

Collective action, governance structure and organizational trust in localized systems of production. The case of the AOC organization of small producers

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The objective of this paper is to explore the collective organizational forms that prevail in localized systems of production. More precisely, in a study on the governance of groups of small agricultural producers, we found that a club-based organization with a strong internal governance structure presents great advantages. Collective action, contractual relations and organizational trust are important in this governance system. This paper contributes to the discussion on Appellation d'Origine Contrôlées (AOCs, Designation of Controlled Origin) and more particularly provides new elements that help to understand the forms of collective organization that prevail in these systems. The amount of research dedicated to AOCs has increased so much that it is no longer legitimate to claim that they are just an obsolete form of local production with no future, or a harking back to the past. Yet, they are still often considered as curiosities, and few studies in the field of economic organization have focused on the organizational methods that prevail in these localized groups of producers. Basing ourselves on a specific example – that of the Comté AOC – economic arguments are presented in terms of legitimacy. It is shown (1) that it is possible to analyse the methods of internal organization of an AOC, and (2) that this analysis should be centred on a common good – reputation – that justifies and requires this form of co-ordination and brings into play mechanisms of organizational trust.

Keywords: AOC; localized systems of production; governance; clubs; trust.

1. Introduction

The objective of this paper is to explore the collective organizational forms that prevail in localized systems of production. Our approach is linked to two trends of analysis that hold an important place in contemporary literature.

First, the research concerning the processes of collective action, which highlights group and co-ordination phenomena outside commercial frameworks. In particular there are the works dedicated to commons, following Schelling's founding work, and the analyses concerning the iterated prisoner's dilemma (Axelrod 1984), in their spatial form (Nowak and May 1992) or their conventional form (Young 1993). Second, the literature that concentrates on localized systems of production, and which tries to identify the modalities of organization and the factors of performance in these entities. The best example is provided by the studies concerning industrial districts (Pyke *et al.* 1990), clusters (Porter 2000) or regional systems of innovation (Maskell and Malmberg 1999).

However, these approaches have severe drawbacks: they either do not take the rules imposed in these local systems (in the first case) sufficiently into account, or they over-estimate the virtues of the functioning of the latter (in the second case). This is why we have chosen to analyse the modalities of organization of a local system as they are internally, and to focus on the roots of behaviours and the rules that govern this system. In particular, an analysis in terms of trust seems to be rich in potential, especially when it associates inter-personnel interactions and the organizational dimensions in its reflection on the emergence and the functioning of local collective actions.

Our approach is based on an analysis of the modalities of organization and governance in groups of small agricultural producers, and particularly in an AOC (*Appellation d'Origine Contrôlée*; Designation of Controlled Origin) system of production. The amount of research dedicated to AOCs has increased so much (Béranger and Valceschini 1999, *Economie Rurale* 2000) that it is no longer legitimate to claim that they are just an obsolete form of local production with no future, or a harking back to the past. In fact, there is a consensus as to the advantages of this method of product signalling and the role it plays in the context of regional development policies or in terms of developing local know-how and typicity. Yet, AOCs are still often considered as curiosities, and even though we are gaining a better understanding of how the quality and typicity of their products are marketed, few studies in the field of economic organization have focused on the organizational methods that prevail in these localized groups of producers (Perrier-Cornet and Sylvander 2000).

The aim here is to propose a theoretical framework for the analysis of AOCs, and more particularly to provide new elements that will help us to understand the forms of collective organization that prevail in these systems. Basing ourselves on a specific example – that of the Comté AOC – we will present both economic and organizational arguments in terms of legitimacy. We will show that it is possible to analyse the methods of internal organization of an AOC and that this analysis should be centred on a common good – reputation – that justifies and requires this form of co-ordination and brings into play mechanisms of organizational trust. The questions concerning the production and the characteristics of goods with a label of origin will not be discussed in this paper; instead, our intention is to analyse the forms of co-ordination and the structures of internal governance.

In this study a two-level analysis was carried out. First, from an empirical point of view, we show that an economic and organizational analysis of AOCs – which represent an important part of many countries' agricultural production – is necessary in order to demonstrate that they are not an obstacle to free competition. Second, from a theoretical point of view, it is necessary to describe their internal modes of organization, in order to reveal their governance structures and the importance of trust relations in the local production network.

In this study on the governance of groups of small agricultural producers, we aim to show that a club-based organization with an internal governance structure presents advantages for the functioning of localized systems of production. Collective action, contractual relations and organizational trust are important in this governance structure, as they help to maintain cohesion between the local producers and their commitment to common objectives, but also because they ensure the production of goods that are accepted on the market and have added value.

The main characteristics of AOCs are described in section 2. Our case study, the Comté Cheese AOC is then presented in section 3. In sections 4 and 5, we show that

the Comté AOC can be analysed in terms of the theory of clubs as it possesses the attributes of a club. However, we show that this approach cannot account for all organizational procedures at play within the local production system (section 6). This is why we analyse the modes of organization of the Comté AOC system, which is a system built on three main pillars: an internal governance structure, incomplete contracts and organizational trust (section 7). To conclude, the main goals and results of this study are summarized.

