. Specifically, this work puts the focus on multi-actor collaborative processes, with a more general aim of better understanding the 'multiobjective, multivision and pluralistic process' (Sotarauta, 2009, p.898) that policymaking constitutes in the particular field of territorial development. With this aim, the thesis particularly looks at micro-practices that enact such government arrangements, keeping in mind the relevance of micro-actions and agency of multiple actors in policymaking and governance. Indeed, as Bevir (2013, p.17) asserted:

> Really practices of governance are products of people's activity, and people's actions are not determined by institutional norms or to logic of modernization but rather to reflect their agency and intentionality. Really governance is constructed differently by numerous actors grappling with different issues in different contexts against backgrounds of different traditions.

On the other hand, driven by a special concern with the contribution of research to territorial development governance and policymaking processes, the thesis also aims to provide insights into the research-policy dynamics and on how research can potentially contribute to territorial development policymaking.

In sum, the objective of this thesis is *to advance knowledge in regional development policymaking; that is, in the policy processes to foster regional development, specially focusing on multi-actor collaboration in policymaking and the contributions that research can make to those processes*.

The thesis is built around four articles, each of which with its own focus towards this general aim and specific research questions detailed in Chapter III. The overall underlying research questions that guide this work in its whole are the following:

- How does multi-actor collaboration in policymaking contribute to territorial development? (Addressed in Chapter II and Articles 1, 2, 3 and 4.)
- In which ways can research contribute to territorial development policymaking? (Addressed in Chapter II and Articles 1, 2 and 4)

1.3. Contributing to theory from rediscovering practice

This thesis is mainly informed by a constructivist ontology and an interpretive epistemology (Lincoln & Guba, 2013; Yanow, 2007). I believe that knowledge is contextual, that the world is not measurable by some objective means and that the social, political and cultural events are intersubjective constructed truths (Schwartz-Shea & Yanow, 2012). Yet, my position is not completely relativist. Following Wagenaar (2011), we can think of meanings having both a subjective and an objective dimension. Subjective in the sense that they are carried by particular people; objective because they are also embedded in social practices in a way that even people are not always aware or have access to the tacit meanings that influence their own behaviour.

Further, regardless of my intellectual position, as Abbot (2004) argued, the 'grand' debates that structure social sciences are enacted through specific decisions in the research process. I am aware that some of this dissertation's specific decisions and frames of reference may contradict my intellectual positioning in these *fractal debates* (Abbott, 2004). In this sense, I embrace a pragmatic approach. Building on different frames helped me (from a practice perspective) to better understand the phenomena that this thesis is focused on. I will be satisfied as long as this *epistemological bricolage* (Freeman, 2007) on which thesis is based, also provides some insights for others to better understand the complex world of territorial development policymaking.

On the other hand, the thesis construction process has not followed a linear logic. Several authors (Abbott, 2004; Maxwell, 2013; Schwartz-Shea & Yanow, 2012) argue that most social sciences research projects start with general interest in an issue that becomes specified in research questions as the study is conducted. This dissertation has also been built in such an emergent way. I started with only a general interest in regional governance issues and the contributions that (action) research could make to promoting horizontal modes of governance, and with a strong gut feeling that my previous experience in a research project with policymakers could make contributions to theory in that field. However, echoing Abbot's (2014, p.244) words: 'the real issue is how we recognize a puzzle in this amorphous confrontation between interest and data'.

The puzzles and subsequent research questions that this thesis addresses have emerged from continuous interaction between theory and practice guided by an implicit question: what can I contribute to academic knowledge from my experience? I formulated some initial research questions that drove me to a literature that I started filtering unintentionally according to its fit with my experience in a policy environment; and that at the same time led me to read the same experience from new angles and new theoretical glasses ('oh, this explains when…'). It is in those interactions that I would find elements that could make, hopefully, a contribution to academia.

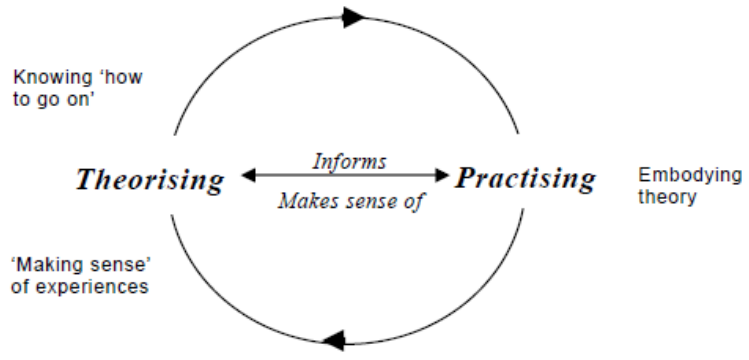
Hence, the overall construction of the thesis and my learning process through its development has been characterized by the *hermeneutic cycle*, a sense making explanatory model with the philosopher Gadamer (1976) as one of its main proponents.

The following extract from Schwartz-Shea and Yanow (2012, pp.30-31) explains what this sense-making process entails:[3]

> A hermeneutic, sense-making circle expresses the idea that there is no fixed starting point for inquiry: the process of sense-making begins wherever the individual "is" in her understanding at that moment, with whatever grasp of things she has at that time. It also suggests that there are no "conclusions" in the sense-making research cycle: there are only momentary stopping points, to collect one's thoughts, perhaps to publish or otherwise disseminate what one understands at that point in time, before one continues on the interpretive path. (…)
>
> By this logic, a researcher begins a project, whether in the field or in a text, with some degree of prior knowledge—that is where the metaphoric light is shining; and his sense-making develops both as he confronts particular elements and as he gains a sense of the wider context. The circle-spiral describes the intimate relationship between part and whole: how the meaning of a phrase or act depends on its relationship to the whole, but, as well, that the meaning of the whole cannot be grasped independent of its constituent parts. In the iterative–recursive abductive engagement between theory and lived experience, the puzzle that the research seeks to explain grows from lesser to greater specificity (and, hence, clarity) as sense-making proceeds along the circle-spiral.

Put another way by Colyer et al. (2005), and as depicted in Figure I-2 , theory and practice form a recursive relationship in a way that practice embodies theory and theory makes sense of practice.

Figure I-2. Practice as embodied theory



Source: Colyer, Jones and Helme (2005, p.22).

[3] I deliberately use Schwartz-Shea and Yanow's (2012) words to explain this process because on the one hand, I cannot explain it better and more beautifully; and on the other, it was precisely reading this text that made me realize my own sense-making logic in this thesis.

Indeed, theory has been 'a coat closet' and the 'spotlight' (Maxwell, 2013, p.43) that has helped me make sense of the data, but the relationship has also been the other way round. This thesis' general heuristics, i.e. the way in which we find things out and have new ideas (Abbott, 2004), has been characterized by the recursive-iterative process between theories and lived experience. The articles' overall research focus can hence be thought of as puzzles that have emerged in such interaction.[4]

The following section describes the context of the practice that has interacted with theory and in which the empirical analysis of this dissertation has taken place.

1.4. The research context: Orkestra, Gipuzkoa Sarean and Bizkaia Orekan (Basque region)

The empirical research for this dissertation is situated in the Basque Autonomous Community (Basque region), Spain. The case studies analysed in Article 2, Article 3 and Article 4 are specific projects developed in two different provinces of this region and equally, Article 1 is implicitly inspired by my experience in these settings.

Figure I-3. Location of Basque Autonomous Community in the Iberian peninsula

Source: https://commons.wikimedia.org/wiki/File:Localizaci%C3%B3n_del_Pa%C3%ADs_Vasco.svg

The Basque region is in the north of Spain (Figure I-3), with a population of approximately 2.1 million. The region ranks in the upper levels of many socio-economic indicators (e.g. GDP per capita) at the European level. In fact, it is considered

[4] In Article 2, the overall frame that defines the academic contribution and the specific research question was set by the editors of the book in which it is published. However, the interaction with the particular research community that the book gathers was also a result of the theory-practice iterative process.

a success case in regional economic transformation, with and old history of innovation and industrial policies, an interventionist regional state in economic policies and a dense and complex institutional system (Morgan, 2016a; Valdaliso, Magro, Navarro, Aranguren, & Wilson, 2014). Administratively, the region is divided into three territorial scales: regional, provincial and municipal. The regional government has strong competences and autonomy in most policy areas, including the definition of industrial and innovation policies.

The region is comprised of three provinces (Figure I-4): Gipuzkoa, Bizkaia and Araba, each of which has its own capital city (San Sebastian, Bilbao and Vitoria, respectively), their own provincial parliaments (legislative branch) and governments (executive branch). Provincial governments (councils) are the tax-collecting authorities and also have relatively strong autonomy in a range of policy areas. Municipalities carry out economic promotion activities through their municipal or county-level development agencies. Counties are supra-municipal and infra-provincial territorial scales with no political and administrative representation. However, they have relevance because in the 1980-2000 period, several municipalities joined to create county-level economic development agencies in order to tackle economic and employment-related problems. These agencies are *inter-municipal joint authorities* 'that operate as special districts across several local governments to deliver specific public service' (OECD, 2010, p.39); in this case, local economic development services. Local economic promotion is made through county development agencies that work on the application of programmes from other government scales and also articulate county-level projects and offer services to small firms and entrepreneurs (Estensoro, 2012; Gainza, 2008).

Figure I-4. Provinces of the Basque Autonomous Community

Source: adapted from https://commons.wikimedia.org/wiki/File:Basque_Country_location_map.svg

Orkestra – Basque Institute of Competitiveness, the institute I work for, is a Basque research institute in the field of regional competitiveness and innovation, with a distinctive feature of engaging with stakeholders when/for conducting research (Aranguren, Franco, Horta, & Silveira, 2016; Aranguren, Guibert, Valdaliso, & Wilson, 2016; Romano, 2017). The core of its mission is not only to study, but also to influence the Basque region's development. Thus, most researchers in Orkestra work in highly interactive modes with policymakers and other relevant stakeholders.

I work in research teams that develop research projects in the field of territorial development and innovation, mainly in projects developed in collaboration with provincial governments. We interact strongly with practitioners and our research is not only oriented to academic knowledge generation but also oriented to having a direct and immediate impact in practice. The two main projects in which I have participated before and during my PhD studies, and that constitute the case studies in Article 2, Article 3, and Article 4, are two territorial development projects carried out with the governments of two of the three provinces of the Basque region: the Provincial Council of Gipuzkoa and the Provincial Council of Bizkaia.

Gipuzkoa Sarean ('Networking Gipuzkoa' in Basque language, and since 2017 renamed the Etorkizuna Eraikiz Territorial Development Lab) is a project launched by the provincial government of Gipuzkoa in 2009. With 700,000 inhabitants, Gipuzkoa is the second largest province in the Basque region. The aim of the project has been to develop new patterns of relationship with territorial actors in order to have more democratic and efficient policy processes for territorial development. This general aim has materialized in different specific objectives and focus because it depended on the governing party at the time (the project has endured three governing terms under two different parties) but it has overall created a new governance mode between the Provincial Council and local development agents, at times also involving regional level policymakers. Orkestra has participated in the project since it was launched, first as one of the research members of the project, then as lead research group and collaborator on the project, which evolved towards an action research project. Orkestra's role has varied throughout time. In its first year, Orkestra was one of the members that participated through traditional research activities, such as analysis and interviews. Afterwards, the research team played an overall facilitation role (Costamagna & Larrea, 2018) throughout the whole process. Action researchers have adopted specific roles over time

depending on the needs and particular situations, such as advising in disciplinary issues, facilitating capacity building spaces, mediating between groups, providing frameworks for strategic reflections and elaborating specific studies. I took part in this project from 2009 to 2016, first as technical secretary and next as research facilitator.

Bizkaia Orekan ('Balanced Bizkaia' in Basque language) is a policy process launched by the Provincial Council of Bizkaia. With 1.1 million inhabitants, Bizkaia is the most populated province of Bizkaia and its capital Bilbao also the biggest city in the Basque region. The Provincial Council of Bizkaia is the government of the province, with an Economic and Territorial Development Department that manages a range of economic development and innovation policy instruments. It also has a provincial level business development agency, Beaz, which participates in the definition and management of subsidy programmes, offers services, such as counselling for entrepreneurs and acceleration of high potential business projects, and manages a business incubator. In addition, there are 18 municipal-level or county-level development agencies in Bizkaia. While there is some heterogeneity in their activities, in general terms most development agencies have evolved (to different degrees) from a focus on supporting employment generation to engaging in a wider range of activities that include services to businesses, commerce and tourism, sustainability plans, innovation promotion, and promotion/management of public-private networks to develop economic strategies (Estensoro, 2012; Gainza, 2008).

The Provincial Council of Bizkaia launched *Bizkaia Orekan* in 2015 with the aim of improving competitiveness policy in the province by putting a special focus on the particularities and challenges of the different municipalities and counties. The project has created different collaborative arenas between territorial actors who are working in identifying territorial-specific competitiveness challenges and defining and implementing actions to tackle them. Orkestra's research team has had multiple roles in this project. The design phase was approached as a co-generative process (Greenwood & Levin, 2007) in which researchers helped co-construct an initial proposal. Since the project was launched, the research team has participated in different roles, for example facilitators and expert participants on specific themes. I am part of the Orkestra team that collaborates on this project.

Gipuzkoa Sarean and Bizkaia Orekan are the projects that constitute the case studies in Article 2, Article 3 and Article 4; and the contexts which, together with my organisational experience in Orkestra, have interacted with theory in the construction of this thesis. My positionality in this construction and in the research settings of the projects is discussed next.

1.5. On my positionality in the thesis

In order to be transparent about the knowledge claims made in this thesis, I consider it relevant to reflect on and make explicit what I bring to this research; that is, to reflect on my positionality when developing the thesis and the articles.

Positionality refers to where one stands, where one places herself in relation to the studied issue, to other participants and to the research settings. There is no such thing as no-positionality, since '*any* view is a view *from some perspective*' (Maxwell, 2013, P.46, emphasis in original) and 'you have to position yourself somewhere in order to say anything at all' (Hall, 1990, p.18 cited by Bourke, 2014).

Indeed, we cannot escape from ourselves when conducting research, although the disembodied and impersonal writing style predominant in academic writing (Cousin, 2010; Golden-Biddle & Locke, 2007), and which I also use, suggests otherwise. As Cousin (2010, p.10) posited:

> Shank (2002: 10) invites his readers to ponder on the difference between a report that says these effects were observed and one that declares I observed these effects. Both describe the same observation of effects, but the language move in the first gives off a greater air of 'science'.

Contrary to what the standard writing characterized by that 'greater air of "science"' suggests, our *self* is always present in all of the stages of research, when relating to others and even when writing. The self is not a negative aspect that needs to be erased but the main instrument from which we interact with and interpret data, a research tool connected with how we approach research and the methods that we use in doing so (Cousin, 2010; Maxwell, 2013; Yanow, 2000).

Certainly, interpretation is embedded in social sciences: the data we work with are actions, and actions are not mere observable behaviours, but behaviours with intentions (Wagenaar, 2011). Acquiring knowledge about such actions always requires an exercise of interpretation, which invalidates the illusion of the existence of researchers who are objective neutral observers. Hence, rather than ignoring the relevance of subjectivity, researchers should be aware of such an influence and make it explicit. In other words, positionality requires *reflexitivity*, researchers who analyse their selves and practices (England, 1994): what do I bring to research and how is that influencing the research process?

Different elements that characterize the standpoint from which we know the world influence our sense-making process (Maxwell, 2003). Along this line, the most common ways to address the positionality issue are the outsider/insider dichotomy and the given categories of any person, such as gender, class, race, and sexuality; and hierarchical position within society and groups (Cousin, 2010; Herr & Anderson, 2005).

Herr and Anderson (2005) propose a continuum of positionalities in which they identify different insider-outsider relations when doing research (especially in action research), which range from *insider research* (the study of self-practice or the actions carried out in one's setting) to *outsiders study insiders* traditional position.

The empirical articles of the thesis (Articles 2, 3 and 4) are based on experiences in which my co-authors and I have been involved and thus, we are insiders to the object of analysis. However, a distinct positionality that I believe is relevant for this thesis is the 'outsider within' positionality, which can have different meanings (Collins, 1986; Herr & Anderson, 2005). The outsider within position may be, as Herr and Anderson (2005) argue, a faulty positioning version of the insider research. This fail occurs when practitioners research their own setting but position themselves as outsiders. In such a case, not acknowledging the insider-ness, the mediated view for being an insider, is wrong positioning. But the term outsider within, in the sense used in feminist theories can refer to some other specific positionality, too. First used by Collins (1986), this term can refer to people who no longer clearly belong to any community and are thus placed in the borders between groups. The term can also refer, as informed by Herr and Anderson (2005), to individuals who reside in the margins within dominant groups. Such would be the case, for example, for women in male-dominated organisations. This

position in the margins (with or without the power dimension) provides a unique standpoint and a specialized knowledge (Herr & Anderson, 2005).

Indeed, while there are multiple research settings and multiple others intermingled with multiple selves and positionalities in this dissertation, I think there is above all one overarching identity dimension that has strongly influenced my positionality: my non-researcher identity in a research environment. My position at work until the final phase of the thesis was that of technical staff and research facilitator. However, beyond this fact, my positionality has specially been influenced by my self-given non-academic identity. Given the image that I have always had about academics (=wise people) in contrast to my self-image as regular people, I have never projected myself as a researcher and academic. Thus, previous to the PhD and for most of the time of its development, I have felt like an *outsider* to the academic community. This way of being has placed me in contradictory spaces, in an *outsider within* position in the sense of 'between groups'. I am part of a research organisation and part of research teams working with policymakers. However, for a long time I have felt that I am like the ones that we - as research organisations - work with: I am one of them (non-academics), one of the others, not one of us.

Another important feature to understand my positionality in relation to the research community is the fact of being part of an action research community in Orkestra. I have taken part in an action research project for several years and I have a positive view on this approach because I have seen its positive impacts. But as part of the community of action researchers, I have lived indirectly the 'struggles' of some of its members that derive from being part of a marginal way of doing research in a wider research community. Further, I have lived some of the struggles myself in the initial steps of this thesis, although I am not an action researcher. Hence, although not being a researcher, my relationship with that community from a near-insider position has been from a marginal standpoint, again, as an *outsider-within*, this time in the (symbolically) 'margins of society' sense.

I believe the aforementioned overarching positionality has affected the projects that I am involved in, my relationship with other members of the research team and more generally to the research community and to *whom* I write and *how* I write in this thesis.

Article 1, co-written with a colleague, is a conceptual article, and thus, there is not a community I am explicitly interacting with. However, I think that it is the article in which 'the others' (the academic community) and my (outsider-within) self is most present. The article develops a theoretical argument, but it is also the product of (a) the *outsider-within* who makes a claim (from the margins) of the validity of action research and other non-mainstream research approaches and (b) the *outsider-within* (non-researcher) who thinks that many of the things that I have lived and experienced when working with policymakers are not reflected in the image that innovation policy studies suggest about the policymaking process.

Article 2 and Article 4 analyse a project for which I was part of the research team's core group together with one of my co-authors, the lead researcher of the project. However, to me, the research and methodological approach developed in the project is the researchers' approach, 'their' approach. Hence, although the (co-authored) articles are defined later (Chapter III) as insider research because that is the characteristic of the work as a whole, to me, we are not analysing our practice, but her (main researcher's) practice (Article 2), their practice (Article 4).

In Article 3, the overall outsider-within positionality has not been that influential because by the time I was working in this project I think such a positionality was already changing due to my PhD studies and my evolution (in practice) at work.

Nonetheless, as it is described in Chapter III, in all articles different measures (e.g., member checking) were taken to meet the criteria for the validity of the work in order to address positionality influences.

Finally, my positionality has a strong influence on the aim of this thesis, the selection of the theoretical building blocks, on how and to whom I write. The theoretical chapter is not a product of a value-free, objective literature review. As mentioned in Section 1.3., the selection of the main conceptual building blocks has been mediated by my experience, and they were selected because I believed that they fit with what I had experienced in my practice. In addition, this work has been primarily written for the academic community. Practitioners were not a direct audience for this thesis and I have not aimed at doing a piece of work that would create helpful tools for practitioners in solving problems. I already try to do that in my work. I think the writing of the thesis is

a work from the *inside out* (Karlsen & Larrea, 2014a), written, both intellectually and emotionally, through reason and emotion, for a community that I still do not really feel that I belong to.

1.6. Structure of the thesis

The thesis is organized around four chapters. Chapter II presents the main theoretical building blocks that constitute the background of the thesis and the articles. Chapter III presents the articles and methodological issues related to them. Chapter IV presents the four articles' main findings and discusses their contribution in relation to the theoretical framework presented and also outlines future lines of further research.

CHAPTER II. THEORETICAL BACKGROUND

> '(…) in the "new politics", in which, typically, actors have to collaborate by transgressing institutional boundaries, trust cannot be assumed. Politics and policymaking thus is not simply about finding solutions for pressing problems, it is as much about finding formats that generate trust among mutually interdependent actors' (Hajer & Wagenaar, 2003, p.12) .

This chapter presents the theoretical background that frames the thesis and the specific phenomena to which it aims to contribute: territorial development policymaking, its governance and the contributions of research to these processes.

The chapter first sets the context by providing an overview of the substantive issues of territorial policymaking; that is, territorial development policies and the main theoretical frames and developments that have most influence them (Section 2.1.). The following sections (2.2. and 2.3) delve into the policy process and the complexities involved in the collective problem-solving processes for territorial development, namely contextual complexities, process complexities and complexities associated with policy problems. Such complexities, as they will be described in Section 2.4, call for cooperative forms of governance in territorial development policymaking. Furthermore, the chapter argues that multi-actor collaboration arenas can be a means to create the collective regional capabilities for joint problem solving and learning (Section 2.5).

The next sections (2.6, 2.7 and 2.8) analyse how research can contribute to the policy world and present relational approaches to policy analysis, and specifically action research as a strategy not only for capturing territorial development policymaking complexity, but also for contributing to policy development. Lastly, a brief summary of the thesis' theoretical chapter is undertaken in Section 2.9.

2.1. Regional development policies

In the globalised world in which supra- and sub-national scales have replaced the national space as the organisational unit of economic life, regions have become key spaces of intervention and analysis (Barca et al., 2012; Gainza, 2008; Navarro, 2009; OECD, 2009, 2010).

Many theories currently emphasise the relevance of place in economic development and factors related to proximity are regarded as key for the competitive advantage of localities (Barca et al., 2012; Porter, 1998). Moreover, the 1990's witnessed the emergence of an extensive literature on territorial development with a focus on the sub-national scale, developed through different models, such as the innovative milieu and industrial districts, the regional systems and learning economy schools, and the California school of economic geography (Moulaert & Sekia, 2003). Despite their different origins and building blocks, these strands generated a similar framework, which emphasises tacit knowledge and the collective and interactive nature of innovation, social capital and cultural and institutional factors, and local identities and localized learning (Dotti, 2014; Uyarra, 2007). These models have been very relevant to the creation of a regionalist body of knowledge that has also influenced practice.

Some of those ideas influenced the international organisations that promote development, which started advocating for a place-based approach to regional development policy that is fundamentally based on two elements (Barca et al., 2012). First, a place-based approach involves considering the geographical context the policy is aimed at influencing. And, second, this approach considers that development needs local and external knowledge and thus, policy should promote interactions among external agents and local groups.

Parallel to those movements, many OECD countries – especially in the European Union - have undergone a decentralization and deconcentrating process that has made regions active in economic development (OECD, 2010). Although regional development policy began in these countries in the 1950s and 1960s, it has been strengthened in recent years and a paradigm shift has occurred over why and how regional development is promoted through policy (OECD, 2010).

A new approach to territorial development policy

In recent decades, many countries have moved towards a new approach in regional development policy (OECD, 2009, 2010). As Table II-1 illustrates, whereas in the old paradigm regional development policy was aimed at promoting more equity through reducing regional disparities (income, infrastructure and employment) the new regional development paradigm aims at promoting growth and regional competitiveness. In the 1990's to 2000's, the competitiveness discourse that took a dominant place in economic development also reached the sub-national scale, which caused regional competitiveness policies to enter the agendas in many regions (Aranguren, Magro, & Wilson, 2017a). That is, there was a shift from a more donor-recipient policy model to growth-oriented policies in regions (Pike et al., 2017).

Table II-1. Paradigm shift in regional development policy in OECD countries

	Old paradigm	**New paradigm**
Problem recognition	Regional disparities in income, infrastructure stock and employment	Lack of regional competitiveness, underused regional potential
Objectives	Equity through balanced regional development	Competitiveness and equity
General policy framework	Compensating temporally for location disadvantages of lagging regions, responding to shocks (e.g. industrial decline) *(Reactive to problems)*	Tapping underutilised regional potential through regional programming (*Proactive for potential*)
- theme coverage	Sectoral approach with a limited set of sectors	Integrated and comprehensive development projects with wider policy area coverage
- spatial orientation	Targeted at lagging regions	All-region focus
- unit for policy intervention	Administrative areas	Functional areas
- time dimension	Short term	Long term
- approach	One-size-fits-all approach	Context-specific approach (place-based approach)
- focus	Exogenous investments and transfers	Endogenous local assets and knowledge
Instruments	Subsidies and state aid (often to individual firms)	Mixed investment for soft and hard capital (business environment, labour market, infrastructure)
Actors	Central government	Different levels of governments, various stakeholders (public, private, NGOs)

Source: OECD (2010, p.13)

Thus, as Table II-1 shows, regional development policy has broadened the scope from the initial interventions, which were mainly focused on infrastructure development and state aid. Changing the focus to competitiveness promotion required the adoption of a more holistic approach and diverse instruments from different policy fields. New trends

in a more pro-active regional development policy are based on exploiting endogenous resources and on a broader thematic focus aimed at stimulating economic growth by promoting measures that improve the business environment and innovation.

In this sense, although it is not clear what exactly is understood by regional competitiveness policies (Aranguren, Magro, & Wilson, 2017a), regional development policy that aims at fostering competitiveness and sustainable growth could be understood as policy that integrates three broad policy areas/dimensions (OECD, 2009): capital stock (infrastructure, including information and communication technologies), the labour market and the business environment.

Specially related to the business environment dimension, two theoretical frameworks have influenced regional development policy practice: regional innovation systems and clusters (Aranguren, Magro, & Wilson, 2017a; Navarro, 2009; OECD, 2009, 2010). Besides, more recently a new framework is proving to have a strong influence on regional development strategies and policymaking: Research and Innovation Strategies for Smart Specialisation (RIS3) (Foray, 2014; Foray et al., 2012).

Clusters and regional innovation systems – also RIS3 – are concepts based on the idea that knowledge and innovation capacity are the key factors in territories' competitiveness (Navarro, 2009). Equally, both frameworks rest on the belief that knowledge is embedded in territories, is not easily moveable and thus the learning processes and local capacities that derive from knowledge are very context dependent.

Clusters

The cluster concept was introduced and popularized by Michael Porter (1990, 1998), who defines it as 'geographic concentrations of interconnected companies, specialised suppliers, service providers, firms in related industries, and associated institutions (for example, universities, standards agencies, and trade associations) in particular fields that compete but also cooperate' (Porter, 2002, p.144). Its roots, however, can be found in Alfred Marshall's (1907) idea that some advantages are derived from the agglomeration of economic activity. The spatial agglomeration of firms is said to produce, among others, specialized skills, inputs, institutions and infrastructures or tacit knowledge, which generate positive externalities that can increase productivity and innovation (Konstantynova & Wilson, 2014, 2017). Moreover, Porter's (1998) understanding of

clusters is also based on the idea that some natural competitive advantages emerge from the competition-cooperation dynamic between companies in a cluster, which have an impact on productivity, innovation and entrepreneurship.

Cluster policies hold a prominent place and influence in regional competitiveness policies (Aranguren, Magro, & Wilson, 2017a; Konstantynova & Wilson, 2017). Broad in scope, both in literature and in practice, cluster policies are characterized by the targeting of specific groups of actors rather than individual firms, and their support to value chains rather than sectors (Konstantynova & Wilson, 2017; Wilson, Konstantynova, & Aranguren, 2017). The main aim of cluster policies is to improve the firms' environment through fostering cooperative activities between them and among them and other actors, which is achieved through three broad types of instruments (Aranguren, Magro, & Wilson, 2017a): financing cluster organization, which are organisations that aim at fostering collaboration between the firms that belong to the cluster; financing collaborative projects; and facilitating cluster and inter-cluster networking activities. However, cluster policies are used by many regions as a general framework for other types of policies and as a means to aggregate key economic actors and promote linkages to, among others, foster innovation (Aranguren, Magro, & Wilson, 2017a; OECD, 2009).

The cluster concept – and associated policies – are related to certain activities (e.g. sector, competences, value chains) and its main actors are firms. In contrast, the RIS framework is more general (neither sector nor activity specific) and emphasises associate institutions since the focus of the RIS, as it will be described next, is mainly on the creation and exploitation of knowledge (Navarro, 2009).

Regional innovation systems

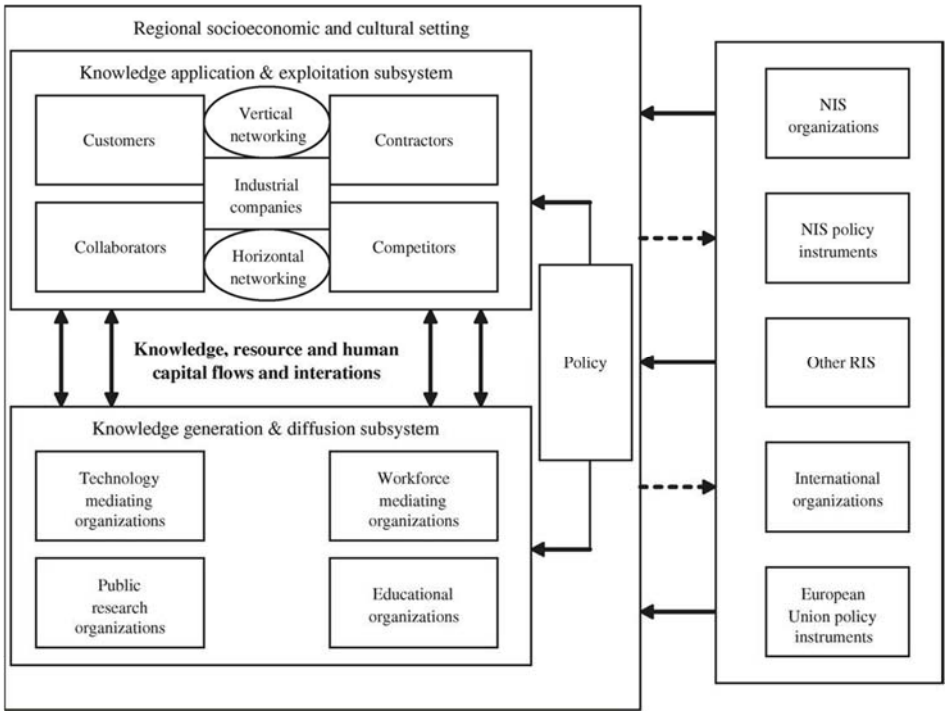
The centrality of innovation in the study and practice of economic development accompanied the development of a large scholarly literature centred on how innovation is produced (Fagerberg, Landström, & Martin, 2012; Fagerberg & Verspagen, 2009; Lundvall, 2013; Martin, 2012). Over the years, the understanding has shifted from conceiving of innovation as a linear phenomenon to an interactive process (Caraça, Lundvall, & Mendonça, 2009). Initial models implied that science was the source of technology and technology the main source of economic development. This unidirectionality and understanding of science as the only factor for innovation were

questioned in the 1908s. First, an interactive view of innovation was introduced that includes feedback mechanisms. Next, systemic approaches were developed that emphasised interactions between different institutions and organizations as producers of innovation. Thus, the agenda and focus in innovation studies changed from predominantly firm-centred to the context of such firms; that is, to innovation systems (Fagerberg, Martin, & Andersen, 2013).

Within this systemic frame is the RIS, a concept inspired by the National Innovation Systems (Lundvall, 1992; Nelson, 1993) that stresses territorial based innovation (Asheim & Gertler, 2005). First introduced by Cooke (1992), the RIS has become both a dominant framework in the analysis of innovation, which has produced a considerable literature, but also a guiding framework for regional innovation policy (Navarro, 2009; Uyarra & Flanagan, 2009, 2010). The RIS is based on the acknowledgment of the relevance of geographical proximity for innovation, the significance of social and institutional factors in regional development and the systemic nature of innovation and interactive learning as the source of innovation (Uyarra & Flanagan, 2009, 2010). Indeed, underlying the RIS framework is the understanding of innovation as the product of 'interactions between business and a variety of knowledge centres (universities, business support, research centres, etc.) at the regional level' (Uyarra, 2007, p.245).

Although the RIS lacks a unique definition, it relates to 'the institutional infrastructure supporting innovation within the production structure of a region' (Asheim & Gertler, 2005, p.299). In its most common and widespread conceptualization, RIS is comprised of two subsystems (see Figure II-1): knowledge generation and knowledge exploitation. Companies and their customers, contractors, competitors and collaborators comprise the knowledge application and exploitation subsystem. The knowledge generation and diffusion subsystem is formed by organizations, such as public research, workforce mediating, educational and technology mediating. Tödling and Trippl (2005) provide an explicit place to the policy dimension in the RIS model, even conceptualizing it as a third subsystem in a later work (see Trippl & Tödtling, 2007) since they acknowledge the key role of policy actors in shaping innovation processes.

Figure II-1. Main structure of a regional innovation system.



Source: Tödtling & Trippl (2005, p.1206)

Ideally, the subsystems interact, enabling knowledge, resource and human capital flows. Moreover, the regional system is not isolated, but linked to other RISs, to national innovation systems and to international organizations and policy instruments from other scales that affect the regional system. Cooke's (2004, p.3) definition of RIS makes explicit this openness of a RIS and its relationship with other systems since he defines it as 'interacting knowledge generation and exploitation subsystems linked to global, national and other regional systems'. The focus in RIS, then, is towards a wider variety of actors and their interactions since they influence the generation and exploitation of knowledge, and thus, innovation.

Navarro (2009) and Uyarra and Flanagan (2010) outline some problems with this - in their words - *fuzzy* concept, which they relate to the lack of conceptual clarity of the region (What is a region? Is it an administrative unit? A functional unit? Physical?), the system of innovation (When do we know that a system is in fact a system?) and the specific actors of the system. Nevertheless, the RIS model has greatly influenced the theory and practice and has become a guiding framework for regional innovation policy in Europe (Aranguren, Magro, & Wilson, 2017a).

Regional innovation policies

Promoting policies to foster innovation is high in the policy agendas of not only international organizations and national strategies but also in regional and local governments (OECD, 2009, 2011). Innovation policy has gained a prominent place in regional development agendas for two main reasons (OECD, 2011). First, national innovation strategies increasingly include a regional dimension due in part to a better understanding of the innovation process by policymakers and the relevance of place-based instruments and public action in fostering innovation. Second, the paradigm shift in regional development policy has placed innovation at the centre of the development agenda. Thus, given innovation policies' central role in regional development policymaking and because much of the new thinking on policymaking in this field has been developed in innovation literature, this thesis puts a special focus on this literature when discussing regional development-related insights.

Although originally focused on science and technology policy, currently innovation policies are understood in a broader sense. A distinction can be made between science, technology and innovation policies (Lundvall & Borrás, 2005). Science policy focuses on allocating and distributing resources among science related activities. Policies are directed to those organizations in the innovation system that generate science (universities and research institutes, technological institutions and research and development -R&D- laboratories), mainly focusing on their internal organization and regulation. Technology policy concerns technologies and sectors thought to be important drivers for economic growth, such as computers, genetic engineering and nuclear power. This policy's action focuses on the links of knowledge generation institutions with industry. Lastly, innovation policy includes all elements of the innovation process and gives relevance to the institutional dimension of the innovation system. Innovation policies are directed towards different elements of the economy and thus, they have a wider focus than science and technology policies. Moreover, innovation policies can equally be understood in a narrow or wider sense. The narrow version focuses on education and science policies whereas the wider version, informed by a systemic view, holds that most policy fields can be considered as long as they contribute to innovation.

Underlying the different ways to approach innovation policies are different theoretical policy rationales; that is, different understandings of innovation and how it is produced, and why and when the public sector should intervene to foster innovation. Rationales are 'more or less formalised models implicitly or explicitly drawing upon academic theories or concepts that could inform policy design, implementation and evaluation' (Laranja, Uyarra, & Flanagan, 2008, p.823). The different levels of rationales or what specifically a rationale is varies according to different authors (e.g. Borrás & Jordana, 2016; Chaminade & Edquist, 2010; Laranja et al., 2008), but they all refer to some kind of frame that informs policy action and intervention. Concretely, Laranja et al. (2008) distinguish between *meta-rationales* and specific *policy rationales*. Meta-rationales are ideas about government action that influence the specific ideas adopted and how they are integrated into the policy process. Policy rationales are constituted from those specific ideas. For example, the neoclassical welfare economics meta-rationale informs 'market failure' policy rationales.

The two main groups that have most influenced innovation and innovation policy are the neoclassical rationale and the systemic (institutional) and evolutionary (structuralist) rationales (Chaminade & Edquist, 2010; Laranja et al., 2008). The neoclassical rationale justifies innovation policy action and more generally government action based on the idea of market failures. In other words, governments must intervene to solve the inefficient allocation of resources. The justification for public intervention from a systemic perspective lies in systemic failures. According to this logic, policy should intervene when the system is not operating well, and private actors cannot or are not solving the malfunctions.

The systemic and evolutionary rationales are currently the most influential theoretically in innovation and to innovation policy (Chaminade & Edquist, 2010). The focus from a systems approach is actors' interactions and rules of the game; that is, on organizations and institutions. Innovation policy derived from this rationale focuses thus on elements that impede knowledge generation due to poor linkages in the system (the RIS in the regional case) – on elements, such as connectivity and learning failures (Chaminade & Edquist, 2010; Laranja et al., 2008). Moreover, the systemic rationale overlaps with the evolutionary-structuralist approach. Policies are equally focused on learning and cognitive capacities, trying to foster learning and experimentation and on changing behaviours that will lead to more interactions in the system (Laranja et al., 2008).

Hence, innovation policies currently have a strong focus on soft instruments that aim at fostering learning, at promoting connectivity through collaboration (between organizations, industry-university), networking and clusters; at altering governance processes and shaping institutions (Laranja et al., 2008; Martin, 2016).

Innovation scholars have posed doubts on the use of systemic rationales as a guiding framework for innovation policy due to difficulties identifying systemic problems in practice (Chaminade & Edquist, 2010), their poor guidance for designing and selecting policy instruments (Laranja et al., 2008) and in another type of debate for their misfit with a wider innovation policy approach that aims at solving 'grand societal challenges'; that is, mission-oriented policies that requires to set direction of change (Mazzucato, 2016; Schot & Steinmueller, 2016). Further, at the regional level, some authors see using a descriptive framework (RIS) for prescriptive purposes as problematic. Among others, they question the conceptual vagueness of the framework and the lack of regional data for applying such a framework (see Navarro, 2009; Uyarra & Flanagan, 2009, 2010) or the lack of analysis of current innovation policies to complement the theoretical frameworks (Borrás & Jordana, 2016). Critiques also hold that RIS overlooks the role of politics in shaping the institutional environments, actor-centred dynamics and extra-regional links, and it underestimates key role of firms in innovation (Marques & Morgan, 2018). Moreover, as discussed in Section 1.2., several scholars have raised awareness of the lack of attention to the real policy world and policymaking processes in these types of frameworks and research (Flanagan & Uyarra, 2016; Uyarra et al., 2017).

In any case, systemic rationales currently have a great influence on innovation policies, and concretely, on regional innovation policies. Besides, systemic rationales are also a characteristic of regional competitiveness policies, including cluster policies (Aranguren, Magro, & Wilson, 2017a). The predominance of systemic rationales has implications, as will be described in further sections, for the governance of territorial policymaking.

Smart Specialization Strategies

Also framed in a systemic rationale is a concept that has strongly influenced the practice of regional development policymaking in recent years in the European context: the smart specialisation concept and its associated policy, RIS3. The RIS3 policy has been

constructed around the smart specialisation concept proposed by a group of experts and this policy is now central to the Europe 2020 agenda and the European Cohesion Policy (Foray, 2014). In fact, it is an ex-ante conditionality for accessing the 2014 to 2020 regional funds that has led regions across Europe to base much of their regional development policy agenda in developing strategies that follow the guidelines provided by this policy.

