LANDSCAPE AND VACATION PREFERENCES OF URBAN DWELLERS IN BUENOS AIRES (ARGENTINA)

Faggi, A.[1]

J. Breuste[2],

N, Madanes[3]

P. Perelman[4]

C. Gropper[5]

afaggi@macn.gov.ar

Abstract

Landscape forms define different kinds of activities and influence tourists' and visitors' expectations. Knowledge of users' typology is a fundamental aspect to be considered in sustainable tourism. In this study we analyze the public perception associated with preferences for landscape and tourist destination. Surveys were applied to users visiting five urban nature reserves in the metropolitan area of Buenos Aires. Experiential and experimental preferences for landscape features were classified in ten categories; vacation was discriminated in beach, mountain, city and rural destinations and both were contrasted with the profiles and education levels of respondents on the background of Argentina as a country with high landscape diversity. There were significant differences between education levels and landscape preferences for four features: variety, one element of the landscape, sensorial features and color; while age was significant for six landscape features: maintenance, one element of the landscape, variety, wilderness, admiration and sensorial features. Beach landscapes, followed by mountain landscapes, were the preferred destinations selected by all groups of respondents, except for the group of people with elementary school education who chose rural destinations as their second preference.

Keywords: landscape preferences, vacation, rural tourism, age, education level

[1] Universidad de Flores, Nazca 274, Buenos Aires. Conicet, Macn, Gallardo 470, DJR 1405, Buenos Aires, Tel 541149828797, afaggi@macn.gov.ar;
[2] Lodron- Paris University, Hellbrunner Strasse 34, 5020 Salzburg, Austria, Tel4366280445241, juergen.breuste@sbg.ac.at
[3] Universidad de Buenos Aires, FCEyN, Ciudad Universitaria, nmadanes@fcen. uba.edu.ar
[4] Conicet, Macn, Gallardo 470, DJR 1405, Buenos Aires, Tel 541149828797, patriperelman@macn.gov.ar
[5] Lodron-Paris University, Hellbrunner Strasse 34, 5020 Salzburg, Austria, Tel4366280445241,

Resumen

Las formas del paisaje definen distintos tipos de actividades e influyen en las expectativas de turistas y visitantes. Un aspecto fundamental a considerar en el turismo sostenible, es el conocimiento de la tipología de los usuarios. En este estudio, se analiza la percepción pública relacionada con las preferencias del paisaje y de destinos turísticos. Las encuestas se aplicaron a visitantes de cinco reservas naturales urbanas en el área metropolitana de Buenos Aires. Sus preferencias por las características del paisaje se clasificaron en diez categorías. Las preferencias como destinos de vacaciones fueron playa, montaña, ciudad y rural. Las características del paisaje y destinos de vacaciones fueron contrastados con los perfiles y niveles de educación de los encuestados. Los resultados indican que no hubo diferencias significativas entre los niveles de la educación y las preferencias de paisaje para cuatro características: variedad, uno de los elementos del paisaje, las características sensoriales, de color y edad. Sin embargo, se encontraron diferencias significativas para seis características del paisaje como: mantenimiento, uno de los elementos del paisaje, la variedad, silvestre, admiración y características sensoriales. Paisajes de playa, seguido por paisajes de montaña, fueron los destinos preferidos elegidos por todos los grupos de encuestados, a excepción del grupo de personas con educación primaria que eligió en segundo término destinos rurales.

Palabras claves: preferencias del paisaje, vacaciones, turismo rural, edad, nivel de educación

Introduction

Tourists are becoming increasingly demanding in regard to environmental quality and one of the main objectives of resource management is to provide a high quality product based upon nature and culture (Shin *et al.* 2001). Intense competition among tourist destinations increases the importance of planning and management for tourism that takes the factors that influence the choice of a particular site into account (Morgan 1999). Destinations compete mostly through their images and so tourism promotion should be based on building effective images (Ahmed 1996, Varela Mallou *et al.* 2006) which are actually a mental subjective representation (Alhemoud and Armstrong 1996). Tourist destinations are more than just sites with infrastructure and services. They imply social and cultural dimensions, where landscapes are highly valued resources and important components of the tourist products (De Aranzabal *et al.* 2009).

The potential of the landscape for tourism enables us to identify attractions at different special scales which can be used to differentiate the levels of detail for management and planning. Landscape forms define different kinds of activities and influence tourists' expectations (Tress and Tress 2003, Stone and Wall 2004) while changes in the landscape influence tourists' perceptions and the quality of a vacation (Petrosillo *et al.* 2006). The types of objects typically used in analysis are physical landscape characteristics but not the appreciation and preferences of visitors for an area (Brown 2006), although knowledge of visitors' typology is a fundamental aspect to be considered in sustainable tourism (De Aranzabal *et al.* 2009). Collins-Kreiner and Israeli (2010) conducted, in a lake area in Israel, market analysis based on geographical, demographic and psychographic characteristics of visitors and non-visitors.

Landscapes are more than just assemblages of spatial elements, integrating cultural identity and human perception. Socio-economic and cultural differences account for variation in the perception of landscape (Strumse 1994).

Many studies of landscape preference have been carried out in the last decade at both coarse and fine scales (Hands and Brown 2002, Steinitz 2003, de Groot and van den Born 2003, Tress and Tress 2003). Chhetri and Arrowsmith (2008) developed a set of predictors of scenic attractiveness derived from data collected via questionnaire administered to a group of university students visiting a national

park in Australia. De Groot and van den Born (2003) showed that more than half of the urban respondents in Netherlands preferred landscapes in which one may experience the greatness and forces of nature.

Preferences for landscapes are typically evaluated by using photographs, questionnaires, surveys and interviews (Kaplan and Kaplan 1989, Steen Jacobsen 2007). Vouligny *et al.* (2009) recommended using several methods that go beyond the visual dimension when evaluating a landscape. According to Dakin (2003), the judgment of landscape through expert eyes that essentially considers the visual attributes may differ from the experimental and experiential approaches of visitors. The experiential approach is based on the emotions and expectations of visitors or tourists, whereas the experimental method takes into account how the public visually assess the physical and cognitive components of a landscape.

Studies on environmental psychology indicated that more open landscapes, with landscaped vegetation, were preferred to other natural vegetation formations. This preference has been related to personal safety with notable differences between genders (Ulrich 1986, Parsons 1995, Kaplan and Kaplan 1989). Ipsen (1997 and 2006) pointed out that these preferences are based on people's social position. Reusswig (2009) defined this as lifestyle and social milieu, Rink (2002) as general social groups. Action oriented social groups (e.g. trekking or landscape type, etc.) are used to stratify reactions of respondents in Germany (Krippendorfer 1984, Kluge 2000). Greider and Garkovich (1994) and Kühne (2006) described the social construction and social distinction of landscape.

Vacation destination varies a great deal according to people's age, income, and education. The choice depends on variables such as the vacationer's profile and characteristics of the destination and trip. Profile includes factors such as age, education, household composition, income, and place of residence (Baloglu and Mc Cleary 1999). Destination characteristics include many attributes such as climate, landscape features, offer of infrastructure and activities and cost related to food, transport, and accommodation (Johnson and Ashworth 1990, Baloglu and Mc Cleary 1999). Ooi (2005) states that tourism experiences are multifaceted and existential, depending on people`s social and cultural backgrounds and, moreover, that tourists who are not necessarily in a same situation may share the same exciting and memorable experiences.

