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3 **Shared Sovereignty over Migratory Natural Resources**

4 **Alejandra Mancilla<sup>1</sup>**

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9 within it, the doctrine of Permanent Sovereignty over Natural Resources. In this  
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22 arrangements are needed to deal in a better way with these and similar natural  
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26 butterfly

29 What is known as the doctrine of Permanent Sovereignty over Natural Resources  
30 was enshrined in international law in the 1962 UN General Assembly Resolution  
31 (UNGAR) 1803 (XVII) of the same name. This declared in its first paragraph that

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32 'the right of peoples and nations to permanent sovereignty over their natural wealth  
33 and resources must be exercised in the interest of their national development and of  
34 the well-being of the people of the state concerned' (UNGAR 1962).<sup>1</sup>

35 The motives for endorsing such a doctrine at the time made sense. Developing  
36 countries, many of them having just acquired independence after long periods of  
37 colonial rule, were adamant that full control over their natural riches was a  
38 prerequisite for economic development. This implied, if necessary, the national-  
39 ization of natural resources when these remained in the hands of foreign companies,  
40 so long as the state exercised this right for the benefit of its citizens (see Perrez  
41 1996).

42 Today, however, the idea of total control, use and management of all natural  
43 resources within a country's territory is increasingly at odds with new and pressing  
44 ecological and environmental challenges at the global level. The problem of climate  
45 change has brought this issue to the fore: when it comes to naturally shared  
46 resources like the atmosphere, it is clear that countries *may not* freely dispose of  
47 them for their own ends, but ought to take into account the effects of their use on  
48 others in a coordinated fashion.

49 In response to this, a growing number of political philosophers have started  
50 questioning the status quo and pointing to alternatives in this regard (see for  
51 example, Armstrong 2014; Moore 2012; Ypi 2012). At the same time, there is  
52 increasing awareness that values such as ecological resilience and sustainability  
53 ought to be demanded from collectives making territorial claims. Avery Kolers has  
54 built a theory of territorial rights over these two principles. *Resilience*, on the one  
55 hand, refers to a property of systems that allows them to absorb external shocks in  
56 such a way that they are able to recover without losing their ability to perform their  
57 basic functions. *Sustainability*, on the other hand, is more generally defined as 'the  
58 scope, quality, richness and benignity of human culture, the biosphere and the  
59 economic life we make from them, and the distribution of those benefits, both now  
60 and over time' (Kolers 2009, p. 76).

61 This article adds to these questionings starting from the assumption, following  
62 Kolers, that resilience and sustainability ought indeed to be requisites for collectives  
63 claiming sovereignty over a territory.<sup>2</sup> I focus on a kind of resource the sustainable  
64 management of which presents a challenge for such a regime: to wit, migratory  
65 species. Rather than *full internalization* or *externalization* (i.e., rather than full  
66 domestic control or full global sharing of natural resources), I suggest that what  
67 such species require for their continued existence is *shared sovereignty*, understood  
68 as shared control, use and administration in a way analogous to joint tenancy in

1FL01 <sup>1</sup> This idea is reiterated in later UN documents, such as the Charter of Economic Rights and Duties of  
1FL02 states and the International Covenant on Economic, Social and Cultural Rights. See, respectively,  
1FL03 (UNGAR 1974, 1976).

2FL01 <sup>2</sup> There are a series of good reasons to demand resilience and sustainability from collectives claiming  
2FL02 sovereignty over natural resources, and expounding them here would lead this article in a different  
2FL03 direction. Just to mention two: for purely instrumental reasons, keeping the ecological balance and caring  
2FL04 for the environment are good things for the people who live in the territory. Second, as a matter of justice,  
2FL05 having these two principles limit the conduct of territorial entities helps to ensure that they will leave  
2FL06 *enough and as good* for present and future others to use, a matter of utmost importance given the ever  
2FL07 scarcer natural resources available in the world today, and the ever increasing demand for them.

69 private property law. This ought to be carried out by an independent entity making  
 70 decisions that represent the interests of the range states, but maybe also those of  
 71 third parties. My argument is essentially in line with Cara Nine's proposal on joint  
 72 self-determination over shared rivers (Nine 2014), but it also seeks to expand on it,  
 73 showing how the shape that a shared sovereignty regime will take will depend on  
 74 the kind of resource at stake.

75 The article proceeds as follows. First, I present the current state of the debate  
 76 when it comes to migratory species in international law and political philosophy,  
 77 spell out some definitions and make some clarifications. Second, I focus on the  
 78 specific crisis of the monarch butterfly in North America as a case study and show a  
 79 possible, but inadequate and ultimately insufficient way out of the crisis. Third, I  
 80 present the options of full internalization and full externalization and their problems.  
 81 Finally, I turn to shared sovereignty, suggest what it would look like in the case of  
 82 monarchs, and compare it to joint tenancy in private property law. I conclude that  
 83 we need novel, more imaginative and flexible ways of thinking about natural  
 84 resources governance if our goal is to preserve them for present and future  
 85 generations.