The smart specialisation concept emerged from the acknowledgment that research and development is fragmented in Europe and that regions were developing similar strategies and policies without considering their own assets, making for inefficient investments in innovation (Foray et al., 2012; Foray, David, & Hall, 2011). In contrast, RIS3 proposes that regions should prioritize their knowledge-based investments based on their own strengths and assets and focus their industrial and knowledge development in such direction in order to fully exploit their innovation potential (Foray & Goenaga, 2013).

The RIS3 is innovative in respect to previous policies and approaches regarding both content and process (Aranguren, Magro, & Wilson, 2017a; Foray & Goenaga, 2013; Navarro, Aranguren, & Magro, 2012; Radošević, 2017). It is not a fully horizontal approach since it implies a selection of priorities (Foray & Goenaga, 2013). The selection of regional priorities is to be accomplished through an *entrepreneurial discovery processes* (EDP) (Foray, 2016). EDP, although a vague concept, implies that the identification and exploration of new activities should be done by stakeholders – private sector, universities, and technology centres– and, that governments must adopt the role of establishing the frameworks for that process (Foray, 2014, 2016; Foray et al., 2012). In that sense, one of the main differences between RIS3 strategies and traditional innovation and industrial policies is their bottom-up approach in selecting regional knowledge-based investments (Foray, 2016; Landabaso, 2014; Morgan, 2017).

Despite the differences, cluster policies, policies based on RIS framework and the RIS3 approach are based on similar rationales (Aranguren, Magro, & Wilson, 2017a). They all adopt a systemic perspective and acknowledge the relevance of horizontal capabilities of the innovation system and consider all the actors in the system – industry, research, governments – that compose clusters and RIS, although the RIS3 also includes civil society.

Once set up the frameworks that have most influence regional development policies the remainder of the chapter will concentrate on the focus of this thesis: the process of territorial policymaking through which territorial policies are enacted, multi-actor collaboration in policymaking and the contribution of research to those processes. In order to do so, it is necessary to shed light on what is meant by policymaking, which the next section tries to clarify.

2.2. Understanding policy and the policy process

Public policy, an elusive concept

Public policy is an elusive concept for which the policy literature provides different definitions. Most, like those presented below, relate to activities developed by governments and public institutions:

> the term public policy refers to a set of actions by the government that includes, but is not limited to, making laws and is defined in terms of a common goal or purpose (Cochran et al., 2011, p.1).

> Stated most simply, public policy is the sum of government activities, whether acting directly or through agents, as it has an influence on the life of citizens (Peters, 1986, p.4).

> what governments do and neglect to do (Klein & Marmor, 2006a, p.892).

> the deliberate decisions – actions and nonactions- of a government or an equivalent authority towards specific objectives (Weible 2017, p.2).

> policy means the actions, objectives, and pronouncements of governments on particular matters, the steps they take (or fail to take) to implement them, and the explanations they give for what happens (or does not happen) (Wilson, 2006, p.154).

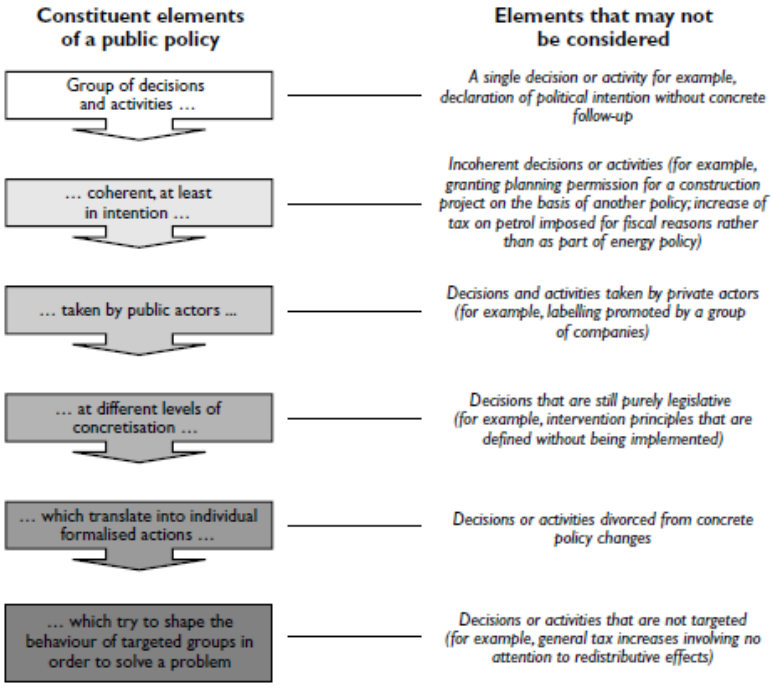
However, public policy can be understood more broadly as ‘a group of decisions and activities that are linked to the solution of a collective problem’ (Dente & Subirats, 2014, p.35, original in Spanish). In this definition, the relevant element for defining a public policy as such is the aim to solve a collective problem rather than the actors that develop it. However, although this thesis acknowledges that there are diverse actors involved in policymaking beyond the public ones, it is mainly based on a view of policies and policymaking in which public actors have a strong presence since at some

point policymaking does involve their action or decision. Moreover, due to the nature of the cases and my own experience, I mainly put the focus on governments and other public and semi-public institutions in policy development. That is, the focus of the thesis remains on institutionalized governance.

Policies can also be conceptualized as multi-dimensional. For example, Page (2006) provides a useful four-level classification to understand policy both as actions and intentions. Policy intentions can be general *principles* (e.g. privatization, deregulations) or more specific, regarding goals and strategies for specific problems and issues (*policy lines*). In the innovation policy literature, as described previously, these policy intentions are usually regarded as meta-rationales or rationales. In the realm of policy as action, policy can be conceptualized at two other levels: *measures*/*tools* and *practices*. Tools are particular means government use to address specific problems and can include a broad range of measures, such as financial incentives and personnel assignment. *Practices* refer to the behaviours of those in charge of implementing policy tools. Thus, the term public policy is used in academic literature to sometimes refer to one or some of those dimensions and sometimes encompasses them all.

However, following Knoepfel, Larrue, Varone and Hill (2007), we could state that a policy cannot be fully considered a policy if there is no set of decisions and activities beyond pure intentions. These authors propose an interesting concept of public policy in order to determine what it is (and it is not). As Figure II-2 illustrates, different elements jointly constitute a public policy. Policy is aimed at solving a collective problem for which it must be targeted at behavioural changes of particular populations. Besides, policy involves a set of normative and administrative decisions and actions that are formalised and implemented. These decisions and actions must be coherent at least in intention (a set of disconnected actions towards the same target group would not be considered a policy). Lastly, in order to consider a policy public, it needs to be proposed or mainly developed by public actors, or private actors with some kind of public legitimization to develop them.

Figure II-2. Constituent elements of a public policy



Source: Knoepfel et al. (2007, p.30)

Diverse ways of looking at the policy process

Just as the term public policy can have multiple meanings, the policy process is an equally elusive concept. Generically, Weible (2017) defines public policy as: 'the interactions that occur over time between public policies and surrounding actors, events, contexts, and outcomes' (Weible, 2017, p.2). Indeed, as Cairney (2013) argues, the policy process is a complex interaction of institutions, policy networks, exogenous factors, ideas and choices made by actors. Such a process is a black box that cannot be defined and uniquely depicted. In fact, different theories and frameworks of analysis have been developed in the public policy literature that try to conceptualize it, each focusing on different levels of analysis, concepts and frames of reference (Cairney & Heikkila, 2014).

It is not easy for a newcomer to navigate the field and try to understand holistically what the policy process involves. On the one hand, we can find several frameworks of analysis, approaches or holistic theories (Araral, et al., 2013; Sabatier & Weible, 2017; Peters & Zittoun, 2016) - the so-called theories of the policy process - that gather active research communities aimed at building a theory of the policy process (Weible, 2017). Such theories include, among others, the Multiple Streams Framework (MSF),

Punctuated Equilibrium Theory (PET), Policy Feedback Theory (PFT), the Advocacy Coalition Framework (ACF), the Narrative Policy Framework (BPF), the Institutional Analysis and Development Framework (IAD) and the Innovation and Diffusion Models (IDM). Table II-2 illustrates how each tries to build holistic theories by focusing on key elements of the policy process, namely: actors, institutions, networks, ideas, context and events (Cairney & Heikkila, 2017).

Table II-2. Elements of the policy process explained or emphasized in policy theories

	MSF	**PET**	**PFT**	**ACF**	**NPF**	**IAD Framework**	**IDM**
Actors making choices	Policy entrepreneur and policymakers	Broadly, policymakers and interest groups and other organizations, and individuals within groups and different venues	Implicitly actors who are affected by policy may in turn become policy actors	Policy actors who form coalitions, act strategically, learn, etc.	Actors and groups interested in policies use narratives strategically to influence public opinion and decisions	Actors, primarily individuals, who make choices	Policymakers, experts, entrepreneurs
Institutions as rules or venues of decision making	Informal rules and formal venues, recognized but institutions not emphasized	Institutional venues and their rules, which cause more or less friction	Policies institutionalized in rules and programmes	Types of policy venues and rules in the broader context, but less directly	Part of context	Institutions as rules and norms that shape behaviour, and typology of rules	Indirectly, institutionalized channels of communication
Networks / subsystems	A broad policy community of actors, with relatively little focus on insulated subsystems	Subsystems as sources of stability and power	Groups mobilizing to protect or challenge programmes	Subsystems and coalitions	Modifies the ACF's flow diagram on subsystems and explores the idea of focusing on regimes	Networks within action situation, but not explicit attention to subsystems	Loosely, information networks
Ideas or beliefs	Policy solutions proposed and amended over time to become acceptable to a policy community	Monopoly of understanding in established subsystems; and new solutions or ideas that break through	Ideas about policy benefits and political attitudes via interpretive effects of policy	Belief systems that drive policy actor behaviour	Narrative strategies, grounded in belief systems and ways of thinking that are embedded in cultures	Shared preferences or norms of actors, but not explicit	Policy solutions emulated, or the perceived norms of policy adoption that influence policy borrowers
Context	National mood, policy conditions, pressure groups, admin turnover, etc.	Endogenous subsystem context; wider policy environment	Past policy decisions and broader context	Stable parameters – social, cultural, economic, physical, and institutions structuring the subsystem	Not a core part of NPF, but recognizes legal, constitutional parameters, geography, etc., as important	Physical and material conditions, community characteristics, pre-existing institutions	Socioeconomic conditions, education, ideology, religion, etc.
Events	Focusing events draw attention to problems	Events shift the macropolitical agenda	Not directly addressed	External events and internal events (e.g., shocks, change to governing coalition)	Not directly addressed, but may combine with narrative to focus attention	Not directly addressed	Indirectly addressed, for example, crises but part of context

Source: (Cairney & Heikkila, 2017, p.315)

Furthermore, new theories continue to emerge (see Schlager and Weible 2013) aimed at contributing to understanding the messy process that policymaking entails. And, although not categorized as 'theory', some other completely different ways of conceptualizing the policy process can be found, like postpositivist approaches (Fischer & Gottweis, 2012), which focus on the relevance of ideas, discourse and argumentation.

Besides, great scholarly work has been developed with a focus on specific dimensions and aspects of the policy process. Such is the case, for example, in works on policy instruments (Howlett, 2005), policy networks (Klijn & Koppenjan, 2012; Wu & Knoke, 2013) and policy learning (Dunlop, Radaelli, & Trein, 2018b). Some works specifically relate to particular activities and 'stages' of the policy process (e.g. policy instruments and design, and the multiple streams theory of agenda setting) whereas others attend to particular phenomena that involves a wider array of activities (e.g. policy learning).

It is not the aim of this thesis to deepen on each of these lines of policy process research but rather to acknowledge the great diversity of approaches, analysis and understanding of this phenomenon. However, the systematization work done by Enserink, Koppenjan and Mayer (2013) is useful for a general overview of the diversity of theories and lines of research. These authors distinguish between five main policy models that bring together the different theories and frameworks with different understandings of policies, the policy process and its institutional context (see Table II-3).

Table II-3. What policy process and policy entail and how institutional context is understood according to different policy models

Policy model	Policy process	Policies	Institutional context
Rational decision-making	Rational, intelligent decision based upon synoptic information	Evolves in a few (chrono)logical steps or phases	Closed, unicentric, hierarchical, authoritative
Political game	Political compromises among autonomous, interdependent stakeholders	Power play or bargaining game among stakeholders	Pluricentric, interorganizational arena with restricted access
Discourse	Constructed and shared meanings in a policy debate	An interactive learning process; an exchange of arguments and meanings	Number of advocacy coalitions and policy communities with different belief systems or paradigms
Garbage can	Coupling of problems, solutions, politics/participants at the right moment	'Erratic' and 'volatile'; it progresses by 'fits and starts'	Fragmented with many actors and ad-hoc networks with little stability
Institutional process	'Reproduction' of earlier solutions, shaped and constrained by norms, rules, etc.	Repeated interactions based upon institutional norms, cultures, routines, etc.	Networks with varying levels of stability, nested in a larger institutional environment.

Source: Adapted from Enserink et al. (2013)

The first policy model is the *rational model*, which rests on the assumption that policies made by unitary actors are implemented hierarchically. This is the conventional way of understanding policymaking and is appreciated by policy makers for its easy applicability.

Policymaking as a *political game* sees policy outcomes as the result of coalitions among independent actors with different political rationalities. Thus, diverging interests come to a shared understanding and agreement on common resources in order to solve problems.

Policymaking as discourse is the model that views the policy process as argumentation. In such a view, different actors share their arguments and the debate is structured by a storyline. Hence, in order to solve problems, the parties must come to a shared meaning.

The garbage can model's main idea is that policymaking is carried out through independent policy activities. In this view, not only problems look for solutions but 'solutions can look for problems, participants can look for problems and/or solutions, and opportunities' (Enserink et al., p.28).

And lastly, p*olicymaking as an institutional process* places special relevance on institutions, particularly soft institutions (norms, routines, etc.), in public policy and on the interactions among the actors involved in the policy world.

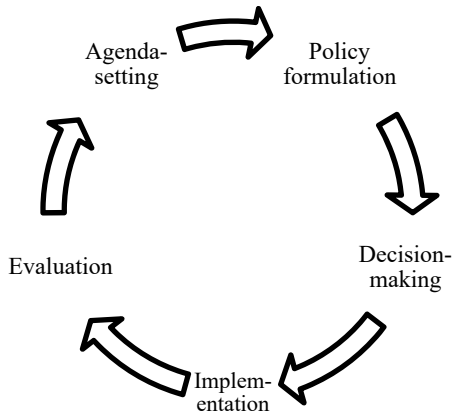
Most policy process theories emerged as a criticism and awareness of the overly simplistic image of the policy process of previous models. However, one such initial depiction - the policy cycle model - is still a well-used analytical tool because it simplifies the complexity of the policy process, which helps us to understand the relationship among actors, institutions and ideas (Howlett, Ramesh, & Perl, 2009; Jann & Wegrich, 2007). As Weible (2017) states, the problem with this model is not as much its simplicity but its use by many as the only way to view the policy process.

Thus, although acknowledging that this is only one among many other ways of looking at the policy process, this model is described in more detail next. It is a well-used frame in practice and this model provides a frame that enables an overview of some of the activities involved in policymaking and how these activities can be approached.

The policy cycle

Even though several ways of illustrating the policy process have been developed, the policy cycle model is one of the most used analytical tools to depict it. The model derives from different sources, mainly from the work of political scientist Charles Jones (1970) and a founder of policy sciences Harold Laswell (1951). This model portrays the process through different sequential stages. Several ways of illustrating the concept can be found but today the most accepted approach considers five stages (see Figure II-3): agenda-setting, policy formulation, decision making, implementation, and evaluation (Howlett et al., 2009).

Figure II-3. The policy cycle model



Source: author's own elaboration based on stages proposed by Howlett et al. (2009)

The *agenda setting* stage is the phase in which an issue is considered a public problem and it is introduced in the government's agenda. This stage is considered to be highly political, in which some issues are selected above others and several actors exercise their influence (Green-Pedersen & Mortensen, 2013; Howlett et al., 2009; Jann & Wegrich, 2007; Majone, 2006). Following Jann and Wegrich (2007), two stages can further be differentiated: the recognition of the existence of a problem and the inclusion of the problem in the policy agenda. Whereas the first usually occurs in the public sphere, the inclusion of a problem in the agenda can follow different patterns: it can be initiated by society, by interests groups or by governments.

The recognition of policy problems is an objective endeavour for some authors, a subjective construction for others (Howlett et al., 2009). That is, agenda setting can be thought of as the recognition of a problem that already exists and is taken on by a

government; or, understood that the construction of problems is a discursive game in which an issue is framed as a policy problem. For example, Stone (1989) describes the agenda setting stage as a competition of *causal stories*, as an exercise of crafting stories around problems that define causes, heroes and villains. From another perspective, Kingdon's (1984) window model sees agenda setting as *windows of opportunity* that are opened. For Kingdom (1984), a problem is introduced in the agenda when policy entrepreneurs can link problems, solutions and opportunities and all those *streams* occur simultaneously. That is, when a perception of an issue as a problem exists in the public sphere (problem stream), experts equally consider it a problem (policy stream) and a political pressure (politics stream) also exist. In any case, and despite the different views, ideas can be said to be the most relevant factor in the agenda setting stage, a stage in which the construction of 'hegemonic images' of policy problems becomes essential (Howlett et al., 2009; Jann & Wegrich, 2007).

Policy formulation is the stage of the policy cycle model when different alternatives to tackle a policy problem are analysed, narrowing the scene for policy makers that later must decide and establish policy goals and actions. It usually involves fewer policy actors than the agenda setting stage since formulation is mainly a backstage task (Sidney, 2007). Different actions and policy instruments are analysed in this phase in order to find the best measures to tackle policy problems. Several actors try to exercise influence and thus it entails a process of conflict resolution among governmental and public and private actors (Jann & Wegrich, 2007). Whereas some lines of thought define this stage as a technical task of analysing objectives and effects, for others it constitutes a more a political, messy and contested work (Sidney, 2007).

Decision making relates to the adoption or election of a particular solution to a collective problem (Dente & Subirats, 2014). Although early studies of this stage and more recent movements in evidence-based policymaking picture decision making as a rational evaluative activity, other studies and empirical analysis have shown that decisions are affected by many other factors beyond pure systematic and technocratic evaluation (Howlett & Giest, 2013). Thus, decision makers have many constraints specific to the policy world, such as time, the possible consequences of their decisions, their bounded rationality, information constraints and many other factors that cause decisions to be incremental and similar to past ones.

Implementation refers to the stage when policies are executed by actors different than those who defined them. Implementation has been the focus of analysis of a broad range of approaches that understand this stage and its relationship with the whole policy process in different and divergent ways. Implementation studies, as Pülz and Treib (2007) explain, have evolved from a hierarchic and rational view to a more complex understanding of the implementation phase, and more generally of the policy process. The first generation of studies took a top-down perspective, according to which decisions made by central governments are the starting point of the policymaking process, and implementation is just an administrative and apolitical process. A second generation of implementation studies view officials also as political actors who influence and even determine policies through their everyday strategies. A third generation of implementation studies mixes elements from both generations.

Finally, *evaluation* is the last stage in the policy cycle model when the previously defined and developed policies are assessed. However, evaluation studies have developed towards a general approach that goes beyond this stage and involves the whole process, through the study other issues, such as policy change (Jann & Wegrich, 2007).

In sum, the policy process is not a bounded definable phenomenon but a complex process in which ideas, actors, contexts and events interact. Vast scholarly work has conceptualised and analysed the process - holistically or focusing on specific aspects - from diverse angles. Despite the divergent ways of conceptualizing the policy process, most approaches understand it as a complex interaction of factors and they acknowledge some type of complexity in the policymaking process. It is those complexities that we discuss in the next section.

2.3. Regional development policymaking: complex processes dealing with complex problems in complex policy spaces

Following Uyarra and Flanagan (2010), regions can be thought of as policy spaces. Thus, as it will next be discussed, we can think of regional policymaking as a complex process that deals with complex problems and is developed in complex policy spaces.

Complex processes in complex spaces

In general terms, the policy world is pervaded by complexities, which can be said to have increased with the so-called network society (Hajer & Wagenaar, 2003). Hajer and Wagenaar (2003, p.5) suggest that the emergence of new actors and new open-ended institutions have caused a shift from the stability of institutions to the fluidity of networks. In effect, in the decentred world, policymaking not only happens in a '"matrouchka" system' (Hajer and Wagenaar 2003, p8) in which lower levels of governments fit into higher ones and in systems in which bureaucratic structures and party politics had a central role. Multi-level governance, transnational policy discourses, policy entrepreneurs who can belong to the private sector and even to the general public, all illustrate that policies are made in spaces that exist in an 'institutional void' (ibid., p.9), without relating to any specific moment of decision and agent of decision (Goodin, Moran, & Rein, 2006; Hajer & Wagenaar, 2003).

Moving this discussion to a more abstract level, Wagenaar (2011) defines complexity as one of the three *generative* properties of policy. In his inspiring work, he states that the policy process and the outcomes of policymaking are heavily conditioned by three intrinsic features: complexity, time and pluralism. Like any other complex system, the policy world is defined by a high density of interactions that make policy outcomes unpredictable. In fact, according to Wagenaar (2011), policies can be thought of as emergent properties of 'complex networks of actors and objects' (p.451). That is, as properties that emerge from the interaction of elements of the system, which is precisely why a complex system cannot be captured in its whole by analysing its parts.

Closely linked to the complexity of the policy world is the factor of time. Policies are intrinsically linked to time: policymaking always looks to the future by explaining from the past. However, the future, as Wagenaar (2011) notes, is emergent, is becoming at every second, and thus explanations and predictions are just tools to help policymakers act in the face of uncertainty.

The other intrinsic feature of policy and the policy world is pluralism, which makes the policy world ungovernable by a unique principle. Different moral values are in conflict in practice; Or in other words, there are simultaneously several desired states of things that exclude each other. For example, and using an illustration from Wagenaar (2011), usually it is not possible to achieve a high quality health system that is both accessible

to everyone and affordable. Indeed, when several values are desirable but cannot be measured by an overarching principle, a unique solution does not exist. This value pluralism translates in the policy world into political pluralism; pluralism enters into play with power and makes the policy world a world of conflicts. This reminds us that politics is also about bargaining, about 'who gets what' (Goodin et al., 2006).

At a more concrete level, institutional governance contexts are characterized by substantive, strategic and institutional complexity (Klijn & Koppenjan, 2016). Actors involved in policymaking processes have differing and sometimes conflicting views of the issues at hand (substantive complexity). Furthermore, those views can change over time, thus actors' actions and the interactions among their strategies cannot be predicted (strategic complexity). Besides, actors belong and represent different institutional regimes with their own rules, organizational arrangements and procedures, which increase the complexity of interactions in governance arenas (institutional complexity).

At the regional level, Karlsen (2010) uses a parallel concept to describe such complexity: regional complexity. Karlsen (2010) presents regions as contexts where different interdependent actors with differing visions of problems exist and where none have the power, authority and resources to make the others work in a specific direction or solve the problem for their own. Further, there can be different types of territorial complexity situation types, from full consensus to full conflict, and intermediate situations in which there can be conflict and/or consensus over the problems to be addressed and over the means to tackle them.

Indeed, territorial development can be thought of as the 'struggle between visions, development ideas and interests' (Sotarauta, 2009, p.903). Development is a highly normative concept: what constitutes development is dependent on the contexts and notions that people and groups believe and what they judge to be priorities (Bristow, 2010; Pike et al., 2007). Thus, 'achieving answers to the question of 'what kind of local and regional development and for whom?' (…) involves compromise, conflict and struggle between sometimes opposing priorities" (Pike et al., 2007, p.1266). In other words, regional development is more of a political than technocratic nature (Sotarauta, 2004).

Moreover, regional economies are also 'networked and are multi-scalar entities' (Bristow & Healy, 2013, p.930) in which not only public and private actors, but also different multi-level administrative public action interact and a high density of institutions are involved in steering regional development and policymaking. In that sense, regions can be thought of as both active spaces in policy development and spaces affected by policies and actions of other territorial levels (Uyarra & Flanagan, 2010). The multiple agents, organisations and practices in regions thus cause a dispersion of power, knowledge and resources for regional development throughout this myriad of actors (Karlsen & Larrea, 2014a; Sotarauta, 2005).

In the specific context of innovation policy, several elements are said to have made innovation policymaking more complex than in the past (Borrás, 2009; Laranja et al., 2008). Although referring to R&D policy instruments and not to innovation policy in general, Martin (2016) highlighted some of those trends: the increasing number of actors involved in R&D policy; the different scales of public intervention; the new demands from public sector management strands that demand public accountability; the attempts to engage the general public in science-related affairs; or the integration required of R&D instruments with other instruments derived from initiatives that aim at addressing 'grand challenges'.

Borrás (2009) systematizes different trends and explains the complexity derived from what she names the *widening* and *deepening* in innovation policy; that is, the expansion of the scope of innovation policy and the introduction of new forms of intervention. The influence of systemic perspectives brought new issues and intervention fields to innovation policy, as was explained in Section 2.1. Moreover, the governance paradigms of public administration promoted experimentalism in governments, which started using new forms of action and new instruments. Hence, innovation policy expands its role and scope from the initial science focus to a more systemic focus, and also includes new issues, such as user-driven innovation, innovation for security and innovation for poverty reduction. Likewise, new instruments have been introduced, the use of soft instruments has increased, and old instruments have been renewed to accomplish new goals. Besides, currently more government scales are engaged in innovation promotion, derived from the territorialisation also mentioned in Section 2.1.

As a consequence, instruments derived from different theoretical logics and territorial scales coexist in the same public intervention space (Flanagan et al., 2011). Different actors, multi-scale instruments with differing rationales, aims and implementation approaches and interactions take place and are engaged in regional innovation policymaking (Flanagan et al., 2011; Uyarra & Flanagan, 2010). Moreover, the picture becomes more complex since in each of the territorial scales and policy domains affecting innovation there are different government layers (political, administrative and operative) with different logics that interact in the design, implementation and evaluation of policies (Boekholt et al., 2002; Braun, 2008; Laranja et al., 2008; Magro, Navarro, & Zabala-Iturriagagoitia, 2014; OECD, 2005). The political layer is in charge of establishing priorities and formulating strategies. The administrative layer implements and manages programmes and the operative layer are the beneficiaries, such as companies and knowledge insfrastructure. Further, political and administrative layers would be subject to common administration problems, such as fragmentation in policy action, the primacy of efficiency upon strategic thinking and the different rationales that guide different policy fields (e.g. the logic of growth in innovation vs. the logic of system limitations in sustainability) (OECD, 2005).

In sum, the introduction of new instruments, their interaction, the coexistence of different policy rationales, the inclusion of new issues, the activism of different territorial scales or the softness of policy instruments within recent rationales are said to have resulted in more complex institutional frameworks for innovation policymaking and an increasingly complex policy field.

Do we deal with complex problems?

Further, not only the policy world, regions, territorial development and innovation policy fields are complex, but so too are the problems the policymakers deal with. As Head and Alford (2015) attest, social pluralism (different values and interests), institutional complexity (multilevel governance) and scientific uncertainty (uncertainty on the knowledge needed) are closely linked with complex problems.

In effect, nowadays most policy problems are thought to be complex. Problems, such as climate change, poverty and an ageing population, are multidimensional and require responses that transcend departmental divisions, levels of government and even the traditional distinction between public and private domains.

A well-used term for this type of problem is *wicked problem*. Rittel and Weber (1973) introduced this term as part of a more general concern among some planning scholars regarding the application of rational and technocratic policymaking as a means to address major policy problems (Head, 2008, 2010; Head & Alford, 2015). For Rittel and Weber (1973), most social problems, unlike tame and technical problems, are ill-defined: they lack a clear definition and solution. Since Rittel and Weber's (1973) seminal work, wicked problem has become a term in the field of policy analysis to refer to almost all policy problems (Newman & Head, 2015; Peters & Pierre, 2016).

The original ten characteristics Rittel and Weber (1973) used to define wicked problems have been synthesized and redefined by other scholars. Nevertheless, in general terms, wicked problems refer to problems characterized by (1) a high degree of complexity in which there are multiple interconnected variables that cross several policy domains, governance scales and domains of the public and the private; (2) uncertainty or conflict about the knowledge needed to define the problem, its causes, consequences or solution; (3) conflicting visions about the very nature of the problem, its causes and its solution, and who and how should develop them; and a (4) relentless nature - they can never be solved (Head, 2008, 2010; Head & Alford, 2015; Klijn & Koppenjan, 2016; Roberts, 2000; Termeer, Dewulf, Breeman, & Stiller, 2015; Weber & Khademian, 2008).

But can we say that we are dealing with wicked problems in territorial development policymaking? This question is not a mere theoretical exercise for conceptual purposes. Rather, the definition of problems has relevance for the strategies defined to deal with them. In fact, the framing of problems determines greatly their solution and who participates in solving them (Head, 2008; Hoppe, 2010). If a problem is defined in terms of lack of knowledge, the solution will be to devote more research to better understand the problem or to define a solution. If a problem is defined in terms of conflicting views, the strategy for dealing with the problem would be dialogue (Head, 2008). Thus, structuring and framing problems becomes a vital element in policymaking since as Hoppe (2010) states, the policymaking process is ultimately an exercise of governance of problems.

The answer to the question of whether territorial policymaking deals with wicked problems is neither straightforward nor obvious, however. The wicked nature of

territorial development, innovation policies and specially the contexts in which they take place have been documented by several scholars, mainly in terms of the contested nature of development and value conflicts among diverging future states, diverging interests and institutional frameworks, dispersed leadership and distributed knowledge (Borrás, 2011; Flanagan et al., 2011; Karlsen, 2010; Karlsen & Larrea, 2014a; Lundström & Mäenpää, 2017; Magro & Wilson, 2013; Pike et al., 2007; Sotarauta, 2005, 2012). However, it may be incorrect to conclude from this complexity that competitiveness issues and territorial development problems are wicked problems.

First, different types of complex problems between the tame and the wicked problems exist (Dawes, Cresswell, Pardo, & Durant, 2009; Head, 2008; Hisschemöller & Hoppe, 1996; Hoppe, 2010). Although there is a tendency to denominate wicked problems to different types of normal complex problems (Newman & Head, 2015; Peters & Pierre, 2016), wicked problems – and even more so *super-wicked problems* (Levin, Cashore, Bernstein, & Auld, 2012) – are the quintessential complexity in that they have high degrees of value conflict and knowledge uncertainty (Klijn & Koppenjan, 2016; Peters & Pierre, 2016). But, there are other different types of complex problems between the tame and the wicked problems with varying degrees of complexity, uncertainty around knowledge and conflict about the nature of the problem (Dawes et al., 2009; Head, 2008; Hisschemöller & Hoppe, 1996; Hoppe, 2010). For example, the degree of value conflict and contested nature around *fracking* or around promoting technological innovation in companies are not the same.

Besides, the wickedness of problems is dynamic and variable across time and place (Head, 2008; Kreuter, De Rosa, Howze, & Baldwin, 2004; Newman & Head, 2015). There may be wicked problems globally, but others can exist in certain places and not in others because they depend on the characteristics of the context and on how the problems are framed in those particular situations. Moreover, problem framing is to a great extent a subjective exercise (Hoppe, 2010; Newman & Head, 2015). Different actors (and analysts!) within the same policy domain might qualify problems differently. In fact, according to Hoppe (2010), policy makers tend to 'tame' the problems because this gives them a sense of control and makes it possible to act on them. Furthermore, they may even do it as a deliberate strategy to silence divergent views.

Hoppe (2010) introduces an interesting view on the wickedness of problems since he does not approach this issue in terms of the nature of policy problems but on how they can be structured. Policymaking involves structuring problems, which raises questions of who is involved in the structuring exercise. This also determines the strategies and who will deal with them. Policymakers can perceive of different situations for problems. There are the unstructured (or wicked) problems and the structured (or tame) problems, which have already been explained. In addition, following Hoppe's typology (Hisschemöller & Hoppe, 1996; Hoppe, 2010) problems can be perceived of as *moderately structured problems with normative agreement* in which there exists uncertainty and divergence of views about solutions, but there is a consensus around objectives or the desired state. Problems can also be perceived of as *moderately structured problems with knowledge certainty,* which means that agreement and certainty about the knowledge needed to solve the problem exists, but discrepancies remain concerning the desired future.

Let us think for example of regional innovation policy repertoires presented by Morgan (2016a, 2017). His works show that the Basque innovation policy repertoire rests, among others, on the idea that manufacturing matters. This would mean that any policy intervention related to strengthening manufacturing in the Basque region will be perceived as an intervention whose goal is presumed to be widely agreed upon. Of course there may be divergent aspects or when situating this fact in the more general society-wide debate of what type of regional development we want. But that particular issue can be said to have general normative agreement. This may not be the case in another context in which there may be a stronger debate about the types of economic activities that need to be fostered in particular territories. The strategies to deal with the issues, besides the willingness of governments to opening up or closing down debates and issues would be thus context specific.

In any case, although the nature of the problems – or the structuring of the problems - is greatly context-based, we can generally assert, to a greater or lesser degree, that regional policymaking, a complex process situated in complex contexts, does deal with complex problems that transcend univocal best technical solutions made by unitary actors. In effect, that is why governance in regional development policymaking becomes pivotal for navigating this complexity. This idea is further developed in the next section.

2.4. Governance: a 'magic concept' (also) in territorial development policymaking

Magic concepts, as Pollitt and Huppe (2011) state, are those terms that are 'broad, normatively charged and lay claim to universal or near universal-application' (p.643), very influential and used by both practitioners and academics. Magic concepts have a large scope and multiple meanings, highly positive connotations, dissolve conflicting interests and are fashionable both in the academic and the policy world. Pollitt and Huppe (2011) argue that governance is one such magic concept in government and government-related research. In my view, it is also a magic concept in regional development and innovation research. Nevertheless, although magic, it is very relevant for territorial development policymaking.

The field of political science and public administration acknowledged more than two decades ago that putting the focus on government institutions was no longer sufficient to capture the complex process in which society is governed and the informal spaces of steering outside the boundaries of governments. Hence, the idea that horizontal and cooperative collective problem solving strategies should substitute traditional top-down governing approaches derived in the so-called shift *from government to governance* (Klijn & Koppenjan, 2016).

Currently, the term governance is commonplace and can be found in many policy documents and discourses almost as a substitute term for government. The term is equally present in many academic fields and we can find diversity of variations in works, with additional 'adjectives', such as: good governance and its reflection in the private sector, corporate governance; the phenomena of governing without government (international governance and community governance); networks, both between public and private actors, or exclusively; and multilevel governance (Kersbergen & Waarden, 2004).

Despite the vast work that deals with governance, there are multiple theories that provide different and even conflicting definitions of this term, therefore, it is used with different meanings (Bevir, 2011; Klijn, 2008; Mayntz, 1998; Pollitt & Hupe, 2011). For example, we can distinguish between first order, second order and third order governance (Kooiman, 2003). First order governance refers to the strategies of problem

solving, or modes of governance. Second order governance refers to the institutional settings in which those strategies are embedded. And, third order governance or metagovernance refers to the principles that rule strategies and institutions. Similarly, we can look at governance and different research paths that have been developed about this phenomenon according to their belonging to *polity*, *politics*, or *policy*; that is, whether they refer to institutional properties, structures and practices that shape the interactions of actors, the scope of the actors involved in decision-making, or the political steering and the instruments used by governments to achieve their goals (Treib, Bähr, & Falkner, 2005).

With all the conceptual ambiguity and diversity around governance, a clarification needs to be made regarding the use of the term governance in this thesis. Torfing and Triantafillou (2016) inform the notion that governance can be used on the one hand as a 'generic concept', referring to the processes to which society goals are negotiated and to the processes of governing, and on the other, as a 'counter concept' referring to network, collaborative and horizontal forms of steering, to types of governing that move away from control-based governing modes (Kersbergen & Waarden, 2004). This thesis uses governance in both its generic sense and as it relates to network and horizontal approaches to governing. We can also find both forms in the literature that deals with territorial policymaking. However, when the term is used (both in territorial development literature and in this thesis) in a normative sense – claiming more governance – it is related to the counter concept and in this thesis specially focusing on multi-actor collaboration in policymaking.

Indeed, there seems to be wide agreement in the territorial development literature on the relevance of more horizontal forms of governance and policymaking for regional development and innovation. From a territorial development perspective we have already seen an acknowledgment of the contested nature of development, the relevance of local knowledge, the need to foster interactions within the subsystems from a RIS perspective and the acknowledgment that leadership, power and knowledge are dispersed throughout the territory (Aranguren, Wilson, & Navarro, 2017; Borrás, 2011; Karlsen, 2010; Karlsen & Larrea, 2014a; Pike et al., 2007; Sotarauta, 2005, 2012; Sugden & Wilson, 2002). From this follows that in order to develop territorial strategies and bring about collective action it is necessary to establish mechanisms of governance that allow dialogue, communication and cooperation between the different actors

involved in regional development (Alburquerque, Costamagna, & Ferraro, 2008; Bristow & Healy, 2014; Karlsen & Larrea, 2014a; Pike et al., 2007; Romis, 2012; Sotarauta, 2005; Valdaliso & Wilson, 2015; Wilson, 2010).

In regards to policymaking, the increasing awareness of complex institutional contexts that shape policy processes and the complexities of the policy field have increased the claims for a need for interactive forms of governance and coordination in regional development, in innovation systems in general and innovation policy in particular. The new regional policy paradigm advocates for the participation of multi-level governments and public and private stakeholders in shaping policies as a condition for an effective implementation of regional development policy (OECD, 2009, 2010). The widening of the scope of regional development policies in a logic of fostering competitiveness and a focus on endogenous growth and local assets require to improve governance both horizontally and vertically, transcending local-regional-national divisions, policy sectors and traditional public-private divides (Barca et al., 2012). Further, place-based approaches that recognize that national governments by themselves cannot define local development policies' claim that different levels of government must collaborate in order to build policies based on local knowledge and to strengthen local institutions and capacities (Barca et al., 2012; Pike et al., 2007). Greater control of local scales in decision making in regional development, empowering them and thus promoting more bottom-up policies are also viewed as a way to build institutions and local capacity key for regional development (Rodríguez-Pose, 2013).

Place-based policies thus need to include local and regional actors in the design and implementation of policies to fully exploit the knowledge base of a region (Barca et al., 2012). Moreover, in the words of the OECD (2009, pp.141-142), the engagement of firms and wider civil society in regional development strategies and certain policy instruments is a way to 'do the right things' and 'do things right': a way to tap into their knowledge and include feedback mechanisms in public action. Even further, if sustainable and inclusive growth and regional resilience are to be achieved (along with more democratic practices) a system that fosters public debate with all local actors should be promoted (Alburquerque et al., 2008; OECD, 2009; Sugden & Wilson, 2002).

The governance discourse is also present in innovation and regional innovation policy. In fact, according to the OECD (2005) 'innovation governance becomes the key

challenge, and it requires developing the necessary institutional set-ups, procedures and practices for agenda setting and prioritisation, implementation and policy learning' (p.7). The arguments are very much the same as those in regional development policy. In general, we can distinguish two paths in which governance discourse takes form. One is related to the need for the coordination of instruments and visions, which is very much linked to the idea that the systemic nature of innovation policies do not fit the rigid institutional arrangements of public administration (Edler, Kuhlmann, & Smits, 2003). Approaching innovation promotion in a holistic and systemic way in a complex institutional setting would require better hard and soft coordination mechanisms, as in better formal institutional mechanisms of coordination and improved modes of relationship, information sharing and learning between different policy domains, layers and levels to reduce the duplicities, inconsistencies, incoherencies and sectorial logics (Borrás, 2009; Braun, 2008; Magro et al., 2014; OECD, 2005, 2011). Thus, coordination can be thought of as 'a matter of multi-level governance applied to the level of the state' (Braun, 2008, p.233). In this sense, countries adopt different types of coordination tools (e.g. consultation processes, regular dialogue, co-financing, inter-departmental committees, regional innovation agencies) in order to improve vertical and horizontal multilevel governance (OECD, 2011).

In the second path, interactive and network modes of governance are seen as a means for responding to some of the challenges that emerge in innovation policymaking. Laranja (2012) for example argues that network-based institutional arrangements could contribute to a better response to some of the challenges derived from the complex innovation policy field: a better articulation between innovation and science policies for knowledge transfer, a better interdisciplinary interaction in knowledge production, a better interdepartmental coordination to approach policies holistically, higher collaboration degree with stakeholders, the inclusion of end users in policies, a better link between formulation and implementation of policies and improvement to the inclusion of strategic intelligence mechanisms. Equally, interactive policymaking would be the means to include beneficiaries' views in policymaking to better respond to their needs (Nauwelaers & Wintjes, 2002).