2. The ‘*appellation d’origine contrôlée*’ (AOC)

AOC is a local appellation used in France to designate a product whose qualities and characteristics are primarily due to the geographical environment (a well-known and well-defined production area) in which they are produced, that includes both natural and human factors. For a product to be AOC certified, it must be produced, in specific conditions, within a geographically defined production area, it must have a duly established reputation and be the object of a certification procedure based on technical requirements; it must also be historically founded on ‘old, fair and constant practices’. In all cases, the nature of the certification under consideration appears to be three-fold. First, a certain number of characteristics and production standards must be achieved (for instance, the regularity of the product, its production based on selected (mostly non-industrial) raw materials, the banning of chemical inputs). Second, it is believed that the specificity of a product is guaranteed by tradition and typicity rather than the use of scientific expertise (this tradition is guaranteed with reference to the local history and reputation of the product). Finally, the development of the technical specifications is usually transferred to the economic and professional sectors, with the collaboration of an inter-professional association for the defence of local interests and the INAO (*Institut National des Appellations d’Origine*; National Institute of Appellation of Origin). To be granted the AOC designation, a product must be examined and approved by the committee that often demands additional information and more precise technical specifications. The committee is normally aware of the reputation of the products. The products under examination must be associated with tradition and quality. Until the 1990s there were very few AOCs but in the last few years the INAO has created many others, not only in the wine or cheese sectors but also in other agro-food sectors (olives, fruit and vegetables, meat, honey). Currently, almost 60% of the wines (467 appellations, that is 52% of the total production, 15 billion Euros in turnover) and 16% of the cheeses (47 appellations, that is 20% of the total production, 2 billion Euros in turnover) have been granted this appellation.

The main economic justification for the existence of the AOC label resides in the questions concerning food products, not only with respect to their price, in the sense of Akerloff (1970), but above all to their ability to meet consumer expectations. It constitutes a sign for consumers and provides them with information concerning certain characteristics of the goods that are presented. These characteristics relate to both the origin of the product and to various criteria of production. It has for a long time seemed necessary to implement description procedures designed to protect and satisfy their expectations because of the concerns of consumers or their demand for quality products.

In order to increase the amount of information downstream, producers have used various methods, the purpose of which is to mark the products with an easily

identifiable sign that gives information regarding the characteristics or the provenance of the products. Thus, a certain number of certification systems have emerged in France, such as the *Label agricole* (Agricultural label, a collective label that certifies that an agricultural product is of a high quality), the *Certification de conformité* (Certification of conformity, which guarantees that a food product possesses specific characteristics or was produced in accordance with pre-established rules, pertaining to the manufacturing, processing or conditioning of the said product), the *Agriculture biologique* label (biological or organic agriculture, a method of organic production applied to non-processed vegetable products) or the *Produits de montagne* (mountain food products, related to a geographical production area and to the fact that the raw materials must originate from and be processed in the mountains).

Interest in quality products – or products with specific characteristics – has increased to such an extent in recent years, that since the 1991 Lisbon Agreement (signed by 19 countries) entered into force, the WIPO (World Intellectual Property Organization) has administered 766 registered appellations of origin, the majority of which, however, are French and correspond essentially to four categories of products: wines, spirits (70% of all appellations), cheese, tobacco and cigarettes. At the European level, regulation now recognizes signs of quality such as the PDO (Protected Designation of Origin) or the PGI (Protected Geographical Indication), which were created in order to encourage diversity in agriculture, protect product names from misuse and imitation and help consumers by giving them information concerning the specific characteristics of the products. However, because these signs of quality have not yet been officially recognized by the World Trade Organization, they concern essentially Mediterranean countries (France, Italy, Greece, Portugal, Spain) and Germany. APDO covers the term used to describe foodstuffs that are produced, processed and prepared in a given geographical area using recognized know-how. For a PGI, the geographical link must occur in at least one of the stages of production, processing or preparation. Furthermore, the product can benefit from a good reputation. At present, the main products benefiting from this type of labelling are cheese, meat products, oil, fruits and vegetables; wine is, for the time being, excluded.¹

Particular attention has been paid to the provenance of the products, to their traceability, as well as to aspects of food safety. Indeed, the introduction of biotechnologies into processed foodstuffs, the multiplication of different varieties and the development of mass production, have given rise to suspicions on the part of consumers regarding food products and contemporary techniques of production (Ruffieux and Valceschini 1996). This modernization has been a source of concern to consumers; in order to rectify the asymmetry that exists in the supplier-client relationship, and because of the anxiety due to the proliferation of GMOs (Genetically Modified Organisms) or to spongiform encephalitis (mad cow disease), a number of certifications that apply to bovine meat and its properties in terms of traceability, for instance, have appeared on the scene.

The implementation – on the demand side – of the above-mentioned procedures that aim to inform consumers, is offset – on the supply side – by a debate between different partners or economic actors that directly concerns the modalities for the implementation of these quality control procedures. The coercive conception of regulations (*ex-ante*) is replaced by a co-operative approach, in which the actors (particularly the local actors) of the certification process take part in debates and negotiations that lead to consensual decisions, even though the latter do not always

entirely satisfy all participants. In the case of certifications related to a *typicity* or a *terroir* (e.g. a territory with particular soil characteristics and identity techniques) for example, it has been observed that the interaction between the members of local networks of production, and the social construction of compromise (Letablier and Delfosse 1995) both play a very important part in the genesis of certification.

