

Governance of the commons and social values: a dialogue between Elinor Ostrom's work and the francophone theory of reciprocity

Eric Sabourin

▶ To cite this version:

Eric Sabourin. Governance of the commons and social values: a dialogue between Elinor Ostrom's work and the francophone theory of reciprocity. Journal of Peasant Studies, 2023, 50 (7), pp.2685-2700. 10.1080/03066150.2022.2120809. hal-04423411

HAL Id: hal-04423411

https://hal.science/hal-04423411

Submitted on 31 Jan 2024

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

Governance of the commons and social values: a dialogue between Elinor Ostrom's work and the Francophone theory of reciprocity

Eric Sabourin

CIRAD, UMR ART-DEV, F-34398 Montpellier, France.

ART-DEV, Univ Montpellier, CIRAD, CNRS, Univ Montpellier 3, Univ Perpignan Via Domita, Montpellier, France

Revised manuscript. This paper was published in *The Journal of Peasant Studies*, Vol. 50, 2023, Issue 7 pages 2685-2700

https://doi.org/10.1080/03066150.2022.2120809

Abstract: This paper analyses the importance of reciprocity in the management of common resources. It compares the role that Elinor Ostrom attributes to the norm of reciprocity in her approach to common property resources to the Francophone economic anthropology's theory of reciprocity. The argument relies on the application of these two theoretical and methodological approaches to the analysis of common resources management systems in the Northeast of Brazil and in New Caledonia. The conclusion attempts to establish a dialogue between Ostrom's proposals and the theory of reciprocity.

Key-words: Common resources management, reciprocity, Elinor Ostrom, Brazil, New Caledonia

Introduction

In the context of debates on sustainability, the issue of transforming and modernising traditional structures for the management of shared natural resources has become particularly crucial. Following the failures of privatisation and nationalisation of natural resources after decolonisation, based on socialist experiments or liberalisation processes, the transfer of the management of these natural resources to user organisations has remained a challenge and a source of much debate, particularly since the implementation of programmes to decentralise their governance (Ribot et al., 2006; Ribot and Peluso, 2003).

Elinor Ostrom's work has made it possible to reactivate the sociological and political theories of collective action (Ostrom, 1990). She proposed to apply collective action to shared management of the common natural resource. The stakes are high for user communities and organisations, as well as for the various levels of government. Additionally, since 1997, Ostrom mobilised the notion of reciprocity, which she described as one of the attributes that allows user groups to manage natural resources. Although she had first considered reciprocity as a universal social norm (referring to Gouldner, 1960), she gradually sought to explain its specific effects and, if not its nature, at least its origin. I applied Elinor Ostrom's methodological proposals, particularly in the context of my fieldwork in Brazil and New Caledonia, in parallel with the Francophone theory of reciprocity in anthropology¹ renewed by Scubla (1985), Temple and Chabal (1995), Anspach (2002) or Godbout (2007). This renewed Francophone approach of

¹ Henceforth in this article, when we write "theory of reciprocity" or "renewed theory of reciprocity", we will refer to the Francophone theory of reciprocity in anthropology, without having to specify it at each use.

reciprocity theory was built in the continuity of the pioneer's discoveries: Simmel (1908), Malinowski (1922), Thurnwald (1932), Mauss (1924), Levi-Strauss (1949), Polanyi (1957) and Gouldner (1960). I will not consider the proposal of altruism economics (Kolm and Mercier, 2006) and I discuss in the third section the main difference of Francophone reciprocity theory with the approach of Marshall Sahlins (1972). It should be added that this renewed theory of reciprocity, in particular within the Mouvement Anti-Utilitariste en Sciences Sociales (M.A.U.S.S.) by Anspach, Godboud (2007), Scubla, Temple (1995) and Gardin (2006), is not limited to small indigenous or primitive communities, but considers its application to our rural or urban contemporary societies.

This article analyses the convergences and divergences between both approaches and aims to extend the use of the concept of reciprocity as applied to common resources. A priori, it was not a question of seeking epistemological compatibility between both approaches. Indeed, the theory of reciprocity is based on a systemic and partly structuralist approach, while Ostrom's proposal mobilises a sociological framework of methodological individualism associated with the theory of neo-institutional economics. Nevertheless, Ostrom has often tried to go beyond the limits of individualism by investing in approaches of collective action. The renewed theory of reciprocity as presented by Temple and Chabal (1995) spares the uncertainty of the freedom of individual choice in relation to social obligations in a framework that is often too quickly described as purely holistic (Caillé, 2000).

The management of common natural resources (such as land, water, pasture, and forests, etc.) and the production or maintenance of collective equipment or infrastructure involve various forms of organisation of collective action, of mutual aid and sharing, that are still alive, in peasant and indigenous communities (Ostrom, 1990; Temple, 1983, 2003; Sabourin, 2005, 2007, 2012).

This article has three sections. The first recalls Ostrom's approach toward the analysis of common natural resource management and the role she had assigned to reciprocity. The second section proposes a reading of the management of the commons according to the theory of reciprocity. The third section concludes the article by discussing the differences between both theories. The argument is based on applications of both approaches to the analysis of common national resource management systems in Northeast Brazil and New Caledonia.

Governance of common resources and reciprocity according to Ostrom

Collective action and management of the commons

According to Ostrom (1990), to respond to situations of interdependence between heterogeneous actors, collective action is implemented through institutions. Institutions are defined as a set of rules and norms that are put into practice by a group of individuals to organise some activities. Norms correspond to values within the group and rules are representations that are shared with the outside world and are possibly subject to sanctions (Ostrom, 1998). Collective action depends on the ability to develop and adapt common rules, the institutionalisation of which within a group is an incentive to cooperation and sharing.

