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## Avoiding the Commons Trap: An Exploration of Local Community Governance of Water in Valais, Switzerland

Rémi Schweizer

### 1 Introduction

Today, the idea of *commons* (in the singular or in the plural, as a name or a qualifier) acts as a mobilizing banner that gathers academics and activists from various horizons. More than the intrinsic nature of the resources qualified as such, what is put forward is a form of social organization that relies on community initiatives and local-level solutions to foster sustainable development—what I will call *Local Community Governance* (LCG).<sup>1</sup> In the wake of the United Nations Conference on Environment and Development (UNCED) of 1992 and of crucial scientific contributions at the turn of the 1990s, the idea progressively emerged that LCG

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R. Schweizer (✉)

Natural Resource Policy Group (NARP), Swiss Federal Institute of Technology (ETH), Zürich, Switzerland

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models could contribute to a more democratic, fair, sustainable or effective management of natural resources. This worldwide trend is partly rooted in water governance debates, at the same time as it has strongly infused them. The notion that “*water is a common*” became a rallying cry, leading to the production of a wide range of scientific literature, strategic papers and non-governmental organizations’ (NGOs) statements that highlight the necessity to develop, maintain or come back to more local and cooperative forms of governance.

As this enthusiastic body of research developed, however, some authors have been providing a more nuanced picture, pointing out the mixed results of LCG, questioning the underlying assumptions of the literature and emphasizing complexities and social dynamics in resource governance. The aim of the present chapter is to explore some of the controversies and analytical pitfalls that arose by comparing them with what is happening in the field. The first part starts from the eclectic consensus generated by LCG and identifies three constitutive dimensions of a minimal definition: a clearly delineated community; a principle of self-governance; and an endogenous local regulatory arrangement. The chapter continues by reviewing more critical streams of literature, from which three controversies arise in relation to these constitutive dimensions: the more or less exclusive delineation of the community; the nature of the interactions within and around it; and the interplay with state actors and regulations. These controversies are then confronted to the case of the Valaisan bisses, which provides a sound empirical field to discuss them. The necessity to go beyond a sentimentalized image of LCG and to avoid falling into a form of “commons” trap, as well as avenues for future research, are identified in conclusion.

## 2 From an Eclectic Consensus to a Minimal Definition of LCG

During the last three decades, considerable attention has been devoted to LCG as a successful strategy for avoiding Hardin’s (1968) “Tragedy of the Commons.” Departing from the deep-rooted pessimism that the

“Tragedy of the Commons” contributed to spread, a pervasive consensus (Mosse 1997) in favour of LCG progressively emerged. This enthusiasm has been nourished by a wide range of examples from all around the world, regarding resources as diverse as mountain pastures, forests, fisheries or water (Berkes et al. 1989; Ostrom 1990). The widespread existence and numerous benefits of LCG have been demonstrated and, more than often, their development or revival called for. Elinor Ostrom crucially contributed to the dissemination of the notion with her 1990 seminal book, to the point that she received the 2009 Nobel Prize in Economic Sciences for the way she “*challenged the conventional wisdom*” by demonstrating how natural resources can successfully be managed as “*local commons without any regulation by central authorities or privatization*.”<sup>2</sup>

At the heart of this worldwide trend is, as suggested by the preceding statement, an operational emphasis on local communities and an empirical investigation of the conditions under which their members will be led to *cooperate towards a common interest*—a dimension that Hardin and his followers failed to consider. What is put forward is a heterogeneous world of social and institutional practices that goes beyond the logics of market and state, a way of governing natural resources that is different from top-down state intervention and privatization. As such, the notion conveys a plasticity that makes it attractive to actors from diverging, sometimes loosely connected areas (McCarthy 2005).

