

POSTCARDS: A geographic approach of the diffusion of the landscapes in the territories

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ABSTRACT: The touristic destinations are using images to develop their attractiveness. As a consequence, they are required to select singular places which can attract tourists. Therefore, these places become “places of reference” and give an identity to the territories. The particular link between the pictures, or “images of territories” and the territories which are chosen to represent a region, constitutes the basis of this project. This study employed a particular item showing an image of destinations: the holiday postcards. By definition, a postcard is an image of a touristic site which is sold on site but also in more remote locations. The special relationship between touristic sites and selling points raises questions about territorial image and landscape identity. A survey was conducted in two departments of the French Alps: Savoie and Haute-Savoie and more than 8100 postcards have been collected. The study shows that many factors are influencing the seller’s choices and a typology of touristic sites is elaborated. Then, analyses are conducted from the selling points in order to observe different kinds of territories according to their use of the landscape. **Keywords:** postcards, territory, spatial analysis, Alps, landscape diffusion, identity.

RESUMEN: Los destinos turísticos recurren a imágenes para generar atraktividad, teniendo para eso que seleccionar lugares singulares que puedan atraer turistas. Como consecuencia, esos lugares se vuelven “lugares de referencia” y confieren una identidad a los territorios. El punto de partida de este estudio es el nexo específico entre imágenes o “imágenes de territorios” y los territorios que son escogidos para representar una región. Este estudio utiliza un medio particular de presentación de la imagen de destinos: la tarjeta postal. Por definición, una tarjeta postal es una imagen de un local turístico que es vendido en el propio local, pero también en locales más remotos. La relación especial entre los locales turísticos y los puntos de venta colocan cuestiones sobre la imagen del territorio y la identidad del paisaje. Fue realizada una encuesta en dos regiones administrativas de los Alpes Franceses - Savoie y Haute-Savoie – y fueron recogidas más de 8100 tarjetas postales. El estudio revela que son muchos los factores que influyen las escogidas de los vendedores, siendo elaborada una tipología de locales turísticos. Fueron entonces realizados análisis de los puntos de venta para observar los diferentes tipos de territorios en función del modo como el paisaje es utilizado. **Palabras clave:** tarjetas postales, territorio, análisis espacial, Alpes, difusión del paisaje, identidad.

RESUMO: Os destinos turísticos recorrem às imagens para gerarem atratividade, tendo para isso que seleccionar lugares singulares que possam atrair turistas. Em consequência, esses lugares tornam-se “lugares de referência” e conferem uma identidade aos territórios. O ponto de partida deste estudo é o nexo específico entre imagens ou “imagens de territórios” e os

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territórios que são escolhidos para representarem uma região. Este estudo utiliza um meio particular de apresentação a imagem de destinos: o cartão postal. Por definição, um cartão postal é uma imagem de um local turístico que é vendido no próprio local, mas também em locais mais remotos. A relação especial entre os sítios turísticos e os pontos de venda coloca questões sobre a imagem do território e a identidade da paisagem. Foi realizado um inquérito em duas regiões administrativas dos Alpes Franceses - Savoie e Haute-Savoie – e foram recolhidos mais de 8100 cartões postais. O estudo revela que são muitos os factores que influenciam as escolhas dos vendedores, sendo elaborada uma tipologia de locais turísticos. Foram então realizadas análises dos pontos de venda para observar os diferentes tipos de territórios em função do modo como a paisagem é utilizada. **Palavras chave:** cartões postais, território, análise espacial, Alpes, difusão da paisagem, identidade.

INTRODUCTION

Tourism is an important part of the development of countries, and more and more of them are trying to develop their tourism (Simon, 1995; Frustier and Perroy, 2004). According to Judd (1995), “to attract tourists, it is important for local boosters to be able to project a specific identity that can transform ordinary places and times into extraordinary touristic worlds”. According to that, countries must develop their cultural or architectural singularities and landscape wonders for their attractiveness.

To do so, several medias are used such as television campaigns, Internet, brochures, postcards... All these medias are using images, and especially landscape pictures. Many studies have shown the role of photography (Dann, 1996; Day *et al*, 2002) or the motion picture (Kim and Richardson, 2003) in the choice of a touristic destination. Generally, the image of the destination has been the subject of much attention in literature (Gallarza *et al*, 2002; Beerli and Martin, 2004). According to Hunter (2008), “photographs cast the natural and cultural resource of a destination in the best light and even prescribe the proper host-tourist interactions through their depictions”. But, by this way, images give a synthetic vision of the reality and suggest the identity of a given place (Millet, 1991; Mazas, 1995). With images, territories diffuse their identity.

In all the medias used to develop attractiveness, one is different: the postcard. Indeed, the medias discussed previously do not permit creation of a direct link between images of touristic sites and places where they are sold. Brochures, Internet or television show images that are not connected directly with the sites which are used. These kinds of medias come directly to consumers at home, while postcards are located in the territories.

Postcards have been used in ethnology (Albers and James, 1998; Edwards, 1996) but are still rarely used in geography (Font, 1996; Waitt and Head, 2002). Several studies used postcards to understand the relationship between the image and the identity of a place (Pritchard and Morgan, 2003; Mayes, 2009) or the role of the postcard in the traveler's

choice (Yuksel and Akgul, 2006). However, the special link between touristic sites and selling points was never discussed.

Hossard (2005) said about tourism: "Wherever there is tourism, there are postcards". This statement is agreed by Winiwarter (2001), "Nowadays, pictures postcards are an important part of the travellers' lives". According to Marcwick (2001), "postcards are the most widely disseminated touristic icon". Every year in France, more than 360 millions postcards are sold. So, postcards are an excellent advertising for the destinations and are the "archetypal touristic imagination" (Amirou, 2002). They also help us to understand how the touristic sites are spread in their surroundings. Otherwise, we suggest that this spatial diffusion is the result of marketing choices on the part of sellers.

Postcards provide three types of information: a visible place (a touristic site which is represented on postcard), a selling point and a content landscape. The relationship between selling points and touristic sites raises the question about how the sites are spread on the territory. We suggest that the spatial diffusion of the touristic sites shows their role in the place's identity. A low spatial diffusion implies a local identity while a high spatial diffusion represents a global or regional identity.

A second assumption is based on the fact that several factors influence the choices of the postcard marketing. When a seller makes a choice, he has to consider the tourists' expectations; postcards must represent some touristic sites which are close to the selling point or easily accessible, some beautiful sceneries...

