

The Harmonization Game: Reasons and Rules in European Biodiversity Policy

Juha Hiedanpää^{1*} and Daniel W. Bromley²

¹*Finnish Game and Fisheries Research Institute, Joensuu, Finland*

²*Anderson-Bascom Professor of Applied Economics, University of Wisconsin-Madison*

ABSTRACT

Since Finland joined the European Union (EU) in 1995, the European Commission has shown growing impatience with how EU rules with respect to protection of wolves and other large carnivores have been enforced within Finland. In 2005 the Commission referred the matter to the European Court of Justice, which subsequently found Finland deficient in the strict protection of wolves. We investigate the reasons underlying the court case. We identify two problems in the realm of 'reason giving'. The first problem arises from the lack of a causal model linking decentralized actions on the part of the subjects of administrative rules with the desired outcomes imagined by the centralized entities issuing the new administrative rulings. The second problem arises from the authoritarian tendencies of the EU that fail to understand the context of wolves for rural livelihoods in Finland. Both of these problems give rise to surprising practical effects emerging from the 'harmonization game'. We introduce the concept of 'instrumentality' with respect to the goal of sustainable wolf populations. We also introduce the concept of 'inverse high-grading' of wolves under the umbrella of biodiversity protection. The EU and the people of rural Finland will continue to struggle over wolves until a more coherent policy goal, and a more defensible administrative rule structure, can be formulated. Copyright © 2010 John Wiley & Sons, Ltd and ERP Environment.

Received 10 January 2009; revised 10 March 2010; accepted 5 October 2010

Keywords: habitats directive; harmonization; policy dispute; policy pragmatism; wolf (*Canis lupus*)

Introduction

FINLAND BECAME A MEMBER OF THE EUROPEAN UNION (EU) IN 1995 AND EU TREATIES AND LEGISLATION came into force. For our purposes here, the important rules are those directives and other institutional arrangements concerning the harmonization of major policy initiatives pertaining to biodiversity (McCormick, 2001; Knill and Liefferink, 2007). Two areas of contest are of immediate interest. First, the planning for, and the implementation of, the EU-wide Natura 2000 reserve network precipitated a major reaction amongst rural residents in Finland. More than 15,000 letters of appeal were submitted to the administrative courts in Finland. The strong reaction to Natura directives was driven by the realization that implementation of the new

*Correspondence to: Juha Hiedanpää, Finnish Game and Fisheries Research Institute, Yliopistonkatu 6, 80100 Joensuu, Finland.
E-mail: juha.hiedanpaa@rktl.fi

rules was another example of the old-style *ruling-down* conservation that had largely been removed (Hiedanpää, 2002). Moreover, Finnish environmental authorities insisted that they did not have the administrative and procedural alternatives necessary to comply with the imposed rulings and schedules of implementation (Oksanen, 2004). Second, the new directives affected rural Finns in a profound way, and particularly with respect to strict new rules on the protection of wolves and other large carnivores (Palviainen, 2000).

The Habitats Directive found the wolf to be critically endangered in most of Europe and therefore must come under *strict protection*. Thus, with accession, Finland came under Annex Number IV. Ironically, accession of Finland brought more wolves into the EU, thereby reducing its overall scarcity in the Union. But accession also placed Finland under a particular obligation to uphold that new-found European abundance. In addition, Finland's stock of other large carnivores, especially bear, lynx and wolverine, added to this *biodiversity bonus* from Finland's accession to the Union. Since about 2000 Finland's wolf population has steadily increased, and the population began spreading to the west of the country. Predictably, this growth and spread spawned increasing fear of the wolf, especially in rural areas (Bisi *et al.*, 2007).

The emerging conflicts have several facets, with rural livelihoods (cattle and reindeer herding) and rural safety figuring prominently in the tension. Over the past 15 years the EU has shown growing impatience with Finnish legislation, and especially with how EU rules have been indifferently enforced. As a result, the European Commission initiated an informal dialogue in early 2000 with Finnish officials concerning wolf management issues, with particular emphasis on alleged derogation of the requirement of strict protection. When the Finnish government did not react 'appropriately' to these informal inquiries, the Commission started an infringement proceedings. According to the Commission, it had good reasons to believe that: (1) the conservation status of the wolf in Finland was not favourable; (2) Finland had not honoured the principle of strict protection; and (3) Finland had not adequately explored feasible alternatives for wolf predation in order to reduce losses to livestock.

By 2005, the Commission seemed convinced that the infringement proceedings had not improved Finland's practices and so the Commission referred the matter to the European Court of Justice (ECJ). Following an investigation into the allegations, the Court rendered its judgment in June 2007. Finland was found to be at fault on one charge (#2), but not on the other two. The Court ordered the government of Finland to rectify its failure to offer strict protection to wolves. Failure to do so would expose the government of Finland to a fine.

We see immediately the somewhat ironic aspect of the findings; the ECJ found that the conservation status of the wolf was not in jeopardy (#1), and that the Finnish government had done a commendable job of mitigating wolf predation (#3). Despite these two favourable rulings, Finland was ordered to take further steps to increase the level of strict protection of the wolf (#2). In the broader sense of 'harmonization', these inconsistencies warrant further elaboration, which we offer here. In particular, the question of interest here is to determine how the game of asking for and giving of reasons was played out during the infringement proceedings and the subsequent court case. This inquiry will help us to highlight the practical implications of the harmonization game in the context of Finnish biodiversity policy.

The Policy Context

The government of Finland had focused most of its attention on the preparation of a Wolf Management Plan (Anon., 2005). Stakeholder opinions of that process have been summarized by Bisi and Kurki (2008). Beyond this, there are only two analyses of Finnish wolf policy (Ratamäki, 2008; Bisi *et al.*, 2007). Both of these reports suggest that effective wolf policy will require more public participation than seemed to be the norm in Finland. Although it appears that the pertinent authorities did acknowledge the importance of the public, they were unsure how to involve the public in the formulation of policy. Equally unfortunately, the authorities had little insight about involving the public in implementation, except for holding organized hearings during preparation of the management plan for the wolf. Sandström *et al.* (2009) compared the suite of Fennoscandian policies for large carnivores. They note that three countries, Finland, Norway and Sweden, created Large Carnivore Councils that were important instruments for information flows, particularly in the quest of support for established policies (e.g. management plans for large carnivores). In Finland and Sweden the councils are only advisory in nature, with membership drawn from formal and informal stakeholders. In Norway the councils have formal standing

The Harmonization Game

to interact with various stakeholders and to take legally binding decisions. These arrangements have not been in place long enough to have a profound impact on wolf management.