Few studies to date have examined the interactions between landscape preferences, selection of tourist destinations and tourist profiles. De Aranzabal *et al.* (2009) studied the relationship between visitors' preferences and landscape features in a tourist region of Spain. They concluded that the most attractive landscape features were mountains, cultural heritage, climate, forests and water courses, while different kinds of landscapes were visited by different target groups.

The aim of this paper was to analyze the relationship between landscape feature preferences and choice of tourist destinations based on an experiential approach of a group of people of different profiles. More specifically the research addressed the following question:

Do respondents' age, gender and education influence preferences for landscape features and their vacation destinations?

Methods

Geographical context

Argentine has a great variety of ecosystems. Among fifteen continental eco-regions, only six have an extension that exceeds 10% of the total country area: the dry Chaco in the North and the Patagonian steppe in the South, the Espinal and the Plain Monte, towards the centre of the country, all characterized by arid conditions (Ministerio de Salud y Ambiente de la Nación - Argentina y el PNUMA 2006). The Pampa eco-region, in a central situation of the country has favorable ecological and climatic conditions for human settlement and development activities (Table 1). This region is covered by extensive grasslands where two thirds of Argentineans live (about 36.6 million people). Natural trees are rare and most modern woodlands are planted as industrial, protective or aesthetic plantations.

All of the argentine eco-regions offer quite a lot of attractive possibilities for recreation and tourism. The High Andes, Puna, Hilly Monte, Yungas and Patagonian forests are ideal mountain destinations with fantastic landscapes. Striking forms carved out over thousands of years by erosive forces, multicolor sceneries contrasting with the blue of the sky, of rivers and lakes are stages for wildlife watching, the practice of trekking and winter sports.

Rural destinations can be found in the Chaco, Iberá, Campos, Espinal and Patagonian steppe. They are ideal settings of real beauty combining peace and

cordial hospitality with the atmosphere of tradition and the country life, offering horseback rides and treks and the possibility to participate in typical rural activities. Sun and sea tourism found place in several sandy beaches located in the Plain Monte, Pampa and Delta eco-region.

Table 1 Principal features of Argentine eco-regions

Ecoregions	Area	Percentage	Location	Biome
Mountain destinations				
High Andes	143,000	5.1 %	NW, SW and central-W	Dry- cold steppes and grasslands
Puna	86,400	3.1 %	NW	Dry- cold steppes and grasslands
Hilly Monte	117,100	4.2 %	NW	Thorn scrub desert
Yungas	46,610	1.6 %	NW	Subtropical rainforests
Patagonian Forest	70,000	2.5 %	SW	Temperate forests
Dry Chaco	492,980	17.7 %	NW and central	Subtropical forests and savannahs
Humid Chaco	118,500	4.3 %	NE	Hygrophilous forests and savannahs
Iberá Wetlands	37,930	1.4 %	NE	Lagoons, marshes and swamps
Campos	27,680	1.0 %	NE	Grasslands and savannahs
Espinal	297,400	10.7 %	central	Dry forests

Patagonian Steppe	534,460	19.2 %	SE	Steppe
Rural and Beach destinations				
Plain Monte	353,310	12.7 %	Central W and SE	Thorn scrub desert
Pampa	391,330	14.8 %	central	Grasslands
Delta and Paraná Islands	48,250	1.7 %	NE and central-E	Hygrophilous forests, marshes and swamps
Other destinations				
Paranaense	26,860	0.9 %	NE	Subtropical rainforests

The enquiry

Six hundred questionnaires administered through personal interviews were applied to users visiting five urban reserves in the metropolitan area of Buenos Aires during the week and weekends in April and June 2009 in order to measure public perception associated with landscape and tourist destination preferences. Isovariance curves were used to determine the optimal number of surveys (Cochran and Cox 1965).

The selection of the survey sites – urban reserves – was because those respondents were interested in contemplating a landscape of high environmental quality. Respondents were selected randomly, over a route within the selected areas and at some specific points in the reserves.

The questionnaire included eight questions of which six collected personal and background data (gender, age, family status, education level, occupation, place of residence). Two questions sampled users' perception, i.e. their attitude and opinion regarding the feature/s of a landscape that they preferred and where they went on vacation. The first question which evaluated the preference for landscape features was *open ended* and the user expressed his/her opinion. The second question was a choice between fixed options, including beach, mountains, countryside and cities.

Frequency of preferences for landscape features were classified in categories following Vouligny *et al.* (2009) based on the premise that experience of a landscape is multidimensional and goes beyond the sole visual component of a landscape (Dakin 2003).

In our study, experimental features are physical and cognitive components of a landscape, while the experiential features are the feelings generated by the observation of those components (Table 2).

Table 2 Categories of the landscape features based on Vouligny *et al.* (2009)

Landscape category	Landscape features	Abbreviation
Experiential	**Emotions**	
Atmosphere	Tranquility, well-being, peaceful, freedom	GPAT
Admiration	Magnificence, gorgeous, wonderful, beauty	GPAM
Experimental	**Physical and cognitive components**	
Sensorial	Using sense other than sight (wind, silence)	GPS
Colors	Colors of different elements	GPC
Vastness	Amplitude of the landscape, view far away	GPV
only one element of the landscape	(trees, water, flowers, sky)	GPL
Variety	Diversified, more than one element	GPVA
Environmental	Nature, air quality	GPE
Wilderness	Unmanicured, natural, vegetation unmodified by man	GPW
Maintenance	Cleanliness, order, landscaping, harmony	GPM

Statistical Analyses

We used χ^2 analyses to compare the respondents' preferences regarding landscape and vacation destination, and their profile. When differences were found, a partioned χ^2 analysis was performed to analyze which answers differed from the expected χ^2 (Pearson). In addition landscape preferences were analyzed for each vacationer's group to examine differences regarding their selections of experiential

and experimental categories by using a correspondence analysis. Multivariate analyses were carried out with STATISTICA software 6.1.

Results

The respondents were residents of the mega-city Buenos Aires in Argentina, a country with broad landscape diversity (mountains, forests, beaches, countryside and urban landscapes etc.). Half of the respondents were women and half men. The majority were in the 21-30; 31-40 years age range (Table 3). More than half of the respondents (52.52 %) had a higher level of education (academic and technical degree), 35.45 % had high school and 13.98% elementary school.

Table 3 Percentage of respondents classified in age groups

Age	15- 20	21-30	31- 40	41-50	51-61	≥ 61
%	16.91	21.13	24.71	17.23	13.17	6.82

Landscape preferences

There were no significant differences in the preferences for landscape features between male and female respondents. In general terms, water (18 %), vegetation (11%), tranquility (10 %), green color (7.5 %) and trees were the most frequently mentioned out of 56 features. Maintenance was mentioned in 2.65 %.