This path has been strengthened within the RIS3 approach, with the suggested inclusion of stakeholders into the whole policy process (Gianelle, Kyriakou, Cohen, & Przeor, 2016). Indeed, and even further, participatory bottom-up processes are increasingly

viewed as necessary, among others, for customizing policy instruments to the practices of the actors (Mytelka & Smith, 2002; Sotarauta & Kosonen, 2013), for ensuring that mission oriented policies are shared among the actors (Mazzucato, 2016) and specially for implementing the RIS3 strategy.

RIS3 strongly argues for participatory and cooperative forms of policymaking, which also has implications for governments. The RIS3 approach demands that governments develop inclusive forms of governance and collaborative approaches for searching economic opportunities (Morgan, 2017). In fact, this requirement has led to major changes in the governance arrangements in many European regions (Kroll, 2015), but it has been problematic for many (Estensoro & Larrea, 2016; Radošević et al., 2017). In effect, the 'policy capacities' or more generally governance and institutional capacities required for such horizontal, private-public collaborative arrangements are not easily adopted because the regions have their own histories of innovation policies and policy repertoires based on different assumptions and practices and different traditions (Karo & Kattel, 2015; Morgan 2013; Morgan, 2016b; Radosevic, Curaj, Gheorghiu, Andreescu, & Wade, 2017; Valdaliso et al., 2014; Wu, Ramesh, & Howlett, 2018a). This is why there is a growing awareness of the need to consider and upgrade regional governance and institutional capabilities for effective RIS3 development, especially in economically weaker EU regions (Marques & Morgan, 2018; McCann & Ortega-Argilés, 2016; Radošević, 2017).

In any case, following regional development and innovation literature, horizontal modes of governance and interactive and cooperative forms of policymaking become pivotal in the view of the complexities of the institutional contexts in which they are enacted and the complexities of the broadening of scope of the policies to foster development. Further, as the next section will describe, the arguments that derive from the specificities of the policy world not only reinforce the claim for cooperative forms of policymaking but take them even further.

2.5. Multi-actor collaboration in policymaking for joint problem solving and learning

If specific logics of territorial development and innovation policymaking offer several reasons for advocating for horizontal forms of governance, arguments that derive from

the specificities of the policy world reinforce and take them further. These arrangements, as we will discuss, not only enable better policymaking, but also may foster learning in ways that strengthen the capacities for collective problem solving.

Collaboration is mandatory in contemporary policymaking

Drawing from lines of reasoning from the policy and governance literature, we make ours the idea that the complexities of policymaking, the interdependence of actors facing complex problems and the need for inclusion of different kinds of knowledge in the policy process – specifically in regional policymaking – call for collaborative and participatory policymaking through which communication, persuasion, interaction and trust building become key (DeLeon & Vogenbeck, 2007; Goodin et al., 2006; Hajer & Wagenaar, 2003; Innes & Booher, 2003). As Hajer and Wagenaar (2003) wisely wrote, 'policymaking (…) is not simply about finding solutions for pressing problems, it is as much about finding formats that generate trust among mutually interdependent actors' (p.12).

It is undeniable that administration and control have limits. Various constraints from the policy world make impossible the 'high modernist' ambitions of policymaking, i.e. the ambitions of making a better world based on the confidence in humans' ability to measure, monitor and somehow control the world (Goodin et al., 2006). The non-linearity of policy processes, the emergent property of policies and the density of interactions among many actors and objects in the policy world limits central governing (Innes & Booher, 2003; Wagenaar, 2011). As Goodin et al. (2006) argued, the aim of command and control of early policy models has always been an illusion, but in complex policy problem situations it is even more unfeasible because policies are never implemented in the way they were designed. Moreover, high modernism strengthens the persuasive character of policymaking as higher levels of education and resources have created more demanding citizens' groups that push systems to more deliberative systems. In this sense, planning scholars, such as Healey (2003), have long noted that planning (or policy) really happens in meetings, not in the planner's office or in papers and plans. Governing, thus, is more a 'matter of negotiating through a decentralized series of floating alliances' (Goodin et al., 2006, p.12) and policy is based on "'relational contracts'": an agreement to agree, a settled intention to 'work together on this' (ibid.).

Furthermore, the complexity of the network society brings uncertainty, and this uncertainty has implications for the relationship between knowledge and the policy process. 'Full information' (Goodin et al., 2006) and 'absolute knowledge' (Hajer & Wagenaar, 2003) are fallacies. Although the idea of instrumental rationality assumes that policy makers can have clear ends and full information about policy options, means and constraints, policy is taken in part in ignorance, not only related to means and constraints, but also about goals (Goodin et al., 2006). In other words, 'we often do not know what we want until we see what we get' (Goodin et al., 2006, p.20). Moreover, the idea that expert knowledge can provide the solutions has also been contested and thus, there must be new strategies to include knowledge in the policy process, which should be based on collective learning, joint responsibility and concrete problem solving (Hajer & Wagenaar, 2003; Innes & Booher, 2003).

Similarly, complexity of problems and the policy context demand collaboration. Multi-dimensional problems transcend policy fields, traditional fragmentation of administration and policymaking processes and the atomization of actors. Complex problems need to include different views for both understanding the problems from multiple perspectives and to engender different interests and capacities to act on them (Brugué, Canal, & Paya, 2015; Head & Alford, 2015; Kreuter et al., 2004; Termeer et al., 2015; Termeer, Dewulf, Karlsson-Vinkhuyzen, Vink, & van Vliet, 2016). Besides, the interdependence of actors in dealing with complex problems and the awareness of such interdependency converts policymaking into an endeavour of creating communities of actions and joint responsibility processes by which trust becomes an essential component (Hajer & Wagenaar, 2003). Actors need to collaborate to solve problems and, in a recursive way, interactive and collaborative policymaking in which actors actively participate in problem solving and collective action becomes the place in which the generation of trust takes place.

Indeed, if the 'best solution' never exists in high degrees of uncertainty and complexity, what actors can best make is build responses that will explore options to navigate in such complexity (Innes & Booher, 2010). Thus, the varieties of knowledge, interest and experiences will help open up more possibilities and agreement on collective responses.

Collaboration for collective learning

Moreover, diverse works on collaborative governance have shown that intense interactions between different actors with diverging views produces learning in a sense that generates new insights, changes beliefs, reframes old problems and situations and develops collective capacities to act together (Ansell & Torfing, 2014; Ansell & Gash, 2008; Innes & Booher, 2010). Collaborative approaches to policymaking, then, produce learning, but a specific type of policy learning different from how most regional development policy approaches this concept. Let us clarify.

Policy learning is an elusive concept, like policy, policy process and governance (as seen in previous sections). Heclo (1974) was the author who first introduced the concept of policy learning and the idea of knowledge as an explanatory factor of policy change, in opposition to the previous conflict and power based theories (Bennett & Howlett, 1992; Grin & Loeber, 2007). Since then, learning in public policy has become a key theme of analysis in diverse fields (see Goyal & Howlett, 2018), a central factor in most policy process frameworks and it may even be considered a lens and theory in the policy process (Dunlop & Radaelli, 2018).

However, there are different ways of understanding learning in public policy, what it entails and its outputs (Dunlop & Radaelli, 2013; Dunlop, Radaelli & Trein, 2018a; Freeman, 2006). Different attempts have sought to systematize the vast work and one of the most used and cited is that of Bennet and Howlett's (1992), which identified different ways of understanding and using the concept in previous works, based on the learning agentes (state official, policy networks, policy communities), the content of the learning (process related issues, instruments, ideas) and the results of the learning (organizational change, changes in programmes, paradigm change). Thus, the change produced by learning depends on the the object of learning and whether the learning occurs in a bounded set of actors or in the wider community.

Since Bennet and Howlett's (1992) seminal work several developments and changes have occurred. Among the changes, there was a shift from individual-focused learning to a collective conception of learning and a widening of the scope of learning agents, which was extended to societal actors (Grin & Loeber, 2007). Hence, currently we can find a wider and more diverse body of work with different underlying assumptions and approaches to learning and policy – e.g. rationalist, institutional, constructivist

(Freeman, 2007) and approaches to learning linked to different uses and relationship with governance – e.g. instrumental, gaining power, legitimacy, democracy (Gilardi & Radaelli, 2012).

How learning is understood has implications because, as Table II-4 shows, the mechanisms, logics and said benefits vary accordingly (Dunlop & Radaelli, 2013, 2018). For example, whereas an instrumental type of knowledge, that of solving concrete problems can be produced by teaching, a conceptual reflexive type of learning involves deliberation.

Table II-4. Varieties of learning

Learning as…	**Epistemic**	**Reflexive**	**Bargaining**	**Hierarchical**
Knowledge use as…	instrumental	conceptual	political symbolic	imposed
Causal mechanisms **Knowledge use mediated by…**	expert teaching	deliberation	resource competition	institutional rules
Benefits as…	cooperative asymmetric	depth of debate and breadth of knowledge types	wide range of evidence scanned	locks-in evidence
Pathologies as…	groupthink	uneven capacity leads to spurious consensus	unstable outcomes and expert discrediting or withdrawal	blocked learning and expert defeatism
Decision-makers' attention as…	directed	diffuse / divided	selective	routinized
Mode underpinned by a logic of…	rationality	appropriateness	consequence	habit

Source: Dunlop and Radaelli (2018, p.8)

Learning in general, and policy learning in particular, is equally considered a key aspect in regional development, even more so in territorial innovation models and in systemic innovation rationales. The relevance of tacit knowledge and interactive learning in fostering innovation and competitiveness of territories is fundamental in place-based approaches (Dotti, 2014; Moulaert & Sekia, 2003; Uyarra, 2007). In regards to innovation, derived partly from the prevailing systemic view in innovation studies, learning is thought to be a crucial factor both in innovation processes and in policy processes. Interactive learning between actors is considered the main source of innovation; institutions and networks are thought to be producers of such learning; and

soft instruments, that promote learning, are fostered (Chaminade & Edquist, 2010; Laranja et al., 2008; Uyarra, 2007; Uyarra & Flanagan, 2009, 2010). Learning is also considered of vital relevance for innovation policymaking (Aranguren, Magro, & Wilson, 2017b; Chaminade & Edquist, 2010; Flanagan & Uyarra, 2016; Koschatzky & Kroll, 2007; Mazzucato, 2016; Nauwelaers & Wintjes, 2002) and emerges as one of the axis of governance required for systemic innovation policies (Borrás, 2009; OECD, 2005) .

However, usually policy learning is related to an instrumental type of learning (an updating of beliefs that occurs through trial and error or through others' experience), which is focused on analytical capacities fostered through, for example, peer reviews, monitoring exercises, benchmarking and people mobility (e.g. Borrás, 2011; Nauwelaers & Wintjes, 2008).

An interesting view on learning that can be linked to the process of territorial policymaking, to the capacity to collectively govern and solve problems, is that of Benz and Furst (2002) with their concept of regional policy learning. For the authors, regional policy learning is 'a special case of policy learning: it is a process of collective learning geared to a strategy of regional development with those actors participating who contribute to regional development' (p.22). In this type of policy learning, the field of reference is the territory: learning is a collective process, which affects both cognition and structures of interests; and change in actors' actions and interaction is necessary for the effectiveness in governing regional development. In order to consider a process as regional learning, both actors and groups of actors must learn and that learning has to lead to structural changes or reallocation of resources as a result of collective action. That kind of learning should go beyond instrumental learning, to affect policy goals and involved actors. This is an insteresing concept in the frame of territorial development policymaking since it is aimed at regional development and it involves collective processes with different agents in a given territory.

Indeed, multi-actor collaboration in policymaking can be seen as a means of fostering regional policy learning. We learn from literature on consensus building, collaborative planning and governance and social learning approaches that it is through collaboration and (a facilitated) dialogue that participants get to know that their interests are reciprocal, that build 'congruency' in meanings (Grin & Van de Graaf, 1996; Loeber,

van Mierlo, Grin, & Leeuwis, 2007) such that they build a solution compatible with the values of each actor and valid for everyone despite their diverging problems and different views. It is also through dialogue that they develop relationships that could be long term and the relationships could change as they better understand the others, identify opportunities, break down barriers and create trust, shared understanding and commitment to the process (Ansell & Gash, 2008; Innes & Booher, 2003).

Further, if a real 'collaborative rationality' is engaged and processes are facilitated in a way that they foster deliberation and transformative learning so that they explicitly address the conflicting views and taken-for-granted ideas, processes may promote system changes and long term, deep collective capacity building (Fischer & Mandell, 2012, Innes, 1995, 2004, Innes & Booher, 2003, 2010). By engaging in such types of processes of honest dialogue and trust building, actors solve concrete problems, address issues from different perspectives and learn from each other's experiences, and in the long term, develop a heuristic to collectively solve problems and become more adaptive and resilient communities (Innes and Booher, 2010).

To summarize, in line with a great part of the work in the territorial development and innovation field, this thesis also argues for the need for horizontal forms of governance and better coordination among actors in territorial policymaking. Further, it is also based on the idea that multi-actor collaboration processes are needed in order to promote learning and construct widely agreed upon solutions built on diverging views and knowledges to address everlasting complex collective problems.

Finally, this thesis is also interested in the role of research in all those processes. Can research contribute to such complex contexts and problems to aid territorial policymaking? In which ways? Further, can research contribute to fostering multi-actor collaborative processes? These are the questions that the reminder of this chapter addresses.

2.6. The use and impact of research in policymaking

The research-policy dynamics and the poor impact of research in policy can be framed differently, as Table II-5 by Stone et al. (2001) shows. This dynamic can be viewed from a variety of angles: a problem of inadequate supply of research; a problem of lack

of access; a poor policy comprehension of researchers; a problem of ineffective communication by researchers; a societal disconnection of researchers and policy makers; as a problem of ignorance of politicians; a lack of governmental capacity; as an issue of what kind of impact research should have; a problem of power relations; or a problem of research validity.

Table II-5. Ten ways of conceiving research – policy dynamics

Ten Ways of Conceiving the Research – Policy Dynamic
1. The problem can be defined as a *public goods problem*, where there is an inadequate supply of policy relevant research.
2. The problem can be defined as one of a *lack of access* to research, data and analysis for both researchers and policy makers. Recommendations to improve both access to and the diffusion of knowledge follow.
3. The problem can be defined as the *poor policy comprehension of researchers* towards both the policy process and how research might be relevant to this process. Overcoming this lack of understanding requires researchers to study the policy process, to demonstrate the relevance of research, and to build methodologies for evaluating research relevance.
4. The problem can be represented as *ineffective communication by researchers* their work. Improved communications strategies are consequently encouraged.
5. The problem can be defined as *societal disconnection* of both researchers and decision-makers from those who the research is about or intended for, to the extent that effective implementation is undermined. The appropriate focus is on (for example) 'participatory rural analysis', 'street-level bureaucracy' and encouraging 'public understanding of science'.
6. The problem can be defined as the *ignorance of politicians* about the existence of policy relevant research, or the incapacity of over-stretched bureaucrats to absorb research. The solution – 'building bridges' or constructing 'conveyor belts' – takes form, for example, of conferences and workshops, or the appointment of specialists to government committees
7. The problem can be conceived in terms of policy makers and leaders being dismissive, unresponsive or incapable of using research. This problem requires improvement in *governmental capacity* to recognise and absorb research, as well as in the capacities, personnel and resources of the state structure more generally.
8. The problem can be conceived of as not simply a question of research having a direct policy impact, but one of broader patterns of socio-political, economic and cultural influence. This leads to questioning of the *domains of research relevance*, impact and influence, and requires the adoption of a longer-term perspective where research may take a generation to exert real influence.
9. The problem can be defined as one of *power relations*. This generates concerns about the contested validity of knowledge(s), issues of censorship and control, and the question of ideology.
10. The problem can be viewed as one of the *validity of research*, and problems relating to the question: what is knowable? Attention is then focused on different epistemologies and 'ways of knowing'.

Source: Stone et al. (2001, pp.3-4)

I stated in the introduction that this work addresses a concern posed in regional development literature around the need to consider the complexities of the policy world in order to undertake more relevant research. Overcoming such *poor policy comprehension* is precisely one of the ways to improve the research-policy dynamics as Table II-5 illustrates. With such an aim, the remainder of the theoretical chapter is an attempt to better understand the role that research can have in the policy process.

The concern of the impact of research in society and regional development

The gap between theory and practice and the impact of social sciences research on society are general concerns in social sciences and associated fields. Examples include the work of Gibbons and colleagues (1994) on mode 1 and mode 2 knowledge generation, the works on engaged research by action research scholars (e.g. Levin & Ravn, 2007) and in other fields (e.g. engaged scholarship by Van de Ven, 2007) and the ongoing reflections on the role of social sciences in society from a sociology of knowledge perspective (e.g. see the special issue by Pohoryles & Sors, 2016).

At the regional level, the role of universities in regional development and how universities can impact the socio-economic development of regions is a major concern among regional development scholars and has led to significant academic work (see Harrison & Turok, 2017), including recent special issues on the theme (Harrison & Turok, 2017; Uyarra & Sanchez-Barrioluengo, 2017a) and academic networks like RUNIN (https://cordis.europa.eu/project/rcn/205516_es.html).

These works reflect on the different types of roles of universities (Pinheiro et al., 2012; Trippl, Sinozic, & Lawton Smith, 2015; Uyarra, 2010), conceptualize universities as institutional actors and change agents in regional development (Aranguren, Franco, et al., 2016; Aranguren, Guibert, et al., 2016; Romano, 2017) and even analyse the function universities can play in RIS3 strategies (Elena-Pérez, Arregui, & Marinelli, 2017; Goddard, Kempton, & Vallance, 2013). Among the many ways to understand the functions of universities, that of the 'engaged university', in which the university is given a developmental role in the socio-economic development of territories, has gained prominence in recent years (Uyarra & Sanchez-Barrioluengo, 2017b). According to this view, universities should integrate the developmental role as a core and transversal principle that affects all their activities, like teaching and research. In the realm of research, an active engagement model has been long claimed and developed by action research scholars, not only at the organisational level (e.g. Gustavsen, 1992), but also in the wider territorial development dimension (Aranguren, Karlsen, Larrea, & Wilson, 2013; Karlsen, 2007, 2010; Karlsen & Larrea, 2014a; Karlsen et al., 2012; Larrea, Aranguren, & Karlsen, 2011).

Nevertheless, few works conceptually focus particularly on the research-policy interaction. Even those that do focus either empirically or conceptually on such an

interaction (Aranguren, Guibert, et al., 2016; Elena-Pérez et al., 2017; Karlsen & Larrea, 2014a; Karlsen et al., 2012) mainly build on frameworks developed to understand university–society and university–industry interactions, such as the 'triple-helix' and 'third mission' of universities, or on action research and regional development derived frameworks. Since the interest of this thesis is on understanding the role of research in the policy world and in policy development – the research-policy dynamics – it will draw from literature that particularly analyses this dynamic, although not specifically at the territorial level.

Modes of knowledge utilization

In the specific field of policies, social scientists' concern over the influence of research on public policies arose in the 1970s as a result of the recognition that research results were used much less than expected in the formulation and elaboration of policies (Bailey, 2010). This concern gave rise to the so-called 'utilisation studies', which focused on this relationship and drew a complex map in which the use of research was explained by factors linked to the research dimension, the policy dimension and the interaction between the two (Bailey, 2010; Kababe, 2014).

One of the most influential works in knowledge utilisation is Carol Weiss' (1979), which sought to understand how the interaction between research and policy occurs and therefore made an attempt to clarify the concept of 'knowledge utilisation' by identifying seven different meanings previously given to this term. Her work helps outline different uses in a more detailed and nuanced form.

1. The *knowledge driven model* is based on natural sciences-based assumptions that basic research is followed by applied research, to which development and application follows. That is, knowledge[5] would enter the policymaking arena following this exact sequence of events.
2. In the *problem-solving model*, research starts from a specific practice-related problem to which research aims to contribute. That is, research provides results that can be used as inputs for solving specific policy problems. The model's implicit

[5] In this section I use the term "knowledge" as an equivalent to "academic knowledge" or knowledge produced by research. I am very much aware that there are many forms of knowledge other than the one that results from research, but I use it here as an equivalent for reasons of word economy.

assumption is that politicians and researchers share goals and therefore, the contribution of social sciences is to look for the best ways to achieve them.

3. The *interactive model* refers to the ways of thinking in which social science interacts with the policy world as one of the many information sources that policymakers use to make decisions. It does not necessarily refer to face to face and direct meetings between policymakers and researchers. Instead, it suggests that academic knowledge is only one of the elements that influence decisions, which are also based on experiences, political ideas and so forth and in several external information sources.
4. The *political model* refers to the use of research to legitimize or support decisions, ideas and own positions. This is not necessarily something negative for Weiss (1979) since it can be a way to reaffirm a decision. However, it is illegitimate in cases when research is misinterpreted or intentionally distorted.
5. The *tactical model* refers to the use of academic knowledge for issues that have nothing to do with the content of the research. It could for example be used to delay decision ('we are researching…'), to avoid responsibilities by arguing that a decision was made based on research, and to increase prestige by working with certain renowned organizations.
6. According to the *enlightenment model* social sciences enter into the policy world through concepts and theories that help make sense of a problem and lead to new ways of thinking and new ideas. Thus, research raises awareness about new problems that later turn into policy problems (e.g. sustainability, climate change). This interaction happens over time and through a myriad of interactions. In this case, academic knowledge is not specifically helpful for concrete policy problems and policies but contributes more generally as a means of thinking about society's problems.
7. *Research as part of the intellectual enterprise of society*. This perspective sees research as a part of society, not an independent variable but a dependent variable just like policy. In other words, policy and social sciences influence each other and are generally influenced by general thinking of the time. Thus, there could be cycles in which policy influences research through creating a specific interest about a particular topic and that research then widens and influences policy.

Other scholars rearrange those models into broader categories. For example, Beyer (1997), Radaelli (1995) and Ginsburg and Gorostiaga (2011) distinguish between three

general different types of uses: (1) *instrumental use* refers to the use of knowledge generated through research for specific actions and decisions; (2) *conceptual use* refers to the contribution of academic knowledge in changing ways of thinking around particular problems in a way that produces gradual changes during time; (3) *symbolic/strategic use* refers to situations in which academic knowledge is used to legitimize policies and positions previously taken.

In any case, the use of research in policymaking and the explanatory factors on the lack of use depend on how one conceives of such relationship. Landry, Amara and Lamari (2001) identify different explanatory factors and determinants for four grand types of models and studies on knowledge use like Weiss' (1979). In the *science push model* (similar to Weiss's knowledge driven model), knowledge is generated from needs defined by researchers, and policymakers are the recipients of this knowledge. Thus, it is a model based on a linear logic that assumes a direct adaptation – without translation – of academic knowledge by policymakers. In this model the factor that most determines the use of knowledge in the policy process is advances in academic knowledge.

The *demand pull model* (Weiss's problem-solving model) is also based on a linear relationship between academic knowledge and policy. But in this model the needs of specific knowledge are established by policymakers. Researchers then (usually through a contractual relationship) focus their work on those needs. The main determinant of research utilisation in this model is the adaptation of research to policymakers' needs.

The *dissemination model* rests on the idea that knowledge utilization depends especially on the type of research and on the efforts made for its dissemination. Therefore, this model emphasises dissemination as part of the activities to be developed with research.

For the *interaction model*, the use of knowledge is mainly determined by diverse non-linear interactions between researchers and policymakers that occur over time. This model includes the explanatory factors of previous models, since it states that knowledge use depends on the needs of policymakers, the type of research carried out and the mechanisms of interaction and dissemination between both worlds. In this model, the more sustainable the relationship, the more likely that academic knowledge is used in the policy process.

Closing the gap between researchers and policymakers

One of the most cited reasons for the lack of use of academic knowledge in early studies (and even now) is the so-called 'two-communities' theory by Caplan (1979).. This theory argues that two separate worlds exist, that of policymakers and that of researchers, each with different interests, beliefs, languages and forms of understanding knowledge. This idea of separate worlds and different worldviews, different timing of both communities and the belief that social scientists prioritise rigor over relevance are ideas prevalent in subsequent works (Neilson, 2001). In my view, as Ginsburg and Gorostiaga (2001) and Radaelli (1995) have argued, the two-communities and two-cultures idea ignores the great variety of individual interests, beliefs and approaches that beyond the archetypical figures, can be found in both communities. The boundaries are usually much fuzzier. Sometimes overlapping figures exist, policymakers who are researchers and vice versa (Ginsburg and Gorostiaga, 2011). Furthermore, Radaelli (1995) notes in following Lindquist (1990) that a third community could be defined: that of policy actors with relevant policy knowledge but who are not policymakers. Such would be the case of consultants, think tanks and other types of knowledge brokers. This idea, as Figure II-4 shows, provides a more complex picture of the knowledge-policy dynamics.

Figure II-4. Different kinds of knowledge, knowledge-oriented actors, arenas

Knowledge 'What'	*Actors 'Who'*	*Arenas 'Where'*
Information data	Academics in universities International data providers Governmental units Policy institutes (e.g. survey data)	Co-operative games Stable decision-making Sophisticated depoliticized arenas
Ideas	Academics in government Think-tanks Idea brokers Policy advisers Social scientists in policy fora	Uncertainty Crisis management Policy revamping New policy areas
Argument	Experts operating within advocacy coalitions	Zero-sum games Post decision-making (justification) Learning across coalitions

Source: Radaelli (1995, p.176)

However, it is undeniable that two broad worlds exist and could communicate better. In that sense, different factors linked to each of the worlds and the interaction between the two are said to affect the use of academic knowledge (Bailey, 2010; Kababe, 2014):

On the research side, Bailey (2010) and Kababe (2014) identify relevance, validity and communication issues. As previously described in knowledge utilisation models, research is not necessarily aimed at concrete problems; but even when it is, researchers' recommendations may be not used for different reasons. For example, research and recommendations do not consider complexities of policymaking and feasibility of recommendations in political terms, as several innovation and regional development scholars attest. Or, a time lag between research results and the policy need exist. Another reason for the lack of use of research can be that a particular research objective has no relevance in policy terms. Or, finally, communication problems arise due to a lack of effort or a lack of understanding of the language, timing and how to reach policymakers.

On the policy side, there are several factors that may affect the use (and non-use) of academic knowledge following Bayley (2010) and Kababe (2014). These factors include the absorptive capacity to internalize academic knowledge, the rotation of policymakers and the influence of ideology in selecting and discarding elements of the research. Moreover, policy decisions are usually shaped by various actors, and therefore, it is not possible to reach everyone who influences the policy process. Even the type of policy, the cultural and political context and the overall attitude towards scientific knowledge can affect knowledge utilisation.

Regarding the elements related to the interaction between research and policy, Bayley (2010) and Kababe (2014) suggest that not using academic knowledge may be explained by the lack of relevance usually given to the interaction spaces between the two, a lack of networking and the rare tendency to establish long-term strategies and relationship (with the exception of methods, such as formative evaluation, stakeholder models and action research).

Thus, strategies to reduce and tackle the factors that negatively affect the use of knowledge in policy development would be recommended for increasing research use. For example, from a traditional research lens, Laundry et al. (2001) and Weible et al.

(2012) propose to build strong substantive knowledge and knowledge about the particularities of the policy subsystem and the context in which the researcher is aiming to have influence; to build interactions through a variety of means, both through strong and weak ties; or long-term involvement in the policy subsystem. Laundry et al. (2001) also envisage spaces for discussion of research objectives as a means of reducing the cultural gap.

Indeed, the gap can be reduced by improving communication between the groups or by seeking to be influenced by the other group. In this sense, Ginsburg and Gorostiaga (2011) identify six broad approaches to closing the gap between policymakers (or practitioners) and researchers (or theorists), which includes both types of approaches, from unidirectional communication to dialogue in the Freirean (1996) sense. The first approach, *translation/mediation,* involves making research more easily accessible for policymakers, through for example, the role of 'knowledge brokers'. The second approach, *education*, would be focused on enhancing the capacities of researchers or policymakers so that they can better communicate with each other. The third approach, *role expansion*, encourages either researchers or policymakers to take part in the activities of the other group. Such would be the case, for example, for practitioners that do research or researchers that take on the role of policymakers. While these approaches foster communication between the two groups, additional approaches also foster dialogue between the groups. *Decision-oriented* research encourages researchers to focus their research on problems that concern policymakers. Thus, policymakers are partly involved in the research process by identifying the problems, and thus, some type of dialogue is established between the groups. Even further, in *collaborative action research*, practitioners and policymakers are fully involved in the research process, and thus, there is joint reflection and action. Whereas collaborative action research involves a changing role of policymakers, what Ginsburg and Gorostiaga (2011) call *collective research and praxis,* requires that both policymakers and researchers change their roles. That is, not only policymakers are involved in research, but also researchers are involved in policy practice. In sum, the use of research in policy can be framed differently, putting more weight on the research dimension, the policy dimension and their interaction. Strategies adopted from the research perspective in order to have a larger impact on the policy world would have to consider them all accordingly.

2.7. The diverse functions of policy analysis

Whereas studies described in the previous section provide a framework for analysing the use of research in policy development from the angle of research in general, the studies on policy analysis allow for examining research-policy dynamics from another perspective: namely, the activities and functions that studies with an explicit action orientation and an aim to impact policy, can play.

Policy studies in general have an action orientation. Harold Laswell (1951) suggested that policy sciences are characterized by their problem and action orientation, normative character and multidisciplinary (DeLeon & Vogenbeck, 2007; Goodin et al., 2006; Howlett et al., 2009). That is, from the outset they have the aim of 'relevance', solving real problems and having an impact in real policy world. They are also value laden and normative, as prescriptions are made based on values and positions. The field is also action-orientated in that whereas other types of sciences may focus on analysing institutional concerns, policy studies focus on what we do with or in those institutional settings. Hence, as Goodin et al. (2006, p.6) argued, 'policy studies is a ''persuasion'' that aspires to normatively committed intervention in the world of action'.

Within the general field of policy studies, following De Leon and Weible (2010), Enserink et al. (2013), Howlett et al. (2009) and Subirats (1993), we can distinguish between policy process research and policy analysis. That is, some studies focus on the study 'of public policy' (Enserink et al., 2013) and 'knowledge of' policy processes (DeLeon & Weible, 2010) – the processes and ideas that try to understand the policymaking process. The theories and frameworks of analysis for these studies, which were briefly mentioned in Section 2.2, help to better grasp the messy process of policymaking. Other studies focus on the 'knowledge in' policy process (DeLeon & Weible, 2010) – the analysis for policymaking. These studies mainly focus on programmes, policies and outputs with an explicit aim of improving policymaking. In fact, its stress on policy development tends to put a special focus on prescription (Subirats, 1993). This would be the case in studies of other fields – like regional development or innovation studies – that particularly focus on the analysis 'for' regional development and innovation policymaking. Thus, 'policy analysis encompasses a variety of activities concerned with the creation, compilation, and application of

evidence, testimony, argument, and interpretation in order to examine, evaluate, and improve the content and process of public policy' (Dryzek, 2006, p.190).

The functions of policy analysis can be thought of in temporal terms according to when in the policy development process policy analysis interacts. For example, Thissen and Walker (2013) see a difference within 'ex-ante' policy analysis that aims at helping actors in policy design and development; 'as is' policy analysis, which focuses on analysing present policies; and 'ex-post' policy analysis, or evaluation.

Policy analysis' functions can also be thought of in terms of their academic aim. For instance, Knoepfel et al. (2007) identify three schools of thought with three distinct overall aims of policy analysis in knowledge generation. For the school that links policy analysis mainly to theories of the state, policies are not an analytical aim in of itself, but a means for understanding the public sector's role in society. A second school, which aims at understanding the functioning of public action, takes policies as a means of understanding the logic of that public action. This would include, together with policy research, the analysis that contributes to policy formulation and implementation. A third school of thought aims at evaluating policies, their objectives and effects.

Nevertheless, a more nuanced understanding of the role and function of policy analysis in policy development is provided by the different approaches to policy analysis identified in the literature, and the different roles of researchers associated with them. In very general terms, there are two main families of policy analysis: positivist and post-positivist. Mainstream policy analysis has been based on positivist thinking, greatly influenced by welfare economics´ ideas and techniques (Howlett et al., 2009). The 1990's witnessed the emergence of the so-called 'argumentative turn' as a critique to positivist ideas, based on two main arguments (Howlett et al., 2009). First, postpositivists reasoned that many elements intrinsic in the policy world, such as values, interests and politics, were not present in technocratic, rationality-based analysis approaches and thus failed to examine policies and the policy process. Second, for scholars who shared new alternative approaches, traditional policy analysis was a way of promoting technocratic and top-down governance. In their view, participation in policy analysis should be fostered both as a means *per se* for democratic purposes and to lead to better policies and implementation.

Indeed, policy analysis 'needs to bridge the gap between science and action' (Enserink et al., 2013, p.14), but this fit or accommodation can be conducted in different ways. On a continuum with science at one extreme and action the other, the balance could fall on one side or the other (ibid): policy analysis can be developed by fitting policymaking to science and therefore prioritizing scientific knowledge (rationalist or technocratic fit) or edging towards more usable knowledge (fit based on constructivism, pragmatism or relativism). The evolution of the policy sciences from less rational to more diverse modes of policy analysis, in this view, is a dialectic process between those two forms of accommodation (Enserink et al., 2013).

Under those two umbrellas, and even in their intersection, several families, strands and models have different goals or focus of analysis, which leads to different types of policy analysis that aims, among others, at problem solving, fostering democracy empowerment and advice giving (James & Jorgensen, 2009). Thus, the role of analysis in policymaking is different depending on the policy model that frames the conceptualization of the policy process. Table II-6 illustrates how policy analysis can have diverse aims: reducing complexities through providing scientific knowledge and evidence, rationalizing policymaking, promoting learning and frame reflection among the different stakeholders in order to foster dialogue and overcome asymmetrical debates, increasing the realisation of problem-solution combinations and supporting capacity building and contributing to overcome institutional barriers to problem solving.

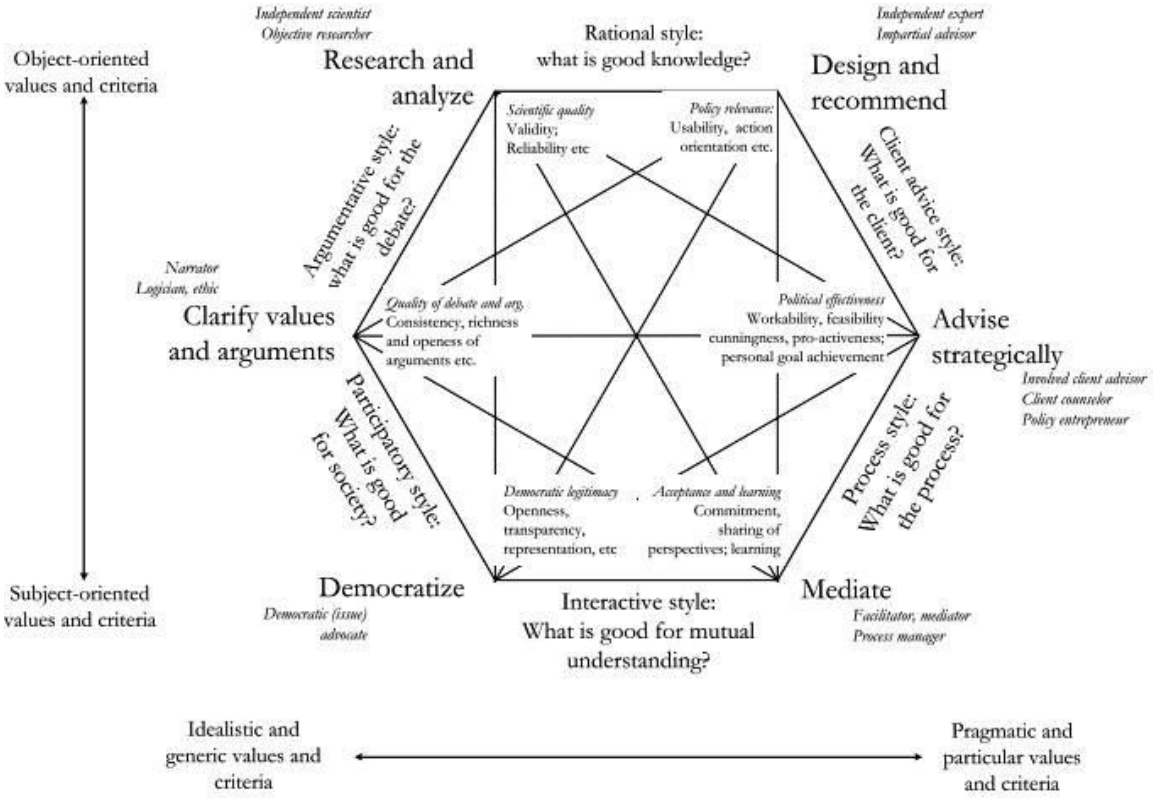
Table II-6. The role of policy analysis within different policy models

Policy model	**Policy process**	**Implications for policy analysis**
Rational decision-making	Rational, intelligent decision based upon synoptic information.	Production of knowledge to support decisions in policy phases
Political game	Political compromises among autonomous, interdependent stakeholders	Speaking truth to power; producing usable and authoritative knowledge; rationalizing the policy process and enhancing evidence-based compromises
Discourse	Constructed and shared meanings in a policy debate	Overcoming asymmetrical debates; furthering frame reflection and learning across policy coalitions
Garbage can	Coupling of problems, solutions, politics/participants at the right moment (window of opportunity)	Supporting policymaking activities within streams and entrepreneurial actions to realize policy windows; enhancing the realization of good problem-solution combination
Institutional process	'Reproduction' of earlier solutions, shaped and constrained by norms, cultures, rules, etc.	Conducting institutional analysis to overcome dysfunctional routines and institutional barriers to integral problem solving; supporting capacity building for underrepresented stakeholders; reviewing and improving institutional embedding

Source: adapted from Enserink et al. (2013)

Mayer et al. (2013) provide an enlightening and helpful work for understanding the wide and diverse world of policy analysis and the different functions of a policy analyst. They approach the study of policy analysis not only in terms of schools and approaches, but also the activities involved. Hence, they give light to the spectrum of diversity of functions and understandings of policy analysis, and the different epistemological assumptions and values behind them.

Figure II-5. The hexagon model of policy analysis



Source: Mayer et al. (2013, p.60)

As Figure II-5 illustrates, policy analysis can entail different clusters of activities: (1) *research and analyse* places the focus on knowledge generation; (2) *design and recommend* would take the next step, translating knowledge to advice or policy design; (3) *clarify values and arguments* refers to analysing the values or arguments behind any policy problem with the aim of improving the debate; (4) *advise strategically* sees policy analysis as client-orientated; (5) *democratize* sees policy analysis as a way of giving a voice to ignored stakeholders' views; (6) *mediation* entails the analysis of context and the design and facilitation of spaces for negotiation for stakeholders.

These activities are more or less relevant in different policy analysis styles Mayer et al. (2013) identified that are linked to different policy models with different evaluation criteria (for example, ‘what is good knowledge?’ vs. ‘what is good for mutual understanding?’). Table II-7 summarises the policy models Enserink et al. (2013) identified, and were described in Section 2.2., to the related policy analysis styles and activities that Mayer et al. (2013) identified.

In sum, the functions (and impact) of research and policy analysis in policy development can range from traditional research that gives scientific evidence for policy design to the facilitation of debates and analysis of values in order to enhance democracy through opening the debates. The skills of policy analysts to develop their endeavours will equally vary accordingly (from discourse analysis and institutional analysis to political and mediation skills).

To close this section, I add Wagenaar’s (2011) ideas, which will be the subject of the next section. Wagenaar (2011) asserts that policy analysis contributes to institutionalized governance by enlightenment and aid-in-decision-making. Both look at the future, but they do so in different ways. Clarification involves all kinds of research on the policy process, which is centred on reflectively diagnosing the past to help improve anticipation of the future. In contrast, the institutional role of aid-to-action in policy analysis looks at the future deliberately. This type of analysis (that includes, among others, decision analysis, scenario formulation, model building and risk analysis) creates descriptive and prescriptive models to better grasp the future and aid decision making. We will reflect more on these ideas in the next section.