Scholars have studied local forms of cooperative actions from very different perspectives, rooted in long-opposed social sciences traditions. Often classified in dichotomous ways (see Mosse 1997; Johnson 2004), the main academic streams oppose rational-choice institutional-economics (in line with Ostrom) to socio-historical approaches influenced by notions of moral economy (Scott 1976). In activists’ or practitioners’ circles, too, the idea of *commons* is mobilized by various actors, from alter- or anti-globalization circles with more or less radical agendas (e.g., Klein 2001; Bollier 2002)—which see them as an alternative to the commodification, corporatization and propertization movements that came with the neo-liberal turn of the 1980s—to international organizations with more or less liberal approaches—which see the

devolution of management competencies as an alternative to state-owned or state-operated utilities and as a way to reduce subsidies by transferring costs to local users.

A similar attraction towards LCG can be found in the specific area of water. The vision of water as a *common* that would better be collectively managed (by local communities, water users associations, watershed committees) gained considerable weight in the academic literature (Wade 1988; Trawick 2001), among activists' circles (Shiva 2002; Barlow 2007), and in international debates (United Nation 2015). Again, two broad schools of thoughts can be identified (Bakker 2008): a first perspective that emphasizes community solidarity, traditions and moral codes in preserving and providing water resources for community members (Shiva 2002; Trawick 2001); and a more utilitarian perspective that underlines how LCG can function to avoid water resource depletion amongst a strictly delineated group of users (in line, again, with the work of Elinor Ostrom).

These different approaches depart from antagonist worldviews and theoretical strands. If one wished to sort them out, however, one could say that they all emphasize modes of governance that do not rely on the interventions of a distant authority (through public policies or the guarantee of ownership), but on solutions devised by the users themselves. Although the main points of emphasis may vary, most contributions highlight a series of principles that are structured along a common line. Without pretending to settle existing disputes, I propose a minimal definition of LCG by drawing this line along three dimensions:

- *the existence of a clearly delineated community*, organized within a structure of governance that gathers the users of a (system of) resource(s);
- *a principle of self-governance* according to which the community can elaborate and impose to its members its own system of rules, without the intervention of an external authority and with a strong involvement of members;
- *a local regulatory arrangement* that is formed through the aggregation of these endogenous rules and has the legitimacy to monitor the actions of the members vis-à-vis the resource (notably through the distribution of use rights among them);

### 3 The Debates Around LCG: Three Points of Controversies

As this eclectic consensus developed, more critical stances also began to appear. Scholars have, in fact, regularly pointed out the shortcomings of the LCG trend (see Mosse 1997; Agrawal and Gibson 1999; Leach et al. 1999; Bakker 2008; Saunders 2014; Cleaver and de Koning 2015): how its promises often fell short of expectations; how the two schools of literature (rational-choice and moral economy) contributed to diffuse a *romanticized image* of the community; and how the analyses that are provided are more than often oblivious of power relations, inequalities and wider political structures. Hall et al. (2014), in an attempt to synthesize key themes of debates, identify three main lines of critiques: the *homogenous community*, associated with a mystification that “can lead to the exacerbation of inequalities and exclusion” (p. 73); the *avoidance of politics*, which prevents LCG analyses to account for the ways in which “power relations at local levels affect institutional outcomes” (p. 76); and the *socially inadequate analyses* that are provided.

At the hearth of these critical contributions are, of course, ontological debates about the nature of individuals and of social interactions. But these debates also have implications on a more empirical and operational level, as they raise crucial questions related to the nature of LCG: does the *delineation of the community* result in an exclusive or an inclusive model of governance (dimension 1); are heterogeneity and power relations within local communities a reality and, if so, how do they materialize in the *local regulatory arrangements* governing resource uses (dimension 3); how does the inclusion of local communities within wider frames of governance take place and what does it mean in terms of self-governance (dimension 2)? These three points of controversies and the analytical pitfalls they lead to are briefly described hereafter.

#### 3.1 The Delineation of the Community (Ins and Outs)

The delineation between the commoners (*ins*) and the outsiders (*outs*) is at the core of LCG models as analyzed by Elinor Ostrom (1990) and her followers, but also by scholars from the moral economy school

(see Johnson 2004). Historically, the development of LCG approaches can be understood as a reaction against the equivalence made by Hardin (1968) between the notions of *commons* and of *Open Access* : for LCG proponents, *commons* do not rely on “any one” property but, to the contrary, on a collectively organized system of rights and obligations. The allocation of these rights delineates the community of users and differentiates LCG from open-access models.