In general, the literature concerning European biodiversity policy is much more common, the result perhaps of the administrative challenges of meeting the international requirements of nature conservation, and also having to adjust European and original member states' policies with those requirements, of which Natura 2000 is an example (Baker, 2003). Paavola (2004) comments on the importance of taking distributive and procedural justice into consideration when European biodiversity policies are planned and implemented. There are a few country-specific studies on implementation problems associated with the Habitats Directive (e.g. Sauer, 2005; Stoll-Kleemann, 2001; Hiedanpää, 2005) and Water Framework Directive (e.g. Beunen, *et al.*, 2009), and more broadly on the European level (Rauschmayer, *et al.*, 2009). Rauschmayer and Behrens (2008) address the legitimacy of EU policy concerning the great cormorant. These studies identify problems in the application of EU requirements. Prominent here is a difficulty in how the principles of public participation and stakeholder collaboration are applied as biodiversity policies are planned and implemented (Paavola *et al.*, 2009).

A second area of conflict concerns the production of 'knowledge'. In the Habitats Directive, a favourable conservation status (FCS) is defined as an overall objective of conservation measures. However, it is difficult to organize comprehensive species and habitats monitoring networks, both at the national and at the European levels. According to Mehtälä and Vuorisalo (2007), the criteria of FCS should also incorporate functional characteristics of an ecosystem, not just species characteristics and habitat features. In recognition of this problem, EU policy-makers have begun to develop alternative approaches that do not focus on individual animals (e.g. a 'problematic' wolf) but instead broaden the interpretation of the Habitats Directive by focusing on the challenges associated with population-level management of the great cormorant (European Parliament 2008) and large carnivores (Linnell *et al.*, 2007). But as AlphanDéry and Fortier (2001) have argued, a territorial policy cannot be based on science alone. It also requires active governance processes operating over different scales.

On legal matters, Koppen (2001) has addressed the role of the ECJ and concludes that the Court has been quite active in the formulation of European environmental practices.¹ Her primary focus is the Single Europe Act and consequent tensions between trade and environment. Stone Sweet *et al.* (2001) discuss the 'settling down' of European political space. That is, they discuss the evolution of supranational policy arenas (sites of governance) as they are structured by EU rules and the activities of the EU's organizations. Stone Sweet (2004) offers a nuanced view of the judicial construction of Europe. However, he does not address the issue of interactions between the Commission and member states. Rather, he is concerned with how policy, economics and law are intertwined in the process of the construction of Europe in Brussels, primarily involving lobbyists and other purveyors of specific interests. In a promising discussion of the interplay of the EU and national governance, Maurer *et al.* (2003) conclude that both Brussels and individual national policy-makers understand the reality of interdependence, but have difficulty in abandoning their traditional habits of presuming that complete national independence lives on. Here we discuss the importance of ensuring enforcement of newly harmonized EU legislation (Caddy, 1997).

We see that the EU is not simply imposing rules and regulations on member states, nor do member states see the rules as 'given.' Rather, a highly nuanced game is underway between the member states and the Commission.

Litigating Reasons

With the foregoing political context in mind, we now turn to the contentions surrounding 'the problematic wolves of Finland'. We start with the specifics of the legal dispute between the government of Finland and the European Commission. Our research materials (data) are the documents and reasons deployed by the government of Finland and the Commission. We seek to understand the role of reasons, but we also hope to uncover better means for communicating multilevel purposes, and their reasons.

When the European Commission first decided that Finland had failed to comply with Community environmental law, the Commission issued a letter of formal notice to the Finnish government [Document 1, hereafter D1; see

¹The standard account is that legislatures 'make' policy while courts only 'interpret' it. The standard story has never been coherent, as we see here.

Appendix]. The Commission requested that within 2 months of receipt of the letter the government of Finland respond with its observations on the issues raised by the Commission [D2]. Then, after considering the Finnish response, and finding it inadequate, the Commission issued an ‘opinion’ [D3]. When the government of Finland failed to prove, in its letter of response [D4], that it had complied with the original ‘reasoned’ opinion, the Commission referred the case to the ECJ. The case (C-342/05-1) began in September 2005 when the letter of charge was issued to the government of Finland [D7]. In December 2005 Finland delivered a statement of defence to the ECJ [D8]. In February 2006 the Commission sent a ‘response of plaintiff’ to the ECJ [D9], and Finland answered with its response in April 2006 [D10]. The ECJ issued its judgment in June 2007. In September 2007 the Commission issued a letter to the Ambassador of Finland in Brussels [D11]. Finland’s letter concerning the Implementation of Judgment was issued in November 2007 [D12]. These ten documents prescribed by the Infringement Procedure and the ECJ, plus two additional letters, (1) a draft version of Finland’s Management Plan for Wolf (9 September 2005) [D5] and (2) the final Management Plan (29 December 2005) [D6], constitute the pertinent research materials.

Building on content analysis, we now discuss the *six realms of reason giving* on the part of the contending parties.² These realms of reason are: (1) public safety, (2) language and phrasing, (3) conservation status, (4) satisfactory alternatives, (5) derogation from strict protection and (6) rule enforcement.

Public Safety

In response to the formal letter of notice, Finland sought to situate the wolf in the context of Finnish society and economy, particularly with respect to livelihoods and public safety in rural Finland. At the most basic level, the Finnish government’s position was that the people of Finland have a long and contentious relationship with the wolf. In essence, the government of Finland argued that the wolf is not just another large mammal such as the bear, lynx or wolverine. Indeed, the government insisted that wolves represent a historic threat to perceptions of safety in the widespread forests of Finland [D2 §3, §5]. The dominant economic activities in the forests – livestock raising and reindeer herding – are sources of attraction for large carnivores such as the wolf, and this attraction creates problems in the eyes of those living in rural Finland [D2 §21]. The Finnish government argued that the Commission is obligated to acknowledge the requirements and spirit of the Habitats Directive, especially article 3 §3. There one finds explicit recognition of the pertinence of social, economic and cultural aspects to biodiversity policy [D8 §67, §68]. In essence, Finland accused the EC of being self-serving in selecting specific parts of the Habitats Directive for strict interpretation.

