

MEASURING PLACE ATTACHMENT TO CĂLIMANI NATIONAL PARK (ROMANIA) AMONG LOCAL RESIDENTS AND TOURISTS. PRELIMINARY FINDINGS

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ABSTRACT. - Measuring Place Attachment to Călimani National Park (Romania) among Local Residents and Tourists. Preliminary Findings. Understanding the attachments that people develop for certain places is an interesting area of study, but with little attention in Romanian empirical research. This study introduces the concepts of place identity and place dependence in relation to a specific area within the local culture of the Land of Dorna. Starting from previous studies carried on western samples, a research instrument measuring the degree and content of place attachment was translated and adapted. 86 respondents (52 residents and 34 tourists) filled in the questionnaire. Comparing the degree of attachment, there was no significant difference among the two samples. However, local residents tended to display higher levels of place identity, while tourists displayed more emotional functionality to the study area. Place attachment is deeply embodied in the local culture. Due to the research design the generalization of the results is limited. However, this study may act as a starting point in researching other geographical mental spaces. The lands of Romania are unique social and cultural spaces with specific attachment patterns. Future studies should consider larger and representative samples in order to find additional patterns of attachment among residents and other individuals (e.g. tourists, visitors, new residents, other communities etc.).

Keywords: *place attachment, place identity, place dependence, local culture, Land of Dorna, tourists.*

1. INTRODUCTION

For many years the concept of 'place attachment' can be found in a variety of sciences. In *geography* the concept has different connotations such as a symbolic and spiritual attachment of an individual or collective to an area, place (Relph, 1976, 1997; Tuan, 1974, 1977; Cocean, 1997 etc.) like an "affective bond between people and place" (Tuan, 1974: 4) or in terms of environmental behavioral issues (Relph, 1976; Tuan, 1974; Peet, 1998 etc.) "in which people find themselves, live, have experience, interpret, understand and find meaning" (Peet, 1998: 48). For *anthropologists* the meaning of attachment is correlated with the understanding of the role of cultural significance in the

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daily life of an individual or collective (Gupta and Ferguson, 1997). The meaning of the concept in *sociology* is perceived like a powerful link between an individual or collective and a particular place (Williams, Patterson, Roggenbuck and Watson, 1992; Kaltenborn and Williams, 2002; Williams and Vaske, 2003; Giuliani and Feldman, 1993 etc.) and it “captures in a quantitative but somewhat narrow form, the important distinction between valuing a place for the goods and services that might be associated with it versus the deeper emotional and symbolic relationships people form with place” (Williams, Stewart, Kruger, 2013: 8). In *environmental psychology* (Altman and Low, 1992; Stokols and Shumaker, 1981; Brown, 1987) the concept is seen like “the symbolic relationship formed by people giving culturally shared emotional (affective) meanings to a particular space or piece of land that provides the basis for the individual’s and group’s understanding of the relationship to the environment” (Low, 1992: 165).

Going through all these conceptualizations, we may conclude that the main characteristic of the ‘place attachment’ and its similar concepts (topophilia, sense of place, attachment etc.) is that it involves the humans (community) and their feelings, emotions and perceptions for the environment and for the place in general.

The concept of ‘place attachment’ was assessed in studies that decipher the environmentally responsible behavior (Vaske and Kobrin, 2001), the attachment of tourists and community to a natural place (Williams, Patterson, Roggenbuck and Watson, 1992; Williams and Vaske, 2003), the impact of natural resources over the behavior of communities (Young, Williams and Roggenbuck, 1990; McCool and Martin, 1994), the influence on managerial options and management of wilderness (Williams and Roggenbuck, 1989; Wickham and Kerstetter, 2000), the attachment to a city (Hidalgo and Hernandez, 2001), region (Cuba and Hummon, 1993) etc.