The question remains, however, as to the exact level of exclusivity—or of inclusiveness—that is characteristic of LCG. For some, a major benefit is the importance given to a certain level of openness (Weinstein 2015, 77) and to the adoption of rules that “enhance, not restrict, access” (Johnson 2004, 415). For others, to the contrary, the “key is the ability to limit the access of outsiders” (Berkes 2006, 3) and to develop a form of “private property for the group” (Bromley 1992, 11). If both points of view are not necessarily antagonist—one can limit the access to a resource while maintaining a certain level of openness—their normative concerns are quite opposed: in the first case, it is a *philosophy of inclusion* that is put forward, while in the second case the accent is put on the *crucial dimension of exclusion*, with the risk of developing models of governance that are regressive (Bakker 2007, 447) and serve to reproduce gender and caste exclusions (Mosse 1997, 499). Failing to consider the possibility and consequences of exclusion represents a first pitfall for empirical analysis.

### 3.2 The Nature of Interactions Within and Around the Community

The nature of interactions within and around the community is another point of division. Regardless of whether the accent is put on simply calculated pay-offs (in institutional-economic approaches) or on traditional wisdom (in the moral economy school) to understand rules development, LCG analyses have been criticized for avoiding politics (Hall et al. 2014, 76–80). Several contributions emphasize their limits when it comes to the understanding of historically specific structures of power (Mosse 1997, 470) or of heterogeneity within communities (Clever and de Koning 2015, 2). Questions related to social conflicts and inequalities

are not necessarily negated, but do not represent a major entry point. To the contrary, the image of “a community in which resource users are on roughly equal footing” (as explicitly put forward by Schlager 2005, 39) often prevails. The focus is very much on the capacity to cooperate towards a common interest, to restore harmony with the environment, or to develop endogenous (and therefore legitimate) rules.

Yet there are no reasons why the local regulatory arrangements that are at the core of LCG wouldn't be the result of negotiations and bargaining among commoners; and no reasons why these social interactions wouldn't be shaped by the power relations, the specific interests and the inequalities that necessarily exist within local communities (Agrawal and Gibson 1999; Mehta 2001; Bakker 2008). These communities are internally differentiated, and the claims of one or another member may be highly contested (Leach et al. 1999). There is, therefore, a challenge to take heterogeneity and power relations seriously and to show how they concretely work to shape and sustain local regulatory arrangements. Failing to do so represents a second analytical pitfall.

### 3.3 The Interplay Between the Community and State Actors/Regulations

The place of these local regulatory arrangements “within the wider frames of governance” (Clever and de Koning 2015, 2), and in particular within public policies, represents a last point of controversy. LCG approaches are often promoted in reaction to the perceived failures of top-down state interventions—either because they are supposedly inefficient or at the mercy of private interests. There is a convergence in diffusing an image of communities not only as homogenous, but also as isolated entities providing an alternative to public regulations. Autonomy and independence from state systems are emphasized (Mosse 1997, 469), and the complex interplays with public policies are not fully explored. Ostrom (1990, 90), for instance, mainly considers the relationships with “external governmental authorities” from a negative perspective, putting forward the recognition of a minimal right to self-organization and the absence of interference.

Several contributions have, however, highlighted the need to pay more attention to the relationships between state agencies and policies, on the one hand, and local communities and endogenous rules, on the other. Both in Southern (see Lund 2006 for the case of Africa or Roth 2009 for the case of Indonesia) and Western countries (see Gerber et al. 2011 for the case of Switzerland), the exploration of these relations has proved to be crucial in understanding resource governance. Also within the commons scholarship, a large body of literature emerged around the idea of co-management (Berkes et al. 1991), analyzing these interdependencies with emphasis on power sharing, collaboration or, more recently, adaptation (Olsson et al. 2004) and social learning (Berkes 2009). All these contributions point, in sum, to a third analytical pitfall related to the necessity to put LCG in context by questioning its interplays with state actors and regulations.

