METHODS OF LANDSCAPE RESEARCH

Dissertations Commission of Cultural Landscape No. 8

Commission of Cultural Landscape of Polish Geographical Society, Sosnowiec, 2008

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ICONOGRAPHY OF LANDSCAPE TO UNDERSTAND RELATIONS BETWEEN A TYPICAL PRODUCT AND ITS LANDSCAPES

key words: iconography of landscape, labels cheese, France Masif Central

INTRODUCTION

In a context of liberalization and globalization of the farm production trade, typical farm productions as PDO (Protected Designation of Origin) have to prove their specificities (traditional know-how), their origin (well-defined area) and their quality to respond to evolutions and requests of society (sustainable development, multifunctionality of agriculture...), (Gauttier, 2006). In France, the landscape is often used to promote local products as cheeses. The message given by actors involved in these productions often suggests that the quality of landscapes reflects the quality of the products. The multiplication of events intitled "the taste of landscape", "from field to fork", "the landscape in our plates", suggests this implicit link between a product and the landscapes of its area of production.

This study explains a method based on semiological tools to analyse which types of landscapes are associated with a specific cheese on its labels. Our approach identifies through the example of the saint-nectaire cheese (PDO) the characteristics (or emblems) used on labels for promoting that cheese and for testifying to the links between the landscapes and the area of production.

First we will provide the theorical framework on which this study is based. Then, we will explain the methodological frame used to analyse images and objects of landscape linked with the saint-nectaire cheese production on labels. Finally we will expose the first results and the perspective given by this study that we today develop in a PhD.

THE SAINT-NECTAIRE CHEESE AREA OF PRODUCTION Physical aspects of the area

The area of production comprises 69 municipalities belonging to south-west of the Puy de Dôme and north of the Cantal departments. This area covers around 18000 ha of natural and agricultural spaces, located above 750 meters high.

It's a mountainous area globally dominated by volcanic landforms. However, the heterogeneity increases in finer scales: the highest top of the Massif Central (Puy de Sancy, 1886m) is based at the center of the area with very specific landscapes often compared with those found in the Alps. The landscape alternates between peaks and valleys, and between grasslands, meadows and forests. The Cezallier is a high volcanic plateau, characterised by opened landscapes, composed mostly of meadows which give to that area a strong agricultural identity. The south west part of the area, called Artense, is a plateau made of granite substratum. It is more diverse than the Cezallier plateau thanks to an alternance of meadows, forests, groves and peat bogs. This area is also composed of many valleys, sloping zones, and the water is omnipresent (lakes, rivers, peat bogs...)

Actually, in this area several livestock systems are present (beef cattle, sheeps...), which also contribute to shape the landscape. Forestry, tourism and urbanization have also consequences in the evolution of the landscapes. Thus, the landscape is not exclusively the result of the saint-nectaire cheese production.

The PDO saint-nectaire cheese production

"PDO is designed to protect 'the name of a region, specific place or in some exceptional cases a country, that refers to an agricultural product or foodstuff originating in that region, specific place or country'. A PDO refers to a product 'whose quality or other characteristics are essentially or exclusively due to a particular geographical environment with its inherent natural and/or human components and which is produced, processed and developed within the delimited geographical area" (Bérard, Marchenay, 2007).

The saint-nectaire cheese production is not evenly distributed in the area of production: the farmhouse saint-nectaire cheese production is shared among two main areas. The first one is located around the Sancy mountain, the original area of production, and the second one is located in the north part of the Cantal department, more specifically on the Cezallier plateau (Guerreiro, 2005). The dairy production is finally predominant on the borders of the area of production.