Table II-7. Policy analysis styles and main research activities related to policy models

Policy model	Policy process	Implications for policy analysis	P. analysis style	Main research activities	Role of policy analyst
Rational decision-making	Rational, intelligent decision based upon synoptic information.	Production of knowledge to support decisions in policy phases	*Rational style*	- Research and analyse - Design and recommend	'To underpinning the (scientific) evidence base of public policy'
Political game	Political compromises among autonomous, interdependent stakeholders	Speaking truth to power; producing usable and authoritative knowledge; rationalizing the policy process and enhancing evidence-based compromises	*Client advice*	- Design and recommend - Strategically advise	Different roles: increasing the evidence base, producing usable knowledge, process manager, facilitator or mediator
Discourse	Constructed and shared meanings in a policy debate	Overcoming asymmetrical debates; furthering frame reflection and learning across policy coalitions	*Argumentative style*	- Research and analyse - Clarify arguments	To propose argumentation strategies to facilitate debate; mediator and facilitator among different groups
			Participatory style	- Democratize - Clarify arguments	
Garbage can	Coupling of problems, solutions, politics/participants at the right moment (window of opportunity)	Supporting policymaking activities within streams and entrepreneurial actions to realize policy windows; enhancing the realization of good problem-solution combination	*Process style*	- Strategically advise - Mediation	Policy entrepreneur
Institutional process	'Reproduction' of earlier solutions, shaped and constrained by norms, cultures, rules, etc.	Conducting institutional analysis to overcome dysfunctional routines and institutional barriers to integral problem solving; supporting capacity building for underrepresented stakeholders; reviewing and improving institutional embedding	*Interactive style*	- Democratize - Mediation	Traditional policy analysis; analysing the role of institutions in policymaking

Source: adapted from Enserink et al. (2013) and Mayer et al. (2013).

2.8. Research as enlightenment and aid-to-action: the relevance of relational approaches in policy development

As Section 2.7 has discussed, policy analysis can entail a vast array of tasks depending on how it is practiced. Many approaches exist that not only understand the policymaking process differently, but also what policy analysis is, its objetive and thus the role of the policy analyst. Therefore, there is no unique approach to conducting policy analysis and research. This thesis is built on the belief that most approaches may contribute to both understanding better the policy process and to policy development. While most approaches may be needed, following the brilliant work of interpretivist scholar Hendrik Wagenaar's *Meaning in Action: Interpretation and Dialogue in Policy Analysis* (2011), collaborative approaches to policy analysis can be said to be better suited to contribute to policy development.

Wagenaar (2011) analyses different approaches to policy analysis in terms of their contribution to the policy world. First, he makes a distinction between empiricist (positivist) policy analysis (EPA) approaches and interpretive policy analysis (IPA) approaches. Within the latter, he also distinguishes three approaches according to how they capture meanings, or *meanings-in-use: hermeneutic meaning, discursive meaning and dialogical meaning*. Hermeneutic meaning deals with the subjective meaning of individuals. It is the type of research in which analysts (placing themselves as outsiders) focus on making meanings visible and understandable. The focus is on both subjective and intersubjective meaning, situating the individuals' actions within a wider context of the individuals' settings to capture the 'real' meaning of a phenomenon. This approach, unlike the other two, assumes implicitly that individuals have full access to their own subjective meaning. Instead, discursive meaning and dialogical meaning consider that there are some objective meanings (e.g. norms) that make practices possible but inaccessible to individuals; something beyond the individuals' self-understanding and subjectivity, a *background knowledge* that is situated '*outside*' of individuals. Discursive meaning focuses on supra-individual frameworks that shape society. The role of researchers would be to unmask frameworks that shape individuals' actions. Finally, for dialogical meaning or the *actionable approach to meaning* (dialogical interpretive analysis), meaning does not reside in the object of analysis, but rather within the relationship of the object with the analyst. This approach tries to deal with

the connection between subjective and objective meaning, between agency and structure, by focusing on action. That is, according to Wagenaar (2011, p.60), 'we move from a philosophy of representation to a philosophy of intervention'. In this last approach, we can find action research (e.g. Greenwood & Levin, 2007), collaborative dialogue (e.g. Innes & Booher, 2003, 2010) and conflict-resolution (e.g. Forester, 2009).

Wagenaar (2011) then considers the contribution of each of these approaches to the policy world by assessing their account to the generative properties of policy (complexity, time and pluralism), which were presented in Section 2.3, their action orientation and their accomplishments in the two institutional roles of policy analysis, enlightenment and aid-to-decision-making (see Table II-8). That is, a policy analysis approach that *fits* well in today's policy world must provide enlightenment on the effects of complexity, time and pluralism on policies and policy process and help policymakers navigate in emergent times within that complexity and value differences.

Table II-8. Fit of empiricist and interpretive policy analysis to the world of public policy

	Contribution to policy making					
	Complexity	Time	Pluralism	Action-orientation	Enlightenment	Aid-to-Action
EPA	-	+	-	+ / -	+	+ / -
IPA-herm	+ / -	+	+	+ / -	+	+
IPA-disc	+	-	+	-	+	-
IPA-dial	+	+	+	+	+	+

Source: Wagenaar (2011)

As Wagenaar (2011) argues, dialogical IPA deals well with complexity, time and value pluralism, both in capturing them (enlightenment) and in acting upon them (aid-to-action). This type of research is interactive, evolving and pragmatic and deals with a wide range of (often adversarial) actors. Thus, it captures the emergent and evolving nature of time and of the policy problems. And, by bringing different visions on the future, dialogical IPA is not only able to capture the complexity, but also to deal with value differences. Moreover, dialogical IPA can in practice deal with the complexity that is impossible to portray (as other approaches would aim) in a single model and can work pragmatically with deep value differences to bring agreement. Dialogical IPA is

also evolving, and fits with the emergent property of time in practice in that research is always there to contribute to action.

One of the approaches to dialogical policy analysis is action research (AR). Given the approach's relevance to this thesis (as explained in the introductory chapter) the remainder of this section will briefly provide an overview of this specific research approach.

AR is a research strategy for change (Karlsen & Larrea, 2014a; Reason & Bradbury, 2001), an 'orientation to inquiry rather than a methodology' (Reason, 2003, p.106). Indeed, it is much more than a methodology. AR, with different degrees and with different perspectives depending on specific lines of practice, is based on strong normative values of research as a strategy for transformation, democratic development, empowerment and capacity building (Greenwood & Levin, 2007; Reason & Bradbury, 2001).

AR is characterized by different elements (Greenwood & Levin, 2007): (1) it is based on specific contexts and tries to focus on real problems, (2) researchers and actors / participants generate knowledge jointly (co-generation) through collaborative processes, (3) understands that different knowledge and experiences contribute to the process and (4) co-generated knowledge leads to social action. In sum, AR is based on three pillars: action, participation and research and thus, AR is developed '"with" rather than "on" people' (Heron & Reason, 2001, p.179).

One of AR's core elements, as with all collaborative policymaking and policy analysis approaches, is dialogue. Dialogue, as Wagenaar (2011) asserts, is both an activity and a concept; it is an intellectual and actionable tool that helps to bridge action and theory, which researchers use to understand the world and to meet it in a practical way.

Indeed, AR is 'constituted by a series of communicative actions that take place in dialogical environments created by communities or other organizations for the purpose of the cogeneration of new knowledge, the development and implementation of plans of action, and the democratization of society' (Greenwood & Levin, 2007b, p.75). Creating dialogue spaces for communicative actions with practitioners is thus key to AR. These spaces can develop more informally or through designed methods (e.g. *dialogue conferences* proposed by Gustavssen, 1992). These spaces can also have a

more long term and less fixed form (e.g. *agoras* of Karlsen and Larrea, 2014a). In any case, learning and transformation are produced through these spaces where dialogue is at the core.

Several families and strands constitute AR's wider family, such as participatory action research, action science, systemic action research and educational action research (Dick, 2015; Greenwood & Levin, 2007; Reason & Bradbury, 2001). Among them, pragmatist action research is the one most linked to regional development and innovation studies. Although it was not developed specifically for policy development but more generally for regional innovation, given its influence in this thesis and more generally in the regional development field, a brief overview of this approach follows.

Building, among others, upon American pragmatism proposed by philosopher John Dewey, in pragmatic action research, action is the only means of both generating and testing knowledge: the value of knowledge is only measurable by its practical use (Coghlan & Brydon-Miller, 2014; Greenwood & Levin, 2007). Pragmatic action research was mainly developed around the Tavistock Institute of London and the Nordic Industrial Democracy. First focused at the organizational level, it was later, through the Nordic school, broadened to the regional development field (Johnsen et al., 2014).

Pragmatic action research builds on generating change through creating learning arenas with practitioners within existing institutional structures. It is a normative approach with a social change agenda, but pragmatic AR is less radical and critical than other approaches like the participatory action research. Pragmatic action researchers are 'reformers, not liberationist' (Greenwood & Levin, 2007, p.9). That is, the direction of change is the one established by practitioners. Pragmatic action research brings the spaces, methodologies and tools so that practitioners can self-organize their process of change. That change can vary from organizational change within a company to governance change in regional development.

The learning arenas and how these are approached vary, especially between the two schools, can be differentiated within the pragmatic tradition: the socio-technical school and the democratic dialogue approach (Johnsen et al., 2014). The socio-technical school approaches change by mainly focusing on system interactions. The co-generative processes are developed through *search conferences*, specific types of collective

processes of inquiry that aim at collectively developing plans for solving practitioners' problems. The other approach is the democratic dialogue approach (Gustavsen, 1992). In this approach, change and AR are approached from a communicative rationality that rests on a strong constructivist approach and aims at shared meaning making through *dialogue conferences*, spaces of *democratic dialogue* ruled by specific principles based on participation and inclusiveness.

Action Research for Territorial Development (ARTD) (Karlsen & Larrea, 2014a), a specific approach that practices AR as a strategy for fostering territorial development and policy learning, is situated in this pragmatic tradition, although it is also inspired by Paulo Freire's (1996) more liberationist approach. ARTD was developed in collaboration with researchers in Orkestra – Basque Institute of Competitiveness, University of Agder and University of Rafaela, and it is the approach on which Article 2 and Article 4 of this thesis focus. The main feature of ARTD is that it builds upon Greenwood and Levin's (2007) co-generative learning ideas and Gustavsen's (1992) democratic dialogue and communicative approach, to develop a holistic practice-oriented framework that moves beyond problem solving purposes and aims at generating a long-standing capacity to collectively act (*collective knowing*) for territorial development. In ARTD research is used for solving concrete problems, but also to create territorial capacities for joint problem solving in the long term, which it does, among others, by facilitating a type of policy learning that is reflexive (Karlsen & Larrea, 2014b, 2017). In that sense, ARTD echoes the works of collaborative dialogue scholars, such as Innes and Booher (2003, 2010) and social learning approaches, whose aims transcend specific problems to seek also system-level changes.

AR, although is not used much in policy analysis (Bartels & Wittmayer, 2018), positions as a research approach that can contribute to the policy world through action and change-orientation and through creating collective learning processes that cannot only better grasp but also act on the complexities of the policy world (Wagenaar, 2011).

2.9. Summary of the conceptual background

The theoretical chapter has set the frame of the conceptual background that this thesis is built upon in interaction with my own experience in research projects.

As described in the chapter, policymaking is a complex process that involves many actors with their own interests, ideas, emotions and institutional arrangements situated and acted upon in equally complex contexts. The policy process is not a bounded, definable phenomenon but rather a complex process that merits the attention of vast scholarly work that provides different, but definitely not simple and rational views on this process. Far from being a rational and technical endeavour, policymaking involves conflict, ignorance, competition of ideas, power and learning that involves many actors and institutions. In such a process, theory is only one ingredient that informs policymaking and thus, influences practice only to a degree. Nevertheless, it is important to know the main frames and theoretical rationales that guide, or at least, analyse territorial development policies. Thus, this chapter has described how the most influential regional development frames – RIS, clusters, RIS3 – share a place-based and systemic view of development. Institution building, the relevance of interactions among the actors of a particular policy field and their wider contexts, learning and capacity building are elements that territorial development policy frameworks also share.

Such frames, theoretical developments in territorial development and the works on policy studies show the complexity with which territorial development policymaking deals and is embedded. As the chapter has illustrated, territorial development policymaking is a complex and pluralist process situated in complex, pluralist and uncertain contexts that deal with complex problems, which transcend univocal best technical solutions made by unitary actors. It is precisely this pluralism and uncertainty that make governance key for navigating this complexity.

A range of different logics, rationales and lines of argument specific to the territorial development field also call for horizontal and network forms of governance in territorial development policymaking. The contested nature of development and the consequent need to bring about diverging visions, to include local visions in place-based policies, the relevance of institution and local capacity building, the significance of participation to foster resilient places, the importance of tacit knowledge and interactive learning to foster innovation and the need to approach development policies systemically and holistically all provide reasons and arguments to steer territorial development and territorial development policymaking through cooperative forms of governance.

Further, the chapter has argued that the nature of policies and the policy world reinforce the claim for multi-actor collaboration in territorial development policymaking. The non-linearity of policy processes, the emergent property of policies and the density of interactions among many actors, the persuasive character of policymaking, pluralism – and thus, conflict – the complexity of institutional contexts and of the network society all call for collaboration in policymaking. Multi-actor collaboration not only can make policymaking more effective, but also may foster learning in a way that produces regional policy learning, strengthening the capacities for collective problem solving.

Lastly, the chapter has analysed the different roles of research in policy development and how it can increase its impact in order to be relevant for territorial development policymaking. As described in the chapter, research contributes to policymaking in different ways, such as providing a reflective capacity and insights for thinking on new problems, or producing evidence to help decision making or mediating between actors involved in policymaking. From such diverse contributions to policymaking however, the chapter has specifically delved into dialogical approaches to policy analysis and concretely in AR. For its capacity to deal with and help navigate through complexity, its *fit* with the timings of policymaking and its contribution to deal with value differences, following Wagenaar's (2011) arguments, this approach is especially suited to help territorial policymaking.

Overall, this is the conceptual background that informs and is further developed in this thesis' four articles. The articles are the subject of the next chapter.

CHAPTER III. THE ARTICLES

'The acting harbors the dialectic
between individual experience and social reality'
(Wagenaar, 2011, p.11).

This chapter presents the four articles included as part of the thesis. The first section (3.1) provides a general overview of the articles stating their relation to the particular dimensions of the conceptual framework presented in Chapter II and the specific research questions to which they respond. The second section (3.2) explains the research process, describing the general research approach of the articles, methods and trustworthiness issues. The section expands upon the methodological information provided in the articles, which is constrained by space limitations. Sections 3.3 to 3.6 present the articles, in their submitted or published version[6], including a brief introductory text. The chapter closes with a summary.

3.1. Articles overview

The four articles included in this thesis depart from the general theoretical framework presented in Chapter II and the research context described in Section 1.4. to provide insights regarding the general focus of this thesis, namely, territorial development policymaking, multi-actor collaboration and the research-policy dynamics in this field.

Article 1, which is a conceptual article, focuses on the analysis of regional innovation policies, emphasising the governance of regional innovation policy. Specifically, it reflects on the need to increase the diversity of analysis approaches in regional innovation policy analysis in order to better capture and address the complexities of this field. The article reflects on the potential contribution of interpretive policy analysis approaches (briefly mentioned in Section 2.7 and further explained in Section 2.8) to the study and practice of regional innovation policy. The concrete question that the article addresses is:

[6] Reference lists of the articles have been integrated into the general reference list of the thesis.

What potential contributions can interpretive policy analysis approaches make to the analysis and practice of regional innovation policy?

Article 2 also focuses on the research-policy nexus by delving into a specific collaborative and dialogical policy analysis approach (mentioned in Article 1): AR. Concretely, it addresses a specific aspect of ARTD, an AR approach built in the intersection of action research and regional systems of innovation (already described in Section 2.8), the relational-critical dynamic that characterizes the relationship between policymakers and researchers, and how this becomes an heuristic to understand how ARTD has fostered change in Gipuzkoa.

The article addresses the following research questions:

What are the characteristics of the relational-critical dynamic between policymakers and researchers practiced in ARTD?

How has the relational – critical dynamic practiced through ARTD in Gipuzkoa Sarean contributed to a new form of governance for territorial development in Gipuzkoa?

Article 3 shifts the focus to the multi-actor collaboration processes in place-based competitiveness policymaking. Specifically, the article analyses the results of a multi-actor collaboration process in terms of public innovation in the case of Bizkaia Orekan (presented in Section 1.4). The article addresses the following research questions:

What is the potential of collaborative policymaking in place-based competitiveness to foster public sector innovation?

What types of public innovation have been fostered through multi-actor collaboration in place-based policymaking in the case of Bizkaia Orekan?

Article 4 further develops an idea briefly presented in Article 3: the working modes and practices that multi-actor collaboration in territorial development and policymaking demands of governments and public organisations. Concretely, the article analyses the case of Gipuzkoa Sarean (which at the time of writing changed the name to Etorkizuna Eraikiz Territorial Development Lab) in view of the practices of the New Public Governance (NPG) public administration paradigm. The article responds to the following overall question:

How do the governance practices required in the Territorial Development Lab [former Gipuzkoa Sarean] for fostering territorial development collaboratively relate to the principles, strategies and roles of actors framed under the NPG paradigm?

3.2. Research approach, methods and validity

This section expands information on the research approach and methods used in the articles. It also provides information related to the validity of the work presented.

3.1.1. Insider research, action research, self-ethnography, case study

Article 1 a conceptual paper. Articles 2, 3 and 4 analyse long-term projects developed with policymakers (described in Section 1.4) in which the authors have participated and they are *complete participants* (Given, 2008).

Article 2 analyses the relationship of researchers ('us' – although as made explicit on my positionality statement, to me it is more 'her' than 'us') with policymakers in an action research project, specially focusing on researchers' practice and strategies. Thus, this is an *insider research* case of research 'conducted within a social group, organization or culture of which the researcher is also a member' (Greene, 2014, p.1). Article 4 also analyses the same action research project in which the authors of the article were members of the project at different moments in this long-term experience. Thus, it is also an *insider research* case.

Article 3 describes a process that we (the authors) influenced and the actions and changes of other actors in the project. Thus, although we do not belong to the group of actors we analyse, we do belong to the project in which those actors have developed such actions and changes. From that view, the case could also be labelled insider research. However, although similar to insider research, I think that Article 3 – and also my particular position in Article 2 and partly in Article 4 due to my particular outsider-within positionality – can be better framed as a self- ethnography study.

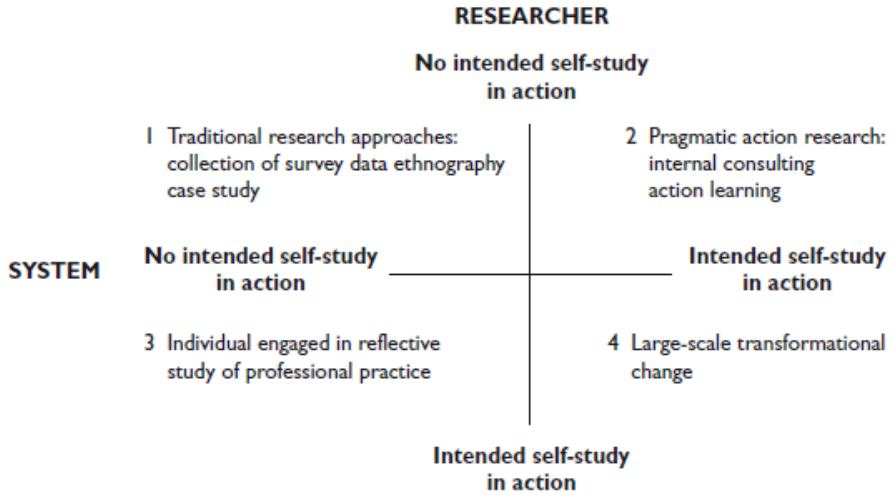
Alvesson (2003) defines self-ethnography as 'a study and a text in which the researcher-author describes a cultural setting to which s/he has a "natural access", is an active participant, more or less on equal terms with other participants' (p.174). Alvesson proposes this term to refer to those rare studies when researchers neither study others'

settings (ethnography) nor focus on the self (auto-ethnography). The primary role of the researcher in the settings that she is studying is not that of researcher, but of participant: the researcher is an *observing participant* rather than a participant observer (Alvesson, 2003, p.174). Although Alvesson (2003) mostly refers to situations in which researchers study their closest setting, like the university, a department or a research group, I think it may be applicable in this case.

In the case of Article 3 (Bizkaia Orekan), our role as the research team was not focused on carrying out a particular study on the issue analysed in the paper (public innovation), but more generally to help reflect and advise on process and on specific content related to competitiveness. That is, the paper analyses a topic which is not the focus and aim of the project and our work. Precisely, the idea in self-ethnography is using one's own position in a setting for some other research purpose. Thus, self-ethnography entails documenting and interpreting the events that one is witnessing, and in which one could be or not directly engaged (Alvesson, 2013), which is the case in Article 3. Moreover, this would be the case in my particular way of approaching Article 2 and Article 4 because of my role in the project, which was not that of a researcher.

Although insider research, the articles are of different types if categorized using Cohglan and Brannick's (2005, p.49) matrix depicted in Figure III-1.

Figure III-1. Focus of researcher and system



Source: Coghlan and Brannick (2005, p.49)

Coghlan and Brannick (2005) describe how insider research can be approached with or without an explicit aim to change practice, both from the researchers and the group or

system in which they are embedded. Thus, there can be different types of insider research ranging from the traditional research approach to research aimed at large transformational change.

I would place Articles 2 and 4 in Square 4, whereas Article 3 could be placed in Square 1. Article 2 is a reflective study on the practice of researchers with policymakers, which in isolation could be categorized in Square 2. Article 4 could also be considered traditional research if it were not part of a larger, transformational research. Indeed, both articles are situated in large-scale transformational research involving practitioners and researchers with an explicit change aim. These articles and their insights contribute through different dimensions to such a bigger endeavour, and my co-authors have the mechanisms to introduce the learning and to further influence wider practice of the analysed case. Article 3 mainly analyses the actions developed by others (and indirectly some from us) and changes that occurred in others – namely, policymakers. It does not analyse and reflect on the practice of researchers neither has had an explicit aim to change the practice of the actors involved, although it eventually may be used for that purpose because it is situated in a long-term research collaboration process.

Regarding methods, the three empirical articles are based on case studies, that is, they focus on the singular (Simons, 2014; Thomas, 2011; Yazan, 2015). However, they follow a flexible approach (Merriam, 1998; Stake, 1995) because two are AR-based analysis and the other is self-ethnography, which 'calls for a more reflective approach in which data management matters less than a revealing, insightful account and interpretation' (Alvesson, 2013, p.190).

Indeed, these articles have approached analysis through direct interpretation (Abbot, 2004) on the lived and witnessed experiences and supported with the documentation of the project. As they are local knowledge cases, they provide as Thomas (2011) suggests, a unique opportunity to gain a depth of experience that would otherwise be inaccessible to external researchers.

Table III-1 summarizes the articles' methods and research approaches and specificities of the case studies, drawing from Thomas (2011) and Stake (2006).

Table III-1. Research approach and methods in the articles

	Article 1	Article 2	Article 3	Article 4
Type of paper	Conceptual	Empirical analysis	Empirical analysis	Empirical analysis
Research approach	-	Insider research Action research	Insider research Self - ethnography	Insider research Action research
My particular approach	-	Self – ethnography: observing participant	Self – ethnography: observing participant	Self – ethnography: observing participant, and external
Method	-	Case study	Case study	Case study
Type of case study: Subject	-	Local knowledge case	Local knowledge case	Local knowledge case
Type of case study: Purpose	-	Instrumental and intrinsic	Instrumental	Instrumental and intrinsic
Type of case study: Process	-	Retrospective – three snapshots	Retrospective	Retrospective
Data analysis	-	Direct interpretation	Direct interpretation	Direct interpretation

Source: author's own

3.1.2. Trustworthiness

Three of the four thesis articles have been accepted for publication after a peer-review process, and therefore, it could be asserted that they meet the quality criteria for academic work. The fourth is still under review. Nonetheless, I further reflect briefly on some more elements about validity in order to provide the reader with more tools to determine the trustworthiness of the knowledge claims of this work.

There is no agreement within qualitative research on the proper validity criteria that should be used in this type of research (Herr & Anderson, 2005; Maxwell, 2013). Several alternative criteria for positivist and quantitative work have been presented in different works, from different perspectives (e.g. Lincoln & Guba 1985, Eikeland, 2006). In this work, I will broadly adopt the criteria of internal credibility, external credibility, transcontextual credibility and workability (Eikeland, 2006; Greenwood & Levin, 2007; Lincoln & Guba, 1985).

Internal credibility refers to the soundness of the interpretation presented in a research work for the study's participants. Prolonged engagement with participants and persistent observation are two of the most relevant techniques to provide a sound account of the events analysed in a research work. This has been the case in Articles 2, 3 and 4, as described previously and in Section 1.4. Moreover, the analysis of the empirical articles

was shared and/or discussed with some of the participants (member-checking). In Article 2, we sent sections of the chapter to everyone mentioned in it. We received feedback from some, and we even made a change due to one participant's comment. In Article 3, we discussed the analysis of the case in one of the steering group's meeting that we shared with policymakers in charge of the process, and the interpretation sounded reasonable to them. In Article 4, we have not undertaken any member-checking with participants. The article examines an experience in order to analyse its links to a theoretical framework, and we found that member-checking was not relevant for this purpose. Moreover, many of the claims made in the article in regard to changes that occurred in the participants' practice are based on claims they made, and thus, their voice and view is introduced in that way in the article.

In all the articles, we have also checked the interpretation of the analysis between the researchers, insiders to the cases. In Article 2, my co-author and I undertook different parts of the analysis, which we later shared, jointly reflected upon, and rewrote. In Article 3, I made the first analysis, which I then shared with my co-authors. They added some new views that I used to rewrite the analysis and we all agreed it was a sound interpretation. In Article 4, one of the co-authors, who has been involved in the project more recently, has served as a contrast to the views of those co-authors who have been involved more deeply for a longer time in the analysed case.

For external credibility, that is, how credible the interpretation sounds to readers that have no prior knowledge of the cases, we relate to the peer-review process undertaken in two of the empirical articles, which for each article involved different external researchers. We cannot determine this in Article 3, which is still in revision. Equally, this is the unique criteria that by now we can regard to for transcontextual credibility (or transferability), that is, the use that the findings could have in other contexts. We hope to have given sufficient contextual information in the articles so that others can determine if they can take and adapt some of the findings to their own contexts.

Although this is especially linked to action research methodologies, I wanted to look at the workability or viability criteria. This criterion refers to the idea that knowledge is valid as long as it is tested and usable in practice. We shared the 'soft resistance' concept (the main concept in Article 2) with a group of colleagues who also work in collaborative research projects in a meeting held on 02/02/2018 and with four

policymakers in a meeting celebrated on 20/09/2018. The researchers found that it was a very useful concept for thinking about the processes and their relationship with policymakers; the policymakers found it useful not only to think about their relationship with researchers, but also other practitioners. In Article 3, as stated in Section 3.2., there was no aim to promote change through the analysis. However, we hope to eventually introduce some of the findings to promote a joint reflection on some of the issues that can help the project's overall process. In Article 4, since it was the last written paper, this issue is beyond the scope of the dissertation.

Lastly, transparency on positionality is a key aspect in qualitative research. In the empirical articles we have been very explicit about our insider position in the analysed cases and that the analysis has been based on our direct interpretation of events. Moreover, in regard to the dissertation in general, including the articles, I have tried to be as transparent as possible about my particular positionality (Section 1.5) and how that may influence research. In so doing, I hope to have given the reader enough information to determine the trustworthiness of this work.

Now that the methodological aspects and trustworthiness has been established so that the reader of this work has full information on the work presented, the chapter next presents in turn each of the articles included in the thesis.

3.3. On the role of research in territorial development policy: Article 1

Chapter II has presented several works that make explicit the complexity that characterises the policy world, the regional contexts in which territorial development policies are developed and the particular complexities of the innovation policy field. The article departs from this awareness to reflect on the need to think about the approaches that research uses to contribute to capturing and navigating such complexity. Specifically, it presents concepts and research approaches developed within the interpretive school of policy analysis and analyses the potential contribution that their use could make to regional innovation policy analysis and practice.

On the study and practice of regional innovation policy: the potential of interpretive policy analysis

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Abstract

Over the past decade, the literature on innovation studies has begun to recognize the growing complexity associated with innovation policies. However, these complexities, inherent to the policy world, have often not been sufficiently recognized or considered in prescriptive studies of regional innovation policies, which may hinder the contribution being made from the research to the practice of innovation policy.

The present conceptual article reflects on the relevance of analytical approaches toward capturing, and interacting with, such complexities. We discuss necessary reflections that should take place in the process of analyzing regional innovation policies so as to grasp and address their complexities in a more comprehensive and holistic manner. We specifically propose the incorporation of interpretive policy analysis, a perspective that has a long history in policy sciences even though it is not extensively developed in the literature on regional innovation studies until now.

Keywords: regional innovation policy, policy analysis, interpretive policy analysis, regional innovation studies, governance, coordination.

Introduction

Over the past decade, various studies in the academic discipline referred to as 'innovation studies' have recognized the increasing complexity associated with innovation policies. This complexity is believed to be the result of a wide array of factors (Borrás 2009; Flanagan, Uyarra, and Laranja 2011; Laranja, Uyarra, and Flanagan 2008; Magro, Navarro, and Zabala-Iturriagagoitia 2014; Magro and Wilson 2013; Martin 2016).

On the one hand, innovation policies have expanded their scope horizontally and vertically (Borrás 2009). The previous exclusive focus on science and technology has given way to a wider spectrum of policies that deal with innovation in a more systemic manner. Moreover, policies are increasingly adopted on multiple scales (supranational,

regional, subregional and local), each of which has defined its own public interventions for promoting innovation.

Likewise, policies have undergone 'deepening' (Borrás 2009). Governments have adopted new types of instruments derived from new innovation rationales, resulting in more diverse policy portfolios. This diversity of instruments that support innovation has been accompanied by increasing experimentation as governments define and implement new forms of public action while also progressively involve the general public and other more specific stakeholder groups (Martin 2016).

Consequently, instruments derived from different theoretical logics and territorial levels coexist in the same public intervention space (Flanagan et al. 2011). In addition, each of the geographic scales and policy domains has different layers of actors and logics, which interact in the processes of policy design, implementation and evaluation (Boekholt et al. 2002; Laranja et al. 2008; Magro et al. 2014).

Thus, the inclusion of new issues in innovation promotion; the introduction of, and interactions among, new types of instruments; the coexistence of different policy rationales; the action at different geographic scales; the experimentation by governments and the existence of different layers of actors and logics have all contributed to increasing the complexity of the innovation policy field.

To the aforementioned coexistence of different sectoral logics and multilevel policies and actors, we should also add the complexities of the institutional frameworks in which these arise. Moreover, the policymaking process itself, as well as the governance of the territories in which policies are enacted, constitute an extremely complex context (Hajer and Wagenaar 2003).

However, although the complexities specific to the innovation field have been widely recognized in the innovation studies literature, the complexities inherent in the policy world are not sufficiently considered in prescriptive studies of innovation policies (Flanagan and Uyarra 2016; Laranja et al. 2008; Uyarra et al. 2017). Therefore, as some innovation scholars argue, the contribution made from the research to the practice of innovation policies may have been insufficient.

In effect, the significance and the potential consequences of the gap between research

and practice are increasingly being pointed out. Some critical voices, for example, have questioned the academic community's ability to acknowledge the political nature of innovation policies and to reflect on, among other aspects, the objectives and communities that benefit from or are hindered by the dominant studies in the field (Morlacchi and Martin 2009; STEPS Centre 2010). Some others have questioned the pragmatic value of innovation studies in improving policy practice. It has been argued that to increase the relevance of such contributions, the inherent complexities of the policy world should be considered in greater depth both generically and specifically with regard to policies supporting innovation (Flanagan and Uyarra 2016; Niinikoski and Kuhlman 2015). In this sense, some quarters recommend traditionally absent dimensions in the study of innovation policies, such as the agency of the different actors and the importance of policy implementation, as deserving more attention (Flanagan and Uyarra 2016; Uyarra et al. 2017).

The present conceptual article responds to the preceding discussion in the literature by introducing a new dimension for reflection—the relevance of the selection of analytical focus in the analysis of innovation policies. Our primary concern here is to stimulate what we consider a necessary reflection on the approaches from which policies are analyzed, so the complexities embedded in the world of innovation policies can be understood and addressed in a more comprehensive and holistic manner. To achieve this goal we rely on a review of the literature on policy studies, linking the contributions made in that stream of research with the current discussion in the field of innovation studies in general and regional innovation policy in particular.

The contributions made by policy scholars to solve wicked and complex problems reveal the need to adopt new ways of viewing, and acting on, the problems faced by societies and governments (Head and Alford 2015; Termeer et al. 2015). Inspired by this idea, and drawing from diverse sources on policy studies, we propose viewing and analyzing regional innovation policies from a perspective that has had an extensive history in policy sciences, as well as a considerable presence in science and technology policy and science, technology and society studies, despite being nearly absent in the literature on regional innovation studies to date. That perspective is interpretive policy analysis.

The article is structured as follows. The first section briefly reflects on the complexities

of policymaking. The second section places interpretive approaches within the broad spectrum of forms of policy analysis. Based on a comprehensive review of the literature on policy studies the third and fourth sections conceptually examine in greater depth the concepts and approaches used in interpretive analysis and that might be of relevance to regional innovation policy. We first look at the potential contributions of the practice perspective, ordering devices and collaborative analysis approaches to the governance of innovation policies. Then, we explore constructivist policy learning approaches as a means to foster social learning to promote innovation policy frameworks that respond to major societal challenges. The article concludes with some final thoughts and reflections on the ideas presented herein, as regards the potential of interpretive policy analysis for the study and practice of regional innovation policy.

The need to understand the policy world to contribute to it

Several authors have indicated that the discipline of innovation studies has an incomplete image of the policy world. Critics have observed, for example, that most studies leave aside 'the real life of policies' (Borrás and Jordana 2016, 1), that 'policy recommendations are surprisingly blind to the actual policy processes' (Sotarauta and Kosonen 2013, 1), that 'very few studies appear to examine the nature of policy making or draw on insights from the policy studies literature' (Porteous 2016, 158), and that the rationales of policymakers and managers are overlooked in innovation policy analysis (Laranja et al. 2008).

Highly extensive analysis in this regard has been conducted by Flanagan and collagues (Laranja et al. 2008; Flanagan et al. 2011; Flanagan and Uyarra 2016; Uyarra et al., 2017). These authors highlighted a contradiction that pervades much of the literature. Although there is broad consensus that innovation cannot be viewed as a linear phenomenon (Edquist 2014), the same literature seems to conceive the policymaking process linearly. The literature accords excessive relevance to theoretical logics and rationalities in policymaking processes, minimizing the importance of agency of the actors involved and their policy interests, ideas and rationales. The inherent complexity of policy implementation also receives insufficient attention. Likewise, the literature ignores the symbolic values and meanings of innovation policy instruments without venturing beyond their technical and instrumental dimensions (as a means to an end, associated with theoretical logics and rationalities). Furthermore, the relevance of the

implementation phase and the role that past experiences play in the adoption of current policies are equally minimized. From the perspective of these authors, which we share in this article, if innovation studies are to be practically useful in public policy, a genuinely evolutionary focus must be adopted (Lipsey and Carlaw 1998), relegating linear conceptions of policymaking to the sidelines.

Indeed, the policymaking process is more complex than the literature on innovation studies seems to presume. In addition to the inherent complexities of the specific field of innovation policies (such as the coexistence of instruments derived from different logics, greater experimentation and the inclusion of new instruments or action on various geographic scales), there are also complexities in the governance contexts in which policies are formulated and implemented. As Hajer and Wagenaar (2003) note, policies are defined and implemented in increasingly complex governance contexts, in which the emergence of new actors and open-ended institutions has led to changes in the already complex policy world. Indeed, new political 'spaces' have emerged, and transnational discourse and multilevel governance have replaced former institutional systems in which lower levels of government fit into higher ones. In addition, party politics and bureaucratic structures have lost their central role. A major part of policymaking and politics today occurs in an 'institutional void', without relating to any specific moment and agent of decision (Goodin, Moran and Rein, 2006; Hajer and Wagenaar, 2003, 9). Moreover, policy networks are characterized by an institutional, substantive and strategic complexity (Klijn and Koppenjan 2016); the actors in the universe or system of a certain policy field belong to institutions regulated by their own norms and have different views of the problems that those policies are intended to solve. Moreover, these views can vary over time, which means that the resulting strategies cannot be predicted ex ante.

Meanwhile, the policymaking process itself is far from a linear task exclusively driven by logical reasoning, in which theoretical ideas can pass directly into the policy agenda. On the contrary, this process encompasses a complex interaction of ideas, institutions, exogenous factors, actors and specific decisions (Cairney 2013). From the recognition of a problem through its inclusion on government agendas to the formulation, implementation and assessment of policies and instruments, all activities involve a myriad of actors, interactions, perceptions, ideas and power games (Howlett, Ramesh, and Perl 2009; Jann and Wegrich 2007; Pülzl and Treib 2007; Sidney 2007). Policies

are therefore not merely instrumental products derived from technocratic rationality. They do not simply solve problems; rather, they also reproduce social norms and arrangements (Fischer and Mandell 2012). The policymaking process is by nature relational and persuasive. It is devised in learning processes that are emergent and interactive by actors with limited rationality. In these processes, past policies and the way they were defined and implemented also carry weight and ideological or symbolic aspects acquire relevance alongside the presence of readily apparent, purely rational reasons (Goodin et al. 2006).

Therefore, and in agreement with Flanagan and Uyarra (2016), we consider that any research effort made in the field of innovation policy—particularly regional innovation policy—that seeks to influence practice must be backed by understanding and acknowledgment of the complex world in which that knowledge interacts and is embedded.

Other ways of viewing and interacting with the complexity of innovation policies

Recognition of the complexity of the field of innovation policies, of the processes by which these are defined and implemented and of the governance contexts in which they are embedded must be accompanied by reflection on the way in which research—and more specifically policy analysis—views and interacts with this complexity.

The policy world can be viewed and analyzed from various perspectives (Cairney and Heikkila 2014). For example, policies can be understood as a product designed by a specific government and then implemented in a hierarchical manner as either the result of coalitions of independent actors, and that of a discursive or argumentative process or the product of soft institutions and the interaction between different actors (Enserink, Koppenjan, and Mayer 2013). Likewise, one can approach policy analysis in diverse ways, which can vary in terms of, among other things, their objective, the epistemological assumptions on which they are grounded and the focus of their analysis. All these approaches are characterized by an action orientation, i.e. they seek to influence practice (De Leon and Vogenbeck 2007). Policy analysis can therefore be described as an activity area that ‘encompasses a variety of activities concerned with the creation, compilation, and application of evidence, testimony, argument, and interpretation in order to examine, evaluate, and improve the content and process of

public policy' (Dryzek 2006, 190).

Mayer, Van Daalen, and Bots (2013) constructed a model that seeks to create a synthetic framework among the diversity of schools and methods of policy analysis. They differentiate between those (more traditional) activities, the objective of which is to generate scientific knowledge, and those dedicated to translating that knowledge into policy design. They also distinguish between approaches focused on analyzing and debating the values behind the (policy) problems, those designed to 'give a voice to those who have no voice' and those that focus on providing spaces for discussion, negotiation and collaboration.

Despite the aforementioned contributions, this diversity of analytical approaches, which is based on different epistemological principles, ways of viewing the policy world and ways in which policies are created, does not seem to have sufficiently permeated the literature on innovation studies. It is even less visible in regional innovation policy analysis (Borrás and Jordana 2016), where the predominant views are based on suppositions related to technocratic and linear rationalities (Flanagan and Uyarra 2016; Uyarra et al. 2017).[7] This tendency is particularly striking since the literature on innovation studies has had—and continues to have—a major influence on policy practice (Godin 2006). In the field's early years, contributions by authorities such as Chris Freeman (1987) played a fundamental role in organizations such as the Organisation for Economic Co-operation and Development (OECD), helping to shape its understanding of, and supporting the formulation of, innovation policies. In a similar manner, the OECD also played a fundamental role in providing a context for managing the conceptualization of an innovation system, as well as defining indicators by which to characterize such a system (Godin 2009). This bidirectional wave of influence was followed by other authors, such as Nelson (1981, 1993, 1997) and Lundvall (1992), mainly on the national scale. In turn, authors like Cooke, Gomez-Uranga and Etxeberria (1997) raised concerns over the need to consider a region as a space with institutional, regulatory and policy characteristics that could diverge from those at the national level. This thrust led to a series of policy actions taken by the European Commission in the

[7] A few exceptions are worth mentioning, including (among others) discursive analysis of innovation policy (Niinikoski and Kuhlman 2015), priority setting with a focus on implementation and street-level administration practices (Hellström, Jacob and Sjöö 2017), stakeholders' cognitive frames in policymaking options (Levidow and Uphman 2017), narrative-based evidence gathering (Levidow and Papaioannou 2016) and argumentative practices in the area of translational research (Vignola-Gagné 2014).