Landscape preferences and age

Landscape preferences were more heterogeneous regarding age groups (Fig. 1). Nature (GPE) and one element of the landscape (GPL) were the most frequently mentioned preferences. However we only found significances regarding age in five age ranges and seven landscape categories (Total χ^2 =104.94, p = 1.08E-06) (Table 4).
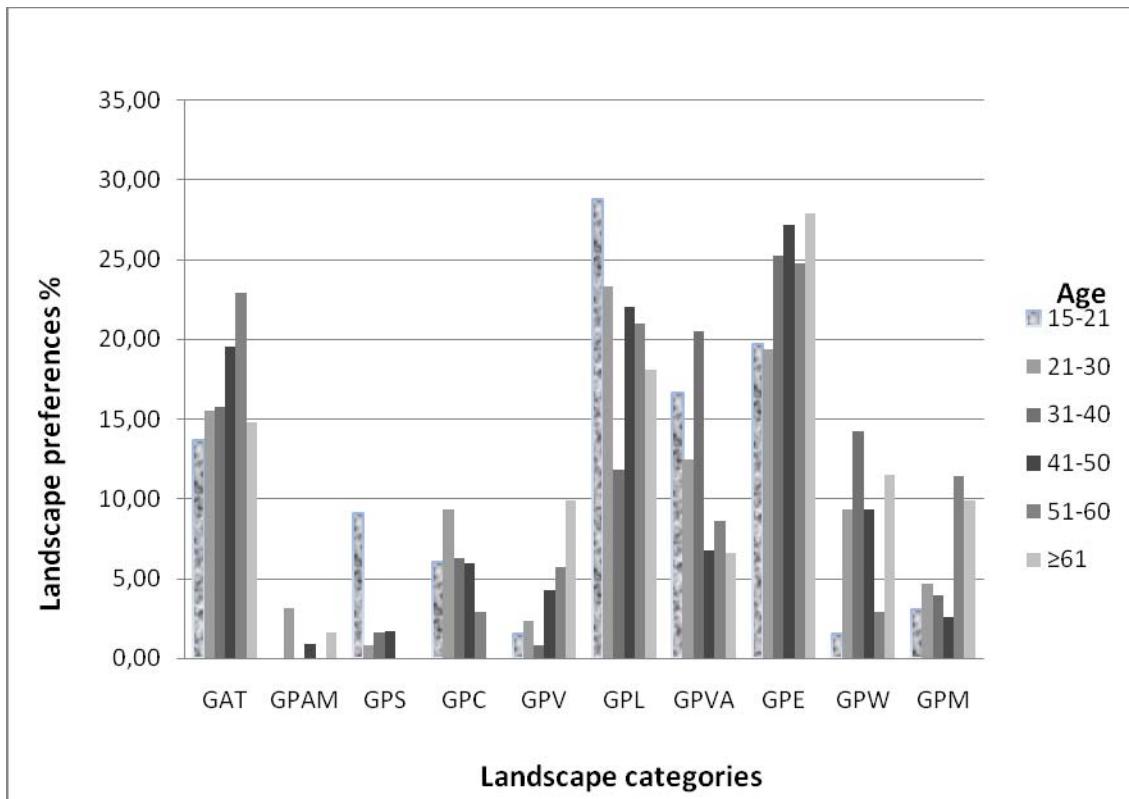
Table 4 Significant preferences for landscape categories according to age of respondents

Landscape category	Maintenance	One element	Sensorial	Wilderness	Admiration	Variety
Age						
15-21			x	x		
21-30					x	

31-40		x		x		x
41-50						x
51-60	x			x		

x significant at p= ≤ 0.05

Fig. 1 Preferences of different categories of a landscape according to the age of respondents

References:

GAT: Atmosphere; GPAM: Admiration; GPS: Sensorial; GPC: Colors; GPV: Vastness; GPL: only one element of the landscape; GPVA: Variety; GPE: Environmental; GPW: Wilderness; GPM: Maintenance.

People between 31-40 years mostly liked wilder places (p= 0.02) and 20.47% of them a diverse landscape (p= 0.02). This group had a lower preference for only one element of the landscape (p= 0.01).

People of 41-50 years less liked the variety of a landscape, (p= 0.0) while those between 51-60 years preferred neatness, order and care (p= 0.01), and disliked wilderness (p= 0.03).

Young people between 15-21 years preferred the sensorial components of a landscape, liked to enjoy silence and to hear the sounds of nature, (p= 0.0), while those between 21-30 years preferred magnificence and beauty when contemplating a landscape (p= 0.03). Young people between 15-21 years liked wilderness less than the other groups (p= 005).

Diverse and wild landscapes were valued by respondents between the ages of 31-40 years; maintenance was preferred people between 51-60 years. No significant differences were found in people older than 61 years.

Landscape preferences and education level
One element of the landscape, e.g. trees, water etc., nature as a whole, a sense of tranquility and well-being were the landscape preference features most mentioned by people grouped according to their level of education (Fig 2).

We found significant differences between landscape preferences and education level (x^2= 37.46; p= 0.004).

Fig. 2 Preferences of different categories of a landscape according to the educational level of respondents
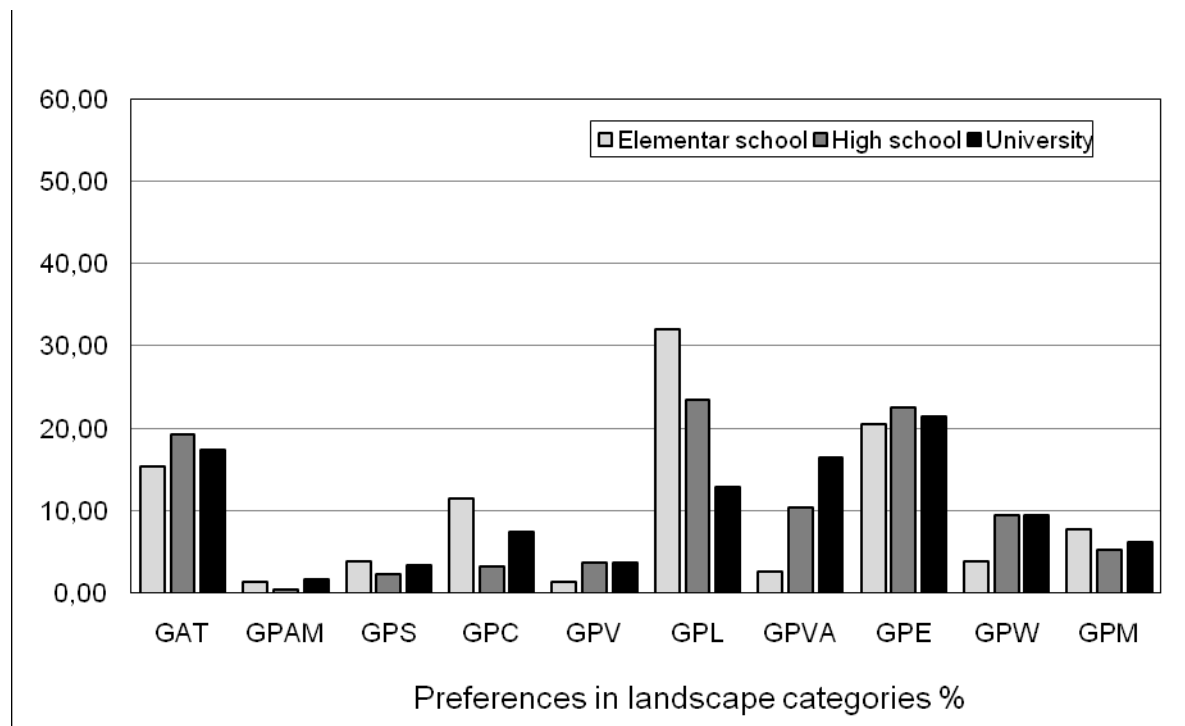
References:

GAT: Atmosphere; GPAM: Admiration; GPS: Sensorial; GPC: Colors; GPV: Vastness; GPL: only one element of the landscape; GPVA: Variety; GPE: Environmental; GPW: Wilderness; GPM: Maintenance.