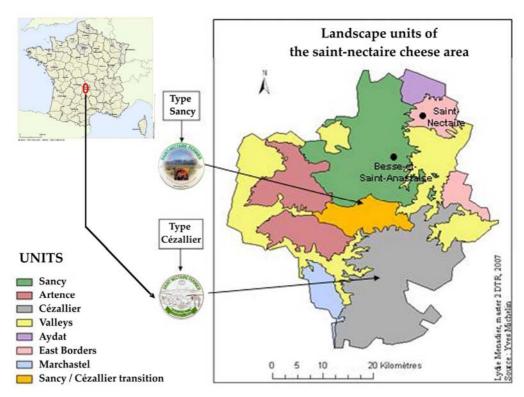


Fig. 1. Landscape units of the saint-nectaire cheese area of production. Source: Foltête, Litot, Menadier, Michelin, 2008.

The question of the evolution of landscapes in the area of production becomes more and more current because of the new reglementation voted to specify some practices. For instance, in a few years, the cattle will have to be native from the area of production, and farmers won't be allowed to give fermented fodders to dairy cows... These news rules will have an real impact on landscape through the changes in land-use, the building of new barns to stock hay....

Nevertheless, these changes express a willing of the entire network to anchor the product in the territory and to increase its specificities and its legitimity. In this context, a reflexion on the images used to promote the product seems also useful to point out the discrepancies between advertisings and the characteristics of the area of production, and to help farmers to create a coherent and conscious message for consumers. In this way, the first step is to observe and analyse the diversity of landscape representations on images used to sell the cheese, and to evaluate their relations with the area of production.

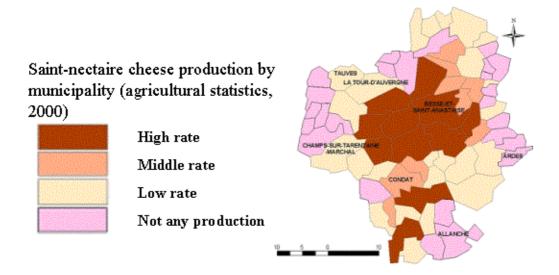


Fig. 2. Repartition of the saint-nectaire cheese production. Source: Michelin & al, 2007.

A diversity of representations of the landscape

The physical aspects of the landscape and the different activities on the area of production contribute to the heterogeneity of landscapes. The combination of landforms, land covers and anthropic influences gives also to the inhabitants and to the tourists the feeling of a very specific region with an extremely diverse landscape identity. This diversity of representations is perceptible through travel brochures or advertisings promoting the territory and labels used to sell the cheese. As an example, in a collection of 400 cheese labels of saint-nectaire, around 200 of them represent different images of landscape.

The examples above show that the landscapes presented on labels are not only pictures of the area of production but are also used for their implicit values, such as the French rural area, the emblems of Auvergne region, or old farming practices.

This first description of the characteristics of the area of production suggests that links between a product and its landscapes are very diverse and hard to understand.

But, in spite of this high variety of representations, we may ask: are there recurrent landscape types? How can we analyse them, and how can we measure their links or gaps with the "reality" of the area of production?



Fig. 3. Examples of labels and their link with the area of production. Source: Menadier, 2007.

METHODOLOGICAL FRAMEWORK TO ANALYSE LINKS BETWEEN A TYPICAL CHEESE AND ITS LANDSCAPES

Theorical aspects (fig. 4)

To understand the relations between the saint-nectaire cheese and its landscapes, we used the landscape system proposed by Brossard and Wieber (Wieber, 1995) who broke down the landscape into three conceptual "boxes". On one hand, this model groups biophysical, biologic and anthropic components of the landscape under the name materiality (or production) of landscape. On the other hand, the box intitled "representations of landscape" refers to the individual and collective factors of the processus of representation. And between these two boxes, the one called "visible landscape" analyses the transition between the landscape elements and their images. As we consider the landscape as an image of a visible area made of a combination of material objects (Michelin & al. 2006), our approach is centred on this intermediate box: actually the aim is to characterize the main objects present on the area of production and to compare them with the objects used to promote the cheese on advertisings.