1990s under the umbrella of regional innovation strategies (Zabala-Iturriagagoitia et al. 2008), which are at present time reframed under the Research and Innovation for Smart Specialisation Strategies (RIS3) programme (European Commission 2011).

In this article, we contend that greater analytical diversity, which transcends traditional policy analysis that is based on linear rationality, could contribute to the study and practice of regional innovation policies. Moreover, as argued by Goodin et al. (2006), instrumental rationality, along with its (implicit) desire to somehow measure, monitor and control the world, is an impossible illusion in the relational, persuasive, political and constraint-filled real world. On the contrary, policy analysis, as an interventionist and action-oriented activity, must fit with the reality that it seeks to analyze and influence (Hajer and Wagenaar 2003; Wagenaar 2011). This reality, as we have already emphasized, is highly complex.

Indeed, policy analysis 'needs to bridge the gap between science and action' (Enserink et al. 2013, 14); however, this fit or accommodation can be achieved in various ways. On a continuum with science at one extreme and action at the other, the balance could lean to either side (ibid): policy analysis can be developed by fitting policymaking to science, thereby prioritizing scientific knowledge (a rationalist or technocratic fit) or by edging toward an emphasis on more usable knowledge (a fit based on constructivism, pragmatism or relativism). In line with this, several views emerged in the 1990s as part of the movement known as the 'argumentative turn.' This turn arose precisely as a criticism of the positivist and rationalist perspective that has traditionally dominated policy analysis (Howlett et al. 2009) and has also been generally predominant in the field of innovation policy. In contrast, the approaches within this turn share the idea that instrumental rationality is not effective in the complex policy world; the belief that policy analysis can be a means of democratic transformation and the acknowledgment that knowledge is always contextual and comes from particular and irreproducible contexts (De Leon and Vogenbeck 2007; Fischer 2007; Hajer and Wagenaar 2003; Howlett et al. 2009; Ingram and Schneider 2006; Wagenaar 2007, 2011). In other words, the meanings that people give to actions cannot be studied in an abstract manner but only within the specific contexts in which these meanings arise, and therefore knowledge is always contextual (Innes and Booher 2010; Schwartz-Shea and Yanow 2012; Wagenaar 2011).

The remainder of this article focuses specifically on concepts and approaches developed from this perspective. We believe that this line of thinking could yield new ways of viewing, and interacting with, the field of regional innovation policy.

Focusing on agency: ordering devices, the practice perspective and collaborative spaces in the governance of policies

Recognition of the systemic nature of innovation and the increasing complexities that characterize the field of innovation policy has led to a consensus on the need to improve coordination mechanisms and adopt more horizontal forms of governance for effective design and implementation (Boeklholt et al. 2002; Borrás 2009; Edler, Kuhlman, and Smits 2003; Laranja 2012; Magro et al. 2014; OECD 2005). Furthermore, bottom-up participation processes are increasingly being viewed as necessary, for example, to adapt policy instruments (Sotarauta and Kosonen 2013) and to target policies to specific missions (Mazzucato 2016). At the regional level, the recent introduction of smart specialization strategies (Foray, David, and Hall 2009; Foray et al. 2012) has represented a major innovation, producing significant changes in the governance mechanisms of innovation policies in many European regions (Kroll 2015).

With regard to this, we believe that some concepts developed by interpretive approaches to policy analysis could be useful in understanding and promoting the coordination and governance of regional innovation policies. In particular, we refer to the practice perspective, the relevance of meanings, and the collaborative spaces of policy analysis.

There is no doubt that ideas have a major influence on policymaking. Ways of seeing the world, ideologies, paradigms and discourses have a direct effect on how different actors interpret the problems to which policies seek to respond (Howlett et al. 2009). Facing situations of enormous complexity, people need to somehow simplify this complexity so as to understand and act upon reality. Interpretive schemata or ‘ordering devices’, such as frames and narratives (Hajer and Laws 2006), are the implicit mechanisms by which people carry out this simplification, or better said, the tools that researchers use to analyze the way people make this simplification.

It is through frames that we interpret situations and facts, capture certain elements of them and define problems (Hajer and Laws 2006; Pérez-Lejano 2013). Likewise, frames also guide our action, functioning as ‘road maps’ (Wagenaar 2011, 364) that define the

boundaries of what to do or not do. Similarly, narratives are mechanisms that help us make sense of situations (Fischer and Mandell 2012). The creation of coherent narratives about specific situations helps us to understand the world and also to organize people into communities with common meanings (Stone 1989). Moreover, according to Bevir (2011), policymakers learn by listening to and telling stories, which gives coherence to their past and future actions. Furthermore, the creation of common narratives can be a vehicle to build consensus (Hajer and Laws 2006).

As already discussed, the design and implementation of regional innovation policies involves a complexity of actors in different fields or policy domains, geographic scales and policy layers (political, administrative, and operational). Each of these actors influences the design and implementation processes of the different instruments that operate in certain spaces (Flanagan et al. 2011). And as Flanagan and Uyarra (2016) note, these actors (or even the same actor over time) differently interpret the various instruments of innovation policy with which they interact. In other words, innovation policy instruments have interpretive flexibility. Therefore, the analytical tools that help to capture those meanings could be useful for the analysis of innovation policies.

What meanings do different actors imbue policy instruments with? Debora Yanow's (1993, 1996) influential work shows that there are at least three communities of meaning in any policy-related situation: those who design policies, those who implement them, and the beneficiaries. However, these three main groups can also contain several subsets, such as directors, street-level bureaucrats and interest groups. Yanow (2000) developed a methodology to analyze the different meanings that might exist behind instruments and their associated problems, which could be of help to capture the interpretive flexibility of regional innovation policies.

This interpretive flexibility can also have an effect on the coordination and governance of policies, within a specific government or between governments or institutions. Where coordination failure occurs, the underlying causes may include different views of certain policy instruments, their objectives, or the role of each actor in their design and implementation. Therefore, identifying the interpretive frameworks of the people involved in policymaking could serve as a way of studying the coordination that complements the analysis of hard coordination spaces (Magro et al. 2014), thus enabling us to answer questions that are difficult to address from traditional

perspectives. What prevents better coordination in situations in which formal spaces for coordination are provided? How are instruments understood by the people who design and implement them and by those who execute them at the operational level? How does each actor interpret their role in this policymaking process? How do the actors understand the roles of the other institutions involved? At a higher level, how are the roles of the public and private sectors, and of society in general, framed in science, technology and innovation? What are understood to be the goals of regional innovation policy? Why is it necessary?

Indeed, coordination failures may involve disagreements not only on specific issues but also on deeper questions where the confrontation is not over concrete facts but rather over the interpretive schemata. Knowing the frames of the participating actors through specific analyses of frames or through narratives could help us to better understand such situations. It would be insufficient, for example, to place the focus of analysis only on the mechanisms of coordination between the policy instruments of two levels of government if there is a possibility that a higher level (e.g. a regional government) may not legitimize a lower level (e.g. a city council) to define the instruments that best respond to its own strategies. How can coordination mechanisms be improved if, from the outset, there is no openness or willingness to seek such improvement? Similar problems could occur between different departments or units (e.g. the industrial policy unit and the research unit) of a single regional government that deal with innovation policies in a broad sense. In these cases, the source of conflict is not the concrete coordination mechanisms themselves but rather the preeminence that one actor claims over another in defining the policy agenda. Therefore, the mere creation of hard coordination spaces is necessarily, by itself, an incomplete solution. In these cases, as Schön and Rein (1994) discuss, there is a need to reframe the situation by viewing it from another angle, i.e. reflection-in-action. Consequently, ordering devices and the analysis of meanings provide instruments for analysis and are helpful instruments in policymaking practice.

Another contribution offered by interpretive approaches is their focus on practice, or what is generally understood as the everyday work of policymakers. Various authors such as Hajer and Wagenaar (2003) and Flyvbjerg (2001), have suggested using practice as the unit of analysis for the study of politics and policies. Practice is a relevant unit of analysis not only because evidence derives from practice but also

because policies are designed to regulate practice (Freeman et al. 2011).

Practice is important because the everyday application of policy is the place where policymakers face dilemmas, doubts, uncertainties, ambiguities and conflicting values. The enacting of policies occurs through this daily work and through an ongoing series of micro-actions and decisions (Laws and Hajer 2006; Wagenaar and Cook 2003). Indeed, studies examining the implementation of policies are more relevant than studies of innovation policy give them credit for (Uyarra et al. 2017). Implementation is not just a phase in which instructions from higher levels of a government hierarchy are passed down and followed but a phase in which policies 'are frequently reshaped, redefined, or even completely overtuned' (Pülzl and Treib 2007, 100). The everyday problem-solving strategies of people at lower administrative levels can influence policy as strongly as those of the high-level policymakers who designed them, or even more so. It is, therefore, important to know what happens in this everyday work, which is quite distant from the formal spaces or moments of policy design and the official documents that capture the goals of a certain instrument and that tend to be the traditional focus of analysis. The focus on practice highlights the micro-practices of policymaking because as Wagenaar (2011, 366) notes, 'the microrationalities of individual actors frustrate the macro-rationality of collective problem solving'. In other words, the analysis of the mundane and everyday work of policymakers is needed to explain why some policies stagnate, why some policy instruments have unexpected consequences, and why some programs fail. Efforts to answer these questions must consider the policy implementation phase.

Finally, we believe that the literature on regional innovation studies could also be nourished by research on collaborative spaces in policies, planning and governance. As Palshaugen (2014) observed, the 'interactive turn' in innovation policies has not been accompanied by an interest within the literature in what happens in the meeting spaces where regional governance of innovation materializes. Therefore, interpretive approaches that highlight the function of collaborative and meeting spaces between different constituents could be of interest to the innovation studies community.

As those defending collaborative approaches to policy analysis have emphasized, policymaking is not only a matter of finding solutions to problems but also of 'finding formats that generate trust among mutually interdependent actors' (Hajer and Wagenaar

2003, 12). The complexities of the policymaking process, the diversity of views, opinions and interests that operate in it and the uncertainty regarding possible solutions to complex problems demand collaborative approaches to both policymaking and analysis (Goodin et al. 2006; Hajer and Wagenaar 2003; Head and Alford 2015). The 'absolute knowledge' purportedly offered by science and research has been called into question because of the uncertainty and complexity with which policy development occurs. Indeed, it is necessary to develop new strategies to integrate this type of knowledge in the policymaking process

With regard to this, several works related to consensus-building processes, negotiation and mediation models, collaborative planning methods and collaborative governance models have focused on how these spaces can be managed and how academic knowledge can be generated in and applied to them. The literature shows that these collaborative models lead to learning, problem solving and changes that improve the adaptability and sustainability of systems and the generation of social capital (Innes 1995, 2004; Ansell and Gash 2008; Innes and Booher 2003, 2010). Research on these topics could therefore facilitate the practice of collaborative approaches that could contribute to a more horizontal form of regional innovation governance.

All in all, viewing innovation policies and their governance through a new lens—that of meanings, ordering devices and everyday practice—and learning from collaborative approaches to policy analysis may help us to better understand and influence the world to which the innovation academic community seeks to contribute.

Social learning approaches for the next generation of innovation policy

In recent years, both in the literature and in the discourses of international bodies, the idea that innovation should contribute to not only economic growth but also development in the broadest sense has gained significant ground. In this sense, Schot and Steinmuller (2016) have identified a new paradigm that they call the third framing, or innovation policies for transformative change. To these authors, a distinction can be made among three frames, two of which are widely used in policy practice while the third is in its early stages of development.

The first frame, which relies on a linear approach to innovation and focuses on science and technology policies, has been partly replaced in the discourse by the second frame,

focused on innovation systems, based on the interactive nature of innovation and associated with instruments that concentrate specifically on generating interactions. As discussed above, these two foci have been studied extensively, with a major effect on innovation policies in most regions and countries in both past and present. However, a third framing or paradigm has been emerging out of discourses grounded in the idea that innovation policies must help to solve grand societal challenges (Edquist and Zabala-Iturriagagoitia 2012; Mazzucato and Penna 2016). Increasingly, initiatives such as the United Nations Millennium Development Goals, the Responsible Research and Innovation framework promoted by the European Commission and the science, technology and innovation literature itself view innovation as having a relevant role in the achievement of social and environmental goals. Although this way of thinking has not yet strongly affected regional innovation discourse and practice, some scholars and regions have already started to work in this direction (see Magro 2017[8]), and it is reasonable to think that it will eventually find a prominent place on the academic and policy agenda.

However, as Schot and Steinmuller (2016) claim, the adoption of such a frame implies producing changes at the systems level. Indeed, it could call into question the very goals of the innovation policies that prevail on most agendas of regional governments. As some critical studies have already suggested (e.g. STEPS Centre 2010; Stirling 2014), this step could imply questioning the normative value bestowed upon innovation and asking tougher and more basic questions: innovation for what purpose and for whom? Who decides the regional innovation goals? What goals should be prioritized on the regional innovation policy agenda?

This frame of action currently arises more in discourse than in practice, and the specific instruments and practices that could lead to greater adoption of these logics and to their fruitful coexistence with previous logics have yet to be identified. With regard to this, collaborative spaces could be yet another way of generating the social learning required to make such paradigmatic changes (Bennett and Howlett 1992; Borrás 2011) and enable the adoption of a new focus for regional innovation policies.

Learning has been considered to be a key factor not only for innovation (Lundvall 2010)

[8] Magro, E., "Transformative innovation policy for regions: regional responses to global challenges?", Beyond competitiveness (blog), July 28, 2017, http://blog.orkestra.deusto.es/transformative-innovation-policy-for-regions-regional-responses-to-global-challenges/

but also for the definition and implementation of policies and their governance (Aranguren, Magro, and Wilson 2017; Chaminade and Edquist 2010; Nauwelaers and Wintjes 2002), permitting actors to adopt more holistic perspectives within the systemic framework of innovation (OECD 2005; Koschatzky and Kroll 2007; Borrás and Edquist 2018). A paradigm change such as beginning to think in terms of *innovation policies for transformative change* also requires learning—not learning about processes, programs or systemic failures (Borrás 2011) but a reflexive, second-order type of learning. As Loeber et al. (2007) showed through their study of projects to foster sustainable development, the type of learning needed for profound change 'is not only about ideas, but also about the power dimensions involved in the envisioned transformations' (84). This implies prioritizing some goals and practices over others, as well as accomplishing institutional changes that require making explicit the implicit assumptions underlying actors' everyday practices and governments' policies and instruments. What kinds of goals are really being pursued by regional innovation policy? Are these goals compatible with sustainable development? Are the policies and instruments really inclusive? Such questions do not involve a mechanical or instrumental type of learning but rather a reflexive type (Freeman 2006, 2007; Gilardi and Radaelli, 2012; Dunlop and Radaelli 2013) that questions the implicit assumptions underlying existing programs and policies.

The spaces generated through collaborative approaches to policy analysis could be managed in such a manner as to provoke this type of learning, which may eventually lead to the adoption of innovation approaches that encompass social and environmental goals and foster systemic changes. To this end, as shown by Loeber et al. (2007), these spaces must promote a review of actors' theories and logics, reflect on their role in policy practice, and facilitate systemic thinking. In the field of regional innovation, for example, it has been shown that action research can foster this kind of social learning (Karlsen and Larrea 2014a, 2014b, 2017).

Final reflections

There is widespread agreement that regional innovation policymaking has become an increasingly complex field and a subject of analysis because of the growing number of actors involved in promoting innovation, the multiple and diverse instruments used in this endeavor, and the several policy fields that not only affect regional innovative

capacity but have also become the focus of regional innovation policy strategies. The most recent developments in regional innovation policy theory and practice provide evidence of the previous multi-level, multi-actor, and multi-policy complexities while deepening such a propensity. For example, smart specialization strategies have prompted new forms of policy experimentation in many European regions, and the increasing connection between innovation policies and social challenges has not only expanded innovation policy goals but also questioned existing practices.

Regional innovation policies are enacted through complex processes that take place in complex contexts. Policymaking is relational, persuasive, messy, emergent, non-linear, and political. However, as several regional innovation policy scholars have pointed out, the complexity of the policy field—which derives not from field-specific complexities but from the very nature of the policymaking process—should merit further acknowledgment and attention from regional innovation policy studies if it aims to increase its impact in practice. Adding to these voices, the aim of this conceptual paper was to argue for methodological pluralism as a means to better grasp and contribute to regional innovation policies. In particular, we advocated for the potential role that interpretive policy analysis can have in both the study and the practice of regional innovation policy.

Indeed, although fully representing a complex and emergent world is not a feasible endeavor, diversifying the angles through which we look at it, putting the focus of analysis on alternative dimmensions, and using diverse methodological approaches for doing so may further our understanding. Building on diverse modes developed in the literature on policy studies, not only for understanding the policy process but also for analyzing it, could be a way of furthering our understanding of what regional innovation policymaking entails.

With this aim, the paper has reflected on some potential contributions that intepretive policy analysis could make to innovation studies. It has presented concepts and frameworks that could be of value to regional innovation policy analysis. In particular, we have explored the potential relevance of the analysis of narratives, frames, and meanings; the practice perspective and collaborative approaches to policy analysis.

The paper has suggested that the analysis of meanings, narratives, and frames can be used as a tool for capturing the interpretive flexibility of policy instruments and the particular standpoints of policy actors involved in innovation policymaking, which could be used, among other purposes, to analyze governance and coordination with a greater perspective on agency. Equally, applying the focus to the practices that produce and reproduce policymaking and governance through the introduction of a practice perspective opens up a possibility to better understand specific paths adopted by policies, how these are enacted, and the differences between the intended policy goals and their actual implementation. From a more action-oriented perspective, and as previous works on action research have demonstrated, the paper has also suggested that collaborative approaches to policymaking offer possibilities not only to better understand but also to change practices toward improved regional innovation policymaking. Moreover, collaborative approaches that are oriented to foster a second order type of learning that challenges tacit assumptions behind policymaking practices seem particularly suited for the paradigmatic changes required to promote innovation policies for transformative change.

By presenting potential uses of these concepts and frameworks, the paper aims to illustrate the benefits of adopting a more pluralistic approach to the analysis of innovation policies and the potential of interpretive policy analysis as a way of doing meaningful research that fits the complexities of regional innovation policymaking. Just as interpretive approaches have provided alternative understandings of governance and policymaking in a wide range of policy fields, we suggest it could also do so in the field of regional innovation policy. This proposition requires further studies that empirically apply the approach presented in the paper in order to assess its real value and potential in the analysis and practice of regional innovation policy. We intend to do so in further investigations and equally hope that it inspires other researchers to explore new ways of considering, analyzing, and changing the policy world in which we are embedded, we interact with and we aim at contributing to.

3.4. Delving into the micro-practice of research-policy dynamics: Article 2

Article 2 delves into the research-policy dynamics by analysing the relationship between researchers and policymakers in a particular case and in ARTD, a research approach already presented in Section 2.8. This approach can be categorized as dialogical and collaborative policy analysis approach, presented in Section 2.8. and in Article 1.

The article characterizes the dynamic between researchers and policymakers as ‘soft resistance’, a conflict-based and agreement-oriented relationship between the critical and the relational roles of researchers and policymakers that can institutionalise new models of governance among territorial actors. It also describes how this dynamic has contributed to institutionalizing this new governance mode in practice.

Soft resistance: Balancing relationality and criticality to institutionalise action research for territorial development

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Abstract

This chapter explores the dynamic between relationality and criticality in Gipuzkoa Sarean, an action research project in the Basque Country, Spain. Specifically, it delves into the relationships between action researchers and policymakers when co-generating the processes that led to the creation of a new governance model for territorial development. The learnings discussed in the chapter identify this dynamic as *soft resistance*, the conflict-based and agreement-oriented relationship between the critical and the relational roles of researchers and practitioners that can institutionalise new models of governance among territorial actors.

Keywords: Action research, conflict, institutionalization, soft resistance, territorial development.

Introduction

Within the innovation and regional development literature, interest has increased recently about how innovation and development policies can help respond to grand societal challenges, establish a more sustainable future and build more resilient places (Bristow, 2010; Morgan, 2004; Schot and Steinmueller, 2016; STEPS Centre, 2010).

Action research for territorial development (ARTD), the approach presented in this chapter, fosters more inclusive development and innovation policies and processes through social learning and the generation of participatory regional governance patterns (Karlsen and Larrea, 2014a). The specificity of ARTD is that it emerges as the result of praxis, as the transformation through the practice of pragmatic action research (AR) and the legacy of Paulo Freire in the context of the Basque Country. That is why ARTD is not presented as a normative approach to AR but as a way to share 'how we do' AR.

The main project in which ARTD has developed is Gipuzkoa Sarean ('Networking Gipuzkoa' in the Basque language) (GS), led by the Provincial Council of Gipuzkoa (council), one out of three provincial governments in the Basque Country. Started in

2009, GS is ongoing. One of its key features is its continuity throughout three different terms, with changes in the political party in the government. Action researchers (including the authors of this chapter) have participated in GS from its inception and have played a role in the resilience of the project, which has been recognised by policymakers. The primary aim of policymakers through the three terms has been to develop new patterns of relationship with territorial actors in order to have more democratic and efficient policy processes for territorial development.

Institutional change is the Holy Grail of AR, and the core argument in this chapter is that GS has achieved institutional change through *soft resistance*. This is the concept we use to describe the relationship between the relational and the critical dimensions within the co-generation process between policymakers and researchers in ARTD. The discussion leads to identifying this relationship as conflict-based and agreement-oriented. The awareness of having conflicting perspectives made the relationship between researchers and policymakers openly critical in both directions (the *resistance* dimension). But there has also been a steadfast prioritisation of action, one of the three cornerstones of AR, by both policymakers and action researchers. Action required agreement, and agreement required that action researchers and policymakers gave up part of their interests in order to act together (the *soft* dimension).

Our proposal of *soft resistance* derives from praxis, the continuous interaction between theoretical concepts and practice. The first part of the chapter discusses previously developed theoretical frameworks. Then the case is used to share the practice that inspired the concept. Relating the concept of soft resistance exclusively to theory or practice would conceal its inspiration from praxis. Consequently, the connections between different sections are as relevant in this chapter as the content presented in each of them.

Action research for territorial development (ARTD)

ARTD is a research approach developed within the context of the Orkestra Basque Institute of Competitiveness and its alliances with the University of Agder in Norway and the Praxis Institute for Technological and Social Studies for Territorial Development in Argentina. Orkestra is a university-based research institute in the Basque Country (Spain) specialising in the field of regional development. Its founding

goal is to act as an agent of regional change and have an impact on the development of the Basque Country. Orkestra researchers work in collaboration with a great number of networks, businesses, governments and other institutions with the aim to foster transformative research. AR was one of the approaches adopted by some of the researchers with that aim. The main theoretical background for ARTD includes regional innovation systems (RIS) literature and policy analysis together with AR literature (Arrona, 2017; Costamagna and Larrea, 2016, 2017; Estensoro, 2012, 2015; Estensoro and Larrea, 2016; Karlsen and Larrea, 2014a, 2014b, 2017).

The promotion of innovation has become a significant priority in the policy agenda of regional governments, stemming from the solid consensus that knowledge and innovation capacities are key to the progress of territories (Navarro, 2009). Especially influential has been the regional innovation systems (RIS) framework (Asheim and Gertler, 2005; Cooke, 1992, 1998; Trippl and Tödling, 2007), which, in a nutshell, sees innovation in a region as the product of the interactions among the production subsystem (firms), the knowledge-generation subsystem (universities and technology centres) and the policy subsystem (governments). Although ARTD considers the RIS framework useful, it places a stronger focus on micro-practices and social processes (including policymaking) that produce innovation in order to better understand and contribute to such processes. Moreover, micro-practices cannot be framed exclusively within a regional scale. Problems of specific actors are influenced by processes occuring at local, regional, national and international levels. Hence, a multiscale concept of development is required. That is the reason why ARTD does not refer to regional development but to territorial development, interpreting the concept of territory as a space of mutual influence in which actors operate at different territorial levels.

ARTD also proposes that researchers should go beyond the normative position of proposing to foster interactions in order to promote innovation and offer methodologies to do so. In that sense, ARTD strongly resonates with developments in interpretive and collaborative approaches to policy analysis that argue that collaborative and participatory ways of policy analysis are needed for the complexity of today's world (Goodin et al., 2006; Hajer and Wagenaar, 2003). ARTD proposes a hands-on strategy to foster collaborative policymaking processes that (unlike mainstream approaches to innovation and regional development policy analysis) not only acknowledges the complexity of policymaking but also delves into and interacts actively with it.

The ARTD framework

AR and its different approaches have already been presented in the introduction to this book. In this section, we describe how we started working with Greenwood and Levin's (2007) co-generative framework, a well-known framework in the literature of AR, to later develop our own, ARTD (Karlsen and Larrea, 2014a). ARTD is not presented as a normative model on how AR should be conducted but as how we did AR in GS, which is the context in which *soft resistance* and institutionalisation took place.

When the GS project began, the research team did not have a framework of our own to develop AR processes. We used Greenwod and Levin's (2007) co-generative framework to discuss with policymakers the process and our roles. We chose pragmatic AR because it was evolving from workplace development to networks and regional processes (Gustavsen, 1992; Johnsen and Normann, 2004; Pålshaugen, 2013), which was consistent with our territorial approach.

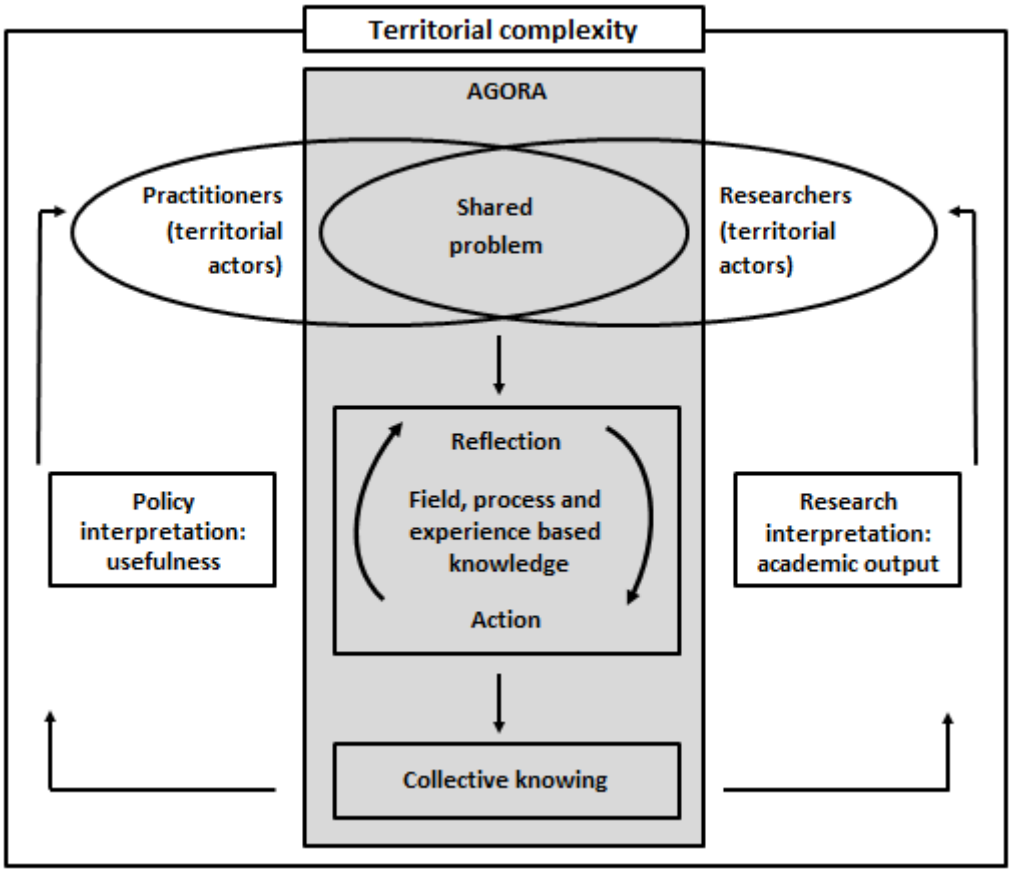
Greenwood and Levin (2007) propose pragmatic AR as the way to produce *cogenerative learning* – that is, new actions that derive from collective reflections between researchers and local stakeholders. The key to building mutual learning is the creation of arenas for dialogue between local stakeholders and researchers. Greenwood and Levin (2007) propose a cyclical co-generative framework with two distinct phases for practising AR. First, researchers and stakeholders define and clarify a research question derived from local demands (problem definition). Then, researchers foster a meaning-construction process through reflection and action where researchers help local stakeholders to solve their problems and increase their problem-solving capacities.

At the initial stage of the GS project, the goal was to develop social capital among actors influencing the competitiveness of the province. Following Greenwood and Levin's (2007) framework, we assumed that policymakers were the problem owners and it was their problem to develop social capital while we were outsiders helping them.

But praxis requires the continuous testing of theory in practice, and our experience of AR showed that some concepts in Greenwood and Levin (2007) matched our practice better than others. In order to overcome this perceived mismatch we undertook the process of elaborating a framework that better represented our practice. We named the

new framework action research for territorial development (ARTD). Figure 1 represents our new framework (Karlsen and Larrea, 2014a).

Figure 1: Co-generative framework for action research for territorial development



Source: Karlsen and Larrea (2014a, p. 100)

Figure 1 describes ARTD's cyclical process that takes place in the agora. The agora is the space where policymakers and researchers meet – the space in which societal and scientific problems are framed and defined and where what will ultimately be accepted as a 'solution' is negotiated. It starts with an initial negotiation between policymakers and researchers about the problem they want to solve together. A critical moment for this has been every last trimester of the year, as the relationship of Orkestra with the council materialises through a yearly agreement and during these months the goals for the next year are discussed and agreed upon. Then, cycles of reflection and action occur. Although workshops are a typical tool used for reflection, one of the main specificities of this approach is that dialogue and reflection mostly do not occur in ad hoc workshops outside policymakers' routine but that researchers are integrated into routine meetings of policymakers in the policy process. One example of this is the core group of researchers and policymakers who meet every Wednesday in the government premises

to reflect and decide on the entire process. For specific goals, larger groups of policymakers and researchers meet in two- to four-hour workshops that take place either monthly or two-monthly. In these meetings and workshops, we help policymakers reflect on their challenges by introducing concepts and frameworks that help interpret the problem from different angles. Another feature of ARTD is that we make an effort to use the same language in academic and policy environments, contradicting the principle of adapting the language to each community and prioritising the construction of a shared language for all participants. After shared reflection, making and enacting policy decisions is the responsibility of policymakers, who then report that experience to the agora – and continue with new cycles of reflection and action.

In order to help the reader understand the connections between this framework and *soft resistance*, we focus on three features that influence the interrelation between the critical and the relational roles of researchers that emerged from praxis.

The first feature that distinguished ARTD from Greenwood and Levin (2007) was that we did not feel as if we were outsiders to the process of constructing social capital for competitiveness in the province. Orkestra had been created not only to analyse but also to influence competitiveness. We felt that the development of social capital for competitiveness was also our problem and that we were not neutral regarding that goal. We stopped talking about insiders and outsiders and developed a new language with policymakers: we were all territorial actors and all problem owners. Being accepted as problem owners by policymakers empowered us to maintain our own positions. For instance, one of the aims of the main policymaker who led the project was to have an impact on the population through media and at a macro level. We offered resistance to this proposal, supporting the definition of specific problems and dialogue in micro-processes with the actors directly involved in their solution. We consider that evolving our status from outsiders to insiders created a context in which our critical positions were given more legitimacy to influence the process.

The second feature of ARTD was the explicit consideration of complexity. As problem owners, we as action researchers had our own position on the issue that did not always coincide with those of the policymakers. In order to talk about it with policymakers, we framed the AR process as part of *territorial complexity* (Karlsen, 2010), a situation in a territory where various autonomous but interdependent actors might have different

interpretations of the problems and the possible solutions to these problems. None of the actors had the hierarchical power to solve the problems using command and control procedures (Karlsen and Larrea, 2014a). ARTD proposed complexity, and thus conflict between policymakers and action researchers, was a natural situation. Having conflict at the core of the framework made some policymakers feel uncomfortable. They thought the conflict meant that something was not working properly in the project. But slowly, through the continuous use of the framework as our road map for the process, complexity and conflict were accepted as the natural state in our relationship and the departure point for dialogue and agreement for action. This shared understanding helped policymakers accept that our critical perspectives were a natural input into the process and thus generated conditions for the development of *soft resistance*.

Finally, Greenwood and Levin's (2007) framework did not address in an explicit way that the continued process of solving problems together generated a collective capability that was a strategic feature for territorial development. In our case, we felt that this collective capability was more relevant in the process than the specific solutions we constructed. We thus proposed the development of *collective knowing* as the main aim of ARTD and defined collective knowing as a capability, a learned pattern of collective action, where the actors systematically modify their actions over time through a dialogue and learning process. Collective knowing can only develop over time among actors who regularly meet and interact. It is a capability for knowledge in action, the capability of stakeholders and researchers to solve the problems of the territory together. We consider collective knowing as a basic condition for the institutionalisation of ARTD and thus *soft resistance*, as what is institutionalised are not the specific solutions but the mechanisms to construct such solutions together, namely, collective knowing. That is why we argue that the institutionalisation of AR occurs through collective knowing and, more specifically, through the integration of some features of AR – *soft resistance* among them – as intrinsic parts of the new governance that accompanies collective knowing.

Soft resistance

We had not systematically reflected on the interaction of the relational and the critical dimensions in ARTD until we started the writing process for this chapter. Still, we have found this relationship to be deeply embedded in our concepts and practice. We also

think that one of the GS policymakers had already named it when, in an interview with a PhD student, he described our work as 'soft but continuous resistance'. These words served as inspiration for us to reflect on the relational and critical dynamic and to name such a dynamic *soft resistance*. As are the rest of concepts in this approach, *soft resistance* is not proposed as a normative concept but as part of 'how we do' ARTD.

We understand *soft resistance* as the mutually reinforcing relationship between the critical and the relational roles of researchers and practitioners in ARTD that can institutionalise new modes of governance among territorial actors. Soft resistance is conflict-based and agreement-oriented. The aim of having the mutual reinforcement of the critical and the relational dimensions does not mean there is no recognition of differences in policymakers' and researchers' frameworks. Conflict is understood as the natural state in this relationship. Still, the case shows that when there is a will to agree and act to improve the territory, the critical and the relational dimensions can reinforce each other and do not necessarily need to be interpreted as a dichotomy in AR.

Soft resistance has two main features. The first is that it is a dynamic concept. The dynamics of *soft resistance* have to do with stages in which the relational role generates a buffer of trust and the conditions to be critical without disrupting the process. When the moment to be critical comes, pressure is exercised by researchers in order to generate change. Policymakers accept this pressure because of the buffer of trust. But if pressure is exercised honestly and for the sake of shared interests, the critical role of researchers can also strengthen the buffer of trust in the medium- to long-term. This sequence generates in time the conditions to produce and institutionalise change.

The second feature of *soft resistance* is its steadfast focus on one of the cornerstones of AR: action. This focus is inspired, on the one hand, by the will of participants (researchers and practitioners) to prioritise territorial development beyond particular positions and, on the other hand, by the understanding that agreement is necessary in order to act. In ARTD, researchers and practitioners assume that they have different positions, but they also assume dialogue is a negotiation process in which they will give up some of their positions in order to reach action. We consider that this feature is what explains the longevity of the project presented in the chapter and, most relevant of all, its capability to reach the stadium of institutionalisation.

ARTD and *soft resistance* are frameworks developed in contexts in which change has been worked within the system without radically challenging it but pushing it to slowly transform. They do not focus only on *what it is* or *what it should be* but on *what it can be* (Avelino and Grin, 2017). When proposing his pedagogy of the oppressed, Paulo Freire (1996, 2008a, 2008b) argued that the oppressed cannot initiate the process of liberating themselves nor helping others in their liberation until they recognise that the oppressor is partly inside them. Inspired by him, we approach change processes by considering that although many of us work to change the system, the system is also inside us and it is important to be aware of that. *Soft resistance* has more to do with generating this awareness in those in power than generating external pressure on them to change. But researchers can also be powerful and influential in change processes. This means that *soft resistance* requires that researchers have in mind that they must change their research approach and their role in change processes in order to change the system.

Soft resistance in Gipuzkoa Sarean (GS)

Gipuzkoa Sarean (GS) is an action research project in which both authors have participated since 2009: one as research coordinator, the other in a technical facilitation role until 2016. The project has been extensively documented by meeting minutes and research diaries, which constitute the main data source. Different lessons from this experience have been presented in several publications (e.g. Estensoro and Larrea, 2016; Karlsen and Larrea, 2014a, 2014b, 2017).

This section focuses on the dynamic between the critical and the relational dimensions in GS. First, an introduction to the case is presented in order to briefly explain the project's substantive change within the context in which it has been developed. Then, in order to illustrate how we practise *soft resistance* in ARTD and reflect on its features in connection with the guiding framework presented in the introduction of this book, we focus on three lessons that represent three episodes within different periods of the project. These episodes do not explain the whole history, neither do they constitute one linear story. They are loose episodes that aim to help understand relevant features and results of *soft resistance* as we practise it.

Introduction to the case: Context, aim and main results

GS was launched by the provincial government of Gipuzkoa in 2009. Its focus has been to develop new patterns of relationship with territorial actors in order to have more democratic and efficient policy processes for territorial development. In a nutshell, GS aims at fostering a new governance model for territorial development.

In administrative and political terms, the Basque Country has a regional government, three provincial governments and municipal councils. In the 1980s, most of the municipalities created county-level economic development agencies. Counties are supra-municipal territorial levels with no political representation, comprising several municipalities. Local economic promotion is made through county development agencies (11 in Gipuzkoa) that work on the application of programmes from other government scales and also articulate county-level projects and offer services to small firms and entrepreneurs.

Governance prior to GS. Prior to the action research process, the council and the 11 county agencies defined and developed their own strategies. Coordination among them was made only through one-to-one informal communication. The council did not formally involve counties in their policy definition processes.

Governance after GS. As a result of the action research process, in 2013 GS created new governance mechanisms through building collaborative spaces between the council and the county development agencies in order to foster more aligned territorial development processes and policies. Two of the mechanisms include the core dialogue spaces constructed through co-generation processes between researchers and policymakers working together to design, create and later manage the spaces. The InterCounty Table (ICT) is the space where policymakers of the council meet on a two-monthly basis with political representatives (mayors of municipalities) and directors of county agencies to decide and agree upon joint strategies. The county facilitators' action research process is the capacity-building space for technical staff of county agencies, currently focused on the creation of capacities for developing policies for Industry 4.0 (a strategy to use digitalisation to modernise industry) and coordinate actions linked to economic development programmes.

These spaces have been key in terms of changing governance and creating stronger relationships among local- and provincial-level policymakers, eventually leading to the empowerment of local economic actors, which now have a formal place in provincial economic development policies. They have also produced more concrete changes, such as the adaptation of some governmental programmes. The collaboration framework between local and provincial policymakers was institutionalised in 2017 with a formal agreement that defines the spaces and procedures of the collaboration. The details of such an agreement are explained later in the chapter. This can be considered the main result of GS as it institutionalises a new governance (procedures and spaces) for territorial development in the province.

The need for building the relational base for practising soft resistance

Our first lesson learned when reflecting on our experience is that in order to generate the context for *soft resistance,* it is necessary to build a relational base on which to develop such a relational-critical dynamic.

In order to illustrate this lesson, we focus on the initial stage of the project in 2009–2010. In the initial months of the project, the main conflict (and later agreement) between policymakers and researchers was the research approach of the project. Building a trust relationship was necessary for us to negotiate the approach and to empower and legitimise ourselves to play a critical role.