According to the government of Finland, the data suggested that the Finnish wolf population was increasing, and that it was also expanding from east to west. Both of these suggested that feelings of personal insecurity and economic damage would increase. The data also suggested that damage would not be uniformly distributed across the population of wolves. Specifically, approximately 20% of the wolves were said to cause 80% of the damage. Reindeer suffer the most from wolves, followed by sheep, cattle and domestic dogs; it is estimated that wolves kill between 20 and 40 dogs annually in the country. In eastern Finland, half of the dogs that had been killed were taken from houses and farmyards, while the other half were killed during hunting trips with their owners [D6, pp. 17–18]. In recognition of this damage from wolves, there is a history of compensation payments from the Finnish government. Between 2000 and 2003, total compensation in Northern Carelia was €47,000, while in Kainuu (south-east Finland) compensation amounted to €21,000. In Satakunta (south-west Finland), €7500 was paid over this period, because of wolf attacks on sheep [D6, appendices 1 & 2]. Of course monetary compensation for lost livestock – eventually destined for market anyway – is a different matter in the eyes of those in rural Finland from compensation for family ‘pets’.

The Commission’s response to these concerns, particularly to residents of rural Finland, seemed to be one of indifference. The Commission asserted that it is ‘normal for wolves to avoid people’ [D1 §24]. The Commission also insisted that article 3 of the Habitats Directive – calling attention to the importance of ‘social, economic, and cultural aspects to biodiversity’ – could not be used as justification for derogation from strict protection.³ The Commission did not repeat this claim during the infringement proceedings.

²The reader may be helped in thinking about ‘reason giving’ by referring to Brandom (1994, 2000) and Bromley (2006a).

³The Commission referred to ECJ ruling C-247/85 (Commission vs. Belgium), according to which, article 3 of the Habitats Directive could not override an obligation to strict protection.

The Harmonization Game

Language and Phrasing

Although the Commission acknowledged that the ‘exact words’ from the Habitats Directive need not appear in national statutes, the spirit and meaning of the Directive must not be in doubt. In the present case, the Commission insisted that the government of Finland had not lived up to this obligation in its Hunting Statute [D1 §8, §9]. Although the killing of wolves, in particular reindeer-herding areas, is acceptable under certain circumstances, the wolf is to be strictly protected outside of these special zones. This condition is stated in the Finnish Hunting Statute (article 24 §2). However, the Commission faulted the Finnish Hunting Statute – especially §28 – on the grounds that the specific language was not in accordance with the purposes and principles of the Habitats Directive. For example, the Directive used the phrase ‘especially significant damages’ while the Finnish Hunting Statute referred only to ‘damage’. In addition, the Habitats Directive specified ‘especially important public interest’ while the Finnish Hunting Statute used the term ‘public interest’. Finally, the Habitats Directive emphasized ‘carefully monitored conditions’ while the Finnish Hunting Statute used ‘monitored conditions’.

In response, the government of Finland admitted that the phrasing was problematic and during summer 2001 it revised the Hunting Statute to bring the language into conformity with the Directive [D2 §6]. These changes occurred during the first phase of the infringement proceedings, but *after* the Commission had sent its letter of formal notice. From this point forward, the nature of the infringement proceedings changed. Specifically, the litigation ceased to be about ‘non-conformity’ with the Habitats Directives on the part of Finland. The dispute shifted, instead, to one of ‘bad application’ – as repeatedly pointed out by Finland in its ECJ documents [D8 §36, §37, §38, §51, §54, §56, §64].

Conservation Status

The Commission was initially motivated by its assertion that the wolf was *critically endangered* in Finland [D1 §33, §34]. In 1999, the estimated population was 97–110, and in 2000 there were said to be approximately 110–130 individuals [D1 §13, §14]. By 2001, when infringement proceedings started, the Finnish wolf population was estimated at approximately 100 individuals. The infringement proceedings against Finland were launched on a finding by the Commission that the conservation status of the wolf was clearly ‘not favourable’ [D1 §17]. Any assessment of the conservation status of the wolf required scientific evidence of the wolf’s population dynamics [D1 §18]: The Commission asserted in its infringement proceedings that the wolf population of Finland had fallen below what it considered to be a *minimum viable population*.

In contrast, the Finnish government presented its arguments in terms of the *probable population size*. The government relied on a network of volunteer observers numbering between 1265 and approximately 1500 individuals [D2 §10; D8 §29]. These observational data were combined with the scientific research of the Finnish Game and Fisheries Research Institute [D2 §10]. The Finnish government argued that this approach was both more accurate and more workable for estimating the likely population before the breeding season [D2 §11] than seeking to estimate the minimum population size at the end of each calendar year – an approach favoured by the Commission [D1 §3]. The two parties insisted that *their* approach and estimate was more consistent with the precautionary principle [D2 §10; D3 §11].

During 2000–2002, and just prior to the filing of the complaint by the Commission, 25 wolves were killed legally and an additional five killed illegally in Finland. This from a total wolf population estimated at 100–130 individuals. According to the government of Finland, these losses were more than compensated for by 35–40 pups born during the same period [D2 §12, §13]. However, in 2002, the Commission argued that the best evidence suggests that only 25% of new pups reach breeding status at 3–4 years of age. The government of Finland called attention to the 9–27 pups born annually in the immediate vicinity of Finland on the Russian side of the border [D2 §13, §14], to which the Commission countered that a few wandering wolves from Russia would not have any meaningful effect on Finland’s population [D3 §15].