We also refered to the concept of « landscape models » (Cadiou, Luginbühl, 1992). Anyone contemplating a landscape relates it to a landscape model which is a simplification of the reality: the image is interpreted by the personal perception of

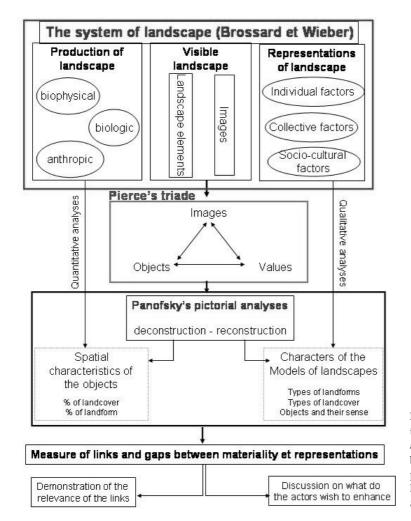


Fig. 4. Organigram of the theorical frame to analyse the links between a labellised product and its landscapes. Source: by author.

the observant according to social, cultural and aesthetical references. The individuals don't necessarily perceive all its components, and often disregard other components, and over-estimate others in accordance with their tastes, references and experiences of that space. These models finally convey specific values to the land-scape (authenticity, tradition...). Thus, the aim of this study will be in a first step to analyse the emblematic landscapes or models associated with the cheese on labels.

The iconographic status of these models gave us the possibility to analyse the landscape thanks to semiology. The second part of the figure is a reinterpretation of Pierce's concepts developed during the 1970's which conveys us the possibility to

study the representations of landscape: the image obtained by the combination of material objects of the landscape gives to the observant the possibility to interpret the global landscape and to associate it values.

To go deeper in that way, we also used pictorial analyses developed by Panofsky, who suggested a specific method to analyse works of art which can be transposed to a landscape analysis: the first step is to deconstruct a work of art to find significations for each of its components. In a second step, thanks to the values given to each object independently to the others and to psycho-social factors, it's possible to reconstruct the image to give a global sense to the picture.

Finally, this theorical frame helped us to formalize an original method to elaborate a typology of images based on their components and on their values, and then to measure distances between the materiality and the representations of landscapes.

Methodology

Three hypotheses prevailed in the methodological choices: first, we assumed that there were localizable "reference landscapes" for promoting saint-nectaire cheese, but that these corresponded to a greater or lesser degree to the reality of the production. Second, we posited a gap between images and discourse in associating a product with landscapes, depending on the knowledge of the individuals questioned on the product.

Finally, we postulated that between the landscape objects on labels and those that were effectively present in the production zone, gaps existed that could be measured.

The theorical framework was applicated to a very specific support, a collection of more than 400 labels of cheese. A first observation of the dataset helped us to perceive different categories of images and to select the final corpus of labels (a set of 180 labels representing landscapes). This methodological approach led to the creation of a framework for interpretation, similar to a pictorial analysis in which the study of linguistic elements is deliberately minimized. Our choice is explained by the wish to highlight landscape objects and their arrangement, in order to understand the links between the territory and the product.

The high diversity of the images selected and of the representations of landscapes was an opportunity to test the existence of recurrent models of landscape on these images intended to consumers. The first aim was to characterise theses images and to extract models of landscapes associated with the product.

The first step of our research was to identify the characteristics (or emblems) used on labels for promoting that cheese. We had to observe and deconstruct each image to create a database. It permitted us to make a very precise description of each object present on labels. The choice of the variables required to specify the sense of

each object independantly of the others and of the context in order to obtain an homogeneous dataset to realise typologies. We focused on the type of habitat, the species of animals, the presence or not of vegetation, the type of relief, the real or symbolic place suggested by the image, the degree of modernity or the status of the landscape (degree of realism, symbolism...), and so on. Because the nature of our variables was different, (composition of the picture, landscape objects themselves, interpretation and general meaning of the picture), we realised three distinguished databases in order to designe in a second step coherent typologies of labels according to these categories.

