

A political ecology of shifting commons in the Pyrenees: Shepherds on the edge of production and amenity-based capitalism after the reintroduction of bears

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Abstract

The brown bear reintroduction program in the Pyrenees was launched in 1996, once their population was considered extinct in the central parts of the mountain range. The increasing number of livestock casualties caused by bear attacks forced the public administrations to adopt a package of protection measures, which included hiring mountain shepherds to tend the local farmers' flocks during the summer grazing season. Although these measures were deemed to restore age-old communal shepherding practices that had recently been abandoned by bringing together bears, livestock, and shepherds in the high mountain pastures, the bear program has produced an overlap of communal and state-driven territorialities. Drawing attention to the ambiguous position of mountain shepherds within a new pastoralism-conservation network, situated between local farmers and bear program's decision-makers, this article argues that the commons must be taken into consideration as it persists in current times, even within a high-modern territoriality unfolded under different forms of environmentality. The shepherds epitomize the hybridization of different territorialities, situated on the edge of the production-based economy developed by the local farmers and the amenity-based economy behind the bear reintroduction program. There is a shared, though differentiated capitalist view of natural resources. Using the main theories of power in political ecology and taking the variables of 'format, management, governance, and institution' to frame the commons as an enduring local collective farming resource, this article scrutinizes the collision between the two types of capitalism, usually misidentified as a rural-urban divide. It also shows the extent to which the shifting existence of the commons, crystallized through the ambiguous position of the shepherds, may provide us with a fruitful toolkit to better understanding human-wildlife conflicts based on the cleavage between farming and conservationist sectors.

Keywords: Brown Bear, bundle of rights, commons, environmentality, pastoralism. Pyrenees, types of capitalism, territorialization

Résumé

Le programme de réintroduction de l'ours brun dans les Pyrénées a été lancé en 1996, car l'espèce était considérée comme éteinte dans les parties centrales de la chaîne montagneuse. Depuis lors, l'augmentation des attaques sur le bétail a contraint les administrations publiques à adopter des mesures de protection, dont l'embauche de bergers de montagne pour s'occuper des troupeaux des agriculteurs locaux pendant la saison des pâturages d'été. Ces mesures étaient censées restaurer les pratiques ancestrales de pastoralisme communautaire, en réunissant les ours, le bétail et les bergers dans les pâturages de haute montagne. Mais le programme ours a entraîné un chevauchement des territorialités communales et étatiques. L'article soutient que les biens communs persistent à l'époque actuelle, même au sein d'une territorialité ultramoderne qui s'est déployée sous différentes formes d'environnementalité. Les bergers de haute montagne occupent une position ambiguë dans le nouveau réseau pastoralisme-conservation, situé entre les agriculteurs locaux et les décideurs du programme de l'ours. Ils incarnent l'hybridation de différentes territorialités, situés à la limite de l'économie de production développée par les agriculteurs locaux et des objectifs d'agrément du programme de réintroduction de l'ours. Il existe une

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vision capitaliste partagée, mais différenciée, des ressources naturelles. En utilisant les principales théories du pouvoir en écologie politique et en prenant les variables du "format, de la gestion, de la gouvernance et de l'institution" pour définir les biens communs comme une ressource agricole collective locale durable, l'article examine minutieusement la collision entre les deux types de capitalisme. Il montre également dans quelle mesure l'existence mouvante des biens communs, cristallisée par la position ambiguë des bergers, peut nous fournir une boîte à outils fructueuse pour mieux comprendre les conflits entre l'homme et la faune.

Mots-clés: Ours brun, faisceau de droits, biens communs, environnementalité, pastoralisme. Pyrénées, types de capitalisme, territorialisation

Resumen

El programa de reintroducción del oso pardo en los Pirineos se inició en 1996 una vez su población se consideró extinta en las partes centrales de la cordillera. El incremento de bajas en los rebaños causadas por ataques de oso instigó a las administraciones públicas a adoptar un paquete de medidas de protección que incluyeron la contratación de pastores de montaña para cuidar a esos rebaños durante la temporada de pastoreo estival. Aunque estas medidas y sus efectos más inmediatos, la coexistencia de osos, ganado y pastores, se fue considerada por los promotores del programa de reintroducción como la restauración de prácticas pastorales comunales ancestrales que habían sido recientemente abandonadas en los pastos de alta montaña, el programa del oso ha dado lugar a una superposición de territorialidades de naturaleza comunal y estatal. Dentro de una nueva red pastoral-conservacionista, los nuevos pastores de alta montaña se encuentran en una posición ambigua, permaneciendo entre los ganaderos locales y los proponentes del programa del oso. Este artículo argumenta que los comunales deben ser considerados como elementos contemporáneos incluso dentro de una territorialidad altamente moderna que se despliega bajo diferentes formas de ambientalidad (*environmentality*). Los pastores de hoy en día ilustran la hibridación de diferentes territorialidades al ser ubicados dentro de una visión capitalista de los recursos naturales, compartida pero diferenciada entre la economía productivista desarrollada por los ganaderos locales y la economía terciarizada promovida detrás del programa de reintroducción del oso. Tomando las principales teorías del poder en ecología política y usando las variables de formato, gestión, gobernanza e institución que permiten enmarcar a los comunales como una gobernanza local colectiva de los recursos ganaderos que no está restringida a ningún período, este artículo examina la colisión entre estos dos tipos de capitalismo, generalmente identificados erróneamente mediante la división urbano-rural. Finalmente, también muestra hasta qué punto la existencia cambiante de los comunales, cristalizada a través de la posición ambigua de los pastores, puede proporcionarnos un conjunto fructífero de herramientas analíticas para comprender mejor los conflictos humanos alrededor de la fauna salvaje surgidos a raíz de la división entre los sectores ganadero y conservacionista.

Palabras clave: Oso pardo, entramado de derechos, comunales, environmentality, pastoralismo, pirineos, tipos de capitalism, territorialización

1. Bears, flocks, and shepherds

The native brown bear (*Ursus arctos arctos*) population along the Pyrenees decreased from a few hundred in the 1920s to barely five individuals in 1995 (see Figure 2), when the species was wiped out from the central parts of the mountain range (Parellada *et al.*, 1995). The extinction was not natural. Until the 1970s bears were considered a species to be hunted in France and Spain (Casanova, 2002), and even after this turning point illegal hunting continued to happen. This was, therefore, a human-induced extinction. In the face of this situation, the Spanish and French governments implemented conservation initiatives, and bears achieved full legal protection in the 1970s and 1980s. At a European scale, both the Bern Convention in 1979-1982, which was ratified by Spain in 1986 (Caussimont & Herrero, 1997), and the Habitats Directive in 1992, set out the legal framework for the implementation of wildlife policies in the European Union (EU). At a local scale, some studies fostered by the Catalan government in the late 1980s concluded that there were still a few individuals in the Catalan High Pyrenees, in the districts of Val d'Aran and Pallars Sobirà, northeastern Spain (see Figure 1), and that a translocation of bears was required to ensure the viability of the species in the mountain range (Alonso & Toldrà, 1993).