## 4 The Case of the Valaisan Bisses

The irrigation channels known as *bisses*, in the Swiss Alpine canton of Valais, provide an opportunity to explore LCG in a context that has been raised as a major point of reference in the literature. Relying on the empirical work of the American anthropologist Robert Netting (1981), Elinor Ostrom explicitly mobilized the Swiss example in her 1990 book and, in the following years, several authors have explored the Swiss commons from a variety of perspectives (e.g., Kissling-Näf et al. 2002; Stevenson 2005; Gerber et al. 2011; Baur et al. 2014). In a political system ensuring high autonomy in resource management, Swiss agro-pastoral resources are often presented as paradigmatic examples of resources that have been collectively—and successfully—managed by local communities. This holds true for pastures or forests as well as for these famous *bisses*.

As in other dry mountain regions around the world, supplying water to the canton of Valais has always posed major challenges. This struggle led to the construction of irrigation schemes characterized by spectacular channels hollowed out of the ground or attached to the sides of vertiginous precipices: the *bisses*, in French, or *Suonen*, in German. Showing long trajectories of historical continuity, these smallholder systems have



been watering crops for centuries and are still providing a wide range of services that are crucial not only to the mountain communities, but also to the people living downhill: water provision, regulation of floods, biodiversity support, landscape formation, socio-cultural services and, more recently, touristic functions. Built by local communities of users, *bisses* have been traditionally characterized by endogenous governance structures and community water-rights systems, the robust, long-enduring and sustainable nature of which has been highlighted many times (e.g., Crook 1997; Wiegandt 2008). This community-engineering heritage, witness of a *creative institutional genius* (Rodewald and Knoepfel 2011), has fascinated scholars, political authorities and citizens for centuries.<sup>3</sup>

The goal is to discuss this institutional genius at the light of the analytical pitfalls identified earlier. The general characteristics of *bisses* governance models and their correspondence to an ideal type of LCG are questioned in a first step, before being confronted with the three controversies. The analysis is based on the empirical material gathered in the context of a research project conducted between 2010 and 2013 (Schweizer et al. 2014)<sup>4</sup> and relying on an in-depth exploration of five case studies (*bisse Vieux*, *bisse de Tsa Crêta*, *Torrent-Neuf*, *Niwärch*, *Grossa*), as well as on more general secondary sources.

#### 4.1 *Bisses* as a Paradigmatic Example of LCG?<sup>5</sup>

Although the *bourgeoisie* (*Bürgergemeinde*)<sup>6</sup> as a whole was in some few places responsible for their operation, *bisses* governance traditionally relies on ad hoc entities that gather (and delimitate) the circle of their users: the *consortages* (*Geteilschaften*). These *consortages* (today recognized as corporations of cantonal law) represent endogenous structures of governance specific to an irrigation network, an important water channel or a sub-portion of network. They hold the rights to derive a certain amount of water from a river (today recognized as an *immemorial water right*) and to convey that water to the irrigated fields through a series of channels. Their main roles are, on the one hand, to avoid rivalries regarding the access to water and, on the other hand, to develop, maintain and operate the network through a collectively organized system of rights and obligations.

At the individual level, the water derived in the network is divided among the members of the consortage (*consorts/Geteilten*), who received a certain number of water rights (*droits d'eau/Wasserrechte*) at the time of the construction. Expressed in “hours,” these rights are distributed according to a strict schedule that determines when exactly they can be exercised (*tour d'eau/Wasserkehr*). They are generally recorded in a register (*ratement/Wasserbuch*) that reports the transfer or creation of new rights. If the rights of the consortage to derive and convey the water are held collectively and cannot be disposed of without the consent of the community, the water rights are individual and can be transferred under certain conditions. In some areas, these rights are strictly linked to private property rights on the irrigated field (i.e., they cannot be disposed of separately) while in others they are independent (i.e., they can be disposed of separately). The transfer of water rights outside the community can, in addition, also be limited or require the approval of the community. In any case, water rights are transferred by inheritance and the consorts can collectively decide to create new water rights to be distributed among them or allocated to new members. The boundaries of consortages are, thus, in constant evolution.