## 86 Preliminaries

87 The status of migratory species (understood as those whose members move  
 88 cyclically and periodically between two different geographic areas) remains under-  
 89 theorized in international law and untheorized in political philosophy.<sup>3</sup>

90 In international law, *natural resources* are broadly understood as those 'natural  
 91 assets (raw materials) occurring in nature that can be used for economic production  
 92 or consumption' (Organization for Economic Cooperation and Development,  
 93 *Glossary of statistical terms*). And by default, like everything else that is natural and  
 94 non-human, migratory species are treated like *resources* subject to the national  
 95 sovereignty of the countries where they happen to be.

96 Given their mobile nature, however, some migratory species are special in that  
 97 they become subject to different sovereignty regimes depending on the time of year:  
 98 some of them may cross one or more national jurisdictional boundaries (like  
 99 monarch butterflies and caribou), while some may cross between states and the high  
 100 seas or airspace above them (like seals, sea turtles and squids, sea birds and some  
 101 dragonflies).<sup>4</sup> It is this international nature with the particular ecological and  
 102 political challenges it presents which led to the approval in 1983 of the only  
 103 worldwide treaty that deals with this kind of animals in an integrated manner so far:  
 104 the Convention on the Conservation of Migratory Species of Wild Animals

3FL01 <sup>3</sup> The literature on the legal treatment of migratory species at the global level yields only a few, mostly  
 3FL02 outdated results (De Klemm 1989; Navid 1989; Bowman 1999a, b; Sands 2003). In the contemporary  
 3FL03 literature on political philosophy, as far as I have searched, they remain entirely absent.

4FL01 <sup>4</sup> Those that move within state borders and those that never leave the commons throughout their lives  
 4FL02 (like maybe some cetaceans and tuna) are not going to occupy me here, insofar as they only fall under just  
 4FL03 one jurisdictional regime.



105 (hereinafter, the Bonn Convention).<sup>5</sup> This focuses on the conservation of species  
 106 that are either endangered or threatened, with habitats and migration routes that  
 107 encompass more than one country, so that any attempt for conservation requires the  
 108 cooperation and coordination of all the *range states*. These are defined as any state  
 109 ‘that exercises jurisdiction over any part of the range of that migratory species, or a  
 110 state, flag vessels of which are engaged outside national jurisdictional limits in  
 111 taking that migratory species’ (Bonn Convention, p. 1). The *range* of the migratory  
 112 species, in turn, comprises ‘all areas of land or water that a migratory species  
 113 inhabit, stays in temporarily, crosses or overflies at any time on its normal migration  
 114 route’ (Bonn Convention, p. 1).

115 By way of clarification, in what follows I neither argue for the intrinsic value of  
 116 migratory species, nor question their status as natural resources. I thus argue along  
 117 lines that should be fully acceptable from a purely anthropocentric point of view—  
 118 which is in any case the one customarily invoked in international treaties regarding  
 119 wildlife.<sup>6</sup> Although this anthropocentric approach that assigns merely instrumental  
 120 value to all other living beings is controversial, I purport to offer an argument  
 121 ecumenical enough to persuade both those who endorse it and those who reject it.  
 122 My aim is to show that one does not have to be a wildlife-lover to accept that a  
 123 change in the international regime is desirable when it comes to migratory species.  
 124 On the contrary, even for those who care for natural resources only insofar as they  
 125 serve that purpose (i.e., as *resources*), it makes sense to take a more holistic  
 126 approach to sovereignty, where countries stop acting by themselves and start acting  
 127 as a unit.

128 An initial objection to this project might be that no one really disputes my point.  
 129 As I have just mentioned, the international community already concedes that  
 130 interstate agreements ought to be put in place in order to conserve certain migratory  
 131 species. The Bonn Convention, ratified by 113 countries, affirms that parties  
 132 ‘*acknowledge* the importance of migratory species being conserved and of range  
 133 states agreeing to take action to this end whenever possible and appropriate,’ and  
 134 further claims that the parties ‘*acknowledge* the need to take action to avoid any  
 135 migratory species becoming endangered, so that the parties (a) *should* promote, co-  
 136 operate in and support research relating to migratory species; (b) *shall endeavor* to  
 137 provide immediate protection for [endangered migratory species]; and (c) *shall*  
 138 *endeavor* to conclude agreements covering the conservation and management of  
 139 migratory species [with an unfavorable conservation status]’ (Bonn Convention,  
 140 p. 2, my emphases). To this, one could add the growing number of bilateral and  
 141 regional treaties that confirm this general willingness, including the above  
 142 mentioned Bern Convention on the Conservation of European Wildlife and Natural  
 143 Habitats (1979), the EUROBATS Agreement on the Conservation of Populations of  
 144 European Bats (1991), the Convention for the Conservation of Southern Bluefin  
 145 Tuna (1993), and so on and so forth.