The typologies of labels (second step) were based on statistical analysis (multiple correspondence analyses and bottom-up ranking) of the descriptors used. This method enabled us to highlight values relative to the production of saint-nectaire as well as recurrent models of landscapes.

Using a multifactorial analysis is equivalent to a reconstruction of the images and of their signification according to the sense given to each of their objects. Furthermore, this method allowed us to highligh new "families" or types of land-scapes that it is henceforth a question of comparing with the materiality of the area of production itself.

Actually, the second aim of this study was to measure links or gaps between the images and the characteristics of the area of production. Thus, we developed a method for quantifying the landscape objects depicted on the labels to focus exclusively on the material components of the images. We also used statistical analyses to deconstruct and then reconstruct the global structure of the images.

First, we selected the appropriate images for a quantitative analyse among the previous dataset. For instance, we excluded the images that represented only the foreground. Then we calculated the part of each object on each label. Descriptive analyses and variance analyses were carried out to assess the variability of the corpus, and Principal Component Analysis (PCA) and Agglomerative Hierarchical Clustering (AHC) then enabled us to combine quantified landscape objects to reveal typical landscapes on labels. These analyses were performed on the entire corpus to obtain first an overall, synthetic view, then a view by landscape type and, finally, a view based on aspects of the image. This method enabled us to describe more precisely the characters of the objects of landscapes on labels and to confirm and specify the different types of landscapes recognised previously.

To measure the links of the images with the characteristics of the area of production, we used GIS method to quantify in an equivalent way the composition (topography and land-cover) of the landscape units which correspond to landscape types highlighted on labels. We used ArcGis 9 and topographic datas (Digital

Elevation Model, DEM, and Topographic Position Index, TPI¹) as well as land cover data (Corine Land Cover of 1999) to quantify the types of land use and relief features per landscape unit of the production zone (fig. 1), drawn from a classical landscape assessment (unpublished working document on a scale of 1/100,000). Tab. 1 synthesizes the correspondences between the variables of the label analysis and those derived from GIS data.

The final step consisted in the assessment of gaps between the landscapes used for advertising on the product, and the "material" components or "characteristics" potentially observable in the area of production.

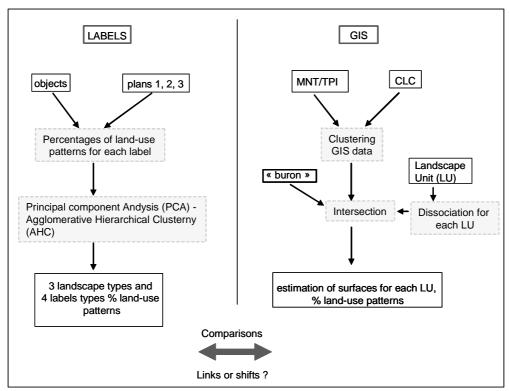
Tab. 1. Correspondences between the variables of the analysis of labels and those drawn from GIS data.

LABEL variables	GIS variables		
Types of land cover	Types of land cover: Corine Land Cover (C.L.C.) data		
Pastures and crops	Pastures (code CLC 2.3.1), arable land (code 2.1.1),		
	permanent crops (code 2.2), heterogeneous agricultural		
	zones (code 2.4)		
Summer mountain pastures	Grasslands and natural pastures: (code 3.2.1) moorland		
	and scrub (code 3.2.2)		
Water	Inland wetlands and surfaces under water:		
	(codes 4.1.1. / 4.1.2 / 5.1.1 / 5.1.2)		
Erosion / bare ground	Bare rock (code 3.3.2)		
Rock	Sparce vegetation (code 3.3.3)		
Wooded	Forest of leafy trees (code 3.1.1) coniferous trees (code		
	3.1.2) mixed (code 3.1.3), forest and bushy vegetation		
	undergoing change (code 3.2.4)		
Buildings	Urban area (codes 1.1, 1.2, 1.3 et 1.4)		
Forms of relief	Topographic Position Index		
Valley	Canyon (code 1), gentle slope, small valley (code 2), U		
	shaped valley (code 4) and crest, hill in a valley (code 8)		
Plateau	Plateau (code 5), rounded crest, hill on plateau (code 9)		
"Rounded" relief	Weak slope (code 6)		
Relief with angular forms	Mountain streams, springs (code 3), steep slope (code 7)		
	and mountain summit, pointed crest (code 10)		

Source: author's compilation.