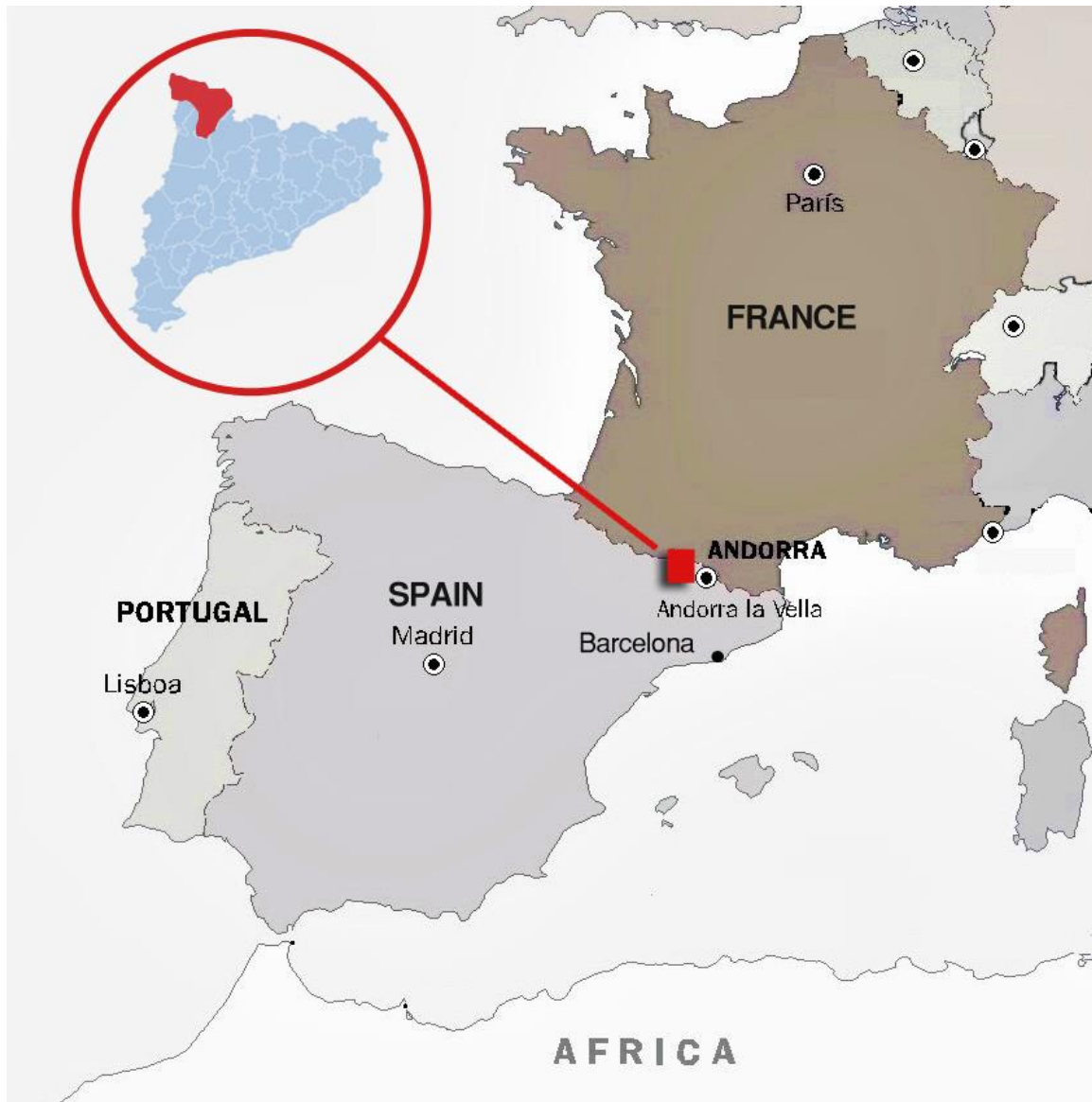


Figure 1: The districts of Val d'Aran and Pallars Sobirà, within the larger context of Catalonia and Spain, in southern Europe.

In a short period of time, bears had gone from being hunted to enjoying protected status, ultimately leading to an EU-LIFE project signed in 1993—the bear reintroduction program—which was led by France in agreement with Spain and Andorra, and supported by the regional Spanish governments of Catalonia, Aragon, and Navarra. Following this agreement, the first wave of translocations from Slovenia was undertaken by the French government in 1996 and 1997, respectively releasing two females and a male into Melès, a municipality located in the French Central Pyrenees but adjacent to Val d'Aran district. Although the population of bears remained below ten individuals for a decade and the Pyrenean lineage was considered extinct in 2004 after a female bear was killed in a hunting accident, the second wave of translocations was carried out by the French government in 2006, releasing five more individuals, plus other two releases in 2016 (one male) and in 2018

(two females). There has been a steady increase of the bear population, today surpassing seventy individuals (Figure 2 and 3).

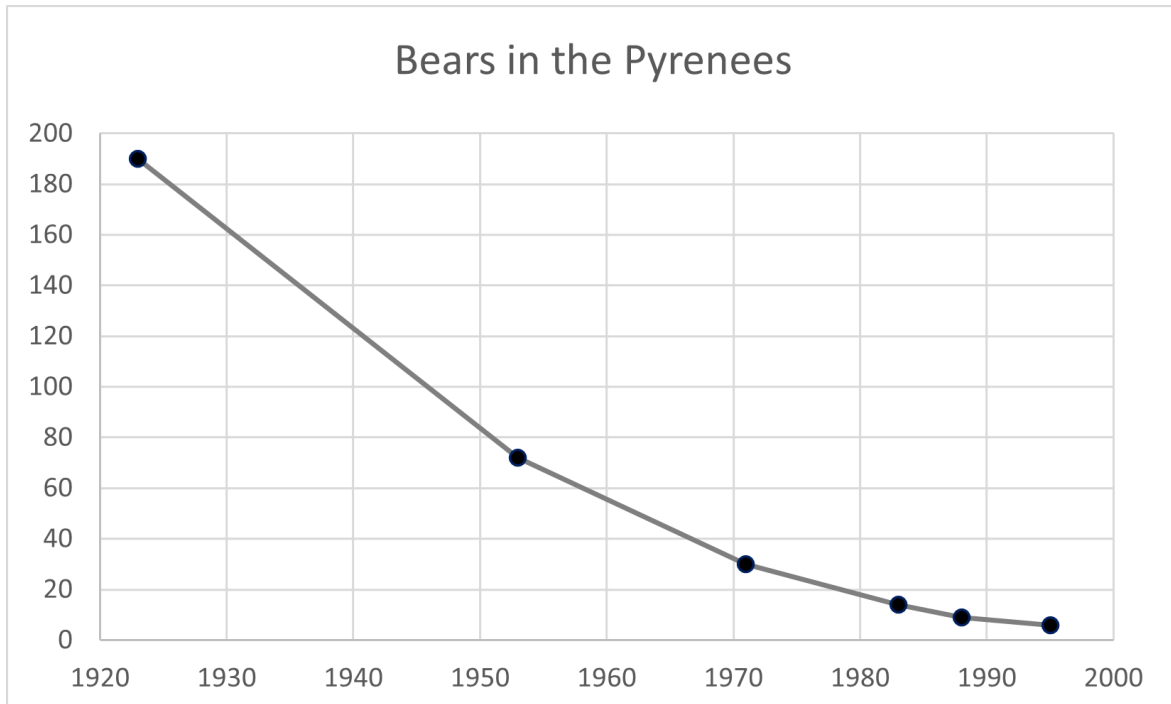


Figure 2: Number of bears in the Pyrenees from 1923 until 1995, just before the bear reintroduction program was launched. Source: Author based on Casanova (2002) and Quenette (2019).