5FL01 <sup>5</sup> Other treaties relating to migratory species focus either on a particular kind (like the International  
 5FL02 Convention for the Regulation of Whaling, from 1946), or a particular region (like the Bern Convention  
 5FL03 on the Conservation of European Wildlife and Natural Habitats, from 1979).

6FL01 <sup>6</sup> See for example: ‘Wild animals in their innumerable forms are an irreplaceable part of the earth’s  
 6FL02 natural system which must be conserved *for the good of mankind*’ (Bonn Convention, p. 1, my emphasis).

146 My answer to this is threefold. First, signing international treaties of this kind  
 147 might be a first, needed step in the direction I am suggesting. This is, however, a far  
 148 cry from claiming that the best way to deal with migratory species on a long-term  
 149 basis is to establish interstate bodies authoritative enough to constrain the actions of  
 150 range states regarding a given resource, and to enforce certain measures to attain  
 151 their sustainable use. The language of international documents regarding nature and  
 152 the environment is famously vague and soft, so as not to scare away potential  
 153 signatories at the cost of turning their prescriptions into non-binding, well wishing  
 154 recommendations. That an agent *acknowledges* the need to do  $x$  is not a sufficient  
 155 condition to do  $x$  (one may acknowledge the need to go on a diet, to then go on to  
 156 enjoy one more candy bar). Moreover, agreeing that the parties *should* do  $x$  is a  
 157 conditional claim dependent for its concretion on a number of factors that remain to  
 158 be spelled out; and conceding that the parties *shall endeavor* to do  $x$  again is no  
 159 guarantee that they will actually do it. Summing up, that states have shown their  
 160 interest in this topic through the ratification of this and that international treaty falls  
 161 short of claiming that they have already accepted sharing sovereignty over resources  
 162 of this kind.

163 Second, international treaties regarding nature and the environment (as well as all  
 164 other international treaties) are voluntary, which means that states may not even  
 165 take the trouble to sign them. This autonomy that states enjoy creates a serious  
 166 problem when it comes to the conservation of migratory species; namely, a  
 167 potentially perverse feedback loop. Today, by default, each range state may do as it  
 168 pleases with the species that inhabit their territory at any given time. In the absence  
 169 of binding agreements, ‘there is nothing that prevents a state from over-exploiting or  
 170 destroying in any way a migratory species on its territory, even though other range  
 171 states of the same species may at the same time be making considerable efforts and  
 172 incurring large expenses to preserve it’ (De Klemm 1989, p. 949). In other words,  
 173 under the current system, states have no incentive to strive for the conservation of a  
 174 given migratory species if those next-door (or at the other end of the migration  
 175 route) are doing very little or nothing to contribute to that same end. Even worse,  
 176 states may have a negative incentive not just to neglect, but to exploit the species in  
 177 question if the others also do, so that each iteration of the cycle reinforces the  
 178 previous one, leading to ever more detrimental effects. This is what I call *injustice*  
 179 *in migration*: namely, the phenomenon whereby range states of a migratory species,  
 180 in absence of binding agreements, have the power to over-use or neglect these to the  
 181 point of extinction while in their territory. This not only leaves an unequal share for  
 182 the other range states, but worse, it gives the latter a perverse incentive to neglect or  
 183 over-use the resource in turn. This phenomenon, I argue, is due to a structural  
 184 inadequacy in the current sovereignty regime over natural resources, suggesting the  
 185 need to revise and redesign it.<sup>7</sup>

186 Third, the more general point of this article is to show that not only migratory  
 187 species, but also other natural resources may require shared sovereignty for their

7FL01 <sup>7</sup> A less damaging although still unfair version of injustice in migration would be that of free-riding in  
 7FL02 migration; namely, when one of the range states takes pains to conserve a given migratory species while  
 7FL03 the other(s) enjoy the benefits without contributing to that end. I thank Avery Kolers for suggesting this.



188 proper management. This is the case of roaming species (like wolves in  
 189 Scandinavian countries and elephants in Africa), certain fisheries, ecosystems that  
 190 cut across national boundaries (like the Amazon basin and Sahara desert), and  
 191 hydrological systems (like Andean glaciers). Although this has been repeatedly  
 192 observed by ecologists and scientists, it has only begun to be acknowledged in the  
 193 political and philosophical discussion.

## 194 **The Crisis of the Monarch**

195 ‘On the first of November, when Mexicans celebrate a holiday called the Day  
 196 of the Dead, some also celebrate the millions of monarch butterflies that,  
 197 without fail, fly to the mountainous fir forests of central Mexico on that day.  
 198 They are believed to be souls of the dead, returned.

199 This year, for the first time in memory, the monarch butterflies didn’t come, at  
 200 least not on the Day of the Dead. They began to straggle in a week later than  
 201 usual, in record-low numbers. Last year’s low of 60 million now seems great  
 202 compared with the fewer than three million that have shown up so far this  
 203 year. Some experts fear that the spectacular migration could be near collapse’  
 204 (Robbins 2013).