We are indeed dealing here with the actors in the production process, actors who share a certain number of advantages, such as collecting an economic rent for example. In the particular case of an AOC, the label of origin itself is the collective property of the beneficiaries and can only be managed collectively. Thus, the issue is actually to determine what is the content of the agreement between the different parties, and how it is maintained and complied with.

3. Presentation of the Comté AOC

The production of Comté Gruyère Cheese started in the nineteenth century, but the AOC was created by decree on 13 April 1976. The AOC stipulates the conditions under which the cheese is produced and ripened and defines the production area. Comté is a boiled and pressed cheese made exclusively of cow's milk. It has a *typicity* and is produced in an area that covers the *départements* of Doubs, Jura and Haute Saone.²

The Comté AOC is by far the most important French Cheese AOC, with an annual production of 46 640 tons (against 18 430 tons for Cantal cheese, 18 000 tons for Roquefort cheese and 17 400 tons for Reblochon). It is an important source of revenue for the region: the production of milk involves 3 400 farmers and a volume of over 4.5 M litres (i.e. a turnover of almost 10 Million FF).

Cheese manufacturing provides a living for farmers and their families but also for cheese makers, ripeners and their employees, and it is an asset for the regional planning and economic development of the Jura Mountain region, where over 80% of the production co-operatives are situated. The marketing networks for Comté have been extensively modified in the last 10 years. Comté production has vastly expanded and has progressively veered away from the norms and methods that characterize artisanal production and which can still be found in the manufacturing of other types of cheese (Blundel 2002). Marketing has been taken over by the hypermarkets and supermarkets (76%), whereas in the 1980s traditional commerce (mainly dairies and markets) still occupied a dominant position. However, and unlike other AOCs (for example Cantal cheese, see below), the production of Comté has not been negatively affected by the growth of the mass retail industry; this is partly due to the strength and coherence of its internal organization.

In its 'traditional' and most widespread³ version, the manufacturing of Comté Cheese relies on three main groups of actors and a structure of governance.

- (1) The *farmers* produce the milk and supply it to co-operatives (over 160) or (to a lesser degree) to milk processing firms;
- (2) The *cheese makers* transform the milk into '*fromage en blanc*' in co-operative cheese dairies (where the milk is delivered). The quality of the '*fromage en blanc*' (a kind of fresh white cheese) largely determines the quality of the maturing process.

- (3) The *ripeners* (approx. 20 firms) are responsible for the ripening process of the '*fromage en blanc*' and generally take on the role of sellers responsible for the valorization of the products – the last link in the cheese chain.
- (4) The structure of governance is set up by the CIGC (*Comité Interprofessionnel du Gruyère de Comté*; Inter-professional Committee of Comté Gruyère), which consists of the representatives of the different actors in the process. The CIGC was founded by decree in 1963 thanks to the efforts made by the farmers since the beginning of the twentieth century to establish a reputation for their products, to distinguish themselves from Swiss producers, to be paid a 'fair price' and to try, together with the ripeners, to counteract the rise of industrial production. The actors do not possess the necessary means (technical skills, financial means, time) to control all the stages of the production process, therefore they rely on this governance body, which enables them to reduce transaction costs and to avoid the danger of vertical integration by larger units.

4. Clubs and club goods

We can define the properties of the goods by classifying them (Cornes and Sandler 1996), according to the Public economy criteria of non-rivalry and non-exclusion.

A good is considered as non-rival, or indivisible, when a unit can be consumed by an individual without reducing the consumption opportunities of the other agents. The sun is an example of this (when the view of the sun is not blocked), as opposed to shoes for example. Furthermore, goods possess the characteristic of non-exclusion of benefits when the latter can be obtained by all the agents at no cost as soon as they are produced, i.e. when it is impossible to exclude one agent or one category of agents from their consumption. This is the case for traffic lights, as opposed to motorcars for instance. Thus, the goods possessing rivalry and exclusion characteristics are considered as private goods (food), whereas those with non-rivalry and non-exclusion characteristics are pure public goods (pollution control systems).

However, the world of goods is not limited to these categories and there is, between these two extremes, a wide spectrum of impure public goods, of goods with mixed characteristics (non-exclusion and rivalry for instance). It is within this class of goods that club goods can be found. The latter are characterized by properties of benefit exclusion, but also of partial non-rivalry (Buchanan 1965).

Club goods are collective goods, consumed within a community of a limited size (Tiebout 1956, Olson 1965) and with characteristics such as voluntary participation, congestion, the exclusion mechanism, and partitioning. Traditionally, they concern organizations such as tennis clubs, swimming pools, or highways, but as we are going to show now, they can also apply to AOCs and have a number of characteristics that generally distinguish them from pure public goods.

- (1) *The consumption of 'club goods' is the result of a voluntary process*, as opposed to that of public goods, which can be entirely passive. This consumption is based on a simple economic calculation that is itself based on the anticipation of a net benefit. The advantages gained by being a member of the club must be superior to the advantages associated to the status of non-member.

- (2) *Club goods generate congestion phenomena* that result from their being used by too many club members. After a certain time, these phenomena can become a negative consequence of the success of the goods, or of the organizational process thus implemented: the idea of sharing – that expresses the advantages derived from joining the club – leads to a partial rivalry of the benefits as the membership of the club increases, which in turn leads to the deterioration of the quality associated to the goods and services offered. This is when the phenomenon of overcrowding emerges.
- (3) *Club goods are consumed by an exclusive group*, comprising a finite number of members and *founded on a mechanism of exclusion*. The latter makes it possible to exclude non-members from the benefits of being a member; it acts as an incentive for non-members to join the club and helps to keep the congestion phenomena under control.

