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Multi-level processes and the institutionalization of forest conservation discourses: Insights from Natura 2000

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Abstract

The implementation of the Natura 2000 network of protected areas has been controversial in the EU member states, leading to both conflict and collaboration during planning processes. Such multi-level processes frame the problems and solutions associated with nature conservation policy in specific ways. This article examines how forest conservation is conceptualised by different stakeholders at different levels of governance and investigates whether local discourses can lead to institutional change. We analyse two empirical cases, one of collaborative planning and one of conflict, which emerged in the implementation of Natura 2000 in Soria, Spain. While the dominant discourse draws on scientific rationality, local level discourses draw on local knowledge referring to rights-based and hierarchial rationalities. We found that civil servants' discourses were most complementary with the dominant discourse and enabled an institutional transition between conservation paradigms accommodating habitat conservation and as well as sustainable forest management. Although discourses on participation opened up a window of opportunity for local framings on conservation to become institutionalized, tensions between communicative and hierarchical rationalities jeopardised this institutionalization. Counter-discourses drawing on rightsbased rationality demanding increased control over forests were less likely to become institutionalised.

Keywords:

Institutionalization, rationalities, forest policy, Natura 2000, multi-level governance, discursive institutionalism

1. Introduction

Natura 2000 is a European network of protected areas established under the Habitats Directive (CD 92/43/EEC) and the Birds Directive (CD 79/409/EEC). In the early 2000s the European Commission (EC) signed the Aarhus Convention and implemented it through new directives (2003/4/CE & 2003/35/CE) that emphasised participation and partnerships, and made commitments to participation in its White Paper on Governance (Commission of the European Communities, 2001). This legal framework opened a new dimension for public engagement as the Habitats Directive had only required environmental assessment for plans or projects that were likely to have a significant effect on a protected area (CD 92/43/EEC; Art. 6.3).

These policy developments have led to a growing interest in whether and how participation could increase the acceptability and legitimacy of EU conservation policies (Blondet et al., 2017; Newig, 2007; Rauschmayer, Koetz, & van den Hove, 2009; Wesselink, Paavola, Fritsch, & Renn, 2011). Despite all efforts, controversies around environmental conservation have emerged in many EU member states (Bjorkell, 2008; Ferranti, Beunen, & Speranza, 2010; Hiedanpää, 2002; Krott et al., 2000; Wurzel, 2008). Yet the relationship between discourses of actors embedded in local planning processes and dominant policy discourses of supra-national EU level institutions has remained understudied (Raitio, 2012).

The dominant EU level discourse on Natura 2000 is based on scientific rationality (de Koning et al., 2014). Yet, science is not an obvious driver of local forest management practices (Arts et al. 2014). Local discourses are context-specific and closely connected with institutional developments impacting the region and they influence how local people understand surrounding socio-ecological systems (Pecurul-Botines, *et al.* 2014). The relationship between local and supra-national discourses remains underresearched and whether local discourses can contribute to institutional change at higher levels has attracted limited attention to date (Buizer & Van Herzele, 2012, Paavola, 2007).

This article aims to examine how the discourses of actors at different levels of governance shape policy outcomes, and how institutional change relates not just to EU level policy discourses, but to local counter-discourses. It does so using comparative analysis of discursive practices in two planning processes related to the implementation of Natura 2000 in Soria, Spain: one conflictual in Urbión and one collaborative in the Cabrejas mountains. Our analysis is guided by the following questions:

- What are the main counter-discourses of local actors with regard to Natura 2000 conservation policies?
- How are these counter-discourses used to influence the planning and policy processes?
- Under what conditions can local counter-discourses become institutionalized?

In what follows, we first outline the conceptual framework that informs our analysis. Next we introduce the case studies and the qualitative methodology we employ to examine them. The results section dissects the local counter-discourses in relation to the dominant Natura 2000 discourses. We compare the two cases to assess to what extent the local discourses have become institutionalized. We then explore the key factors influencing the institutionalization process: the internal discursive coherence; the presence of contradictions or complementarities between dominant and local discourses; the presence or absence of alternative counter-discourses. We conclude by discussing the drivers and constraints of local counter-discourses to influence institutional change at higher levels.

2. Theoretical framework: Discursive institutionalism and institutionalization of discourse

Discursive institutionalism highlights the role of ideas and rationalities embedded in discourses in driving institutional change (Arts & Buizer, 2009; Buijs, et al., 2014; Schmidt, 2010). Discourse analysis has been used to investigate instances of conflict and collaboration in policy processes (Hajer, 1995; Zachrisson & Beland Lindahl, 2013), but rarely to compare discourses across governance levels. International forest policy analysis has found that opening up decision-making processes to new actors explains how new ideas emerge and become institutionalized into policy arrangements and social practices (den Besten, Arts, & Verkooijen, 2013; Pistorius et al., 2012; Somorin et al., 2011). But most of these analyses focus on global discourses, and while there are comparative studies of national discourses (Di Gregorio, et al., 2017) most studies do not consider sub-national context and discourses prevailing at regional and local levels.

Discourse analytical approaches have increasingly been applied to forest and biodiversity policies in Europe and elsewhere (Leipold, 2014). For example, discursive evolution of forest-related problems has been examined alongside how forest-related solutions have been framed (Arts & Buizer, 2009; Pülzl 2005). In Vietnam, the evolution of discourse has impacted the framing of sustainable forestry and proposed solutions, as "forestry socialization" discourse has been added to the "sustainable management" discourse (Dang et al. 2012). This evolution enabled institutional change, contributing to recognising forest rights of local people in a communist Vietnam. But, although discourses on forest policies have evolved due to the impact of international forums, local frames rarely become institutionalized at the national or supra-national level.