205 These are the opening paragraphs of the article entitled ‘The Year the Monarch  
 206 Didn’t Appear’, published at the end of 2013 in the *New York Times*. It was neither  
 207 the first nor the last call of public attention to the sharp decline in the number of  
 208 monarch butterflies in North America. The iconic species that figures as the symbol  
 209 of the North American Free Trade Agreement (NAFTA) between Canada, the U.S.  
 210 and Mexico, has linked the three countries for centuries. Every autumn, hundreds of  
 211 millions of butterflies used to cover the Canadian and U.S. skies on their 3000-km  
 212 annual trip to the warmer forests of pine trees and firs in central Mexico. There, they  
 213 spent winter hibernating. In the spring, they returned to the north, where they lay  
 214 their eggs on the native milkweed and died, and so on across generations. While two  
 215 decades ago the insect colonies covered almost 18 hectares of Mexican forest, in  
 216 2013–2014 they were not enough to cover even one (Johnson 2014).

217 That the problem has a political dimension was tacitly recognized by the leaders  
 218 of the three countries meeting in Toluca in February 2014. During the press  
 219 conference following the meeting, Mexican President Peña Nieto affirmed that ‘in  
 220 the area of sustainability... we have agreed to work a task-force with a presentation  
 221 from our three countries to preserve the Monarch butterfly’ (The White House  
 222 2014).

223 There is widespread agreement among scientists that the main responsible for the  
 224 sharp decline in the number of monarchs is the skyrocketing use of glyphosate, a  
 225 herbicide approved by the U.S. Environmental Protection Agency (EPA) in 1993.  
 226 Glyphosate is designed to kill all weeds, including milkweed, which is the only  
 227 plant where the female butterflies lay their eggs (Brower et al. 2012; Pleasants and  
 228 Oberhauser 2013). It is heavily used in industrial farming, especially in genetically



229 modified corn and soy fields, and also to kill weeds along highway shoulders.  
 230 Together with the excessive use of this herbicide, the loss of native habitat to  
 231 cropland, especially in the midwest of the U.S. has also been linked to their  
 232 dwindling numbers.

233 Waxing poetic, advocates for the protection of the monarch claim that, if the  
 234 declining trend continues, '[h]umanity would lose an awe-inspiring annual event...  
 235 The sensation of hearing and seeing tens of thousands of cascading butterflies at  
 236 once is not like any other experience on Earth' (Johnson 2014). But the decline of  
 237 the monarch poses not only an *aesthetic* challenge. If one follows the list of different  
 238 values that the Bonn Convention recognizes for wild migratory species, it turns out  
 239 that these butterflies have most of them.<sup>8</sup> While not so important as pollinators or as  
 240 bird food, they signal the *ecological* health of their habitats, so that if we lose them,  
 241 'we are also losing thousands of less conspicuous insects, most of which are  
 242 important components of food webs' (Personal correspondence with Douglas  
 243 Tallamy, May 2014). Their loss also poses an *educational* and *scientific* problem:  
 244 environmental science has made important advances through the understanding of  
 245 its biology (Personal correspondence with Lincoln Brower, May 2014). For the  
 246 Mexicans, monarchs have *cultural*, *social*, *recreational* and *economic* value. The  
 247 Purepecha indigenous people call them the 'souls of the departed,' and honor them  
 248 because their arrival coincides with the time for festivals celebrating the dead.  
 249 Moreover, since 1975 butterfly tourism has flourished on their hibernation area, and  
 250 many farmers who used to make their living from logging the oyamel fir forest now  
 251 preserve it and work as tour-guides around the Monarch Butterfly Biosphere  
 252 Reserve in eastern Michoacán state. There, eco-tourism companies offer weekly  
 253 tours starting at 7000 USD, with over 100,000 visitors arriving each autumn in  
 254 recent years—a figure that dropped to 55,000 in the season 2013–2014, the main  
 255 cause being the dwindling numbers of butterflies (Johnson 2014).

256 So, what to do about the monarch's crisis? Or, more precisely, what may be done  
 257 about the monarch's crisis in the current context, where each of the range states has  
 258 full sovereignty over them at different times, and where—quite clearly—the U.S.  
 259 and Canada are failing to protect the species from its two main threats: namely,  
 260 glyphosate and habitat loss?<sup>9</sup>

261 If one looks at the Bonn Convention for answers, monarchs are the last species,  
 262 and the only insects, mentioned (Bonn Convention, Appendix II, p. 10). One may  
 263 say, along these lines, that the recommended course of action would be for the three  
 264 countries to come together (as their leaders promised they would) to take immediate

8FL01 <sup>8</sup> Apart from aesthetic, these are: environmental, ecological, genetic, scientific, recreational, cultural,  
 8FL02 educational, social and economic (Bonn Convention, p. 1).