A club is usually defined as a voluntary group of individuals who draw mutual benefits from sharing elements such as production costs, the characteristics of the members or of the goods characterized by properties of benefit exclusion. At first, the collective nature of the ‘club goods’ results in each member of the group benefiting from the presence of the other members, which makes it possible to share the total cost supported by the community, thanks to economies of scale, for example. However, once a certain size is reached, congestion caused by the presence of too many members occurs.

5. AOCs are clubs

5.1 *Reputation: both a public good and club good*

Originally, AOCs were limited to the wine industry, but for the last few years, they have extended to other sectors such as cheese, delicatessen and vegetable products (lentils or rice, for example). The specificity of this type of organization was due to the fact that it concerned a particular type of production – wine. Nowadays this specificity tends to be less clear-cut and more diversified situations leading to different methods of production and variations in the forms of internal organization have arisen. However, one dimension remains common to all AOCs: it is that of the establishment or of the maintenance of a reputation. Reputation is the good that is really common to all the producers; it is through their reputation that the producers recognize each other and are clearly identified by the consumers or by their competitors.

One of the properties of this reputation is that it is linked both to the products and to the producers. Externally, the reputation is linked to the product manufactured by the AOC that must be identifiable and have the characteristics of quality, safety and regularity that consumers consider satisfactory such as, for instance, the characteristics required by consumers of wine of origin. Internally, it is the mutual reputation of the different actors, in particular in the case of an organization involving exchanges of semi-finished products between local producers. This is certainly one of the fundamental differences with the reputation acquired by brand products; the difference is founded on two criteria:

- the reputation of brands is above all related to the safety quality of the products and to the traceability of the techniques and processes used at the different

stages of production; whereas in the case of AOCs, it is the ‘terroir’ or place of origin that matters;

- the organization of the production of brand products is based on industrial rules of production, which implies large enterprises and the search for scale economies. In the case of AOCs on the contrary, it is a network of small enterprises that is involved, so that the external reputation of the products echoes the internal reputation of the producers. This would make no sense in a system based on the integration of productions or the implementation of complete contracts at the different stages of production.

In both situations (internal and external reputation), the reputation of AOC products corresponds to the memories of the actors and is based on the observation of the actions of others. Thus, it is based on a circular logic that forces the producer to honour his reputation, in order for him to avoid missing out on future opportunities to sell his product or engage in profitable transactions, if he were to earn himself a bad reputation.

This reputation, which is the common good of the AOC producers, has certain attributes that enable us to characterize it as a club good, as defined in the theory of public goods. Indeed, it has certain benefit exclusion properties, which is demonstrated by the fact that only the producers who belong both to the local production zone and to the association can take advantage of the benefits of the label of origin and of its reputation. Furthermore, it also has the characteristics of partial non-rivalry; indeed, a unit can be consumed by an individual without reducing the consumption opportunities of other agents: the reputation that a producer of the AOC draws from the label of origin does not harm his neighbour’s reputation.

5.2 *The attributes of a club*

As a club good reputation requires that the producers organize themselves into groups of a limited size – groups (or clubs) that produce and consume reputation at the same time. However, in the case of AOCs and of their internal co-ordination, we also find some characteristics that generally distinguish club goods from pure public goods (Sandler and Tischart 1997), in particular with respect to the questions of voluntary participation, congestion and exclusion.

- (1) The formation of AOC syndicates is based on the principle of *voluntary participation*. Several authors (for example Letablier and Delfosse 1995) have highlighted the genesis of an AOC, in particular, by basing themselves on the case of cheese AOCs. Indeed, many cheese AOCs are relatively recent which has allowed us to observe their implementation process. In any case, the local dynamics take a long time to be established because the producers must agree on a common reference frame that will then be included in the specifications. They must determine the production area of the label of origin, and agree on the reference to heritage and on the techniques that constitute the foundation of the reputation. This holds true when an internal contract has been signed between producers intervening at different stages of the production process (Torre and Chia 2001). These elements require long negotiations and the elaboration of compromises not only between producers but also with other institutions such as INAO (*Institut National*

d'Appellation d'Origine, see (2) below). However, the elaboration of the Beaufort cheese system of reference, the successive modifications made to the AOC decree, and the conflicts that occurred when some industrial firms disputed the decision to limit the output of dairy cows, have shown that the producers must voluntarily agree to comply with these rules. The response of INAO with regard to the above-mentioned dispute is perfectly clear, as it reaffirms that the 'appellation' is a matter of choice and that no one is forced to join against his will. Membership is based exclusively on voluntary participation. Thus, certain producers whose production falls within the designated production zone, and who meet the technical standards fixed by the Board of members, can refuse to join the AOC and to use this sign. Even though this situation does not occur very often, it does nevertheless arise in cases related to questions of perceived quality. Sometimes the producers decide not to join because they believe that the reputation of their product could be negatively affected by a comparison with other AOC products (this is the case for a producer of Alsace wine), in other cases, producers decide that part of their production should not have the AOC certification so that it can be sold more easily on an anonymous basis. Furthermore, it must be noted that the voluntary dimension is not only important during the initial phase of constitution. Indeed, the INAO never plays the part of a deciding authority with regard to the attribution or revocation of the AOC authorizations. This organization simply ratifies the decisions taken by the producers themselves, in accordance with the rules and texts they have imposed upon themselves.