Studies in outdoor recreation have shown that the concept of ‘place attachment’ contains two dimensions known as *place dependence (functional attachment)* (Stokols and Shumaker, 1981; Schreyer et. al., 1981) and *place identity (emotional attachment)* (Proshansky, 1978; Proshansky et. al., 1983; Giuliani and Feldman, 1993). *Place dependence* represents a functional form of attachment and reflects the degree in which a place provides and supports the “specific goals or desired activities” (Schreyer et. al., 1981, apud. Williams and Vaske, 2003: 831) of a community and others (tourists, visitors, second home owners etc). The places with a variety of local natural resources that are equipped with optimal infrastructure access and that meet most of the needs and goals of the inhabitants and others are the best places in which the individual or collective may form the strongest sense of place dependence. On the other hand, *place identity* is formed and developed in a long time, and is the interrelation of a series of feelings, senses, emotions, principles, beliefs, habits and traditions that are formed in an individual and in a collective. Williams and Vaske (2003: 831) argue that place identity “refers to a symbolic importance of a place as a repository for emotions and relationships that give meaning and purpose to life”. Most studies have shown that a natural place is important and valuable to an individual or collective if it fulfills both dimensions mentioned above.

The concepts of place dependence and place identity are addressed in studies mainly carried on western regions, but we hypothesize that some of their characteristics are similar to those of the Land of Dorna region. From a *physical-geographical* point of view, the Land of Dorna is a mountain basin surrounded by seven mountain ranges in which the hydrographic network directs the main energy flows of the territory. The

interrelation among the natural elements led to the existence of complex and varied natural resources (wood, hydro mineral resources, a large extent of grassland etc.). These were used over time by the local community and by others. This also generated certain traditional occupations specific to this region. In terms of socio-historical evolution, the Land of Dorna is entirely integrated in *the provincial mental space* (Cocean, 2010: 67) of Bucovina. This is visible in the local architecture and folklore, becoming a *cultural (ethnographic) brand* (Cocean, 2011: 219). A cultural community, like the one in the Land of Dorna, may be defined as the “historically transmitted pattern of meanings embodied in symbols, a system of inherited conceptions expressed in symbolic forms by means of which men communicate, perpetuate and develop their knowledge about and attitudes towards life” (Geertz, 1973: 89).

Besides the material characteristics, the construction of the local culture of the Land of Dorna is also the result of the constant interaction between humans (the community) and nature, through the development of attributes such as belonging, identity and attachment (nonmaterial attributes). This process “includes the mechanisms of thought, intuition and often involves imagination too” (Filip, 2009: 215-216). Thus, a place is “interpreted, narrated, understood, felt [...] flexible in the hands of different people or cultures, malleable over time [...]” (Gieryn, 2000: 465). In the opinion of Tuan (1974: 247) the attitudes, perceptions and values of “traditional people that live in a vertical, rotary and richly symbolical world – *like the inhabitants of the Land of Dorna*, whereas modern man’s world tends to be broad of surface, low of ceiling [...]” [author’s note].

2. METHODS

2.1. Aim

The aim of the current study is twofold: (1) to identify and to describe the main features and types of attachment that the local communities and the tourists in the Land of Dorna developed for a specific place (Călimani National Park); and (2) to describe any possible differences that may occur in the level of place attachment they display. The interest in studying this topic is based on the desire to find out how the inhabitants (community) perceive the sensation of attachment for a place and how is that transposed in their everyday life. To our knowledge, this process has not been attempted for these types of regions (“the lands” of Romania). We note though that these are the results of an ongoing research so only preliminary results are offered here.

2.2. Study area

The study area covers Călimani National Park and three villages: *Donișoara* – part of Poiana Stampei commune, *Gura Haitii* and *Neagra Șarului* – both part of Șaru Dornei commune. All are situated in the Land of Dorna (Romania) (fig.1). The three small mountain rural localities are formed around the local natural resources (e.g. peat, sulfur deposits, rich forests etc.) of the area. The main occupations of the communities include the exploitation of wood and peat and until 1997 the exploitation of the sulfur deposits of Călimani Mountains. The exploitation of the sulfur began in 1970 at surface (in a quarry). Because of the devastating impact that the quarry had on the environment and on the health of the communities, the exploitation was suspended in 1997. Today the former mining area is an enclave of the Călimani National Park.