In parallel with this process, the longstanding pastoral model, based on the permanent presence of shepherds tending and driving flocks of sheep as they grazed on the collective mountain pastures, was dismantled between the 1960s and the 1970s. Since then, local farmers have taken their sheep to the mountain pastures during the summer grazing season and left them untended, with only weekly controls to check their health and location. The combination of the absence of shepherds and the renewed presence of bears gave way to sporadic predation on sheep in some valleys. Although this seems self-evident following the reintroduction of bears, predation was not predicted by the bear program's decision-makers. "We didn't foresee it," as one of the members of the technical staff involved in those initial phases of the reintroduction program admitted. Once sheep casualties caused by bear attacks became more numerous and evident, the public administration began to implement a regrouping policy in 2010 to mitigate the negative impact on the farming sector. This policy consisted of gathering sheep belonging to different local farmers from adjacent villages in single larger flocks, namely the regrouped flocks,² with a set of protection measures funded by the public administration: shepherds, livestock guardian dogs (LGDs), and electrified enclosures for night camps. While electrified enclosures had never been used before, shepherds, LGDs, and the entire package of measures were deemed to restore age-old

² In 2023, there were six regrouped flocks tended by fifteen shepherds in the Catalan High Pyrenees for a total of 7,000 sheep or goats belonging to several local farmers.

shepherding practices that had been abandoned (coinciding with the drastic decline of the bear population since the second half of the twentieth century). In effect, shepherds disappeared from these mountains for a generation and LGDs had not been used for protection purposes since the mid-twentieth century. The regrouping policy did manage to reduce the negative impact on the farming communities caused by the renewed presence of bears. However, it failed in appeasing the social conflict between the farming and the conservationist sectors.

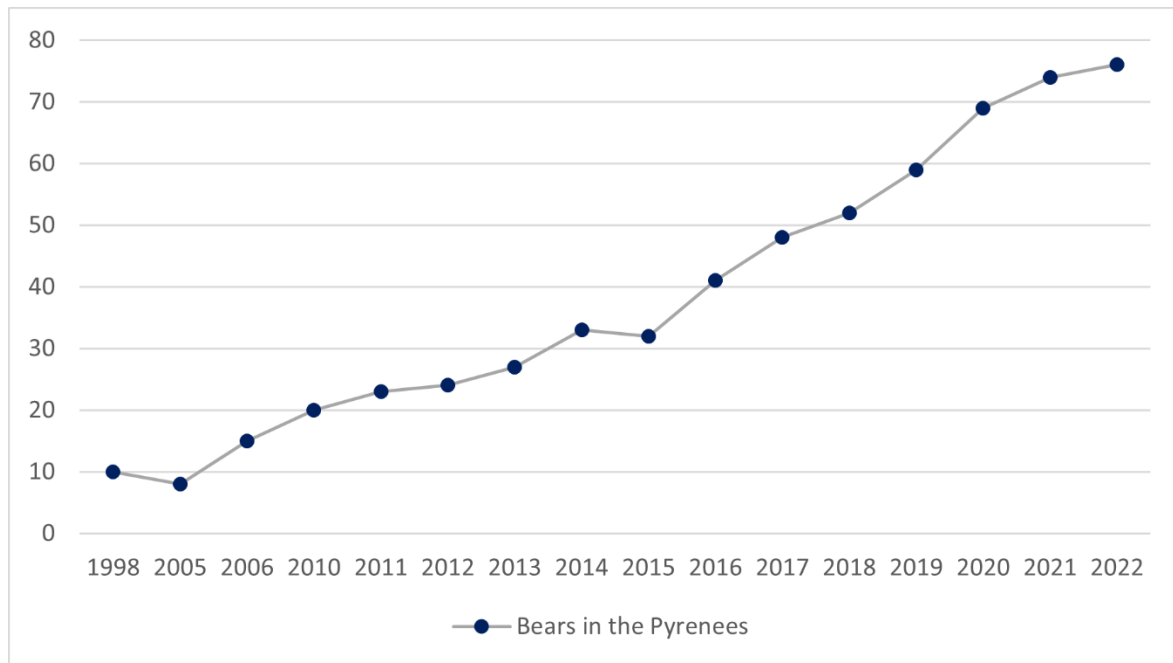


Figure 3: Number of bears in the Pyrenees during the bear reintroduction program (1998-2022). Source: Author, based on Palazón (2023). The number in 2022 (76) will, awaiting the 2023 census. The reason behind this increase is the number of samples belonging to individuals that were not accounted the previous year.

Beyond giving the multiple reasons behind the persistence of these conflicts despite the success of the protection measures in reducing the number of bear predations on livestock, this article draws on a political ecology approach. It focuses on the ambiguous position of the shepherds within a new pastoralism-conservation network built upon the bear reintroduction program, and on what this ambiguity tells us about the importance of bringing to the fore the notion of the commons in human-wildlife conflicts. Dissecting the composition of this network of stakeholders as well as examining the new relations of power among them from multiple angles reveals the extent to which the bear program has not restored the former landscape of the Pyrenean pastures, composed of bears, flocks, and shepherds. Departing from the premise that "the representation of landscape is not innocent of a politics," and that "landscape and territory are embedded in relations of power and knowledge" (Darby, 2000, pp. 9; 15), the bear program has, rather, produced a whole new landscape articulated through new structures and relations of power in which we can see the hybridization of a communal territoriality, formerly based on a farming economy, with a high-modern territoriality (Scott, 1998). It revolves around a state-driven wildlife conservation program and is underpinned by a leisure-based economy (Beltran & Vaccaro, 2014a). This hybridization shows the shifting persistence or, paraphrasing Eizenberg (2012), the actual existence of the commons in the current use and management of collective natural resources in the Pyrenees.

The new articulation of the commons under a wildlife reintroduction program unfolds through a new network of power relations within which the shepherds hired by the public administration are situated on the edge of two confronting parties: local farmers and bear program's decision-makers.

'The commons' is a buzzword that requires immediate clarification. The commons here refers to an old local herding model that used to, and more importantly still does, set the basis for the use of mountain pastures by the local farmers' livestock. There are variations in format, management, governance, and institutions (see below Table 1). The commons is not just a land tenure regime—the common property regime—or a type of resource—common pool resources (Vaccaro & Beltran, 2019). Inspired by the idea that "the commons is a way of (...) organizing social relations and resources" that "may even have components that contradict the ideal type" (Eizenberg, 2012, pp. 764–765), my approach to the commons conveys a local communal collective farming resource governance that is not restricted to a specific period. In other words, commons conjure up a specific territoriality or the "unfolding of society over a territory" (Vaccaro *et al.*, 2014, p. 3) that has shifted over time, taking shape under different types of hybridized or mixed models of institutional resource governance (Beltran & Vaccaro, 2014a; Eizenberg, 2012; Turner, 2017). Change and persistence is what leads me to name this a 'shifting commons.' I propose not to identify the shifting manifestations of the commons as a vestige, usually idealized in restoration terms, from the past. In other words, the commons here do not refer to an old traditional pastoral model that used to shape agrarian societies in the Pyrenees since times immemorial. Instead, and counterintuitively, they still are an important element of modernity, understood "as a historical regime [that] results from the implementation of a new type of governmentality associated to the simultaneous consolidation of nation-state and capitalism, with individualism as a generic behavioral framework" (Vaccaro, 2010, p. 25).

Delving into the new pastoralism-conservation network, we can see that the mountain shepherds epitomize the hybridization of tradition and modernity by staying on the edge of the production-based economy developed by the local farmers and the amenity-based economy behind the bear reintroduction program within a shared, though distinctively capitalist view of natural resources (Walker, 2003). In the collision between these two types of capitalism, the shifting existence of the commons crystallized through the ambiguous position of the shepherds may provide us with a fruitful toolkit to better understanding the structure and relations of power underlying human-wildlife conflicts based on the cleavage between the farming and the conservationist sectors.