- (2) *Congestion phenomena*. It is the number of members, and therefore the use by too many members of the common good – reputation – which can generate problems. Indeed, the benefits derived from the club effect are considerable. For example, the price of quality wines (AOC wines ranking first among them) has increased significantly since the 1960s (about 10% in constant francs), whereas that of ordinary French wines has decreased dramatically (more than 30%) during the same period. However, this dominant factor should not make us forget that the profits derived from the AOCs have started eroding, at two levels.
- (a) At sectoral level, the multiplication of AOCs in France, is becoming a threat for the well-established and oldest wine AOCs. As a result, the consumers' illusion that 'AOC' is synonymous with quality tends to fade out. In the context of the European Union, a similar phenomenon has emerged with certain nations seeking to limit the benefits of the club effect. This has resulted, for example, in an increasing number of applications being submitted for German beers or waters to be granted the AOP status. It is hoped that this will lead to a dramatic decrease in profits, and in turn, to the disappearance of semi-public goods in favour of pure private goods affected by problems of uncertainty and imperfect competition.
- (b) More specifically and with regard to the case under discussion, there are, within a single AOC, problems that could make it difficult to control the number of members. The example of French AOC wines shows that sometimes 'too much AOC kills the AOC'. In some regions the 'wine of origin' designation has been granted too generously to local wine producers. This has led to the production of large volumes of wine with the AOC designation. As a result of this, the designation has lost its

significance and consumers' trust in AOC products has been eroded. Products with very different characteristics are sold under the same designation; medium quality wines (produced in large quantities and sold at low prices) for example are sold under the same designation as high quality wines (produced in small quantities but which can no longer be sold at high prices because the reputation of the AOC designation has been tarnished). Thus, there has been a deterioration of the general image of AOC products accompanied by a drop in quality and a loss of interest from quality producers in the AOC designation. This phenomenon has mainly affected the wine industry but can also be found in the production of AOC Cantal Cheese. The requirements in terms of quality and volumes of production have been much less demanding for Cantal cheese than for Comte Cheese, which has resulted in a sharp drop of prices and a loss of prestige. Only specialists are nowadays capable of distinguishing an industrially made Cantal cheese from an artisanal cheese (i.e. more mature and with technical guarantees with regard to the production process), and most Cantal cheese available in supermarkets is low quality, non-matured cheese sold at a much lower price than Comte cheese is. This joint deterioration of prices and image is due to the absence of strong selection criteria, and therefore to the weakness of the mechanism of exclusion that we shall discuss now.

- (3) The implementation of the *mechanisms of exclusion* is particularly clear in the case of AOCs; indeed the Consumption Code insists on the fact that the geographical references of an AOC 'shall not be used for any similar product . . . nor for any other product or service when such use is likely to divert or weaken the notoriety of the label of origin'. As Chen (1997) pointed out this is the reason why the terms 'Roquefort' or 'Bordeaux' can only be used for this type of cheese or wine, to the exclusion of all other products with similar technical characteristics, or produced in the same area but not according to the specifications. Furthermore, the example of the lawsuit won by the champagne producers shows that, in French law, the label of origin extends to products outside of the food-processing industry. This is the reason why a leading perfume manufacturer was not allowed to call one of his perfumes 'Champagne'; indeed, it was thought that the manufacturer in question might unduly benefit from advantages that should be reserved to the members of the above-mentioned club. However, following the questions raised by the mad cow disease crises or by the proliferation of GMOs, producers are more than ever encouraged to become members of AOCs. In France, for example, the number of applications for AOC membership has increased and has spread to foodstuffs not previously concerned by the AOC certification (green lentils from the Puy, rice from the Camargue). In the European Community, the number of applications submitted by producers of southern countries whose agriculture is characterized by a low productivity has also increased significantly. The *sign* is becoming more widespread and standardized, and for this reason it is difficult to do without it. From this point of view, AOCs still represent a powerful advantage in terms of reputation, so that nowadays, more and more producers in the food-processing industry seek to become AOC members or to organize themselves into associations.

6. Problems of co-ordination within AOCs

An interpretation of an AOC as a club with a common reputation does not take into account certain complex procedures of internal co-ordination that may take various forms, but which are mostly related to conflicts of interests between the actors of the different categories. Therefore, our analysis cannot be exclusively based on an interpretation of AOCs as clubs.

This is not the case for the situation described earlier, that corresponds perfectly, in its simplicity, to certain wine AOCs, where wine growers and producers also play a major part in marketing the final product, so that the competition they are engaged in is restricted to the market where they compete with different references, and in different sectors. In this case, although all the producers share and consume the reputation of the AOC, each one will try to send an additional signal to consumers, which is expressed in terms of price or of the reputation of the producer himself.

That is a simple situation, in which problems of co-ordination occur between participants who are in a similar situation and only require a common action to overcome the difficulties related to building the reputation. However, asymmetric relations can also arise internally, due to the presence of several groups of members with different status and positioned at successive stages of the production process.

The types of organization that present internal characteristics of relational asymmetry in the production process and are characterized by transaction costs between the members of the group (Raynaud and Sauvéé 2000) are called vertical AOCs. This is the case for certain cheese AOCs, where independent categories of actors are positioned at each stage of the production process. Exchange and power mechanisms between these categories of actors do not depend on the general organization of the group, even though establishing an external reputation remains the common objective of all members.