¹ Jenness, J., 2006, extension for Arcview 3.x, v.1.2. Jenness Enterprises.

This allowed a synthetic view of the landscape characteristics of the production area, and we identified those objective elements justifying the relevance of certain types of landscape or places of reference pinpointed in the first qualitative analysis. Fig. 5 synthetizes the quantitative approach adopted and the types of results obtained.



 $\textbf{Fig. 5.} \ \textbf{Data processing chart. } \textit{Source: author's compilation.}$

RESULTS

Landscape models associated with the saint-nectaire cheese production

Qualitative analyses of the content allowed us to understand the sense given for each landscape element, but also global senses or models of landscapes associated with the production of saint-nectaire.

Fig. 6 is an example of typology of labels based on landscape elements present on the images (MCA of which the first 3 factors explain about 55% of the information of the variables). This analyse helped us to understand the symbolism intended in the arrangement of landscape elements on the labels.

In a general way, the fist axis opposes realist and symbolic labels: realist images often correspond to photographies, with natural colours and modern conception. On the contrary, symbolic images correspond to imagined drawings or paintings, and places or stages are not always recognizable. The second axis opposes values of nature and culture: on one hand, the landscape and its material dimension is central in the message while on the other hand human activities are predominant. Nevertheless at the intersection of all these values, agricultural landscapes are favoured, which explicitly reflects the relations of reciprocity established between humans, their productive activity, and the area of production.



Fig. 6. Classification of the saint-nectaire cheese labels (axis 1-2). Source: Michelin et al., 2007.

Identifiable landscapes types (fig. 7) were also revealed by the analysis. In analysing these landscapes that could be qualified as "landscape models", we highlight both elements proposed, for the consumer to associate the cheese with the production area, and the underlying advertising logic.

First, we found two landscape types qualified as real or realistic, easily identifiable and corresponding to precise places in the production area. These are localizable

types, even though they convey a strong symbolic message relative to the notion of know-how and to the presence of a longstanding cheese-making tradition:

- The "Cézallier type" consists primarily of images featuring objects such as burons (traditional mountainous farm buildings) and villages, meadows and leafy trees. It reflects a link between product and territory in so far as it concerns one of the traditional areas of farm production of saint-nectaire cheese (along with the Sancy mountains). These labels are therefore firmly anchored in the territory and, in modern and realistic semiological terms, connect the notions of the productive action, visible landscape actions in the area, and the industry as it is today.
- The "Sancy type", is composed of hilly terrain associated with landscape elements such as flora, minerals or water, but also elements relative to agricultural activity (buildings, animals, etc.). Sometimes discrepancies may appear, such as the representation of cheese production outside a **buron**, which is in reality the traditional way of producing Cantal (not saint-nectaire) cheese, or images of manual milking, which hardly exists at all anymore.

Second, two types of landscape qualified as symbolic yet localizable are identified. Less anchored in the reality of the saint-nectaire production area, they represent the fact that the product belongs to Auvergne, primarily so that it may be more accessible for the consumer:

- The "Chaîne des Puys type" is composed of labels with a modern design that symbolically display nature devoid of any human activity. These are landscapes situated outside the area of production, although they are visible from it. They are nevertheless emblematic of the Auvergne region.
- The "Saint-Nectaire type" presents landscapes on the eastern edge of the production area, where there is a very small proportion of farm production. But some landscape characteristics are easily identifiable by an uninformed consumer (altitude and especially the volcanic substrate). This type is distinguished by references to the Saint-Nectaire village itself, the legendary place of birth of this cheese. It thus plays on the reputation of the name, which the consumer will be able to identify.