The conditions under which local discourses might become institutionalized have been seldom examined. Raitio (2012) found that in Finland traditional forest planning provides a set of informal rules embedded in economic rationality that reinforce formal rules for timber production, sometimes at the expense of social obligations. This institutional context reinforces the role of the forest agency as a timber producer, rather than as a facilitator between diverse forest-related interests, which would reflect a communicative type of rationality. Similarly, in this article we ask how the adoption of a specific rationality translates into specific discourses and what explains the institutionalization of such discourses.

Rationalities are the justifications for adopting specific discourses, where "discourse" refers to a "specific ensemble of ideas, concepts and categorisations that are produced, reproduced and transformed in a particular set of practices through which meaning is given to physical and social realities" (Hajer, 1995, p. 44). Rydin (2003) identifies

scientific, economic and communicative rationalities as the three main rationalities used to legitimize policy decisions. In table 1, we illustrate how these rationalities could shape the policy agenda. Scientific rationality involves the acceptance of science as evidence and it assumes that there is one physical reality, leading to objective understanding of knowledge and objective definitions of the problem and solutions. Economic rationality refers to "the manner in which economic practices have sought since the 16th century to justify themselves in a theory of wealth and production" (Rydin 2003: 137). McCarthy, (2006) examines economic rationality in the form of market-based mechanisms such a forest certification and carbon markets that developed after the 1990s. This rationality limits the selection of policy instruments to those that increase the role of the private sector including voluntary agreements Communicative rationality recognizes the constructive nature of arguments, supports deliberative processes and is presented as an alternative rationality, where, communicative power (Rydin 2003) refers to the ability to generate ways of thinking and seeing that open new possibilities for problem-solving and action based on a consensus on what constitute the truth (Fischer, 2003).

	Scientific rationality	Economic rationality	Communicative rationality
View of the environment	Physical reality; object of inquiry	Resource and object of consumption as well as the context for economic processes	Socially constructed: Interface of the physical and the social
Nature of environment- al problems	Arising from lack of understanding and knowledge; leading to poor management	Arising from economic externalities, and lack of property rights; not incorporated in the economic decision- making	Arising from inadequate stakeholder involvement, rejection of lay knowledge, and insufficient environmental education
Preferred environment- al solutions	Based on sound science, knowledge-led	Market-based instruments; introducing property rights and quasi-market pricing	Consultation with stakeholders; visioning, and consensus building.

Table 1: How Rydin's rationalities shape different worldviews of environmental problems and their solutions (Source: Adapted from Rydin, 2003: p.96).

Institutionalization happens when discourses solidify into institutions and organizational practices (Hajer, 1995: 61). A discourse becomes dominant or hegemonic when a powerful actor or a majority of actors adopt or prescribe it to conceptualize the world (*Ibid*). According to Phillips et al. (2004), institutionalization depends on the relationship between a discourse and social action, and assumes that social action is supported and defined by texts such as laws and guidelines that describe and communicate those actions. They suggest that a discourse is more likely to become institutionalized if: i) it

is internally coherent presenting a unified view of social reality; ii) it is supported by broader (external) discourses that are not highly contested; iii) the actors producing the discourses have high levels of legitimacy.

3. Case studies, materials and methods

We use a comparative case study approach that examines a conflictual process over the Natural Park designation in the Urbión mountains and a collaborative planning process in the Cabrejas mountains in Soria, Spain. The two case studies have different physical, institutional and socio-economic characteristics and different forest histories that have given rise to different discourses.

In the Urbión Mountains, pine (Pinus sylvestris) forests have traditionally been exploited for wood production, and are part of a Special Area of Conservation (SAC) overlapping with a pre-existing Regional Natural Park. Most of these forests were commons in the early 20th century and traditional ordinances orginating from the XII century still regulate forest use and protect access. Today the majority of these forests are in part controlled by local administrations as well as by villagers. In the Urbión Mountains a number of small villages are embedded in the forest surface whereas in the Cabrejas Mountains human settlements are hardly observed. Then, searching on national statistics databases (INE 2010) we found that only of 5 of these Urbión Mountains villages exceed one thousand inhabitants. Forest resources support the provision of public services to the villages as well as infrastructure and cultural legacy. When a Natural Park was created in the Urbión Mountains, some villagers and city councils opposed its establishment. A local referendum was held, which rejected the establishment of the park. A formal complaint was made by local city councils to the Spanish Constitutional Tribunal to reassert their legal rights to manage land within the boundaries of the Natural Park. Yet, despite a negative vote on the inclusion of the areas in the park, it was legally approved in February 2010.

In the Cabrejas Mountains, the main tree species is the Spanish Juniper (Juniperus thurifera). Juniper forests have low intensity use and traditionally have not been object of forest management (Lucas Santolaya, 1998), because of their slow growth of only about 0.5 m3/ha per annum. Spanish juniper is harvested without management plans or guidelines, although harvesting requires a permit and in most cases a forester would choose the trees to be harvested. Although conservation is not critical for their survival, the regional administration included 32,000 hectares of Spanish juniper forests of the Cabrejas Mountains into SAC in 2006. However, almost 87% of the land is under a type of collective ownership (48 %) while private ownership accounts for another 26 %, and local adminsistration only holds a 23 %. There are 11,250 co-owners of the forest, while the villages only have 2,822 inhabitants. The Natural Park declaration did not cause conflict with land owner, because of the low intensity of forest use. The Cabrejas Mountains have suffered from rural exodus for several decades. At the time of this study only 70 villagers lived in the major village of Calatañazor and most of them are were elderly (Instituto Nacional de Estadística, 2010). The main concern of forest owners and local action groups is abandonment. Both types of forest have expanded in the Soria province.

