3 How do the commons meet the state? A political science perspective

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3.1. Introduction

In Switzerland, commoners' organisations have managed Alpine natural resources such as forests and meadows for long periods of time in a sustainable way (Mc Netting 1981). Drawing upon the analysis of Alpine and other commoners' organisations, Nobel Memorial Prize laureate Elinor Ostrom (1990, 2000) explained the survival of commoners' organisations by the consistency in the attributes of the resource system and the rules governing its users, who act primarily in a self-governed environment. Ostrom proposed eight design principles to explain the emergence and maintenance of commoners' organisations and successfully applied these principles to numerous cases across the globe. The publication of Ostrom's design principles initiated a global research trend for local governance structures. Among the theoretical currents that referred to Ostrom's principles, rational choice approaches - to which Ostrom belongs - and moral economy approaches (Scott 1976), have played a central role. However, various authors have also noted the shortcomings of these approaches. The lack of attention to power issues in commons research has been particularly highlighted (Cleaver 1999, Bakker 2008, Saunders 2014, Cleaver and de Koning 2015). There have also been warnings against a "commons" trap' (Schweizer 2018), according to which commoners' organisations would intrinsically produce social and ecological outcomes that are more desirable than those from other types of organisations. More specifically, Hall et al. (2014) note how rational choice and moral economy approaches seem oblivious to three elements. First, these approaches tend to neglect the heterogeneity of commoners' organisations. In practice, exclusive processes surround commoners' organisations, as neither membership, nor access to the resource, is open to all (Berkes 2006). Second, heterogeneous power relations characterise interactions among commoners, and one should not forget that arrangements at the core of commoners' organisations also result from negotiations and bargaining among commoners (Bakker 2008). Third, the relationship between commoners' organisations and the state is of high importance, as there are strong power interdependencies between these entities (Gerber et al. 2008). In other words, these approaches focus on the internal

apolitical functioning of commoners' organisations and tend to ignore their interactions with the state and public policies.

The relationship between commoners' organisations and the state may involve Ostrom's eighth design principle, which suggests that it is important for commoners' organisations to organise into multiple layers of nested enterprises, both through horizontal and vertical connections (Cox et al. 2010). Acknowledging in particular the role of vertical connections, Ostrom listed three methods that larger systems may use to facilitate local self-organisation: "providing accurate information about natural resource systems, providing arenas in which participants can engage in discovery and conflict-resolution processes, and providing mechanisms to back up local monitoring and sanctioning efforts" (Ostrom 2000: 35). These three points were reiterated in the conclusion of The Future of the Commons (Ostrom et al. 2012: 81ff), but never extensively analysed in Ostrom's work. To account for such relationships, scholars introduced the notion of co-management (Berkes et al. 1991, Olsson et al. 2004), or extended Ostrom's analytical framework to discourses, as well as the political-economic context on international, national, regional, and local scales (Clement 2010). In line with Ostrom's suggestions, anthropological approaches defined a set of conditions to explain the long-term perpetuation of commoners' organisations in relation to the state. They identified recognition by local actors and legal protection by the state, as well as the support of the state to commoners' organisations, for example in the creation of open platforms for local debates, as necessary conditions (Landolt and Haller 2015, Haller et al. 2016, Haller et al. 2018, Kimengsi et al. 2019). Anthropologists analyse the emic perceptions of commoners' organisations that are engaging in the institution-building process. Overall, these approaches focus on the conditions for crafting institutions locally, and how external influence, such as the state and non-governmental organisations, may support their long-term perpetuation.

3.2. Public policies to codify ownership, management, and use of natural resources

The study of the interactions between commoners' organisations and the state seem of particular importance because the embeddedness of commoners' organisations managing natural resources into broader governance structures has increased over the past century. In fact, state legislation has progressively codified the ownership, management, and use rights of natural resources. In Switzerland, such codification took place at the beginning of the twentieth century through the definition of property rights to (natural) resources in the Federal Civil Code (Knoepfel and Schweizer 2015). Also, public policies specified possible resource uses, possible requirements, and restrictions (e.g. ranger patents for forest management, prohibition of clear cuts, hunting plans, and landscape protection). Since the 1970s, environmental policies have increased the number of regulations codifying the use, management, and ownership of natural resources (e.g. Knoepfel et al. 2001; Bolognesi and Nahrath 2020). Arising from the need to