Each water right is associated with maintenance (*corvées/Gemeinwerk*) and financial obligations, as well as with a voting right at the general meeting of the consortage (*Assemblée générale/Geteiltenversammlung*). The *corvées* refer to a certain number of workdays to be spent on the channel, usually at the beginning of the irrigation season. For maintenance and general surveillance, a water guard is generally appointed among the members and supplementary *corvées* can be organized. The day-to-day operation of the network is ensured by the committee (*comité/Vorstand*) and mainly based on customary practices and routines. The *Assemblée générale* gathers all water rights holders and represents the supreme entity of the consortage. It is responsible for formalizing operational rules (although this is rarely done before the twentieth century), allocating new water rights, sanctioning offenders (in case of water theft for instance) and electing the committee.

Although some dimensions might vary from one *bisse* to another, very similar systems of rights and obligations can be found throughout the canton. *Bisses* governance thus fully matches the three components of

LCG as defined in this chapter, and do represent relevant empirical fields to explore the controversies we are interested in:

- Consortages represent *clearly delineated communities* that gather bisse users.
- They have a capacity to elaborate and enforce their own system of rules, based on a strong involvement of users and without the intervention of an external authority (*self-governance*).
- The collectively organized systems of rights and obligations, aggregated to customary practices and routines, form an endogenous *local regulatory arrangement* that monitors the actions of the consorts vis-à-vis the resource.

## 4.2 The Delineation of the Community (Ins and Outs)

Water represents, in an agro-pastoral society where irrigation was for a long time the only way to increase productivity, a resource under pressure. This holds true both at the level of river basins (concurrence between consortages) and within the different irrigation schemes (concurrence between peasants). Not surprisingly, the resolution of these rivalries required a prioritization of some users over others. The main objective of the consortages was, precisely, to guarantee (i.e., to reserve) the access to water for members of the community. The presence of excluded groups appears in that respect inherent to these models. Two empirical zooms can be mobilized to support this assertion.

In one case where the archives of the consortage (period 1930–1974) were carefully kept (*bisse de Tsa Crêta*), the consorts alternated between agreeing (1930, 1954) and refusing (1952) to welcome new members. Torn between the need to maintain water supply and that of finding new revenues in a context of rural abandonment, the consorts opened up the resource mainly to bring new financial resources, notably in relation to a costly maintenance project in 1930. These observations confirm the more general conclusions of Wiegandt (1980, 155), who states that since the sixteenth century, the commoners of the village have protected their

interests by deciding to open or to close their agro-pastoral resources to outsiders.

The *Torrent-Neuf* constitutes a second revealing case, one of the few where the channel was, in a first phase, operated by the entire *bourgeoisie*. It was only in 1810 that a separate consortage was created with the goal to protect the resource from outside hands (Roten Dumoulin 1990). In the wake of the French Revolution, the egalitarian intentions of federal and cantonal authorities (equality between *bourgeois* and *non-bourgeois*) were feared because they could lead to a loss of control over crucial agro-pastoral resources. A consortage was seen as the best way to anticipate these evolutions for the 800 *bourgeois*, who “gave up” their rights to 800 consorts (the very same people). Clearly, this strategy was crafted as a way to avoid the risk of having to open the resource whenever egalitarian intentions became translated into law.

In addition to these direct mechanisms of exclusion, which target specific groups of potential users (a group of peasants, the *non-bourgeois*), more indirect mechanisms can also be observed. These devices are indirect in the sense that exclusion is not expressly formulated but stems from the specific conditions related to the transfer of rights (e.g., interdiction to transfer water rights outside the community without express permission, giving implicitly a priority to existing members) or to the repartition of new water rights (e.g., through auctioning, giving implicitly a priority to the wealthier). Because they make access to the resource more complicated, or even impossible, for some groups of people, these rules can also be seen as mechanisms of exclusion.