The first author spent over 6 months in the study area to acquire situational knowledge to be able to characterise and interpret local discourses. Interviews were conducted with 32 representatives from different governance levels: i) local administrators¹ (n= 8), villagers affected by the protected area (n= 7) and local action groups² (n=2); ii) regional civil servants³ responsible for the implementation of conservation policies (n=7), and; iii) conservation activists, academics and environmental consultants (n=8).

Interpretative policy analysis was used to examine the meanings of policy processes and their implications (Yanow, 2007). All interviews were transcribed and thematic analysis was used to identify discourses on the implementation of forest conservation policies. As a result of this phase of generating categories and themes (Marshall & Rossman, 2006: 158-159), four main themes emerged: i) interests and actors' strategies; ii) discourses on forest management; iii) discourses on forest conservation; and, iv) discourses on the governance of the forests. In a second stage all the transcripts were systematically coded against these four main themes. This resulted in a further categorization of the different discourses' content into three analytical categories of: i) underlying rationalities; ii) problematizations and iii) institutional solutions.

For the analysis of rationalities we started coding following Rydin's (2003) original typology of scientific, economic, and communicative rationalities. Using abductive coding, we identified three counter-rationalities that are additional to Rydin's original ones (Bryant and Charmaz 2019). We label them "local knowledge", "rights-based" and "hierarchical" rationalities. To study the institutionalization of local counter-discourses and their rationalities, we then assessed how these rationalities and the related institutional solutions were reflected in the EU-level documentary material such as technical reports, policy documents and legislation. To explain institutionalization we analysed: 1) the internal coherence of local discourses and their underlying rationalities; 2) the extent to which the discourses were supported by dominant Natura 2000 discourses; 3) the extent to which they challenged dominant rationalities and discourses.

4. The multi-level landscape of dominant and counter-discourses

In the following sections we will first characterise the dominant European level discourse on forest conservation and how it is being implemented at regional level. In

¹ Local administrators are elected representatives of villages in Urbión and Cabreja Mountains and city councils. They represent mainly forest ownership.

² Local action groups were created as mandatory local governance structures for the implementation of EU rural development programs starting from 1991. And from 2002, Natura 2000 benefited from funds to integrate environmental measures into agrarian policies.

³ Regional civil servants mainly include forest engineers working under the General Directorate of the Natural Environment of the Castile and León region, which is responsible for the control and management of Public Forests and protected areas.

the section that follows, we compare these discourses and their rationalities to counterdiscourses prevailing at the local levels, and assess their level of institutionalization.

4.1 Dominant discourse in implementation of Natura 2000: The EU discourse and the institutionalization of regional discourse

The discourse on habitats has dominated the implementation of Natura 2000 in the Castile and León region in Spain. It is a discourse from European Commission (EC), supported and informed by environmentalists and scientists. The EC has authority to transpose its environmental policy into domestic policies of the member states (Jordan, et al., 2004). It also controls the legal mechanisms to enforce the implementation of the Directives (Paavola, 2003). For instance, the EC rejected the Spanish Natura 2000 site proposals as insufficient in 2000 and 2004 and referred Spain to the European Court of Justice, because of the infringement of the Habitats Directive.

The dominant EC discourse has it that "the European habitats should be maintained in a favourable status of conservation" (CEC 2004: 5). Natura 2000 policy refers in the official documents to the concept of "habitat" to guide its implementation. For instance, the EC, in the report of the Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora, establishes the aim of Natura 2000 as "ensuring biodiversity in the European territory through the adoption of measures for the conservation of natural habitats and structures Natura 2000 draws on a scientific rationality. As we have shown in table 1, the preferred environmental solutions following a scientific rationality are based on sound science and knowledge. One Habitats Directive solution to nature conservation is based on ecology and biological sciences (labelled as conservation discourse in Table3). The conservation discourse is used to define the areas to be protected, to classify them according to different habitats typologies and to establish the measures to ensure biodiversity are dependent on these habitats.

Ensuring the institutionalization of the above-mentioned specific list of habitats reinforces an ideal of nature conservation as 'letting natural processes be'. However, the acceptance of this discourse, from an institutionalization point of view, has policy implications for Natura 2000, such as, for example, the revision of the habitats list:

"It should be possible to amend the list of habitats, being very careful because there would be always people interested in taking important habitats from it, but revising what processes are natural and what are not... and if Spain's junipers mix with pine. That is the natural process... maybe then, we'll have to accept that this is what is correct" (Botanist and academic from the University of Soria)

This revision would entail monitoring the evolution of the habitats and amending that list accordingly the observed changes, instead of managing them to keep a static list. This is a preservationist approach to conservation.

Regional civil servants and environmentalists have aligned their discourses with the position of the EC. The EC acknowledges that national level institutions are accountable

for implementation of Natura 2000 (CEC, 2000; CEC 2004). In the region of Castile and León, the General Directorate of the Natural Environment controls forest management planning and protected areas; and therefore this Directorate (and their civil servants) hold legal authority responsible for the implementation of Natura 2000. Civil servants from this Directorate also draw on scientific rationality to produce and reproduce discourses in key texts on the implementation of Natura 2000. This enables them to influence how the EC discourse on habitats is institutionalised at regional level. They interpret and classify habitats and decide measures for maintaining or re-establishing favourable conservation status. They interpret the Habitats Directive in the light of sustainable forest management (SFM). SFM is based on traditional scientific forestry, which has informed discourses that justify forest or ecosystem management as a tool for forest conservation (Marraco, 1991; Scott, 1998; Winkel, 2010).