Sensorial and color preferences were significantly different for respondents with elementary and high school education. While respondents with elementary school mostly preferred features of the landscape related to sensorial impressions like sounds, smells, tastes, humidity, temperature, wind, light and shadow (GPS= 3.85%; χ^2= 340.7; p= 0; GPC= 11.54%, χ^2 = 319.9; p= 0), those with high school education valued colors and sensorial features less (GPS= 2.35%; χ^2 =199.4; p= 0; GPC= 3.29; χ^2= 4.852; p= 0.028).

People with university education named first environmental features like nature and air quality, followed by atmosphere features (ie. tranquility, well being, peace and freedom) and by variety.

Landscape variety was a significant valued feature for respondents with university education (16.53%, χ^2 =7.81, p= 0.01) and only one element in the landscape was significantly less preferred (GPL =12.81; χ^2= 13.13; p= 0). On the contrary, a very low percentage of the group with elementary school valued diverse landscapes (GPVA= 2.56%; χ^2 =6.701; p= 0.01) (Fig. 1).

Vacation preferences

Beach, followed by mountains, was the most preferred vacation destination. No significant differences in gender were found for vacation destination choice (p= 0.316), but we found differences by age (χ^2= 104.94; p= 1.08E-06) and education level (χ^2: 13.02; p= 0.042) (Fig. 3).

Fig. 3 Choice of vacation destination on according to education level of respondents
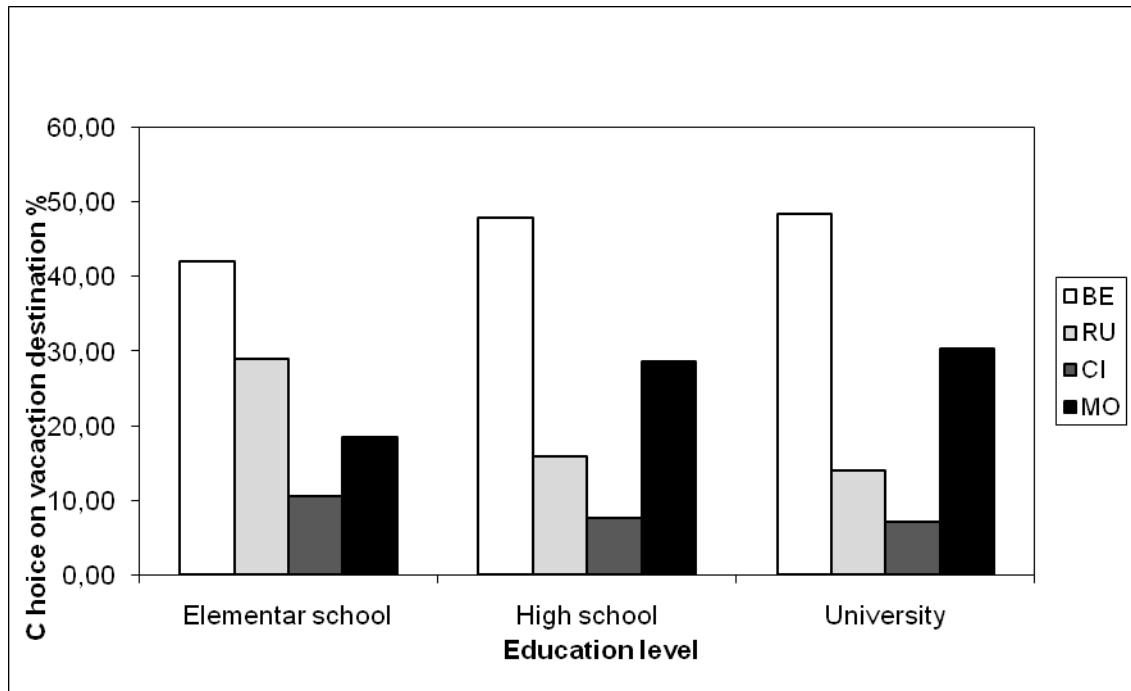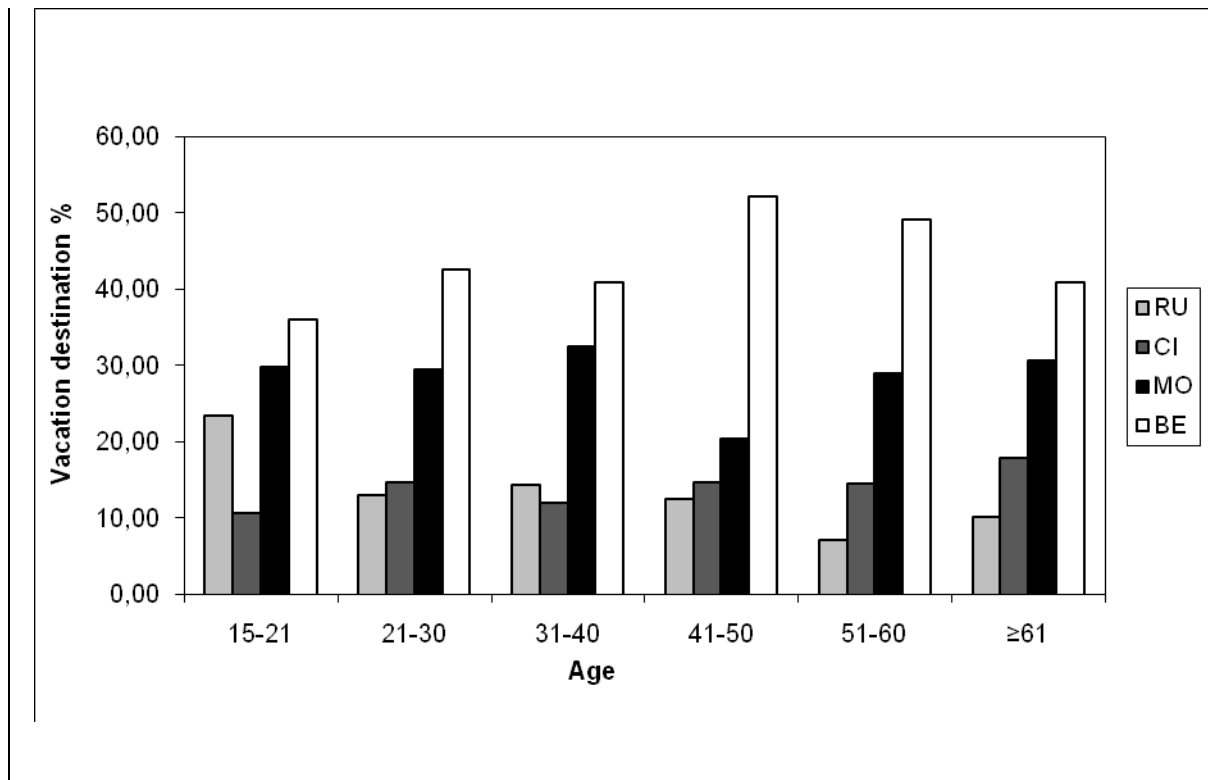
References:

BE: Beach, RU: Countryside, CI: city, MO: Mountain.