The Commission argued that in 2002, Finland had 11 or 12 breeding pairs, which is below a viable level [D9 §2, §4]. However, the government of Finland argued that the Commission had *not* made the case that prevailing hunting policy in Finland was responsible for any negative effects on the favourable conservation status of the wolf. On the contrary, the Finnish government argued that their policies had actually increased the population size [D8

§47–§51]. As above, populations during 2000–2002 had expanded from the east to the central part of Finland, and there was increased presence in western Finland. The structure of the population had also improved. In 2004, there were 16 litters compared with only five litters 6 years prior to that (1998) [D8 §48; D4 §21]. By 2004 there were an estimated 185–200 wolves in Finland, almost twice the known number for 1995 [D8 §47]. Both parties agreed that the 20 pairs of breeding adults – about 200 individual wolves – would be sufficient for a viable population.

Satisfactory Alternatives

As the Commission made its case against the killing of wolves, it also proposed a number of alternatives that it considered to be effective in reducing damage attributable to wolves. These alternatives to hunting include repellents, assorted fragrances, electric and other fences, and other damage-prevention measures. And the Commission insisted that if these failed, there remained the possibility of monetary compensation [D1§19]. The Commission challenged the government of Finland to show evidence that it had first pursued these alternatives before granting permission to hunt wolves, and in particular, exactly what alternatives had been pursued [D1 §20].

The government of Finland replied that each Game Management District considered feasible alternatives *each* time it is faced with the situation created by a problematic wolf [D2 §24]. Moreover, the government argued that the alternatives used were precisely those advocated by the Commission (as above). The government budgeted €2.85 million in 2002 for these purposes. This sum of money was not just for wolf-related damage but for all damage from large carnivores to humans, traffic, agriculture, domestic animals, animal husbandry, non-living materials and reindeer [D8 §60]. In addition, the government established a dedicated telephone line for rural residents to check whether it is considered safe to take a dog into specific forest tracts [D8 §59].

Both parties to the dispute agreed that it is best to rely on a portfolio of alternatives carefully constituted for each case [D7 §35; D8 §55].

Derogation from Strict Protection

In the most profound area of dispute, the Commission argued that Finland had continued to allow wolf hunting as a regular – indeed preferred – measure to hold down wolf damage. In doing so, Finland was charged with being in clear and wilful violation of the purpose, the principles and the specific language of the Habitats Directive (article 16 §1). Specifically, the Commission charged Finland with being in violation of the principle of *tight interpretation of derogation* [D7 §36]. That is, the Commission insisted that derogation from strict protection is possible *if and only if*: (1) there are no alternative measures available; and (2) the wolf population is judged to be in ‘favourable conservation status’. Even if those conditions are met, hunting under derogation must be selectively targeted to a specific wolf *known to be responsible* for the ‘very significant damages or threat of very significant damages’ (article 9). The Commission argued that Finland had not been able to show that hunting licences were issued *only* for the sake of preventing ‘very significant damages’ [D7 §4]. The Commission also complained that non-selective wolf hunting remained a customary practice in Finland, and that hunting was practised on the general wolf population rather than being concentrated on those specific wolves known to be the seriously problematic [D7 §36].

In response, the Finnish government argued that according to the Directive (article 16 §1, subsection b), damage need not have happened for derogation to be justified [D8 §66]. That is, derogation for the sake of preventing very significant economic damage is *not* against the Directive’s purpose, principles or language [D8 §67]. Finland repeated its concern for social issues (public safety, rural livelihoods), and complained that the Directive (particularly article 2, §3) obligated the Commission to recognize economic and social circumstances in each situation. According to Finland, the reference to this should be justified when the threat of very significant damage is imminent [D8 §68]. Finland argued that a regional policy of derogation on wolf hunting was not based on a continuation of customary practices but was instead the result of a case-by-case assessment of the particular circumstances [D8 §69].

The government of Finland further emphasized that permission to hunt is granted only under the following circumstances: (1) a grant to specific individuals after lengthy deliberation; (2) covering a very specific location in a tightly restricted area; (3) for a specific period of time; and (4) subject to compliance with the annually revised limits set by the Ministry of Agriculture and Forestry [D8 §71; D8 §20]. Permission to kill a wolf was predicated

The Harmonization Game

on detailed involvement with local government officials familiar with the people and the conditions pertinent to the decision [D8 §72, §73]. In its commitment to a scientific policy on derogation, Finland argued that derogation from strict protection should *not* be reflected from the point of view of favourable conservation status, but, instead, from the point of view of *the effects of derogation* on the favourable conservation status [D10 §15].

Rule Enforcement

Finally, there is no doubt that enforcement of the wolf-hunting rule in Finland has been problematic. First, much hunting has targeted wolves in general and not particular problematic individuals. This practice has certainly violated the purposes and principles of the Habitats directive [D1 §9; D7 §12] with According to the Commission, the practice of targeting hunting to wolves in general and not to particular problematic individuals, has certainly violated the purposes and principles of Habitats Directive [D1 §9; D7 §12]. In the early stages of the infringement proceedings, the Commission referred to a famous Finnish case (Ruokolahti) and pointed out that the hunters had *not* been punished for their illegal wolf hunting during the 1999 moose hunt [D1 §26]. The government of Finland denied the accuracy of this claim and stated that this particular case went under police investigation and later, after judicial deliberation, the prosecutor considered the case ‘minor’ (a misdemeanour) and decided not to call the defendant to court. Finland reminded the Commission that the waiving of charges is in fact an enforced sanction since the defendant *was* in fact found guilty [D2 §55, §56]. The government also offered additional details on other consequences of illegal hunting [D2 §57]. The Commission did not refer subsequently to the Ruokolahti case.

The Commission further argued that when illegal killing, road kill and other unofficial wolf mortality is added to the annual legal hunting kill, the total may, and in many occasions is, in excess of the maximum annual limit set by the Ministry of Agriculture and Forestry. The Commission claimed that when these conditions are allowed to persist over a number of years, the purposes and principles of the Habitats Directive are clearly violated [D7 §37]. However, as indicated above, the government of Finland denied that unselective hunting was common. For example, between 1 August 2001 and 16 March 2006, the Ministry of Agriculture and Forestry received 60 applications for the killing of 187 wolves. The Ministry approved only 14 applications covering just 19 wolves [D10 §49]. Every killed wolf was taken into consideration when the following year’s maximum limits were determined in the Ministry [D8 §75].

