

DESIGNATION OF ORIGIN: QUALITY AND SPECIFICATION

Leo Bertozzi

Consorzio del Formaggio Parmigiano-Reggiano, Reggio Emilia, Italy

QUALITY IS VIGOROUSLY PURSUED AS A COMMON OBJECTIVE

The development and the promotion of products of quality represent for agricultural politics one of the major challenges of the next years (EEC Commission, 1990). Quality constitutes the main topic of numerous seminars, it is a top priority for the organization of research groups and the reorganization of structures within firms. It constitutes, also, the subject of legislation secured by guarantees at different levels. Due to a considerable cultural (especially economic) change, the evolution of varying mentalities highlights, to a considerable extent, qualitative aspects. In industrialized countries, in the post-war period, all of the efforts were oriented with success toward the satisfaction of the alimentary needs of the population. Consequently, it helped to increase enormously the diversity of foods offered and the saturation of the market, for which investments were directed toward diversification. In such a context, the themes relative to quality always became more present, passing from the preoccupation of the individual to that of society and finally to the environment. Also, the attention of legislators was directed in this way, translating constituent concerns into laws always more current for the production and commercialization of food.

Quality can be defined, but is measured only in part. This attribute, therefore, remains, for the most part, subjective, depending on decisions and evaluations that have a limited range. Quality, in other words, remains a concept linked to culture. This brings one then to the point of asking if there can exist a valid means to exceed the limits of subjectivity, suitable to describe, evaluate and defend 'quality'.

In response to these considerations, there is a tendency toward spreading the application of the concept of designation of origin (DO), already adopted by some countries in order to distinguish traditional products of value. This paper, without pretending to examine all the aspects of every attribute, proposes to define in which ways the DO integrates the concept of quality,

responding in specific ways to the expectations of producers, the needs of consumers and, at the same time, the necessities of legislators.

THE DESIGNATION OF ORIGIN

According to the definition of the European Community (EEC Council, 1992), DO 'means the name of a region, a specific place or, in exceptional cases, a country, used to describe an agricultural product or a foodstuff:

- originating from that region, specific place or country; and
- the quality or characteristics of which are essentially or exclusively due to a particular geographical environment with its inherent natural and human factors, and the production, processing and preparation of which take place in the defined geographical area'.

The use of a geographical name to define a product of origin from a region corresponding to that name is very ancient. Already in the fourth century BC in ancient Greece, there existed wines from Corinth, almonds from Naxos, honey from Sicily, and marble from Paros, while in the Roman Empire under the reign of Augustus, there were well known dates from Egypt, cured ham from Gaul, oysters from Brindisi and marble from Carrara. Similar lists were compiled in the successive historic periods, until our times. In the same spirit, a commercial export treaty signed in 1712, mentioned the wines of Burgundy, the silk of Messina, the leather of Russia and the beavers of Canada (De Vlietan, 1989). The majority of the designations used in the past have been abandoned to follow economic or social evolutions, but the employment of such geographical names continues and has been developed with the growth of production and trade. As a result, agreements at an international level have been drawn up, beginning with the Convention of Paris of 1883. The use of a geographical name to designate a product of origin of a region that carries such a name is explained by the fact that the product of the designated region presents a few characteristics of quality and of originality that are the result of the geographical influences and/or the result of human factors. This usage was first established at a local and regional level

then, with the development of trade, on the national and, very frequently, on the international level.

In the DO, therefore, the two factors of originality and notoriety exist that also involve the economic importance of the production. The influences of the natural environment are related to the pedologic conditions that furnish the particular, identifiable characteristics of the product. The influences of human factors are related to the choice of production methods and of technology.

Fundamental differences exist with respect to commercial brands. The brand is a visible sign that distinguishes the products or the services of a business or of a group of businesses from those products and services of other businesses; it corresponds to a credible and prescriptive right of ownership individually or collectively alienable. The owner of a brand can use it as desired, for any product obtained from their business, or from other businesses, in one or in several countries; then, the characteristics, the way of presentation or the production of products sold with the brand in possession can be modified; then, it can also be given to others, also if these people are found in other regions or countries; in the end, other manufacturers, even in other countries can be licensed to use the owner's brand.

The DO, instead, corresponds to a collective right of use for products based on local, faithful and constant practices from a defined geographical area; it is an inaccessible right that does not belong to a personal claim of a producer but is bound to a territory corresponding to the DO and can belong, therefore, to all who work in that region. Such a right is unalienable; therefore, it cannot be taken away from a producer that fulfils the corresponding conditions for use of the Designation. It is then an imprescriptible right, and only the producers of the region of origin that respect the conditions of use can utilize the DO for admitting to the market an original and unique product.