9FL01 <sup>9</sup> I am assuming that illegal logging in Mexico—which was a few years ago signaled as the main cause in  
 9FL02 the declining numbers of monarchs—has been to a large extent eliminated thanks to the government  
 9FL03 taking action and establishing regular anti-logging patrols (see 'Hope for monarch butterfly after Mexican  
 9FL04 logging halted'). My analysis would change, however, if the increasing number of clandestine drug  
 9FL05 laboratories within Mexico's natural reserves and the violent take-over of the timber industry by drug  
 9FL06 cartels in Michoacán became yet another cause of the monarch's decline (see for example, 'Impacta el  
 9FL07 narcotráfico áreas naturales protegidas de México').



265 measures to prevent their further decline. It turns out, however, that in this case none  
 266 of the three range states has even signed it.

267 As things currently stand, Mexico, the main loser in this affair, could file a  
 268 complaint against the U.S. and Canada for environmental and economic harm. This  
 269 could be based on their threat to the continued existence of a World Natural  
 270 Heritage Site, and on this causing losses of billions of dollars to the Mexican  
 271 economy. In other words, Mexico could claim to be suffering from injustice in  
 272 migration: due to the neglect of the other range states, they are not getting their  
 273 *share* of butterflies. Moreover, if things continue as they are, the Mexican  
 274 communities who used to care for the butterflies and live from butterfly tourism will  
 275 probably have to return to logging the forests, as they used to, creating a perverse  
 276 feedback loop and the further decline in the total population of the species.

277 To ground its claim, Mexico could invoke Principle 2 of the United Nations  
 278 Conference on Environment and Development, affirming that ‘states have, in  
 279 accordance with the Charter of the United Nations and the principles of  
 280 international law... the responsibility to ensure that activities within their  
 281 jurisdiction or control do not cause damage to the environment of other states or  
 282 of areas beyond the limits of national jurisdiction’ (United Nations 1992). Another  
 283 source of international law that could serve as a precedent is the iconic Trail Smelter  
 284 Arbitration between Canada and the U.S. (1941) where, for the first time, an  
 285 international tribunal had to decide about the limits of state sovereignty for the  
 286 prevention of trans-boundary harm (Miller and Bratspies 2006, p. 3).

287 But even if Mexico were compensated for the economic loss resulting from the  
 288 decline of the monarchs, this would not be enough to solve the problem. To recall,  
 289 economic value is only one of the many that butterflies have, and under such an  
 290 arrangement the other values would still be lost not only for Mexico, but also for the  
 291 other range states affected and, for that matter, for the world at large.<sup>10</sup> That is, even  
 292 if the economic injustice against the Mexican communities who make a living  
 293 thanks to the monarch were rectified, this would still leave a *natural debt* behind,  
 294 constituted by the loss of ecosystem services of which the monarch is an indicator.<sup>11</sup>  
 295 To this should be added the other *debts* arising from the loss of the monarch’s  
 296 educational, recreational, social and aesthetic value. This signals the inadequacy of  
 297 the compartmentalized, closed design of the current sovereignty regime for dealing  
 298 with resources of this kind, making it necessary to think of alternative paths of  
 299 governance. To these I now turn.

10FL01 <sup>10</sup> Some could here object that it is actually the Canadian and U.S. farming industry that ought to get  
 10FL02 compensated by the Mexicans if measures are taken to preserve the butterflies that negatively affect their  
 10FL03 corporate interests. I deal with this objection below.

11FL01 <sup>11</sup> I here use the term *natural debt* descriptively, although it is normally given a normative connotation,  
 11FL02 insofar as what constitutes *over-use* is set by some theory of just entitlements (Blomfield 2014).

300 **Sovereignty Over Mobile Natural Resources**

301 In this section, I present three alternative regimes for the governance of natural  
 302 resources, and show how they fare when it comes to wild migratory species. I  
 303 suggest that shared sovereignty is the one that best fits the bill.

304 **Full Internalization**

305 One option is *full internalization*, i.e., to give states full control over the resource in  
 306 question (Mancilla 2015). In the case of wild migratory species, this could take three  
 307 forms.

308 One possibility is *full temporary sovereignty*, or what we have today: namely, to  
 309 let countries enjoy full sovereignty over any natural resource that is within their  
 310 borders *at any given time*—which means, in the case of migratory species, to enjoy  
 311 full sovereignty *in turns*.<sup>12</sup> I have already shown that this solution is inadequate  
 312 insofar as it leads to a perverse feedback loop. Above all, it shows how the current  
 313 system is at odds with environmental and ecological demands, drawing lines where  
 314 they ought not to be drawn and causing imbalances as a result.

315 A second possibility is for countries to invoke the principle of *ius solis* and claim  
 316 sovereignty over all natural resources *generated or born* in their territories,  
 317 wherever they happen to be.<sup>13</sup> This solution would be a radical departure from the  
 318 status quo, as it would imply that the countries of origin would have the prerogative  
 319 to control that species along their migratory cycle, thereby encroaching upon the  
 320 sovereign rights of whatever territory they happen to be in at any given time (merely  
 321 requiring non-interference from the other states would also count as a form of  
 322 encroachment; for example, by preventing the latter from carrying out certain  
 323 activities that would harm the species). This would constitute *full permanent*  
 324 *sovereignty* over migratory species in its most thorough sense. However, apart from  
 325 the problem of encroachment on sovereignty, it would bring an unwelcome  
 326 implication that few would be willing to accept; namely, that countries where pests  
 327 originate would have to compensate all those affected by their trail of destruction.