In this sense, conservation is not about preserving concrete species or limiting uses, but about habitat management. The head of the Forest Services in Burgos was reflecting on the Habitats Directive in these terms:

"The novelty of the Habitats Directive is the management of conservation, not conservation from the point of view of limitations of use. This is a very important shift in mindset, that I have not seen reflected in administrative structures" (Forest services, Burgos)

SFM discourses of civil servants resonates with EU level discourses that highlight the compatibility of conservati Natura 2000 sites with sustainable use of natural resources. For instance, a number of official documents of the EC such as guidelines to interpret Natura 2000 legislation afecting forest in Europe include discourses on SFM and traditional land use (CEC, 2000; CEC 2001; CEC 2004). Especially in Central and Southern EU countries characterized by multifunctional forestry and rural development needs there is an acknowledgement of the compatibility between the two approaches to conservation in Natura 2000 sites:

"In regions where extensive farming and forestry systems with a high ecological value continue to exist, generally in the south and east European regions, but also in some highlands and mountains in other European countries, the proposed Natura 2000 sites tend to be larger in size. Here, their conservation is closely related to the maintenance of specific farming systems or forestry practices. In these regions, conservation strategies are different and tend to seek the integration of nature conservation and rural development, in what could be termed an 'extensive' nature conservation strategy" (CEC, 2000: 28).

Thus, drawing on the same scientific rationality has allowed regional civil servants and environmentalists to influence the implementation of Natura 2000 in Soria, making SFM a co-dominant discourse. However, when it comes to implementation on the ground, dominant discourses face counter-discourses of local inhabitants on forest conservation.

4.2 Local rationalities and counter-discourses of Natura 2000 implementation in Soria

Alongside Rydin's (2003) three types of rationalities, at the local level three additional (counter-)rationalities provide the justification for local discourses in Soria. They are crucial to understand institutionalization of discourses. Table 2 summarises the main features of these locally embedded rationalities.

	Local knowledge rationality	Rights-based rationality	Hierarchical rationality
View of the environment	Socially constructed; Resource or commodity	Right to decide; Object of control; Political Context	Physical reality; Interface of the physical and the social
Nature of environment- al problems	Arising from abandonment or disattachment; Clash between urban and rural perspectives	Arising from state or other "externals" over-ruling inherited acquired local rights on access, decision- making, and management	Absence of central control of the natural resources or /and public accepted planning documents
Preferred environment- al solutions	Context specific, based on practical experience, customs and local knowledge	Recognition; Decision- making rights and co- accountability in forests management/conservatio n	Expert committees and strong bureaucracy; Policy- expert interface and state-centered control

Table 2: Local rationalities in local counter-discourses

All six rationalities underpin the emergence of distinct discourses at different governance levels and their interactions contribute to explain the trajectory of institutionalization. Table 3 summarizes all actors' discourses by their content. Next, we analyse to what extent local discourses became institutionalized in the conflict in the Urbión Mountains and in the collaborative planning in the Cabrejas Mountains.

Actors	Discourse	Rationalities	Problem	Solution
Official discourse of Natura 2000 (Dominant discourse)	- Conservation discourse: European habitats should be maintained in a favourable status of	- Scientific	-Ensuring protection of biodiversity in the European territory	-Institutionali- zation of habitats in Natura 2000 -Revisit habitats
Civil servants (co-dominant)	conservation - Sustainable Forest management discourse: SFM tool for	- Scientific	 Let nature be How to control ecosystems 	lists -Forest management
	conservation - Legalistic discourse: Forest services hold legal authority	- Hierarchical	dynamics	plans
Villagers in Urbión (Local counter- discourse)	- Caring discourse : These forests exist because of us	- Rights-based - Economic	Losing the human relation / interest with the forests	-Recognition of villagers rights on forests - Compensation for services provided (PES)
Forest Owners in Cabrejas (Local counter- discourse)	- Abandonment discourse: If the land is abandoned a type of life is forgotten	- Economic - Local knowledge -Scientific	- Abandonment	-Forest management - Compensation for services provided (PES)
Local Action Groups in Cabrejas (Local counter- discourse)	- Abandonment discourse: Nobody lives here, nothing happens here - Participation discourse: as an opportunity for rural	 Local knowledge Economic Communicative Rights-based (at the end of the 	- Abandonment	- supported by rural development and other EU funds

Table 3: The dominant and counter-discourses in Urbión and in Cabrejas Mountains

4.3 Institutionalization of local villagers' 'caring' discourse in the Urbión Mountains: "These forests are there because of us"

In the Urbión Mountains local inhabitants hold counter-discourses about forest conservation that are unrelated to the concept of habitat. The *caring discourse* is one of the main counter-discourses there. A strong rights-based rationality underlies this villagers' discourse, which argues that maintaining the local interests in and rights to forest will help preserve the forest. It justifies the existence and conservation of forest on the basis of the ancient ordinances regulating forests rights, drawing on the local history of forestry to demonstrate that local city councils and villagers are good forest managers. Villagers claim their established rights to forests and their local knowledge about forest management justify the transfer of competences to local governments. A villager from the Urbión Mountains put it:

"We do not want to give away the decision making power over the forest... that we consider as ours... [...] they should transfer more... to the local city councils, because they have demonstrated that they manage their forests well" (Local villager)

In the past, the dependency of the local economy on forests was more pronounced in Urbión than elsewhere in the province. The property rights regime there and the related collective duties in the communal forests were fundamental local institutions. Rightsbased and economic rationalities are interwoven in interest-based justifications for maintaining control over the forests:

"If a person holds an interest in the environment where he lives, then, this person will preserve it. If this interest is lost, then, the person will abandon it [the environment or the forest, in this case]" (Local villager and forest exploitation enterprise)

In addition, private forest owners have also adopted counter-discourses linked to an economic rationality drawing on payments for ecosystem services (PES) to demand compensation from public and private sources (Raum, 2018). Despite the history of forestry institutions and culture in Soria, villagers are today rather disconnected from their natural environment. This changing context has weakened these institutions and related counter-discourses:

"Before, people depended on the forests... people lived in the forests... they had to drag the wood... you had to take care of the goats, and sheep. They lived from the forests... and now the problem with young people under forty years old... or thirty years old... they don't live from the forest, so they look at the forests as something that is for leisure and that they want to preserve because they are theirs... but they have gradually lost the idea of how to manage the forest and how it works"

(Local villager and forest ranger)

While the *caring discourse* is consistent with civil servants' scientific rationality since it integrates the discourse on sustainable forest management as a conservation tool, villagers have not adopted a scientific rationality related to habitats and ecological dynamics. On the contrary, the designation of a Natural Park revived discursive struggle between villagers and civil servants about who has the right to make decisions on local forests. Consequently, the *caring discourse* and its rights-based rationality contradicts civil servants' legalistic discourse and hierarchical rationality, which is used to block institutional solutions involving greater decentralization of authority on forests. For instance, a public servant responsible for protected areas highlighted that the legal framework determines what is feasible and what is not, and the risk that participatory processes could raise false expectations:

"I think we should consider to what extent the requirements fit with the existing structures, or if these could be changed... However, regarding competences or administrative structures... this is a huge qualitative leap... there may be things that are totally impossible... and it's very important to have this framework clear from the beginning of the process to avoid false expectations or unfeasible things"

(Civil servant)

In the Urbión Mountains, the villagers sought legitimacy through a referendum asking people whether or not they supported the inclusion of the local forest in the Natural Park. Despite the referendum outcome against the inclusion, civil servants' legalistic discourse drawing on hierarchical rationality dominated. Villagers had limited ability to influence the EU policy agenda and to resist regional legal decisions in part because civil servants are considered legitimate actors in decisions on policy implementation.

The caring discourse which his primarily rights-based is aligned with civil servants SFM discourse and its scientific rationality, but not with their legalistic discourse (and hierarchical rationality) and the latter is why it did not become institutionalized.

4.4. Institutionalization of forest owners' abandonment discourse in the Cabrejas Mountains: "If the land is abandoned a way of life is forgotten"

In the Cabrejas Mountains, the forest owners concern is how to reverse abandonment. Although in their discourse they claim a need to preserve their local identity as they represent a way of living and some values that when the last people will disappear, those will disappear as well, they use almost exclusively economic rationality to justify the institutionalization of measures that promote forest management:

"It is necessary to take advantage of our assets and to get some money, whatever this money is, to take advantage of the land" (forest owner 1 in Cabrejas)

The forest owners' discourse suggests that abandonment has to be reversed through active land management supporting income generating activities. This discourse is consistent with the civil servants' discourse on using forest management to control

ecosystem dynamics and to maintain the conservation status of forests. However, due to the low economic productivity of juniper forests they are not actively managed. The preferred local institutional solution calls for compensation for environmental services that forest resources provide:

"The forests are giving enough to the society, enough to take us into account, aren't they? We are not asking for subsidies; we only want them to pay for our contribution... this would be the logical thing..." (forest owner 2 in Cabrejas)

This view resonates with international discourses promoting market-based policy instruments as payments for carbon sequestration from forests and for the provision of ecosystem services more generally. Although primarly economic, this discourse is compatible with scientific rationality as scientists and environmentalists seek to quantify costs and benefits of forest conservation. Local actors are aware of carbon accounting and use the idea to their benefit in their discourses. For instance, local action groups and forest owners consider payments for environmental services (PES) a solution for channelling regional development funds to the area. One participant referred to ideas about externalities and PES in the following way:

"In this area we are claiming that... according to the Kyoto protocol... if someone pays to emit CO₂, we should receive something for fixing it, shouldn't we? So from the city councils they are insisting... there comes a moment when they say... ok, and how much CO₂ are you fixing?... Don't worry, that is technically possible through the staff working in CESEFOR... who were already bearing this idea in mind..." [...] "and then, they can say... this has been already quantified, we are establishing it at this amount... and if they pay this much for contaminating, then, we should receive this much... then, as far as development goes, this can be a source of income in the long term..."

(local action group representative 1)

These local discourses based on economic rationality are not at odds with dominant discourses drawing on other rationalities. However, despite the alignment with scientific rationality, these discourses have not been institutionalized in formal PES mechanisms. Uncertainties about the potential sources of funding and debates about providers and beneficiaries of payments and about the administrative structure to channel the funding remain unresolved. Moreover, unlike in Urbión, in Cabrejas forest is mostly privately owned and traditionally civil servants have played a minor role in its management, therefore these type of forests might be less likely to benefit from schemes promoted by the public forest administration.