Finally, postcards give a particular image of the destinations. Some of the sites become iconic sites while others are excluded from the postcard displays. Another part of this study is to reveal what are the conditions to transform landscape into postcard. Finally, we will discuss the role of landscape in the spatial diffusion of postcards and its role in territorial identity.

METHODOLOGY

As a marketing object, postcards are not free. To collect postcards, an original method is implemented. Some pictures of the postcard displays are taken directly from the selling point. Then, each sheet (usually containing a dozen pictures) is cut individually and each picture is implemented in a database. Information about landscape content, shooting, is collected and touristic sites and selling point are positioned into GIS.

The special link between selling point and touristic site is named the "vector diffusion" and describes the intensity of the exchange between them. In other words, this is the number of postcards of one touristic site collected in one selling point. We should specify that the number of postcards of one site is the number of different postcards for one

site (shooting, season...). In addition, the term “diffusion potential” is used to express the number of cards per touristic site.

From the “diffusion vectors” it is possible to see simultaneously the “diffusion areas” and the “landscape areas”. The first one represents all the selling points that sell the image of one touristic site. The second one corresponds to all the sites that are sold in one selling point. For each approach, many methods are used to highlight the diffusion factors and they are depicted at the right time.

Survey area

The selected area is composed by two departments of the French Alps: Savoie and Haute-Savoie. This area was chosen because of the diversity of its landscapes (peaks, valley, different types of mountains...) and its great touristic attraction, represented by famous resorts such as Chamonix and Megève.



Figure 1: Area study : Savoie and Haute-Savoie

The survey was conducted in 97 selling points in Savoie and Haute-Savoie in summer 2005. Only the north-west was excluded (south of Genève, west of Bauges) because of its geographic situation (far from the first Alpine peaks). About 8200 postcards were collected and 560 touristic sites were identified and positioned in GIS. As shown in Figure 2, Alpine sites are not evenly distributed on the territory. Large valleys are excluded while Alpine peaks are present. Otherwise, the number of cards per site shows some wide disparities. Over 60% of sites have less than 10 cards while the group Grandes Jorasses, Drus, Aiguille du Midi, Aiguille Verte, Lac Blanc and Mont Blanc has a total of 22%.

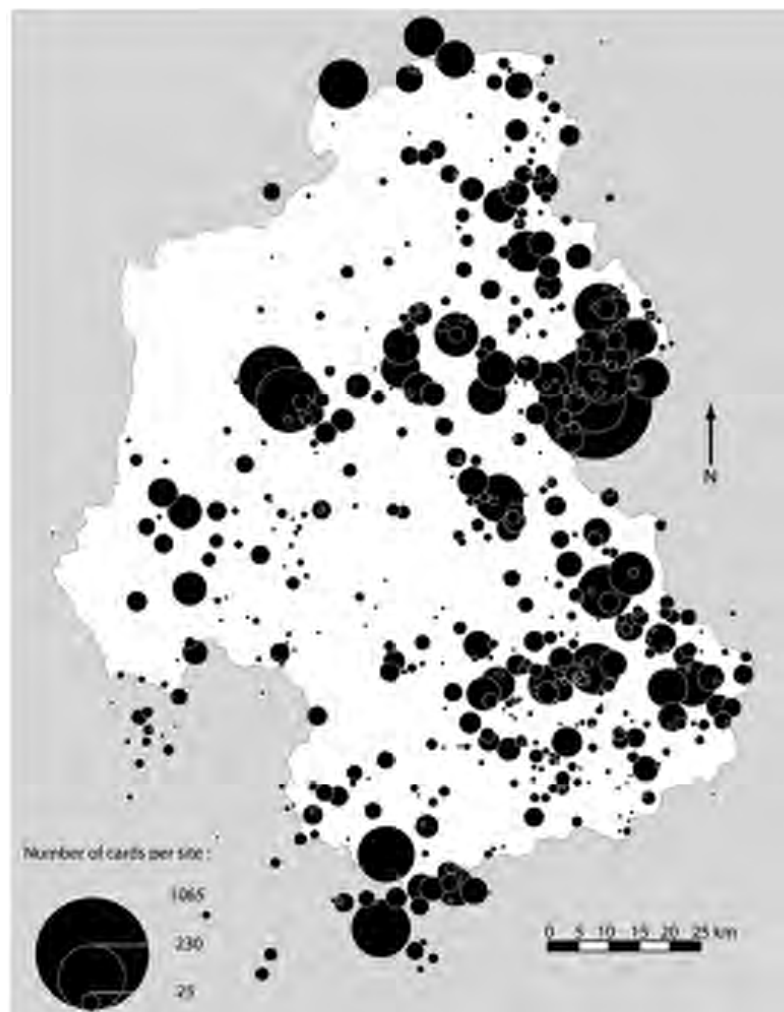


Figure 2: Number of postcards collected per touristic site

Finally, 80 “fuzzy names” were identified matching large tracts of land. For example, fuzzy names can represent “Les Alpes”, “La Maurienne” or “Savoie’s landscape”. This kind of card is not used here but it allows one to understand the identity of the territories. Indeed, fuzzy names induce different scales of identity. The spatial difference

between their geographic area and the places where they are sold gives information about how they are perceived by residents or tourists.

RESULTS

ALPINE TOURISTIC SITES, CHOICES AND INEQUALITIES

The factors that influence the choice of postcards by sellers

Some of the factors in the choice of marketing of the touristic sites are presented: accessibility, visibility, competition and association of sites.

Accessibility

To measure the impact of distance, we observe the number of cards from one touristic site in each selling point, according to its distance from it. Sites with less than 10 cards are evicted because a linear regression method is applied, so 180 sites are used.

To measure accessibility, two types of distance are tested: Euclidean distances and distances according to the road network. Figure 3 shows the r^2 for each site with Euclidean in blue and network distances in red. Generally, the network distance provides better results than the Euclidean distance, even if occasionally, it may be more explicative. This phenomenon is often due to a particular topography but it is not detailed here. As a conclusion, accessibility causes inconvenience for tourists and the sellers must consider this geographic prerequisite. Otherwise, according to Thompson (1963) or Foley and Cohen (1984), residents perceived objective distance better than cognitive distance.