Reasons and Rules

The *harmonization game* is crucial to science policy in the European Community because it offers a window on to the inevitable tensions between contending sovereigns – an individual nation-state and the EU. The term ‘harmonization’ suggests collaboration and cooperation. However, harmony is precisely what is missing here. The government of Finland was ordered (not asked) to comply with an EU directive, and if it did not it would be subjected to the ultimate authority of the ECJ. The Finnish government certainly knew that joining the EU would bring it into possible conflict on a range of issues – from labour practices to food processing. Why then, among the many issues that contending sovereigns can quarrel over, is the wolf so problematic? We suggest that the ‘wolf problem’ is illustrative of two fundamental problems in much administrative rule making.

The first problem arises from the absence of a clear *causal model* linking the decentralized actions on the part of the subjects of administrative rules with the desired outcomes imagined by the entities issuing the new administrative rulings. We call this an *instrumentality problem*. The second problem arises from the fact that the authoritarian tendencies of the EU, exemplified by its administrative rulings under the mask of harmonization, operate without acknowledgement that wolves are an integral component of rural livelihoods in Finland. Wolf policy differs from efforts to protect birds, wild flowers and other charismatic constituents of the natural environment. Wolves kill dogs, small farm animals and ungulates. Strict protection of wolves under the umbrella of the Habitats Directive is an example of what we shall call *inverse high-grading*.⁴ We contend that the inherent flaws of inverse high-grading, evident in wildlife policy in Africa, undermine the coherence of EU biodiversity policy.

⁴ We explain this concept in a subsequent section.

Instrumentality

The fundamental challenge in public policy and its associated rule-making is to ensure coherence between the goals and objective of particular policies and the administrative rules and procedures thought to be necessary to achieve those goals. When new administrative rules – new institutions whose purpose is to alter individual and group behaviours pertinent to current *undesirable* economic, social and ecological outcomes – are promulgated, and when that alteration in individual choices and action results in new *desired* economic, social and ecological outcomes, we can say that the changes in administrative rules are instrumental to the policy goal that provided the reason for the new institutions (Bromley, 2006a).

Note that new policies start in what we call the *realm of reasons*. It is here that existing problems in a polity are acknowledged, and it is here that the search for solutions receives its impetus. More importantly, defining problems and finding solutions is a game of asking for and giving of reasons. It is in the realm of reasons that consideration of problems and discussions of possible solutions to those problems are ‘worked out’. Legislatures are realms of reason giving. To make an obvious point, the term ‘parliament’ reminds us of the central role of deliberative public discourse in deciding what seems best to do. Judiciaries are also the realms of reason giving. Our study indicates that the essential *purpose of rhetoric* – of producing ‘evidence’ – is to ‘work through’ the reasons for holding particular beliefs.

Finland and the Commission shared the same general concern for the viability of wolves in Finland. However, during the infringement proceedings and the ECJ-case Finland explicitly grounded its reasons in tradition. In contrast, when considering threats to local livelihoods, national sovereignty and various methods for estimating population size, the Commission relied on formal primary and secondary rules of the EU – especially the Habitats Directive.

Reason giving is the essence of what the philosopher Charles Sanders Peirce would call ‘fixing belief’:

. . . the action of thought is excited by the irritation of doubt, and ceases when belief is attained; so that the production of belief is the sole function of thought (Peirce, 1957, 36).

The reasons asked for, and the reasons given, are always in terms of the quest for what it would now seem better to do about particular problematic situations (Bromley, 2006a). It is here that the Peircean process of ‘fixing belief’ takes place. It is helpful to recall that beliefs are rules for action – one never acts without believing that it is a ‘good’ action. Thus, when a legislature has arrived at a clear – even if not unanimous – view of what would be better to do, a formal declaration is issued. New legislation comes into force. Likewise, when a court has arrived at a decision, a new judgment is issued. In our case, both parties convinced the judiciary (the ECJ) about the plausibility of their beliefs in the face of EU legislation: Finland had managed to increase the wolf population and had sufficiently considered feasible alternatives for wolf predation in order to reduce losses to livestock. The Commission highlighted the flaw in Finland’s practices concerning the strict protection of wolves.

New rules from the legislative level – or from judicial decisions – are novel, codified beliefs about new hoped-for actions (behaviours) by members of the political community. These newly codified beliefs are then referred to administrative agencies for yet further elaboration and specificity. Finland has revised its hunting legislation 26 times since joining the EU; it has revised the Hunting Act 12 times, and the Hunting Statute 14 times; of the statutory revisions, 10 of them made reference to the infringement proceedings of either the spring hunting of birds or the wolf conflict with the EU. Following the last revision of the Hunting Statute (2008), the issuance of special wolf hunting licences was completely decentralized to the regional Game Management Districts.⁵ The prerequisites for obtaining a special hunting licence remained as laid out in the Hunting Act and the Habitats Directive, but the shooting of problem wolves became more difficult. The applicant was now required to provide proof that the wolf being hunted is the *specific* animal causing significant problems. The realm of reason (legislative and judicial) has been brought into closer harmonization with the *realm of rules* (administrative rules).

Both the legislative level and the administrative level define the ‘working environment’ for firms and households in the polity. We refer to this working environment as the *realm of adaptive action*. The essential burden of

⁵This is the body that had previously managed licensing only during the hunting season.

The Harmonization Game

firms and households in a nation-state is to adapt to new rules that emerge from the legislative and administrative processes.⁶ The adaptation of rural people to the increased wolf population, and to the new, stricter, interpretation of the law, has been highly problematic. The infringement proceedings, and the ECJ judgment, have not been ideal for 'fixing beliefs' in rural Finland. There are indeed a number of problematic aspects in how the Commission, the government of Finland and the ECJ came to their divergent beliefs concerning wolves in Finland. This situation was particularly evident when approximately one-third of the wolves in Finland – mostly from the east of the country – disappeared during the winter of 2007/8. And when natural causes were ruled out, the only plausible explanation was illegal killing. It appears that the realm of adaptive action – firms and households – has not adapted as expected.