328 A third possibility is to give *partial permanent sovereignty* to each of the range  
 329 states, whereby each of them retains at all times *some* share over the resource in  
 330 question. But how to determine this share? Would it be the total population divided  
 331 by the total number of range states? The proportion between the total population and  
 332 the time they spend on each state along their migration route? The proportion  
 333 between the total population and the total added value that the species has for each  
 334 range state? Any division of resources of this kind would not only be almost

12FL01 <sup>12</sup> It is interesting to note that, although the doctrine is called full *permanent* sovereignty, when it comes  
 12FL02 to migratory species it can only be *temporary*.

13FL01 <sup>13</sup> Albeit unsuccessfully, this principle was invoked at the turn of the twentieth century, in what was  
 13FL02 known as the Pacific Fur Seal Arbitration. There, the U.S. claimed sovereignty over the Bering fur seals  
 13FL03 beyond their national jurisdiction, based on the fact that they had bred on U.S. territory. Without using  
 13FL04 these terms, the U.S. government at the time was complaining against injustice in migration—the ground  
 13FL05 of their complaint being the over-exploitation of the seals by British vessels that caught them as *res*  
 13FL06 *nullius* in the open sea (Sands 2003, p. 562).

335 impossible to implement (would individuals get *marked* as belonging to one state or  
 336 another, or would a certain number of them be assigned to each state?, etc.), but  
 337 would also be ecologically unsustainable, in the same way that the current regime is.

338 To sum up, by trying to administer in parts what may only be administered as a  
 339 whole, full internalization fails to give an adequate answer.

### 340 Full Externalization

341 At the other end of the spectrum is *full externalization*, namely, to share control over  
 342 all natural resources and natural events globally, including migratory species.  
 343 Global egalitarians have suggested various principles to guide this sharing, as well  
 344 as more or less extensive ways in which it may be carried out.<sup>14</sup> To an extent, this  
 345 regime has already been put in practice regarding one migratory species on earth, to  
 346 wit, big whales. Established in 1946, the International Whaling Commission (IWC)  
 347 is open to all countries as members, regardless of whether they are landlocked or  
 348 coastal, and regardless of whether these mammals ever cross their Exclusive  
 349 Economic Zones (EEZs). This makes sense insofar as whales are purportedly the  
 350 most cosmopolitan species on earth, spending a large part of their time in the global  
 351 commons. But a regime of full externalization does not seem as plausible for the  
 352 vast majority of species with more limited migratory patterns. This implausibility is  
 353 both in principle and in practice. In principle, because a given species will likely be  
 354 of more interest and value for the range states (and maybe also for some other  
 355 specified third parties) than for the world at large, this ought to correlate with greater  
 356 control and responsibility over them by those interested parties.<sup>15</sup> In practice (and  
 357 this critique applies not only to full externalization of migratory species, but of  
 358 natural resources generally), implementing such a regime would pose daunting  
 359 practical challenges—from the appraisal of *interest* and *value* to the decision of  
 360 which fair-share principle ought to be applied in each case. While full external-  
 361 ization, then, might be a good solution for cosmopolitan species like whales and  
 362 maybe also some tuna, it seems to be an overreaction when it comes to the  
 363 management of most migratory species.

### 364 Shared Sovereignty

365 A third option is *shared sovereignty*. As I said at the outset, this is the regime that  
 366 appears more adequate to deal with wild migratory species, but maybe also with  
 367 other natural resources that demand a holistic management in order to remain  
 368 sustainable—like shared watercourses, ecosystems and roaming animals. To  
 369 reiterate, this is different from the mere establishment of agreements between  
 370 states based on a consensual treaty-based model. The latter, on the one hand,  
 371 preserve the status quo while setting limits and imposing obligations over the range

14FL01 <sup>14</sup> The most thoroughgoing theory in this regard is Hillel Steiner's, who proposes that every individual on  
 14FL02 earth ought to be entitled to an equal share of the value of natural resources: her *unconditional initial*  
 14FL03 *capital grant* (Steiner 2009, p. 6).

15FL01 <sup>15</sup> It is precisely on this basis that the IWC has issued non-zero whaling quotas for aboriginal subsistence.