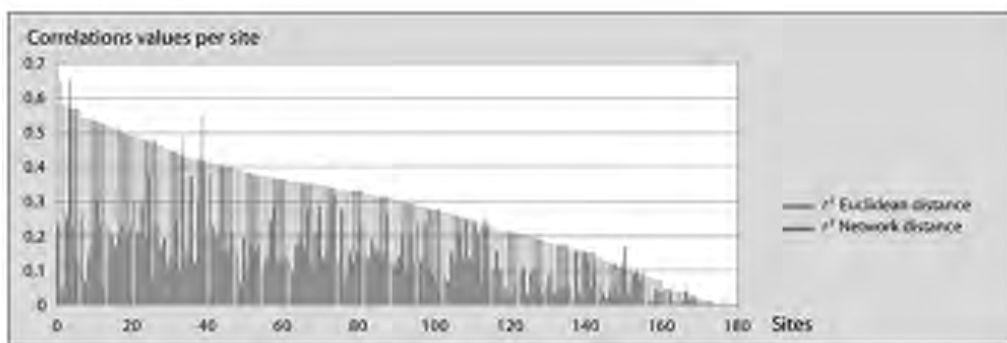


Figure 3: Correlation values from network and Euclidean distances

Visibility

Many postcards are composed of two plans. The foreground often shows a village, a resort or a building and the background shows Alpine peaks easily recognizable. So we suggest that the visibility of

an Alpine site can have an impact on its marketing. In other words, a site which is visible from a selling point has a higher probability to be sold than a site which is invisible. To test this hypothesis, some visibility calculations are used (Joly and Al, 2009). DEM (Digital Elevation Model) comes from SRTM images with a resolution of 90 meters. Since computation times are extremely long, only nine sites are tested: *Mont Blanc*, *Aiguilles d'Arves*, *Grande Casse*, *Chaîne des Aravis*, *Mont Pourri*, *Aiguille des Drus*, *Grandes Jorasses*, *Dent Parachée* and *Aiguille Verte*. Then, a logistic binary regression is applied to determinate the probability of marketing for each site according to their visibility (Agresti, 1990).

Results are presented in Figure 4. A site which is visible from a selling point is sold in 74% of cases. On the contrary, a site which is invisible is not sold in 62% of cases. These results show that visibility is an important factor in the diffusion practice. They also show the people's willingness to add strong identity markers. In this way, they develop a sense of belonging to places of life.

Variable	B	Wald	#.	eB
Constante	1.548	79.267	<0.0001	4.794
Visibility	-0.545	126.413	<0.0001	0.589

de \ Vers	0	1	Total	% correct
0	161	218	579	62.35% *
1	101	290	391	74.17% **
Total	462	508	970	67.11%

* Specificity
** Sensibility

Figure 4: Values of the logistic binary regression

Competition

Like gravity models, spatial interactions can appear between sites in the selling points. This phenomenon is a form of spatial concurrency between sites. For example, the important number of cards of the 'Mont Blanc' in Chamonix prevents the commercialization of other sites. To test this idea, Huff model is used to measure the probability of the presence of the sites into the selling points according to their diffusion potential and their distance from the selling points. Two matrices are used; the first one is the real number of cards per site in each selling point, the second one is the estimation of the number of postcards according to the diffusion potential and the distance be-

tween touristic site and the selling point. By using a linear regression between the estimated values and the real values, the r^2 coefficient gives their correlation.

By using sites that have a diffusion potential higher than 20 cards, the r^2 is equal to 0.72. By using sites that have diffusion potential higher than 10 cards, r^2 maintains good performance, it is equal to 0.65. When a site has less than 10 cards, the estimation becomes uncertain because the number of samples is not significant. However, this result demonstrates the importance of spatial competition between the touristic sites and it shows the focalization effect of the touristic sites. For example, in the city of Annecy, the diversity of postcards is low because of the presence of the Annecy lake.

Association between sites

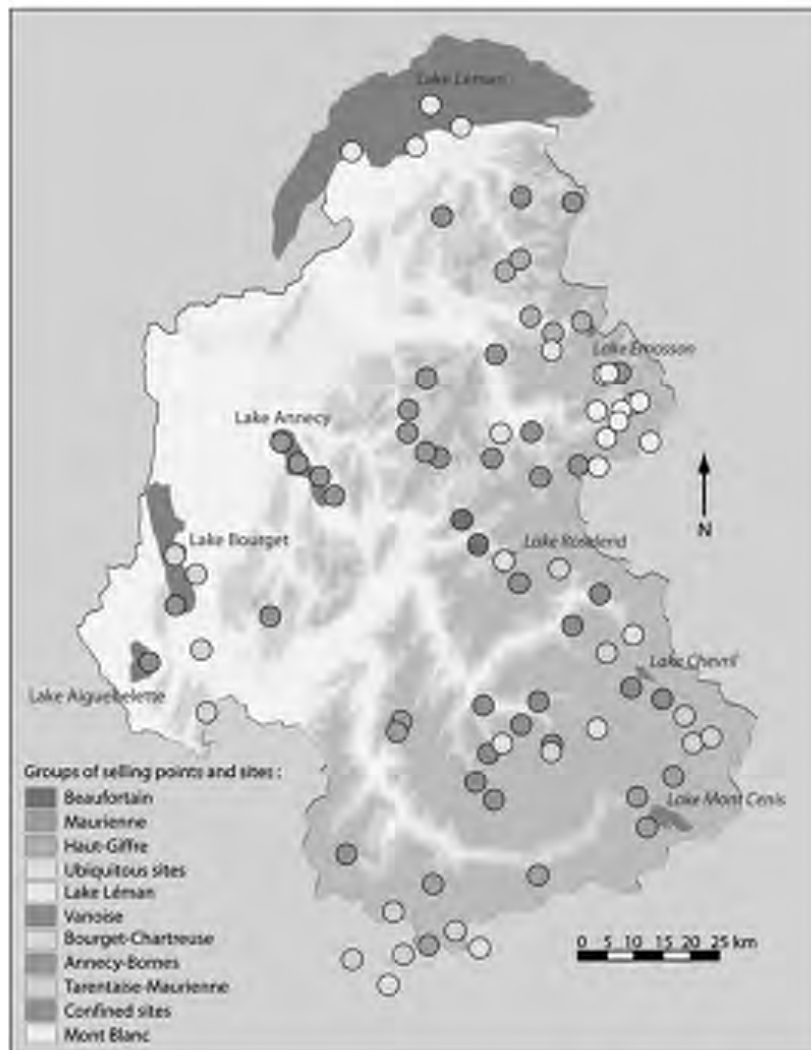


Figure 5: Associations of sites from co-occurrence matrix

As the competition phenomenon, we argue that some touristic sites can form associations. In other words, some sites are frequently sold together in the same selling point. For example, in Annecy, postcards showing the lake are sold with a lot of cards of the city of Annecy. Also, in Chamonix or Argentière, you can buy a postcard of the Aiguille du Midi with a card of Mont Blanc in every selling point.