The essential quest for instrumentality is made more difficult by the necessity for harmonization across three *contending realms of reason*. This challenge arises because the challenge of fixing belief is precisely that of being able to engage all pertinent participants in reasoned discourse. Here it is the bifurcated and contending realms (not realm) of reasons that compromise the quest for instrumentality.

Inverse High-Grading

The second problem facing biodiversity policy arises from the particular approach that the European Parliament and the European Commission has adopted – an approach that we call *inverse high-grading*. The concept of high-grading is at the core of traditional natural resource management. High-grading entails the selection of one (or a very few) constituents of nature for economic attention, and the subsequent evolution of an economy of nature focused on the acquisition of those several constituents. Richard Norgaard has addressed this process of co-evolution (Norgaard, 1984, 1994). The modern cereal economy is the essence of a co-evolutionary system predicated on high-grading. Industrial fisheries have carried high-grading to an extreme (Bromley, 2005, 2006b, 2008, 2009). Indeed, high-grading is evident in all economies. The imperatives of competitive pressure dictate that this shall be the case.

We see the spread of inverse high-grading to biodiversity policy when international environmental authorities and advocacy organizations declare that one or more constituents of a particular natural environment are so significant that special efforts must be mounted to prevent *any* human exploitation of those particular attributes of a local environment. The problematic irony of inverse high-grading is that those who issue authoritative rulings about which parts of nature are too important to be compromised are themselves immune (protected) from the rigours and hardships of survival – getting a living – in this environment where particular constituents of biodiversity have suddenly acquired lexical dominance. Local people, suddenly inconvenienced by authoritative assertions from outside, are justified in asking for *good reasons* why their traditional livelihood agenda has been redefined without their input or consent.

The political flaw in inverse high-grading is that a single attribute of a complex ecological milieu has been identified and there is then the expectation that all other activities in the immediate setting will be re-arranged to ensure protection of that particular dimension. Those familiar with ecology will recognize that long-run evolutionary trajectories are compromised by this selective approach to biodiversity protection. The history of nature parks in much of the developing world demonstrates this problem. In those settings, inverse high-grading has resulted in certain charismatic creatures and their essential habitat being declared of greater importance than the people who have long resided in those areas. There is little mystery why poaching and other acts of defiance soon emerge. Defiance motivated by serious competition for forage and water is one thing. Defiance motivated by actual harm precipitated by newly sanctified parts of nature – elephants that destroy crops, tigers that kill infants in India, wolves that kill domestic dogs in Finland – is quite another. The obvious problem with biodiversity policy motivated by inverse high-grading is that it substitutes one thing for many things: inverse high-grading focuses attention on one particular piece of an ecosystem – in this case the individual wolf – to the exclusion of a large number of other aspects that influence the viability of *all* wolves. Those other aspects, of such profound importance to the survival of the population of wolves, concern the habitat in which wolves live and must eat. The

⁶We ignore here the role that firms and households might play in influencing the nature and content of those rules – the practice of politics.

problem with EU wolf policy is that wolves exist in an ecological milieu that is far more complex than the simplistic predator–prey models of inverse high-grading. In such simplistic models, rural residents of Finland are seen as predators and wolves are seen as prey. The predatory aspect of the wolf is of no significance to those committed to inverse high-grading. Yet those who live among wolves have a plausible reason for their actions: fear.

Enriching the Regulatory Regime

Biodiversity policy under the EU's Habitats Directive is part of a larger political discourse concerning 'regulations'. This discourse is problematic because it suggests that there is some natural set of institutional arrangements that combine to comprise 'the economy'. From this flawed start, public policy is thought to be a process of imposing 'regulations' on this natural (and naturalized) structure. However, this artificial dichotomy between the economy and the polity is deeply flawed (Bromley, 2006a; Samuels, 1989). Coherent public policy is an exercise in volitional pragmatism – deciding what policy-makers want to accomplish as they figure out what it is possible to accomplish. Like Neurath's Mariner – forced to repair his ship on the high seas – nation-states go about repairing (righting) the economy in terms of what is thought to be needed at the moment. And policy must be understood as something that is never finished.

It seems that both instrumentality and inverse high-grading can explain the conflict discussed herein. First, the downward ruling from the European Parliament to the European Commission to the Finnish Parliament to Finnish administrative agencies and eventually to individual households in rural Finland represents a mode of policy formulation in which profound concerns for sustainable livelihoods in rural Finland were considered less important than maintaining a particular (yes, quite particular) population of an unwelcome, quite dangerous and harmful aspect of rural biodiversity. Coherence in policy formulation requires some degree of acceptance ('buy-in') on the part of those being affected. When authoritative rulings emanate from within a single polity, those embedded in the realm of adaptive action, households and firms, have the perception of missing both the essential dialogue that preceded the ruling and recourse after the ruling has been announced. Politics and policy are about reason-giving, and the central purpose of the political process is to enhance the scope for giving reasons. The hierarchy of EU rule-giving in the absence of comprehensive reason-giving leads to coherence problems down through the policy hierarchy.

Secondly, the adoption of inverse high-grading as the organizing principle for biodiversity protection has given rise to a policy climate in which the *only possible* outcome is conflict. If science is to inform biodiversity policy – as it should – then it is necessary that the correct scientific approach should underwrite the core of the policy dialogue. The future viability of wolves in Finland requires that the wolf population be secured at the least possible disruption to the established habits of living of the human population that must now co-evolve with this creature in their midst. Not every wolf in the pack is essential to the future viability of the entire population. The application of science to biodiversity policy must be in terms of instrumentality, not authoritarianism.

It now seems useful to cast the discourse about biodiversity in a broader policy context. Specifically, there is a continuum of policy approaches to encourage local communities to protect and enhance biodiversity. Rauschmayer *et al.* (2009) and Paavola *et al.* (2009) approach this from the specific angle of multilevel governance, i.e. from the viewpoint of public participation and institutional fit. We, however, approach it from the perspective of 'governmentality' – how the EU and the government of Finland chose to exercise different modes of power in the harmonization game whose purpose was to create appropriate conditions for the renewal of certain habits of mind and action pertaining to administration and citizenship.⁷ We call these: (1) facilitative policies, (2) inducing policies and (3) injunctive policies. Each instrument choice holds different implications for the sustainability of these programmes.