In Governing the Commons, Ostrom (1990) showed through examples of the management of common resources, that the functioning of collective action does not follow the usual assumptions in economics. She criticised the so-called 'first generation' models of rational choice theory (Olson, 1966) and their hypotheses in terms of rationality

and perfect information of the actors. Ostrom showed that these models are rarely validated and are even contradicted by observations of practice as well as by experimental results such as games, models, and simulations (Cardenas and Ostrom, 2004; Kahan, 2005). Actors in real situations make better choices in terms of collective gain than those related to predictions of rational choice theories. This situation is explained on the one hand by the importance of 'face-to-face' interactions or inter-knowledge, which leads to mutual commitment, and on the other hand, by the capacity for innovation of the actors, which in turn allows the actors to learn together by changing or adapting the rules, to reduce asymmetries, and to increase collective gain.

Ostrom (1990, 1998) divided the application of reciprocal relationships into various structures: i) 'binary relationships': face-to-face, shared management or collective learning; and ii) 'ternary relationships': inter-knowledge leading to mutual commitment, transmission, and rule learning, etc. Then, she empirically verified that this search for symmetrical relationships (reduction of asymmetries) could generate more wealth (increase collective gain).

This empirical analysis is admittedly in line with the Francophone theory of reciprocity (as described above), but essentially in a framework of effectiveness of the interests of the actors, even if they are interests that became collective by the nature of the common resources, specifically because their private or individual use and exploitation are not easy. From 1997 onwards, Ostrom (1998) proposed the construction of 'second generation' collective action models based on mechanisms of developing norms, rules, and learning processes, all of which make it possible to increase the level of cooperation (Ostrom, 1998). Subsequently, Ostrom's analyses emphasised on reciprocity, trust, and reputation, as the core concepts at the heart of collective action (Ostrom, 2003). She showed how reciprocity, trust, and reputation could combine 'moral sentiments and material interests as the foundations of cooperation in the human economy' (Ostrom, 2005; Gintis et al., 2005). How are human, ethical, and emotional values considered in Ostrom's theories?

Reciprocity, trust, reputation, and common management

For Ostrom (1998), there is no cooperation without reciprocity, that is, without feedback or sharing from the other users of the group or community. Actors make an effort to identify other relevant and concerned actors. They consider them as possible cooperants. They cooperate a priori with those who express the same intention and refuse to cooperate if there is no reciprocity. There are sanctions for those who betray the trust of others, and such sanctions are part of the 'rules of the game'. Ostrom criticised the reductive interpretation of the norm of reciprocity in the 'tit for tat' strategy in game theory, which consists only in doing what the other does (Axelrod, 1997, 2006). For her, it is mutual trust that explains reciprocity. 'Participants must also have a certain level of confidence in the reliability of others and be willing to implement broad strategies of reciprocity. If participants are afraid that others may take advantage of them, no one will want to take costly actions, just to discover that others do not practice reciprocity' (Ostrom and Walker, 2003 p 3-17).

Confidence is defined as a specific degree of the probability that one agent will give to another to perform a given action.

'[...] We define trust as a 'particular level of the subjective probability with which an agent assesses that another agent or group of agents will perform a particular action'.

Thus, trust allows the trustor to take an action involving risk of loss if the trustee does not perform the reciprocating action [...]. Another crucial aspect of trust is that it involves an opportunity for both the trustor and the trustee to enhance their welfare' (Ostrom and Walker, 2003, p. 8-9).

One of the means explored by Ostrom to explain the permanence of reciprocity is the sanction or at least trust (and therefore the fear) in the implementation or fulfilment of the sanction (Ostrom, 2005). Ostrom sought the explanation of reciprocal behaviour in game theory through the repetition of laboratory experiments using models (Sethi and Somanathan, 2003) involving the willingness to coordinate their action based on trust between individuals, which requires minimum information on the reciprocal dispositions of others.

'The fact that the norm of reciprocity can prevail in a society implies that a significant proportion of individuals are trustworthy. Reciprocity as the dominant norm of interaction between agents constitutes, according to game theory, an effective balance of repetitions of the game of the social dilemma with multiple individuals in situations of incomplete information. For reciprocity to assert itself as a norm of social interaction, trustworthy individuals must not only overcome the temptation of the 'free rider' but need to coordinate their actions well with each other' (Ostrom, 2003, p. 16).

Elinor Ostrom thus considers reputation as one kind of information that motivates trust in others and thus facilitates reciprocity in cooperation (Ostrom, 1998, p. 12). Ethical values remain subject to the interests of users. Finally, the density of the network of strong reciprocators and their probability of interacting are set as conditions for the expression of the norm of reciprocity: since 'reciprocal' individuals are a minority in society, their impact depends on the density of their interactions.

'When reciprocal agents using conditionally cooperative strategies have a higher chance to interact with one another than with the surrounding population in general, they can invade a population composed of agents who always defect' (Ostrom, 2005, p. 16).

Ostrom (2005) proposed the adaptation of policies according to the density of action of 'reciprocal' individuals. The formalisation or institutionalisation of producer organisations may thus become necessary to legitimise, in a new context, peasant practices of reciprocity or ancestral social norms such as mutual help and shared management of common resources. It is the role of policymakers to ensure that these partners are recognised.

'Creating institutional mechanisms that local participant can use to organise themselves, such as through special districts, private associations, and local/regional governments. It is also important that policymakers not presume that they are the only relevant actors in efforts to solve collective action problems. They have partners if they are willing to recognise them' (Ostrom, 2005, p. 26).

To sum up, Ostrom pointed out a lot of evidence of cooperative and reciprocal behaviour, thus contradicting the theory of rational choice. Individuals achieve more than rational results by building the conditions for reciprocity, trust, and reputation to help overcome or reduce selfish and self-interested temptations.