2. Power in political ecology: A lens to examine the new pastoralism-conservation network

Inspired by the three different theories of power that have nurtured the political ecology literature, namely Weberian actor-oriented perspectives, neo-Marxist structuralism, and Foucauldian poststructuralism (Svarstad *et al.*, 2018), I begin by teasing out the new triangle of stakeholders engendered by the reintroduction of bears and the implementation of the regrouping policy. Taking into consideration actor-oriented perspectives and the political economy structure upon which social relations unfold, this article examines the main stakeholders involved in the new pastoralism-conservation network, drawing special attention to the figure of the shepherds, and how they ended up playing a central role between local farmers and bear program's decision-makers within an institutional scaffold underpinned by a specific rationality over natural resources. The examination of the ambiguous position of the shepherds within this triangle of stakeholders seems to enliven the canonical divide between the rural and the urban. In the second part of the text I combine a Foucauldian approach to power through the framework of environmentality (Agrawal, 2005; Fletcher, 2010) with that of property theory (Blomley, 2016; Bromley, 1992), and in particular of the notion of the commons (Vaccaro & Beltran, 2019) to show the extent to which the close examination of the figure of mountain shepherds within this new pastoralism-conservation network sheds light on the actual existence of shifting commons and the power structure and relations underlying their manifestations.

The analysis shows the need to understand the commons if we want to address the reasons behind the persistence of the social conflicts around the bear reintroduction program in the Pyrenees. Pulling the thread of Fletcher's proposal towards a liberation environmentality in which political ecologists should consider the call made by the Common Property Regime (CPR) perspective "for greater democracy and participation in resource governance regimes, (...) often hampered by authoritarian top-down structures" (2010, p. 179), approaching

the bear program as the overlap of different forms of environmentality should lead us to examine the different types of imposition felt by the local farmers in the face of the renewed presence of bears and shepherds in the Pyrenees.

Given that "[e]mpirical work has shown that systems of common property governance often include overlapping systems of rights" (Turner, 2017, p. 797) as well as of multiple forms of environmentality (Fletcher, 2017; Marino *et al.*, 2022), we can analyze the shifting manifestations of the commons through the framework of territorialization (Blomley, 2016; Vandergeest & Peluso, 1995) and of environmentality (Agrawal, 2005; Fletcher, 2010). The bundle of rights schema proposed by Schlager and Ostrom (1992) and revisited by Sikor *et al.* (2017) is useful. Going one step further, we examine the changes in local farmers' herding models fostered by the reintroduction of bears in the Pyrenees as an overlap of multiple environmentalities and a form of territorialization (Braun, 2000; Hannah, 2000). As such, I contend that the bear program works as a form of state-driven territorialization since it "helps to define, inscribe, and stabilize a set of relations associated with property" (Blomley, 2016, p. 596) through different forms of environmentality, without considering the importance of the shifting persistence of the commons and the ways in which they are reshaped, imbued with new power relations, via the figure of current mountain shepherds.

The bundle of rights schema thus serves to examine the ways in which territorialization and environmentality set a dialogue with the notion of the commons. Considering different levels of rights, the bear program preserves local farmers' right to keep using collective natural resources, i.e., most of the mountain pastures in the Catalan High Pyrenees, formerly categorized as common lands, since the mid-nineteenth century defined as public lands (Beltran & Vaccaro, 2014a, 2014b). But it refrains those local farmers from keeping their authoritative and control rights to those resources. In a nutshell, in the wake of the implementation of the bear program local farmers have lost the right to manage or choose how to graze their livestock on the mountain pastures. Given this scenario, shepherds become the human figure that exemplifies and embodies the local farmers' loss of authority and control over their natural resources.

Returning to the theories of power used by political ecology scholars, an actor-oriented perspective allows us to scrutinize who are the new shepherds and how they are perceived by others and by themselves, while a Marxist approach enriches the analysis by examining the institutional scaffold of the new pastoralism-conservation network, addressing the question of who owns the means of production. This key question translates into who controls or shapes the meaning, use, and management of the commons (Eizenberg, 2012). Finally, Foucauldian analysis of environmental issues evokes the work of Agrawal on the notion of environmentality (2005), though which the care for the environment derives from the simultaneous institutional creation of conservation figures to protect the environment and of subjects who care about the environment (see Marino *et al.*, 2022). In Catalonia, the "simultaneous redefinition of the environment and the subject as such redefinition is accomplished through the means of political economy" (Agrawal, 2005, pp. 23–24) took place in the 1980s, just before the bear reintroduction program was launched, with the creation of environmental NGOs and the approval of Catalan legislation covering natural protected areas (Font & Majoral, 1999). The combination of these three approaches to power unfolds through the dissection of the main stakeholders involved in the regrouping policy—shepherds, bear program decision-makers, including state bodies and environmental NGOs, and farmers—and the triangular interplay between them. This theoretical combination leads us to draw attention to the overlapping forms of resource governance the bear program has operated under: sovereign, disciplinary, and neoliberal environmentalities (Fletcher, 2010).

In the conclusion, I underline that recognizing the shifting persistence of the commons, epitomized by the ambiguous position of mountain shepherds and as part of the current unfolding of Pyrenean societies over these territories, may pave the way to bridge the divide between the farming and the conservationist sectors. Recognition may build a more generative pathway, through which not only use rights, but also authoritative and control rights—the right to choose— will be taken into consideration by the decision-makers from the bear program. To do so, we need first to better understand shepherds' ambiguous position after some brief notes on the methods underpinning these findings.

2. Methods: Interviewing while going walkabout

The results and arguments draw from an ethnographic three-year fieldwork in the Catalan High Pyrenees between 2017 and 2020 as part of a doctoral program.³ Sampling took place among shepherds, farmers, and bear program decision-makers, including technical staff and politicians. Some 22 informants, with fourteen people involved in the bear program were interviewed, most of the time through recurrent appointments. I also conducted interviews with former and current managers of the Shepherds School of Catalonia (see below in the next Section) and with local politicians and public officers (17 people). Interviews were transcribed for discursive qualitative analysis around the semantic fields of the commons, compatibility, conservation, imposition, landscape, property and rights, and temporal conjunctions (e.g., before, we used to...). Except for Catalan government politicians, I usually combined interviews with participant observation of the tasks conducted by shepherds and farmers tending livestock, and the bear program technical staff monitoring the species and assisting the shepherds and farmers in the implementation of protection measures. I was inspired by Strang's definition of walkabout as an ethnographic technique that

...explores people's historical and contemporary relationships with local environments (...) 'going walkabout' with informants in the places that they consider to be important, and collecting social, historical and ecological data *in situ*. (2010, p. 132)

Also, following Darby's proposal for a 'peripatetic ethnography' that allows us to "examine how social relations are spatialized and spatial relations are socialized" (2000, p. 4), most of the interviews were conducted outdoors or *in situ*. This was the case for the shepherds tending the regrouped flocks or resting in the mountain huts at night; for the farmers as they were working in their barns or driving their livestock across the mountain pastures; and for the bear program technical staff as they were collecting fur samples from wires in the trees or checking the presence of bears in the mountains with their binoculars. I complemented these ethnographic techniques by visiting the only museum devoted to the brown bear in the Catalan Pyrenees, named *La casa de l'os* [The House of the Bear], and by attending several talks concerning the bear reintroduction program. A lack of direct contact with some politicians was supplemented by attending these talks and symposia on livestock-wildlife conflicts, and by discourse analysis of Parliamentary speeches and media interviews.

A few personal aspects are worth mentioning, especially considering that the bear program was, and still is a very sensitive topic in the area of study. My arrival at the field site was not a solitary adventurous experience *à la Malinowski*. Rather, I settled down in Val d'Aran district with my wife and our two children, aged two and recently born, and we lived there for seven years. Introducing myself as a husband and father, as well as becoming a permanent resident, shaped the rapport with my informants. I was unknown to the local population as a man born in Barcelona and from an urban background, and with an academic affiliation as a graduate student from a Canadian institution. Holding a biology degree may have also helped me in setting a confident atmosphere with those supporting the bear program. Finally, I approached the field with a no clear stance on the conflict engendered around the bear program. I had the chance to witness and admire from afar the magnificent presence of a bear traversing the crest of a mountain; I also admired the local farmers' knowledge about toponyms, pastoral practices, and property arrangements.