explain the effects of public policies and property rights on natural resource management, Swiss researchers used neo-institutional approaches and developed the Institutional Resource Regime (IRR) framework (Knoepfel et al. 2007; Gerber et al. 2009). According to the IRR framework, property rights and public policies both influence the exploitation and protection of natural resources, as they co-define the appropriation and use rights for natural resources. Property rights are recognised and enforced by the state and allow non-owners to be excluded; public policies implement policy instruments that specify, and often limit, the use rights of resource owners, potentially allocating use rights to non-owners (Varone and Nahrath 2014). The main assumption of the framework is that the *coherent* regulation of all goods and services produced by a natural resource increases the likelihood of its sustainable management (Gerber et al. 2009). The coherence or incoherence of a resource regime involves the degree of contradiction, lack of coordination, or lack of clarity of regulations affecting natural resource management. Whereas internal coherence relates to the fit between public policies, or to the fit between property rights, external coherence describes the fit between public policies and property rights. Incoherent resource regimes (i.e. incoherent policies and/or property rights) tend to produce regulations that are incompatible, and thus lead to the overuse of natural resources (Gerber et al. 2009). In other words, the IRR framework combines the lenses of institutional economics used by Ostrom with public policy analysis (Knoepfel et al. 2007). As a consequence, the framework may prove useful to analyse the interactions between commoners' organisations and the state.

An increasing number of researchers have applied the IRR framework to an analysis of natural resource management (Lieberherr et al. 2019), and more specifically to the analysis of common pool resources. The common pool resources under analysis include, for example, land in common property (Knoepfel et al. 2001, Gerber et al. 2008, Gerber et al. 2011), forests owned by commoners' organisations (Bisang 2001, de Buren 2014), landscape (Rodewald 2004, Gerber and Knoepfel 2008), wildlife (Nahrath et al. 2012), housing (Nicol and Knoepfel 2014, Balmer and Gerber 2018), and water (Aubin 2008, Garin and Barraqué 2012, Schweizer 2015, Nahrath and Bréthaut 2016, Bolognesi and Pflieger 2019). Research applying the IRR framework to CPR analysis sheds light on the relationship between commoners' organisations and the state, and the (positive or negative) impact of public policies on the survival of commoners' organisations. Researchers have distinguished four types of interactions between commoners' organisations and the state, which are described below.

3.3. Four modalities of interaction between the commons and the state

3.3.1. Translation

Commoners' organisations may act as intermediaries in the implementation of public policies. While intermediaries might play different roles in policy implementation processes (Bendor 2009, Coggan et al. 2013, Shahab and Viallon 2020), commoners' organisations can act as translators of public policy objectives into the local understanding of resource owners targeted by public policy instruments (Nahrath et al. 2012). Such an act may be explained by the fact that members of commoners' organisations are also targeted by the considered public policy or policies. The translation of policy objectives involves modifying a pre-existing hierarchy of norms and providing legitimacy to a new, adapted hierarchy (Jobert and Muller 1987: 73). Such modification of the hierarchy of norms may work in two directions. Commoners' organisations may, for example, modify the local hierarchy of norms by translating national policy objectives into local norms: into the beliefs and practices of local actors. In a case comparison of hunting associations in charge of managing wildlife in Switzerland, Nahrath et al. (2012) observed that representatives of common-pool organisations managing wildlife acted as intermediaries between state representatives and hunters in charge of implementing cantonal wildlife policy objectives. Created at the beginning of the twentieth century, these self-organised hunters associations have responsibility for the wildlife stock within specific regions. As the study shows, they proved more effective than the permit-based regulations, or state-managed systems which apply in other Swiss cantons. Further drawing on cases analysing the functioning of secular common dyke associations protecting land from floods in Bern canton, Gerber et al. (2008) observed how these corporations effectively represented landowners as members of the association in the flood protection policy. Association representatives were able to translate the interests of involved actors towards both the municipality and the cantonal administration, as well as towards their own members. The authors observed how these commoners' organisations made policy target groups (i.e. its members) aware of their responsibilities regarding flood protection, and influenced their belief systems and behaviours in policy processes (Gerber et al. 2008). The overall results of these studies suggest that: if (1) the property rights of commoners' organisations are clearly defined and recognised by the state, and (2) commoners' organisations are part of local political-administrative arrangements implementing public policies, then commoners' organisations may increase the effectiveness of policy outcomes.

3.3.2. Infusion

Commoners' organisations might also contribute to reducing rivalries regarding the use of common pool resources among distinct groups of resource users by infusing CPR-related practices and knowledge into the public organisations in charge of policy implementation (Bréthaut 2013, Nahrath and Bréthaut 2016). The case of water governance in the mountain area of Crans-Montana, Valais, shows how municipal organisations circumvent situations of water scarcity during consumption peaks in the tourist season. To avoid water shortages, representatives of several municipalities in Crans-Montana had to reach a flexible agreement on water exchange. Several of the municipal representatives held positions in commoners' organisations that had owned and managed water rights for centuries. These organisations were responsible for sharing water among farmers, primarily for agricultural purposes, and, therefore, their members who worked as representatives of the municipal water organisations were familiar with concluding quick and flexible oral agreements on the use of water. Some representatives were also acquainted with each other. These two factors allowed municipal representatives to share their knowledge of water management from commoners' organisations within an (official) intermunicipal committee. This committee was entitled to make temporary informal agreements on the use of water in situations of scarcity, and rapidly transfer water flows from one municipality to another. As a consequence, the practical knowledge, and the network of trust stemming from commoners' organisations, was infused into a larger inter-municipal system, which allowed temporary situations of resource scarcity to be overcome.