'The central theme that links all discussion relates to the gains from association that are achieved when individuals are able to develop trust and reciprocity. Whether they come in the form of market exchange or personal relationships, the gains from association depend on the willingness of individuals to take risks by placing their trust in others.

Whether that trusting behavior is mutually beneficial and lasting depends on the trustworthiness of those in whom trust has been placed' (Ostrom and Walker, 2003, p. 8).

Management of the commons and reciprocity theory

A look back at the theory of reciprocity

The first element of the theory of reciprocity renewed by Temple and Chabal (1995, 2003) concerns the definition of the concept from a socio-anthropological point of view. The principle of reciprocity is not limited to a gift/counter-gift relationship between peers or symmetrical social groups. The reductionism of this definition, which has long prevailed in anthropology, leads to confusion between symmetrical exchange and reciprocity. This impasse persists as long as reciprocity is interpreted with the binary logic that is appropriate for exchange. This exchange can be reduced to the limit, that is, to a permutation of objects. Temple and Chabal (1995) proposed the use of ternary logic that includes a third party (*tiers inclus* in French). This third party appears as the 'third' element in the reciprocal relationship. Mauss (1924) and Temple (2003) interpreted it as the being which give sense to the a relationship of reciprocity and recommended accounting for it as the original structure of the inter-subjectivity that is irreducible to the exchange of goods or services that is freed from any social bond or debt.

From an economic point of view, reciprocity is not only an economic category different from market exchange, as Polanyi (1957) identified, but also has an economic principle that is opposed or even antagonistic to exchange (Temple and Chabal, 1995).

The second element of the theory, which is part of its universal nature, is that reciprocity can take many forms. Anthropology has often used this terminology to describe only the reciprocity of gifts, such as offerings, total services (Mauss, 1924), and potlatches, which constitute what Temple and Chabal (1995) referred to as the 'positive form' of reciprocity. Nevertheless, there is also a form of 'negative reciprocity'², for example, that of certain cycles of institutionalised revenge, as in the Awajun and Wampis societies (Temple and Chabal, 1995). Unlike exchange, of which development or extension is associated with the logic of competition and accumulation for profit, the logic underlying negative reciprocity is linked to a dialectic of honour, just as how that of gift is linked to a dialectic of prestige. However, the thirst for prestige (a source of authority in reciprocal systems) motivates the flood of the gift (Mauss, 1924, Temple, 2003): 'the more I give, the more I am'.

Between the two extreme expressions of negative and positive forms of reciprocity, communities and societies have established various intermediate forms in their pursuit of symmetry in relationships. For example, to control the ostentation or the agonistic (or unfriendly) gift leads to the destruction of the other in order to subdue him by the logic of prestige.

Third, reciprocal relationships can be analysed in terms of structure in the anthropological sense. They are broken down into a few elementary structures as proposed by Mauss

² Different from the sense of negative reciprocity in Sahlins (1972). Sahlins calls "negative reciprocity" the practice of profit-seeking and utilitarian approaches of the transaction.

(1924), Lévi-Strauss (1949), Scubla (1985), and Temple (1998). These reciprocal relationships, structured in their symmetrical form, generate ethical values as identified by Aristotle in *Nicomachean Ethics* (350 BC) that is, the relationship of reciprocity in a symmetrical bilateral structure³ generates a sense of friendship and the structure of symmetrical distribution of goods within a group generates a sense of justice. Thus, other types of relationships in other structures can produce other specific values. This element is probably the most complex part of the theory of reciprocity as proposed by Temple and Chabal (1995) and the most difficult to validate, since it concerns not only the production of material goods, but also that of human feelings and values. It is also the most original and interesting element in the theory, the one that offers the possibility of alternative analyses and proposals in terms of social or solidarity economy, or simply for a 'more human' economy (Temple, 1997).

To sum up, there are several fundamental structures of reciprocity that generate different feelings and therefore different values; and there are several forms of reciprocity that give them different imaginary possibilities. The feeling produced by reciprocal relationships, that of the original being, can be captured in the imagination of prestige or revenge, or alliance, giving rise to positive, negative, and symmetrical forms of reciprocity. Temple (1997, 1998, 2003) showed how, in societies dominated by reciprocity, structures, levels, and forms are articulated to form different systems of reciprocity, which were horizontal (community or segmental societies) or vertical (hierarchical societies).

Most common resource management systems are based, for example, on a specific collective binary reciprocal structure, namely 'sharing'. In the sharing structure, everyone faces everyone: the emotional and ethical values generated by sharing relationships are a sense of belonging and trust. The feeling of belonging to a collective is very strong. It appears spontaneously in most peasants' and farmers' testimonies, associated with the notions of unity, solidarity, strength, and life of the collective or community being.

Recognition of shared management and updating reciprocity

When commons management arrangements based on reciprocity are recognised by the State and public policies, sharing relationships generally succeed in adapting (updating) within new institutional structures that are better suited to the modern context (Sabourin, 2005; Sabourin *et al.*, 2005).

Brazilian common pasture experience

In Northeast Brazil, land speculation in the areas where irrigated perimeters are located has led to illegal invasions and private appropriation of common pastures. The solution negotiated between the State and farmers in northern Bahia, that is, the granting of collective titles of land ownership of these communes to producer associations has set a precedent for sustainable and local agrarian reform (Sabourin *et al.*, 1995, 2005).

In the Juazeiro, Senhor do Bonfim, and Uauá municipalities, this legislation has made it possible to reconstitute a body of collective rules of sharing common pastures, via a new

_

³ For the theory of reciprocity, this type of cooperation corresponds to an elementary structure of binary reciprocity, namely sharing. It is a symmetrical structure among individuals within the group and between each individual and the group. The sharing relationship inevitably comes under tension or in contradiction with the logic that is regulated by the principle of exchange.

form of organisation, namely the producers' association. There is an update, not of the structures, but of the framework of sharing as the nest of the reciprocity relationships.