Today, the main occupations of local residents are mainly based on the wood exploitation and processing and on the tourism sector.

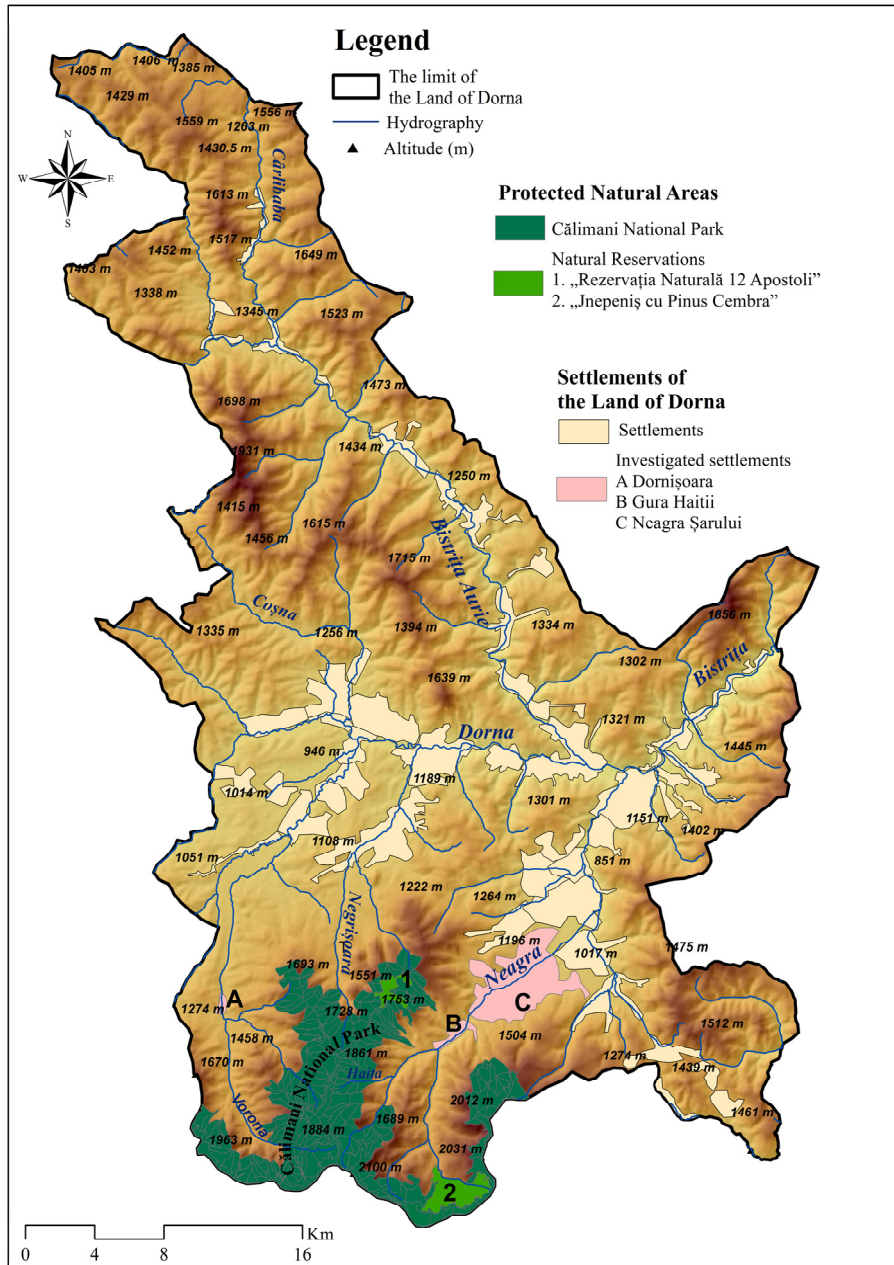


Fig. 1. The location of Călimani National Park in the Land of Dorna

The area (24,041 ha) was declared a national park by Law no. 5/2000 and by Government Decree no. 230/2003. The northern part of the park is situated on the territory of the Land of Dorna (15,449.3 ha) and includes two other natural reserves: "12 Apostoli" (200 ha) and "Mountain Pines with *Pinus Cembra*" (384.20 ha) (Law no. 5/2000). The main purpose for which the Călimani National Park was set is the conservation and protection of the biodiversity of the fauna and flora, maintaining the natural habitats and the natural geographical beauty of the area. All these actions are set by the law and the park management plan in order to maintain a sustainable development. The access is by foot. Horse riding is also permitted using the marked routes. The only exception is the paved road to the former sulfur quarry. Also, as a consequence of the park status, there are no structures that can accommodate tourists.

For the communities living near the park, the simple presence of the natural resources, the beauty of the place, the legends of the outlaws (Pintea, Haralambie, Miu etc.) and the magical and mythical events represented by the fairs are part of their lives, beliefs and surroundings. On the other hand, for tourists the park represents beautiful natural wilderness and a peaceful place where they can relax and visit the main attractions.

2.3. Sources of data

Data were collected in one week in July 2012. Using the criteria of physical distance, three villages were chosen: Dornișoara, Gura Haitii and Neagra Șarului. Regarding the sampling method, convenience sampling was employed in the process of selecting respondents from the target population. Therefore, the study sample was

Table 1.
Socio-Demographic Characteristics of the
Study Sample (n = 86)

Socio-demographic characteristic	N (%)
Gender	
Male	49 (57)
Female	37 (43)
Age	
20-40 (young adults)	38 (44.2)
41-60 (middle adults)	48 (55.8)
Income	
<500 RON	33 (38.4)
501-1000 RON	36 (41.9)
1001-1500 RON	10 (11.6)
>1501 RON	7 (8.1)