A co-occurrence matrix is used for the sites that have a diffusion potential higher than 20 cards. In each selling point, the occurrence of each site is measured to determine statistical frequency. After that, a correspondence analysis and an ascending hierarchical classification are used to observe associations. Figure 5 shows eleven classes of sites that are frequently sold together in the selling points. Some sites are concentrated like sites around Lake Lemman or these of Haut-Giffre while others have a large space of diffusion (Vanoise's peaks, Mont Blanc...). So, it is necessary to observe more specifically the differences between these kinds of associations.

For this purpose, an analysis of the seeding points of sites and of the seeding points of selling points is conducted. The aim is to create a virtual touristic territory allowing us to understand how associations work.

From the X and Y coordinates of sites and selling points, a geographic center is calculated for each group. This center is a new point with coordinates and its position depends on the geographic distribution of the points in a group. Then, Bachi distance is used to measure the spatial spread of the points around the geographic center. The Bachi's distance, for each group, shows the middle distance between all points and the center. The higher the distance is; the more the group is spatially spread. Figure 6 shows the sites territory, the selling points into which the sites are sold and the distance between them. For example, the sites group which is named "Lake Bourget" is a little territory: the sites are close to each other, the selling points that sold them are close to them.

On the contrary, the group which is called "ubiquitous sites" shows sites that are far from each other and far from their selling points. Furthermore, the particular situation of the geographic center of the selling points shows that the sites are sold everywhere in the area of study.

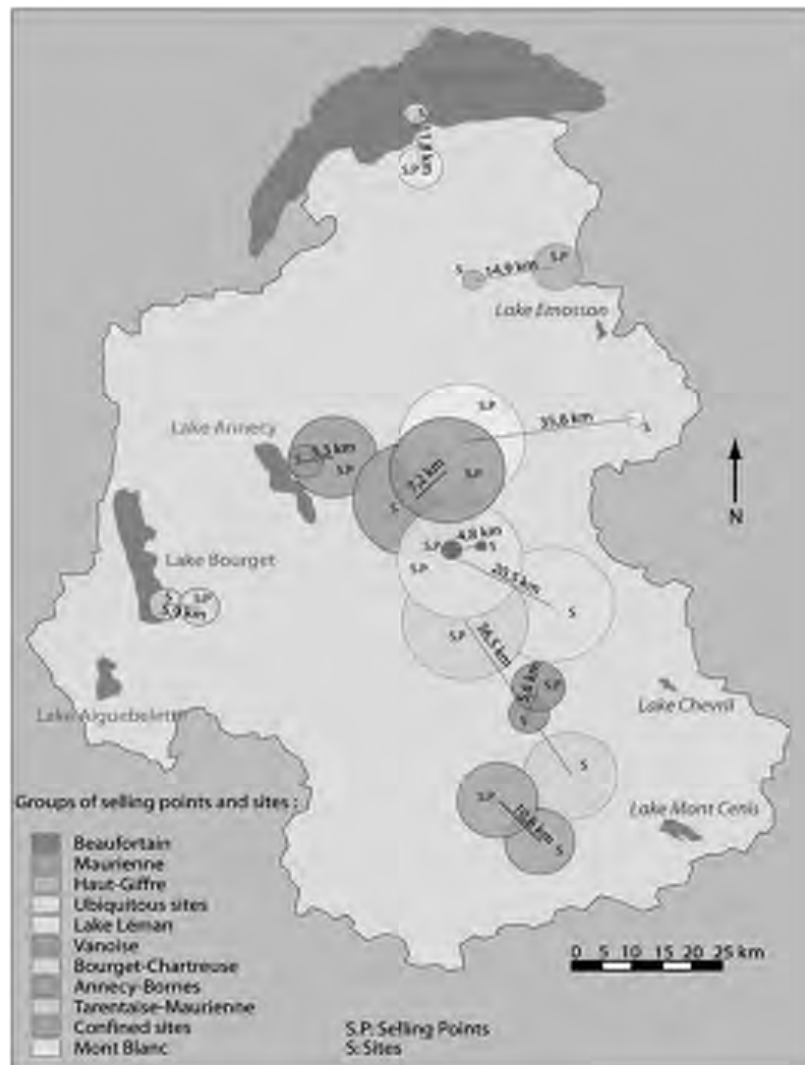


Figure 6: Virtual tourism areas of the associations of sites

As a conclusion, some sites groups are local association which diffuses their image into a local area while others are sold together into a large territory.

3.1.2 A typology of Alpine touristic sites

Despite the role of distance, visibility or competition, Alpine touristic sites are spread differently on the territory. So, a typology of sites is proposed. This typology is based on the spatial spreading of the image of the sites. Four criteria are used in the typology:

- Spreading potential (number of cards per site)
- Average distance traveled by the cards of a site
- Number of selling points that sold the image of a site
- A diversity index (to measure the repartition of a site in the study area)

After that, a classification using k-means allows to distinguish five classes of sites which are presented in Figure 7.