Third, certain labels are dominated by symbolic elements, that may even be reflected in non-figurative images. A gradient of realism is identified:

- The "Auvergne landscape type" will represent, for example, non-localizable mountainous landscapes which are strongly correlated with the landscape identity of this region (volcanic plateaus, cows of the Salers breed, etc...).
- The "unknown type" comprises labels on which the product can be associated with high-altitude meadows, or with generic villages. This type does not give to the image any territorial value but only provides indications that the cheese comes from a mountainous rural area.



Fig. 7. Example of label for each landscape type. Source: Menadier, 2006.

The analysis of landscape types displayed on saint-nectaire labels highlights the diversity of landscapes associated with the product. The degree of closeness between the images and the actual production area reveals a plurality of settings, depending on the area represented and the values associated with them. We can therefore assume that those labels that present a real territorial attachment reflect an "PDO logic": it focuses symbolic landscape elements of the production area, which are related to the know-how and history of the cheese. The "brand logic" can be found on labels that show landscapes representative of the Auvergne region as a whole. To give consumers the means to identify the product, the labels present ideas and symbolic references, that are not necessarily linked to real places. The complexity of the status of the landscape is thus revealed through this gradient of realism which was identified through the analysis of the emblematic landscape elements found on the labels of saint-nectaire cheese.

The degree of anchorage of the images in the area of production

To identify the importance of the place displayed in the settings represented on cheese labels, we need to ascertain the degree to which these images are anchored in the production area.

The first descriptive analyses (ANOVA) of objects of landscape on labels allowed us to characterise more precisely each landscape type. Tab. 2 summarizes the main landcover and landform elements of each landscape type.

Based on results of quantitative analyses of the entire corpus (PCA of which the first three factors explain about 60% of the information of variables), we were able in a second time to clearly identify, or "reconstruct" three types of landscapes (Sancy, Cézallier and Auvergne types).

Tab. 2. Main landcovers and landforms of each landscape type (ANOVA).

Landscape type	Dominant % of land-	Dominant % of
Landscape type	cover	landform
Sancy type	Grassland, water, rock	Valley, top
Cézallier type	Grassland, farm building	Plateau
Chaîne des Puys type	Erosion	Hill
Auvergne type	Meadow	Plateau
Cantal type	Grassalnd, farm building	Valley
Saint Nectaire village type	Meadow, village	Hill

Source: author's compilation.

The Sancy type is distinguishable by the presence of very marked forms of relief, either valleys or hills. The Cézallier type is distinguished by the dominant presence of plateaus and summer meadows. The Auvergne type, more generic, can be considered as intermediary. It promotes hilly landscapes that are difficult to locate precisely. Only the first two landscape types were considered hereafter for the comparison with GIS results (see tab. 3 for the results obtained for the Sancy landscape type) since the Auvergne type groups together symbolic images of the entire region that are not representative of a landscape specifically associated with the production of saint-nectaire cheese.

The types of land cover with a high heritage and identity value, such as summer mountain meadows and wetlands present on 91 % of the labels, are overrepresented, as are hilly or angular topographical features. However, the discrepancies observed, especially between the frequencies of types of land cover found on the labels, and those obtained from GIS data, may be due to an "effect of perspective". This effect is found on the images (screen effect of wooded vegetation, slopes over-represented even in the distance, etc.), which propose a tangential view, and not as in GIS data, where the view is synoptic. Thus, the landscape models found on the labels of saint-nectaire cheese remain meaningful in comparison with the actual landscapes. Due to certain characteristics of these landscapes (hills, wetlands, mountain meadows, **burons**, etc.), the quality of the product can more easily be equated with the quality of the landscapes.