No. of visits during the last 12 months	
< 5	68 (79.1)
6-10	11 (12.8)
11-15	6 (7)
> 15	1 (1.2)

selected on the basis of availability. The sample of local residents reached 52 respondents. Tourists were approached at the tourist guesthouses in the neighboring area. As a consequence, the sample for tourists reached 34 people.

2.4. Sample profile

In the general sample there were more male respondents than females (57% compared to 43%). Also, more respondents were classified as middle adults (aged 41-60). Two thirds of them declared an average income per household below 1000 RON and nearly 80% had less than 5 visits in the national park in the last year. A complete description of the sample is provided in table 1.

2.5. Measures

We translated and adapted the items from Williams and Vaske's (2003) measure of place attachment, containing two dimensions: place identity and place dependence.

Place Identity (PI) ($M = 20.60$, $SD = 4.96$) measured the meaning a particular place has to an individual, by using a 5-point Likert scale (1 = *Strongly disagree*, 5 = *Strongly agree*). By summing up the responses of the 6 items, a total score was generated, with higher scores meaning higher levels of self-identification. The Cronbach's alpha reliability coefficient for the current data is .85.

Place Dependence (PD) ($M = 24.80$, $SD = 5.45$) measured the opportunities a setting provides for fulfilling certain goals and activity needs. This scale also uses a 5-point Likert response format (1 = *Strongly disagree*, 5 = *Strongly agree*). By summing the responses of the 8 associated items a general score was computed where higher scores indicating a greater place dependency. The Cronbach's alpha reliability coefficient for the place dependence scale for the current data is .83.

Demographics included information about gender, age, residence (local³ or tourist⁴) and income.

2.6. Procedure

Data were collected on-site. A total of 86 subjects were approached to fill the questionnaire. The participants did not place their names on the papers and were told that their responses would be treated anonymously. Also, they were given the option to refuse to fill in the questionnaire. It took about 20 minutes for adults to complete the questionnaire.