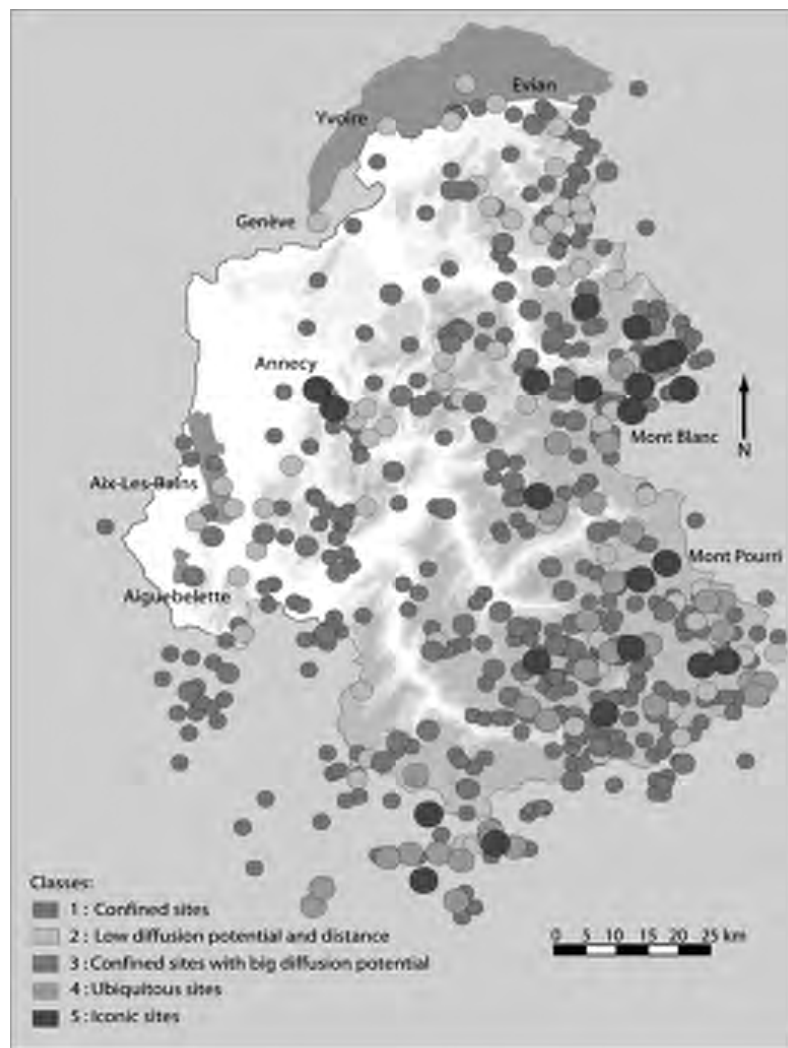


Figure 7: Classification of the Alpine sites according to their spatial diffusion

First class contains confidential sites. The spreading potential of these sites is low and their commercialization is restricted. These sites are frequently ski resort or villages which are exclusively sold in its surrounding.

Second class is like the first class but the diffusion potential is more important. These sites have a big range in their own territory. That is usually some summer activities sites like great lakes or some natural curiosity like rivers or cascades.

Third class has a big spreading potential but localized. This often involves cities like Avoriaz, Bourg Saint-Maurice or Aime. Fourth class includes emblematic or iconic sites. They have a prodigious spreading potential, preventing the other sites to penetrate their territory. In addition, they have a large range in the area study. These sites are peaks, pinnacles, summits, glaciers like the prestigious sites of Vanoise and Mont Blanc.

Fifth class is named “ubiquitous sites” because they are present everywhere in the study area. They are very similar to the emblematic sites but they have a lower diffusion potential. So, they do not have a local big range. Like the fourth class, high mountains are predominant but they are often associated to landscapes, they’re composed of lakes and summits or architectural heritage and peaks.

As a conclusion, the type of landscape is determinant in the commercialization of the sites. The mountains, particularly peaks, snow and ice are spread in the entire area. Mountains are sold almost everywhere even in places with totally different landscapes like alpine lakes, large valley or “alpine pasture”. On the contrary, mountains below 2000 meters or the human landscapes have a very local range. The areas of summer activities like big lakes, rivers or cascades have a big potential (sometimes more than 100 cards) but have a local range too.

Selling points, focalization and appropriation

If the sites show singular practices, what about the selling points? Previously, we have demonstrated that some areas are overhyped while others are excluded from marketing diffusion. These areas are ousted because they don’t have attractive landscapes, so what’s going on here? What kind of sites will the sellers choose in order to keep a sufficient panel?

Territorial endogeneity

The endogenous rate is the percentage of sites that are sold into an area and that are positioned in the same area. The area can be an arbitrary distance around a selling point but it can be an administrative or topographic limit. Here, Alpine watersheds are used. Alpine watersheds are created in GIS due to the difficulty of finding a satisfying division in literature (Debarbieux, 2001). Then, rates are calculated for each watershed, the results are presented in Figure 8. Furthermore, postcards may have two plans, so rates are calculated for each plan. Indeed, it is possible for the foreground to be included in a watershed while the background is included in another, like a card showing the lake Rose-land and the Mont Blanc. This kind of card is essential to understand identity practices because they indicate place attachment processes between the different territories.

Figure 8 shows the endogenous rates to each watershed, and profound contrasts are expressed. For example, the Arve valley is totally confined to its own landscapes (plans one and two). On the contrary, Ménoge valley, Isère valley or Borne valley have almost only exogenous touristic sites. Some sellers focus on their own landscapes while others make their postcards display with exotic sites. This phenomenon suggests a landscape appropriation.