4.1. Institutionalization of local action groups' discourses in the Cabrejas Mountains: "Participation as an opportunity for rural development"

While the forest owners' association in the Cabrejas Mountains sought to generate new income and revitalize the area through calls for compensation for providing ecosystem services, local action groups used different counter-discourses to support institutional

solutions that recognize the cultural, historical and environmental heritage of local communities by promoting and enabling economic activity and rural development. They integrated all these aspects through their *participation discourse*.

In the Cabrejas Mountains local action groups promoted the development of the first management plan for a Natura 2000 site in Castile and León and from 2002 The process was two-fold. First, they conducted an assessment of the ecosystems through the elaboration of scientific reports, and secondly they conducted local consultations related to the management priorities of the Natura 2000 planning document. They were able to open up the policy process by reframing Natura 2000 as a participatory process, because this was in line with official discourse from the EC and with civil servants' discourse and practices. One local action group representative explained that:

"Natura 2000 was something that failed here, we didn't know what it was and what it was for... how it would affect us... but the very structure of Natura 2000 talked about participation, although the lines were drawn in the land without mentioning it to anyone [...] Then we started to talk to people about how they perceived the conservation of natural spaces, and we decided to move from a general perspective of Natura 2000 to a more specific space... we tried to take advantage of what Natura 2000 can offer... we chose a space that was not very conflictual... because the land use there is minimal and then we decided to act upon a space that practically nobody lives in" (local action group representative 2)

The discourse of local action groups emerged in the context of forest abandonment in the Cabrejas Mountains. The absence of economic activity in forests meant the absence of conflict of interests. Local action groups did not encounter competing local counterdiscourses due to small number of people living in the area and because juniper forests were not threatened by any land use change at regional level. Furthermore, some compromises were made, for example recognizing civil servants as legitimate actors responsible for implementing the management plan. This also meant that civil servants were included in the collaborative planning process from the beginning.

The participatory planning process included workshops held with the villagers and enabled different perspectives on forest conservation to inform the "Action Plan" or "Guidelines for Sectoral Planning" [Directrices de Ordenación Sectorial]. What emerged from these workshops were concrete actions justified to local knowledge, rights-based and economic rationalities. For example, those actions include measures related to agriculture and livestock rearing such as: i) research and promotion of ecological farms in the exploitation zone; ii) fostering profitable farming systems; iii) increasing the number of cattle in the Spanish juniper forests; iv) support the marketing of sheep through quality stamps; v) adoption of agro-environmental measures; vi) reducing the impact of wolves in the farms; vii) enhancing local participation. Thus, the discourse of local action groups successfully integrated scientific and communicative rationalities on forest conservation with local knowledge and economic rationalities of local discourses forging internal coherence and support across these non-conflicting discourses within the Natura 2000 management plan.

Within these consultation processes, local action groups challenged the dominant discourse in order to try to influence both national and European level conservation policies and implementation processes (See table 3 for an overview of all discourses). In fact, in the collaborative planning process in the Cabrejas Mountains, local action groups interpreted forest conservation policy not only as a top-down imposition of scientific-bureaucratic restriction, but as an opportunity for increased activity in rural areas. As a result, local action groups align with other rationalities (scientific and communicative) to broader (external) highly legitimate discourses that are not highly contested, in this case dominant discourses.

In response to local action groups' participatory discourses, civil servants used legalistic discourse to set boundaries to local agency, mediating between hierarchical and communicative rationalities. For instance, civil servants used legal discourses to legitimate local participation in only specific settings such as in discussions on the management plan. Yet, when it came to the institutionalization of concrete economic mechanisms to enable the implementation of the action plan, which implied devolution of management competences to the local level, civil servant withdrew support, delegitimizing local counter-discourses. Consequently, the plan has not been implemented.

Table 4 summarizes actors' discourses and how counter-discourses attempted to merged different rationalities to enhance their internal coherence, and whether those rationalities of counter-discourses contradict or align with dominant EU and national level discourses and to what extend those counter-discourses have become institutionalized. This alignment with other rationalities to broader (external) highly legitimate discourses (that are not highly contested) should produce more powerful institutions because their self-regulating mechanisms will reinforce each other (Phillips et al. 2004).

Actors	Discourses	Integrating rationalities	Conflicts and alliances	Extend of institutionalization
	- Forest management is a tool for conservation	- Scientific rationality integrates conservation and forest management discourses		- Guidelines about habitats conservation which include forest/habitat management
Civil servants (co-dominant)	- Forest services are legitimate managers		- Hierarchical and rights- based (right to manage discourse) rationalities in conflict	 Reluctance to devolve responsibility to the local level
Villagers in Urbión (local counter- discourse)	- Caring discourse: These forests exist because of us	- Economic, Rights-based and Scientific ationalities are integrated through sustainable forest management	- Hierarchical rationalities in conflict with rights- based	 Right to villagers to benefit from forests through their management Conflict about the Natural Park declaration. Referendum invalidated.
Forest Owners in Cabrejas (local counter- discourse)	 If the land is abandoned a type of life is forgotten 	- Economic, and scientific rationalities are integrated to support income-generating activity. In line with scientific discourses on PES.	- No evident conflict between rationalities, but no clear definition of who should pay what to whom for PES	- Unclear outcomes
Local Action Groups in	- Nobody lives here,	- Economic and local knowledge	- Participation discourses	- Natura 2000 management

Cabrejas	nothing happens here	rationalities are integrated to	by LAGs' aligned with EU	plan with an action plan and
(local counter- discourse)	-Participation is an opportunity for rural development	support income-generating activity and recognizing the cultural, historical and environmental heritage of these areas - Communicative rationality is later merged with rights-based rationality to implement the Natura 2000 plan		guidelines for sectoral planning. - However, this participated document was not approved (when rights-based rationality was claimed).