Another example of modern public recognition of reciprocity practises can also be found in Northeast Brazil applied to local seeds management. With a specific law, the Federated State of Paraíba has recognised and subsidised community seed banks for the conservation and production of local maize and bean varieties, for economic reasons of food security and ecological considerations in terms of biodiversity conservation (Sabourin, 2008).

It is precisely in the field of collective resource management that farmers' and breeders' organisations can sometimes lead to the adaptation or updating of the rules of reciprocity. These organisations constitute a local legal space that is politically recognised by society and the State, which is not the case with informal community structures. These producers' associations provide a new regulatory framework in order to adapt to the new management norms and rules that can be systematised and, even if they are not understood, at least respected or even sanctioned by the global society (Sabourin, 2001a).

New Caledonia Kanak common lands

Since the Nouméa Accord in 1998⁴, the recognition of Kanak land⁵ has left the responsibility for common tribe land management to the customary system, which raised new questions such as, 'What are the roles of the chiefdom, the councils of elders, clans, women, youth, and the new collective or associative structures in tribes?' After the Kanak revolts of 1984, the Groupement de droit particulier local (GDPL – Local Group of Specific Local Rights) was created to collectively manage tribal lands while reconciling the productivist requirements of the French State and of the merchant exchange economy. This status sought to reconcile the rules of customary law (as applicable to individuals) and those of common Roman law (as applicable to property), and to build a bridge between the Kanak and the European worlds. The tribal model, which carried and continues to carry strong inequalities in land distribution should not be idealised. Melanesians are organised according to chiefdom societies and are therefore relatively hierarchical (Sabourin and Pédelahore, 2002).

Nevertheless, traditional land management according to the rules of reciprocity must ensure that the basic needs of each family are satisfied. Thus, the system of allocation by land keepers was relatively flexible and provided modalities for the reception of landless clan families or those displaced because of conflicts. Now, in New Caledonia, the possibility of creating a customary land register is being considered. However, the land register fixing the allocation of collective tribal land may contradict a customary practice in place, such as receiving new land applicants or receiving new clans or births (Sabourin and Pédelahore, 2001). Contradictions are therefore frequent in the context of post-colonial land reforms, even if they are intended to do so in the name of the rights of the

_

⁴ This agreement between the French government, the pro-independence parties and the loyalist party provides for territorial autonomy of the Kanak provinces managed by the pro-independence parties, and a sequence of referendums allowing access to independence between 1998 and 2021.

⁵ By Kanak lands we mean, on the one hand, the territories of the reserves called tribes in which the indigenous population was concentrated during the colonisation process and, on the other hand, the original lands of the Kanak clans which were returned or redistributed to them by the French State via a land reform (Dauphine, 1989).

first people and the development of the entire local population, particularly in mixed systems that combine both reciprocity and exchange logic.

Tensions and contradictions between management policies and user communities

There is a fundamental contradiction in terms of land ownership and use between local or community management and development policies, including a large part of the proposals for land or agrarian reform. For indigenous people and peasants, land is not just a commodity, created in order to be sold (Polanyi, 1957). As the available space is often insufficient for the survival of the family, it constitutes, above all, a place of residence, a basis for other complementary activities. It is, of course a place to live, a matter of common heritage, identity, and a seat of origin, as well as the essence of the group and its symbolic brands (fetishes, mounds, rites, etc.). In this sense, land though inalienable, is not a commodity.

Brazilian Northeast water management experiences

The same applies to water management. In Northeast Brazil, as part of the agricultural modernisation of the 1970s and 1980s, the Federal Government with the support of the World Bank built major irrigation infrastructure.

The decentralisation and management of boreholes, reservoirs, and irrigated areas are not necessarily ecological slogans that oppose the small dam built on community land in favour of the large public or private dam. It is justified insofar as it is at the local level at which production is organised and at the level at which collective action can work, which in turn makes it possible to manage water resources at a lower cost and with greater efficiency. However, collective action does not mean unitary collective organisation or cooperative production. It depends on the promotion of dialogue, consultation, and coordination between different types of actors that are situated in the same catchment area. This applies to collective self-help or *mutirão* work for the construction and maintenance of small dams (Sabourin *et al.*, 2002). Collective self-help is adapted for the management of localised resources by small groups such as women in a neighbourhood, farmers living in the same lowland, etc.

Nevertheless, the construction and maintenance of community structures also operate as occasions for conflicts that highlight the limits of the management of collective property. The forms of individual or collective appropriation have an impact on the processes of exclusion. The violent history of conflicts over water and land in Northeast Brazil proves this. However, conflicts can also bring new solutions through the negotiations they generate and the collective learning processes associated with them.

In Northeast Brazil, both church and State interventions since the 1970s and 1980s followed by interventions by NGOs and multilateral agencies have multiplied, resulting in a free distribution by gift of wells, pumps, cisterns, dams, and irrigation systems. The maintenance of collective water supplies was organised previously by the patriarch of the community, in return for a specific form of mutual help. With the clientelist distribution of public tanks and dams, the rigour and motivation for this maintenance is often rather controversial. The status of this collective infrastructure in terms of user rights and responsibilities has become ambiguous.