Vacation preferences and age

Significant differences were found only for 15-20 years old people (χ^2= 33.43; p= 0.00011), and for 31-40 years old people (χ^2= 27.03; p= 0.0013) who preferred countryside after beach and mountain destinations (Fig. 4).

Fig. 4 Vacation destination according to age of respondents

References:

RU: Countryside, CI: City, MO: Mountain, BE: Beach.

Vacation preferences and educational level

Destination choice differed significantly with their level of education (p= 0.042) (Fig. 3). When asked for their preferred vacation destinations, all groups of respondents chose beach first and mountains second, except for the elementary school group whose second preferred destination was countryside.

The countryside preference of the less educated people was statistically significant (29 %, χ^2 = 8.69, p= 0), as was their choice of not choosing mountain destinations for vacations (18.42 %, χ^2 =3.62, p= 0.06).

Vacation and landscape preferences

Figure 5 a, b, c, d showed the preferences for landscape features mentioned by respondents who went on vacation to the beach, to the mountains, to cities or to countryside. In general, the most preferred landscape features were one element, variety, and features classified in environment and atmosphere categories.

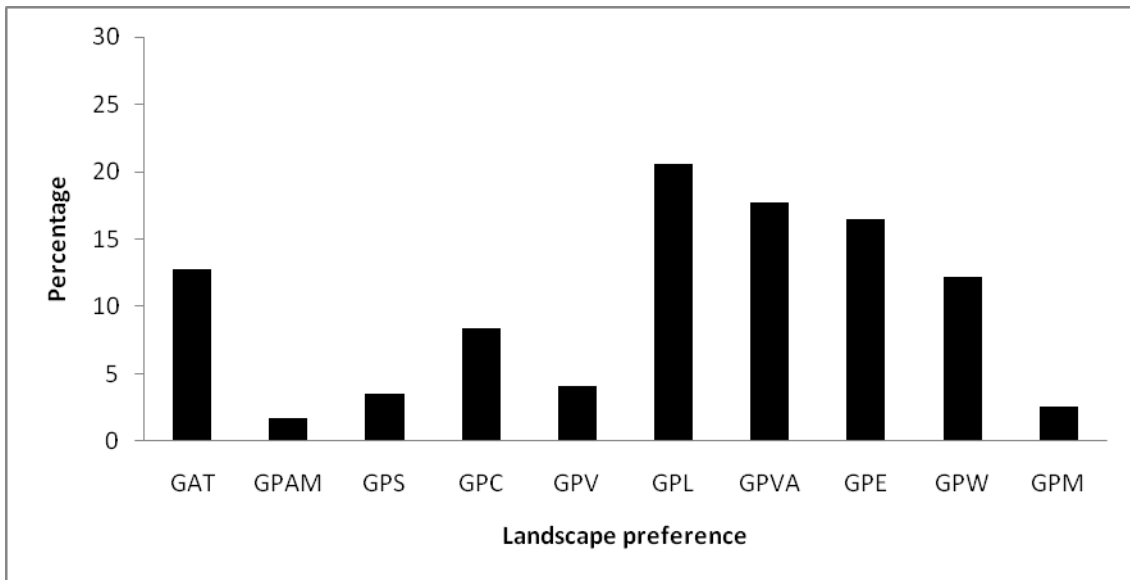**Fig. 5 a Landscape preferences according to respondents going on vacation to the beach**

Fig. 5 b Landscape preferences according to respondents going on vacation to the mountain
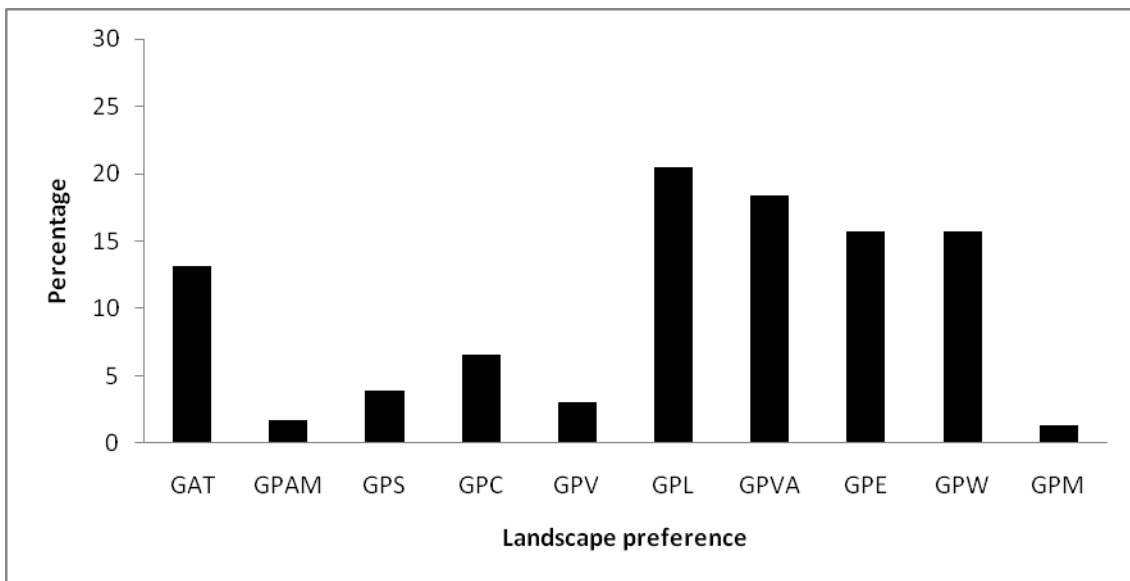