The conditions for obtaining the protection of a product as a DO are:

- the determination of the obligations to follow in order for the DO to be legitimate precedence, delimitation of a geographical area and of the conditions of production and transformation of raw materials; and
- the existence of a system of controls and of fraud repression that involves the definition of specific characteristics of the product based on objective and measurable parameters, in order to avoid unfair competition in cases of usurpation against producers or fraud against consumers.

Some European countries from the Latin tradition and law have codified and adopted for some time now the customs of the DO for numerous agricultural and food products. These were adopted for wines at the EEC level starting in 1979. Actually, the typology of products protected by the DO is varied and includes, other than

wine and alcoholic beverages, vinegars, dairy products, meats and vegetables. The economic relevance of the many designations varies from products very well known and found practically all over the world, like Roquefort, and others marketed only in the area of origin, like the hay of Crau (France).

Considering the evolution of the market in different cultures, the implementation of the DO has come to be perceived in different ways: for some, it is a way to maintain their typical productions; for others, it represents the ultimate defence of traditionalism. For such reasons, it becomes useful to reflect on the evolution of the agricultural sector in industrialized countries.

The development of agriculture in the decades past was determined by the degree of modernization, through the objectives of intensification and rationalization of production. Tradition was viewed as a rigid and vague preservation of old and inefficient habits. Schultz asserts that, 'The man who farms as his forefathers did cannot produce much food no matter how rich the land or how hard he works' (Schultz, 1964). The continuation of producing traditional products was perceived as outmoded and a residue of a tradition that was exercising a disruptive influence on the modernization process. Even in newer, more differentiated approaches, the paradigm — tradition equals passivity and is opposed to change — remains implicitly influential. National agricultural politics are oriented, then, towards modernization. Commercialization is achieved by following the latest research and development to produce new appropriate technologies, fostering the development of industries to take advantage of the latest scientific input and extending education to give farmers the ability to use the new input. This lopsided approach has produced an excessive strain on the natural and physical environment leading to the standardization of the rural landscape and, in the peripheral farming regions, land abandonment and agricultural decline (Lowe, 1992). Productive diversification was understood to mean the development and the spread of indistinct products with new commercial brands — more than the development of the local patrimony — with focused attention given to the hygienic aspects of production. Therefore, if consumers are able to find the same products in an area ever more vast, they find themselves ever more forced to select among products differentiated by a few simple characteristics that take into account, almost exclusively, changes in eating habits. An example of this would be the proliferation of products with a low content of cholesterol, salt and calories.

Meanwhile, there are often descriptions of the phenomenon of overproduction, the increase of subsidies and the environmental damage that is the result of modern agricultural methods (Priebe, 1985). There have now begun to appear proposals for 'partial modernization' in which traditional and modern elements

each take on specific cultural connections (Bendix, 1966). It is coming to be understood that, through the preservation and the development of traditional products, it is possible to improve the economic conditions of unfavorable or marginal areas. It is also clear that the objectives and the measures of agricultural politics are driven by the diverse cultural and structural conditions existing in the farm community.

For these reasons, the instrument of the DO becomes valuable as a condition that can come to be applied in a uniform way at the international level.

THE DESIGNATION OF ORIGIN IN CHEESE

In 1951, several European countries (Austria, Belgium, Denmark, France, Italy, Switzerland, Norway, Sweden and Holland), agreed to an 'International convention on the use of designations for cheeses' with the purpose of putting into effect a regulation and a system of international cooperation intended to assure and guarantee fair reciprocal use of the Designation of Origin in cheeses. Subsequently, only Italy, France, Spain and Portugal adopted specific substantive national legislation, which was then broadened at the international level with bilateral accords.

In the legislation of the countries cited, for every DO, the following are established:

- the area of production including the geographical zone in which the milk is produced and the cheese is manufactured and aged;
- the conditions of production, manufacture and aging, based on traditional methods;
- the characteristics of the cheese;
- the methods of control.

In general, the application of these regulations is submitted to an administrative body that affiliates the producers and that is recognized by the national government.

Actually, in the total production of cheeses, those with DO represent 5% in Spain, 8% in Portugal, 10.5% in France and 49% in Italy (Bertozzi, 1993).