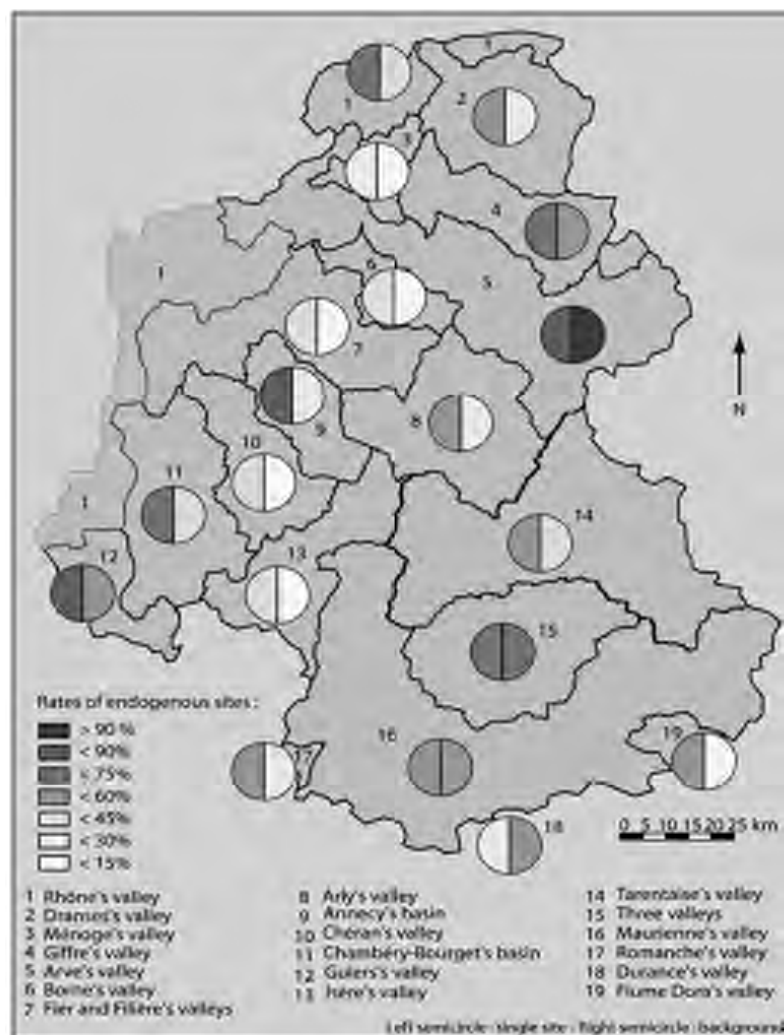


Figure 8: Endogenous rates per Alpine watershed

Yet, among this appropriation process, it is necessary to identify what is due to the identity choices and what is due to the landscape reality. Indeed, it is possible that certain sellers have to sell exotic landscapes because there are no attractive sites in their circle. But if there are attractive sites that are sold in other areas, this indicates a choice of identity. To ensure this possibility, it is necessary to observe spatial relationships between watersheds.

Finally, calculations have been completed with the Alpine massive instead of Alpine watershed and the results are similar.

What are the spatial interactions between territories?

Figure 9 present the three main connections between each watershed. Used for better discerning, this method permits to represent more than 85% of the connections between every watershed. So, it is easy to see that the Arve valley is used to provide landscapes in almost every territory.

In the “deficient places”, singular processes occur. If we examine Ménoge valley and Borne valley, which have low endogenous, their practices are totally different. The first one focuses on closest valleys and none of its landscapes are sold elsewhere. Consequently, the reason for this is a lack of attractiveness; role of identity is hidden by a necessary appropriation.

The second one uses exotic landscapes and neglects adjacent valleys like Fier valley or Ménoge valley. In addition, it has a big potential which is used by other territories like Arve valley and Fier valley. So, according to that, other concerns are at work (landscape preferences, personal history...).

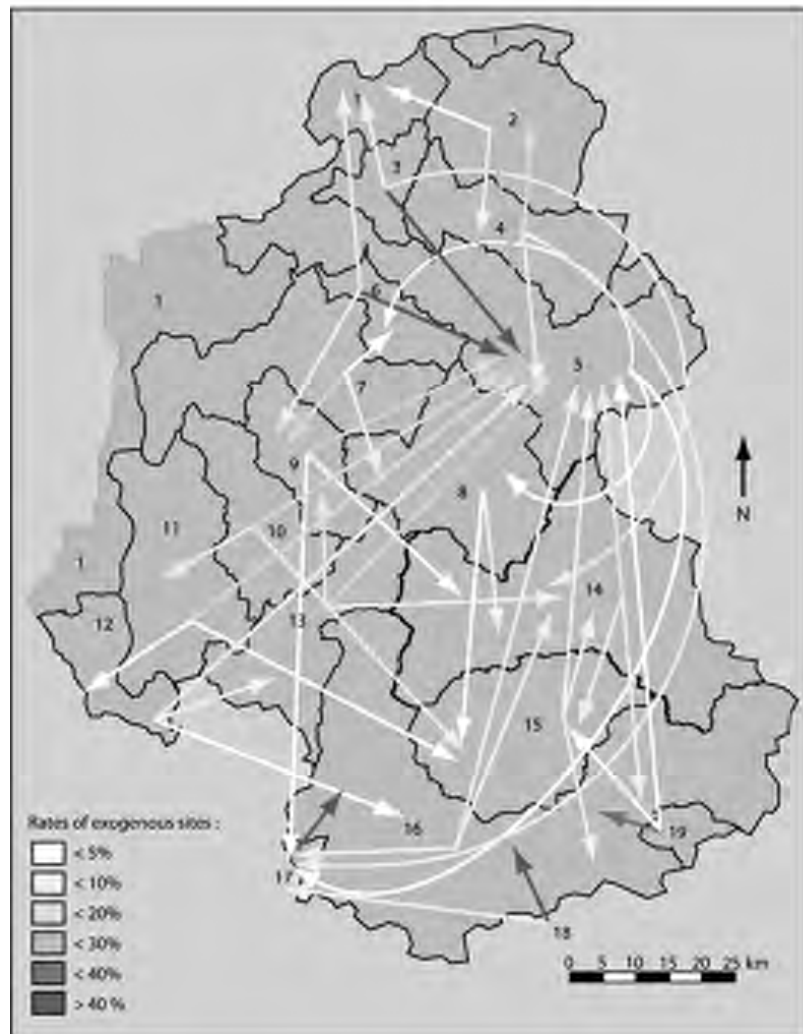


Figure 9: Landscape connections between watersheds

Analysis conducted in large areas like the watershed allow to detect some focalization or appropriation situations, showing identity and commercial practices. It is possible to improve this observation with a different level of analysis: the selling points.

The selling points, another level to understand

To observe the marketing choices locally, a method from circular statistics is used to combine the landscape offer for each selling point. This method is ordinarily used in climatology to represent the climatic aspects like wind or precipitations (Shell and Lang, 1975). With a unique vector, the average distance and the average direction of the landscapes which are sold in a selling point is synthesized. In Figure 10, each selling point has a vector. The length of a vector gives the average distance of the touristic sites; its color (the vector norm) indicates the stronger or lower spreading of the sites around the selling point. For example, in Saint-Gervais, red color indicates that all the sites that are sold are positioned east of Saint-Gervais. The short length means that they belong to the Mont Blanc sites like Aiguille du Midi, Aiguille Verte, Sea of ice, Mont Blanc...