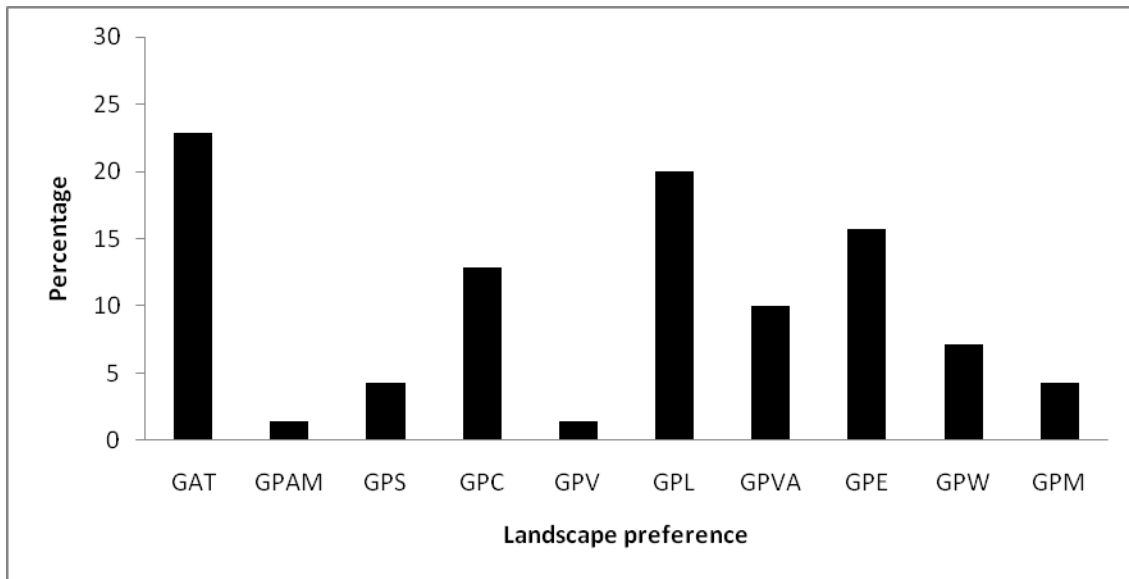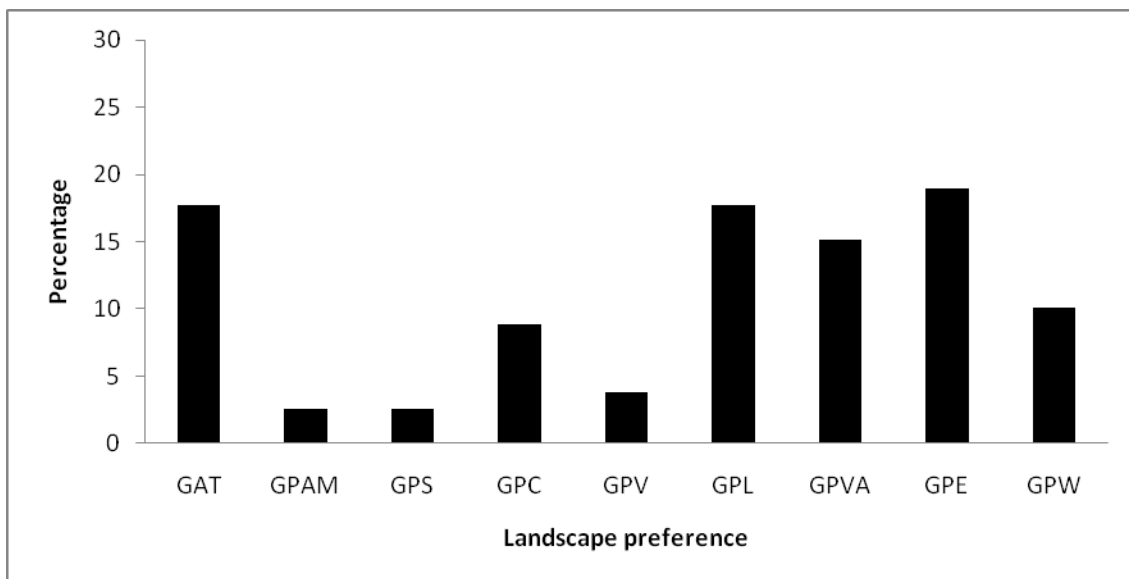**Fig 5 c Landscape preferences according to respondents going on vacation to cities**

Fig. 5 d Landscape preferences according to respondents going on vacation to the countryside

References:

GAT: Atmosphere; GPAM: Admiration; GPS: Sensorial; GPC: Colors; GPV: Vastness; GPL: only one element of the landscape; GPVA: Variety; GPE: Environmental; GPW: Wilderness; GPM: Maintenance.

Vacationers going to beach and mountain destinations mentioned similar landscape preferences favoring one or more elements of the landscape, nature as a whole or emotions like well being. Some respondents in the beach group also chose wilderness. Urban vacationers chose well being, one element of the landscape,

nature as a whole, color and variety in decreasing order. Those visiting rural destinations liked nature as a whole, well being, variety and wilderness.

Nevertheless no significant differences were found between vacation destination and preferences for landscape features using correspondence analysis (p= 0.97).

Discussion

We found that natural elements such as water, vegetation, tranquility, green color and trees were the most preferred landscape features, in coincidence with Kaplan (1984), Schoeder and Anderson (1984) , Ozguner and Kendle (2006). Water as an element was the first choice of 18 % of the respondents, in coincidence with Yang and Brown (1992), who found that water, was the most valued element of a landscape in Korea.

Our principal results confirmed the hypothesis that age and level of education of the respondents played a key role in the preference for a landscape. In our study we recognised a general trend in the mature population (51-60 years) of preferring manicured and managed landscapes. Order and maintenance as desired features by older people has been explained by the need for safety and easy locomotion (Strumse 1994, Kuo *et al.* 1998) which is also associated with a lower interest for natural scenery (Bjerke *et al.* 2006). As stated by Kaplan and Kaplan (1989), humans prefer landscapes that favour their own survival and well-maintained vegetation has been found to enhance security (Anderson and Stokes 1989, Nasar and Jones 1997).

Our results showed that young people between 15-21 years preferred the sensorial components of a landscape, liked to enjoy silence and to hear the sounds of nature. These findings were in accordance with Mäkinen and Tyrväinen (2008) who found in suburban green spaces in Helsinki, that visual and sensorial characteristics of green spaces are important to teenagers.

Some elements of a landscape and nature as a whole have priority over wilderness. The results of this study support the findings of Breuste and Breuste (1995) in Germany, of Breuste *et al.* (2002) in Argentina and Breuste *et al.* (2003) in Chile, Spain and Germany. However, our results about people from the metropolitan area of Buenos Aires could not confirm the findings of Vouligny *et al.* (2009) who noted

the predominant role of the image of wilderness in the social representation of Canadian residents in rural areas. Our findings showed that wilderness was frequently valued by people between 31-40 years (14.3 %) but was less preferred by young people (15-21 years) (1.5%) and by those between 51-60 years (2.8 %). These findings were somewhat controversial, because we interviewed people visiting natural reserves which have a wild appearance and we expected that wild as a feature would have been more greatly valued, but this was not the case. Many studies demonstrated that people often thought of natural areas as being scary, disgusting and uncomfortable (Talbot and Kaplan 1984, Harrison and Burgess, 1988, Ozguner *et al.* 2006) and our results coincided with Bjerke *et al.* (2006) and Breuste and Breuste (1995) who found a reduction in the preference for natural landscapes with increasing age.