GS was launched with the aim of strengthening social capital to improve competitiveness and well-being. The policymaker who launched the project was a university researcher on leave to undertake his political role. Although he had a real desire to make policy-relevant research, he defined a traditional linear research process in which he planned to interact with territorial actors in order to gather data and later share the results. We had a different approach based on AR: we wanted to build the solutions to problems based on dialogue with territorial actors. However, due to the imbalance of status between policymakers and researchers, the interpretation of the research methodology by policymakers prevailed.

Despite the differing visions, the team from Orkestra was committed to the process and performed the tasks assigned in the traditional design research process. This was our way to offer *soft resistance*. We knew that in order to develop AR in the long-term

(*resistance*), we needed to be part of the team that implemented the policymaker's vision in the short-term (*soft*).

This way, at certain moments we were able to solve some problems that were relevant process-wise. For example, the project director decided to produce four workshops (with approximately 70 territorial actors) to share the results of secondary data and interview analysis conducted about social capital. We helped him with the operational issues of organising the events (invitations, presentations, lists of participants), and this created the context to share with him some critical perspectives based on AR principles. One perspective was that instead of using the workshops only to present research results, they could also be used to reflect on future challenges and further define the actions to be implemented, using the analysis only as a means to start that discussion. This contribution was incorporated into the design of the workshops.

Our commitment to the process despite the differing views and our initial constructive critical contributions created trust between policymakers and our team. As a consequence, some months after the project had begun, one of the action researchers (one of the authors) was designated the research director of the project, which up to this point had been the exclusive responsibility of the policymakers. Through *soft resistance* we had changed the distribution of power and generated the conditions for us to be more openly critical about the research approach and push action research forward in the process.

One example of how action research started to emerge in this project is that policymakers started to regularly meet with researchers not to distribute work but to design the process together. This was a substantial change in the relationship and included, for instance, a discussion on the legitimacy of policymakers, researchers and participants in the workshops to influence the process. This specific discussion on legitimacy created a positive context in which to be mutually critical: researchers to policymakers and policymakers to researchers.

In sum, through probing effectiveness in problem-solving in the existing research framework, we could generate the conditions in which to be critical about such a framework and start changing it.

Contesting engrained habits in practice

The second lesson is that contestation when developing the critical dimension must focus not only on ideological or political discourses but also on concrete practices in which engrained habits emerge. This section shows that although a government may have a critical stance in ideological terms, it is the way in which these are implemented in practice that defines how the critical stance transforms policymaking. The role of action researchers was to make incoherencies evident and generate pressure to be coherent in actions that might seem small but in the long-term made a difference.

In order to elaborate on this discussion, we use the period between June and December 2013 in which the process with county development technical staff was launched.

The coalition governing at the time (different from the one that launched the project) was leftist, with a critical stance toward traditional power structures. In the previous two years, policymakers and researchers had worked a proposal for a new governance model for territorial development that was based on AR principles: dialogue, participation and research. The alignment of the research approach with some of the new government's principles, among others, contributed to build the relational base with the political team. But although there was an overall agreement on the governance model defined and how to methodologically develop it, several conflicts emerged when making concrete decisions on how to put it into practice. One such conflict occurred between June and September 2013.

We had explicitly discussed that governance spaces to be created with county agencies should not only include directors and political representatives but also the technical staff, since this staff facilitates economic promotion in their counties as their daily practice. When the (newly entered) policymaker in charge of the implementation of the process made a first design of the governance model, he included an initial design for a 'training programme' for county development technical staff. The policymaker had a coherent discourse on new governance and participation; still, possibly because of his own training and background, he had conceived of the training process in a linear way, consisting of a series of lectures from experts on territorial strategies, development and participatory methodologies. This design was more connected to what Freire (1996) defined as banking approaches (depositing knowledge on those who don't have it) than a problem-posing approach (initiating the process based on what students know and the

problems they meet). This was not aligned with the philosophy of the governance model that we had discussed; moreover, the design gave a passive role to technical staff..

We made explicit this contradiction from the first day (*resistance*), and we had several discussions at the theoretical and methodological level about it. Among others, we discussed Freire's work and its alignment with the government's proposal: the principles of action research and dialogue. But the discussion at this theoretical level did not change the design of the training process made by the policymaker.

However, the policymaker had to meet a tight schedule to start the training process and asked our team to help him develop it. We accepted even though we had disagreed with his design (*soft*). But we also told him that our contribution would follow our AR principles (*resistance*). He accepted because he needed us and because he trusted on us.

Now we had our space to be critical not in discourse but through a myriad of practical issues: who would participate, what concepts would be presented and discussed, how discussions would be generated, how results from the discussions would be taken to other spaces and so on. Unlike with the theoretical discussion, the policymaker accepted our concrete proposals and let us implement them in workshops, in which he also participated.

The first four-hour sessions took place between 3 October 2013 and 14 November 2013. The group was formed by two staff members from each county agency (22 in total), the policymaker of the council in charge, and our team (the two authors). We discussed with the participants the building blocks of the territorial development and governance approach of the new government: inclusive and participatory territorial development, paradigm change and social innovation, and innovative governance models. Besides discussing and reflecting on ideas, staff from agencies discussed the proposal of the council for a new governance and we designed the sessions so the participants could jointly elaborate on: 1) concrete proposals to develop a participatory governance in our province and 2) a critical document about the government's model and the process we were developing.

On 5 December 2013, we organised a special feedback session to which policymakers from the council were invited. Five policymakers (politicians and civil servants) took part besides the policymaker in charge of the process. Technical staff of county agencies

made presentations about the specific realities of each county. They also presented the proposal on 'things to be done', which they had worked on in previous sessions. This proposal included ideas such as the need to work on the political commitment to county development, the need to define the roles of different actors in territorial development and the need to improve communication patterns. Finally, they also shared their critical view of the project and the model proposed by the government. The document and presentation – literally named 'a critical view' – posed questions such as: 'Are you/we really promoting a holistic development model or are we just focused on economic development? Why haven't we been included in the initial design of the process if the governance model is supposed to be participatory? We are asked to have a shared project in our counties, but is the model you propose a shared project in the council or is it just a project of one political party?'

The participants and policymakers had a deep and honest dialogue around these questions. This was not a usual practice for anyone. Staff from development agencies used to fill out (anonymously) an evaluation sheet after every session, and the one from that day includes comments such as the following:

> Without any doubt, [what I most liked from the session is] the participation of the members of the government. We should value a lot that they have sat down with us "face to face". It has been very useful for us to talk with them about all these issues. We should value a lot the humbleness that they have shown and the way they have reacted to our contributions and to our critiques.
>
> It is clear that we are facing a new governance model. If all politicians would have an attitude like that….

Likewise, policymakers from the council recognised that the session had 'helped us have a map of the territory', that they 'realized that there is a lot of strength in counties', that 'we have seen diversity and that enriches the process' and that 'we are building the government together' (words of different policymakers, taken from the meeting minutes). The policymaker in charge of the process was of course very satisfied with the session and its results.

Moreover, the work developed in those first sessions had a real impact on the project. The proposal made by participants on 'things to be done' served as the base for defining

and launching some months later 11 specific projects for experimenting a new governance model in each of the counties, with the involvement of technical staff, politicians and directors of county agencies.

The training space continued discussing other relevant issues of the process and after one year transformed explicitly into an AR process. When we initially offered resistance to the policymaker's design, we were ineffective in terms of generating any change. Still, we had a soft attitude by getting involved in the development of his idea and started to offer our resistance in apparently less relevant practical issues. In a few months, the process was completely transformed, becoming a dialogical process that impacted the new governance mode in ways that we could not have imagined when we initially resisted its design. The training process was created through *soft resistance,* and it later became itself a space for *soft resistance*.

Soft resistance and the institutionalisation of AR

Our third lesson is that *soft resistance*, and thus AR, can lead to the institutionalisation of more productive critical-relational dynamics in territorial governance. In the early stages of the AR process, we needed to play a proactive role to keep the process moving by engaging in *soft resistance,* but over the years, the need for such hands-on facilitation was reduced as we co-generated collective knowing and new rules of the game that made it possible for participants to express criticism and strengthen relationships. In line with our ARTD framework, the participants recognised that territorial development is a cyclical process of conflict and agreement and were empowered to accept, explicate and manage conflict. In this section, we will show how ARTD became institutionalised first in *experimental* practices and relationships of *soft resistance* and second in *formal* agreements and structures among the stakeholders.

We present two key episodes to illustrate this lesson. The first one (March and April 2017) illustrates how *experimental* practices and relationships of *soft resistance* became institutionalised in the AR process. The second (June 2017 on) shows how the AR process institutionalised to become a new mode of territorial governance.

Institutionalisation of soft resistance

At the beginning of March 2017, the research team facilitated a workshop with staff from development agencies and representatives of the council in order to agree on how

to improve their programmes to support internationalisation of small firms. One of the main issues at stake was a programme in which the chamber of commerce, the council and the agencies had previously collaborated but the council had stopped even though the agencies had a very positive evaluation. The proposal from the agencies was to resume this collaborative framework, and in order to orient reflection to action, a representative of the chamber of commerce was invited.

When introducing the workshop, one of us shared the news that the policymakers in charge of innovation programmes in the provincial council had positively reacted to a proposal to develop part of its Industry 4.0 programme through an experimental process of AR together with county agencies. Although we felt this to be good news, the following is what one of us wrote in her research diary that day:

> […] I looked at them [facilitators from agencies] and realised some of them couldn't even keep eye contact. They looked down, none of them seemed happy about the news. […] when we stopped for the coffee break, I approached a group and […] asked them directly if there was anything wrong. They immediately started talking about a program of the provincial council they were implementing. […] they saw a huge inconsistency between the discourse in the [AR] workshops and the "real relationship between them and the council"
>
> (Research diary, 9-3-2017)

In response, we engaged in *soft resistance* to further make conflict explicit. We proposed to use the workshop evaluation system to gather information about this inconsistency and invited the facilitators to constructively suggest what could be improved in the programmes. We would then take this feedback to the next meeting with policymakers in the council, who are in charge of the programmes and would analyse the evaluations from the workshops. They agreed even though, as we gathered from informal conversations later, some of them felt anxious about the potentially negative consequences of voicing their critiques for us. Comments from participants included:

> I think that, although our role is agreed on paper, we are being nullified in practice
>
> I feel frustrated. On the one hand we want to believe in the process […] but the day to day attitudes are demotivating, as if nothing could be changed

Many participants consider the provincial council the powerful actor compared with the county development agencies collaborating because the council decides on the funding that the agencies depend on to operate. The agency staff in charge of developing the collaboration programmes actually have limited space to directly discuss, and thus be critical of, these power structures.

While previously there were no mechanisms for constructively channelling such criticism, the new governance framework enabled the staff to have their voices heard. When we presented their feedback at the next regular meeting with policymakers of the council, the policymaker most directly involved in the programme immediately accepted part of the critique: 'our discourse is not paced with practice, the self-critique is that we need to adjust discourse and expectations' (Meeting notes, 14-03-2017). Yet, he also shared his own interpretation of the process: 'this is their truth, but it is not the truth' (ibidem). This response was echoed two days later at a regular meeting of the InterCounty Table (ICT), where policymakers of the council and the action researchers met the presidents and managers of the agencies. One of the agency directors commented:

> What they [staff] presented were subjective experiences, they are legitimate, but we must not confuse them with the position of the agencies. This does not mean they are not important.
>
> Maybe we have not acted properly in order to help the staff understand the context.
>
> (Research notes, ICT meeting, 16-03-2017)

A couple weeks later, the stance of the staff had undergone a remarkable transformation. During a monthly workshop involving us, agency staff and council members, one of us wrote the following:

> In the coffee break I approached a group again. I did not mention the incident […] but they started to talk about it. This time all comments were positive […] and one of them thought their critique had had a positive effect [in how the project was developing].
>
> (Research diary, 06-03-2017)

The change in the staff's stance probably had to do with their reflections on how *soft resistance* enabled them to constructively use their voice in the new governance model. After being critical with the programme, some of them expressed their worry, which we

interpret to be linked to their fear of lacking the relational buffer for their critical stance. The relational base developed by others, such as the action researchers and directors and presidents of the agencies, helped the council to constructively integrate the critical perspective in their decisions. Hence, engaging in *soft resistance* helped to generate change without disrupting the process.

We argue that *soft resistance* was institutionalised because the use of the facilitators' AR process as a space for dialogue with asymmetric power was ingrained in the participants' habits and the less powerful actors, the agency facilitators, were empowered to speak their voice in these spaces. Still, what was institutionalised at this stage of the process was *soft resistance* as 'the way we do ARTD'. What we share in the next episode is how ARTD was institutionalised as 'the way we do territorial development policy'.

Institutionalisation of ARTD

The second episode took place 2 June 2017, when the new governance framework was institutionalised in a formal ceremony, presided by the prime minister of Gipuzkoa and with the participation of the 11 presidents (mayors) of the county development agencies. They signed a formal agreement that transformed the dialogue spaces created in the AR process into what was named the new governance mode for territorial development. AR was given formal recognition as the method to construct the new governance because, besides an invited external keynote speaker, the coordinator of the AR team (one of the authors) was the only additional person invited to sit at the table where the agreement was signed. She was, together with one of the policymakers, the only one who had been part of the process since 2009. Policymakers expressed gratitude for Orkestra's role:

> The signature today is the result of a long process of years in the ICT […]. At the starting point there was scepticism with the process. […] with the help of Orkestra we developed a process where we developed trust and tested our patience. The process has given good results. […] Today we formalize it.
>
> (Director of Management of the Strategy of the Provincial Council, 2-6-2017)

The agreement commits all participants to a yearly cycle in which AR is integrated. An ICT meeting in July will set the priorities for collaboration between the council and the agencies. From July to December, the council will work on including these priorities in

the budget. Once the budget is approved in December, ICT meetings will co-generate programmes that respond to shared goals and workshops of the facilitators will co-generate the conceptual frameworks and technical tools to make these programmes effective. A new ICT meeting will evaluate the one-year cycle and initiate a new one, reinforcing the goals already established or establishing new ones.

This process is already being implemented, and the main goals agreed upon in July 2017 relate to connecting the Basque Government to participate in these procedures, develop Industry 4.0. and coordinate economic promotion programmes.

Closing reflections

Throughout the chapter, we have introduced and discussed *soft resistance*, the concept that describes the critical-relational dynamic within the co-generation process between policymakers and researchers in ARTD.

ARTD is a hands-on research strategy to create collective knowing and foster more participatory and inclusive territorial development governance modes. In ARTD, as action researchers, we feel that territorial problems are also ours; hence, we don't think that we help policymakers solve *their* problems but that we are solving *our* problems together. We do so in 'the "mud" of policy practice' (Hajer and Wagenaar, 2003: 19): dialogue arenas in ARTD occur in hybrid spaces where not only research is developed but also policies are enacted. Entering such spaces involves having to adapt the research practice to the constraints of the world of policymaking: we take the world as 'it is', and soft resistance is exercised in such a world, with all its opportunities, limitations and contradictions.

Soft resistance is conflict-based and agreement-oriented. Conflict is the natural state of processes for ARTD, and we do not only acknowledge it but also actively manage it (Karlsen and Larrea, 2014a). However, soft resistance also relies on the idea that we need agreements in order to act and that it is possible to reach enough agreement between policymakers and researchers and among the several territorial actors despite our differing views.

The starting point of AR processes, as described in the guiding framework of the introduction of the book, is highly situational and dependent on the contexts it is

developed. In our case, we have learned that it was necessary to first build a relational base between policymakers and researchers on which to develop the critical-relational dynamic. Only through that base did we negotiate the methodological approach of the project, gain space and recognition for action research in a project that initially had a traditional linear research approach and place ourselves in a position to play a more critical role.

As also pointed out in the guiding framework of the book, AR needs to simultaneously engage with and challenge status quo. Through *soft resistance,* the critical stance does not only focus on programmatic ideas or general discourses but especially on concrete decisions and actions that materialise them. In our experience, it is in those micro-practices where engrained habits emerge and need to be challenged through continuous reflection. It is also in concrete practices that power imbalances occur and where learning that may affect practice can be co-generated: concrete micro-actions and decisions may be decisive factors in the ways policymaking and governance is developed in a territory.

Lastly, we have discussed that the critical and the relational dimensions get embedded within the system once AR and, more specifically, *soft resistance* have been institutionalised as part of a new governance mode. In GS, not only the collaboration spaces have been formally institutionalised through an agreement between the provincial council and county agencies but also the relational-critical way of engaging in soft resistance has been institutionalised as part of the governance mode of these spaces. Consequently, process outcomes and impacts, following the editor's framework, are the main changes achieved by *soft resistance* in ARTD.

To conclude, we use this final section to respond to the invitation of the editors of the book to share reflections for anyone that would like to take up our approach to engage in *soft resistance.* Throughout the chapter, we have described why and how we practise it, but we cannot offer a how-to guide: *soft resistance* is praxis, and praxis occurs differently in every context. However, we do have a recommendation for those wanting to experiment with it: go into practice and develop your own way. It won't be easy. It is much easier to be critical in academic work than it is being critical in real-world practice. But knowledge co-generation and change do not occur on paper, they only take place through action. In your process, what we conceptualised as *soft resistance* will

transform into something else, a new concept that will better suit your context. But if our concept inspired you to act, its mission will be accomplished. That’s the way we believe we can better contribute to change.

3.5. Furthering the contributions of multi-actor collaboration: Article 3

Besides the role of research in territorial development policymaking, this thesis also aims to advance knowledge of territorial development governance, placing special focus on multi-actor collaboration in policymaking. The theoretical chapter has set the frame for the need for multi-actor collaboration as a means of fostering learning, joint problem solving and collective capacity building for policymaking. The article presented next further examines the impacts of multi-actor collaboration, analysing how it has produced policy innovation and contributed to wider public innovation in the case of Bizkaia Orekan.

Public innovation through governance in place-based competitiveness policymaking

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Abstract

The purpose of this paper is to explore the link between collaborative governance arrangements for place-based competitiveness and public innovation. The paper is based on a case study analysis of a policy process that aims at adapting policy to respond to local competitiveness challenges in the Basque province of Biscay. Analysis of the case finds that multi-actor collaboration for competitiveness policymaking has led to policy innovation. This has promoted emerging changes that could be conducive to a more innovative public sector. These findings validate arguments posed by proponents of collaborative innovation that suggest that multi-actor collaboration is a driver for public sector innovation.

Keywords: Public innovation, policy innovation, collaborative innovation, governance, place-based policy, competitiveness

Introduction

Public innovation has become a growing concern for governments across the world. While in the 1990s the public sector was mainly seen as a promoter of private innovation, today there are many factors putting pressure on governments themselves to become more innovative. These include technological developments changing the relationship with citizens, more informed and demanding citizenship, a reduction in public resources, and a more complex local-global society with growing presence of complex problems (Ansell & Torfing, 2014; Bason, 2011; Sørensen & Torfing, 2011; Torfing & Triantafillou, 2016). In this context, the message seems to be clear: these changes call for public organisations able to do more with less; organisations that provide innovative solutions and better services, while increasing transparency, accountability and legitimacy.

Supra-national initiatives such as the European Public Sector Innovation Scoreboard and the OECD Observatory for Public Innovation, along with a range of policy

documents (e.g. European Comission, 2013; OECD, 2015), have been developed with the aim of helping governments in their efforts to foster public sector innovation. The phenomenon has also received significant attention in the governance and public administration literature (De Vries, Bekkers, & Tummers, 2016).

The regional development and competitiveness policy communities are also not completely alien to this concern, although few studies can be found that address the issue explicitly (Morgan, 2016b). Yet frameworks used to design interventions impacting regional competitiveness – for example smart specialisation strategies – are putting new demands on the public sector. Indeed, the roles played by regional governments in regional development strategies is receiving growing attention, where governance capabilities are increasingly viewed as a key element for successfully developing systemic policies and strategies (Karo & Kattel, 2014; Ketels, 2017; Morgan, 2013, 2016b; Radošević, 2017).

In effect, traditional top-down and departmentalised governance and administration modes do not seem to fit with systemic competitiveness rationales that require both internal coordination and external engagement with the multiple private and public actors that shape the competitiveness of territories. In this context, public sector innovation is seen as the means to build *smart public administrations* (Morgan, 2016b, p. 52) that better fit new place-based development policy rationales.

This article builds on previous work suggesting that new approaches in regional development and competitiveness require a more innovative public sector. It seeks to examine this proposition from another perspective: the potential of precisely those very same approaches as a source of innovation. Building on theoretical advancements around collaborative innovation and using a case study of a collaborative policy experience in the province of Biscay, Basque Country, the paper explores the idea that governance arrangements that emerge with the aim of improving competitiveness policies do not only constitute an innovation in themselves but *can also be a means of leveraging an innovative public sector more generally*. The research question that the article addresses is: what is the potential of collaborative policymaking in place-based competitiveness to foster public sector innovation?

The paper is structured as follows. The next section sets the contexts of public sector

innovation in competitiveness policies. The third section introduces what public sector innovation is and analyses proposals for multi-actor collaboration as means to promote public innovation. This conceptual discussion is applied to the analysis of the case in the fourth section, and the article closes with a brief summary and final reflections.

Public sector innovation for competitiveness policymaking

Since Porter (1990) applied the concept of competitiveness to territories, the competitiveness narrative and its underlying systemic logic has strongly influenced regional development policy (Aranguren, Magro, & Wilson, 2017). Influenced also by other systemic frameworks such as Regional Innovation Systems (Cooke, 1998), a dominant regional policy discourse has emerged that combine place consciousness with a focus on a wide range of place-specific elements that affect the economic development of territories (Ketels, 2017; McCann & Ortega-Argilés, 2017).

Regional development policies are no longer focused only on state aid and infrastructure development but have broadened their scope in order to exploit endogenous factors in growth oriented models (OECD, 2010; Pike, Rodríguez-Pose, & Tomaney, 2017). Indeed, it is widely acknowledged that competitiveness is affected by a range of different factors and policy fields (Aranguren & Wilson, 2014; Ferreira & Ratten, 2018), which has led to the development of large regional economic development policy portfolios that include instruments focused on both harder (e.g. infrastructure, R&D) and softer (e.g. collaboration, social capital) elements of the business environment. These instruments cover a wide range of areas such as internationalization, innovation, finance, skills, infrastructure and cluster development (Ketels, 2017). Further, regional development instruments and actors interact with those from national and sub-regional scales, turning regions in complex policy spaces (Uyarra & Flanagan, 2010).

More traditional, linear forms of designing and implementing territorial development strategies and competitiveness policies are thus fast becoming obsolete in the complex, multi-agent contexts in which contemporary regional development processes are rooted (Aranguren et al., 2017a; Karlsen, 2010; Valdaliso & Wilson, 2015). This context calls for policy interventions to be coordinated across policy fields, public and private organisations and governance scales (Aranguren et al., 2017a). In particular, place-based approaches to innovation and competitiveness advocate the development of

context-sensitive and systemic policies, which suggests that new forms of governance should play key roles in generating spaces for learning and addressing policies in systemic ways, in mobilizing local knowledge, and in ensuring the engagement of local actors for designing and implementing those policies (Aranguren et al., 2017a; Barca et al., 2012; Gertler, 2003; Laranja, 2012; Pike et al., 2017; Tödtling and Trippl, 2005). Hence place-based approaches put special demands of regional governments as they require roles, capacities and governance modes that are different from traditional models (Ketels, 2017, Morgan, 2016b).

The demands on governments and the public administration have increased even more with the latest policy frameworks that guide regional development strategies. In particular, regional governments across Europe and around the world are experimenting with new ways of making policy decisions in the framework of so-called 'modern industrial policies' that bridge the traditional public-private divide (Crespi, Arias, & Stein, 2014; Lin & Monga, 2017; Rodrik, 2004; Wade, 2012; Warwick, 2014). Specially influential in the European context, smart specialisation strategies (RIS3) have a central place in regional development policy agendas since they were established as a prerequisite for accessing European Cohesion Policy funds (Foray, 2014). RIS3 proposes regions to focus their industrial and technological development on a selection of knowledge-based investments based on their strengths and assets (Foray & Goenaga, 2013). The RIS3 is innovative in that it implies selecting priorities, but more importantly because it proposes to base this selection on *entrepreneurial discovery processes* (Aranguren et al., 2017a; Foray & Goenaga, 2013). These *entrepreneurial discovery processes* (EDP) (Foray, 2016) imply that the private sector, universities, technology centres, etc. should be involved in the process of identifying and exploring new activities alongside government.

The development of RIS3 has been problematic in many regions, which has increased awareness around the relevance of the institutional and governance capacities of regions in developing this type of experimental, bottom-up and network-based policy approach (Estensoro & Larrea, 2016; Morgan, 2016b; Radošević, 2017). The RIS3 approach demands that governments develop inclusive forms of governance, implying collaborative approaches for searching for economic opportunities (Morgan, 2016b). Following Morgan (2016b), such types of governance require governments that have the capacity for external engagement with many actors, which at the same time, requires

distinct internal capabilities. These include the capacity to orchestrate policies among diverse departments, the capacity to have feedback mechanisms, time and resources for organisational learning, and the capacity to tolerate failure and learn from it.

The requirements of systemic and bottom-up approaches do not fit well with the rigid institutional arrangements of the typical public administration (Edler, Kuhlmann, & Smits, 2003; Morgan, 2016b). Governments are usually organized in silos that tend to divide problems and they are based on rational decision-making processes and a fragmented implementation that hinders systemic approaches (Brugué, Canal, & Paya, 2015; Head & Alford, 2015). Furthermore, the very nature of a public sector that builds on classical bureaucratic principles fosters stability and leaves little room for flexibility and experimentation (Bason, 2011; Brugué et al., 2014).

Changes in the public sector, or otherwise said, public innovation is thus a necessary requirement not only for a public sector that is more democratic, efficient, legitimate or adapted to the complex nature of current policy problems as governance scholars and international bodies argue, but also to be able to lead regional development and competitiveness from a systemic and holistic view. Following Morgan (2016b) it can even be considered a critical determinant on the success or failure of fostering experimental processes, such as an EDP. However, rather than seeing it as an ex-ante condition for successful implementation of new competitiveness and regional development policies, this article explores the idea of seeing both phenomena as interactive and evolving. Could new governance arrangements for place-based competitiveness policymaking constitute in itself a driver for fostering a more innovative public sector?

Collaborative innovation: multi-actor collaboration as a means of fostering public innovation

Public innovation has been subject to considerably less theorising and analysis than private innovation (Halvorsen et al, 2005; Hartley et al., 2013). Thus, there is some ambiguity in the literature and practice about what exactly constitutes an innovation in the public sector (Considine, Lewis, & Alexander, 2009; De Vries et al., 2016). However, it can generally be defined as ‘a new or significantly altered process or approach that is novel, that has been implemented in some form, and that is intended to deliver better public outcomes by achieving increased efficiency, effectiveness, and

citizen, user or employee satisfaction' (OECD Observatory of Public Sector Innovation[9]).

Public innovation differs from private innovation in that it is always context-specific and aims at generating public value. This can be achieved through different means, such as: developing more meaningful services; improving efficiency and effectiveness of public organizations; and enhancing democratization through participation, accountability and transparency (European Comission, 2013; OECD, 2015; E. Sørensen & Torfing, 2011; Torfing & Triantafillou, 2016). However, like private innovation, public innovation can include different types of changes, which are usually interrelated (De Vries et al., 2016; European Comission, 2013; Halvorsen et al., 2005; Hartley, 2005; E. Sørensen & Torfing, 2011; Walker, 2008). Innovation can refer to new practices that improve the quality and efficiency of internal administrative and technological processes (process innovation), the services and products offered (service/product innovation) or the ways of approaching problems and relationships with external actors and citizens (governance innovation). It can also refer to the introduction of frameworks that enable new ways of understanding problems (rhetorical innovation) and to changes in policies (policy innovation).

But what leads public institutions to break with past practices of whichever nature and innovate? Whereas in the private sector innovation is mainly driven by market logics, public innovation respond to other rationales, such as political and electoral reasons, new demands on service users, technological development and internal frustration with existing systems or practices (Halvorsen et al., 2005). Following Brugue et al (2014) a distinction can be made between drivers of innovation – the factors that activate the innovative potential – and innovation environments – the contexts that facilitate innovations. Innovation drivers can be of diverse nature and come from different sources: from institutions which are distant to concrete daily practices, such as the academia or other scales of public institutions (higher drivers); from experiences of similar administrations (lateral drivers); from within the organization itself (internal drivers) and from agents outside the institution, stakeholders and citizens (external drivers).

[9] https://www.oecd.org/governance/observatory-public-sector-innovation/library/DEFINITION%20OF%20TERMS.pdf

Recently, a strong line of research has been developed that argues that the external driver of innovation, that is, the innovative potential of external collaboration, is currently under-explored and thus public institutions need to open their doors to take better advantage of it (Agger & Sørensen, 2014; Ansell & Torfing, 2014; Brugué et al., 2014). In particular, proponents of collaborative approaches to innovation advocate that network-based governance approaches and multi-actor collaboration can be a means not only to increase efficiency and improve democratic practice, but also to foster public innovation (Hartley et al., 2013; E. Sørensen & Torfing, 2011; Torfing, 2018).

Indeed, governance and innovation can be said to have a bilateral relationship, as argued by Torfing & Triantafillou (2016). The governance mode of an administration conditions the type of innovation, but at the same time, public innovation can transform governance. In this sense, research has already shown that governance innovation can create the conditions under which other types of public innovation emerge, including policy innovation (Moore & Hartley, 2008). Specifically, the importance of collaboration for innovation has been widely demonstrated (E. Sørensen & Torfing, 2011). Empirical evidence shows that multi-actor engagement can lead to new ways of seeing and framing problems, of thinking and agreeing on solutions, of coordinating actions, and of creating a sense of ownership that facilitates the implementation of innovation and generates public value (Agger & Sørensen, 2014; Ansell & Torfing, 2014; Hartley et al., 2013; Head & Alford, 2015; Roberts, 2000).

Ansell and Torfing (2014) reduce the links between collaboration and innovation to three main *generative mechanisms*: learning, synergy, and commitment. Learning occurs as the product of intense interactions among people with different knowledge and visions, leading to new ideas or to reframing old ones. Synergy refers to the process of joining capacities and resources to carry out innovative actions. Lastly, collaboration can generate commitment and a sense of ownership among actors that enables consensus-building and support for the implementation of innovative solutions.

Following Sørensen and Waldorff (2014) it can also be argued that collaborative arenas may lead to policy innovation. Yet, for such innovations to occur, new visions and problem-solving strategies produced in collaborative spaces need to be diffused in regular policy-making domains. The role of boundary-spanners becomes critical in such an endeavour. More concretely, Sørensen and Waldorff (2014) argue that politicians

that take part in collaborative arenas need to play the role of 'transmission bands' or 'advocates' so that innovation reaches regular policy agendas.

The next section explores these propositions in a policy experience developed in the province of Biscay, the Basque Country (Spain), with the aim to explore the public innovation potential of the network governance arrangements that are emerging in context-based competitiveness policymaking processes.

Fostering public innovation through place-based competitiveness policymaking: the case of Bizkaia Orekan

Introducing the case

With 1.1 million inhabitants, Biscay is one of the three provinces of the Basque Autonomous Community (Basque Country) in Spain. The Basque Country is administratively divided in three levels: regional, provincial and municipal. The regional government has autonomy in most policy areas, including the definition of industrial and innovation policies. Provincial governments (councils) are the tax-collecting authorities and also have relatively strong autonomy in a range of policy areas, including competitiveness policies. Municipalities carry out economic promotion activities through their municipal or county-level development agencies. Counties are supra-municipal and infra-provincial territorial levels with no political or administrative representation. However, they have relevance in the economic development field because between 1980 and 2000 period several municipalities created county-level economic development agencies in order to tackle economic and employment-related problems.

The Provincial Council of Biscay (the Government) has an Economic and Territorial Development Department (the Department) that manages a range of economic development and innovation policy instruments. It also has a provincial level business development agency, Beaz (the Agency), which participates in the definition and management of subsidy programmes, offers services such as counselling for entrepreneurs and acceleration of high-potential business projects, and manages a business incubator. In addition there are 18 municipal-level or county-level development agencies in Biscay. While there is some heterogeneity in their activities, in general terms they engage in a wide range of activities that include services to

businesses, commerce and tourism, sustainability plans, innovation promotion, and promotion/management of public-private networks to develop economic strategies (Estensoro, 2012; Gainza, 2008).

During 2015 the Department and the Agency, in collaboration with researchers from Orkestra (the Basque Institute of Competitiveness), defined and launched the project *Bizkaia Orekan* ('Balanced Biscay' in Basque language). This project has the aim of improving competitiveness policymaking in the province by putting a special focus on the particularities and challenges of the different municipalities and counties.

The project has established four geographically-delimited working groups that gather approximately 60 people from 34 public and private-public organisations of the territory who work on local economic development. These are coordinated by a Steering Group, made up of policy-makers from the Government and the Agency and researchers. The working groups have defined competitiveness challenges in their geographic areas and they are working collaboratively to tackle them. Specifically they have worked on 14 challenges which include: fostering vertical cooperation between large and small companies; analysing industrial value chains and fostering collaboration among companies; fostering the adoption of new circular economy business models; connecting local specialisation-based dynamics with the Basque Country's smart specialization strategy; creating a shared database of competitiveness policy instruments of all public institutions; promoting improved management of small and micro-businesses; facilitating access to industrial land; and holding periodic coordination meetings between different agents to gain a better knowledge of their work, policies and actions.

The process has included strong interaction with businesses. From June 2016 to June 2018 participants of the project carried out 10 training sessions with 76 companies and 4 workshops that gathered 80 companies; they visited 107 companies and developed individual actions around circular economy and diversification strategies with 11 companies.

Methodology and analytical framework

The case analyses the process followed by the project *Bizkaia Orekan* from its initiation in 2015 to June 2018. The analysis is carried out in the framework of testing

propositions presented in the preceding sections and assessing the potential of multi-actor collaboration in policymaking for public sector innovation.

The case study is exploratory and retrospective (Thomas, 2011) and it is approached as self-ethnography (Alvesson, 2003). The three authors of the paper take part in the project. Their roles have differed throughout the process: two of the authors participated in the project design phase, which was approached as a co-generative process (Greenwood & Levin, 2007), and all three authors have participated since then adopting different roles (eg. Facilitators or expert participants on specific themes). The analysis is a direct interpretation of the authors, based on their experience and observations of the process, and on the analysis of data produced from the project.

The authors have participated in 67 meetings with policymakers and territorial actors (78 when including the participation of other researchers from the team), all of which were documented with meeting minutes and researchers' personal notes. Project dissemination documents include newspapers pieces, news on institutional websites, and presentations by Council members in project events. Data also includes an evaluation survey developed in October 2017. This included 9 questions to score the contribution of the project to several objectives (e.g. coordination among the institutions, increased knowledge on the actions and programmes of other institutions) on a Likert scale from 1 to 5, and two open questions to assess overall strengths and areas for improvement in the process. The survey was sent to (at the time) all participants in the working groups (53 people) and was responded by 55% of them (29 people).

In order to structure the analysis the process is described and analysed in terms of: (i) the governance innovation that this project has constituted (innovation *in* governance); (ii) the potential to foster innovative solutions and policy innovation (innovation *through* governance); and (iii) the changes stimulated by the process that could be conducive to a more innovative public administration (innovation *with* governance). The resulting interpretation of the case has been shared with the other members of the project Steering Group (which includes policymakers from the Government and the Agency). The analytical framework is presented in Table 1:

Table 1. Analytical framework of the case

Innovating *in* governance		Innovating *through* governance: policy innovation		Innovating *with* governance: changes towards a more innovative public sector
Substantive innovation	Operative innovation	Generative mechanisms for innovation	Mechanisms for policy innovation	- Intra-organizational changes - Changing the role of public officials. - Changing the mindsets to be more open to experimentation in public action
- Involvement of territorial actors to promote competitiveness-Relevance to local actors and inter-institutional collaboration	Soft spaces of governance for policy experimentation	- Learning - Synergy - Commitment	Transfer mechanisms between the soft governance space and the formal government decision spaces: Steering Committee	

Innovating *in* governance

An innovation, following Brugué et al (2014), starts by recognizing a problem and acknowledging that existing policy initiatives have not been sufficient to tackle it (*the why* of innovation). Once acknowledged, the pathway to innovation (*the what* of innovation) rests on two pillars: a conceptual turn (substantive innovation) and a methodological turn (operative innovation). In other words, the problem is approached in a new way and new ways of working are also generated.

The why of innovation. Building on previous studies and experiences, the innovation in Bizkaia Orekan started from acknowledgment of a heterogeneous competitiveness landscape within the Province. The Government had commissioned Orkestra to develop a study on the competitiveness of Bizkaia in 2014. This diagnostic included a statistical cluster analysis that, using 17 indicators about the context for strategy and rivalry, competitive outcomes, factor conditions and related industries, had divided the counties of Bizkaia in several groups with different characteristics. The analysis made evident that different parts of the territory were facing different competitiveness challenges. The analysis also concluded that it made sense to define policies that took into account this diversity at the local level. Moreover, internal studies from the Government pointed out the fact that the beneficiaries of the Government's current competitiveness policy programmes tended to be concentrated in specific localities. This acknowledgement prompted the Government's decision that something new and different to existing policies, instruments and services was needed to foster more balanced territorial competitiveness.

Substantive innovation: Involvement of territorial agents to promote competitiveness

A Steering Group was established to work on the idea. The Steering Group was composed of political and technical staff from the Department and the Agency, alongside researchers from Orkestra. A series of reflections guided by regional development frameworks led the group to conclude that better-adapted competitiveness policy, and ultimately more balanced competitiveness, required the establishment of new communication and dialogue spaces among actors at different territorial levels. In addition, this was also understood as a way of strengthening local institutions for economic development.

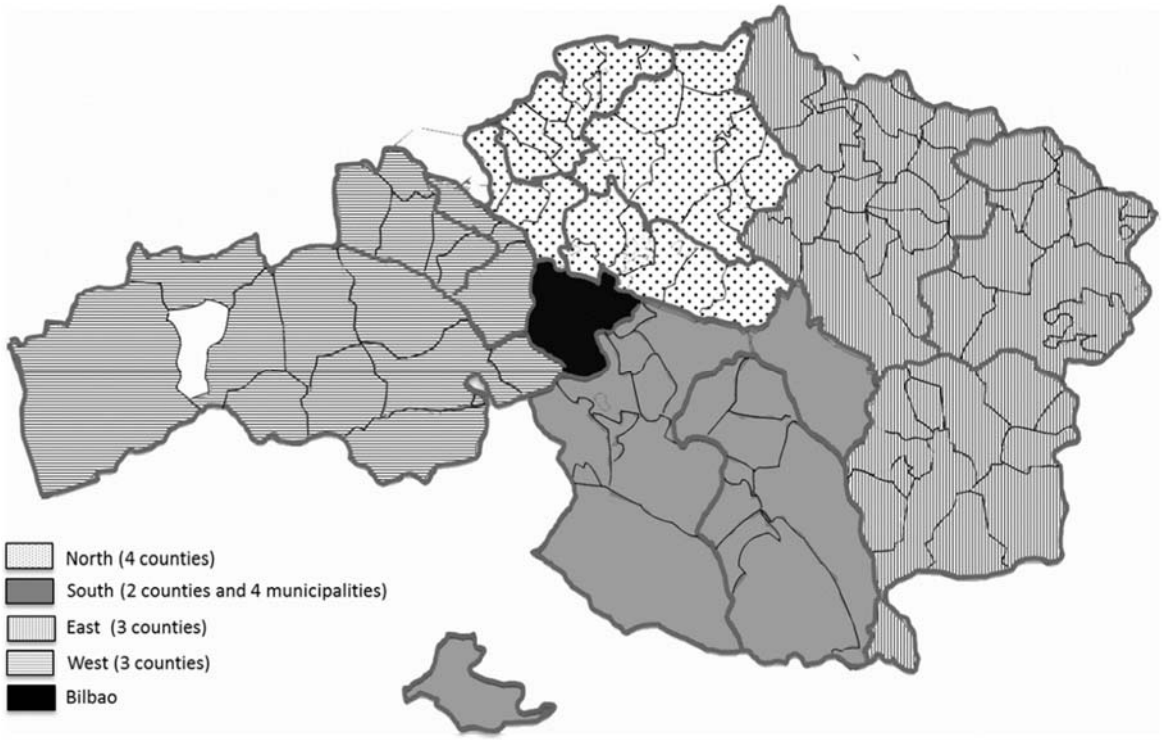
This approach to the problems identified thus entailed a substantive innovation in approaching competitiveness in that inter-institutional collaboration was given a central role, with the importance of local actors in economic development recognized. The approach added a territorial dimension to what was until then a fairly standard business dimension of competitiveness policy.