³ The overall research led to the dissertation *Greening the commons. Alpine skiing, brown bears, and extensive husbandry in the Pyrenees* (2022).

3. The bear program through the ambiguous position of mountain shepherds: Dissecting the triangle of stakeholders within the new pastoralism-conservation network

The bear program has produced a landscape comprising bears, flocks, and shepherds that at first glance may resemble an earlier time, in which private livestock from the same village grazed together as village flocks when the local populations in the Catalan High Pyrenees were still acutely aware of the presence of bears in their region. But different herding models have operated over time, with different social groups, managerial formats, resource governance, and institutions in charge of controlling implementation (Table 1).

Herding models over the twentieth and twenty-first centuries in the Catalan High Pyrenees			
Period	1900-1970	1970-2010	2010-to date
Managerial Format	Communal collective	Private individual	Public collective
Governance	Farming	Farming	Environmentalities
Institution	Local	Local	State
Land Tenure	Public	Public	Public

Table 1: Herding models over the twentieth and twenty-first centuries in the Catalan High Pyrenees.

The regrouping policy fostered by the public administration under the umbrella of the bear reintroduction program laid down a mapping of power relations among a new collectivity of stakeholders. The tangible presence of the state in the Catalan High Pyrenees has transformed the hierarchical, two-party relationship between farmers and shepherds that lasted until the end of the 1960s and the beginning of the 1970s, when the village flocks were still present, into a more complex, triangular set of interactions also involving state bodies and environmental NGOs such as the Brown Bear Foundation.⁴ Likewise, the implementation of the regrouping policy has entailed the transition from resource governance of farming to a state-driven conservation governmentality with an environmentality of flocks and pastures, in which conservation policies act as the institutional mechanism shaping the conduct of local farmers (Fletcher, 2010).

This triangle portrays two polarized edges—local farmers in opposition to state decision-makers of the bear program—and one ambiguous vertex—the shepherds.

Through this institutional network and the regrouped flocks, the bear program decision-makers have played a crucial role, reshaping the previous hierarchical dual relationship between farmers and shepherds. The resulting triangle of stakeholders put the shepherds in an ambiguous position. Tending the local farmers' sheep but being hired by the public administration through the bear program's funds, they have ended up situated in between two opposing poles: the farming and the conservationist sectors. The shepherds have been placed on the edge of two colliding categories, urban outsiders and rural insiders, respectively animalized by bears and sheep, and personalized by those supporting the bear program—state bodies and environmental NGOs—and those confronting the program—the local farmers. The rural-urban divide as well as the inside-outside boundary mask the clash between production and amenity-based capitalist economies. Shepherds are in the middle of this collision. They are crucial to understanding the resulting power relations within this new triangular network of stakeholders.

⁴ FOP in Spanish. <https://fundacionosopardo.org/en>

Looking at the Shepherds School of Catalonia (<https://escoladepastorsdecatalunya.cat/>) helps to understand who the shepherds are, and their role the new environmental rationality under the bear program. Most mountain shepherds studied there. This training began as part of a previous, larger enterprise, called *Rurbans*, which since 2003 aimed to revitalize the Catalan Pyrenean districts away from hegemonic regional development schemes based on real estate speculation and tourism. There had been a massive rural exodus from the 1950s to the 1980s, but stabilized and even reverted in some valleys based on the development of a tertiary economy (Guirado, 2011). *Rurbans* also intended to encourage recent graduates to return to the rural primary sector.

The School has responded to the clash of the two agrarian models. The project promotes a model of extensive husbandry in line with the values of agroecology, sustainability, and cooperativism. But the system implemented in the region is underpinned by hierarchical structures directed to conventional or industrial production. A binary results: the farmers from the country or the rural insiders, who own the scarce number of private lands, and the shepherds from outside or from the city, who tend the local farmers' flocks, but are sometimes seeking to run their own farm in the near future. Differing from the mid-twentieth century, current shepherds are partially framed as outsiders who earn their living from the bear rather than the sheep. "When I complain about the bear," a shepherd from one of the regrouped flocks asserted, "they [some local farmers] reply to me: But you live off this!" The same shepherd recognized that "without it [bear], we [shepherds] wouldn't be here!" These conversations illustrate to what extent current shepherds fall into the power relations that hinge upon the following scheme: farmers and sheep *vis-à-vis* state and bears.

"Bears to the Parliament, politicians to the reserve." This banner at an early demonstration against the bear program held in the Catalan Pyrenees in the 1990s sharply illustrated the extent to which the bears were considered as part of the urban locus of state political power. This slogan was repeated with a small twist—switching "zoo" for "reserve"—in a more recent protest against the bear program by some local farmers in the summer of 2019. Likewise, a former mayor and a local cattle farmer also showed to what extent bears are perceived as urban intruders. "I would have put the bears at the Catalunya Square [the most famous square that gives entrance to Barcelona's downtown]," stated the former mayor, while the cattle farmer recalled a scene at a meeting with some bear experts from the Catalan government and the Brown Bear Foundation that took place in Barcelona when the first bears had just been released: "How easy it is," he complained, "to make decisions at the neighbor's backyard!" A local sheep farmer went one step further when he deemed the bears as the *okupes* (squatters) of their private and collective lands:

In a town, if squatters break in a block of flats, in a factory, in your apartment... Damn! The police can come, someone can come... It will take more or less, but maybe you will get them out... But here, among deers, roe deers, wild boars, now the bear... they are destroying the private property! I pay a tax from my lands, you know?! Whether they are barren or cultivable. They are our squatters. They are the squatters of the rural world!

The rural insiders/urban outsiders abstract separation is epitomized through the tangible renewed presence of bears in the Pyrenees. Furthermore, it crystallizes through the shepherd's concrete work/job divide within the bear program, that is, the distinction between whom they work for and whom they get their incomes from. Whereas shepherds' passion and tasks revolve around tending the sheep, they are hired as self-employed people by the public administration through the bear program. More specifically, although they feel as though they belong in the farming sector and their work takes place in the high mountain pastures—the quintessential peripheral rural setting—their job and salary comes from the Catalan government's Department of Environment. This is the urban/state locus where local farmers' struggles are mostly directed. Thus, shepherds' ambiguity is illustrated by a puzzling balance between an economic dependency toward environmental conservation funds and their social attachment to the farming sector.

The biography of one of the shepherds serves to illustrate the banner of urban outsiders used by some local farmers. Born in the late 1980s in a well-off Barcelona neighborhood, he enrolled in the Shepherds School in his mid-twenties in 2012, although he did not work as a mountain shepherd in the Pyrenees until 2017. Not

being a descendant of a peasant family, wearing brand fashioned glasses, he describes himself as a *neorural pixapí*, a colloquial adjective in the Catalan parlance that stands for a pejorative description of urbanite tourists—normally coming from Barcelona and its surroundings—that is coined by the rural inhabitants, and which literally means "the one who pees in a pine tree." He is good at languages, with a remarkable and eccentric knowledge of Japanese, besides English and French, and his mother tongues Catalan and Spanish. Before getting involved in the farming sector through the Shepherds School, he studied a Bachelor of Science degree in Biology.