To sum up, we can consider, that gaps exist between the landscape elements on labels and real elements existing in the production area. But, these gaps are not in contradiction with reality.

Tab. 3. Differences between landscape elements present in the Sancy zone and those presented on the labels.

Land cover and forms of relief	% of total surface of labels		% of labels representing them	% obtained from GIS data
pasture	15		55	42
upland pasture	34	+	27	29
tree cover	19	-	68	26
buildings	1	+/-	23	1,5
wetlands	11	++	23	1
plateau	26	+/-	41	21
valley	39	++	45	15
angular relief	26		91	51

Source: author's compilation.

Degree of realism for percentages obtained from the corpus of labels

-- - : far inferior to slightly inferior to the reality +/- : more or less equivalent to the reality + ++ : slightly to vastly superior to the reality.

CONCLUSION

The geographical approach developed in this study was at the interface of the materiality of landscape and its representations. Our choice was to use semiology and pictorial analyses to test a methodology to describe landscape structures and to grasp the diversity of the landscape components and their links with the reality. Even if it's only an exploratory study, the first results demonstrate that it's an efficient way for future researches to study the relations between a territory, a product and the landscapes.

Actually, our findings enabled us to know which main aspects of landscape were promoted on labels and which were effectively present in the area of production. Apart from this synthetic view of the landscape characteristics of the production area, we identified those objective elements justifying the relevance of certain types of landscape or places of reference pinpointed in the qualitative analysis.

Through these results, it's noticeable that two processes could explain the differences between the models of landscapes associated with the production of saint-nectaire. On one hand a processus of transformation of landscapes elements on labels which can be illustrated by the importation of landscape elements without direct link with the area of production (for instance the Chaîne des Puys type) or by the use of references to common landscape models (the Mountain, the French rural heritage of the labels of the non located type). On the other hand, we can underline

a process of deformation of the landscape elements on labels. This one is translated both by the valuation of the emblems of the territory such as the village of Saint-Nectaire, and by the use of symbolic elements relative to the notion of know-how...

By means of these different methodologies, we endeavoured to reflect the complexity of an analysis of links between product and landscapes. Thus, initially, the values attributed to the landscapes on the labels led us to consider the systems of "perception" and "use of landscape" proposed by Brossard and Wieber (Brossard & Wieber, 1984). The quantitative analysis of landscape objects represented pictorially on the labels and present in the area of cheese production was performed to measure the links or gaps between the landscapes that served as a medium for communication on the product, and the "material" components or "characteristics" potentially observable in the area of production. This led us to analyse more specifically the "producer" and "visible landscape" systems.

Despite the limits of our study (analyse of one kind of advertising, diversity of representations on labels, differences of support to compare materiality and images...) the complementarity of the methods enables us to pursue our investigations to analyse the modalities of local anchorage of agricultural products using the concept of landscape. Henceforth, we focus on farmer's practices to understand the links between their product, the advertisings and the area of production. As farmers make the cheese and shape the landscape, we think that it's necessary to imply them in this reflexion because the stakes are important for the upholding of products and of landscapes of quality.

REFERENCES

Bérard L., Marchenay P., 2007: From local food to localised food/De produits locaux à produits localisés, in Localized products in France: definition, protection and value-adding *in* Anthropology of Food, *S2*, Mars 2007, From local food to localised food/De produits locaux à produits localisés.

Brossard T., Wieber J.C., 1984: Le paysage, trois définitions, un mode d'analyse et de cartographie, L'espace géographique, 13 (1), 5-12.

Cadiou N., Luginbühl Y., 1992: Modèles paysagers et représentations du paysage en Normandie – Maine, in paysage au pluriel, pour une approche ethnologique des paysages, pp 19-34.

Deffontaines J.-P., 1996: Du paysage comme moyen de connaissance de l'activité agricole à l'activité agricole comme moyen de production du paysage, L'agriculteur producteur de paysages. Le point de vue de l'agronome. Comptes-rendus de l'Académie d'Agriculture de France, 4, 57-69.