Traditionally, there were rules of access and use for each type of community or individual reservoir. These rules have often been disrupted by external interventions in water infrastructure and management. Donations to the community that do not fit into the logic of reciprocal structures become difficult for peasants to manage. They cause conflicts over usage rights and maintenance duties when they do not destroy reciprocal practices by devaluing them or making them dependent on external powers or obligations. There is then some confusion in terms of responsibility as to the origin and meaning of the gift, and therefore as to the sharing of these collective goods. Conflicts and negotiations concerning their maintenance have arisen between users and especially between communities and public authorities. According to the peasant communities, the State should assume the maintenance and operation of the collective facilities it has built for public use (usually before an election). This type of infrastructure would move from a state of common good to a state of public good as defined by Ostrom and Ostrom (1978).⁶ The State considers them to be common goods and the result of cooperation between farmers and public services, and thus the maintenance of this becomes the responsibility of the local population. The same principle of transferring responsibility for infrastructure and equipment management to users finally prevailed in the case of large public irrigation schemes, but under conditions that left small producers with little choice in terms of organisation.

New Caledonia land management

The Kanak land claim was carried collectively by clans that were united in their pursuit of their objectives of legitimising their demand and creating a balance of power in their favour. However, it does not necessarily imply a collective project for the management or economic development of reclaimed land (Sabourin, 2001b). This is particularly true for the development of former tribal lands cleared by European settlers that were then transformed into pastures and reclaimed by Melanesians under the land reforms. Bovine breeding does not correspond to the Kanak tradition and the sharing of a herd quickly finds its limits. The administration's proposal for shared management of a collective herd in an extensive *ranching* system quickly proved unrealistic (Dauphiné, 1989; Djama, 1999). The primary reason for the Melanesian claim is linked to a demand for 'reparation' for the damage caused by colonial land grabbing and a return to the land identity base. The use of the GDPL as a structure for the development of economic activities is limited because of the absence of statutes specifying the rights and duties of its members. Finally, banks are still reluctant to lend funds to these hybrid or customary structures.

Thus, the difficulty encountered in integrating Melanesians (and their land allocations) into a 'common law' system built for and within a productivist capitalist society must not only be interpreted as the inability of custom to adapt to the requirements of the dominant exchange market model (Sabourin and Djama, 2003).

I have analysed another example with the Kanak local markets. The study of local markets for rural products in the Northern Province of New Caledonia (Sabourin *et al.*, 2006; Sabourin and Tyuienon, 2007) revealed marked contradictions between the colonial development model through the market exchange imposed by the French administration and the proposals to update the reciprocal structures of the Kanak populations. As Kanak

⁶ Ostrom and Ostrom (1978) defined public goods as goods with free access for all and defined common goods as public goods that are subject to restrictions upon access or user rights.

women producers were prohibited from redistributing unsold goods at the end of market operations by being awarded prizes through a game of bingo, some women's associations (Canala, Hienghène, etc.) then proposed to sell the products as soon as the market reopened, based on a hybrid logic incorporating the ideals of exchange and reciprocity. Market exchange is used for European customers but unsold goods are redistributed among the producers (mainly women) by means of bingo (Tyuienon, 2004). This experience illustrates both the possibility of setting up mixed systems, combining exchange and reciprocity practices, and the revitalisation of 'reciprocal markets', that is, a bilateral ternary reciprocal structure where services flow in both directions (Temple, 2003).

Between anthropological reciprocity and the Ostrom norm of reciprocity: differences and dialogue

Ostrom (1990) proposed, on the one hand, the analysis of the social construction of local institutions adapted to suit the management of common resources within a framework of cooperation, based on collective choices and behaviours. On the other hand, she set the norm of reciprocity as a core concept at the heart of these arrangements (Ostrom, 1998; Ostrom and Walker, 2003, Ostrom, 2005).

Ostrom considered reciprocity to be both an internalised moral norm and a principle of social exchange characterised by a willingness to cooperate. She identified and described some recurring structures of reciprocity. Ostrom also attached importance to reciprocity to the point of making public policies depend on the proportion of 'reciprocal' actors (Ostrom, 2003, p. 18).

Beyond the common findings between Ostrom and the theory of reciprocity, there is a difference in both the approach and the postulates, although it may seem that the distance between both is small. First, the proximity or similarity of the terms and categories creates various risks of confusion. Ostrom viewed trust, reputation, and reciprocity as social norms that correspond to the attributes of users, or even user groups. However, for the renewed anthropological theory of reciprocity, trust is an ethical value, as is reputation, since it corresponds to the recognition of the values of others. On the other hand, reciprocity encompasses all structures to produce ethical values. It is therefore neither a norm nor an ethical value. The main difference lies in the fact that for the theory of reciprocity, trust and reputation (prestige) are ethical values produced by reciprocal relationships according to a project of a community or society, based on the willingness of the human beings to live together even before the project exists to exploit or produce nature together.

For Ostrom, the relationship with nature partly determines the relationship between people and nature. The fact that land feeds people implies that human beings appropriate the land and privatise or collectively manage it, based on the category of the resource. There are 'attributes of goods' (resources) that determine human behaviour. For the theory of reciprocity, there are relationships between people that can define property as social responsibility, thus associating appropriate good with a social function such as the river irrigates the land and the land produces food. However, the relationship with nature is ordered to the relationship between human beings, that is the river irrigates the lands of all people; the land produces food for all people. This is may be the main difference also with Sahlins' interpretation of reciprocity.