Determining the limits of the community is, in sum, an issue that must necessarily be addressed if rivalries are to be settled. If bisses had been modest in size, the pressure on the resource low and the community isolated, consortages would have perhaps approximated an ideal type of *commons* based on a philosophy of inclusiveness. If, however, as this is more likely to be the case, the irrigation network requires substantial investments, the pressure on water resources is high and the community is part of a broader and dynamic social context, trade-offs arise and exclusion becomes a reality. In that respect, it would be inadequate to consider consortages as models of inclusiveness. They are, to the contrary, discriminatory, and indeed that is their intrinsic aim. Consortages represent

exclusive institutional structure and convey, as such, the risk to establish quasi *club goods* reserving the access to a club regrouping those who participated to the construction of the *bisse*, have the financial capacity to contribute to its maintenance, or are considered as legitimate members of the community—to the exclusion of those who do not or are not. The specificity is not to reject exclusion, but to manage it through other ways than state interventions or private property—although, as we will see, the distinction is not as clear-cut as it may seem.

### 4.3 The Nature of Interactions Within the Community

The local regulatory arrangements that govern *bisses* operation are, as we have seen, largely endogenous. They are elaborated by the members of the *consortages*, which are granted a high level of autonomy to do so. These arrangements are formed of a mix of long-enduring customary practices—regarding water distribution, *corvées*, irrigation techniques—and of more punctual decisions, sometimes based on calculated pay-offs—for instance when it comes to the inclusion/exclusion of members. Their development also represents, to some extent, the results of more or less conflictual negotiations between collective actors and/or individuals. At the light of our empirical field, local communities do appear heterogeneous in several aspects, and this heterogeneity certainly contributed to shape local regulatory arrangements.

*Consortages* represent, first, structures that are specific to an irrigation network, a water channel or a sub-portion of network. This ad hoc nature has two consequences. Each local community is, on the one hand, characterized by a superposition of several *consortages* (i.e., of *sub-communities*), each of them being responsible for a sub-portion of the local irrigation scheme and elaborating its own system of rules. One individual is, on the other hand, generally a member of several of these entities. A complex web of sub-communities and social dynamics result from this superposition, with a risk of tensions that is exacerbated when several *consortages* derive water from the same river or when systems of rules are in contradiction. This situation requires a minimal level of coordination

between consortages and can lead to situations of conflicts that may durably affect the rules that are adopted.

Each consortage is composed, second, of a plurality of bodies (general meeting, committee, water guard) that do not necessarily pursue the same objectives or have the same level of influence. If the general meeting is supposed to be the supreme body, the members of the committee and the water guard(s) play the most direct and important role in the day-to-day operation of the resource. These functions are positions of power that confer both social prestige and key competences when it comes to the adaptation of customary rules (i.e., to the marginal development of the local regulatory arrangement). Here again, this situation is not without risks of tensions and of power concentration (for instance through multipositionality, when an individual holds position of power in several consortages).

Last but not least, consortages are composed of several tens of members with diverging interests and values. Debates, tensions and conflicts between these members are part of everyday life within community structures (Wiegandt 1980; Crettaz 1995)—for the access to water (e.g., in case of water thefts); for the damages caused by an imprudent user; for the inclusion or exclusion of members; and for the collection of financial contributions (in particular in a context of rural abandonment). These tensions are at the core of the rules that have been developed throughout the ages. In the words of the Valaisan sociologist Bernard Crettaz (1995, 325), “*power relations cross community life [...]. Here as elsewhere, there are rich and poor, dominant and dominated, in balance within the community equilibrium. [...] The emblematic history of the bisses has most of the time been a history of conflicts*” (our translation).