372 state that at any given point in time happens to hold full temporary sovereignty over  
 373 the species in question. Shared sovereignty, on the other hand, implies that full  
 374 permanent sovereignty is exercised not by any given range state at different points  
 375 in time, but by a single entity that implements common measures all along. To use  
 376 the terminology of social ontology theorists, one could say that the members of this  
 377 entity would act under a *we-mode*, with one shared intention to achieve common  
 378 objectives when it comes to the resource in question.<sup>16</sup>

### 379 **A Place to Look at: Shared Watercourses**

380 In a recent article, Cara Nine has used the example of international rivers to show  
 381 how what she calls *joint self-determination* over a delimited territory may be  
 382 brought about (Nine 2014). After a dispute between Argentina and Uruguay over the  
 383 pollution of the Uruguay River that divides both countries, the International Court  
 384 of Justice suggested the creation of the Comisión Administradora del Río Uruguay  
 385 or CARU (International Court of Justice 2010). Formed by ten delegates, five from  
 386 Argentina and five from Uruguay, this administrative commission has the power to  
 387 measure and decide each state's share of the river's resources, as well as legislative  
 388 powers to determine its management, planning and use. A key aspect is that  
 389 CARU's decisions are binding on both governments, so that it is not merely an  
 390 advice-giving entity, but one with limited but well-drawn enforcement powers over  
 391 both countries.

392 As Nine correctly point out, in conflicts between riparian states, the regime of  
 393 'separate domains with constraints' is not enough. In other words, it is not enough  
 394 that each state agrees not to act over the common resource (in this case, the river) in  
 395 ways that unduly harm the other state's fair share of that resource. This is because to  
 396 determine what *undue harm* and a *fair share* means for each needs to be  
 397 permanently negotiated and discussed between the parties in ways that call for joint  
 398 self-determination.<sup>17</sup>

399 Evidently, the type of resource in question will be relevant to the normatively  
 400 optimal design of a shared sovereignty regime. Applied to monarchs, it could start by  
 401 setting the task-force that the three North American leaders promised they would.<sup>18</sup>  
 402 This task-force ought to have the power to implement concrete measures to halt

16FL01 <sup>16</sup> The literature on collective agency and common intentionality is vast and this is not the place to  
 16FL02 review it. Here I follow Raimo Tuomela's definition of a group agent as one whose 'functional and  
 16FL03 intentional existence... derives from the joint attitudes, dispositions, and actions of its members, and from  
 16FL04 the irreducible reference to the group that these attitudes and actions involve and that is here assumed to  
 16FL05 make groups conceptually irreducible to the members' individual properties and relationships not based  
 16FL06 on the group' (Tuomela 2013, p. 3).

17FL01 <sup>17</sup> I am therefore skeptical of proposals such as that of Banai (in this issue), where each polity is left to  
 17FL02 decide the upper limits on the permissible exercise of territorial jurisdiction over natural resources. At  
 17FL03 least when it comes to migratory species, a unilateral self-imposition of provisos on consumption and  
 17FL04 exploitation of certain resources seems inefficient and ultimately insufficient to guarantee their  
 17FL05 sustainability, even if done with a due regard to the right to self-determination of other polities.

18FL01 <sup>18</sup> Maybe this task-force could take the legal form of a guardianship along the lines of Christopher Stone's  
 18FL02 proposal for guardianship of natural objects (Stone 2010).



403 destruction of milkweed in the U.S. and Canada. To name just three: create tax  
 404 incentives so that farmers include forage strips on their lands; reduce federal  
 405 subsidies to corn ethanol, to slow down the conversion of native habitat into  
 406 cropland; and work together with the transport ministry in the U.S. to convert  
 407 roadsides from mowed turf to prairie. It should also take measures to strengthen law  
 408 enforcement in Mexico to stop deforestation. All in all, this entity would follow  
 409 butterflies across their complete annual cycle, including migration, hibernation,  
 410 feeding, and rest. Eventually, it would be akin to extending the Unesco's Heritage  
 411 Site in Michoacán state to the whole biological corridor through which the butterflies  
 412 move, which makes sense ecologically (Roberts and Vidal 2014, Monarch Butterfly  
 413 Fund 2014, and personal correspondence with Brower and Tallamy).

414 I suggest looking at *joint tenancy* in private property regimes to get an idea of  
 415 how shared sovereignty could be structured in practice. As opposed to *tenancy in*  
 416 *common* (where the owners of an asset need not have equal shares over it, and can  
 417 freely dispose of their share whenever they want), under joint tenancy each owner  
 418 has an equal share over the asset (no one joint tenant can ever have a larger share),  
 419 and an equal undivided right to keep or dispose of the asset as a whole.<sup>19</sup> When it  
 420 comes to the management of migratory species, range states have so far behaved  
 421 like tenants in common, freely disposing of their share of the common asset and  
 422 sometimes more, creating injustice in migration. If their status in the future were  
 423 akin to that of joint tenants, on the contrary, they would need to make all decisions  
 424 on the administration and management of their shared resources together, with  
 425 shared intentions and objectives, and would thus have much less discretion  
 426 regarding the use and abuse of that resource while in their territories.

## 427 **Should Only Range States Have a Say?**

428 An important question to be raised is whether this framework of shared sovereignty  
 429 as a kind of joint tenancy ought only to be exercised by the range states in question,  
 430 or whether it should be open to other parties as well—like other states, scientists and  
 431 educators, businesses that may have a special interest in the conservation of the  
 432 species, and anyone in general who holds the species valuable for them (or not) in  
 433 one of the many senses of *value* mentioned before. This is the question of  
 434 'constituting the demos' (Goodin 2007).