Marshall Sahlins in Stone Age Economics (1972), drawing on Mauss, Polanyi and Godelier (1966, 1970), also rediscovers the existence of economic categories different from capitalist exchange, which he groups within the domestic mode of production. However, he extends the confusion between exchange and reciprocity by establishing a typology of categories of exchange and the quality of social links between partners according to their degree of reciprocity. He distinguishes between three forms of reciprocity: i) the generalised reciprocity when solidarity and social ties take precedence over the material value of the exchange; ii) the balanced reciprocity when there is a search for an equivalence of value between services; and finally, iii) the negative reciprocity in the case of profit-seeking and utilitarian approaches. Sahlins recognises the specificity of the gift; but, like Mauss, he imagines a giver who interprets the counter-gift as an exchange. The reciprocity of this fact is half-gift half-exchange. To justify the overabundance of reciprocal societies, Sahlins then brings in the interest that would incite a member of the group to exchange his services with the community, just as Lévi-Strauss imagined, to explain polygamy, that the most powerful warrior offered the others security in exchange for women. The chief would offer his services in exchange for an overproduction of material goods, which he would then redistribute. The ideology of the chief can only be explained here in a negative way: enclosed in themselves, primitive communities would be incapable of surpassing themselves, condemned to wither away. From then on, the chief would be the providential man who would give the community imaginary goals to overcome this threat of chaos. For Temple (1994), Sahlins considers reciprocity as the circulation of use values instead of the re-production of these use values.

Until the 2000s, Ostrom (1998) considered that the norms attributed to user communities (trust, reputation, reciprocity, the sense of belonging such as interdependence and common perception) were historically and socially constructed. Nevertheless, she did not identify the origin of the reciprocal relationships she highlighted and then validated through experimental economics by mobilising game theory. Ostrom enriched the use of game theory by mobilising multi-agent models and powerful simulation tools (Cardenas and Ostrom, 2001; Rouchier et al., 2001; Collectif Green, 2011) that are more complex than conventional models. Since these tools and models are based on complex or realistic assumptions of human behaviour and not on the simplistic premises of rational choice theory, the results confirm various hypotheses including those of reciprocal theory (Sethi and Somanathan, 2003). To explain reciprocity, Ostrom mobilised the pre-existence of trust, while for the anthropological theory of reciprocity, it is symmetrical reciprocal relationships in sharing structures (of common resources) that produce trust. Repeated simulations of interacting models involving reciprocal rules and trust also show this as indicated by Sethi, and Somanathanb (2003). Simulation and economic experiments work, and confirm the empirical observations, as soon as a variable of knowledge of the other's behaviour built from shared experience is introduced (Cardenas and Ostrom, 2004; Kahan, 2005; Ostrom, 2005).

Similarly, Ostrom sought an explanation of the origin of reciprocal practices and relationships in 'hard' sciences such as biology (Ostrom, 2003). She then mobilised work on the biological origins of reciprocity and trust (Kurzban, 2003) and on the notion of mutual altruism in socio-biology (Trivers, 1971).

'To explain the existence of altruism on the basis of reciprocity, Kurzban defines natural selection in terms of design or adaptations rather than behavior. Specifically, an organism can be thought of as being made up of subsystems, each designed to solve a particular problem and contribute to reproductive success. In this view, natural selection is a process that, over time, selects the best designs in solving a problem' (Ostrom, 2003, p. 9).

Attempts to find an altruistic principle in the biological data of the living world have not been proven yet.

'It is in the structure of reciprocity, that is, a social, not a biological structure, that a root cause must be found: there is no altruistic principle, no principle of primary gift, which could find its place in the individual, in the genus or in the species, but if we situate human origin not in the individual, but in the relationship of reciprocity then it is possible to say that reciprocal interactivity is the matrix of an irreducible value to the specific skills and interests of the parties involved' (Temple, 2004: 14).

This value is the feeling shared by everyone and it lends both sides the ability to find meaning in what is invested in interactivity. This appearance of meaning for all, is what Temple (2004) suggests that we can really call as the common good.

Conclusion

Despite empirical evidence and a recurrent intuition about the intimate relationship among reciprocity, trust, and reputation, Ostrom remained trapped within the limits of the utilitarian framework that she lent to community management and its regulation by a minority of altruistic and 'reciprocal' individuals, organised in more or less dense networks, in the pursuit of an egoistic sharing of common interest. Ostrom does not question the future of production resulting from community management or ownership, that is, she does not investigate its integration into the capitalist exchange market.

To explain reciprocity, she invoked the prerequisite of trust, whereas for the theory of reciprocity, on the contrary, there are symmetric reciprocal relationships in sharing structures (more precisely, among common resources) that produce trust. Indeed, this is demonstrated by modelled repetitions of games involving trust and reciprocity, thus introducing a variable of knowledge on the behaviours of others based on their common experience (Kahan, 2005). It is probably around Ostrom's latest work in experimental economics that we can look for validations of both her empirical hypotheses and the proposals of the theory of reciprocity.

It is a common observation that both approaches recognise that the shared management of common resources works better in small groups or in societies based on the construction and shared respect for common rules. Reciprocal relationships work all the better when everyone knows that their interlocutors are also in a reciprocal framework, which Ostrom also confirmed in her mobilisation of game theory.

Admittedly, institutional or public recognition of shared resource management arrangements based on reciprocal relationships can guarantee or facilitate the sustainability of these structures (Sabourin *et al.*, 2005). However, the most important thing in this sense is to guarantee the reproduction of ethical human values that they help generate, namely trust, reputation, mutual respect, responsibility, and justice.

is does not presuppose or prevent the construction of values that are co

⁷ This does not presuppose or prevent the construction of values that are common to humanity at large such as the aspiration for peace, the propensity for a form of justice, and concern for future generations

Acknowledgement

The author would like to thank the organisers of the Research School with E. Ostrom on "Collective Action: Epistemology, Theory, Methodology" (June 2011) for their excellent work and the opportunity to dialogue with Elinor Ostrom. Many thanks to the reviewers of the Journal of Peasant Studies for their contribution to the improvement of the text.

References

Anspach, M. R., 2002. À charge de revanche : figures élémentaires de la réciprocité, Paris : Éditions du Seuil.

Aristotle,[-350] 1994. *Ethique à Nicomaque*, 8, 1132b-1133a, trad. J. Tricot, Paris, Vrin, p. 238.