The effect of education on people's landscape preferences showed that middle-aged, well educated people, who were interested in wildlife, expressed a greater preference for diversity than other segments of society, in accordance with Bjerke *et al*. (2006). Variety was a significant feature characteristic of respondents in the 31-40 year age range, which was the segment of respondents with higher education. The link between education and preference for a varied landscape was coincident with De la Fuente de Val *et al.* (2004) who found that university students of environmental science in Chile considered more diverse landscapes as having greater scenic beauty. Roovers *et al.* (2002) found that forest visits were related to higher educational levels in Belgium, where visitors preferred mixed forest types with variation in structure and topography. On the contrary the 41-50 year old group was less interested in variety, mentioning only one element of a landscape as their preference.

No effects of gender were found in preferences for landscape and choice of destination in the present study in agreement with Bjerke *et al.* (2006) in Norway and Breuste *et al.* (2003) in Chile, Spain and Germany, but differing from Ozguner and Kendle (2006) in Turkey.

We did not find any significant associations between the selection of vacation and age, except in the case of countryside destinations preferred by young people. This is in accordance with findings of Ooi (2005), showing that tourism experiences are multifaceted depending on people's profil.

The attachment of young people to rural destinations can be related to the shorter duration of travel and lower costs, since rural destinations are near to the metropolitan areas where this study was carried out. Nevertheless countryside was also mentioned by the other vacationer groups, and can be associated with the country's tradition of a long history of agricultural exploitation in Argentina and with the large extension of territory that is devoted to rural activities. Nowadays, although more than 85 % of the population is urban, there is still considerable attachment to rural traditions.

This fact can be associated with a re-evaluation of the traditional rural landscape discussed by Faggi and Ignatieva (2009) for Buenos Aires and Christchurch. In addition, this trend is stronger in young people who have escaped from their European immigrant roots and it is associated with reflection, a distinct identity and continuity with former native landscapes. As Meyer *et al.* (1991) discussed, in rural areas tourists get to experience life as it really is, to meet local residents, and to return to their roots.

Although at first the selection of a destination may not be due to landscape criteria but to traditions, fashions, costs, travel distance and duration of holidays, we could recognise some interesting trends. Respondents choosing beach and mountain destinations, which are places retaining many attributes of naturalness, preferred more experimental landscape features, such as physical characteristics of the landscape as suggested by Vouligny *et al.* (2009). On the contrary, for city destinations, whose main interest may not belong predominantly to the visual dimension alone, emotions and visitors' expectations played the principal role. Breuste and Breuste (2002) discussed the importance of urban landscapes as the most frequently used landscapes for recreation in the long term. They pointed out the special importance of the emotional acceptance of urban recreation sites used and the influence of user expectations for the decision to use a specific site.

Our results could be applied for the segmentation of tourist markets that are more responsive to needs and tastes suggesting the importance of used communication strategies depending on tourist age and education level. In addition, according to Brown (2006), they can provide an opportunity for assessing development proposals and a legitimacy for land use decisions that are based on true public consultation rather than the often narrow development interests. In general terms, for city destinations, activities and features that inspire emotions and expectations should be developed. More attention should be made to enhance different visual

features relevant for different age groups in beach, mountain and rural destinations. Nevertheless, refinement in our approach is also needed. This study relied on a single unit of measurement for vacation destinations, which might have resulted in a lower level of reliability of the results than if we had defined the landscape units more precisely at a finer scale. Differences between urban vs. rural beaches, coastal vs. continental cities; flat vs. sloping rural locations; cultural or historic vs. recreational cities; agricultural vs. pastoral vs. forested landscapes might help to clarify and generalise our findings.

The inclusion of factors other than age and education into a comparative study, e.g. a more sophisticated social grouping by "lifestyles" or different cultural backgrounds could give new perspectives on the subject.

References

Ahmed, Z. U. (1996) The need for the identification of the constituents of a destination's tourist image: a promotional segmentation perspective. *The Tourist Review*, 2, pp. 44-57.

Alhemoud, A. M. & Armstrong, E G. (1996) Image of tourism attractions in Kuwait. Journal of Travel Research, 34 (4), pp.76-80.

Anderson, L.M. & Stokes, G.S. (1989) Planting in parking lots to improve perceived attractivenss and security. *Journal of Arboriculture,* 15(1), pp.7-10.

Baloglu, S. & Mc Cleary, K. W. (1999) A Model of Destination Image Formation. *Annals of Tourism Research,* 26 (4), pp.886-897.

Bjerke, T., Ostdahl T., Thrane, C. & Strumse E. (2006) Vegetation density of urban parks and perceived appropriateness. *Urban forestry and Urban Greening,* 5, pp. 35-44.

Breuste, J. &Breuste, I. (1995) Nutzung und Akzeptanz von Grünflächen und naturbelassenen Landschaftsräumen im Stadtgebiet - Untersuchungen in Halle/Saale. *Verhandlungen der Gesellschaft für Ökologie,* 24, pp. 379 – 384.

Breuste, J., Michell, J., Moser, P. & De Rosa, C. (2002) Datos para el diagnóstico ambiental del área metropolitana de Mendoza de una encuesta a pobladores urbanos, *Energías Renovables y Medio Ambiente,* 34 (3), pp. 112 – 118.

Breuste, J., Breuste, I. & Rojas Hernández, J. (2003) Naturaleza y espacios libres en zonas urbanas – estudios comparativos en Halle (Saale) (Alemania) y Concepción/Talcahuuano (Chile), in: J. Breuste, J., J. Rojas Hernández, H.D. Kasperidus & C. Priego (Eds) Utilización y Manejo de la Naturaleza y del Paisaje en Aglomeraciones Urbanas, pp.107-134, 171-190 (Leipzig: UFZ).

Brown, G. (2006) Mapping landscape values and development preferences: a method for tourism and residential development planning, *International Journal Tourism Research*, 8, pp. 101-113.

Chhetri, P. & Arrowsmith, C.(2008) GIS-based Modelling of Recreational Potential of Nature-Based Tourist Destinations, *Tourism Geographies* 10 (2), pp.233-257.

Cochran, W. G. & Cox, G. N. (1965) *Diseños experimentales*. (Mexico:Trillas).

Collins-Kreiner, N. & Israeli, Y. (2010) Supporting an Integrated Soft Approach to Ecotourism Development: The Agmon Lake, Israel, *Tourism Geographies,* 12, 12(1), pp. 118 -139.

Dakin, S.L. (2003) There is more to landscape that meet the eye: towards inclusive landscape assessment in resource and environmental management. *The Canadian Geographer,* 47, pp. 185-200.

De Aranzabal, I., Schmitz, M.F. & Pineda, F.D. (2009) Integrating Landscape Analysis and Planning: A multi- scale approach for oriented management of tourist recreation. *Environmental Management,* 44, pp. 938-951.

De Groot, W. T. & van den Born, R. J. G. (2003) Visions of nature and landscape type preferences: an exploration in The Netherlands. *Landscape and Urban Planning,* 63(3), pp.127-138.

De la Fuente de Val, G., Atauri J., de Lucio J. & Mulhauser, H. (2004) Influencia de la heterogeneidad del paisaje en la calidad escénica: El Caso precordillerano andino de la cuenca de Santiago. *Revista de Geografía Norte Grande,* 32, pp.87-105.