1. *Facilitative policies.* Facilitative policies allow individuals to undertake behavioural changes that are consistent with the long-run interests of both the ruling authority (in this case the EU/EC) and those at the level of adaptive action (households). For instance, rural residents throughout Europe benefit from a pleasing and sustainable landscape, and the European Parliament can expect little resistance to policies that seek to bring this about. The

⁷On governmentality, see Foucault (2008) and Dean (2010).

The Harmonization Game

same can be said for many rural development initiatives. In the case of wolves, it is more difficult to identify a clear harmony of interests between the EU/EC and rural households in Finland. Facilitative policies seem to have limited prospects with respect to wolves.

2. *Inducing policies.* In contrast to facilitative policies, inducing policies seek to realign incentives for those settings and circumstances in which the interests of both main parties – here the EU/EC and residents of rural Finland – diverge. We need policies that change the incentive structure of the ‘harmonization game’. Although compensation for damage may be fine for livestock, financial compensation is rarely adequate for household pets killed by wolves. Here, more creativity is called for. In particular, it calls for institutional entrepreneurship – the courage and capacity to challenge prevailing dysfunctional institutional arrangements, and to initiate processes for the correction of perverse rules and rulings. Here we acknowledge the potential of the Regional Large Carnivore Councils, but we look particularly for more profound processes to change the rules of the harmonization game (Hiedanpää and Bromley, 2010).

3. *Injunctive policies.* Finally, injunctive policies compel (require) a particular performance target on the part of individuals in the realm of adaptive action. EU policy on killing wolves is an injunctive policy. In contrast to the collaborative component of facilitative and inducing policies, here we encounter compulsion. The familiar lesson from wildlife policy in much of the world is that external injunctions will fail if they focus inordinate attention on particular physical attributes of the local environment – the population of wolves – without considering the livelihood prospects of those who occupy the suddenly favoured ecosystem and its ‘essential’ components (wolves). We have used the term inverse high-grading to denote a situation in which the desires of outside interests manage to trump the livelihood priorities of humans living in the same vicinity. Of course there will be concern that complementary efforts must be made to improve livelihoods. But the emphasis will often be clear that policy is driven by doing what is necessary, but not much more, for people such that they will help those parts of nature identified by outsiders as warranting extraordinary protection.

Conclusion

It is our sense that the EU, and the people of rural Finland, will continue to struggle over the wolf until a more coherent policy goal – and a more defensible administrative rule structure – is formulated. This move toward instrumentality must abandon a policy target of fixing on the total wolf population in Finland – and then arguing about whether it is sufficient to ensure long-run viability. The more meaningful instrumentality must draw attention to the *marginal effects on sustainability of the total population as a result of the removal of a single wolf*. This brings meaningful science into the policy process.

A more coherent policy goal would be to include the people of rural Finland as pertinent (and *active*) adaptive actors into the harmonization process, not continue to regard them as mere *passive* and docile adapters. The broader implication of this would be to understand harmonization not as a game of command and obedience, but rather as a discursive, collaborative and multilevel activity of self-governance engaged in by particular localities, member states and the EU. Instrumental and communicative actions prescribed here would manifest legitimacy, and would encourage creativity and personal growth at every level of governance. Of the existing structures, the Regional Large Carnivore Councils might serve as an initial condition of these necessary learning processes.

Acknowledgements

We thank the Academy of Finland’s HirSu-project for funding Juha’s visit to University of Wisconsin-Madison in 2008 and Sauli Härkönen for comments.

References

- Alphandéry P, Fortier A. 2001. Can territorial policy be based on science alone: the system for creating the Natura 2000 network in France. *Sociologia Ruralis* 41: 311–328.

