QUALIFICATION OF THE ORIGIN OF BEEF MEAT IN EUROPE ANALYSIS OF SOCIO-TECHNICAL DETERMINATION BASED ON FRENCH PRACTICES

F. Casabianca, N. Trift, B. Sylvander

Summary
Quality has been the subject of various definitions: we make a distinction between the generic quality of the mass market and the specific quality, which allows divisions on the basis of distinctions. Therefore, the origin already defined and protected is a component of this specific quality. The criteria to be applied are the result of grading operations. As regards beef, very few situations can be used to analyse how these-criteria are structured. The obstacles which hinder the transfer of the origin from the live animal down to the cut of meat to be consumed are reviewed and their causes studied.
Taking as a basis meats whose origin is qualified, we analyse two contrasting situations in France:
(i) the bull from the Camargue, an animal whose carcass is ill-shaped and which offer a strong referent to coordinate the agents in the chain, and
(ii) the Full marbled of Mezenc, which, in contrast, has an average carcass and undergoes a quite special fattening system which forces stockmen and butchers to organize around the live animal.
A model of the ways in which the origin of these two bovine meats is qualified shows recurrent elements which, when put to the test in other situations, offer a pertinent framework for future studies. They explain why so few projects have gone ahead. But bovine meats from specific origin do not seem able to travel well beyond their locality of origin, due to the close interaction between the agents - including the consumer - which they imply.

Keywords: bovine meat, protected origin, structuring of criteria, specific technical devices.

Introduction
The idea of quality has been the object of varied definitions, referring to different approaches. Its diverse and partially contradictory implications

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originale from this initial non-determination. Two essential ideas support the use of the term "quality".

• The first concerns the listing of the characteristics which make something what it is; as regards the ends for which it will be used; these are the properties expected to be present. The ISO 8042 norm gives a rather broad definition: "quality is the totality of the properties and characteristics of a product, a process or a service that bear on its ability to satisfy implied or stated needs". Stress is then put on the importance of needs and on the comparative character of their satisfaction.

• The second idea supports the manifestation of a level of excellence, a way of setting something apart as compared to similar products and which justifies it begin sought.

However, in both cases, nothing sets out who has to define the content of quality, between the provider and the consumer. Nothing indicates how it is fashioned and how is it ensured. Can we be satisfied by an interaction of proximity between the agents concerned directly, or do we have to appeal to institutions, and even the State itself, to regulate the scope of the needs to be fulfilled? We find here a first theoretical paradox: where is quality defined?

These two broad ideas are often merged within a large array of situations, which refer, for instance, to supposed needs, to expressed expectations, to matters of non-quality (lack of properties or to disqualifying processes disappointment due to the absence of excellence). This multiple meaning characteristic does give rise to frequent confusions and it would then be important to share clear definitions, through the organisation of a discussion in the European countries about the definitions of quality, so as to no longer speak of quality as such, but to state precisely what is the meaning retained.

Concerning foodstuffs, the word "quality" is logically the object of the same queries. It has also known different main uses during successive periods. This brings us to consider three approach levels.

1. Historically, quality is first understood as the absence of flaws, frauds and fakes. Public power intervention expressed itself very early concerning this aspect, by the establishment of specific regulations. A de facto harmonisation seems to be on the way in the different European States, while a consensus is evolving on the need for a generalised implementation of this approach.

2. More recently, quality rests upon expected properties such as organoleptic and nutritional characteristic and useful value. This creates the need to take into account the legitimate. The function of the State here is to look after the interests of its citizens, including substituting itself to their expression. In this manner, the needs of the consumers remain largely implicit and
encompassed in the concept of public interest. This is the case of regulations concerning the sanitary safety of foods and other normative characteristics, specially contributing to nutritional equilibrium or to services.

3. Finally quality denotes sought after characteristics likely to allow an increase in value, for instance the production methods (organic agriculture, environmentally friendly production, and animal well being), the production zones (territory of origin, mountains) and their inherent traditions. These characteristics must be explicitly stated in the offer of the products so as to pinpoint the necessary interventions, the responsibility of each operator and to bring about the expected increase value.

These three approach levels do not substitute each other, they are permanently superposed and justify different intervention levels of public authorities, of the operators and of the consumers. In particular, the drawing up of national or even international norms, which bind everyone, is based on very different proceedings from those that sanction voluntary interventions where only certain operators involve themselves.

Concerning foodstuffs in Europe, we can consider that at present the two first levels refer to all the products on the mass markets, and they can be included in the designation of "generic quality" which is expected to be thorough and without ambiguities. On the contrary, the third level entails differentiation strategies for the products and segmentation of the markets. This third level, "specific quality" is the one which implies the affixing official quality signs and entails special arrangements (Sylwander et al., 2000).

To give value to an origin seems to be advantageous for the marketing of products bearing the name of a territory. Studies have demonstrated that consumers, especially during a period of crisis, feel reassured by information concerning the locality of production of a foodstuff (Barjolle and Sylwander, 2000). It becomes then essential to protect this name, since it is associated to specific properties quality linked to the production territories is one of the forms of specific quality (Casabianca and de Sainte Marie, 1998): We undertake to deal in depth with the terms of quality linked to the origin.

The position which we have adopted consist in considering quality as a social construct, where the convergence between the various agents involved is not spontaneous or natural. It arises from a complex process through which partial and provisional compromises are worked out between purposes sometimes difficult to harmonise. Therefore, within the networks, the operators must carry out negotiations concerning the technological qualities of the goods exchanged. Likewise, in the markets, the heterogeneity of the preferences must be taken into account when organising the offer, and compromises are made between the signals sent (price levels, information attached to the products,
trademarks) and societal demands (environmental performances, rural or territorial development).

Quality criteria become then the results of qualification operations through which the construction of a socio-technical convention is effected, allowing the majority of the agents to reach their aims. To qualify a product is then not reducible to analyses regarding some characteristics chosen on the final products. It is in fact necessary to reach convergent representations of the aims and the means employed (including bio-technical resources and know how) to develop a concerted project based on quality linked to the origin (Casabianca et al., 1994.). Researchers have a particular responsibility to face in these qualifications.

In this approach, beef meat is an interesting case, as an apparent paradox can be seen: the stocking terroirs (and specially the pastures) are strongly highlighted to praise the properties of certain meats or of certain breeds. Nevertheless, very few beef meats show quality signs linking their characteristics to the origin. By itself, this paradox is a challenge for researchers and authorises opening a series of enquiries about the qualification of origin of beef meats in the European context.

In the first part, we set out the field of study of our work, detailing the general framework within which the origin is now protected in Europe and the special questions raised by beef meat. Then, in the second part, we will endeavour to understand the obstacles which hinder the transfer of the origin of the animal to its meat, reviewing their deep-seated-causes, including the role of researchers themselves. Then in the third part, we bring forth our field work on the study of specific cases where local agents have started (and in some cases carried to completion) the steps for the qualification of origin of beef meats. Finally a fourth part will allow us to set out the formal elements of an analysis protocol for situations that can be observed in Europe.