An example of this is the production of Comté Cheese. Indeed, asymmetric vertical relations occur between cheese-makers (who belong to co-operatives) and ripeners (who control access to the market) that relate to the identification of the quality of the intermediary product delivered downstream, the discussion about the purchase price of the latter, and more generally profit-sharing within the system, between the categories concerned. Thus, in the context of vertical relations, there might arise 'hold up' situations where – in certain wine AOCs for instance – one of the parties is forced to accept unfavourable conditions (Giraud-Heraud *et al.* 1999). The danger of such situations arising is increased by the fact that the investments are specific and the contract quite unspecified, thus fostering a free-riding behaviour on the part of some members who take advantage of their position to escape from their commitments in terms of quality or appropriate a major part of the rent.

As the comparison between several cheese AOCs shows, these situations can become even more complicated and give rise to more sophisticated conflicts when different groups are competing on the same segment of the production cycle (Sylvander and Marty 2000). In some wine AOCs, where the division of labour is stabilized and hardly ever questioned, competition takes the form of attempts by certain categories of producers to get involved in other stages of the production process.

This is the case, for instance, when producers try to get involved in the sale of the final product, or when merchants implement a policy of vertical integration. These situations are then characterized by phenomena of competition-struggle,

where co-operation in regard to the external reputation is coupled with internal competition between the different actors of the production and the marketing process. This leads to a three-fold relation of horizontal competition, vertical hold up and co-operation for the promotion of the AOC, which shows how important it is to base the process of collective organization on internal co-ordination mechanisms. Naturally, problems sometimes prove impossible to solve internally, particularly when, under pressure from mass retailers, producers are forced to reduce their margins. In the case of the Comté AOC, a solution has been found by diversifying the products sold (Comté cheese marketed under well-known cheese brands, but also under supermarket or hard discounters' brands) and through product differentiation (the CIGC has recently introduced 'vintages' of Comté, more or less strong or soft, according to their places of origin on the AOC territory). The CIGC work, which also consists of carefully constructed advertising campaigns, also rests on the essential role played by the ripeners, who are the regulators of the system, and who prevent overproduction and price cuts by controlling the quality and the quantity of cheese produced. The policy adopted by the Cantal cheese AOC (see 2b) has been quite different and has resulted in important internal problems. Under the pressure of mass retailers, local producers engaged in frantic competition, dropping their prices and lowering the quality of their products. In the medium term, this has adversely affected the product's reputation and has resulted in a significant drop in sales and profits, largely due to the absence of an internal co-ordination of small local producers and to their inability to resist the pressures from retailers and consumers.

These problems of internal co-ordination can be solved thanks to different mechanisms of co-ordination, set up by the actors or resulting from their common history. In the case of AOCs, the three main mechanisms used are: drawing up contracts, the implementation of a governance structure, and making use of the organizational trust that exists within the local system. The purpose of each mechanism is to overcome the uncertainties or the phenomena of opportunism that can result from failures in terms of internal co-ordination. These are presented successively, basing them on the case of the Comté AOC, the functioning of which is now well-known and enables us to carry out a detailed analysis of the governance structure (Perrier-Cornet 1986, Torre and Chia 2001).

7. An organizational analysis of the functioning of the Comté AOC

The internal functioning of the Comté AOC proves, after close examination, to be relatively complex. In fact, it rests on three basic elements: the first element is the signature of contracts. Contracts are signed between the members of the AOC, whatever their status. They make it possible to reduce uncertainty concerning the quality of the products sold and exchanged within the system. The second element is the internal governance structure: the AOC is governed by an organization representing all parties within the AOC. Finally, there is organizational trust, which is at the basis of all relations between the participants. Contrary to the hypothesis proposed in certain studies (for example, Johansson and Mattsson 1987), trust and contractual relations do not exclude each other and do co-exist within the complex internal organization of the local production system (this is in keeping with the hypothesis defended by Nooteboom (2002), for example).

7.1 *Contracts*

The contracts signed within AOCs reduce uncertainties when questions of possible opportunism arise in the relation between actors situated at successive levels of the process, whether it be the quality of the product supplied or the selling price of this product.

As shown by the example of Comté cheese, and in view of the uncertainties related to production, maturing and marketing, and the great number of producers that makes it impossible to control the production of the raw material (the milk), the contracts are necessarily incomplete. Contracts are set up for a period of one year renewable by tacit agreement; they determine the role of each actor, the conditions of exchange and the payment procedures, without fixing the rules for the development and marketing of the product. They specify the conditions for the collection of the cheese, the price that will be paid for them (it varies according to the seasons), the quality of the product and the valorization of the cheese on the market, they also determine the place and dates of delivery and storage, and how the price of the milk is calculated. Furthermore, they are drafted differently according to the methods used to market the milk or the cheeses.

Thus, in the case of the relation between the producers and the ripeners (the producers of *fromage en blanc* use the co-operatives to sell it to the ripeners who are responsible for the maturing process and for the marketing of the cheese) the latter become the owners of the cheese when it is collected. The aim of the contract is to encourage the exchange of products within the AOC and to regulate relations between these partners; in other words it is designed to prevent (1) co-operatives from negotiating the price of cheeses separately each month (the contract's role here is to reduce the transaction costs), (2) certain ripeners from selling their product at a lower price than the others and thus – through a free-riding behaviour – appropriating a large part of the profits gained through the common effort, and (3) ripeners from looking for *fromage en blanc* every month – including outside the AOC – in order to make the most of their installations (the contract prevents any temptations to go it alone).