Axelrod, R., 1997. *The Complexity of Cooperation*, Princeton: Princeton University Press.

Axelrod, R., 2006. "Agent-based Modeling as a Bridge Between Disciplines" in: Tesfatsion L. and Judd K. (ed.), *Handbook of Computational Economics*, Vol.2 Amsterdam, North-Holland: Elsevier, 1565-1584.

Caillé, A., 2000. Anthropologie du Don : le tiers paradigme, Paris: Desclée de Brouwer.

Cardenas J.M.and Ostrom, E. 2004, What do people bring into the game? : experiments in the field about cooperation in the commons. International Food Policy Research Institute, Washington, D.C., U.S.A: Capri Working Paper n°32

Collectif Green, 2011. Analysis of a research trajectory on renewable resource management with reference to the work of E. Ostrom, in *École-chercheur with E. Ostrom, Collective Action: Epistemology, Theory, Methodology, Montpellier: CIRAD, Agropolis, 21/06/2011.*

Dauphiné, J., 1989. Les Spoliations foncières en Nouvelle-Calédonie (1853-1913), Paris : L'Harmattan.

Djama, M., 1999. "Transormations agraires et systèmes ruraux mélanésiens en grande terre de Nouvelle-Calédonie ", *Journal d'Agriculture Traditionnelle et de Botanique Appliquée*, 41 (1): 201-224. https://doi.org/10.3406/jatba.1999.3708

Gardin, L. 2006, Les initiatives solidaires. La réciprocité face au marché et à l'Etat, Eres, Paris.

Godbout T. J. 2007. Ce qui circule entre nous, Paris, le Seuil.

Godelier M. 1966. Rationalité et irrationalité en économie. Paris: Editions Maspero.

Godelier M. 1970. *Sur les sociétés précapitalistes*. Textes choisis de Marx, Engels, Lénine, Paris, Éditions sociales, 1970

Gouldner, A.W., 1960. "The norm of reciprocity", *American Sociological Review*, 25 (2): 161-178.

Gintis, H., Bowles, S., Boyd, R., Fehr, E., 2005. *Moral Sentiments and Material Interests: The Foundations of Cooperation in Economic Life*, Cambridge (MA): MIT Press, 253-275.

Kahan, D.M., 2005. The logic of reciprocity: Trust, collective action, and law, in Gintis, H., Bowles, S., Boyd, R., Fehr, E., *Moral Sentiments and Material Interests: The Foundations of Cooperation in Economic Life*, Cambridge (MA): MIT Press, 339-378

Kolm, S C. and Mercier Ythier J. (eds) 2006. *Handbook of the Economics of Giving, Altruism and Reciprocity*, North – Holland: Elsevier.

Kurzban, R., 2003. Biological foundations of reciprocity, in Ostrom, E., Walker, J. (Eds), *Trust and Reciprocity: Interdisciplinary Lessons for Experimental Research*, New York: Russell Sage Foundation, 105-127.

Lévi-Strauss, C. [1949] 1967. The Elementary Structures of Kinship, The Hague: Mouton.

Malinowski, B. [1922] Argonauts of the Western Pacific, London, Routledge, 260p.

Mauss, M. [1924] 1950. Essai sur le Don, in Sociologie et Anthropologie, Paris: PUF.

Olson, M. [1966] 1978. Logique de l'action collective, Paris : PUF.

Ostrom, V., Ostrom, E., 1978. "Public goods and public choices", in Savas, E.S (Ed.), *Alternatives for Delivering Public Service: Toward Improved Performance*, Boulder, (CO): Westview Press, 7-49.

Ostrom, E., 1990. *Governing the commons: The Evolution of Institutions for Collective Action*, New York: Cambridge University Press.

Ostrom, E., 1998. "A behavioural approach to the rational-choice theory of collective action", *American Political Science Review*, 92, 1-22. https://doi.org/10.2307/2585925

Ostrom, E., 2003. Toward a behavioral theory linking trust, reciprocity and reputation, in Ostrom, E. and Walker, J. (Eds), *Trust and Reciprocity: Interdisciplinary Lessons for Experimental Research*, New York: Russell Sage Foundation, 19-78.

Ostrom, E., 2005. Policies that crowd out reciprocity and collective action, in Gintis, H., Bowles, S., Boyd, R., Fehr, E., *Moral Sentiments and Material Interests: The Foundations of Cooperation in Economic Life*, Cambridge (MA): MIT Press, 253-275.

Ostrom, E. and Walker, J. (Eds), 2003. *Trust and Reciprocity: Interdisciplinary Lessons for Experimental Research*, New York: Russell Sage Foundation.

Polanyi, K., 1957. The economy as an institutionalized process, in Polanyi, K., Arensberg, C. and Pearson H. W. *Trade and Market in the Early Empires, Economies in History and Theory*, Glencoe, Ill.: Free Press

Ribot, J.-C. and Peluso, N.-L., 2003. "A theory of access: Putting property and tenure in place", *Rural Sociology*, 68. https://doi.org/10.1111/j.1549-0831.2003.tb00133.x

Ribot, J.-C., Agrawal, A. and Larson, A.M., 2006. "The decentralization of natural resource management: Theory meets political realty", *World Development*, 34, 11, 1864-86.

Rouchier, J., Bousquet, F., Requier-Desjardins, M., Antona, M., 2001. "A multi-agent model for describing transhumance in North Cameroon", *Journal of Economic Dynamics and Control*, 25, 527-559. DOI: 10.1016/S0165-1889(00)00035-X

Sabourin, É., Caron, P., Silva, P.C.G., 1995. "Enjeux fonciers et gestion des communs: Le cas des vaines pâtures dans la région de Massaroca (Bahia, Brésil)". *Cahiers de la Recherche Développement*, 42:7-21.