**Field of study**

*A juridical framework to specify origin and quality*

A juridical framework exists, and gives status to the exclusive association between a name and a product and ensures its protection a geographic indication is understood as intellectual property. In effect the TRIPS agreements held within the scope of the WTO (World Trade Organisation) as

\[\text{TRIPS agreements are dedicated to the rights on Intellectual Properties at world level, including the geographical indications.}\]
well as the provisions of the PDO (protected origin appellation) and PGI (protected geographic indication) in the EU (regulation n° 2081 of 1992), foresee the protection of the "geographic indications" the name of a region, a specific locality or in some exceptional cases of a country serving to differentiate an agricultural product or foodstuff originating in of that region, that locality or that country. These, considering that a specific quality, repute or other characteristic can be attributed to that geographic origin and whose production and/or processing and/or elaboration take place within the delimited geographic area.

The definition of the IG in the TRIPS agreements and that of the PGI in European regulation 2081 are identical. From this point of view, the protected origin appellation can be considered as a special instance of the general case of geographic indication: «the name of a region, of a specific locality, or in exceptional cases, of a country, used to designate an agricultural product or a foodstuff originating in that region, of that specific locality or that country and whose quality or characteristics are essentially or exclusively due to the geographic setting, including natural and human factor and whose production, processing and elaboration take place within the delimited geographic area».

The origin is then not a plain source which would be documented by an efficacious traceability. The basis of the legitimacy to allow exclusiveness to certain producers is constituted by qualities characteristics, a reputation attached to a determined zone. The origin can result:

- From a strong link between the product and the "terroir". This link being expressed by specificities inherent to these localities and alicited by human activities. It is the principle of the "appellations d'origine" in France, first used in viticulture and later on extended to other products, especially cheeses. The product is then presumed to express a "special type" linked to the terroir.
- A strong anchoring to the production territory, which makes the elaboration of the product very difficult to carry out in other localities. In this case, the strength of local solidarities both ensures the product's reputation and justifies preventing the geographic name to be used freely, to avoid its becoming "generic". This set is what confers to the product the legitimacy to bear a protected name.

The provisions arising from regulation 2081 had been preceded in certain countries (mainly those following the "Roman law" tradition) by national laws concerning the "designations of origin". While in the wine and cheeses sectors numerous products enjoyed the protection of their origin, meat in general and especially beef, stayed largely out of these interventions. Therefore, until the beginning of the 90's, there was only one meat in France under the AOC (the
Appellation d'origine Controlee, the french version of the PDO: the fowl of Bresse (Sylvander, 1995).

On the other hand in France, quality signs also comprise; besides Organic Agriculture which corresponds to a set of obligatory norms for the means of production (production methods which do not use synthetic chemical products), the Red Label and the certificate of compliance whose definitions are as follows:

- The Red Label: "certification attesting that an agricultural product or foodstuff has a set of characteristics fixed beforehand which guarantee a superior level of quality that distinguishes it from similar standard products. The Red Label is a collective brand belonging to the Ministry of Agriculture and Fisheries".

- The Certification of Compliance of the product: "attests that a foodstuff or an agricultural non-alimentary and non-processed production, processing or packaging. These characteristics must be objective, traceable, measurable and signification for the consumer".

The Red Label has been the object of a concerted action of the meat sector, above all to point out the fitness of breed types of meat (Charolais, Limousin etc.). Thus, it is the quality characteristics of the meat from animals belonging to specialised breeds - whatever the locality of their breeding which are guaranteed (de Fontguyon, 1995). It can be said that, until 1992, bovine meat was left outside the proceedings and systems for the qualification of the origin (Beranger et al., 1999).

*Beef in an unprecedented crisis*

The upheavals which followed the crisis due to the "mad cow" disease revealed to the consumers "the existence of breeding, practices (specifically as concerns feeding) which they did not suspect" (Sans et de Fontguyon, 1999a). This recent awakening has led, in few weeks; to a shift in the "hierarchy of the attributes sought by the buyers of beef" (Sans and de Fontguyon, 1999b). The organoleptic dimensions of the meat (tenderness, taste, etc.) lose importance in favour of food safety, which entails the guarantee of the source of the meat. Exigencies regarding the labelling of the source and transparency requirements within the chain had then to be reinforced, leading to a partial questioning of the ruptures which had taken place before (Sans et de Fontguyon, 1999a).

However, the obligations to inform the consumer deal only essentially with traceability and placing of the animal into broad and scarcely explicit categories (for instance meat breed heifer). From the point of view of
regulations (European regulation 1760/2000 and the ISO 8042\(^2\) norm concerning documented source), these obligations translate in terms of identification and registration of the bovines associated to a labelling system for the meat and the products based on beef. From the point of view of the inter-professional organisation, the establishment of two collective brands "Bœuf de Tradition Bouchère" "Traditional Butcher's Beef" (BTB)\(^3\) and "Green Pastures Beef" "Boeuf Verte Prairie (BVP)\(^4\) which guarantee, by means of their listing of specifications the French origin of the animals, the "meat breed" type, the "traditional" feeding of the animals and the tenderness of the cuts to be braised. Sans and de Fontguyon (1999b) mention collective mass differentiation. This differentiation does not rely on a strong innovation of the product, but rather on an organisational change of the whole meat network. The surfacing of this organisational dimension, together with the hierarchical change of attribution, has deeply disrupted the capacity for initiative of the agents within the chain. In effect, "the differentiation interventions promoted by the processing and mass distribution industrialists, are not in a position to react to this new situation" (Mazé, 2000). The study of relationship within the sector shows that before the crisis, the processing and mass distribution industrial groups did not set out special exigencies in the matter of stocking. Also, collective interventions often initiated upstream (such as BTB or BVP) are today able to assimilate the new regulatory exigencies, science they define stocking practices in a set of specifications controlled by independent third organisations. We find here the two constraints mentioned by Valceschini (1999) for the elaboration and use of a "quality signal". The first refers to the "relevance of the signal" and the need of the agents to recur to it. Within the context of the consumers' change of attribution, described by Sans and de Fontguyon (1999a), the sign developed by the inter-profession is fully relevant. The second concerns "the credibility of the quality sign". The control via third party organisms permits to guarantee "that the information affixed on the product compiles with the stated definition and the commitments made" (Valceschini, 1999).

Responses to reassure the consumers

During decades, the rules concerning the labelling of bovine meat remained unclear. When introducing the last European regulation 1760/2000 of

\(^2\) The ISO 8042 norm defines traceability as the aptitude to find the history, utilisation or localisation of an entity by means of registered identifications

\(^3\) Intended for retail butcher shops

\(^4\) Intended for mass distribution
July 17, 2000\textsuperscript{5}, the lawmaker mentions the instability of the beef market caused by the ESB crisis and the lack of efficacy of the previous directives. In spite of the existence of a decree, dictated of 1969, regulating the identification of the animals, and their zootechnical registration\textsuperscript{6}, and of European directives 90/425\textsuperscript{7} and 92/102\textsuperscript{8} "experience has shown that the implementation of the directive (at least that of 1992) was not completely satisfactory and must still be improved. It is therefore necessary to adopt a specific regulation for bovine animals so as to reinforce the provisions of that directive" (Regulation 1760/2000).