Operative innovation: Soft spaces of governance

The decision to establish dialogue spaces with local economic development actors generated a range of practical challenges in terms of operationalizing the idea: Which specific spaces are defined to establish dialogues? Who participates in these dialogues? How is the Government organized to engage in the dialogues? The Steering Group developed a cycle of reflection-decision around these challenges that led to the definition of a concrete project.

On the one hand, it was decided to establish the dialogues based on existing institutional frameworks: coordination mechanisms should be stablished with municipal and county level development agencies, who are the actors responsible for economic development at the local level. On the other hand, it was decided to establish several dialogue spaces, 'dividing' the province into zones. This division sought to respond to and balance different rationales (similarities in economies, geographical proximity, existence of previous demographic and cultural links, institutional collaborations, and so on). Six zones were initially defined, leaving out the capital city, Bilbao, with which the Department already had strong articulation spaces. After a process of contrast with local actors, however, the Province was finally divided in 4 zones (Figure 1).

Figure 1. Zoning of Biscay in the Project Bizkaia Orekan (Balanced Biscay)



Source: author's own

The proposal was shared through a series of workshops with 80 political and technical representatives from local economic development institutions. These workshops also served to share county and municipal level perspectives and to identify the competitiveness challenges to be tackled. The identification of the challenges was based on a reflection around a specific territorial competitiveness framework (Aranguren et al., 2010) that establishes that the final societal outcomes of economic growth and wellbeing are obtained through intermediate outputs related to employment, productivity or innovation. These outcomes and outputs are determined by several factors that can be grouped around three dimensions: the behaviour of the firms, the specialization of the territory and the quality of the business environment. It is in those determinants where policies can have a more direct impact and, hence, the local actors were prompted to identify the challenges that affected their zones under each dimension.

The workshops also served to constitute the four working groups to take forward the initiative. These gather representatives of different counties and municipalities, public officials from the Department and the Agency, and a researcher from Orkestra, to

engage in joint-problem solving. The working groups can be thought of as *soft spaces of governance*, that is, as 'in-between' spaces of governance" (Haughton et al., 2013, p.217) that transcend territorial units and respond to both territorial-administrative logics and spatial-relational logics (Allmendinger & Haughton, 2013; Allmendinger, Haughton, Knieling, & Othengraffen, 2015) in order to solve challenges that are sometimes place-specific but also transcend boundaries of administrative logics. In the words from one of the participants:

> [one of the strengths of the project is] to increase the scope of our actions (linked to the territory), since the territorial area in which we work does not coincide with the areas of the economic activities of the companies.
>
> (Statement of a county representative in the evaluation survey, October 2017)

The groups started functioning in June 2016. They have: (1) defined zonal challenges based on perspectives of relevant competitiveness barriers identified by local actors; (2) prioritized those challenges; (3) defined joint actions; and (4) worked on implementing those actions, which includes facilitating a wide range of activities as already outlined in the previous subsection.

Without knowing what exactly they will bring in the medium and long term, these *soft spaces* can be thought of as a governance innovation in that 'production, financing, and decision-making are all moved around in a new configuration to reshape the system that determines what gets produced, how it gets financed, and whose values are given emphasis in guiding the process of social production' (Moore and Hartley, 2008, p.12). Actions (which are financed by the Council) are defined and implemented together with diverse territorial actors, opening the decision and implementation process and providing an experimental way of approaching place-based competitiveness.

Innovating *through* governance: a new government programme to improve the state of industrial zones

The soft governance spaces created in the project see different actors working together in defining and solving problems, and are potentially home to the three generative mechanisms of collaboration to promote innovation proposed by Ansell and Torfing (2014): learning, synergy and commitment.

Combining the visions of different institutions (provincial government, local-county institutions and researchers), each of which operates in different realities, enables problems to be seen from different perspectives and offers all participants a more global vision and nuanced understanding. Given these different perspectives and different territorial contexts, problems like effective innovation promotion can be better approached by combining perspectives in the working groups to generate a more holistic view (*learning*). Moreover, the experimental actions to tackle the problems are being designed through the knowledge of different institutions, their past experiences and the time and resources that they can devote, hence joining capacities, resources and knowledge (*synergy*). All participating members have also shown commitment (in different degrees) and have a sense of ownership of the process reflected in time dedicated to the process. Indeed, from June 2016 to June 2018 more than 70 meetings of 2-3 hours were celebrated and 14 actions were being implemented (*commitment and sense of ownership*). Participants views expressed in the evaluation exercise illustrate some of the perceived strengths:

> …to generate collaborative projects that individually could not be addressed, economic resources to take the actions forward.
>
> …the coordination between agents and the search for joint solutions to common problems that occur in all regions and areas…
>
> …..the opportunity to develop more comprehensive responses with the collaboration of different agents that work to improve the competitiveness of companies…
>
> (Statements of Bizkaia Orekan participants on the strengths of the project, evaluation exercise, October 2017)

After a year and a half of functioning, the process produced policy innovation. Two of the zonal working groups defined a challenge related to the poor state of industrial estates in their areas, which was also noted as an important issue in the other two zones. One of working groups developed an action plan to work on this issue. The root of the problem was isolated: it was rooted in the dispersed responsibility for the industrial estates and lack of a unique body responsible for their maintenance due to a complex interaction of several factors. The solution to the problem could not be thus to designate

resources, but rather to foster the creation of associations within the industrial estates that would also be responsible for conservation of the estates.

This issue was translated by Council and Agency public officials responsible for the process to the Steering Group, which is the coordinating body in charge of following up the whole process. Since the problem transcended zone boundaries, the Steering Group decided that the Department would directly work on this problem to accompany the work to be developed by the zonal working groups. Members of the Department met several regional institutions and other types of actors to better understand the issue and the reason behind the inexistence of conservation bodies for industrial zones. The work both within the group and of the Department led to the conclusion that experimentation grants to foster associations of industrial estates' companies could be the best way to start addressing the problem. In mid-June 2017, members of the Steering Group committed to take this issue to the Government formal decision spaces and by the last semester of 2017 the Government took the decision to design a new programme and include it in their annual budgets.

The Government made the initial design of the programme with inputs from previous studies and dialogues with diverse actors. In January 2018 it presented the draft in a meeting with representatives of the working zones, who provided inputs based on their local knowledge. The government elaborated the final design with this input, and launched the decree in May 2018. The new decree regulates grants to associations of industrial estates for their initial functioning and management. Parallel to this decree, a consultant has been hired to advise companies and municipalities that wish to create this type of association. By June 2018 several municipalities were interested in applying to the grants and some of them had already started working on constituting associations.

Hence, a problem defined in two zones within the collaborative arena space entered the agenda of the Provincial Council, and led to a new policy instrument to tackle a competitiveness challenge of the territory. The experience confirms the idea posed by Sorensen and Waldorf (2014) on the relevance of boundary spanners in promoting policy innovation. In this case, the Steering Group is the mechanism that enables innovation to diffuse from the new 'soft spaces' into formal political processes. Public officials responsible for the process bring information from the working groups to the Steering Group. The Steering Group is constituted by members of the government who

have the position and capacity to transfer issues to the government's decision-making bodies. In this way, discussions in the Steering Group are brought through their members to formal decision spaces, opening the possibility that some issues may lead to policy innovation. Thus, this could suggest that institutional design for fostering collaborative policy innovation should consider the relevance of such mechanisms.

Innovating *with* governance

The development of the process described in the case has also required the Government to make some internal changes in order to steer and manage that process. Although still incipient, these are connected to the requirements of innovative public organizations.

Intra-institutional changes

Alongside the Steering Group (discussed above), the project has developed a new internal organisation of public officials as facilitators of the process. This organisation is built on closer coordination and working relationships between the political and technical staff, between different areas within the Department, and between the Department and the Agency. These staff hold regular meetings to coordinate all actions and are fostering flexible internal arrangements that might allow policies to be approached in a more coordinated way. Moreover, responding to some of the specific challenges – such as the poor condition of industrial estates described above – has required involving other departments and even the regional Basque Government in the process. As previously asserted, competitiveness policies require breaking with organisations based on silos and fragmented policymaking processes. The intra-organizational arrangements created for steering the process and the informal coordination mechanisms promoted in practice for responding to emerging challenges are in line with such a requirement.

Changing role of public officials

Nine public officials from the Department and the Agency were assigned to the project to manage the four working groups (partial dedication). Two of these have responsibility for managing the whole process, and the rest act as facilitators of the zonal groups (two per working group, one from the Department, and one from the Agency). The previous roles of some of these officials involved more traditional bureaucratic duties with less face-to-face interaction with stakeholders. Words from one of the civil servants illustrate the more relational new role:

> Something that I like from this project is the trust relationship stablished with the actors: to be able to make calls and receive calls…
>
> (Words from a civil servant on a training session, 2-3-2018)

In Morgan's (2016b, p.55) words, in new regional development policy paradigms governments need to play a role *curating* the processes rather than *controlling* them, and this also involves a changing role for public officials. A key role for policymakers and public managers in collaborative approaches is to create and manage arenas and interactions with other (public or private) actors, providing the framework for collaborative innovation (Ansell & Torfing, 2014; Bevir, 2013; Hartley et al., 2013; Sørensen & Torfing, 2011; Torfing & Triantafillou, 2016; Waldorff, Ebbesen, & Kristensen, 2014). The changes in their role as public officials, although partial, are in line with such a requirement. Hence, it could be suggested that the new governance arrangements are promoting a new type of role for public officials, a more relational role that is very much in line with requirements for a more innovative public sector (Bevir, 2013).

Changing mindsets to be more open to experimentation in public action

In April 2017 a general event was organised to gather local and county representatives to inform them about the advancement of the project after one year of the process. In the event, the Minister of economic and territorial development of Bizkaia asserted the following:

> …. we started with a blank sheet: how can we improve the competitiveness policies of the County Council? ... it was not easy to understand such a process for anyone… we have learned a lot this year…
>
> (Extract from public presentation, researchers' notes)

A year later, at a similar gathering in June 2018 he stated that:

> One of the achievements of Bizkaia Orekan is the working dynamic. We have created a tool that joints efforts and capacities in each of the zones of Bizkaia, which generates more open and fluid relationships around common interests and projects. (…) A change in the focus was necessary in order to personalize also the policies of the Council.
>
> (Extract from an interview in to Bizkaia Orekan newspaper[10], June 2018)

[10] https://info.beaz.bizkaia.eus/wp-content/uploads/2018/06/bizkaia_orekan.pdf

Innovative public sectors need to create environments that are open to experimentation, learning and uncertainty (Bason, 2011; Brugué et al., 2014; OECD, 2015). However, it is not easy for a government administration to enter into a process whose results cannot be predicted. As Hoppe (2010) states, policymakers like other human beings are 'approval-and-status seekers' (p. 72) and have to respond to various pressures of external legitimacy (politics, media, citizens, stakeholders). As also stated by Morgan (2016b), reducing risk aversion is one of the main challenges to develop experimental approaches in regional development. As the Minister's words suggest, 'it was not easy for anyone to understand such a process'. However, as his words also suggest ('we have learned a lot this year') the Government managed to deal with uncertainty and sense of possible failure and create spaces for learning and experimentation. Members of the Steering Group have acknowledged in several meetings the value of the learning and intangible results produced in the process. The words from the Minister in June 2018 also put in value the intangible 'working dynamic' of the process. What exact mechanisms and drivers have led to the reduction of the barriers to allow experimentation has not been investigated in the case, but a change can be envisaged that has come along the process itself.

Conclusions and final reflections

Current systemic and holistic views on competitiveness and regional development demand developing governance mechanisms that establish inter-institutional dialogues to align visions while also considering different contexts and places in policy development. The article has analysed a case in which a sub-regional government created governance arrangements in search of a more context sensitive approach to competitiveness and in doing so created *soft governance spaces*. Besides being an instrument for experimenting with context-sensitive competitiveness policymaking, these spaces can be seen to constitute a micro-environment for fostering a more innovative public sector. In this sense the case represents an innovation in governance, in that it changes how competitiveness policymaking is approached by the government and shifts the locus of decision and action to include local actors. Local actors have not only been included in the problem-solving strategy, but also in the definition of the problems themselves. In this particular context, the government of Bizkaia is governing through *puzzling* and *participation* (Hoppe, 2010; Peters & Pierre, 2016). That is, it is defining problems and defining intervention through research and analysis, and through

including other actors in problem definition and decision-making processes. This way of governing and the dialogue spaces created in the project have generated learning, synergy and commitment among the actors involved, who are developing actions jointly. Moreover, mechanisms have been established that enable some of the solutions and problems posed in the collaborative arena to influence the agenda and policy mix of the government, leading to policy innovation. Finally, developing collaborative forms of governance, as presented in the case, have come along with some changes within the government in intra-organizational coordination, in the leadership roles of public officials and in the mind-sets of the policymakers involved.

The case presents an experience developed in a micro-environment that does not constitute the core work of the Department and the Agency. The changes that have been envisaged are situated in the specific context of such a micro-environment. However, this experiment with governance innovation is not only leading to concrete policy innovation, but also shows potential to help change ways of thinking and public action in such a way that allows for greater experimentation and contributes towards a more innovative public sector.

Thus, while systemic and bottom-up approaches to regional development policymaking require governments that are open to experimenting, learning and engaging with external actors, the case illustrates that these same practices contribute to openness, learning and experimentation. Within the overall external driver of collaboration as a means for fostering public innovation through learning, synergy and commitment, the exact mechanisms by which barriers to innovation have been reduced was beyond the scope of this article. We could speculate with the idea that, following Brugué et al. (2014), research could have been a driver in that it provided to politicians a legitimate context for experimentation. But it is only a hypothesis that should be further investigated in future works in order to provide a more nuanced understanding of drivers of innovation.

Although based on a single case study, the results of the case suggest an important line for further exploration and development; that of the link between place-based approaches in competitiveness and public innovation. On the one hand, an extensive comparative analysis across regions that have undertaken collaborative place-based approaches to regional development could shed more light on the changes that this

approach has empirically produced in different contexts. European regions and their RIS3 strategies appear as an excellent laboratory in this sense. On the other hand, taken that public innovation can be critical for regional development policies, and if asserted that collaboration in policymaking can have a potential for fostering public innovation, the design of place-based policymaking and governance processes should take the public innovation dimension into account. Getting insights from studies on drivers and barriers of public innovation and considering them for institutional design and management of such processes could be a way to fully exploit the potential of collaborative processes in regional development to foster a more innovative public sector.

Undeniably, public sector innovation initiatives exist and must exist outside the boundaries of competitiveness policies. However, processes like the ones described, if complemented with a perspective on public innovation, could be a means for not only promoting place-based competitiveness but also contributing towards building the *smart states* and systems that current competitiveness and regional development policies require.

3.6. Reflecting on the role of public organisations in cooperative modes of territorial development: Article 4

The previous article analysed innovations that multi-actor collaboration has fostered and the mechanisms through which such innovation is produced by analysing the case of Bizkaia Orekan. Moreover, it introduced a train of thought that this article further develops: what implications do cooperative forms of territorial development have for the public organisations that lead them? Chapter II provided several arguments that strengthen the idea that territorial development processes and policymaking require cooperative forms of steering such processes. But, it did not reflect on what those forms of governing demand of governments and public organisations. Article 4 reflects on this through an analysis of the case of Gipuzkoa Sarean (at the time renamed the Territorial Development Lab), already presented in Article 2.

When collaborative development meets New Public Governance: The case of Etorkizuna Eraikiz Territorial Development Lab in Gipuzkoa

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Abstract

Etorkizuna Eraikiz Territorial Development Lab (TDLab) is a long-term action research process that has produced a change towards more horizontal forms of territorial development and policymaking governance in Gipuzkoa. The article analyses this experience to reflect on the role of public organisations in steering cooperative forms of territorial development. Specifically, the article suggests that cooperative forms of territorial development may need network-based public organisations; and it shows that TDLab has fostered and embodied practices framed under New Public Governance, a network-based public administration paradigm. By reflecting on how such practices were fostered in TDLab, the article also suggests a potential complementarity between New Public Governance and action research for territorial development, the research approach and change strategy developed in TDLab, as a means of better contributing to network-based public organisations.

Keywords: territorial development, New Public Governance, action research, governance

Introduction

Since political science underwent the so-called shift *from government to governance* more than two decades ago, the idea that horizontal and cooperative collective problem-solving strategies should replace traditional top-down governing approaches has pervaded many academic fields and practices (Klijn & Koppenjan, 2016; Pollitt & Hupe, 2011). This governance discourse has also permeated territorial development theory and practice, where a range of different reasons support the concept that governing modes moving away from control-based forms of steering are key for place-based territorial development (Barca, McCann, & Rodríguez-Pose, 2012; Karlsen & Larrea, 2014a; Laranja, 2012; OECD, 2010; Pike, Rodríguez-Pose, & Tomaney, 2007).

In this article, we reflect on the implications that such cooperative forms of steering territorial development have for public organisations. Our main argument is that territorial development needs collaboration-based public organisations that are grounded in the practices of the New Public Governance (NPG) public administration paradigm.

NPG rests on the idea that intra- and inter-organizational collaboration and stakeholder empowerment will provide more efficient and democratic public action (Osborne, 2006; Torfing & Triantafillou, 2013; Waldorff, Ebbesen, & Kristensen, 2014). This argument is explored by revisiting the case of Etorkizuna Eraikiz Territorial Development Lab (TDLab), the action research lab for territorial development, and the efficiency of policies in Gipuzkoa (Basque Country).

Moreover, the analysis of the case provides valuable insights towards understanding how change has been fostered through action research for territorial development (ARTD), the work method and change strategy on which TDLab has been based.

The article is structured as follows. The next section reviews the rationale that frames the need for cooperative forms of governance in territorial development and its link to New Public Governance in order to extract key guidelines to analyse and discuss the case. Section 3 then presents the case and its work method, ARTD. Section 4 discusses the case in relation to the links of TDLab and ARTD with NPG. The article concludes with a brief summary.

New Public Governance for territorial development

The need for networked modes of steering for territorial development

Currently, a range of different logics, rationales and lines of argument call for interactive and networked forms of governance in territorial development (Barca et al., 2012; Karlsen & Larrea, 2014a; Laranja, 2012; OECD, 2010; Pike et al., 2007). One of the strongest and – in our view – most fundamental arguments for this need derives from the acknowledgement of the contested nature of development. Although sometimes presented as a rational and value-free process, territorial development is a highly political activity. Regional development takes place in complex contexts in which diverse and conflicting visions about the nature and the goals of development exist (Karlsen, 2010; Karlsen & Larrea, 2014a; Pike et al., 2007; Sotarauta, 2005). Thus, development is strongly normative: what constitutes development is dependent on the contexts and the notions that people and groups have about it and what they judge to be priorities (Bristow, 2010; Pike et al., 2007). In that sense, “achieving answers to the question of ‘what kind of local and regional development and for whom?’ (…) involves compromise, conflict and struggle between sometimes opposing priorities” (Pike et al.,

2007: 1266). In effect, territorial development can ultimately be thought as the "struggle between visions, development ideas and interests" (Sotarauta, 2009: 903).

Moreover, regional economies are multi-scalar spaces where not only public and private actors but also different multi-level administrative levels interact and where a high density of institutions with diverging interests are involved in policymaking and steering regional development (Karlsen, 2010). The multiple agents, organisations and practices within territories make certain that the power, knowledge and resources for territorial development are distributed and dispersed throughout this myriad of actors who have to continuously dialogue and negotiate (Karlsen & Larrea, 2014a; Sotarauta, 2005). Consequently, in order to develop territorial strategies and bring about collective action, it is necessary to establish governance mechanisms that allow dialogue, communication and cooperation among the different actors involved in territorial development (Alburquerque, Costamagna, & Ferraro, 2008; Karlsen & Larrea, 2014a; Pike et al., 2007).

The need for network-based public organisations

Cooperative forms of steering territorial development have undeniable implications for the role of governments and public organisations. Leadership and facilitation of territorial development is not exclusive of governments, and previous studies have shown that place-based leadership and facilitation is an interdependent, non-linear and dispersed phenomenon among many territorial actors (Beer & Clower, 2014; Costamagna & Larrea, 2017; Sotarauta, 2005). However, governments and public organizations still have a key role in the alignment and facilitation of the collective effort. But what is that role, and how is it enacted?

We can learn from recent developments in public administration and governance research. A strong line in this field claims that public organisations should be based on networked forms of governing and collaboration in order to meet current society's needs. It is argued that public administration should transit towards what has been labelled as New Public Governance. A network-based administration paradigm, NPG is based on the idea that intra- and inter-organizational collaboration and stakeholder empowerment will provide more efficient and democratic public services and actions (Osborne, 2006; Torfing & Triantafillou, 2013; Waldorff et al., 2014).

Governance scholars claim that traditional hierarchical, rule-based and highly specialized and compartmentalised administrations lack both the flexibility to adapt to emergent changes and the holistic approach to problems that are affected by and thus can be tackled from several fields and departments. Equally, the managerialism logic of New Public Management based on rationalisation, atomisation of activities and private-sector logic cannot be valid to steer a public action and territorial development process in pluralist contexts that are by nature political. In contrast, NPG rests on the idea that the current complex and wicked nature of policy problems needs to include diverging visions and knowledges to frame and solve problems; that policy goals are negotiated in interactive processes and central controls have limits; and thus, public problem-solving should be fostered though networked forms of governance that promote a relational public action that no longer divides the politics and administration tasks and design and implementation of public policy and service delivery (Osborne, 2006; Torfing & Triantafillou, 2016). Such type of public administration also changes the traditional roles of policy actors and citizens in public action in regards to previous paradigms. Political leaders are to be more actively involved in defining problems and orchestrating interests, and public officials become the leaders of collaboration-based processes both internally and with external actors. Thus, a networked governance approach that features trust and relational contracts as key governance mechanisms, and an administration that works to enhance the collective capacity for public problem-solving and constructing long-term inter-organizational relationships, seems to better fit today's world (Osborne, 2006).

New Public Governance meets territorial development

Making a parallel case between the claims that argue for network-based public organisations and the governance requirements of territorial development, it is reasonable to suggest that cooperative and horizontal governance arrangements for territorial development and policymaking require public organisations organized and based on collaboration. Undeniably, real governance is not determined by these paradigms, which are just analytical constructs that try to characterize different rationales of public action (Bevir, 2013; Torfing & Triantafillou, 2016; Waldorff et al., 2014). However, a public sector that acknowledges the complexity and pluralist character of the reality in which it is embedded, seeks to foster public value through empowering stakeholders and does so based on collaboration with external actors is much closer in our

view to the needs of steering territorial development as a collective multi-agent, multi-knowledge and contested process. Next, we explore this idea in the case.

Etorkizuna Eraikiz Territorial Development Lab

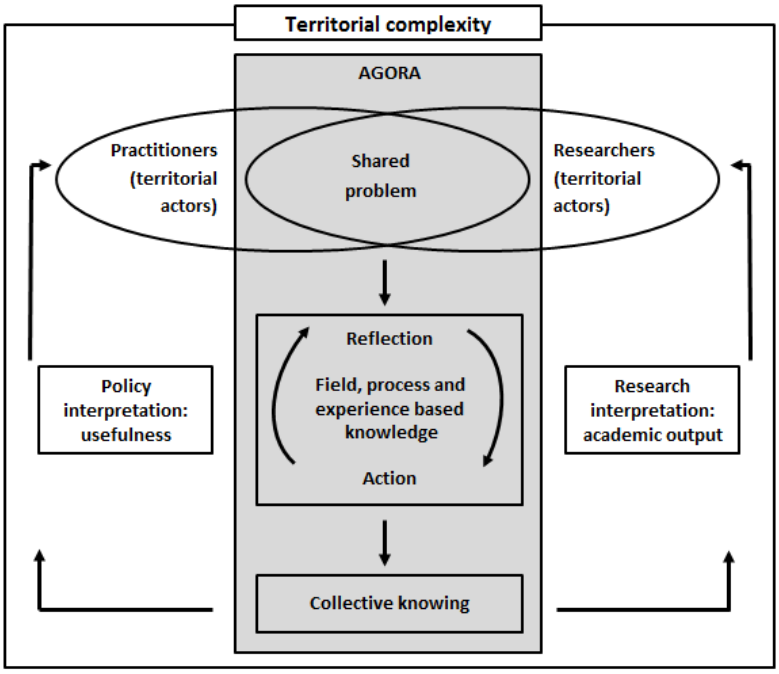
Launched by the provincial government of Gipuzkoa (the Council) in 2009, TDLab is an action research process in which three of the article authors currently participate and the fourth author participated until 2016. The relationship between the research team and the project has developed since 2009 through annual research contracts, creating a fairly stable framework for the development of a long-term research process. The case will be analysed based on project documents (meeting minutes and project dissemination documents) and author reflections. Before describing and analysing the case through the NPG prism, next we present the specific work method on which TDLab has been based.

The work method: Action research for territorial development

TDLab is based on action research for territorial development (ARTD). Although action research comprises several approaches, overall it is a research approach with an agenda of social change that (1) is based on specific contexts and tries to focus on real problems, (2) gathers researchers and actors in joint knowledge co-generation processes, (3) recognizes that different knowledge and experiences contribute to the process and (4) understands that co-generated knowledge leads to social action (Greenwood & Levin, 2007). ARTD is a specific action research approach and strategy for generating change in territorial development, developed in the context of Orkestra – Basque Institute of Competitiveness in the intersection of the fields of action research and territorial development. TDLab has been one of the experiences that has most contributed to its development.

The most comprehensive framework of ARTD is the co-generative framework developed by Karlsen and Larrea (2014a). Figure 1 describes the co-generative cyclical process that takes place between researchers and policymakers. The process starts by practitioners and researchers agreeing on a problem they both "own"; that is, a problem they want to contribute to solving (e.g., changing governance, promoting innovation in companies). Reflection and action cycles in which researchers play a strong facilitator role enable the generation of collective knowing, which researchers and practitioners will later take to their own professional spheres, eventually bringing new problems that need to be solved in the agora.

Figure1. Cogenerative framework of ARTD



Source: Karlsen and Larrea (2014a: 100).

Timeline and significant events of the case

As mentioned, TDLab is a Council-launched process focused on developing new patterns of relationships with territorial actors in order to generate more democratic and efficient policy processes and policies for territorial development. In administrative and political terms, the Basque Country has a regional government, three provincial governments and municipal councils. In the 1980s, most of the municipalities created county-level economic development agencies (county agencies). These agencies (11 in Gipuzkoa) are inter-municipal joint authorities through which local economic promotion is made (Estensoro, 2012). Prior to TDLab, the Council and the 11 agencies defined and developed their own strategies, and coordination among them was through one-on-one informal communication. As a result of the action research process, new formal governance mechanisms were created by developing collaborative spaces between the Council and the county agencies in order to foster more aligned territorial development processes and involve counties in the definition of territorial-level development policies.

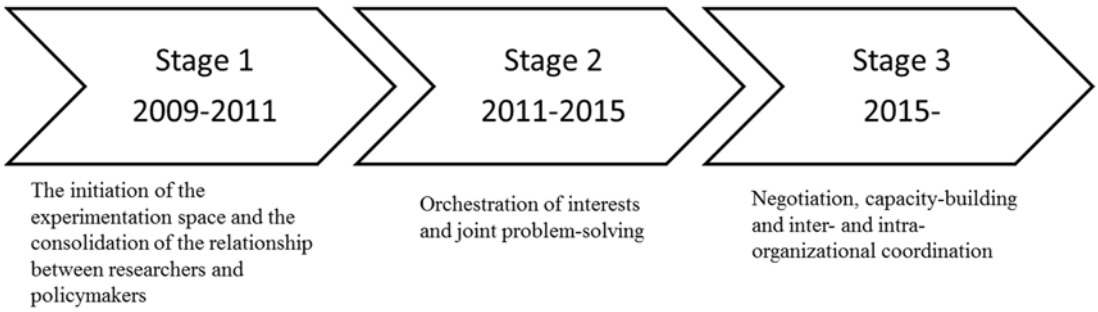
TDLab has been presented in project dissemination documents consisting of different stages, determined among others, by different ruling governments that have led the process. In the following sections, we analyse each stage, sharing the main features of

NPG that can be found in TDLab. We illustrate and later discuss the following NPG features (based on Hartley, 2005; Klijn & Koppenjan, 2016; Waldorf et al., 2014; and Torfing & Triantafillou, 2016):

a) Politicians participate in / facilitate negotiation
b) Political leaders orchestrate interests; they lead the definition of problems and the development of solutions
c) The inclusion of different knowledge and joint problem-solving as a strategy to deal with complex problems
d) Public administration contributes to improving stakeholders' problem-solving capacity
e) Public officials lead intra- and inter-organizational coordination.

Most of these features can be found at different periods, spaces and practices of the project. However, we have selected the main practices that embody such NPG features in each period. From this view, TDLab can be synthetized into the following timeline:

Figure 2. Timeline of the case



Source: Authors.

STAGE 1 (2009–2011): The initiation of the experimentation space and the consolidation of the relationship between researchers and policymakers.

The project (at the time named Gipuzkoa Sarean [Networking Gipuzkoa]) was launched by the Council with the goal of fostering the competitiveness and well-being of Gipuzkoa through strengthening social capital. The project was conceived as having both research and action dimmensions, and was thus viewed as a collaboration project between researchers and policymakers. The Council established a team to run the project led by representatives from the Council President's cabinet and from the city council of the capital of Gipuzkoa, researchers from three different universities

(Orkestra – the institution the authors belong to – among them) and communication advisers. In its first year, several research activities and workshops with territorial actors were developed to define and implement projects to foster social capital. Nevertheless, process-wise and in order to understand TDLab in the long term, the first year and a half were mainly relevant because they enabled the generation of a working dynamic between researchers and policymakers that would be decisive for the continuation and the development of the project from that point on (see Karlsen & Larrea, 2014a, and Orkestra & Gipuzkoako Foru Aldundia, 2015). As stated by the main political representative of the project at the time:

> the work developed until now has served specially for: achieving the coordination of a working group and learn to work together, which at the same time contributes to know how to experiment with other working groups (…)
>
> (Excerpt from a Steering group meeting, 22 March 2011)

STAGE 2 (2011–2015): Orchestration of interests and joint problem-solving.

In May 2011, local elections brought a new party to the government of the Council. Discussion between researchers and policymakers led to the redefinition of the overall goal: "to propose a new socio economic regional development model for Gipuzkoa, based on participation and with the counties at its heart." The new government had an interest in developing a holistic approach to development that would go beyond economic promotion and in increasing the relevance of the local level and counties.

Looking back, we now think that one of the ideas shared by a government member in a 2012 researcher-developed workshop perfectly illustrates the work initiated in this period and followed since then in TDLab:

> [in this territorial development approach] The political level assumes two basic aspects: (1) Make a clear decision (2) Assumes an "orchestra conductor" function of the group of actors
>
> (Transcribed from a Council policymaker's post-it note shared during group discussion)

Indeed, the government made a decision to define a territorial development proposal and initiate dialogue with territorial actors to discuss this proposal and to work together on territorial development strategies and policies. The rationale of the proposal was a combination of political goals and research-derived frames. The Council wanted to

develop a holistic view of territorial development through a participatory approach that would lead to more demoratic practices, focusing on counties in a way that local actors could influence Council policies. The proposal was also strongly influenced by research frameworks provided by ARTD that emphasized the complexity of territorial contexts and problems and the consequent need to base territorial development in participation, the creation of shared vision and trust relationships and the development of territorial strategies based on learning, negotiation and collaboration. This proposal was the first step towards discussion with territorial actors and working with them:

> The presented contents do not constitute a close model. This would be contradictory with the methodology chosen for the process. They constitute concepts and frameworks for reflection and analysis that allow opening a debate about development in the territory. Only through dialogue with territorial actors on this basis can [we] make advances towards the implementation of a new model of territorial development.
>
> (Excerpt from "A proposal for a new territorial development approach for Gipuzkoa," 2012)

Several dialogue spaces were created in 2013 with the purpose of introducing changes in governance and policies. Since the counties were the main focus of the project the core governance spaces were constituted by agency and Council representatives. The first space to be created, which remains as the main political collaborative space, was the Inter County Table (ICT).

The ICT is a dialogue and negotiation space for Council policymakers and county agency representatives. Besides agency directors (technical staff), it was decided to invite political representatives (mayors of municipalities) into these dialogues. If territorial development strategies were to be aligned and defined, and territorial development is not a technocratic but rather a political phenomena, it was relevant to include the political representatives in such definitions. This constituted a significant innovation, since before TDLab the relationship between agencies and Council policymakers was mainly based on specific projects and programmes at the technical level; that is, between Council civil servants and agency directors.

The ICT aimed to collectively define some territorial challenges that the actors would consider relevant. But it also created specific groups to work on joint problem-solving of specific economic development–related issues. The groups would not only gather

members of the ICT but also other departments of the Council and even of the Basque government whenever the issues were affected by these departments and institutions. New programs (such as a program to dynamise local employment promotion or to analyse energy value chain and mapping of companies for the sector) and an agreement to foster internationalisation resulted from the work in these groups.

Another relevant collaborative space created in this period is the facilitators action research process (FARP), a space facilitated by researchers that brought together county agency technical staff and Council policymakers to strengthen territorial development facilitation capacities. If participatory ways of steering territorial development were to be promoted, those who in their everyday work also enact such processes in the counties needed to be part of the process. Moreover, this staff is mainly those who manage collaboration networks and interact on a daily basis with companies and other actors in their counties, so strengthening their capacities to manage those processes was seen as necessary. We will delve into these facilitation capacities in the next section, since politicians were involved more deeply in this endeavour in the following period.

STAGE 3 (2015–): Negotiation, capacity-building and inter- and intra-organizational cooordination.

In May 2015, local elections again brought a new government (with a new party) to the Council and to many of the municipalities. In the initial months, the Council adapted TDLab to its government programme, which would now put a special focus on the efficiency of processes and programs to reach small companies. In order to achieve this, the action research methodology would be maintained.

The main milestone of this period was the formalization of a new mode of governance established between the Council and the county agencies in June 2017 that would be based on the project's two core spaces: the ICT and the FARP. This meant that the spaces for action research that had been created in the previous term became institutionalized. In a nutshell, the ICT consolidated as the space in which representatives from the Council and the agencies decided every June/July about what their collaboration will focus on in the upcoming year. Following these decisions, budgets and programs are designed, which are launched after January. In order to develop the programs in collaboration, the FARP was institutionalized too.

To illustrate the role of politicians in the negotiation processes, we now focus on the period before the June 2017 signing of the formal agreement. The negotiation process was agreed to in a workshop held May 27, 2016. The challenge of the process, as included in the meeting minutes, was to "decide in a coordinated way which is the role [of each of the participants] in economic development." The preliminary stage of the process consisted of three bimonthly workshops in which researchers helped policymakers to get to know one another's positions and made an exercise of empathy in order to build a shared vision. As the following excerpt illustrates, several open issues needed first to be framed as common interests:

> At this moment there are many open questions: in which direction has the territory need to go? How do we have to work the different actors? How do we have to promote new collaborations? (…) the results of this process will be very valuable in that sense.
>
> (Statement from the main Council representative for for TDLab, ICT meeting minutes, 4 July 2016)

Researchers developed several documents and analyses to help this process. These were then shared and discussed together in two workshops held in July and September 2016. Another three bimonthly workshops were designed as the negotiation process. In the words of one of the county politicians in the last meeting before the signing of the agreement:

> This agreement protects a territorial vision. In Arrasate [the first meeting of this process] it looked like each county worked on their own and that we each tried to find our own interest. (…) The process has been bottom up. It is something to highlight… the methodology: working collaboratively
>
> (Excerpt from meeting notes of an Orkestra team member, ICT meeting, 23 Feb. 2017)

Once the new governance was institutionalized, one of the challenges that emerged from the process and was detected in the dialogue process between policymakers and researchers was the need for policymakers in the Council and in the agencies to facilitate the new governance.

Although the need for facilitation capacities and building such capacities had already started in the FARP, in order to reinforce this, a virtual capability-building process was agreed on between policymakers and researchers. Once the virtual space was ready,

politicians in the project were actively inviting other policymakers to participate. We don't go deep into this process here because an article in this special issue (see Canto, Costamagna, Eizagirre and Larrea, 2018) presents that specific project, but we underline the relevance of the role of politicians in the capability-development process.

Finally, we illustrate the role of policymakers in the process of the construction of inter- and intra-organizational coordination. The ICT is a clear example of inter-organizational coordination. Likewise, we highlight here that a significant effort has been made inside the Council to integrate different directorates into the process. At the beginning of Stage 3, in 2015, only two policymakers from the Council's President Cabinet participated in the meetings with researchers every Wednesday. In 15 February 2017, the members of the Economic Promotion department started to participate every second Wednesday. In 20 September 2017, the representatives of the Social Services Department also integrated into the process. Whereas initially all meetings were facilitated by researchers in 17 January 2018, policymakers from the President's Cabinet started to facilitate the meetings with other directorates, thus transforming an action research space into an intra-organizational coordination space in the Council. The following excerpt from the TDLab leader illustrates the relevance of this new intra-coordination dynamic:

> This space shared between the department and the Cabinet has developed, in turn, a new way of working in the Provincial Council. It is not usually easy to overcome the boundaries between departments, but to elaborate the new proposal, it has been essential to do so. Being that achievement also a result of Gipuzkoa Sarean, I considered that it was worth sharing with all of you.
>
> (Statement from the Council representative for TDLab, TDLab Bulletin #16, November–December 2016)

Discussion of the case

Throughout the case, we have described practices in TDLab that, in our view, are very much aligned with practices that NPG scholars claim for public organisations. We have synthesised such practices in Table 1.

Table 1. Alignment of NPG practices with TDLab practices

NPG strategies, practices and roles	Practices in TDLab
Politicians participate in/ facilitate policy goals negotiation	• Active participation of Council and county politicians in ARTD as a strategy to negotiate territorial development strategies and the roles of each within them
Politicians orchestrate interests; they lead the definition of problems and the development of solutions	• Council politicians define development processes and issues and work on their development • Involvement of local politicians in collaborative spaces to define development strategies
The inclusion of different knowledge and joint problem-solving as a strategy to deal with complex problems	• Involvement of different actors from different organisations to work on concrete development issues and define programs (e.g., energy, employment promotion) • Involvement of local technical staff in collaboration spaces • Co-generation between researchers and policymakers
Public administration contributes to improving stakeholders' problem-solving capacity	• Creation of spaces and strategies for facilitation capacity-building • Council supporting and adopting ARTD as a collective knowing generation strategy
Public officials lead intra- and inter-organizational coordination	• Creation of dialogue spaces between Provincial Council and county-level territorial actors and inside the Council

Source: Authors.

As synthetized in Table 2 and further described in the case, the recognition of the complexity that characterises territorial development and the idea that policies and territorial development processes are not only more efficient but also more democratic if they are based on the participation and collaboration of the actors, have promoted collaborative spaces in TDLab between different actors. These collaboration spaces are not only multi-level but also gather politicians and technical staff, breaking the traditional divide between political and technical processes. Their inclusion has been mandatory in order to involve political representatives in defining the goals that affect the territory and technical staff who enact such strategies in practice. A key feature of NPG is precisely to maintain the primacy of politics by engaging elected politicians and public managers in interactive collaborative arenas (Torfing & Triantafillou, 2013). Council politicians and county politicians have been actively involved in defining and participating in the definition of problems and the strategies to tackle them, and in defining their roles in such endeavours. Moreover, they have all entered and adopted the ARTD approach proposed and developed by researchers as a learning and negotiation approach to generate collective capacities within territorial development.

This has also required that all actors involved (both politicians and technical staff) adopt and/or strengthen their facilitation roles (both intra-government and extra-government). Intra-coordination spaces and mechanisms have also been strengthened in order to tackle together the challenges posed by coordinating the inter-organizational spaces and working on issues defined by the actors.

In sum, from a public administration point of view, TDLab has had significant impact on the practices and roles adopted by the Council (and also agencies) in steering such a process:

> …the important thing is how things are done: concretely it is necessary to depart from the capacity to work together to tackle challenges and problems. The methodology fosters the experimentation with governance models that have multi-level and multi-actor active collaboration within. Moreover, in such process universities inject their knowledge in policy design and implementation processes.
>
> (Statement from the Council representative responsible for TDLab, TDLab Bulletin #20, August – October 2017)

Hence, fostering territorial development through collaboration has required the adoption of the practices, roles and strategies that NPG proposes for public administration – although in the micro-environment that affects the steering of this process. In TDLab, the practices of collaborative territorial development have merged with the practices of NPG, which makes us consider the fit of the NPG paradigm with cooperative territorial development processes.