Inequalities between the commoners are, finally, a reality that can hardly be contested. They are particularly reflected in land allocation (Reynard 2002, 91; Mugny 2012, 57). Pastures, orchards and vineyards are indeed dominated by private property schemes. Their exploitation is individual and exclusive and their repartition far from equitable. The system is therefore underpinned both by community values and by individualistic interests, and the potential social benefits of LCG are to some extent qualified by the private allocation of land: the distribution of rights within the consortages generally reproduces

the inequalities existing in land allocation. At the light of that, it becomes apparent that the governance of water cannot be analyzed in a vacuum, but rather needs to be understood in relation to the other resources in presence.

#### 4.4 The Interplay Between the Community and State Actors/Regulations

The historical trajectories of the Valaisan bisses are symptomatic of the (increasing) interdependences between LCG and public regulations that is likely to occur in modern states. In a context characterized by processes of federal integration (in particular regarding civil law), rural abandonment (in connection with industrialization), and ecologization, these interdependences played a key role in the development and, in some cases, the survival of the Valaisan bisses. From the 1900s onward, the evolution of bisses LCG cannot be understood without considering its inclusion within the larger frames of state interventions.

At the national and cantonal levels, the Swiss political system instituted the institutional conditions for continuity. On the one hand, the unification of civil law and the consecration of private property in the Swiss Civil Code of 1907 were made neither at the expense of community governance structures (consortages) nor of the rights they hold (immemorial water rights, land easements, individual water rights). All were explicitly recognized in the Swiss Civil Code and in the cantonal laws of application, which were partly influenced by local traditions and Germanic law (Knoepfel and Schweizer 2015). On the other hand, the development of state interventions did not challenge the essence of community governance (Schweizer and Knoepfel 2013). They contributed to open up formerly closed hydrosystems to new actors and stakes: hydropower production, touristic uses, environmental protection. However, they also left a great deal of autonomy to consortages. In fact, LCG existence and legitimacy were recognized in a number of ways: the Water Right Act (WRA) and the Water Protection Act (WPA) assimilate the water rights of consortages to acquired rights that can be opposed to hydropower companies; several sectorial policies (agriculture, tourism, environment)

recognize consortages as legitimate interlocutors, eligible for subsidies and sometime included in the implementation schemes; most public policies, finally, do not interfere with consortages' prerogatives and allow for continuity in the development of the rules governing bisse operation.

At the local level, a general transition towards more nested models of governance can be observed. In some cases where substantial investments were needed at the beginning of the twentieth century, negotiations were conducted between consortages and public authorities (municipalities) in order to save the network. In several cases, the municipalities accepted to develop the infrastructure (tunnels were constructed), but the consortages had to give up some or most of their prerogatives. The operation and governance of the network were partially (e.g., *Torrent-Neuf*) or totally (e.g., *Niwärch*) transferred. In numerous cases, similar negotiations were conducted but failed, and the bisse were abandoned (e.g., *Tsa Crêta*). In other places finally, consortages remained strong and kept a key role in resource governance. In these cases too, however, the governance became increasingly hybridized, with community rules and practices cohabiting with other logics of governance (mainly from the public sector). The case of the bisse Vieux is particularly illustrative of the complex processes through which these evolutions took place, with a consortage very active in pushing towards governance adjustments and much more reluctant public actors at the municipal level. In the end, each evolution in the sharing of responsibility occurred through confrontational and conflictual negotiation.

## 5 Conclusion: Avoiding the "Commons" Trap

The chapter offers a contrasted image of LCG, more nuanced than the romanticized illusion conveyed by some of the literature. Clearly, the artificial distinction between models of governance is blurred. Local community governance does not emerge or evolve in a vacuum, and the idea that it can be separated from state regulations and private appropriation is a myth. To the contrary, LCG models cannot be analyzed without taking into account its interdependencies with other modes of governance.