The decrees of application of the law concerning stocking and the directives at the community level did then exist before the first crisis of 1996, but their shortcoming was their lack operation. The second drawback of those first regulations regarding what was not yet called traceability (evidently) is that they support the ruptures between the production systems on the one hand a decree concerning the identification of the animals and on the other that about labelling. Under these conditions, the traceability of beef was not practicable at all, since none of the laws and regulations covered the chain as a whole.

The crisis due to the mad cow, as it directly involved the consumer, led public authorities to work on the request to label the meat all along its processing and especially the labelling of the final product. Therefore, it was deemed essential to address in the same text the identification of the animals (as described in directive 92/102) and the specific labelling for the beef sector.

The hierarchical change of attribution in benefit of the source observed in 1998 by Sans and de Fontguyon (1999b) was confirmed during that same period by Giroud’s consumer studies (1998) stating that an 89% of consumers consider this criterion as determining their choice of beef to purchase.

Faced with pressure from the consumers, following the crisis due to the BSE (Bovine Spongiform Encephalopathy), public authorities have provided a

\footnotesize{\textsuperscript{5} This regulation establishes a system of identification and registration of the bovines and the labelling of beef and beef-based products, and abrogates regulation (CR) n\textsuperscript{o} 820/97 of the Council.}

\footnotesize{\textsuperscript{6} Decree no 69-422 of May 6, 1969.}

\footnotesize{\textsuperscript{7} Council of June 26 1990, concerning Veterinary and Zootechnical controls of identification and registration of live animals, so as facilitate exchanges within the Community.}

\footnotesize{\textsuperscript{8} Council of November 27 1992, concerning the identification and registration of animals.}
first series of information about the source of the animal. However, there seems to be a place for a second type of information regarding the origin of the meat.

The establishment of traceability as a mean to document the source of the beef is an essential tool to ensure the origin. Without traceability, and a generalised labelling of the meats, it would be impossible to control their origin.

In fact, one of the major stakes is not only to investigate the source of the cut of meat only, but also to become interested in its origin. In other words, can the situation observed in a particular region be transferred to another region? What is the influence of the terroir (local know-how and environment) in the

Analysis of the obstacles to the transfer of the origin

In spite of these stakes, the pressure brought to bear by the consumers and the reinforcement of regulatory provisions, today in France there are only three Controlled Origin Labels (AOC) for meat and two for beef. This low level of activity shows either only moderate interest for this type of differentiation or a true difficulty to qualify the origin of meats and specially beefs. A similar situation is observed in other European countries as Italy and non-EU country as Switzerland.

This low utilisation shows either mild interest only for this type of differentiation or a true difficulty to qualify the origin of meat and specially beef. If we add up in parallel bovine meats labelled as to origin by the IGP system (the French version of the PGI), we find 5 instances. This number of IGPs compared to the two existing AOC shows that the differentiation of the products according to their origin is sought by groups furthering recognition projects. But the notion of origin in these two official quality signs refers to different concepts. One the IGP - stems from Anglo-Saxon case law, referring to the origin rather in view of historical precedence or the reputation of the product, while the other - the - AOC endeavours to demonstrate the origin as a link to the terroir including both environmental aspects and know how employed by stockmen as well as butchers. The justification of the link to the origin is often more difficult to demonstrate in this last case, since it is needful to establish a bio-physical and socio-historical link between the special type of the product and its terroir.

They all employ a Red label on the national level (calves and heavy bovines together).
Our analysis leads us to identify the different obstacles found between the animal and its meat, to hinder the transfer of the characteristics of origin along the whole chain.

**Obstacles linked to the agents present in the chain**

The insufficiency in the labelling of the origin of bovine meats is first associated to a lack of communication between the operators of the chain (Quilichini, 1998), maintained by the power of particular professional categories.

The empowering of the pegger/grader trade during the 1978 decade, foretold a new organization of the chain in which the activity of the stockmen and that of the butchers are conveyed into separate registers. In his analysis of the Belgian bovine meat chain, from the point of view of socio-technical innovation networks, Pierre Stassart (2002) recognises "the extraordinary capacity [of the pegger/grader] to assemble heterogeneous worlds, to hold in a single movement both stockmen-breeders and butchers". He adds that at the same time the pegger/grader "avoids putting into contact the butchers among themselves and the latter rarely go to the abattoirs to compare carcasses". This intermediary has then a fund of knowledge acquired through experience, which allow him on the one hand to link the live animal to its carcass and on the other the carcass to the cuts of meat issuing from it. This double connection around the carcass, which he is the only able to effect, places him at the obligatory point of transit of both the products and information (price, volume) which circulate. This point of transit is linked to the "difficult to access skills format" (Stassart, 2002) that the pegger/grader employs. These skills and data are hardly encoded (no contracts, no classification grid) and are then not detachable from his person.

This capacity to set apart stockmen and butchers within their single activity ranges (the live animal or the meat) creates strong rupture lines in the continuity of the technical functioning of the activities and therefore by itself weakens the link to the origin.

Quilichini (1998) re-examines these disconnections from an economic point of view, through the mechanisms of price formation of a carcass or of a cut or meat along the successive commercial transactions. He explores the nature of "the quality criteria which are in fact endorsed by commercial practice" (ibid.). He ascertains that these quality criteria vary whether "the producer, the transformer or consumer, to mention only the three main groups
of this sector" is addressed. The consumer still very often associates the quality of meat to its tenderness (Mainsant and de Fontguyon, 1988). In spite of this, then price of meat is not directly linked to its tenderness, quite simply because it is not known how to measure it easily at this time it is the factors scientifically or empirically recognized concerning the management of the stocking to obtain an optimum tenderness that the butchers point out. Not being able to access directly to tenderness [...] it is the factors that make up this tenderness, which are then sold" (Quilichini, 1998).

Finally, at the end of the chain, the morphological characteristics of the carcass (type, weight, conformation) have only very limited influence on the price of the cuts. The shift even the rupture between the criteria concurring into the definition of the quality level of a carcass or of a cut of meat is based, for Quilichini (ibid.), on a differential valuation of the various cuts obtained from the carcass. "The categories approach is concerned above all, with setting, a price to a category of meat (based on the type of cut and its level of elaboration)" and in consequence attenuates the reference to the carcass. In fact it introduces a discontinuity between what makes up the carcass price and the price of meat. In a practically independent manner from the qualification of the carcass, it is in fact the category of meat through the destination of the cut of meat and the manner of cooking it which will largely establish its final price.