Such a biography and professional profile is far away from what a local farmer would expect a shepherd to be. Elder farmers recall perfectly how previous shepherds used to work. A set of idealized memories from their good old times tend to conceal another important feature. Throughout the twentieth century, shepherds did not earn much money, or they even used to work just for food and accommodation: "'Before' [a loose period difficult to situate] the shepherd", as a local sheep farmer described, "was paid in grain in the winter, and in pesetas [former currency in Spain] in the summer. The shepherd was hired all year round on All Saints' Day [November 1st], and sometimes he was from the village." Shepherds used to occupy, therefore, the lowest status in mountainous rural societies. As the same local sheep farmer expanded,

Here, the figure of the shepherd has been...mostly of... a beggar... because he was a person like: This is the shepherd! [contemptuously]. The pastoral profession was at the bottom of the social hierarchy and was a job that was frowned upon and socially degraded.

In the view of some farmers, their memories of poor, but skillful former shepherds contrast with those of today. They express an overarching critique of current shepherds: their overrated economic conditions (a net salary of around 2,000 euros a month or US\$2,147), coupled with their inexpert knowledge. Another local sheep farmer defined the new shepherds coming out of the Shepherds School as "mountain flock's companions" rather than "actual shepherds." This definition has an explicit negative connotation, since the harshest and most important task a shepherd is endowed with and valued by, according to this farmer, does not consist of driving the flock over the mountain pastures to produce or maintain a certain green landscape as part of a protection measure to prevent bears from preying on livestock, but rather helping the sheep to give birth to their lambs to increase the productivity of the business. "The shepherd," the same sheep farmer succinctly pointed out, "earns his living on the farm [when sheep give birth]."

In contrast with these critiques from some local farmers, the current shepherds usually frame the former as "the weak of the story," whereas state bodies and environmental NGOs responsible for implementing the reintroduction program tend to be implicitly categorized as the "strong ones." In this vein, bears and wildlife align with state decision-makers as the urban locus where power resides in since sheep and local farmers represent the powerless rural. The tension between farmers and shepherds, seen as a rural-urban division, conceals underlying structures of power. The state-led regrouping policy clashes with a capitalist view of natural resources: the production-based economy, advocated by the local farmers or rural insiders, and amenity-based capitalism, boosted by the bear program's decision-makers or urban outsiders (Walker, 2003). Although the current number of bears in the Pyrenees has still not led to much of a tourist industry, the bear is often presented as an opportunity for and even the saviour of the primary sector, considered to be in dire straits regardless of the bears' presence in the Pyrenees. Given this apocalyptic or at least uncertain and devalued present, hopeful and revalued futures of opportunity and salvation are tied to an amenity-based economy within which the bear is thought to play a pivotal role. In this vein, a member of an environmental NGO argued that the bear should be considered a potential asset that could benefit the local population, as in other parts of the world:

Unfortunately, the primary sector here is broken, with or without bears. And yes, maybe you can say, 'Bears, that's the final straw!' But it could be seen in another way. It could be interpreted as an opportunity, which is the interpretation that's missing ... the one that is hard to do... even twenty years later [the bear program was launched]. But the bear is a world-class tourist asset! Wherever you go bears are a top tourist resource ... everywhere but here!

The president of the Brown Bear Foundation also argued that the bear should be seen as an asset in rural settings, given the widespread depopulation experienced in most rural areas since the mid-twentieth century:

The bear will not revive the economy of a region, for sure. Not at all! But it all adds up. And given the [impoverished] situation in the rural areas, I think everything that makes a contribution is interesting. ... [The bear] is an asset that brings much [economic] activity and attraction. This is undeniable.

The Catalan government's Director of Environment also emphasized that the increase in large fauna in the Catalan Pyrenees should be considered as an economic opportunity: "There are countries that take great advantage of their big fauna like bears to do business. And we, knowing that the bear is here, can also consider using it to make a profit." As stated above, the clash between a vanishing farming production-based economy and an expected amenity-based economy gives an important role to mountain shepherds (Figure 4).

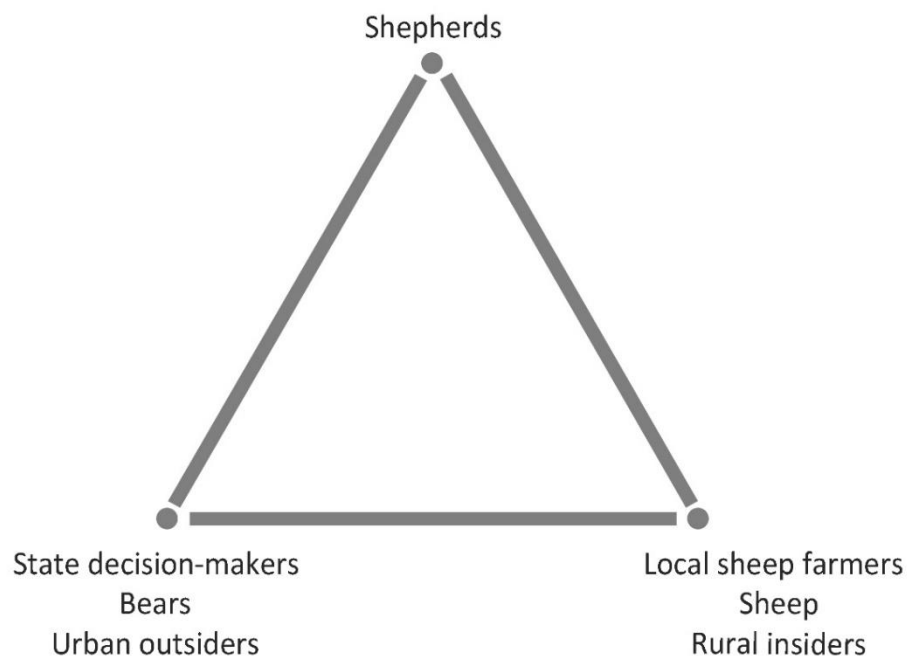


Figure 4: The ambiguous position of the new shepherds between urban outsiders and rural insiders.

The shepherds and their ambiguous position explain to what extent natural resources located in the High Pyrenees are used, accounted for, and mobilized in conflicts between local farmers and the public administration. These differences narrow down to the clash between the decline and rise of, respectively, a production and an amenity-based economy within capitalism.

A public officer from a municipal town council, who is also a sheep farmer's wife, synthesized clearly the degree of polarization once her husband decided to adhere to the bear program's protection measures in 2019, after having suffered around one hundred sheep losses the year before: "At the end of the day we must

do what they want us to do... They want to change the entire village!". Interestingly, 'we' and 'they' may refer to the farmers and the state, and also the rural residents and urban tourists framed within the primary and tertiary sectors of the economy. Two divides that, rather than being tackled and overcome, have been exacerbated through the bear program and have placed a burden on the shoulders of the shepherds.

Given the exacerbation of these divides, in the next section I examine the ambiguous position of mountain shepherds through the overlap of different environmentalities, to better understand the sense of imposition felt by the local farmers in the wake of the translocation of bears and the implementation of the regrouping policy. This is the first step to explore what the shepherd's ambiguous position and farmers' sense of imposition tell us about the need to take into consideration the shifting manifestations of the commons via the bundle of rights schema in wildlife conservation programs.

4. Overlapping environmentalities through the shifting manifestations of the commons

The renewed presence of bears is taken for granted, and local farmers must adapt to this new scenario. According to the director of the High Pyrenees Natural Park (the largest natural protected area in Catalonia at around 80,000 hectares) covering most of the northern regions of Pallars Sobirà district, and the Catalan government's Director of Environment, the bear program consists of the restoration of an enduring landscape in which the local farmers are asked "to do a bit of what [their] grandparents used to do... ever since the Neolithic times," that is "to watch over and fence off [the flocks]." The proponents of the bear program claim that this adaptation, which takes shape through the implementation of the protection measures and the ensuing changes to shepherding practices, will make the presence of bears compatible with extensive husbandry in the Pyrenees, just as it has been since time immemorial. By doing so, the bear program appears to be just a mere return to an age-old territoriality in which the management of private livestock was done in common through the presence of shepherds who would tend the village flocks.