LCG and private property appear, first, way more imbricated than it may have seemed at first glance. Collective and individual allocations of rights interact within complex systems, within which private logics are strong (water rights are individual, land use is dominated by private property). If some principles of solidarity are present (in particular through *corvées*), if some major prerogatives are indeed collective (attribution of new rights, adoption of operational rules), inequalities and exclusion are part of the game. Consortages indubitably represent a form of “*private property for the group*” (Bromley 1992, 11) that convey the risk to create exclusive clubs rather than inclusive communities. Rather than ignoring this reality, LCG analyses should make it explicit and try to understand its extent and consequences.

The separation between public and community governance is also not so clear-cut. Communities always evolve *in the shadow of the state*, as Fritz Scharpf (1997) would have said, and all the empirical situations that were explored could qualify as instances of co-management (Berkes et al. 1991). State interventions played a crucial role to open up the resource to hydropower companies and to civil society while, at the same time, developing the institutional conditions for continuity. LCG was not challenged by the development of the modern state and, in some cases, consortages could actually take advantage of it to maintain and develop the resource in an evolving socio-economic context—even if it could mean a loss of prerogatives. The interplays between local communities and public actors appeared, however, only loosely connected to a collaborative ideal of trials and errors. It implied political negotiations, confrontations and power asymmetries. What seems to matter is the capacity of local actors (consortages and municipalities) to negotiate radical or incremental adaptations of the model. Here again, understanding these dynamics appears as crucial for explaining continuities and ruptures in resource governance.

This calls for thicker analyses in order to avoid falling into a sort of “commons” trap, according to which policies and actions collectively organized at the community level would necessarily be “inherently more likely to have desired social and ecological effects than activities organized at other scales” (by analogy to the idea of local trap as emphasized by Brown and Purcell 2005, 607). *Common* does not mean isolated, a-conflictual, fair or all-inclusive, and the only fact that a local community

is responsible of resource governance does not preclude dynamics of power and domination. It is only by recognizing, rather than ignoring, potential weaknesses and interdependences with other modes of governance that LCG research can make a step forward.

In that respect, there is a need for academics to go beyond a sentimentalized image of LCG and to analyze them for what they really are. This means, in particular, formulating research questions that would contribute to shed light on persistent blind spots or grey areas. From a sociological point of view for instance, one could interrogate the trajectories of those who are not accepted as members of the community. Where do they come from, how do they live, where do they end up? From a political science perspective, the way power and inequalities relate to and influence resource governance could be further explored. Between power concentration and the risk of a tyranny of the majority, what remains for the weakest members of the community? Beyond an ideal of collaboration, what is the nature of the interplays between these communities and state actors? Such questions open thrilling lines of research that could be explored either by re-interrogating the legacy of crucial authors such as Elinor Ostrom (see for instance Clement 2010 and her politicized institutional analysis and development [IAD] framework) or by mobilizing alternative approaches grounded, for instance, in critical institutionalism (Clever and de Koning 2015).

## Notes

1. In the present chapter, *Local Community Governance* (LCG) is used as an umbrella notion that subsumes the wide range of labels—e.g., local commons, common-pool resource (CPR) management, common property resource systems, community-based natural resource management—that are found in the literature.
2. See [www.nobelprize.org/nobel\\_prizes/economic-sciences/laureates/2009/ostrom-facts.html](http://www.nobelprize.org/nobel_prizes/economic-sciences/laureates/2009/ostrom-facts.html), accessed on March 23, 2016.
3. A group of scientists, politicians and citizens is currently working to promote a UNESCO World Heritage inscription of the bisses systems.
4. The project was funded by the Swiss National Science Foundation (SNF) as part of a Swiss National Research Program on “sustainable water management” (NRP 61).

5. The governance models that are described represent an historical appraisal of the situation at the beginning of the twentieth century.
6. *Bourgeoisies* are old civic corporations that refer to the Middle Ages communities of Burghers, which owned (and still own) many real assets in the Swiss agro-pastoral society (Gerber et al. 2011).

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**Rémi Schweizer** is a senior researcher and lecturer at the ETH Zürich. His research focuses on environmental and food governance, with an interest on power relations, policy implementation and innovation and local community governance. Author of several books and articles, he conducts research with a strong empirically grounded approach.