Setting equivalences to the carcasses neutralises the link to their origin

The industrialisation process of the bovine meat network (particularly at the processing industry stages) is not totally finalized, as compared with other agronomical food processing sectors. The beef processing network is composed of a juxtaposition of firms with operating patterns which relate more to that of artisan entities than solely industrial ones. The main reasons for this are the strong heterogeneity of the carcasses processed, which preclude any mechanisation of the processing chains and requires an ample complement of qualified manpower. Attempts at the mechanization of carving-up chains have nevertheless been experimented with, but the rare actual tests have finally failed. The experiment which went farthest towards success lasted about ten years at the INRA Centre at Theix. It led to the design of a carving-up robot which was finally abandoned some years ago, due to its lack of operational adaptation to the carving-up chains.

This aborted attempt witnessed the generalised movement towards industrialisation of the bovine sector. It translates, up-stream; by a will to «format» the animals (in a likeness to the 100 kg swine, or 42 days' pullets) and downstream, by the production of huge quantities of merchandises, ever
increasingly normalised, standardised and to put on the market more and more elaborated products. Soufflet (1988) had already observed, 15 years ago, the beginning of this industrialisation trend. Sans and Fontguyon (1999a) confirmed this trend and noted its intensification in the area of meat processing.

This increasing industrialisation required setting up technical device with the capability of normalising and standardising products stemming from bovine stocking.

Thus, the different devices for the classification of carcasses which have accompanied this trend, since the France grid to the SEUROP grid, have had as their main target that of setting the equivalence of the products, mainly in order to reduce the costs of transactions. This establishment of equivalences (which makes possible the standardisation of procedures), instead of highlighting the value of the characteristics of carcasses, denies their specificities.

This reasoning suppresses any and all reference to the origin of the meat. Under such conditions; the bovine carcasses and their meat are considered only as an undifferentiated «ore». The differentiation of the products is, in such a case, provided by the technological processing innovations downstream.

The recent progress in the classification of carcasses, intended to replace the OFIVAL agents at the slaughterhouses, do not change in any aspect the existing SEUROP classification grid.

Thus, the introduction of the Classification Machine (MAC) at the slaughterhouses, approved by the authorities, reinforces the tendency to set equivalences to products stemming from the stocking of bovine stocks. The manufacturers justify its implementation by the «objectification» of the classification of carcasses which it provides, until then carried out by the subjective and fallible eyes of men. This innovation constitutes a new shift, the distribution of the functions within the bovine network, but does not change in the least the disconnections between the various agents in the network.

Beyond the shifts in functions provoked by the machine, "to delegate thus the handling of the information to the calculation centres is not devoid of risks" (Stassard, 2002). The possibility of disseminating throughout the network the information collected and kept by the MAC remains hypothetical. Consequently, the MAC risks maintaining, after the peggers/graders, the disconnections within the network, by keeping all information related to the carcasses in the hands of a single agent.

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10 This is noticeably the case of the products under commercial brand «Charal»
However, while the pegger/ grader was able to change his reference base according to the clients, the MAC, once set to standards, will evaluate all carcasses according to the same equation and will attribute to them a price level in fact, depending on the butchers in line with their preference, a given carcass could have different prices which the pegger/ grader knew how to negotiate (a carcass lightly covered with fat could satisfy a given one as it lengthened the maturing period and displeased the other in view of his customers' rejection). Or even further, a carcass covered with fat could supply the butchers in Bordeaux while a lightly covered one would suit the Butchers at Lille.

On the contrary, the definite set of standards of the MAC unil automatically class a carcass in its price category and no longer allow counterbalancing this classification having regard to requests of each butcher or wholesaler, or even recognising consumer specificities of each region.

How, under these conditions, can recognition be given to existing local projects of differentiation on criteria other than solely that of conformation? A set of standards on that single parameter would mean excluding projects based on valorising ill-conformed animals or on feeding characteristics based on local resources and guaranteeing at times imperfectly the expected conformations.

In the first case, the MAC would issue a disqualifying classification (if the carcass is ill-conformed) and in the second case, it would not be capable of fully assessing the value of the carcass (due to lack of visible inscriptions on the carcass of given cattle-stocking practices).

_A matter of disciplines in closed-compartments_

These disconnections as a whole, easily observed in productive realities, have justified from a scientific point of view, the rupture among the fields of disciplines concerned: Animal production science, the technology of meats, or the economy of the organisations as well. In fact, the need to establish a link between the ways of producing, the transformation of the meat products and the relationship between the agents was not perceived.

We can succinctly set apart:
- among specialists in animal production, the matter of qualification of the origin is considered in relation to measurable effects of production factors in trying to maximise the biological response of the animal, manly centred on muscle tissue growth
- equally, among specialists in the transformation of meat products, the analysis focuses on the study of the properties of the product (physical-chemical, technological, organoleptic). It aims at optimising the transformation of muscles into meat, essentially centred on the maturing processes, and indicators of tenderness.
- finally, among economists, this question is treated classically in terms of interaction among agents in the midst of the information network. Furthermore, the equilibrium theories of classical economy do not allow addressing emergence phenomena, just as transaction costs cannot totally account for organisational phenomena.

The existing technical devices, as well as those being developed (markedly the classification machine) attempt to summon more and more scientific knowledge and technologies, so as to improve objectivity regarding the assessment of any carcass. In fact they represent an obstacle to the qualification of the origin of bovine meats.

Consequently, most of the technical devices, as they have developed at present, are ineffective towards qualifying the origin of bovine meats. Worse still, they preclude the groups involved in the project from obtaining the necessary means to justify and achieve recognition of the origin of their meat. In all cases, the parties directly involved in the branding of origin project appear to be forced to build case-specific technical devices in order to facilitate the transport of the origin.

Some relevant situations

We have chosen two contrasting situations to analyse how the procedures of qualification of the origin of bovine meats could be carried out. Their main characteristics are presented succinctly in tables 1 and 2. It concerns the "Taureau de Camargue", Camargue Bull first ever French AOC having achieved recognition and the «Fin Gras du Mezenc» Full marbled from Mezene, for which the AOC request is under consideration.
Table 1: SYNTHESIS OF ESSENTIAL CHARACTERISTIC OF THE CAMARGUE BULL