In contrast, most local farmers perceive the changes in the management of their flocks to be an imposition derived from a fully-fledged top-down decision: the translocation of bears. A new environmental governmentality (Agrawal, 2005), in which conservation policies act as a "generic mode of conducting [the local farmers'] conduct" (Fletcher, 2010, p. 178), has therefore clashed with the farming governance of flocks and pastures as well as the different local territorialities prior to the regrouping policy. Among other aspects, these local territorialities have shifted from strict temporal and spatial regulations in operation until the 1960-1970s into the loose pastoral management of livestock on the mountain pastures today. A local farmer described the old system as "grazing with no boundaries", extending from the last quarter of the twentieth century until the implementation of the regrouping policy in the 2010s. When the village flocks were present in almost every village, the so-called 'first grasses' were reserved for the villagers' livestock to graze in the spring, whereas the 'second grasses' were rented for transhumant herds by the local councils of each village or group of villages in the summer. Each village, beyond the current administrative grouping into larger municipalities, used to hold rights to certain mountains or even specific parcels within those mountains.

With the dismantling of the village flocks and the drastic reduction in the numbers of local farmers, which was not always followed by reduced numbers of livestock per village, the temporal and spatial regulations began to blur or simply disappear. In this context, the remaining local farmers have been waging a tug of war with the state and the bear program proponents in a fight to see who adapts to whom. Borrowing the words from a local sheep farmer in his thirties, power relations were very well set from the beginning: "With the regrouped flocks, the Catalan government has not adapted to us, but the other way around. Before each regrouping, they should have studied each mountain area." Local farmers have thus felt forced to adapt, or have resigned themselves to the new configuration. Furthermore, they underline that the previous local arrangements, usually stemming from communal collective actions, were not taken into consideration, nor local farmers' current economic dependency on public funds and subsidies to make their farms a profitable business. A quote from the same local sheep farmer illustrates this standpoint:

'Before,' [referring to the mid-twentieth century] there was so much livestock that they [local farmers] could pay the shepherd, but now, ... we couldn't afford to do that. If the administration stops paying for the shepherd, it's over. I would have to give 80% of my production to [pay] the shepherd in the summer. Or we would have to take drastic action [a veiled mention referred to having to kill a large number of bears].

As a result, the ultimate goal of the regrouped flocks, which is to ensure compatibility between bears and livestock, loses its point. Beyond what the regrouping policy meant for the farmers' livelihoods and for the livestock, the ways in which it has been implemented precludes any chance of farmers adopting a positive attitude toward these measures. In other words, the imposition experienced by the local farmers surpasses the claims of compatibility proposed by the bear program decision-makers.

The distinction that Schlager and Ostrom make between "rights at an operational-level and rights at a collective-choice level" becomes crucial to understand the prevalence of imposition over compatibility in the case of the regrouping policy, and to connect it with the disregard for the persistence of the commons by the bear reintroduction program. These authors stress "the difference between exercising a right and participating in the decision of future rights to be exercised" (1992, p. 251). Both levels of rights may align with collective actions, but they are, according to the bundle of rights schema revisited by Sikor *et al.* (2017), hierarchized in two major orders: use rights, and control and authoritative rights. These orders are attuned to the distinction within property theory scholarship between three crucial layers: the use and the management of natural resources, and ownership or land tenure regimes (Vaccaro & Beltran, 2019). In fact, the land tenure regimes in the high mountain pastures in these areas of the Pyrenees did not undergo any modification after the reintroduction of bears or the implementation of the regrouping policy as they have remained as public lands according to the law (see Table 1). Following the degree of use, control, and authoritative rights, local farmers and the rest of the local villagers still hold use rights to the collective pastures—former common lands—beyond land ownership deeds. According to Sikor *et al.* (2017), authoritative rights are divided into "the right to define the discretionary space for the exercise of control rights" and "the right to assign control rights to particular actors" (p. 340). In this case, those authoritative rights are mostly granted to the Catalan government, usually through municipalities and EMDs (Catalan acronym for Decentralized Municipal Entities) as "the lower echelon of the state's administration structure" (Beltran & Vaccaro, 2014a, p. 27).

Between use and authoritative rights, what seems to be truly at stake with regard to the regrouping policy are the second-order or control rights "to determine the scope of (...) use rights" (Sikor *et al.*, 2017, p. 339), which are divided into the following actions: management, exclusion, transaction, and monitoring. Following the same authors, "management refers to the right to regulate use and transform the resource; exclusion to define who has use rights; transaction to handle the activities required for the realization of benefits; and monitoring to track the use of benefits and state of the resource" (2017, p. 340). Although the renewed presence of bears has not *per se* modified farmers' authoritative rights to collective pastures, what the bear program has shown is that the farmers' control rights have plummeted to very low levels. The keyword here is thus 'choice' or the 'right to choose' which actions will be collectively undertaken. In other words, although the public administration provides local farmers with mountain shepherds at zero cost and local farmers still hold the right to use village pastures, they are not no longer capable of choosing how to use them, how to tend their livestock as they graze on them, or how to manage wildlife populations, although they continue to regard the villages' mountains and the resources therein as *their* commons.

The absence of those higher rights stems from a long history of dispossession of local communities by the state since the mid-nineteenth century (Beltran & Vaccaro, 2014a; Pons-Raga *et al.*, 2021), but the renewed presence of bears and shepherds has made this absence more tangible, and hence contestable. Right from the beginning, "there was a general sense of grievance that went beyond the subject of the bear and engaged with the uses and ownership of the territory" (Jiménez Setó, 2003, p. 64. My translation). The ambiguous labels given to mountain shepherds today sheds light on the importance of considering the actual manifestation of the 'shifting commons', when we analyze the changing structures and relations of power among the new network of stakeholders brought about by the implementation of the wildlife reintroduction program.

Although the Catalan government's Director of Environment claimed that "there is no problem" because "in Pallars [Sobirà], ... the advantages [of joining the regrouped flocks] mean that practically all the sheep ... have been grouped together," the fact that most local farmers in this district adopted and adapted to the public administration's protection measures does not necessarily solve the problem or address the conflict. Approached this way, the 'advantages' must be read as an attempt to hide power behind the scenes. Inspired by Fletcher's Foucauldian frame of analysis (2010, 2017), I approach the regrouping policy through the analytical framework of environmentality in relation to the shifting meaning of the commons. The aim is to disentangle where the frame of compatibility leads us.

The bear program has unfolded, I contend, through the interplay of sovereign, disciplinary, and neoliberal environmentalities imposed in different ways on the local farmers. A top-down wildlife reintroduction program merged with a long-running disciplinary process via economic incentives. First, the release of bears from Slovenia aligns with a sovereign or public environmental governmentality, "in which compliance is sought via top-down injunctions backed by a punishment threat" (Fletcher, 2017, p. 312), epitomized by the brown bear's legal status as an endangered and protected species under EU and Spanish legislation. Second, the ensuing transformations of shepherding practices have involved the overlap of disciplinary and neoliberal environmentalities. The disciplinary form, "in which subjects are enjoined to internalize particular norms and values by means of which they become compelled to self-regulate" (Fletcher, 2017, p. 312), is enacted through the articulation of the hegemonic idioms of heritage and moral ecology (Ferrer & Pons-Raga, 2022; Pons-Raga, 2022). In the meantime, the public administration has provided economic incentives in the form of funded protection measures (shepherds) and offset policies to prevent or compensate for bear attacks on livestock, thus aligning with a neoliberal environmentality "seeking to govern via external incentives rather than internalized norms and values" (Fletcher, 2017, p. 312).