The factors that characterize the typicality of cheeses with DO are based on animal breed, diet and raising conditions, treatments to which the milk is subjected, processing methods and length of aging. If for wine and olive oil, but also for other vegetable products like beans, peppers and asparagus, the bond with the soil is direct, in the case of animal products like cheese, this bond becomes less strong. Various cheeses, from the universally known Roquefort (France) to the less well known Serra de Estrella of Portugal, lay down as conditions that the milk must be produced by local breeds. This characteristic is required above all by cheeses made from sheep's milk, while for those made from cow's milk, the local breeds are maintained above all in

the mountainous regions. This is the case with Beaufort, Reblochon, Abondance from the Savoy region, Fontina from the Val d'Aosta, Comté from the Jura and Salers from Massif Central. For the cheeses where local breeds by now are substituted, there exist programs of selection that take into account some of the original properties of the milk as to coagulation, content and genetic variants of casein. Particular importance is given to the feeding of the livestock. Cheeses produced in major quantities, like Parmigiano-Reggiano® parmesan cheese in Italy and Comté in France prohibit the use of silage and establish that the cows are fed with local forage, in a way to furnish a direct link between the earth and the final product, which is the basis of every factor of typicality. From the point of view of technology, a large part of the cheeses actually known as DO utilize only raw milk, supplemented with natural ferment products. There exist precise regulations also for the coagulating agents; Portuguese cheeses produced with sheep's milk, for example, are coagulated under the exclusive action of the vegetable rennet (*Cynara cardunculus*). Other specifications regulate the conditions of fat separation, salting and aging. Regulations for the mold cheeses require that aging takes place in the natural caves of the area of origin (Roquefort, Bleu des Causses, Cabrales of Cantabria). All of the cheeses have specific composite parameters for the minimum length of aging and the typology of the brand that certifies the attributes of the designation of origin.

These regulations have been established to maintain the specific characteristics of every cheese, guiding the firms for the transformation of raw material suitable for this purpose. The preoccupation of the producers has always been to reduce as much as possible the number of forms of cheese that cannot avail themselves of the DO because they present defects or characteristics that do not meet the established standard. Therefore, regulations for branding have been adopted, based on the methods of the evaluation of quality that, along with the traditional methods of visual external and internal examination, estimate the physical characteristics and the aroma or the texture of the cheese. The evolution and the enlargement of the market, however, has raised the necessity to furnish objective and verifiable parameters to certify the typicality of every production, in a way to differentiate it in comparison with imitations. The various national organizations that control the application of the standards that govern the production of cheeses with DO have supported numerous studies to define the physical, chemical and sensorial parameters necessary to define and verify, in an objective way, the intrinsic characteristics of these products. In the case of cheeses with hard and semi-hard texture, the attention has been concentrated on the parameters that quantify and characterize proteolysis. During aging, all cheeses are subject to a process of protein degradation that brings on the formation of peptides,

free amino acids and the products of their catabolism, and this determines, to a large degree, the structure, aroma and flavor of the cheese. Through the relative composition of certain free amino acids, it is possible to establish chemiometric models to evaluate the real typicality, to recognize defects and to safeguard the commercial identity of the cheeses (Resmini *et al.*, 1988). A methodology that draws the consumer in is sensory analysis. Recently, a guide was published for the sensory evaluation of the texture of cheeses with hard and semi hard textures (Lavanchy *et al.*, 1993), through which it is possible to discriminate, for example, Parmigiano-Reggiano® parmesan cheese in comparison with imitations made in Argentina and in the United States. The methodology of sensory analysis has been provided for in the regulations for the branding of Comté since 1990 (CIGC, 1990).

CONCLUSIONS

When the factors defining production no longer pertain to quantity, attention can then be paid to quality. This characteristic, difficult to measure and complex, is often simplified through the application of one-sided parameters regarding hygiene, reducing the quality and complexity of its many attributes. The enlargement of the market has assisted a universal distribution of products, in which qualitative attributes become confused with opportunely advertised commercial brands. In this way, the diversity of the offering is reduced to the manipulation of the raw materials that come to be modified to obtain a desired product. Moreover, if on the one hand the selection of consumers is increased by the distribution nets, on the other hand, they become always more dependent on the decisions made at the centralized level.