Sabourin, E. 2001. Changements sociaux, organisation de producteurs et intervention externe in Caron & Sabourin (Coord.) Paysans du Sertao Montpellier, Cirad, Repères, pp 107-134.

Sabourin E., 2001b. Besoins et perspectives de gestion concertée de l'aire de chasse de Forêt Plate, Commune de Pouembout, Nouvelle Calédonie, IAC-SRDL 13/2001, Pouembout, 32p. available at : https://agritrop.cirad.fr/507610/7/ID507610.pdf

Sabourin, E., 2005. Les tensions entre lien social et intérêts matériels dans les processus d'action collective, in Sabourin, É. and Antona, M. (Eds), *Les tensions entre lien social et intérêts matériels dans l'action collective*, Paris : Cirad, Bibliothèque du Mauss, 13-39.

Sabourin, É., 2007. *Paysans du Brésil: entre échange marchand et réciprocité*, Coll. Indisciplines, Versailles : Éditions Quae.

Sabourin, E., 2008. Ressources communes et multifonctionnalité au Nordeste du Brésil in Groupe Polanyi (Ed.) *La Multifonctionnalité de l'agriculture : une dialectique du marché et de l'identité*, Versailles : Éditions Quae, 191-211.

Sabourin, É., 2011. Management of commons in Elinor Ostrom: A dialogue with the theory of reciprocity, in *École-chercheur with E. Ostrom, Collective Action: Epistemology, Theory, Methodology*, Montpellier, Cirad, Agropolis, 21/06/2011.

Sabourin E. 2012. Organisations et sociétés paysannes: une lecture par la réciprocité. Versailles, Ed. Quae, 305 p. Collection « Synthèses »

Sabourin E., Sidersky, P., Matos, L.C., Trier R. 2002. "Gestion technique vs gestion sociale de l'eau dans les systèmes d'agriculture familiale du Sertão brésilien", *Sècheresse*, 13 (4) 274-83.www.secheresse.info/article.php3?id_article=2361

Sabourin E. and Djama, M., 2003. "Pratiques paysannes de la multifonctionnalité : Nordeste brésilien et Nouvelle Calédonie". *Economie Rurale*, 273-274 : 120-133

Sabourin, E. and Pédelahore, P., 2001. Traditional land and collective management systems in New Caledonia North Provincia, in *Proceedings of IASCP Pacific Regional Meeting "Tradition and Globalisation: Critical Issues for the Accommodation of Common Property Resources in the Pacific Region*", Sept. 2-4, Brisbane, Australia, 94-110.

Sabourin, E. and Pédelahore, P., 2002. "Indigenous land and collective tenure systems in New Caledonia", *The Common Property Resource Digest*, 61, 2-4.

Sabourin, E, Duque, G., Diniz, P. C. O. Oliveira, M. S. L., Florentino, G. L., 2005. "Public recognition of collective actors in family farming in the Nordeste", *Cahiers Agricultures*, 14, 1, 111-116. https://revues.cirad.fr/index.php/cahiers-agricultures/article/view/30498

Sabourin, E., Grochain, S., Tyueinon, R. Pédelahore, P., 2006. Non market services and economic integration: Endogenous development dynamics for local resources, in Mokaddem, H., *Eleven Approaches to Culture and Nature in the South Pacific*, Nouméa, Secrétariat of the Pacific Community, 87-101.

Sabourin, E. and Tyuienon, R., 2007. "Produits, monnaie et bingo: les marchés ruraux en Nouvelle-Calédonie, entre échange et réciprocité, *Revue du Mauss*, 29, 131-158. DOI: 10.3917/rdm.029.0301. https://www.cairn.info/revue-du-mauss-2007-1-page-301.htm

Sahlins M. 1972. Stone age economics. New York, Routledge, 328p.

Scubla, L., 1985, "Logiques de la réciprocité", Cahiers du CREA, 6, École Polytechnique, Paris.

Sethi, R., Somanathan, E., 2003. "Understanding reciprocity", *Journal of Economic Behavior & Organization*, 50, 1, 1-27.

Simmel G. [1908] 2009. Sociology: Inquiries into the construction of social forms, Leiden, Boston, Brill

Temple, D., 1983. La dialectique du don : essai sur l'économie des communautés indigènes, Paris : Diffusion Inti.

Temple, D., 1994. Critique des thèses de Marshall Sahlins sur la naissance de l'économie available at : http://dominique.temple.free.fr/reciprocite.php?page=reciprocite_2&id_article=36 accessed 15/01/2014).

Temple, D., 1997. "L'économie humaine", Revue du Mauss, 10 (1): 103-109.

Temple, D., 1998. "Les structures élémentaires de la réciprocité", *Revue* du *MAUSS*, 12 (2): 234-242.

Temple, D., 2003. *Teoría de la reciprocidad*, La Paz, Bolivia: Padep/ GTZ, 3 volumes.

Temple, D. 2004. Séminaire sur la réciprocité. available at http://dominique.temple.free.fr/reciprocite.php?page=reciprocite&id_rubrique=49, accessed on 15/01/2014

Temple, D., Chabal, M., 1995. *La Réciprocité ou la Naissance des valeurs humaines*, Paris : L'Harmattan.

Thurnwald, R. 1932. *Economics in Primitive Communities*, London: Oxford University Press

Trivers, R.L., 1971. "The evolution of reciprocal altruism", *Quarterly Review of Biology*, 46, (1): 35-57.

Tyuienon, R., 2004. Combinaisons et incompatibilités entre deux modèles économiques antagonistes. Les marchés de proximité des producteurs kanak Province nord de la NC 2000-2002, Collège coopératif (Paris), Université Paris 3 Sorbonne Nouvelle. 170 p.