3.3.3. Complementarity

Thirdly, commoners' organisations may complement existing policies and public sector organisations (Blomquist 1992, Gerber et al. 2011). This function may increase the effectiveness of policies, in particular when facing policy problems that crosscut the traditional boundaries of policy sectors, administrative organisations, territories, and/or scales (Jochim and May 2010, Levin et al. 2012). For example, commoners' organisation may increase the effectiveness of policy implementation by providing additional administrative capacities, monitoring mechanisms, or knowledge of local environmental conditions (Howlett and Saguin 2018, Söderberg 2011). Gerber et al. (2011) observed how commoners' organisations owning urban land in areas intended for development supported the implementation of municipal land-use planning policy. When opening new land for urbanisation, Swiss municipalities establish a strategic plan, and allocate development rights on land through zoning. In the cities of Bern and Chur, significant amounts of land, including land dedicated to urbanisation, is owned by commoners' organisations. In accordance with municipal planning objectives and calendars, these commoners' organisations made their zoned land available for sale/rent, often for the development of affordable housing, or to regional industries. In certain cases, commoners' organisations even used their financial autonomy and higher budget flexibility to acquire plots of land on behalf of municipalities. Such behaviour shows how commoners' organisations may use their infrastructure and/or financial resources to support the implementation of municipal land use policy goals.

3.3.4. Resistance

A fourth and last modality of interaction between commoners' organisations and the state is the resistance of commoners' organisations to the implementation of public policies, as the case of Alpine pastures in Canton Uri and Obwalden shows (Viallon et al. 2019). Since the end of the nineteenth century, the size of the areas under management, the shrinking profitability of agriculture uses, and financial and infrastructure costs of servicing the land, have challenged both the maintenance of Alpine pastures and the perpetuation of agricultural activities. From a policy perspective, however, the use of pasture was necessary for various objectives, such as agricultural production and the preservation of employment, the prevention of avalanches, and landscape maintenance in support of emerging tourism activities. As resource owners and users, commoners' organisations were the only organisations able to achieve these goals. Such a (relatively) powerful position reflects the secular separation of forestry and pasturing activities. In ancient practices, cattle were pastured in forest areas. This practice has been incompatible with forest management policy until recently (Pfister and Brändli 1999, Stuber 2020; Knoepfel and Nahrath 2017). In fact, the overlap of pasturing activities and forest management was perceived as a cause of the nineteenth-century floods in Switzerland. The separation of these two uses was only achieved a long time after its definition, in some cases only in the second half of the twentieth century (Viallon et al. 2019). These cases show diverging interests between the commoners' organisation and the state, and how rather strong commoners' organisations may successfully resist to the implementation of public policies.

3.4. Conclusion

In summary, policy analysis offers four ways to approach interactions between the commons and the state. This chapter first described the existing research paths in political science that expand upon more traditional economic approaches to common pool resource management. It then briefly introduced the IRR framework as a resource-based approach that accounts for the institutional environment of commoners' organisations. The latter has proven a useful heuristic tool that allows the interplay of public policies and property rights to be tested in empirical situations of natural resource management. The third part of the chapter described four modes of interaction identified by the IRR approach between commoners' organisations and the state: translation, infusion, complementarity, and resistance. To date, these modes of interaction have been applied to a limited number of research projects and publications, whereas understanding interactions between commoners' organisations and the state in Western liberal democracies is crucial for three reasons. First, common property today could not exist without its recognition in law, which is defined by the state. Therefore, considering the state as a key actor in the perpetuation of the commons is essential. Second, the increasing heterogeneity of resource uses may create rivalries with external users, making it necessary to analyse the conflict resolution mechanisms defined by the state and the rule of law to solve them. Finally, the 'shadow of the state' and its structuring role in negotiations may facilitate - or not - self-organised behaviour (Scharpf 1994).

In the case of the commons, the impact of the state's 'shadow' on commoners' organisations is still to be determined. It therefore seems particularly relevant to pay attention to the described modes of interaction. This book offers a timely opportunity to expand the empirical foundations of these modes, which we believe can improve existing explanations of why and how commoners' organisations emerge, perpetuate, or collapse in a complex legal setting increasingly shaped by public policies.

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