Local farmers have responded to sovereign, disciplinary, and neoliberal forms of environmentality with resistance and resignation. The bear program thus appears as a territorializing agent that, despite claiming to ensure the compatibility of the renewed presence of bears with extensive animal husbandry, also and above all, insidiously imposes a dispossession of local farmers to self-govern their means of production: flocks and pastures. Thus, the feeling of dispossession among local farmers' is not an abstract or empty one. Rather, it is filled by a tangible outside force in the form of wildlife, in general terms, and bears, more specifically, regarded as the "squatters of the rural world." In the view of some local farmers, new mountain shepherds have partially personified this force from outside.

Once bears had been translocated into the Pyrenees following a classic top-down conservation policy, the ultimate goal of consolidating the bear population pushed the program decision-makers to more nuanced disciplinary grazing management mechanisms. The taken-for-granted renewed presence of bears, valued as an incontestable asset for the landscape, has given way to an insidious, rather than overt, imposition of shepherding practices. In other words, an insidious, rather than an outright, dispossession of local farmers' control rights over their private flocks and their collective pastures. Instead of the classical Marxist accumulation by dispossession, farmers from the Pyrenees, similar to their counterparts in southern Catalonia in the wake of the wind energy bubble (Franquesa, 2018) or even the highlanders from Indonesia entering the cocoa market (Li, 2014), seem to have lost control of their natural resources—flocks and pastures—in less dramatic and more insidious ways. Such a loss translates into the separation of direct producers—farmers—from the means of production—sheep and pastures—to stretch Moore's reflections, who identified that "the notion that social relations (humans without nature) can be analyzed separately from ecological relations (nature without humans) is the ontological counterpoint to the real and concrete separation of the direct producers from the means of production" (Moore, 2015, p. 19).

Although farmers are under no obligation to follow these measures, a member of the bear program technical staff admitted that not doing so might be a risky decision: "It's a good idea to stick to them [protection measures] in the medium-long term." Following this thread, another technician of the bear program who acts as the liaison between the public administration and local farmers, believed that the bear program would have to be assessed in ten years, because by then recently-implemented protection measures would have become established with no debate about them. The regrouping policy thus operates as a state-driven long-run plan. In the meantime, whether or not local farmers adhere to it, they have been dispossessed of the right to self-govern

their own flocks and the villages' pastures. As a result, considering the vast literature on the history of conservation as dispossession derived from state policies (Benjaminsen & Bryceson, 2012; Büscher & Fletcher, 2015; Griffin *et al.*, 2019; West *et al.*, 2006), I contend that the interplay of sovereign, disciplinary, and neoliberal environmentalities has led to an insidious dispossession by conservation. At this point, it is also noteworthy to mention that the translocation of bears has produced a novel landscape hallmarked by the presence of a large carnivore, but this renewed presence may extend beyond this factual evidence. In the face of the arrival of solitary wolves in the Catalan Pyrenees from the Italian Alps, although they have not constituted stable packs yet, the bear reintroduction program may also be seen as a spearhead in the configuration of a wilder landscape in the Pyrenees to be contemplated and consumed by tourists coming from urban settings.

This analysis aligns with Sikor *et al.*'s approach to 'compensated exclusions', as they

...do not involve local people's outright dispossession from natural resources but exclude them from direct resource benefits and governance in other ways—yet simultaneously seek to compensate their losses through the provision of indirect benefits. (2017, p. 346)

The overlapping forms of environmentality allow us, therefore, to examine how compatibility clashes with a peculiar sort of insidious imposition on and dispossession of local farmers in the way they manage their flocks and pastures, as well as how this confrontation results in the clash of different herding models. Thus, we can better approach the sense of imposition felt by the local farmers by looking at the extent to which the bear program proponents have disregarded, dismissed, or not taken into consideration the nuances between these different herding models and the power relations underpinning each of them. In other words, scrutinizing the power residing in the shifting persistence of the commons, and the persistence of a local communal collective territoriality in current times, even within a high-modern territoriality and the overlapping of multiple of forms of environmentality.

Lastly, inspired by Agrawal's proposal for a "diachronic examination of common-property arrangements" (2003, p. 259), the inversion of the farmers' status in relation to shepherds—from strength to weakness—is revealing. It may be compared across the historical contexts in which the three herding managerial formats—communal collective, private individual, and collective public (see Table 1)—have taken place throughout the 20th and 21st centuries in the Catalan High Pyrenees. In effect, the communal management of sheep in village flocks—from the 1900s to the 1970s—was underpinned by a hierarchical two-party relationship between farmers and shepherds, in which the former were fully empowered in decision-making processes. In contrast, the set of relationships among farmers, shepherds, and state decision-makers under the bear program and within the current regrouped flocks—from 2010 onwards—shows a triangular and more complex interplay, in which the presence of the state and environmental NGOs has turned reversed the local farmers' hierarchical position. In between these two distinct collective shepherding models, the remaining handful of local farmers after the dismantlement of the village flocks over the mid-twentieth century developed an individualized model from the 1970s until 2010. During this period, farmers' livestock used to graze untended with no presence of shepherds over the summer grazing season.

Whereas the first two shepherding models—communal (1900-1970s) and private (1970s-2010)—were underpinned by local governance of natural resources (flocks and pastures), mostly ruled by the local farmers, the last model (2010-to date), which pursues the compatibility between wildlife and livestock, has revolved around different forms of environmentality, as explained above. The bundle of rights schema and the positionality of shepherds in the commons helps to understand the conflicts between two opposing poles in the new triangle of stakeholders: local farmers and the bear program decision-makers.

5. Conclusions: Shepherds and the imperative recognition of the commons in wildlife conservation programs

The translocations of bears from Slovenia into the Pyrenees and the ulterior protection measures funded, promoted, and organized by the Catalan government and environmental NGOs with the support of EU funds have shifted the relationship between the local farmers and the shepherds into a more complex interplay. The

shepherds work for the local farmers and with their flocks, but earn their salary from the public administration, and more precisely from the bear program's funds. According to the bear program proponents, the renewed presence of shepherds restores the quintessential element of the rural mountain milieu in the Pyrenees. Agrarian societies in the Pyrenees used to use and manage their collective natural resources in common, i.e., the village flocks grazed on the collective mountain pastures. I have shown, however, that the commons today, beyond land deeds and property regimes, is part of modern territorialities driven by state-driven wildlife conservation programs and is not returning to, or restoring, vestiges from the past.

Local communal collective action (i.e., the village flocks) in which shepherds used to play a crucial role exists alongside state-driven modern territoriality around the bear reintroduction program. The commons and the power structures and relations surrounding their shifting manifestations must be considered in current human-wildlife conflicts, especially in the reintroduction of wildlife that entails, as in the case of the bear in the Pyrenees, great transformations in herding practices. The change of shepherds' position in the new triangle of stakeholders within the conservation-pastoralism network illustrates shifts in the existence of the commons.

This article shows how power resides in these shifting manifestations of the commons, between the production-based economy and different forms of environmentality under an amenity-based economy. Shepherds have an ambiguous position. Foregrounding the 'shifting commons' is an epistemological attempt to approach the social conflicts around the bear reintroduction program in the Pyrenees in more generative ways. This analytical toolkit should be taken into consideration in the study of human-wildlife conflicts in other parts of the world, but especially in those areas where the conflicting overlap of communal and state-driven territorialities has derived from the reintroduction of wildlife.

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