<table>
<thead>
<tr>
<th>Production</th>
<th>Total volume in 2001:254 T, that is 1,614 Camargue bulls</th>
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<tbody>
<tr>
<td></td>
<td>Average weight of the carcasse: 165 kg</td>
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<td></td>
<td>AOC conformity rate: 83%</td>
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<tr>
<td>Terroir</td>
<td>AOC area, identical to the area of origin of the Camargue horse (Decree of March 1978)</td>
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<td></td>
<td>Two dovetailing areas.</td>
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<tr>
<td></td>
<td>- AOC Geographic area (a triangle whose points are: North Uzes, West Montpellier and East Istres)</td>
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<tr>
<td></td>
<td>- Humid zone (corresponding to the Petite Camargue) where the animals graze during six months in winter</td>
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<tr>
<td></td>
<td>AOC area over 2 regions and 3 departments (causing a coordination problem between the actions of elected authorities and Chambers of Agriculture)</td>
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<tr>
<td>Product</td>
<td>Mainly 3 to 6 year old oxen killed as unsuitable for taurine games</td>
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<tr>
<td></td>
<td>Light conformation of the animals and of the carcasses (ideally situated in the P2 class)</td>
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<tr>
<td></td>
<td>Breed &quot;Camargue bull&quot; renamed as &quot;raco du biou&quot; to avoid confusion between the name of the appellation and the name of the breed and to differentiate the two breeds in the area: raco di biou and brava.</td>
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<tr>
<td></td>
<td>Animals with status of wild</td>
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<td></td>
<td>Sensory tests conclude it is a special type of beef meat:</td>
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<tr>
<td></td>
<td>- A difference of the meat of Camargue bull from other bovine breeds (Charolais)</td>
</tr>
<tr>
<td></td>
<td>- A difference between Camargue bull meats, according to the stockbreeding and feeding on pastures</td>
</tr>
<tr>
<td>Know - how breeding</td>
<td>The logic employed to manage the breeds is to ensure that an aptitude for taurine games be maintained. This leads to the production of animals with special characteristics</td>
</tr>
<tr>
<td></td>
<td>Changing pasture sites in summer and winter (humid zone)</td>
</tr>
<tr>
<td></td>
<td>Complex selection strategy seeking to obtain traits whose genetic transmittal is not known (&quot;drive&quot; of the animal)</td>
</tr>
<tr>
<td></td>
<td>Testing of the selection during races &quot;à la cocarde&quot; and elimination of unsuitable bulls</td>
</tr>
<tr>
<td>Core of the project group</td>
<td>A local businessman is the core of the project group</td>
</tr>
<tr>
<td></td>
<td>Good representation. Quite legitimate. Has been the core of the project since the beginning of the AOC certification effort, but periodically questioned.</td>
</tr>
<tr>
<td></td>
<td>Strategy of integration of the stockmen in the construction of technical devices</td>
</tr>
</tbody>
</table>

The Camargue Bull

The Camargue Bull AOC is based on the breeding of two stocks (raco di biou and brava) in an area matching that of the Camargue proper, expanded to the East by the flats of Bourg "plan du Bourg" and to the West by the Gard river "Camnargue" i.e. "Camargue gardoise". The bull is bred first and foremost to sire animals fit for racing or bullfights and the AOC meat comes from those animals eliminated from bullfighting games. The animals graze out
Table 2. - SYNTHEsis OF THE ESSENTIAL CHARACTERISTIC OF THE FULL MARbled OF MEZENC

<table>
<thead>
<tr>
<th>Production</th>
<th>Total volume in 2001:390 animal were marketed under the Full Marbled of Mezene brand 2002</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Average weight of the carcasse: 358 kg</td>
</tr>
<tr>
<td></td>
<td>AOC conformity rate: 73%</td>
</tr>
<tr>
<td>Terroir</td>
<td>The highest permanent habitat in Europe (up to 1500m)</td>
</tr>
<tr>
<td></td>
<td>The zone proposed for the Full Marbled of Mezene AOC is defined by its altitude. Above 1,100 m, hay is characterized by the presence of wild fennel</td>
</tr>
<tr>
<td></td>
<td>Zone placed over 2 regions and 2 departments (causing a coordination problem between the actions of elected authorities and Chambers of Agriculture)</td>
</tr>
<tr>
<td>Product</td>
<td>The Fine Marbled is an anachronistic animal in a bovine sector seeking rather lean meats</td>
</tr>
<tr>
<td></td>
<td>Carcasses have a slight fat covering, but the meat is marbled</td>
</tr>
<tr>
<td></td>
<td>Sensory testing evidences a difference with other types of animals (stew preparation method, which reveals the special type Full Marbled stock meat)</td>
</tr>
<tr>
<td></td>
<td>Establishment of technical devices to grade the Full Marbled type animal (Full Marbled evaluation grid, Full Marbled commission, grading of Full Marbled during livestock fairs)</td>
</tr>
<tr>
<td>Know-how breeding</td>
<td>The local breed has disappeared (employing pure breeds or crosses: Salers, Aubrac, Limousin, Charolais crossing with Montbeliarde or abundantly with Charolais or Limousin bulls)</td>
</tr>
<tr>
<td></td>
<td>Several gradings during the life of the animal, more or less intensive according to the availability of will fennel hay in place in the stables, the number of heifers in cohort</td>
</tr>
<tr>
<td></td>
<td>Special fattening based of hay from the Mezenc</td>
</tr>
<tr>
<td></td>
<td>Classing of the hay, mainly for its floristic characteristics</td>
</tr>
<tr>
<td></td>
<td>Distribution of the hay 3 times a day, and elimination of the rejected fodder</td>
</tr>
<tr>
<td></td>
<td>Concentrated fodder added so as to modulate fat content</td>
</tr>
<tr>
<td></td>
<td>Different strategies based of the utilisation of hay and the number of Full Marbled to be fattened</td>
</tr>
<tr>
<td></td>
<td>Management of the stock (espessially fattening and finishing) oriented to the production of marbled meat</td>
</tr>
<tr>
<td>Core of the project group</td>
<td>The core group of the project is made up by stockmen and local elected representatives</td>
</tr>
<tr>
<td></td>
<td>Representative and legitimate for the professionals (stockmen, butchers, restaurant operators) and the public</td>
</tr>
</tbody>
</table>

in the open on two areas: one dry and the other humid. The reasoning at work in the management of blood lines, to ensure durably the aptitude for bullfighting, results in the shaping of animals of very specific characteristics. A Group has been constituted with at its core the Tarascon Slaughterhouse and its director.

The ideal animal is that which knows how to race and fight. It is clear that this does not provide it with any particular aptitude for the production of meat. This is reflected logically in its carcass which is, on the average, classed P2. Normally, this classification would lead it towards a low-grade use in food for household animals (pet-food).
As it constitutes the core of the qualification of origin system, the carcass is an easily identifiable point of reference due to its unique conformation. Paradoxically, this extreme originality in the manner of producing the meat confers to the carcass of the Camargue its characteristic type, in the sense that it is not comparable to any other existing beef category. This singular type makes it an ideal referent as a basis for technical devices.

The re-focusing of the technical devices around the carcass itself gives the participating parties a tangible object on which to base the qualification test. In fact, from its visual defects the carcass is a sturdy indicator of the quality of the meat. The carcass of the Camargue bull is therefore informative of the type of meat which is found on it.

Reality tests focused on the carcass allow using the technical devices already existing in the bovine meat network. The SEUROP grid can thus be easily summoned for the evaluation of Camargue bull carcasses. It cannot however be used as it now stands since it would not lead to qualify the carcasses, but to disqualify them in view of their bad shape. The group which is furthering the project has had then to adjust the qualification grid to the type of carcass to be graded.