Table 4: Institutionalization of counter-discourses in the cases studies

5. Discussion: drivers of and constraints to the institutionalization of local counterdiscourses

Institutionalization or institutional change might occur through changes in discursive practices shaping how actors understand reality. A number of scholars describe the institutionalization process as a spiral, which consists of interaction between the discourse of dominant coalitions and counter-discourses. In this process new ideas from counter-discourses can contribute to resphape dominant discourse (den Besten, *et al.*, 2013). As new ideas are institutionalized in a new dominant discourse, it will again be challenged and the cycle begins again.

The analysis of the main rationalities embedded in the counter-discourses can help explain opportunities for institutionalization as well as the degree of resistance to institutional change. Our analysis shows that drawing on the same rationality can facilitate institutionalization of discourse. Existing literature suggests that at the European level discourses on forest conservation are informed by scientific rationality (de Koning et al., 2014). Recent research on forest conservation policy in Europe has also indicated how bureaucracy and its hierarchical structure influence implementation (Logmani, Krott, Lecyk, & Giessen, 2017; Maier & Winkel, 2017). In Soria, civil servants at the regional level also drew on scientific rationality in their two discourses supporting, on the one hand, a habitat approach to forest conservation, and on the other hand, a sustainable forest management approach. Like Ferranti et al. (2017) we also find that discourses of Natura 2000 implementation in Spain are flexible enough to accommodate both conservation paradigms, reinforcing nature conservation goals of sustainable forest management. In the Castile and León region this led to inclusion of SFM in guidelines and Natura 2000 implementation documents.

Local discourses and rationalities derive from and co-evolve with the institutional and socio-ecological context (Voß & Kemp, 2006; Arts et al. 2014). In the Urbión Mountains in particular local inherited property and decision making rights regarding forests have influenced local rights-based policy framing (Pecurul-Botines, Di Gregorio, & Paavola, 2014). Yet, other evidence shows that local communities also adopt global environmental discourses to align themselves with more powerful actors in order to achieve recognition for their demands (Medina et al. 2009). In Soria, local counterdiscourses employed and integrated six different types of rationality – scientific, economic, communicative, local knowledge, rights-based and hierarchical - to varying degrees. Evidence of successful institutionalization of some of these, includes policy discourse related to Natura 2000 that refers to traditional forest use and knowledge rationales, which helps to avoid or reduce conflict with local counter-discourses defending anthropocentric conservation models. Many studies on institutionalization processes show that collaborative processes are necessary a first step to enable such institutional change in the long term (Dang et al., 2012; Smith & Kern, 2009). In the Cabrejas Mountains, local action groups drew on EU level discourses on participation within the limits provided by Natura 2000 policy documents to articulate local counterdiscourses on anthropocentric models of forest conservation. They acted as policy entrepreneurs taking advantage of a particular opening in the Natura 2000 policy implementation process. They merged the dominant discourse on forest conservation

and discourses on participation to shape the policy agenda and position themselves to access associated economic opportunities.

The internal and external coherence of local action groups' discourse linked to conservation facilitated the institutionalization of their solutions into the management plan. Again the lack of conflict between different rationalities facilitated this integration and the forest owners' claims were dealt with by adding a chapter on property in the Natura 2000 management plan. In addition, the adoption of a communicative rationality led to procedural changes to policy making. Dang et al., (2012) aware of the risk of participation as a symbolic device for legitimating management plans, show that the inclusion of non-governmental actors in collaborative planning processes may not necessarily change directly existing power structures, but might change the interpretation of what sustainable management means and through this discursive shift might change the dominance of state actors that no longer can take for granted policies aims that do not include alternative interpretations of forests.

Economic counter-discourses demanding payments for environmental services such as carbon sequestration were less successful in terms of institutionalization, although most of the actors accepted and shared a similar economic rationality. Following Phillips *et al.* (2004), this might be because there was limited support from the higher political levels: the EU Commission or the Spanish government. This might be because concrete answers would compromise big investments at local level. Furthermore, there are uncertainties about distribution of costs and benefits from PES and what should be the administrative structure to channel these economic resources. Recent analysis of Natura 2000 (Winkel et al., 2015) suggests that the lack of policy integration and conflicting interests over the use of forests have led to inaction, which in turn constrains the availability of financing. In contrast, in the Urbión Mountains the economic rights given to the local communities to benefit from forests in the past century kept the interest in those forests as a source of revenue. This interest helped to merge right-based rationalities with the sustainable forest management framing imposed in those forests by public authorities.

Yet, the integration scientific and economic rationalities into public policy discourses has proven far easier than integration of right-based rationalities. We find clear evidence of the tensions between rights-based rationality, often supported by communicate rationality, against hierarchical rationality. In the Urbión Mountains, the conflict over the Natural Park declaration revived an old struggle over forests between the state and the local villagers. Here, hierarchical rationalities were confronted with right-based ones arising from the local level. As a consequence, the regional administration exerted authority and was able to ignore a local referendum rejecting the inclusion of forest in the Natural Park.

Studies on discourse evolution have shown how dominant coalitions, instead of simply suppressing alternative discourses, often give them some voice while at the same time attempting to control their influence (Dang, et al., 2012). We identified at least two mechanisms used by civil servants to control the institutionalization of counter-discourses: i) opening up and controlling the process or ii) stepping out of the process.