However, these contracts are not meant to manage all the relations between the actors of the process, and in the current situation they cannot regulate the milk production that is currently a difficult phase in the production of a Comté cheese. They cannot ensure the overall co-ordination of the process because they focus on the setting up of certain rules concerning the products. Thus, they are only part of the total system of co-ordination that serves as a reference in the case of cheating or non-compliance with the collective rules. They do not force the producers to respect a certain price level, for instance.

7.2 *The governance structure and its functioning*

The governance structure aims at generating, drafting and implementing common rules; it ensures that the latter are complied with, and may modify them when necessary; finally, it defines and enforces the sanctions in case of non-compliance. It is not based on signed contracts but on incentives and the diffusion of rules and information.

In the Comté AOC, this role is assumed by the CIGC, comprising the representatives of the farmers, the cheese-makers and the ripeners. It is the main

mechanism through which information and techniques are shared within the AOC. This organization plays an important role in advertising campaigns and in the policy of cheese ‘vintages’ (research has been carried out to show the relation between some geographical areas and the type of cheese produced), but above all, it is the authority that regulates production. Indeed, until the 1950s, the *fromage en blanc* was sold by auction, the regulation of the production being ensured by the market; this explained the successive periods of under-production and over-production. Contracts binding the cheese-makers to the ripeners have been implemented by the CIGC, who also makes use of another regulation and control mechanism: price-related incentives. It tries, without great success, to increase the production of summer cheese (preferred by consumers) and to reduce existing stocks by giving rewards to firms engaged in this policy. Furthermore, the CIGC is responsible for setting up an internal arbitration procedure in case of litigation concerning the hierarchy of the quality of the cheeses.

Thus, in the Comté AOC, the central management role is played by a governance structure that is the only organization authorized to control and to make sure that the different actors respect their commitments, but also to issue marketing permits. The permits are allocated by the CIGC on the basis of quality. First- and second-class cheeses are directed to selling operators whereas third-class cheeses are transformed into secondary products such as cheese-spread or grated cheese. Until now, the decisions of the CIGC have never been massively contested. One might think that its existence is due to the fact that farmers do not have the necessary resources (technical skills, financial means and time) to undertake the total process of cheese production, so that they have to join with other actors and rely on this authority. However, the organization of producers existed long before the governance authority was set up, even though it had no formal structure at the time.

7.3 *Organizational trust, the foundation of the system*

The contracts and governance structure implemented in the Comté AOC are tools used to distribute the benefits arising from internal co-operation, monitor its results and to achieve the goal of producing a quality cheese with a high market value. However, their action focuses on the final and intermediary products, and their analysis does not give any indication of how the actors organize themselves collectively, nor of the agreements that enable them to carry on working together. With respect to these methods of co-ordination, it is interesting to analyse the relation of trust that existed, in the system, before the implementation of contracts, price control and the governance structure. These relations can be linked to the social capital literature (Coleman 1990), especially when it deals with successful community action or development (Woolcock 1998). However, we mainly focus upon *trust* and *trustworthiness*, at the level of relations within networks of local economic and social actors (Tomkins 2001).

The various attempts to precisely define the notion of trust are often contradictory (see for example, Arrow 1974) for whom trust is the lubricant of social relations, or Williamson (1993) for whom the theory of risk is sufficient to explain situations that are often analysed in terms of trust, or the synthesis carried out by Nooteboom (2002). The definition we retain here is the following: trust can be defined as the mutual expectation that partners will not take advantage of the areas of vulnerability

opened-up by the relation of co-operation or by the signing of incomplete contracts (Sako 1995). This definition is insufficient as it refers to three very different situations, according to whether trust is generated by processes (such as repetition or the reputation of the actors), or whether it is related to the very characteristics of individuals (family or ethnic links), or whether it takes an 'institutional' dimension (relations within associations, firms). This is why we make a distinction between two main types of trust (Dupuy and Torre 1998):

- community confidence, sometimes called blind trust, requires that no guarantees be obligatory, giving them up being a proof of trust: if X asked for guarantees, he would damage the relationship. This particular trust relationship corresponds to an 'over socialized' relation between individuals whose actions are embedded in a set of generally informal rules governing the family or community to which they belong. It is a variable that is attached to a community (religious, ethnic, origin) rather than to a person. However, the trust thus given to a person can be damaged by the future actions of the latter;
- interpersonal trust is acquired through mutual commitments, signs that one sends the other to justify his trust (Kreps 1990). It is a type of trust that is directed towards a person. Thus, interpersonal confidence is not a commodity that exists before the social relation, nor is it a stored information or a resource from which actors can draw. It is built and can therefore imply a degree of calculation.