The stockmen are then but appended to the technical arrangements. They are merely summoned to the work-sites only through some types of carcasses which they deliver to the slaughterhouse. Even when they are not directly present however, the specified stocking method are inscribed in the carcasses: One look at a bull's carcass suffices to notice them. The characteristic type of the carcasses easily witnesses the transfer of the live animal's origin, to its carcass.

In as far knowing whether the transfer from the origin extends to the meat itself, this is a matter for the butchers. There also, the skills of the butcher (or the de-boning technician in the carving-up workroom) are very important, for the registry of the origin from the bull up to its meat. In the Camargue, he must be capable of carving up whole carcasses, and must as well adapt his cuts to the specific type of the carcasses. In view of the variability of the carcasses (considering the erratic composition of slaughterhouse cattle lots) and their conformation (let us also think about an ideal carcassed classed P2), butchers must develop specific cutting patterns.

The fact that the carcass is indicative of the type of meat and that there are specific cutting-up devices (which are not yet specified), allows the marketing of Camargue bulls carcasses and meat in supermarkets. The customers no longer need to find a butcher behind the meat counter, considering that the origin of the meat is visibly inscribed.
In the Camargue case it is possible to imagine the modalities of transfer of the origin as and when transformations take place: from a live animal to the cut of meat (Figure 1) with the carcass in a pivotal position.

**The Full marbled of Mezenc**

This concerns a small volume production. The animals (mainly heifers of somewhat less than 3 years, of different breeds) are marketed only during 6 months of the year, from January to June.

Figure 1. - MODES OF TRANSFER OF THE ORIGIN IN THE CASE OF THE CAMARGUE BULL

The originality of the Full marbled rests of an ad hoc selection of the animals followed by a lengthy Winter feed essentially of hay of the Mezenc Plateau. This altitude hay is special, as it contains "cistre", (wild fennel). This is sorted out, usually the best fraction is distributed to the Full marbled being fattened, three times a day. These animals are marketed almost exclusively among retail butchers.

The construction of technical devices (even if it is not finalised) must go through the definition of a context constituted by objects identified as pertinent to offer a pattern of action common to stockmen and butchers. From this point of view, the carcass is not the focal point either to the stocking or butchering trades.
On the other hand, the carcasses of the Full marbled animals are not very typified, that is to say that they cannot be considered, by themselves, to belong to a specific type. They do not offer then reliable points of reference to decade on the origin of the animal and its meat, as they are difficult to identify in comparison to a more classical production of single breed heifers.

Consequently, the technical devices get organised around a centrifugal movement of the carcass expelled from the qualification of origin devices. The carcass of the Full marbled from Mezenc is not indicative of the type of meat which can be found on it. Therefore, there is no testing of the carcass, which is dumb and incapable of refer back to its own origin. There remains then only the living animal and its method of stocking which can bear witness to the origin of the meat.

However, it is impossible to put this link directly to a test since it does not exist as a material object, but only as a virtual thread between two states of the animal fundamentally disconnected. Only the procedure based on an evaluation of the animal can justify that thread, bearing in mind that it is not entirely foreseeable.

The reality tests imposed by the Full marbled commission and validated indirectly by the butchers through prices agreed for the purchase of Full marbled animals confirms the link between the fattening methods and the type of meat in other words, these reality tests witness the transfer of the origin of the animal to its meat and control the possible drifts of the qualifying system of the origin.

This direct relation of the stockman and the butcher demands that both parties involved should have sufficient common points of reference to talk to each other. The purpose is not so much the sharing all points of reference available since, were it so, the stocking and butchering trades would be confused. The intent is rather to rely on the animals and the graded meat to constitute significant points of reference (animal fit or unfit for fattening, fixing the price).

In such a case both interested parties agree that the specific breeding system permits the registration of origin at the level of the animal, and which is found in the meat thanks to the work of the butcher. Consequently, this type of carcass and its meat must be accompanied by a set of information, without which the thin thread of the origin which links the animal to its meat risks begin lost. The sale at a butcher's shop is therefore indispensable; so that the butcher may inform his customers on the stocking method used for the animal and the name of the stockman who fattened it. In a supermarket, having regard to the fact that the product can hardly speak for itself, the origin would be obliterated.
In these conditions (and for reasons opposed to the simulation in Camargue), it is fairly logical that the group which carries the project forward should be constituted around a core of stockmen from the «Estables» who then enrol some retail butchers. If the stockmen had carried the project with the support of locally elected officials only, they would not have succeeded to express the potential characteristic type of the animal without summoning the assistance of butchers capable of carving up whole carcasses.

Considering that the peggers/graders have been separated from the grading system for the Full marbled (in view of the absence of a device to qualify the carcasses); the butchers, besides purchasing the cattle on the hoof, must cut up entirely and trade the whole carcass. At present, fewer and fewer butchers possess such skills, but here also the work on 'ready-to-carve' pieces of meat would not have allowed to transfer the origin to the cut of meat. These skills relate to the aptitude to set values to all pieces including fore quarters, to manage the stock as a function of sales, and to know their customers sufficiently well to trade the meat which is suitable.

It is possible to imagine ways for the transfer of the origin in the case of the Full marbled of Mezenc through setting in direct connection the animal on the hoof and its meat (Figure 2).

Figure 2. - METHODS OF TRANSFER OF THE ORIGIN IN THE CASE OF THE FULL MARBLED OF THE MEZENC.
This type of grading, far from a reversal to an obsolete tradition, integrated in the modernity of social demands and scientific research in fact, the identification of the origin of the animal through the specified ways of production is well established in the current concerns of consumers. Furthermore, the interest focused on the meat in the Full marbled project (even if the purchase is done on a live animal, it is first and foremost a specific type of meat which is purchased by the butchers) goes in the sense of a increased awareness of the criteria for evaluation of meat in the establishment of the price of the animal. Finally, establishing a direct relationship of the stocking system (especially cattle feed) and the characteristics of the meat follows the same trend as current research.\textsuperscript{11}

*Proposal for a model*

Table 3 presents broadly the possible situations depending on whether the carcass is informative, or not, of its origin. These two archetypes are not meant to represent the overall range of possible situations. They delimit a field of situations by presenting what we analyse as its extremes.

The technical devices are centred either on the carcass at the slaughterhouse or on the stocking activity. Thus, depending on the archetype, the displacement concerns simultaneously the distance (from stable to slaughterhouse), the objects of classification (from butcher to the pegger-grader).

It is not possible to go any deeper here in the total number of cases with which this model has been confronted. However, in his Thesis for a Doctor's Degree of one of us (Trīft, 2003) one can find specifically how three other situations, which have been the object of a detailed research, are positioned:
- the «Manzu de Corse», whose characteristic clearly place it near the archetype «Taurau de Camargue»,
- the «Baeuf de Charolles» which would be relatively close to the «Full marbled of Mezenc»,
- and the «Maine-Anjou» whose carcasses are very informative but whose mode of construction brings them close to the archetype «Full marbled of Mezenc», achieving through this fact a sort of synthesis.