Gauttier J.-P., 2006: Appellations d'origine et paysages, INAO et MAP, p.75.

- Guerreiro F., 2005: Analyse de l'hétérogénéité spatiale de la production de Saint Nectaire en lien avec les paysages, contribution à une typologie des fermes communales, mémoire de Master DTR, p. 100.
- Jenness J., 2006: extension for Arcview 3.x, v.1.2. Jenness Enterprises.
- Foltête J.C., Litot J.B., Michelin Y., Menadier L., 2008: La fabrication et la diffusion d'images types (chapitre 13), in Paysage et information géographique, Brossard T., Wieber J.C. (dir), chapitre 13 ed Lavoisier, 313-337.
- Menadier L., 2007: What relations between a typical product and its landscapes? A typology of landscapes on the saint nectaire cheese labels, IALE world Congress 2007, Wageningen, The Netherlands, Poster.
- Menadier L., 2006: Représentations paysagères et production agricole de qualité : l'image comme outil d'analyse du lien produit-paysage, l'exemple de l'AOC saint-nectaire, Master 1 DTR, UBP, ENITAC, p. 129.
- Michelin Y., Aznar O., Guerreiro F., Menadier L., Planchat C., Vollet D., 2007: The saint-nectaire cheese landscapes, myth or reality, in Europe Living Landscapes: essays exploring our identity in the countryside, Pedroli B. et al. (ed), Wageningen, KNNV Publishing, 46-61.
- Michelin Y., Vollet D., Sahuc P., 2006: Regards croisés sur la construction interactive d'une étiquette de fromage de qualité à partir d'éléments paysagers, cybergéo, 28 p.
- Panofsky E., 1967: Essais d'iconologie, Les thèmes humanistes dans l'art de la Renaissance, Paris.
- Ricard D., 1994: Les montagnes fromagères en France. Terroirs, agriculture de qualité et appellations d'origine, Ceramac, Clermont-Ferrand, 496 p.
- Sud-ouest européen, 1999: Revue géographique des Pyrénées et du Sud-Ouest n°6, La qualité agro-alimentaire et ses territoires, Presses Universitaires du Mirail, Toulouse, p. 83.
- Timj W., 1976: Le Saint-Nectaire, l'histoire d'un fromage d'appellation d'origine dans son cadre géographique et économique, Groningen, Presses Universitaires de Groningen, p. 156.
- Wieber J.C., 1995: Le paysage visible, un concept nécessaire, in Roger A. (dir.) La théorie du paysage en France, 1974 1994, Seyssel, Champ Vallon. p.182 193.

SUMMARY

Typical farm productions have to prove their specificities (traditional know-how), their origin (well-defined area), their quality and their price to respond properly to evolutions and requests of society. The message given by actors involved in these productions is often based on the idea that the quality of landscapes reflects the

quality of the product (Ricard, 1994). But sometimes, landscapes associated with these products don't correspond to the reality of the area and are more symbolic. That's why in France, and more precisely in the middle of the Massif Central, the saint-nectaire cheese is studied to understand the relations between a typical product and its landscapes. In this contribution, we will explain the methods linked with the system of landscape (Brossard & Wieber, 1995) and semiology we used to analyse which types of landscapes are associated with the cheese on the labels. We will also explain the interest of such an approach to understand links and gaps between the materiality of landscapes and representations.

Based on a geographical entry, we analysed how elements of an image are assembled to give meaning to a label. About 200 labels of saint-nectaire representing landscapes were analysed. First, each element was described, classified and interpreted. Then, a statistical study (analysis of the multiple correspondences and then a bottom-up ranking) was carried out to create typologies of labels according to the nature of the descriptors used (composition of the picture, landscape objects, general meaning of the picture).

Typologies have also been compared with a G.I.S. method to analyse the materiality of landscapes in this area. And now, relations between materiality and representations are the subject of a PHD project.