While initially the policy process 'opened up' to the full range of discourses and framings in order to reveal the participants' rationalities and justifications (Stirling, 2007), in the closing of the political opportunity, civil servants used their privileged position to narrow and adapt the demands brought forward by different actors to their views and requirements. For instance, in Cabrejas, the earlier experience of local action groups leading EU rural development programs gave them legitimacy to perform a role in the implementation of Natura 2000. Yet, the administration simply withdrew their support, in terms of both resources and legitimation, when economic, political and technical commitments were required. Thus, despite the wide range of actors and alignment of different rationalities that increased the internal coherence of the document, local action aroups did not manage to construct a power base sufficient for the institutionalization of their discourse in the final document.

At the same time our findings corroborate Phillips et al (2004) argument about the importance of legitimacy in explaining the institutionalization of discourse. Actors such as civil servants who hold formal authority are considered legitimate policy decision-makers and as a consequence have more power to influence processes of institutionalization: they are more likely to be able to embed their discourses into official policy texts than others. In particular, civil servants constrained the institutionalization of local counter-discourses underpinned by rights-based rationalities, while their own discourse, complementary to the dominant discourse on sustainable forest management as a forest conservation tool became institutionalized in Natura 2000 guidelines and technical documents. How to construct or transfer a power base, which not only supports counter-discourses, but facilitates their institutionalization, is an important issue that Phillips et al. (2003) are not discussing. In the field of rural governance, Connelly et al. (2006) have shown how the construction of legitimacy of new actors and processes has to compete with other concepts of legitimacy, most importantly of those that hold power and authority. This affects the institutionalization process since the traditional governance system with its own path-dependencies and claims to power will tend to overide legitimation processes of counter-discourses and consequently their institutionalization.

Finally, our findings corroborate the literature in that participatory discourses around Natura 2000 might lead to increased acceptance of its implementation, but without bringing significant changes into practices and dominant discourses (Blondet et al., 2017). We have shown how in the Cabrejas case participation as an argumentative process provided a window of opportunity for counter-discourses. However, in the later stages, similarly to the Urbión case, tensions between hierarchical, communicative and rights-based rationalities emerged and undermined the internal coherence of the participation discourses. Although local counter-discourses had an impact on the argumentative process, institutional change remained minimal.

6. Conclusions

This work translates the abstraction of discursive institutionalism to a concrete empirical setting to examine the agency of local actors in framing and reframing and transforming the politics of environmental problems. In both case studies the institutionalization of

discourse are are highly context dependent (actors, conflicts and outcomes of a process). Therefore, making context-free generalizations would be incongruous. On the other hand, by contrasting these findings with existing literature we are contributing to explore whether discursive changes effectively translate into new rules, new resources allocated to different groups of actors and new solutions of environmental policy problems.

Discursive institutionalism provides an overall conceptual framework to reflect on what constitutes the justification – or rationality - for adopting a specific solution for the implementation of forest conservation policies, and how the solution adopted will reinforce existing rationalities that maintain the institutions that reproduce those rationalities in the discursive activities of the policy process. By integrating local discourses into a multi-level discourse analysis we found three additional rationalities to Rydin's original ones: local knowledge, rights-based and hierarchical, which are employed at the local level. In order to understand policy change derived from institutionalization of counter-discourses, we analysed how the rationalities of different discourses are integrated at the local level and whether there are tensions between them.

We found that some rationalities are more compatible than others. Scientific, economic and local knowledge rationalities have proven to be largely compatible. The reconceptualization of forest conservation policies was largely based on changes in the use of scientific rationalities and prevailing local knowledge of socio-ecological systems reproduced in local counter-discourses. Civil servants played an important role in enabling the integration of SFM discourse into the habitats conservation discourse within the Natura 2000 guidelines, leading to the institutionalization of SFM as an appropriate conservation policy.

Moreover, we identified the main barriers to further institutional change. Despite the compatibility between economic and scientific rationality, lack of support from higher level powerful actors and conflicts of interest with respect to distribution of costs and benefits from PES schemes failed to translate economic rationales into policy changes. More fundamentally, the analysis of context based rationalities embedded in the local counter-discourses explains the degree of resistance againts the institutionalization of certain policy solutions, such as the devolution of responsibility to the local level. Although the discourse on participation and its communicative rationality can open up a window of opportunity for local ideas to be integrated into policy and planning, **the major constraint to adoption of local discourses seems to be the tension between rights-based versus hierarchical rationality.** Civil servants' and EU level official Natura 2000 discourses avoid engaging with rights-based discourses, and favour scientific and economic and rationalities, in part at least, because right-based arguments are likely to underline the contentious nature of forest conservation policies.

Finally, the legitimacy of policy actors and legitimation processes themselves, proved to be the most influential factor in explaining institutionalization of (counter-)discourses. Where local actors aligned themselves with global discourses of more powerful actors' they achieved some acknowledgment of their demands. Civil servant were able to reshape Nature 2000 conservation policy discourse using scientific rationality, while effectively employing legalistic discourses to strengthen their own legitimacy and limit local demands for increased control over resource management decisions. EU discourses on participation in Natura 2000 enabled the collaborative process led by local action groups, leading to changes in procedures in policy making. Yet, engagement of dominant actors with discourses drawing on rights-based rationalities and reduction of fragmentation of local level discourses remain two major challenges when designing collaborative processes for forest conservation in Europe. To solve conflicts around conservation policies, these issues need to be addressed in multi-level processes that actively mediate between local and higher level demands to control decision making processes.

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