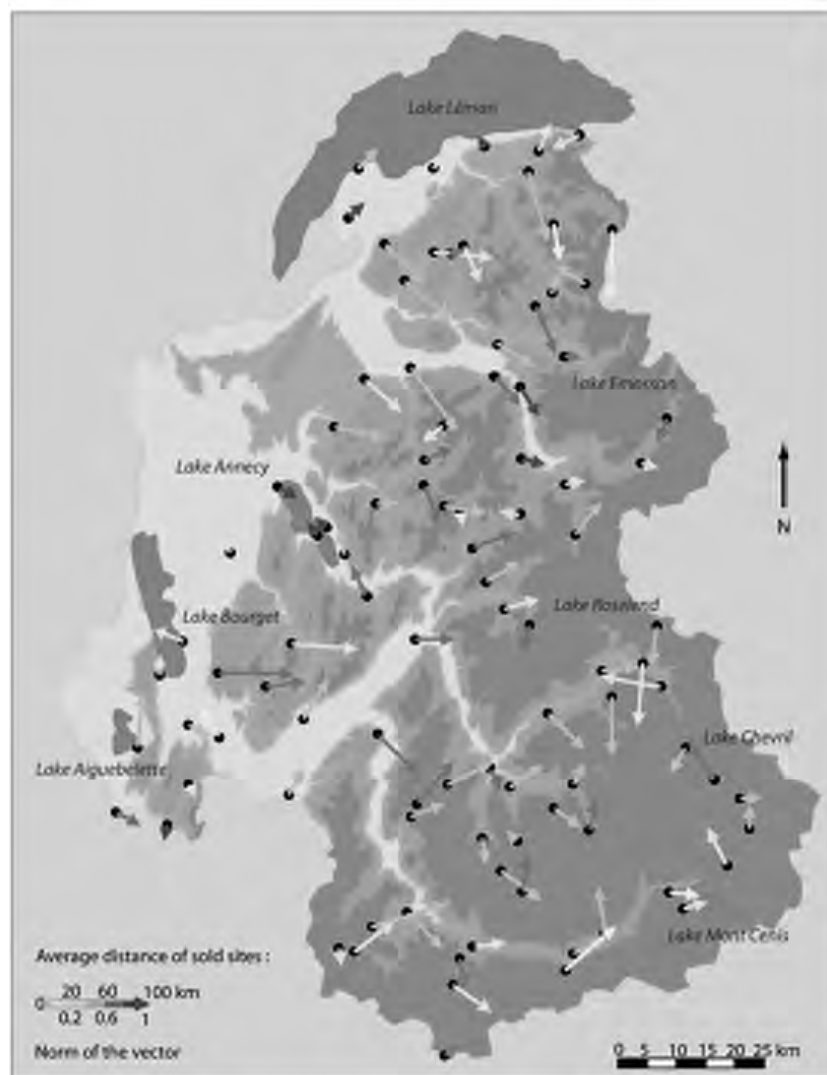


Figure 10: Synthesis of the “landscape areas” of the selling points

Observing selling points, new facts appear. Great lakes form extremely concentrated sets. The selling points positioned between Annecy's lake and Lemman's lake use distant landscapes which are more or less spread. This fact confirms Mont Blanc's attractiveness. Despite these trends, singular observations appear. Megève denies its proximity to the Mont Blanc's sites and prefers Aravis's landscapes. Douvaine uses Lemman's touristic sites rather than Chablais or Mont Blanc's sites. Furthermore, the function of national and local boundaries is materialized: very few Swiss or Italian touristic sites are sold in France, the Tarentaise valley, which is a country limit, is a north-south barrier between Savoie and Haute-Savoie. Few sites located in North are sold in Vanoise, and vice and versa.

Those previous results lead to suggest a typology of the selling points based on their territorial attachment, as we did for the touristic sites. To do this, a correspondence analysis is used from the touristic sites that are sold in the selling points. The sites with a diffusion potential inferior to 10 postcards are omitted because they are not statistically significant. So, the aim is to make classes of selling points that sell the same touristic sites. This method allows to consider the role of territorial boundaries in the commercialization choices.

Figure 11 presents a typology of the selling points. A circle without borders corresponds to selling points that are considering their own territory. In other words, these selling points sold preferentially endogenous landscapes, such as great lakes, Vanoise, Tarentaise, Arve or Maurienne valley.

A circle with a red border shows a preferential attachment to one exogenous territory. The background color of the circle specifies what territory it is. For example, Bonneville or La Roche sur Foron are connected to the Arve valley. This observation can be explained by a lack of attractive sites and the proximity between this city and Mont Blanc. The city of Modane is even more surprising: it denies its position in Maurienne valley to give preference to esteemed sites of Arve's valley. Same observation for Morzine: the city prefers Tarentaise valley touristic sites. Finally, an entire red circle indicates a spread appropriation like in Aiguebelle, la Rochette or Avoriaz.

The reasons that explain why Modane or Morzine are outside their respective territory are difficult to comprehend. Yet, it suggests other lines of inquiry like personal history of the sellers or landscape preferences. Nevertheless, it is very interesting to observe how a large number of selling points are connected. Indeed, these associations are similar to the real territory limits such as Vanoise, Tarentaise and Maurienne valley or Beaufortain. This result shows that the topographic boundaries influence human's perception. They also establish that a large part of sellers favor their own territory.



Figure 11: Tourism territories

DISCUSSION

Using postcards in a geographic context allows one to understand several practices in the spreading of touristic sites. The role of distance, the accessibility, the visibility or even competition have been established. It means that the sellers must consider some quantifiable factors to make a postcards display.

This study allows the observation of the inequalities between Alpine territories: areas are overused while others are completely excluded. In that way, this study can be related with several works about landscape preferences (Delucio and Mugica, 1994; Fyhri *et al.*, 2009).

Otherwise, the supremacy of high peaks and high mountains in marketing process can show the Alpine landscape identity and shows the landscape preferences of the tourists. Consequently, Alpine identity is based on singular landscapes that are not present in other countries in

France. Mountains exist elsewhere in the Alps, but glaciers, high pinnacles or peaks are exclusively in Alps or Pyrénées. In addition, Pyrénées aren't as high as the Alps and its glaciers tend to disappear (Serrano and Gonzales Trueba, 2004).

According to Etchner and Ritchie (1993), "in order to be chosen by tourists, a destination must have strong and recognizable images". Agreeing with Debarbieux (1995), it is necessary to elect reference sites that must be emblematic at an international level. High mountains are the trademark for Alpine residents and constitute an original identity. This identity is issued from a long and cultural story of mountaineering and verticality. So, despite a big potential of natural or architectural sites, the Alps focus on their image of high mountains because they are easily recognizable and discriminate.

This study also demonstrates that postcards are an original and pertinent tool to observe marketing practices and identity process. The particular link between touristic sites and selling points is a singular angle to understand the relationship between landscape, territory, marketing diffusion and identity. Agreeing with Norrild (2001), postcards are an important social object and an appropriation of touristic destinations.