435 As things currently stand, only range states may take joint measures for the  
 436 conservation of a shared species—the exception being cetaceans, in deference to the  
 437 precedent of the International Whaling Commission (De Klemm 1989, p. 941). There  
 438 is, however, something deeply counter-intuitive about this. To take the monarch  
 439 example, imagine that Canada, the U.S. and Mexico come together to deliberate about  
 440 the future of the species, and decide that taking measures to preserve it would be way  
 441 too costly for all three states: for Canada and the U.S. reducing the use of herbicide

19FL01 <sup>19</sup> One more feature of joint tenancy that may turn out to be relevant for the analogy (in cases of state  
 19FL02 secession or merging) is the right of survivorship, whereby the death of one joint tenant automatically  
 19FL03 transfers her part of the property in equal parts to the survivors (see '~~Joint tenancy~~', *West's Encyclopedia*  
 19FL04 *of American Law*).



442 and keeping native habitat would translate into huge losses for the Big Ag, with all its  
 443 economic and social implications. For Mexicans, it would probably be easier and  
 444 cheaper to keep logging the forest instead of preserving it for the sake of elite eco-  
 445 tourism. So why not just change the NAFTA's icon and forget about butterflies (I am  
 446 assuming here that this decision would be brought about democratically)?

447 Without doubt, such a decision would be rejected by many of us who are not part  
 448 of the range states, and who—at least at first glance—do not seem to be directly  
 449 affected by the loss of the monarch. Even more, educators, entomologists,  
 450 ecologists, photographers and nature-lovers worldwide who specifically care for this  
 451 species would have good reason to complain. The general rejection to such a  
 452 measure could be cashed out both in anthropocentric and non-anthropocentric terms.  
 453 Regarding the latter, one could point out that there is something good *in itself* about  
 454 letting either the species or the individuals or both to continue to exist. As I said at  
 455 the beginning, I will not appeal to this sort of argument, although I think there are  
 456 good grounds to commend it. Regarding the former, it seems that, at a certain level,  
 457 we assume that migratory animals (and, more generally, all non-human animals) are  
 458 part of the *common heritage of mankind*. And even though, for practical and  
 459 customary considerations we may choose to keep their management limited to their  
 460 range states, this is not to say that the latter should be entirely free to decide over  
 461 their fate. Among the anthropocentric reasons that one might invoke here are all the  
 462 other values they have for people worldwide; compliance with the Lockean proviso  
 463 to *leave enough and as good* for present and future generations of human beings,  
 464 and the Precautionary Principle: the species might perform an important ecological  
 465 function of which we are still unaware, or have some special gene that might turn  
 466 out to be of key importance for developing a new medical product, etc. These  
 467 reasons should suffice to limit the exclusive sovereignty of range states over a given  
 468 species, and suggest the need to include third parties within such arrangements.

469 While, ideally, all those whose interests are affected ought to have some  
 470 participation in the joint process of decision-making, under non-ideal conditions I  
 471 suggest that at least those with more direct interests at stake ought to be enfranchised.  
 472 In the case of monarchs, entomologists, ecologists, environmental scientists and  
 473 educators ought to be among those represented, as well as the Big Ag companies in  
 474 the U.S. and Canada, and Mexican loggers. To include the last two among those  
 475 deliberating ought not necessarily to condemn butterflies to extinction: if one recalls  
 476 my initial assumption about demanding resilience and sustainability, one could  
 477 accommodate their interests to the extent that these do not compromise those two  
 478 goals. Though it may be true that we will not easily arrive at an uncontroversial  
 479 account of what these concepts maximally require, at least there will be some  
 480 agreement on what constitute clearly unsustainable and non-resilient practices.

## 481 Concluding Remarks

482 The doctrine of Permanent Sovereignty over Natural Resources of individual states  
 483 performed an important political function at its time of inception—namely, to keep  
 484 at bay colonialist structures embedded in international law. Today, however, its



485 compartmentalized approach to the management and decision-making over natural  
 486 resources shows itself increasingly at odds with the aims of achieving resilience and  
 487 sustainability at the domestic and global levels. This is especially clear in the case of  
 488 wild migratory species, but similar worries may be raised when it comes to other  
 489 natural resources like roaming species, shared rivers and ecosystems.

490 The first part of this article has shown how the current sovereignty regime over  
 491 natural resources proves inadequate to deal with migratory species, creating  
 492 injustice in migration. The second part has suggested how a regime of shared  
 493 sovereignty may be articulated along principles akin to those of joint tenancy in  
 494 private property regimes. The hope is that, if the fluttering of a butterfly in Brazil is  
 495 enough to trigger the formation of a hurricane in Texas (Lorenz 2000), it should also  
 496 be enough to trigger the revision of the major principles under which we administer  
 497 natural resources today at the national and global level.

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