Faggi, A. & Ignatieva, M. (2009) Urban green spaces in Buenos Aires and Christchurch. *Municipal Engineer,* 162, pp.241-250.

Greider, T. & Garkoviche, L. (1994) Landscapes: The Social Construction of Nature and the Environment. *Rural Sociology,* 59, pp. 5-21.

Hands, D.E. & Brown, R.D. (2002) Enhancing visual preference of ecological rehabilitation sites. *Landscape and Urban Planning,* 58, pp.35-51.

Harrison, C. & Burgess, J. (1988) Qualitative research and open space policy, *The Planner,* pp.16-18.

Ipsen, D. (1997) *Raumbilder. Kultur und Ökonomie räumlicher Entwicklung* (Pfaffenweiler: Centaurus).

Ipsen, D. (2006) *Ort und Landschaft*. (Wiesbaden: VS Verlag).

Johnson, P. & Ashworth, J. (1990) Modelling tourism demand: A summary review, *Leisure Studies*, 9, (2), pp.145 – 161.

Kaplan, S. (1984) Landscape preference and human evolution: The aesthetics of function, in A. S. Devlin & S. L. Taylor (Eds) *Environmental preference and landscape management.* (New London, CT: Connecticut College).

Kaplan, R. & Kaplan, S. (1989) *The experience of nature: A psychological perspective.* (New York: Cambridge University Press).

Kluge, S. (2000) Empirisch begründete Typenbildung in der qualitativen Sozialforschung. – Available at http://www.qualitative-research.net (accessed 8 Juni 2010).

Krippendorfer, J. (1984) *Die Ferienmenschen. Für ein neues Verständnis von Freizeit und Reisen*, Zürich.

Kuo, F.E., Bacaicoa M.& Sullivan W.C. (1998) Transforming inner-city landscapes. Trees, sense of safety and preference. *Environment and Behavoir,* 30: pp.28-59.

Kühne, O. (2006) Soziale Distinktion und Landschaft. Eine landschaftssoziologische Betrachtung. - *Stadt + Grün,* 56 (12), pp.40-43.

Mäkinen, K. & Tyrväinen, L. (2008)Teenage experiences of public green spaces in suburban Helsinki. *Urban Forestry & Urban Greening* 7, pp. 277-289.

Meyer, R., Richard, C., Mereo, S., Barre, J., Mery, J., Couf, C. & Bousquet, M. (1991) Rural tourism, *Espaces*, 113, pp. 3-34.

Ministerio de Salud y Ambiente de la Nación - Argentina y el PNUMA (2006) *Geo Argentina 2004. Perspectivas del Medioambiente de la Argentina.* (Buenos Aires: MSy A-PNUMA).

Morgan, N.J. (1999) La gestión de la imagen de los destinos turísticos: la promesa que plantea la técnica de promoción basada en la creación de una imagen de marca particularizada. *Papers de Turisme*, 35, pp. 35-57.

Nasar, J.L. & Jones, K M. (1997) Landscapes of Fear and Stress, *Environment and Behavior*, 29 (3), pp. 291-323.

Ooi, C. (2005) A theory of tourism experiences: the management of attention, in T. O`Dell & P. Billing (Eds). *Experiencescapes: Tourism, Culture and Economy*, pp.51-68 (Copenhagen: Copenhagen Business School press).

Ozguner, H. & Kendle, A.D. (2006) Public attitudes towards naturalistic versus designed landscapes in the city of Sheffield (UK). *Landscape and Urban Planning,* 74, pp.139-157.

Parson, R. (1995) Conflict between ecological sustainability and environmental aesthetics: conundrum, canard and curiosity: *Landscape Urban Planning,* 32, pp. 227-244.

Petrosillo, I., Zurlini, G., Grato, E. & Zaccarelli, N. (2006) Indicating fragility of socio-ecological tourism-based systems. *Ecological Indicators,* 6, pp.104–113.

Reusswig, F. (2009) Lebensstile und Nachhaltigkeit. Natur- Landschaftspräferenzen moderner sozialer Milieus, in: U. Eisel, S. Körner, & N. Wiersbinski (Eds) *Landschaft in einer Kultur der Nachhaltigkeit. Naturschutz als politisches Handeln,* pp. 76-92 (Kassel: Universität Kassel).

Rink, D. (2002) Naturbilder und Naturvorstellungen sozialer Gruppen. Konzepte, Befunde und Fragestellungen, in: K-H. Erdmann, & C. Schell, (Eds) *Naturschutz und gesellschaftliches Handeln. Aktuelle Beiträge aus Wissenschaft und Praxis.* (Bonn-Bad Godesberg: Bundesamt für Naturschutz).

Roovers, P., Herny, M. & Gulink, H. (2002) Visitors profile, perceptions and expectations in forests from a gradient of increasing urbanisation in central Belgium *Landscape and Urban Planning,* 59: pp.129-145.

Schroeder, H.W.&Anderson, L.M. (1984) Perception of personal safety in urban recreation sites. *Journal of Leisure Research,* 16(2), pp.178-194.

Shin, W.S., Jaakson, R, Kim, E.I. (2001) Benefits-based analysis of visitor use of Sorak-San National Park in Korea. *Environmental Management,* 28, pp. 413–419.

Steen Jacobsen, J. K. (2007) Use of Landscape Perception Methods in Tourism Studies: A Review of Photo-Based Research Approaches *Tourism Geographies* 9(3), pp. 234-253.

Steinitz, C. (2003) *Alternative Futures for Changing Landscapes: The Upper San Pedro River Basin in Arizona and Sonora* (Washington, Island Press).

Stone, M. & Wall, G. (2004) Ecotourism and community development: case studies from Hainan, China. *Environmental Management,* 33, pp.12–24.

Strumse, E. (1994) Environmental attributes and the prediction of visual preferences for agrarian landscapes in western Norway. *Journal of Environmental Psychology,* 14, pp.293-303.

Talbot, J. F. & Kaplan, R. (1984) The need and the danger: The response to nature in the inner city. *Journal of Arboriculture*, 10, pp. 222-228.

Tress, B. & Tress, G. (2003) Scenario visualisation for participatory landscape planning—a study from Denmark. *Landscape and Urban Planning*, 64, pp.161–178.

Varela Mallou, J., García Carreira, A. Manzano Arrondo, V.& Rial Boubeta A. (2006) Development of an index to assess the brand image of tourist destinations, *Anales de Psicología,* 22, (1), pp.155-160.

Vouligny, E., Domon, G. & Ruiz, J. (2009) An assessment of ordinary landscapes by an expert and by its residents: Landscape values in areas of intensive agricultural use. *Land Use Policy,* 26: pp.890-900.

Ulrich, R. S. (1986) Human responses to vegetation and landscapes, *Landscape and Urban Planning,* 13, pp. 29-44.

Yang B.E. & Brown T. J. (1992) A cross-cultural comparison of preference for landscape styles and landscape elements. *Environment and Behavior*, 24 (4), pp. 471-507.