\textsuperscript{11}Particularly the European «Healthy Beef» programme which researches the relationship between the nutritional qualities of meat regardin fatty acids, and feeding modes. This programme is presented in an in-depth article in this book (Scollan et al., 2005).
Table 3. - PROPERTIES OF THE TECHNICAL DEVICES IN EACH TYPICAL SITUATION

<table>
<thead>
<tr>
<th>Technical devices</th>
<th>Properties sought in the technical devices according to the specific situations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carcass scarcely informative of meat type</td>
<td>Carcass informative of the meat type, Camargue bull</td>
</tr>
<tr>
<td>Full Marbled of Mezenc</td>
<td></td>
</tr>
<tr>
<td>Stockmen</td>
<td>Traders/Institution</td>
</tr>
<tr>
<td>Selection and then orientation of the animals</td>
<td>Orientation and then selection of the animals</td>
</tr>
<tr>
<td>Heterogeneous</td>
<td>Heterogeneous</td>
</tr>
<tr>
<td>Disregards the carcass</td>
<td>Centered on the carcass</td>
</tr>
<tr>
<td>Evaluation</td>
<td>Prediction</td>
</tr>
<tr>
<td>Stockmen and butchers</td>
<td>Traders (and breeders)</td>
</tr>
<tr>
<td>Stables (and cattle fair)</td>
<td>Slaughterhouse (and arena)</td>
</tr>
<tr>
<td>Shared uncertainty and bilateral negotiation</td>
<td>Uncertainty borne by the stockman and preset prices</td>
</tr>
<tr>
<td>Direct connection: animal on the hoof – meat</td>
<td>Succesive connection: animal on the hoof – carcass – meat</td>
</tr>
<tr>
<td>Process of evaluation of the link live animal/meat (demonstration)</td>
<td>Testing of the carcass (show)</td>
</tr>
<tr>
<td>Valuations of the origin</td>
<td>Preservation of the origin</td>
</tr>
<tr>
<td>Essentially in butcher shops</td>
<td>Possible in supermarkets</td>
</tr>
</tbody>
</table>

This last case shows that granting validity to the origin stimulates operators upstream to exert their capacity to build specific technical devices while closely associating butchers to this effort. This working group has succeeded in leading the necessary apprenticeship and has just obtained (early 2004) its AOC, the second one in France for bovine meat after that of the «Taureau de Camargue». Through informations from some colleagueus in other countries, we tried to verify the relevance of such model. A case in Switzerland named «Dry beef meat of the Valais» is informed by Barjolle (personal communication) and another case from Italy Vitellone bianco dell «Apennino centrale» is studied by Marescotti (personal communication). In the Table 4, we summarise the main points to be compared. Obviously, the swiss beef meat is on the same trend as «Taureau de Camargue» because of the essential place of the negociants in the creation of the qualification and carcass is put at the very center of the project. At the contrary, the Italian case is more or less comparable to the case of «Full marbled of Mezenc» because of the main role of breeders and the central place given to the animal (Marescotti, 2000). These two examples encourage the use of such a framework in an all around Europe.
Conditions for grading

Bring the stocking and butchering activities out of their closed compartments: have the stockman establish a dialogue with «his» butcher.

The separation of the activities of stockmen and butchers, through the multiplication of intermediaries between the animal on the hoof and its meat, creates rupture lines among the parties participating in the network. So that the origin gets diluted through every change of hands and transformations of the product, and no longer warrants its transfer to the cut of meat.

On the contrary, to place in direct connection the technical functioning of the stocking and butchering activities — which would not be limited to a simple flux of animals and carcasses — but would also be an occasion for exchanges makes it possible envisage the transfer of the origin.

<table>
<thead>
<tr>
<th>Technical devices</th>
<th>Vitellone Bianco dell’Apennino Centrale (I)</th>
<th>Vianede secha du Valais (CH)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Core group</td>
<td>Stockmen (Consorzio Carne Bovine Italiane)</td>
<td>Traders (and breeders) Centered on the carcass</td>
</tr>
<tr>
<td>Qualification System</td>
<td>Parties involved in the qualification of the origin</td>
<td>Stockmen and butchers</td>
</tr>
<tr>
<td>Place of qualification</td>
<td>Stables (and cattle fair)</td>
<td>Slaughterhouse (and arena) Testing of the carcass (show)</td>
</tr>
<tr>
<td>Ascertaining of the origin</td>
<td>Process of evaluation of the link live animal/meat (demonstration)</td>
<td></td>
</tr>
<tr>
<td>Aim of the work on the carcass</td>
<td>Valuation of the origin</td>
<td>Preservation of the origin through processing know-how</td>
</tr>
<tr>
<td>Marketing</td>
<td>Essentially in butcher shops</td>
<td>Essentially in supermarkets for exportation</td>
</tr>
</tbody>
</table>

Establishing the connection requires re-learning to work together. This requires re-defining the boundaries of everyone's activities. Thus the work of the stockman will no longer stop when the animal leaves the stocking farm, but will extend beyond its slaughter.

Discussions between the stockman and (his) butcher will allow him to apprehend what happens with the carcass of the animal he bred. It is not so much that he will be interested in which butcher shop or supermarket it will be sold, or to what type of client. He will be concerned instead with the judgement criteria on the basis of which it will be evaluated, so that he may eventually respond by adjusting the type of animal to be bred.
Today, the butcher's function is reduced to cutting up work ever more distant from live animals and they carcasses. This to the point where it disappears completely when it is the carving up shop which supplies him with vacuum-packed ready-to-cut pieces (RTC) which he has but to slice. Is it possible, in actual fact, to still call "butcher" a person whose task could be summed-up as just cutting slices of meat? The carving up robot, if it should have proved operational in slaughterhouses, would have pushed this reasoning to its limit by excluding definitely the butcher from his original trade. Establishing a teamwork approach between the stockman and butcher would require that the latter re-assume several facets of his trade:
- Evaluation of the animal on the hoof which he negotiates with the stockman.
- The purchase and cutting up of the whole carcass which requires both technical skills; but also commercial ones as well so as to be able to sell the whole carcass. This problem does not come up when the "butcher" works with RTC pieces. He orders replenishments when he needs them; but composed exclusively of fine cuts of meat.

In this context, the butcher will be able to talk to his clients about the meant that he sells and reconstruct the link to its origin, while this will be hidden when the butcher works only with RTCs.

However, establishing this connection is not spontaneous, either from the point of view of the objects (live animal and meat) or of the participating parties and their activities: It will require some form of adjustment of judgement criteria among the professionals. A stockman considers preferentially the level of fattening of the animal and will not judge it in the same manner as a butcher, who will mainly be looking for the yield in meat. The participating parties must therefore construct specific technical devices which recognise these different judgement criteria, but which maintain them in compatibility. Finally, the team perspective of criteria brought forward by stockmen, and those used by butchers allows then to ensure reciprocal validations of production choices.