In this situation, more attention is paid to the designation of origin, because it represents a way to protect and emphasize a historic productive patrimony, rooted in a specific area, obtained from a rural culture, and offering original characteristics. As regards to brand, the designation of origin is a collective patrimony, the production of which views, in an equal way, all the subjects that contribute to and involve the producers in a particular way. The principal aim of the DO is not, in fact, to conquer new markets, but to spread information for characteristic products about the specific factors of typicality that must be defined, verified and defended. For this, it is necessary that every product be characterized in a specific way through known and reproducible models and that the appropriate administrative bodies that affix the marks attesting to the designation of origin act on behalf of these products in an opportune legislative context. The European Economic Community recently adopted a regulation that, while recognizing the designation of origin, allows for the

guardianship of producers and for the guarantees to consumers. In this way, in fact, the denomination of a product marked with a geographic name of a zone in which it is obtained includes the relative information about the defined qualitative standard required to regulate the production. In the case of cheeses, the concept of the designation of origin has come to be applied for several decades and has allowed the preservation and the development of the farm economy in marginal or otherwise handicapped zones, like the islands and the mountainous regions. This has significance not only for the preservation of agricultural activity in areas that would otherwise be destined for abandonment, but also for the expansion of small and medium-size producing firms with equipment employed in the specific technological process for every product. The designation of origin is not a stick for defence of the privileged, but can represent an instrument useful for development. Proof of this is the fact that the major dairy groups produce most of the cheeses with DO, that are becoming always more imitated. As a result, a very important role is represented by research, in order to put at the disposal of producers and of consumers, analytical methods to better understand the characteristics of DO products. What is needed then, obviously, is a fair legislative context. One might ask in this regard if it is right that, when a consumer asks for Feta he/she is given a product obtained from cow's milk produced in Northern Europe and not the characteristic Greek cheese produced with sheep's milk. Considering the fact that the attribution of the DO is only one way to foster the diversity of food offerings with products that are the fruit of rural culture, their preservation and promotion becomes of general interest, as is pertained to by the search for quality.

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COMMENTARIES

Dr Bertozzi has written an excellent account of the historical development of the designation of origin concept. His account is primarily concerned with European development, and rightfully so, but the concept is equally applicable to many of the countries, particularly the developing countries.

I was fortunate to be able to travel over 7000 miles in India in 1976 to survey the fruit and vegetable research capabilities. The National Science Foundation, upon request from the Indian government, would sponsor the travel funds to and from India. I was impressed time and again over the desire of the Indians to develop export industries based on local products. They were keenly aware of the quality standards of international commerce and the absolute necessity to safeguard their reputation for consistency and quality. To achieve this, they set their own standards and funded an agency in New Delhi to ensure that all products for export met designated standards. This was enforced for a number of products such as those from mangoes, pineapples, guavas, tomatoes, etc. Production problems at that time were difficult to imagine from an American point of view. For example, tin cans had to be assembled on site from 'flats' shipped in from a central point. Assembly and quality inspection for side seam problems had to be more difficult. In addition, often lots were purchased at local markets rather than contract growers, with attendant problems of consistency of raw materials. Quality control instrumentation was often in short supply. In spite of these difficulties, the Indians managed to acquire their niche in world markets. They even have a sense of humor — they had 'export quality' gurus for the American market. I was also fortunate to spend 6 months in Brazil in the 1980s, and quality products for export was a major concern. They became the worlds largest exporters of

concentrated citrus juices, and American firms used the Brazilian supply to stabilize prices in the American market. Other products important to Brazil and unique to tropical areas were coconut milk, hearts of palm, and bamboo shoots. All involved pride in the country of origin.

Another problem important to the country of origin concept is a situation where the producing area is simply too small. I was fortunate to be the plenary speaker at the First Regional Conference on Food Science and Technology in the English-speaking Caribbean in 1983. It was fascinating to listen to the aspirations of some of the small countries. Separate states with current populations of 40,000 (St. Kitts - Nevis), 100,000 (Grenada, St. Lucia, Dominica, Antigua and Barbuda, St. Vincent and the Grenadines) and others not much bigger, are simply too small to make much impact. Collectivization and maintenance of quality would be a worthwhile goal under the DO concept.

F. J. Francis

This paper gives an informative discussion regarding the association of particular qualities of products with the region in which they are produced and the regulatory processes around the use and specification for use of a 'place of origin' to describe a product and to set it apart in the marketplace from other similar products.

In considering this practice, it may be useful to compare it with the regulatory requirements for a specific commodity using the example of Canada's Fish Inspection Regulations where the 'designation of origin' becomes a consideration under product-labelling requirements. The geographical name of the country or location of origin may be included in the name of the product as long as the location name matches the 'country of origin' declaration required on the label. The only exception to this is in the case of a product which has a location name as part of its common name. Examples of this are species such as Alaska pollock, Arctic charr, Boston bluefish, and Gaspé cure for saltfish. In such cases, the location name used as part of the common name does not have to match the country (or area) of origin. Arctic charr is an example of a fish which may be produced as a wild-caught product in Canada's Arctic or which may be produced in an aquaculture facility.

R. K. York