On the other hand, the new governance practices in Gipuzkoa that highly respond to the principles of NPG have been developed without any explicit discussion about this paradigm. We consider that this is due to the high connections of NPG and ARTD, the approach through which change has been fostered in TDLab. They both view contexts and policy and territorial development problems as highly complex, where there are multiple conflicting voices involved. Equally, they acknowledge the existence of diverse knowledge and the richness of such knowledge types, which need to be put in favour of collective problem-solving. Derived from this acknowledgement of not only the complexity but also the political nature of the problems and the processes to tackle them, they have an interactive and inclusive view, with a shared understanding of the fact that policy goals and processes are negotiated in interaction processes. These

principles also derive from a shared view of collaboration- (and negotiation-) based processes as the means of enhancing collective problem-solving (or collective-knowing) capacity.

Table 2. Similarities of NPG and ARTD

	NPG	ARTD
View on context and problems	Context is continuously changing, problems are complex and policy goals are developed and negotiated during interaction processes	Territorial complexity and conflict are the natural state of territorial development processes, and territorial development is a process of managing such conflict
Knowledge needed for solving problems	Multiple: political, private, civil society, etc.	Research knowledge (field and process knowledge) and territorial actors' knowledge
Strategies and principles	Collaboration, network management, joint problem-solving, improving stakeholder problem-solving capacity…	Co-generation, dialogue, reflection and action, collective-knowing generation

Source: Authors, based on analysis of the case and Hartley (2005), Karlsen & Larrea (2014), Klijn & Koppenjan (2016), Torfing & Triantafillou (2016) and Waldorf et al. (2014).

Thus, with its focus on praxis, dialogue, conflict management and facilitation, ARTD – although not explicitly described in the case due to space issues but detailed in previous works such as Karlsen & Larrea (2014a) – could contribute to public administration and governance scholarship and practice in providing the strategies to foster change towards NPG. As shown in the case, ARTD is a strategy that, by collaborating with policymakers and providing tools to transit from normative ideas to real practices, prevents it from becoming exclusively a theoretical reflection on what should be done to transform it into knowing; that is, knowledge in action. As stated by one of the TDLab participants:

> TDLab is achieving its aim, is not only a tool for creating knowledge but a project that serves to promote transformation based on an action-research process.
>
> (Statement from a county agency representative, ICT meeting minutes, 15th September 2016)

Conclusion

TDLab has illustrated a case in which, through a long-term process, fostering territorial development collaboratively has required and promoted inter-departamental and inter-institutional collaboration, collaboration between political and technical staff, the adoption of strategies to create shared vision, negotiation and joint problem-solving and

a transition of the roles of involved politicians and public managers towards a role of orchestrators and facilitators. The changes presented in the case are delimited to a set of actors and practices; and how they connect with, may influence or be influenced by larger institutional and routinized practices has not been analysed. In addition, the case only represents a particular experience in a particular context, and similar experiences could be analysed from this very same perspective. However, based on the case, we could suggest that not only governing society more generally as argued by governance scholars (e.g., Brugué, Canal, & Paya, 2015; Head & Alford, 2015; Osborne, 2006) but also steering place-based territorial development may require network-based public organisations. The most recent theoretical developments and policy-led frameworks that are strongly influencing territorial development policymaking at the regional level, such as the smart specialisation strategies, have already noted that governments need distinct capacities to steer this type of more horizontal strategies (Aranguren, Wilson, & Navarro, 2017; Estensoro & Larrea, 2016; McCann & Ortega-Argilés, 2016; Radosevic, Curaj, Gheorghiu, Andreescu & Wade, 2017). This article and the experience presented add to those voices by pointing out the relevance of the roles, capacities and structures of governments and public organisations in the promotion of territorial development processes and policies. In our view, governance literature and empirical cases of other fields related to NPG could be a source of learning for our field and for governments that are adopting more horizontal and collaborative regional development and policymaking frameworks.

Moreover, TDLab shows a case in which the changes towards collaboration-based practices in public administration have been fostered through ARTD, an explicit change strategy for territorial development. Similar participatory approaches such as collaborative governance and policymaking and collaborative planning (Healey, 2006; Innes & Booher, 2003) and other types of co-creation experiences involving citizens (e.g., Bovaird & Loeffler, 2016) have already been explored as a driver of governance and public innovation. Equally, action research has been widely proven as a change strategy in a wide range of fields through a wide range of empirical cases (Greenwood & Levin, 2007; Reason & Bradbury, 2001), including specific public fields such as education and health and more generally regional and territorial governance (e.g., Vasstrom & Normann, 2014). Adding to this latter line of research and practice in the territorial development field and to our own previous work (Estensoro, 2015; Karlsen &

Larrea, 2014a), and based on the strong connections between ARTD and NPG (which due to spaces issues have only been outlined in the article), the complementarities of these two fields would merit further exploration in the view of promoting network-based public organisations that are better suited for cooperative forms of steering territorial development.

3.7. Summary

This chapter has presented the four articles of this thesis. First, it has discussed the questions they address and their relationship to this thesis' aim and frame. The chapter has also expanded upon the methodological information in order to provide more detailed material to understand the research. Table III-2 summarizes the information presented. Finally, the chapter has presented the content of the articles. The articles are discussed jointly in the next and final Chapter IV.

Table III-2. Summary of characteristics of the articles

	Article 1	Article 2	Article 3	Article 4
Title	On the study and practice of regional innovation policy: the potential of interpretive policy analysis	Soft resistance: Balancing relationality and criticality to institutionalise action research for territorial development	Public innovation through governance in place-based competitiveness policymaking	When collaborative development meets NPG: the case of Etorkizuna Eraikiz Territorial Development Lab in Gipuzkoa
Research questions of the thesis addressed	In which ways can research contribute to regional development policymaking?	How does multi-actor collaboration in policymaking contribute to regional development? In which ways can research contribute to regional development policymaking?	How does multi-actor collaboration in policymaking contribute to regional development?	How does multi-actor collaboration in policymaking contribute to regional development? In which ways can research contribute to regional development policymaking?
Main theoretical blocks of the thesis (explicitly) related	Regional innovation policy Policy and policy process Policy analysis	Relational approaches to policy analysis and action research	Regional development policy Governance of territorial development policy Multi-actor collaboration in policymaking	Governance of territorial development policy Multi-actor collaboration in policymaking
Research questions	What potential contributions can interpretive policy analysis approaches make to the analysis and practice of regional innovation policy governance?	What are the characteristics of the relational-critical dynamic between policymakers and researchers practiced in Action Research for Territorial Development? How has the relational – critical dynamic practiced through ARTD in Gipuzkoa Sarean contributed to a new form of governance?	What is the potential of collaborative policymaking in place-based competitiveness to foster public sector innovation? What types of public innovation have been fostered through multi-actor collaboration in place-based policymaking in the case of Bizkaia?	How do the governance practices required in Territorial Development Lab for fostering territorial development collaboratively relate to the principles, strategies and roles of actors framed under the New Public Governance paradigm?
Theoretical framework	Interpretive policy analysis Policy analysis Regional innovation policies	Action Research Territorial Development and Action Research	(Collaborative) Public innovation Governance of place-based development	Governance of place-based development NPG Action research for territorial development
Type of paper	Conceptual	Empirical analysis	Empirical analysis	Empirical analysis
Research approach	-	Insider – research / Action research	Insider research / Self – ethnography	Insider – research / Action research
My approach and positionality	Outsider- within	Outsider- within Self- ethnography: observing participant	Outsider- within Self- ethnography: observing participant	Outsider- within / outsider Self- ethnography: observing participant
Method	-	Case study	Case study	Case study
Kind of case study	-	Local knowledge case: Gipuzkoa Sarean Instrumental and intrinsic Retrospective – three snapshots Direct interpretation	Local knowledge case: Bizkaia Orekan Instrumental Retrospective Direct interpretation	Local knowledge case: Gipuzkoa Sarean Instrumental and intrinsic Retrospective Direct interpretation
Trustworthiness	-	Prolonged engagement and observation, peer checking, participant checking, external peer review process, usability	Prolonged engagement and observation, peer checking, participant checking,	Prolonged engagement and observation, peer checking, external peer review process

Source: author's own

CHAPTER IV. LEARNINGS AND FURTHER RESEARCH

> ‘ (…) scholars, in academic settings, prefer to deal with questions while practitioners are confronted with problems (…) As policy analysts aspire to contribute to ameliorating problems, that should be their focus, too —the raw, confusing, thankless urgency as it presents itself to the policy maker.’ (Wagenaar, 2011, pp. 102-103)

This closing chapter presents the conclusions and learnings for this thesis. These are structured around the two general research questions posed in Chapter I: (1) How does multi-actor collaboration in policymaking contribute to regional development? And, (2) How can research contribute to regional development policymaking?

The chapter does not repeat the concrete conclusions of each of the articles but rather offers a joint discussion in the frame of the research questions and the objective of this work; that is, to advance knowledge on territorial development processes, multi-actor collaboration and how research can contribute to these processes. Moreover, the information of the cases presented in the articles is further elaborated upon in order to provide more lessons from the writing process. Possible future research lines are outlined together with the learnings and conclusions.

4.1. On multi-actor collaboration for territorial development policymaking

Chapter II has argued for multi-actor collaboration for steering territorial development, based on several reasons derived both from territorial development and policy sciences and governance scholarly work. Beneath the arguments that call for such forms of governance, we found an acknowledgement of the complexity that characterizes regions, territorial development processes and the policy world. This complexity derives from and it is expressed through, among others, the variety of views and interests among the actors; the diversity of rationales behind particular policies and processes;

the mix of institutional practices and the agency of specific actors that shape territorial development; and the political nature of policymaking and territorial development. Thus, a wide range of micro and macro non-predictable factors exist that condition and shape how policymaking and territorial development is enacted in particular territories.

The empirical articles (2, 3 and 4) have shown only a minute part of such complexity. Through looking at the micro-practice of two projects with policymakers, some of the features that characterise the policy world are (only partly) illustrated in the cases.

Article 2 describes specific episodes that although focused on the agency of researchers in the change processes – discussed in the next section – slightly show that doubt and uncertainty is part of the everyday work of policymakers. It also shows that these features may be drivers of policy decisions as much as rational and ideological policy rationales. An episode in the article shows a policymaker in charge of putting in practice an approach previously agreed upon by several government members to approach territorial development in participatory ways. The episode shows that his practice partly contradicts the Council's approach to the process. This episode can be illustrative of how the concrete practice of one policymaker can determine the enactment of a policy in decisive ways. Thus, it supports the ideas expressed in Chapter II and Article 1 about the relevance of implementation and practices in policymaking. Territorial development and policymaking are also enacted by actions and behaviours as apparently insignificant as the one described; not only ideas, discourses and rationales can be framed rationally.

Likewise, Article 3 also shows briefly some of the doubts that policymakers face when carrying out a cooperative governance process. The case describes a process in which policymakers decided to open dialogue spaces with other actors. But many doubts emerged when putting that idea into practice: Who are those actors? Who are the representatives of local territorial development? Do we establish dialogue one-on-one or by territorial zones? Although it is not explicit in the final version of the paper, different options were discussed. Establishing dialogue spaces with each municipality or county would allow for greater adaptation to the particularities of each. Yet, this option would hinder the possibilities to learn among peers, to identify synergies and common challenges and to define joint solutions. In addition, it would have been too time-consuming for the government. However, in order to perform some type of grouping, different logics had to be considered. These different logics would derive in different

territorial delimitations, so it was a relevant decision. Do we establish the zones depending on the economic characteristics that the competitiveness study shows? This would imply generating geographically distant groups in which there is no tradition of previous cooperation. Or is it better to generate geographically close groups even if they differ in their economic characteristics and challenges? Indeed, one could find various theories that could advocate one way or another, but in the end, politicians must weigh (e.g. the similarities in economies, geographical proximity, existence of previous demographic and cultural links, institutional collaborations, and so on) and decide.

Additionally, Articles 2 and 4 show situations in which, even when there is a framework of collaboration and a will to collaborate among actors, conflict and diversity of visions is the regular and daily reality in territorial development. One of the episodes Article 4 describes is the existence of a one-year process that was carried out to establish a formal collaboration framework between the Provincial Council of Gipuzkoa and county development agencies. It took one year because there were several differences between multiple aspects not only on the details of the agreement, but also on the very role of each actor in territorial development. These actors coexist and work together, interacting in the territory in a more or less continuous way, and yet they still have different – and even contradictory – opinions on what corresponds to each one when promoting economic development.

As previously noted, the articles display little of the complexity. Further, we focus only on micro-practices that are part of wider territorial dynamics affected by multiple factors beyond the scope of the articles. Nevertheless, we must not forget that territorial development and policies are developed in contexts in which all the small things illustrated in the articles do exert some influence.

Those contexts characterized by reason and emotion, by collective and individual interest, by rationally taken decisions and daily practices that generate institutions, by collaboration and conflict, are the contexts into which research enters as one more element. And, it is in those contexts, as argued in Chapter II, in which multi-actor collaboration can lead, among others, to collective learning, *collective knowing* and to creating long-term capacities in a territory to solve problems.

Articles 2, 3 and 4 present two experiences of multi-actor collaboration in territorial development that have produced results in line with the claims made in Chapter II. Article 2 and Article 4 analyse the same experience, an AR process with the aim of creating and enacting new governance modes for territorial development in Gipuzkoa. Article 2 focuses on the relationship between researchers and policymakers and thus presents the multi-actor collaboration case more indirectly. Article 4 describes an overall picture of the process focusing on the role of government in steering governance. Previous work by Article 4's co-authors also analyses the same policy experience and show results of multi-actor collaboration in terms, among others, of policy learning (Karlsen & Larrea, 2014b, 2017), capacity building (Estensoro & Larrea, 2016), shared vision (Costamagna & Larrea, 2018) or collective knowing (Karlsen & Larrea, 2014a). However, the articles in this thesis only outline some of the results, such as new programmes, generation of trust and changes in the practices of the Provincial Council, which will be discussed later.

Article 3 show results of multi-actor collaboration in terms of a specific dimension not addressed in the conceptual chapter: public innovation and specifically policy innovation. The case of Bizkaia Orekan shows that multi-actor collaborative spaces and the dynamics between provincial level policymakers and local development actors have led to policy innovation. The article presents a project that created four working groups that gather local development actors and provincial level policymakers to jointly define territorial competitiveness challenges and work on actions to tackle them. The article finds that as collaborative public innovation scholars have argued, multi-actor collaboration in the case has been home to three generative mechanisms – learning, synergy and commitment – that may produce innovation. The implications of such generative mechanisms in terms of policy innovation are described with a concrete output of a new policy programme created by the Provincial Council of Bizkaia. The inclusion of different knowledges of a territorial problem defined in two of those collaborative spaces (poor maintenance state of enterprise zones), the synergies of the works of different actors on this issue and the commitment of participants to define and implement a solution to this problem led the Council to design and launch a new programme to tackle this issue. The article also supports the proposition by Sørensen and Waldorff (2014), who state that coordination mechanisms and boundary spanning roles between collaborative arenas and formal policy decision spaces must exist for

policy innovation to happen. Concretely, the case determines that the new policy programme has been launched because there is a governance mechanism (a Steering Committee) that enables the challenges and possible solutions defined in the collaborative spaces with territorial actors to be assessed and tackled in formal governmental decision spaces through the transmission role of its members.

Article 3 also briefly introduces an issue that is further explored in Article 4: the role of public organisations in steering cooperative forms of governance for territorial development. Article 3, framed under public innovation, outlines some of the changes that fostering multi-actor collaboration has required to the Provincial Council of Bizkaia. These changes include strengthening coordination mechanisms between the Council's different departments and the agency to respond in a more coordinated fashion to challenges that transcend departmental areas; changes in the roles of some civil servants involved who, from traditional bureaucratic work, had to change to the facilitation of collaborative spaces; and changes in the policymakers to be more open to experimentation and to promote actions that do not have immediate tangible (and thus, publicly 'sellable') results.

Article 4 further reflects on these issues by looking at the case Gipuzkoa Sarean (=Territorial Development Lab) through the NPG paradigm, a networked based paradigm, which Table IV-1 illustrates differs from previous public administration paradigms in the principles, objectives, practices and roles of the actors involved in public action.

The article illustrates that fostering collaborative approaches for territorial development has produced changes in the practices of the Provincial Council of Gipuzkoa, which has adopted practices very much aligned with the NPG paradigm. These include involving political representatives in collaborative spaces; building spaces based on learning but also negotiation and conflict management approaches; fostering intra- and inter-organizational cooperation; and strengthening the facilitative role of the (political and technical) actors involved. Hence, the article also suggests that current territorial development policymaking - based on the multi-vision, multi-interest, multi-knowledge and multi-resources approach to understanding territorial development - may need NPG based public administration.

Table IV-1. Three dominant governance paradigms in public administration

	Classical Public Administration	**New Public Management**	**New Public Governance (/networked governance)**
View of context, politics and policy			
Context	Stable	Competitive	Continuously changing
Politics and policy process	Politicians set goals that are implemented by the executive in a neutral way	Politicians set goals. Policy implementation and service delivery is done by independent agencies or market mechanisms	Goals are developed and negotiated during interactions processes. Politicians are part/facilitate these processes
Governance systems and principles			
System	Bureaucracy	Market	Network
Principle	Hierarchy	Competition	Collaboration
Goals and focus of Administration			
Key concepts	Public goods	Public choice	Public value
Overall goal	Ensure legality, transparency and equity in public decision making and service provision	Enhance efficiency through persistent efforts to rationalize and cut slack	Enhance efficiency, quality and capacity for public problem-solving through collaboration and innovation
Objectives	Production of effective and uniform policies and services	Improving effectiveness and efficiency of public services and organizations	Improving inter-organizational coordination and quality of policymaking and services
Focus	Public services provision and quality	Public service efficiency	Solve multidimensional problems
Nature of problems, knowledge and strategies to deal with them			
Needs/problems	Straightforward, defined by professionals	Wants, expressed through the market	Complex, volatile and prone to risk
Knowledge	Political professional	Managerial private sector	Multiple: political, professional, private, civil society.
Strategies, solutions and main management techniques	State and producer centred Public bureaucracies based on hierarchy, specialization and explicit rules. Using hierarchy and command and control; line management; building on rule following, loyalty and a public service orientation of civil servants	Market and customer centred Deregulation, public-private competition and performance incentives. Using business and market instruments to improve service delivery	Shaped by civil society Public-private collaboration through networks, partnerships and relational contracting Using network management; activating actors; organizing research and information gathering (joint fact-finding), exploring content, arranging, process rules, and so forth
Role of actors			
Politicians	Sovereign decision makers exercise authority and produce laws and rule. Visionary entrepreneurs Commanders	Board of directors steering the administration by defining overall goals, targets and budget frames Metagovernors	Political leaders of the political community who define problems and goals and develop new solutions Metagovernors. Orchestrating interests
Public managers	Implement and refine political ideas as experts Administration of rules and resources, while focusing on legality and equity	Develop, refine, and implement ideas from private sector as 'hybrid' managers. Strategic management focusing on inputs and outputs	Manage interaction in networks and participate as experts Leaders of intra- and inter-organizational collaboration while focusing on processes and results
Firms and NGOs	Pressure groups influencing government from the outside	Contracted providers of public services	Partners in negotiated co-creation of public solutions
Citizens	Bearers of legal rights, but subjected to public authority Clients – participate in procedures	Customers making rational choices between different services providers. Express individual preferences on public services	Active citizens engaged in co-production, co-creation and co-governance of public services Co-creators of public services

Source: adapted from Hartley (2005), Klijn and Koppenjan (2016), Waldorff et al. (2014) and Torfing and Triantafillou (2016)

In my view, this suggestion also opens an interesting path for future research: the role of governments and concretely policymakers in cooperative forms of policymaking and governance in regional development. The role that systemic regional policy approaches require of policymakers resonates with NPG based ideas. For example, the roles of regional states and public leadership styles of the RIS3 framework differ from those of previous rationales (Aranguren, Wilson, & Navarro, 2017; Gianelle, Kyriakou, Cohen, & Przeor et al., 2016; Morgan, 2016b) and are much closer to network-based paradigms' claim for policymakers; that is, a role that is mainly about facilitating, creating and managing frameworks of collaboration. Equally, leadership and facilitation of cooperative forms of policymaking and governance are key to such processes. But the adoption of those roles is not straightforward: leadership capacities must be built (Estensoro & Larrea, 2016).

None of the articles have a strong focus on this issue of leadership capacities, although Article 2 and Article 4 examine the need to strengthen facilitation capacities as part of the work developed in the project, which constitutes the case study. Indeed, the project's lead researcher and co-author in both articles, has done academic work in this area and the line of work has been strongly developed in the project (see Costamagna & Larrea, 2018). Likewise, there is a strong line of research on place leadership, which also focuses on the shared leadership of territorial development processes (e.g. Ayres, 2013; Beer & Clower, 2014; Sotarauta, 2005, 2014, 2016). Moreover, governance scholars and collaborative governance scholars have developed a line of work on network management, facilitative leadership and metagovernance (e.g. Ansell & Gash, 2012; Hartley, Sørensen, & Torfing, 2013; Klijn & Edelenbos, 2007; Roberts, 2000; Termeer, Dewulf, Breeman, & Stiller, 2015). Hence, creating capacities for this type of leadership in regional development - a need also posed by the OECD (2009) - could benefit from insights from these different lines related to leadership and facilitation. This could allow for better understanding of the nuances of this type of relational leadership and how to build capacities for it.

Furthermore, another line of further research that could be derived involves innovation literature, which recognizes the existence of different innovation instruments in the same policy space that may be in tension in terms of differing policy rationales, goals and implementation approaches (Flanagan, Uyarra, & Laranja, 2011). Following this line of argument and building on a parallel case in the governance literature, it could be

presupposed that tensions may arise equally between diverging roles that different policy rationales require of policymakers. As Bevir (2013) noted, civil servants must deal and negotiate with the contradictory demands that different public administration paradigms and approaches put on them. Similarly, contradictory demands may also be caused by sectorial policy logics, in this case, by diverging old and new innovation and competitiveness rationales. The coexistence of different rationales may demand different functional patterns, such as brokerage, entrepreneurship and leadership (Capano & Galanti, 2017). Following this line, it would be interesting to further investigate how the coexistence of different roles' demands by different policy paradigms affect policymakers in practice. How do they deal with the tensions between different roles they must adopt in different processes?

Lastly, I want to reflect on the potential of multi-actor collaboration as a means of regional policy learning. As described in Section 2.5, Benz and Fürst (2002) name regional policy learning a type of learning that occurs through networks of actors which produces double-loop type of learning and individual and group level learning and also changes structures and/or resource allocations. Article 3 demonstrates a case that produced learning among many actors and changes in policymaking. A concrete Council programme has been defined collectively, from problem definition to its design. Equally, the experience presented in the cases of Article 2 and Article 4 detail a process that has resulted in the creation of a formal collaboration framework, in which a part of a budget line of the Provincial Council is negotiated with county agencies. In both cases, as outlined in Article 3, governments can be said to have changed – in those particular spaces and fields – towards governing through *puzzling* and *participation* (Hoppe, 2010), which has produced changes not only in terms of learning, but also in the governing process and mechanisms. It is reasonable to suggest that several of those processes within a region may contribute thus to regional policy learning, and hence, territorial development. This is an open issue and proposition that would merit further exploration.

4.2. On the contribution of research to territorial development policymaking

The second general issue that constitutes the focus of this thesis is how research can contribute to territorial development policymaking. The learnings of the thesis in regard to this issue and future research lines are presented in this section.

Inspired by several innovation and territorial development scholars, there has been a key guiding idea in this thesis: the need to acknowledge and understand the policy world to better contribute to it. As described throughout Chapter II and also the conclusion in the previous section, the policy world is political, complex, context-dependant, non-linear and emergent. Moreover, as argued in Chapter II, the research that aims at contributing to such a world should *fit* with those properties (Hajer & Wagenaar, 2003; Wagenaar 2011).

The above proposition is the one that we take as a point of departure in Article 1 to argue that in order to better address the complexities of regional innovation policymaking, we should not only reflect on the focus of the research, but also on the research approaches and analytical lenses used in the analysis of regional innovation policy. To do so, we present some ideas and frames of analysis developed by interpretive policy analysis approaches in policy studies. Through them, we argue that other approaches to analysing regional innovation policies could complement existing ones. Concretely, it delves into two main issues: (a) the potential contributions of ordering devices (meanings, frames and narratives), of a practice-focused research and of collaborative policy analysis approaches to the analysis and practice of regional innovation policy governance; and (b) the potential contribution of constructivist approaches to policy learning to the next generation of innovation policy – namely, transformative innovation policies for addressing societal challenges.

Indeed, if the processes to which the territorial development and innovation literature aims at contributing are complex, diverse tools that help understand such complextity from different angles should be fostered. If governance is not only determined by the formal structures that formalize them but also by the micro-practices of several actors with their own standpoints and institutional contexts (as briefly outlined in the episodes of Articles 2 and 4 and mentioned in the previous section), analytical tools that help us

capture those practices and standpoints would complement a picture given by other perspectives more oriented to structures. Even though representing a world that is complex and emergent will always be an unachievable task (Section 2.6), expanding the scope of ways to look at it (or better said, representing it), will always give a more complete picture. I have not explored or used most of the approaches proposed in the articles due to practical limitations. But, as we concluded in Article I, I hope to explore them in future work, to empirically use frame and meaning analysis for the study of territorial development policies and policymaking; analyse innovation policymaking taking practices as unit of analysis; and even more so, explore these analysis approaches in combination with AR.

Collaborative approaches to policy analysis (addressed in Section 2.6) are also proposed in Article 1 as a means to contributing to governance and social learning for paradigmatic changes in the field of regional innovation. In effect, Chapter II noted that research can have different uses in the development of policies (instrumental, conceptual, symbolic) and that the dynamics between academic knowledge and policies can be understood in different ways (e.g. knowledge driven, problem driven). Moreover, the chapter argued that the type of research explicitely aimed at impacting concrete decisions and actions can also involve different activities (e.g. providing evidence, facilitating dialogues). From any of those different perspectives, the interactions and dialogue spaces between researchers and policymakers become key to strengthening the research-policy link, to incorporating research in policymaking processes and to increasing the impact and usefulness of research in those processes.

Articles 2, 3 and 4 are precisely based on collaborative approaches of doing research. That is why this idea is linked next with reflections derived from those articles. The articles are based on cases in which research, besides performing an *englighning* function also perform an *aid-to-action* role (Wagenaar, 2011). That is, research is used not (only) to capture complexity, but also mainly to help navigate such complexity. This role has been played in many ways in the projects that constitute the articles' case studies. However, strictly regarding what has been made explictit in the articles (and not to my wider experience in those settings), we gain a glimpse of that role in parts of Articles 2 and Article 4.

Article 2 shows how a researcher can enter a policy process in a way that, through frames and reflections, helps to build a practice that is coherent with policy goals. The researcher, then, becomes a tool for impeding the break between the design and the implementation of policies, which occurs many times in policymaking. One episode in Article 4 briefly describes the existence of a one-year negotiation process between territorial actors facilitated by researchers. In that process, research was used to first help learn of each other's positions and to make it an exercise in empathy. Although it is not described in detail in the final version of the article, this exercise was developed through a process of analysing the diverse views on their roles in territorial development and a later discussion of those divergent views. Then, the researcher acted as a facilitator for the actors' agreement. Thus, research becomes a tool for negotiation between a group of actors with diverse interests, providing policymakers with inputs to put different positions on the table and at the same time develop strategies to manage them.

Research is introduced in the process of policymaking and governance, therefore, not as an ouput placed in the world so that policymakers can choose to whether to make use of it, but as a tool that helps with reflection and action in the collaborative process itself. Hajer and Wagenaar (2003, p.19) noted that the lack of influence and the impact of policy sciences can sometimes be understood by the 'gap between the theoretical rationality of the policy sciences and the practical rationality of the practitioner'. In the types of processes described in Articles 2, 3 and 4, the two rationalities come together and become one, to break with that idea (discussed in Chapter II) of the existence of two communities that cannot understand each other. Article 2 for example, shows that ARTD for territorial development - the approach that guides action in the cases of Article 2 and Article 4 - is based on the idea that although researchers and policymakers do have differing views, they can also reach a level of agreement to act.

Moreover, in line with previous works by one of Article 2's co-authors (e.g. Karlsen & Larrea, 2014a), the article illustrates a case in which research becomes a tool for changing governance patterns in a territory. This can be a relevant function to play in territorial development policymaking. Indeed, building on many works in territorial development and policy and governance literature, Chapter II has argued for more horizontal and collaboration based modes of governance. However, fostering a change towards such modes of governing is not straightforward. Public action is not developed

in a vacuum but in specific path-dependent contexts with its own pre-existing institutional framework, policy styles and capacities with deep rooted practices (Flanagan & Uyarra, 2016; Valdaliso et al., 2014; Morgan, 2016). In fact, as noted in Section 2.4, several scholars have already stressed the relevance of governance capacities for developing RIS3 strategies (Estensoro & Larrea, 2016; Kroll, 2015; Marques & Morgan, 2018; McCann & Ortega-Argilés, 2016; Morgan, 2017; Radošević, 2017). In this sense, analysing the multiple roles that research can play in stregnening regional governance capacities and more widely 'policy capacities' (Wu, Ramesh & Howlett, 2018) required for RIS3 could be a line of further research.

Studies on governance and institutional change and policy innovation show that governance changes are usually the combination of external factors and internal drivers, of institutional factors and actors' agency, intentionality and strategies (Arnouts, van der Zouwen, & Arts, 2012; Brugué et al., 2014; Sotarauta & Pulkkinen, 2011). Within this last dimension, that is as an intentional strategy of change, we could situate action research, and more concretely ARTD, the approach analysed in Articles 2 and 4.

In this concrete strategy, and adding to previous works that analyse the features of this approach to contribute to change (e.g. communicative approach to change, conflict management), Article 2 adds a relevant feature to understand how research can contribute to change through the relational-critical dynamic established between researchers and policymakers.

The article concludes that (at least in the concrete experience analysed) without a basis of trust it is not possible to be critical without the process being broken. It also concludes that research should not only be critical with respect to general ideas and programmatic proposals if it wants to generate change, but above all in those concrete practices that also enact policies. Thus, it makes a contribution to the ARTD approach first, but also to better understanding how change can be generated through the research carried out in collaboration with policymakers in long-term strategies.

Lastly, I would like to outline an emerging learning that occured during the writing process of comparing Articles 3 and 4. Section 2.3 of the conceptual chapter presented a reflection on the complexity of problems that territorial development deals with and introduced the work of Hoppe (Hisschemöller & Hoppe, 1996; Hoppe, 2010) who

stated that framing problems is of vital relevance in policymaking because it greatly influences the solutions and strategies adopted to tackle those problems. Articles 3 and 4 (or the writing of the cases in Articles 3 and 4) suggest that research can also have a decisive influence in structuring problems, and thus, also on defining the strategies.

Article 3, the case of Bizkaia Orekan, only briefly mentions the initial phase of the project, which I extend here. As a reminder, the article illustrates a case in which the Provincial Council of Bizkaia, in collaboration with researchers from Orkestra (myself among them) first defined and later developed a process to foster competitiveness that considered the different needs of different geographical zones in the province. This collaboration started in 2014, when the Council comissioned Orkestra to conduct an analysis of Bizkaia's competitiveness. One of the dimensions analysed was territorial cohesion, and the analysis highlighted uneven development in the province's territorial areas and significant heterogeneity in terms of productive specialization and economic performance. Thus, different parts of the province faced different competitiveness challenges. Besides, through their internal analysis and evaluation of their policies, the Council had noted that most of their grants were concentrated in specific localities while they sought to reach a wider range of companies dispersed throughout the territory. Based on this information, they decided to initiate a project to foster competitiveness while also promoting territorial cohesion.

A collaboration framework was established between the Council and Orkestra to address the above challenge, and a steering group was established to work on the proposal. Starting in 2015, several meetings were held in which researchers guided reflections with policymakers with the help of documents and frameworks derived from regional development literature. The reflections mainly involved the complexity of territorial development and the relevance of dialogue with territorial actors in order to improve coordination of actions, to align visions, exchange experiences and encounter possibilities of collaboration and the development of new ideas.

Thus, the rationale for the intervention was framed in terms of a need to foster better collaboration between the Council and local actors: better adapted competitiveness policy and ultimately stronger competitiveness would be reached through establishing new communication and dialogue spaces among actors at different scales. Of course, this rationale fit the view of the policymakers and the government since otherwise they

would not have accepted it (they have rejected several of our frames and proposals since then). However, the frames of research on defining the problem and thus the further steps for tackling it were relevant in this phase.

Equally, Article 4 notes that research, together with other types of political ideas and programs, has been relevant to defining the intervention in Gipuzkoa Sarean (=Territorial Development Lab). Specifically, the article describes a phase in which the Council made a decision to define a territorial development proposal and initiate dialogue and bridging processes with territorial actors. These dialogues would be the means to discuss the proposal and work on territorial development processes, strategies and policies jointly with diverse actors. Research derived ideas, which emphasized the complexity of territorial contexts and problems and the consequent need for participation, shared visions and trust relationships, and the creation and development of strategies based on learning, negotiation and collaboration, were relevant in defining the proposal and the subsequent process. Moreover, research also played a key role not only in helping to develop in practice some of the strategies, but also in contributing to creating awareness on aspects, such as the need to making explicit diverse views and managing conflict, and in framing situations that led to the strategies adopted in the project. Table IV-2 synthezises (my interpretation on) the implications of these rationales in strategies adopted in the case of Article 4.

Table IV-2. Link of intervention rationales and strategies adopted in Gipuzkoa Sarean/TDLab

Government and ARTD based rationales of intervention	Implications	Strategies adopted in TDLab
Development is normative and political Territorial development takes places in territorial complexity situations: Diverging views, interests, resources Policies are more efficient and effective when building on local knowledge and based on collaboration Policies are more democratic when they are developed through participation Territorial development processes need to include the visions of those who work with companies and other actors in practice Territorial development needs shared leadership and facilitators	There is a need to align visions and resources Development strategies need to be negotiated, Conflict needs to be managed There needs to include local knowledge in Provincial level policymaking Facilitation capacities need to be created	Creation of dialogue spaces between Provincial Council and county level territorial actors Involvement of local politicians in collaborative spaces to define development strategies ARTD as a strategy for negotiation, learning and join problem-solving Involvement of local technical staff in collaboration spaces Creation of spaces and strategies for facilitation capacity building

Source: authors' own based on the interpretation of the case of Article 4

The relevance of research in framing problems has been linked in Chapter II to the conceptual use of and the englightening function of research in Weiss's (1979) work. However, in these cases we can grasp that function in the very micro-practice of collaborative research projects in a direct use of research to aid policymaking.

Hence, and returning to the overall driving idea of this thesis, further exploration and expansion of the diverse activities and functions that research can play in the framework of long-term research-policy collaboration experiences, together with other lines outlined previously, could be a way to further enhance how research can contribute to policy development in our incresiangly complex policy field in an increasingly complex policy world.

Epilogue: a final personal note on my learning process

I stated in the introduction that the main motivation for this thesis was strictly personal: this work was first and foremost a research work *for me*. In effect, it has involved learning from scholarly works to help me view my experience from new angles, and eventually, contribute to academia. But I have only partly accomplished this aim. I now realise that I still have a whole world yet to discover and this research has been only a tiny step. Moreover, the thesis has also been a humbling experience for me: I had the idea that most academic works did not capture all the nuances of my real-world experience and I naïvely thought I could do so. I have not and will never do. Even more so, there is a contradiction in the fact that I have developed a thesis that reflects on how research can contribute to policy and territorial development while the thesis has not been approached in a way that develops more actionable knowledge and thus, it is not directed at having a direct impact in practice. I am aware of this contradiction and take charge of it.

However, the thesis has been *for me* in a much deeper way than intellectual development. The PhD has been excellent but a really difficult journey of self-discovery, awareness and empowerment. It has involved breaking with my own idea and also others' ideas about me, searching for my own voice, questioning myself but also some authoritative voices, dealing with my sense of unfit (see Almack & Churchill, 2007), deepening my most personal and inner thoughts and feelings, analysing and questioning my own skills but also questioning institutional (university) implicit and explicit norms. This has been a journey full of ups and downs that at some point I thought to make explicit in the thesis as a kind of vindication of the struggle of the learning process. But afterwards, I realised that although the B side of the thesis is really meaningful for me, it is not necessarily interesting for the reader of a PhD work.

However, I would like to share one reflection in regard to an issue that I discussed in Section 1.5. Although I have undertaken a PhD and written a thesis, I have never seen myself as a researcher. This feeling is mainly related to me, but I think that it could be also linked to the idea that I hold about researchers and academics, which I believe – although I know some people does not agree on this - could also be linked to some

wider or more generalized idea both in (at least part of) society and also in (at least part of) the academic community.

One of the policymakers with whom I have worked most in one of the projects uses a brilliant expression that, by opposition, perfectly fits my (until very recently) implicit view on academics: 'we, the mortals'. That's the expression he uses to refer to those who are not academics. I have never discussed with him the exact meaning for him and he may only refer to the fact of working in the 'real' world rather than in 'the world of ideas'. But to me, 'the mortals' represent the ones who live in worldly life as opposed to the ones who are somehow above all of us, the regular people. Indeed, I have recently realized that I always internalized an idealized image of academics: for me, they were those extraordinary thinkers with ground-breaking ideas in the Oxford University library in the early twentieth century; those great thinkers one always had to listen to; those extraordinary people with their brilliant ideas, insights and reflections about the world. Considerably contradicting my 'academic' discourse and the methodological approaches and knowledge construction processes that I argue for, my inner implicit beliefs held academics to be those who have 'the absolute knowledge' (Hajer and Wagenaar, 2013, p.10). Being a 'doctor' meant that to me: being a doctor meant being a wise person.

Regardless of what this imagery says about me (in opposition to that), I do have the sense – without any data to probe it - that although unlike those extreme terms, that kind of image may also be the image that some others may have. Only some weeks before writing this text, a (non-academic) colleague told me 'jokingly' that I was already levitating a bit. The policymaker who uses the expression 'the mortals' has also many times joked with me telling me that I am already leaving the mortal's world. Another civil servant recently made a comment to me that I cannot reproduce here because of confidentiality issues but was very much in line with that type of comment. And, I sense that this idea, even expressed in joking terms, may have a strong meaning about a generalized idea – not necessarily the one I shared- of what constitutes knowledge, who has the knowledge and even what policymakers may expect from academics (negatively and positively).

This type of belief probably can also be implicitly found in part of the academic world. This quote from a paper by Edquist (2014, p.16) could serve as an illustration:

> Innovation policy design is certainly lagging behind innovation research when it comes to being systemic, broad-based, or holistic. This is clearly an example of a disturbing failure when it comes to the communication between innovation researchers and politicians/policymakers in the field of innovation. This may be a strong reason to involve innovation researchers in the design and implementation of innovation policy to a much higher degree. There is a lot that policymakers and, in particular, politicians can learn from innovation research, not only in principle or analytically, but also regarding policy practice.

When I state that this thesis has been empowering for me, it does not mean that I now see myself as a non-mortal. Quite the contrary, it has made me realise that those who I thought were non-mortals, are mortals like myself. Thus, in response to Edquist's (2014) fragment, and for those who may have similar implicit beliefs like the ones I had, I finish this work with a little story from my practice and some wise words from someone who I worked with.

Orkestra organized the 8th Regional Innovation Policies (RIP) conference in 2013, a conference that gathers scholars from the regional innovation studies community. One of the panels was devoted to AR, and the policymakers who were then responsible for Gipuzkoa Sarean (the project in Articles 2 and 4) were invited to participate. One of them, in sharing his experience of working with researchers, said that working with researchers as well as with other territorial actors was the way to build solutions together and learn together because they did not have the solutions to the problems on their own. During the discussion, one of the researchers in the audience told the policymaker that is was very brave to recognize that they are in a learning process because it implies recognition that they do not know and making that explicit makes one vulnerable. The policymaker responded with something like:[11]

> Neither of us knows, not the policymakers not the researchers. We know as we build together…

[11] This is a reproduction of the words from his speech recorded in my notes. The notes were taken quickly and they are likely a paraphrase.

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