*To state the origin of a meat: recognize the distinctiveness*

The development of industrial strategies imposes setting in equivalence the types of bovine meats in order to obtain objective measures independently of time and space. In such a case all the meats are evaluated on the same basis and reference to the origin is completely left out. However, origin is singular by definition. It is not then reducible to pre-existing categories which, in general, are not suited for the judgement of animals and carcasses which should be atypical as compared with the remainder of bovine production.
By the same token, origino not transferable. The technical devices specially created to qualify the origin of meats in a specific situation are not transferable elsewhere. This non reproducible nature stems from the fact that they were developed on the basis of specific stocking and butchering know-how and practices. Nevertheless, it is sometimes difficult to develop such specific devices against the current of technical advice being circulated.

The stake is then to construct collectively a relevant offer. The choice of the registry an which the character of the meat is based seals a strategic agreement; for the Taureau de Camargue, the bullfighting games mould the type of animal and its carcass. The technical elaboration is naturally not easily coded through the classic criteria used for the description of indifferent stocking concerns the "Full marbled of Mezene" shows a combination of stocking conditions, type of fattening based on mountain hay and of conducts which are not directly legible on the carcass and do not fit the standard zoo technical precepts (Hoquetté et al., 2001). Finally, relevance is evaluated by the intended consumers, through various confidence aspects: the statutory and sanitary basis, the recognised skills of the butcher at the counter, as well as being culturally and gastronomically familiar with the product itself. All this will translate into a willingness to pay representing the recognition of the efforts exerted.

*Collective action dynamics*

Evidently, all this presupposes that a negotiation is conducted to its conclusion concerning the construction of this offer. The concepts of production costs, seasonal variations and quality management remain central ones. The cases studied show that important apprenticeship efforts must be carried out during the inception and development of the project, with leaders having a personality capable of gathering around them the various interests and trades.

But it is also a matter of showing themselves as collectively capable (Nicolas and Valceschini, 1995) of:
- obtaining legal recognition of the origin constructed,
- ensuring the legitimacy of this construction in the view of the local society,
- working out effectively the jointly defined product,
- showing that it is subjected to credible controls, with sanctions for those who do not respect the general regulations,
- accompanying-assisting the operators through research and development.

It is clear that the public mechanisms set in place following European regulation 2081 authorise such processes, even if it is noted that up to now very
few have succeeded. The nature of the obstacles identified, as well as the archetypes of the technical devices to be imagined as we have analysed them, explain this law number.

**Conclusion**

Among the products which claim a quality linked to their origin, meats remain a category of foods which does not fit easily in the definitions and frames foreseen. The interest of the micro-networks which we have identified does not stem from their capacity to supply huge volumes for mass markets: it is clear that the constraints of geographical limits and technical choices (breeds, feeds and ages) severely reduce the productive capacity of the associations constituted. For all that, to qualify the origin of a bovine meat forces the consideration af criteria which are of interest to all agents. And that is a fairly original situation quality cannot be concentrated in an object which can be isolated from operational relationships. The criteria are constructed on technical objects which gather several points of view to be linked. They re-enquire the territorial anchoring through the insertion of local resources at good in the technical regulations those that structure the local grading devices (Trift and Casabianca, 2002). These steps do not seem circumscribed to micro networks or "niche" markets: it's the whole bovine meat sector which is invited to carry out a reflective analysis at the hour of globalisation and alignment of European prices to worldwide rates.

Nevertheless, contrary to other quality signs which allow the product to travel, the construction of AOC's on bovine meats does not give much scope for this. Normally, the signs of origin allow the transportation of the product beyond the region in which it has been elaborated, as is the case for cheeses or wines. In the absence of direct contacts between the producer and his customer, the presence of an indication (most frequently in the form of a logo vouching for the observance of procedures attaching to the certification) guarantees to a extra local third party the characteristics of the product he is buying (in the case at hand its origin if it is a product recognised as AOC or in PGI).

In the case of meat, it seems that the recognition as AOC does not easily permit to have it travel outside of its geographical area of origin in fact, the high level of interaction between local butchers and their customers implicitly includes the latter in the process of construction of the origin. It is the nature of the meat imperfectly transformed on leaving the butcher's shop, which
definitely requires the participation of customers in the completion of the elaboration processes. When cheese exits a maturing shed, a wine the cellar or bread the bakery, they can be consumed without, other process but the initiation to the art of tasting them. Beef meat on the contrary, requires a culinary preparation to be edible, which calls for other skills in addition to its tasting. These culinary preparations are still largely present in regional gastronomy traditions. They act strongly for a return to the methods of butcher carving of the carcasses and cuts, since given preparations demand specific cuts of meat (then of specific types of cutting it).

Consequently, the characteristic types of bovine meat (including those with an indication of their origin) seem scarcely transportable outside their production cradle. This is valid for carcasses as well as meats. To make characteristic types of meat travel, means risking that the butchers will not take their originality into account when cutting them up and neutralise thus their specificity potential (fatty carcass, ill shaped) (Ventura and Van der Mulen, 1994).

To have specially typed meats travel, is also to take the risk that the customers ill - accustomed to these types of meat (redder, firmer or more marbled) prepare them in an inappropriate manner and erase their specificity. However, there are specific culinary preparations which bring out the originality of meats (the «gardiane» for the «Taureau de Camargue», the stew of the Plateau du Mezenc, or the thick marbled Maine Anjou sirloin steak). The development of culinary preparations (especially as ready to serve dishes) is an interesting response to the transport of typical meats, but in turn, hinder the recognition of their origin in a wide area.

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ODREĐIVANJE PODRIJETLA GOVEDEG MESA U EUROPI
ANALIZA SOCIO-TEHNIČKIH ODREĐNICA NA TEMELJU FRANCUSKOG ISKUSTVA

Sažetak

Kakvoća je predmet raznih definicija: razlikujemo generičku kakvoću masovnog tržišta i specifičnu kakvoću koja omogućuje podjele na osnovni razlika. Stoga je već određeno i zaštićeno podrijetlo dio te specifične kakvoće. Kriteriji što će se primijeniti rezultat su kvalifikacijskih postupaka. Što se tiče govedine vrlo se malo situacija može upotrijebiti za analizu strukture tih kriterija. Iznose se prepreke koje koče prijenos podrijetla od žive životinje do odresa mesa za konzumiranje te proučavaju njihovi uzorci.

Uzevši kao temelj meso čije se podrijetlo određuje, analiziramо dvije suprotnе situacije u Francuskoj:
- bika iz Camargue-a, životinje čije je truplo loše oblikovano i koji pokazuje dobar smjer za koordiniranje činitelja u lancu i
- potpuno mramorizirani Mezenc koji, za razliku, ima prosječno truplo i podvrgnut je posebnom sustavu tova, što prisiljava uzgajivače i mesare da se organiziraju oko žive životinje.


Ključne riječi: goveđe meso, zaštićeno podrijetlo, strukturiranje kriterija, specifična tehnička sredstva

Primljeno: 20.05.2007.