Organizational trust, which we refer to here, goes beyond the mere face-to-face relation, and takes into account rules applied in the organization concerning the answers to provide or the procedures to implement according to pre-defined situations. In the case of network organization, the rules concern the compliance with norms of production, trade union membership. It facilitates collective learning. In this case, precedence is important, time making it possible to verify and validate the mutual commitments (Reynaud 1998). The major advantage of trust, which also constitutes a solution to the problem of uncertainty, lies in the shortcomings of the contractual relationship. It plays an important role in situations where relations are not thoroughly specified. The relation of *organizational trust*, which extends interpersonal trust to the principle of collective action, generally existed before the setting up of a system of formal 'AOC type' rules. This is definitely the case of Comté and many local agricultural systems, where relations between actors are marked by behaviour based on community relationships (Watts 1996). Currently, it is organizational trust that prevails in the system.

In the Comté AOC, the contracts are mostly relevant to the final and intermediary products and do not provide any indication of how the actors are organized. The relation of trust that existed before contracts and governance structures were set up, consists of explicit and implicit reciprocal commitments. The commitments are explicit when they have been defined beforehand and formalized in accordance with the internal rules. In this case, it is a strategy of collective action used to produce a common good (see 5.1). The commitments are implicit when they grow out of the relation, which implies the repetition and successive validations of the relations. In this case, the participation in the on-going action co-ordination is sufficient – it imposes rules that one is willing to respect (Reynaud 1998).

The very clear distinction that exists between the trust placed in someone or in his/her future actions, and the fact of entering into a relation of trust, enables us to

understand how this process is implemented. The commitment to co-operate with someone depends on the degree of trust placed beforehand in that person. The search for a means to create trust is based on a previous calculation of the perceived level of risk and of trust. As the relation develops, one acquires new information, in particular regarding the integrity of the partner, and it is then possible to make a judgement. In the case of vertical relations, of the producer-supplier type, the asymmetrical relations imply an increased trust on the part of one of the partners – the partner who received the products for example. The supplier must therefore endeavour to prove that his product and behaviour are trustworthy, even though later in the course of the relation, it is from the repetition of the respective commitments that trust is reinforced, in particular thanks to attributes such as integrity.

Once accumulated, trust can help to strengthen a relation of co-operation because the agents see the long-term advantages of supporting the system. It is important that every member feels like working with the others in order to initiate a relation of trust and that a mechanism of organizational trust leads to a process of positive reinforcements (Zand 1972), that can give rise to virtuous circles, particularly at a local level, as the example of Comté shows.

The partners can then rally around the AOC's external reputation (*vis à vis* consumers), by creating vintages or organizing advertising campaigns for example, partners also rally around the internal reputation (between the different actors) by making sure they provide quality intermediary products and cheeses to the other actors of the production process.

8. Conclusions

The goal of this paper was two-fold. The aim was, first, to explore the collective organizational forms that prevail in localized systems of production and to provide a better understanding of the way in which these systems are governed and, second, to propose a theoretical framework for the analysis of AOCs and provide economic and organizational arguments legitimating the existence of these systems.

Both goals have been met. First, it has been shown that it is appropriate to analyse AOCs from an economic and organizational standpoint. It has been shown that an organizational and economic analysis of AOCs – in terms of clubs and in terms of internal governance structure – is relevant, and that AOCs are in no way an obsolete form of production nor an obstacle to free competition that should be eliminated. We have also been able to analyse the internal functioning of AOCs, in particular the design of the internal governance structure, of contractual relations and of organizational trust at play between the producers at local level.

The organization of the Comté AOC is based on a complex governance structure. It combines contracts, governance structure and relations of organizational trust, in order to ensure the satisfactory functioning of production, and of the exchanges within the local system, and to provide consumers with quality products that give value to the efforts made by the actors of the AOC. This organizational configuration can probably be found in many AOCs. However, further studies must be carried out in order, in particular, to analyse cases where there are both local collective practices with an emphasis placed on typicity and brands pursuing their industrial objectives.

Second, it has been shown that a localized system of production made of small producers could function efficiently when it is founded on club relations and a strong

governance structure, and more particularly when collective action rests on a combination of contractual relations and organizational trust. As highlighted in recent studies on the notion of trust (Nooteboom 2002), contractual and trust relations do not exclude each other, but co-exist within the complex internal organization of the local production system.

The results obtained in this study are actually in keeping with the social contract theory, and particularly with its latest findings (see for example, Wathne and Heide 2004). However, the Williamson approach considers that the internal hierarchy is important and that bringing a transaction in-house permits exposure to the inherent features of internal organization, which may serve to reduce the risk of opportunism. The results obtained here place the emphasis on the advantages of a more flexible network organization. In this type of organization, the independent actors are not just engaged in face-to-face or dyadic relations, they are also integrated into a larger whole and connected with indirect partners, in the context of non-hierarchical but free relations. This form of organization has the advantage of being flexible and reactive while enabling producers to keep small or medium-sized production structures rooted in their production territories. This approach could be applied to other forms of collective organizations of producers who share a common goal.

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Notes

1. More references and data are available at: <http://www.southcentre.org/publications/geoindication/paper10-05.htm> http://www.europa.eu.int/comm/agriculture/qual/en/pdopgi_en.htm
2. See more information on the Comté web site (<http://www.comte.com/english/index.html>)
3. Some industrial groups (Entremont, Besnier) or co-operatives (Ermitage Dairies) have a more integrated approach of the production process. Indeed, they buy their milk directly from producers and subsequently ensure the whole transformation process, up to the sale of the finished product. These firms use to sell both rather standardized industrial products (such as Gruyère or Brie) and niche products (for instance AOC ones). Their share of the Comté cheese market remains very small.

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