- Anon. 2005. *Suomen susikannan hoitosuunnitelma* [Wolf Management Plan for Finland]. Maa- ja metsätalousministeriö 11/2005. Helsinki. http://wwwb.mmm.fi/julkaisut/julkaisusarja/2005/MMMJulkaisu2005_11b.pdf
- Baker S. 2003. The dynamics of European Union biodiversity policy: interactive, functional and institutional logics. *Environmental Politics* 12(3): 23–41.
- Beunen R, van der Knaap WGM, Biesbroek GR. 2009. Implementation and integration of EU environmental directives: experiences from the Netherlands. *Environmental Policy and Governance* 19: 57–69.
- Bisi J, Kurki S. 2008. *The Wolf Debate in Finland: Expectations and Objectives for the Management of the Wolf Population at Regional and National Level*. Publications 12. Seinäjoki: Helsinki University, Ruralia Institute.
- Bisi J, Kurki S, Svensberg M, Liukkonen T. 2007. Human dimensions on wolf (*Canis lupus*) conflicts in Finland. *European Journal of Wildlife Research* 53(4): 304–314.
- Brandom RB. 1994. *Making it Explicit: Reasoning, Representing, and Discursive Commitment*. Cambridge, MA: Harvard University Press.
- Brandom RB. 2000. *Articulating Reasons*. Cambridge, MA: Harvard University Press.
- Bromley DW. 2005. Purging the frontier from our mind: crafting a new fisheries policy. *Reviews in Fish Biology and Fisheries* 15: 217–229.
- Bromley DW. 2006a. *Sufficient Reason: Volitional Pragmatism and the Meaning of Economic Institutions*. Princeton, NJ: Princeton University Press.
- Bromley DW. 2006b. The economics of whaling. In *Whales, Whaling, and Ocean Ecosystems*, Estes JA, DeMaster DP, Doak DF, Williams TM, Brownell Jr. RL (eds). Berkeley, CA: University of California Press; 363–372.
- Bromley DW. 2008. The crisis in ocean governance: conceptual confusion, spurious economics, political indifference. *MAST: Maritime Studies* 6(2): 7–22; Rejoinder, 39–54.
- Bromley DW. 2009. Abdicating responsibility: the deceptions of fisheries policy. *Fisheries* 34(6): 280–90; Rejoinder, 299–302.
- Caddy J. 1997. Hollow harmonisation? Closing the implementation cap in the central European environmental policy. *European environment* 7: 73–79.
- Dean M. 2010. *Governmentality: Power and Rule in Modern Society*, 2nd edn. London: Sage.
- European Parliament. 2008. *Towards a 'European Cormorant Management Plan' to minimize the increasing impact of cormorants on fish stocks, fisheries and aquaculture*. (2008/2177(INI))
- Foucault M. 2008. *The Birth of the Biopolitics. Lectures at the College de France 1978–1979* (translated by Graham Burchell). London: Palgrave Macmillan.
- Hiedanpää J. 2002. European-wide conservation vs. local well-being: the reception of Natura 2000 reserve network in Karvia, SW-Finland. *Landscape and Urban Planning* 61(2–4): 113–123.
- Hiedanpää J. 2005. The edges of conflict and consensus: a case for creativity in regional forest policy in Southwest Finland. *Ecological Economics* 55(4): 485–498.
- Hiedanpää J, Bromley DW. 2010. Contestations over biodiversity policy: Considering Peircean Semeiosis. *Manuscript*. Environmental Values (forthcoming).
- Knill C, Liefferink D. 2007. *Environmental Politics in the European Union. Policy-Making, Implementation and Patterns of Multi-Level Governance*. Manchester: Manchester University Press.
- Kohler-Koch B. (ed.). 2003. *Linking EU and National Governance*. Oxford: Oxford University Press.
- Koppen IJ. 2001. The role of European Court of Justice. In *European Union's Environmental Policy: Actors, Institutions and Processes*, Jordan A. (ed.). London: Earthscan; 100–119.
- Linnel J, Salvatore V, Boitani L. 2007. *Guidelines for Population Level Management Plans for Large Carnivores. A Large Carnivore Initiative for Europe report prepared for the European Commission*. Final draft May.
- Maurer A, Mittag J, Wessels W. 2003. National system's adaptation to the EU system: trends, offers, and constraints. In *Linking EU and National Governance*, Kohler-Koch B (ed). Oxford: Oxford University Press; 53–81.
- McCormick J. 2001. *Environmental Policy in the European Union*. New York: Palgrave Macmillan.
- Mehtälä J, Vuorisalo, T. 2007 Conservation policy and the EU Habitats Directive: Favourable conservation status as a measure of conservation success. *European Environment* 17: 363–375.
- Norgaard RB. 1984. Coevolutionary development potential. *Land Economics* 60(2): 160–173.
- Norgaard RB. 1994. *Development Betrayed: The End of Progress and a Coevolutionary Revisioning of the Future*. London: Routledge.
- Oksanen A. 2003. Paikallisuuden ja kansainvälisyyden kohtaaminen luonnonsuojelussa. Tapaustutkimuksena Natura 2000 – ympäristökonflikti Lounais-Suomessa. *Ann. Univ. Turkuensis C* 192. Turku: Turun yliopisto.
- Paavola J. 2004. Protected areas governance and justice: theory and the European Union's Habitats Directive. *Journal of Integrative Environmental Sciences* 1(1): 59–77.
- Paavola J, Kluvánková-Oravská T, Gouldson A. 2009. Institutions, ecosystems and the interplay of actors, scales, frameworks and regimes in the governance of biodiversity. *Environmental Policy and Governance* 19: 148–158.
- Palviainen S. 2000. *Pohjoiskarjalaisten luonnonkäyttäjien kokemuksia suurpedoista*. Julkaisuja 51. Joensuu: Pohjois-Karjalan liitto.
- Peirce CS. 1957. *Essays in the Philosophy of Science*. Tomas, V. (ed.). New York: The Liberal Arts Press.
- Ratamáki O. 2008. Finland's wolf policy and new governance. *The Journal of Environment & Development* 17(3): 316–339.
- Rauschmayer F, Behrens V. 2008. Legitimacy of species management: the great cormorant in the EU. In *Legitimacy in European Nature Conservation Policy: Case Studies in Multilevel Governance*, Keulartz J, Leistra G (eds). Berlin: Springer; 55–74.
- Rauschmayer F, Paavola J, Wittmer H. 2009. European governance of natural resources and participation in a multi-level context: an editorial. *Environmental Policy and Governance* 19: 141–147.
- Samuels WJ. 1989. The legal-economic nexus. *George Washington Law Review* 57(6): 1556–1578.

The Harmonization Game

- Sandström C, Pellikka P, Ratamäki O, Sande A. 2009. Management of large carnivores in Fennoscandia: new patterns of regional participation. *Human Dimensions of Wildlife* 14(1): 37–50.
- Sauer A. 2005. European nature conservation policy: challenges for local implementation in Germany. In *From Landscape Research to Landscape Planning: Aspects of Integration, Education and Application*, Tress B, Tress G, Fry G, Odman P (eds). Berlin: Springer; 173–192.
- Stoll-Kleemann S. 2001. Barriers to nature conservation in Germany: a model of explaining opposition to protected areas. *Journal of Experimental Psychology* 21: 369–385.
- Stone Sweet A. 2004. *The Judicial Construction of Europe*. Oxford: Oxford University Press.
- Stone Sweet A, Sandholtz W, Fligstein N (eds) 2001. *The Institutionalization of Europe*. Oxford: Oxford University Press.
-

Appendix

Letters of correspondence between the European Commission and Finland

- D1 – A letter of formal notice (April 10, 2001)
- D2 – A letter of observations (July 5, 2001)
- D3 – A letter of reasoned opinion (July 4, 2002)
- D4 – A letter of answer (August 26, 2002)
- D5 – A letter from Finland to the Commission (the draft Management Plan for Wolf) (September 12, 2005)
- D6 – A letter from Finland to the Commission (the final Management Plan for Wolf) (December 29, 2005)
- D7 – A letter of charge (September 12, 2005)
- D8 – A statement of defense (December 7, 2005)
- D9 – A response of the plaintiff (February 23, 2006)
- D10 – A response of defendant (April 3, 2006)
- D11 – A letter to Ambassador (September 3, 2007)
- D12 – A letter concerning implementation of judgment (November 2, 2007)