No study has used postcards to understand the relationship between touristic sites and selling points. So, this defect can be improved by several contributions. Qualitative or quantitative data about landscape preferences could permit understanding of what kind of landscape is expected in the Alps. In addition, it could be interesting to conduct a survey about spatial and cultural perception of the landscape. Therefore, it can be necessary to improve our methods in other countries with different landscapes. For instance, a study in a linear area such as a river or a touristic road could show some new phenomenon.

Finally, many touristic destinations undergo touristic pressure. Many authors mention the impact of tourism on the physical environment (Cohen, 1978; Farrell and Runyan, 1991; Richez, 2000). Postcards can be a tool to change touristic practices. By offering other sites like ordinary landscapes, postcards can reduce the traffic to emblematic sites and can suggest other routes or other spatial practices. Methods exposed in this study can help in making a territorial diagnosis and advise the redevelopment of some abandoned places.

REFERENCES

- Albers, P. C., & James, W. R. (1998). Travel photography: a methodological approach, *Annals of Tourism Research*, 15 (1): 134-158.
- Amirou, R. (2002). De l'imagerie populaire à l'imaginaire touristique, *Espaces, Tourisme et Loisirs*, 199: 26-33.
- Agresti, A., 1990: *Categorical data analysis*. New York: John Wiley.

- Bachi, R. (1999). *New methods in geostatistical analysis and graphical presentation*, New York, Springer-Verlag.
- Bauckhaus, N., Reichler, C. & Stremlow M. (2007). Paysages des Alpes, de la représentation à l'action. *Synthèse thématique relative au thème de recherche I «Processus de perception»*, VDF.
- Beerli, A. & Martin J. D. (2004). Tourism management and the perceived image of tourist destinations: a quantitative analysis, a case study of Lanzarote, Spain. *Tourism Management*, 25(5): 623-636.
- Dann, G. (1996). The people of tourist brochures, in T. Selwyn (Ed.): *The tourist image: Myths and myth making in tourism*, Chichester: John Wiley and Sons, pp 61-82.
- Day, J., Skidmore, S., & Koller, T. (2002). Image selection in destination positioning: A new approach. *Journal of Vacation Marketing*, 8(2): 177 - 186.
- Debarbieux B., (1995). *Tourisme et Montagne*. Paris: Economica.
- Debarbieux, B. (2001). Différenciation et désignation géographique des objets alpins : six manières de faire. *Revue de Géographie Alpine*, 89 (4): 43 - 65.
- Delucio, J. & Mugica, M. (1994). Landscape preferences and behaviour of visitors to Spanish national parks, *Landscape and Urban Planning*, 29 (2-3): 145-160.
- Edwards, E. (1996). Postcards, greetings from another world. In T. Selwyn (Ed.), *The tourist image: Myths and myth making in tourism*. New York, John Wiley and Sons.
- Etchner, C. M. & Ritchie J. R. B. (1993). The measurement of destination image: an empirical assessment. *Journal of Travel Research*, 31(4): 3-13.
- Foley, J., & Cohen, A. (1984). Working Mental Representations of the Environment. *Environment and Behavior*, 16(6): 713-729.
- Font, X. (1996). Managing the tourist destination image. *Journal of Vacation Marketing*, 3(2): 123-131.
- Frustier P., Perroy F., (2004): *La communication touristique des collectivités territoriales*, Voiron, Réseau Territorial.
- Fyrhi, A., Kristian, J., Jacobsen, S. & Tommervik, H. (2009). Tourists' landscape perceptions and preferences in a Scandinavian coastal region. *Landscape and Urban Planning*, 91: 202-211.
- Hossard, N. (2005). *Recto-Verso, les faces cachées de la carte postale*, Paris Arcadia Éditions.
- Huff, D. L. (1964). Defining and Estimating a Trading Area. *Journal of Marketing*, 28(3): 34-38.
- Hunter, W. C. (2008). A typology of photographic representations for tourism: depiction of groomed spaces. *Tourism Management*, 29(2): 354-365.
- Gallarza, G. M., Saura, G. I. & Garcia, C. H. (2002). Destination image towards a conceptual framework. *Annals of Tourism Research*, 29(1): 56-78.
- Judd, D. R. (1995). Promoting tourism in US cities. *Tourism Management*, 16(3): 175-187.

Kim, H. & Richardson, S. (2003). Motion picture impacts on destination images, *Annals of Tourism Research*, 30(1): 216-237.

Markwick, M. (2001). Postcards from Malta: Image, consumption, context. *Annals of Tourism Research*, 28(2): 417-438.

Mazas, A. (1995). Le paysage dans notre patrimoine scolaire : représentations et lecture du paysage dans quelques manuels de l'enseignement primaire, in C. Voisenat (ed.): *Paysage au pluriel, Pour une approche ethnologique des paysages*. Maison des Sciences de l'Homme, pp 65-75.

Millet, N. (1991). Etude de logo, le cas du Tarn. *Les cahiers d'Espaces, Image, stratégie et communication*, 23, Paris, Editions Touristiques Européennes.

Norrild, J. A. (2001). Las postales como creadoras de imagen de destino: el gaucho y la identidad argentina, *Estudios y perspectivas en turismo*, 10: 131-150.

Serrano, E. & Gonzales Trueba, J. J. (2004). Periglaciario en el Grupo Peña Vieja (Macizo central de los Picos de Europa). *Cuaternario y Geomorfología*, 18: 73-88.

Shell, G. S. G. & Lang A.R.G. (1975). Description of leaf orientation and heliotropic response of sunflower using directional statistics. *Agricultural Meteorology*, 15: 33-48.

Simon, F.L. (1995). Tourism development in transition economies: the Cuba case. *The Columbia Journal of World Business*, 30: 26-40.

Thompson, D. L. (1963). New Concept: Subjective Distance. *Journal of Retailing*, 39: 1-6.

Watt, G. & Head, H. (2002). Postcards and frontier mythologies: sustaining views of the Kimberley as timeless. *Environment and Planning D*, 20: 319-344.

Winiwarter, V. (2001). Buying a dream come true. *Rethinking history*, 5(3): 451-454.

Yuksel, A. & Akgul, O. (2007). Postcards as affective image makers: an idle agent in destination marketing. *Tourism Management*, 28(3), 714-725.

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