2.7. Data analysis

The current study employs a quantitative design. In analyzing the relationships between the variables, SPSS 14.0 was used and three main analyses were conducted:

- *Descriptive statistics* were used to reveal some demographic characteristics and associations existing within the two groups of respondents.
- *Pearson's correlation coefficient* was used to indicate whether the 2 main dimensions were significantly related to each other.
- *Mean comparison* was used to estimate the differences between local residents and visitors in the level of place attachment displayed.

3. RESULTS

3.1. Descriptive statistics about respondents' socio-demographic background

The respondents are aged between 20 and 60 and in both samples around 55% were classified as middle adults. The average income ranged between 250 – 2400 RON, but there are significant differences between the two samples. The average income for locals is 525.07 RON, while tourists have a mean of 1176.47 RON. Two thirds of the local residents (63.7%) had a reported income below 500 RON per

³ Local resident was defined as the person who lived in the area for at least 15 years. Only one adult aged 20-60 per household was questioned.

⁴ Tourists were considered persons accommodated in the area, no matter the length of their staying and the number of times he visited the area. In the case of families, all the adults were questioned.

household, while 20% of the tourists reported an income higher than 1501 RON. If all the tourists of the sample visited the region fewer than 5 five times during the last year, there is a big variability in the answers given by the local residents. Two thirds of them (65.4%) also visited the area less than 5 times, but also 21.2% went there between 6-10 times and 11.5% between 11-15 times.

Meanwhile, both local residents and tourists reported somewhat high levels of place attachment, but to different attributes. Local residents tended to see all the elements of the place identity as more important than place dependence. The highest mean obtained for the item 'I am very attached to this place' suggests they find a strong inner connection to this place. Among the tourists in Călimani National Park, the situation is reversed. They tend to value more the functional value of the place. It seems that this place fully satisfies their 'tourist' needs so they return whenever they get the chance (table 2).

Table 2.**Mean place attachment among local residents and tourists**

Attachment item	Local residents (n = 52)	Tourists (n = 34)
Place identity		
This place says a lot about who I am	3.65	3.21
This place plays a central role in my lifestyle	3.69	2.68
I am very attached to this place	3.87	2.82
I identify strongly with this place	3.69	2.74
I feel like this place is a part of me	3.60	2.85
I feel no commitment to this place	3.12	2.94
Place dependence		
I enjoy doing the type of things I do here more than in any other area	3.25	3.62
I wouldn't substitute any other area for doing the type of things I do here	3.19	3.50
Doing what I do here is more important to me than doing it in any other place	2.94	3.32
No other park can compare to this one	2.83	3.53
The things I do here I would enjoy just as much at another site	2.23	3.06
I think a lot about coming here	2.87	3.65
This area is the best place for what I like to do	2.83	3.56
I find that a lot of my life is organized around this place	3.12	2.94

3.2. Correlation analysis

To investigate whether there is a statistically significant association between *place identity* and *place dependence*, a correlation was computed. Pearson's correlation coefficient showed that *place identity* [$r(84) = .455, p < .001$] was statistically significant and positive correlated with *place dependence*. This shows that respondents attaching a strong emotional-symbolic meaning to Călimani National Park also tend valuing more this place's functional utility in supporting their desired leisure experiences. Simple regression was then conducted to investigate how well *place identity* predicts *place dependence* scores. The results were statistically significant [$F(1, 84) = 21.87, p < .001$] The adjusted R

square was .197, indicating that nearly 20% of the variance in *place dependence* was explained by *place identity*. A large percentage still remains unexplained by the regression equation and further studies should incorporate such predictive variables.

When the total sample is split, Pearson's r coefficient shows a strong positive correlation between *place identity* and *place dependence* for locals [$r(50) = .812, p < .001$], but not significant for tourists [$r(32) = .220, p = .212$]. These relations are in the expected direction as local people manage to develop a sense of belonging to the place and functionality is a secondary attribute, while tourists come to this place only because it fulfills some concrete needs, but they belong to other places.

3.3. Mean comparison

In order to test the differences in the level and types of attachments among locals and tourists, independent sample t -tests were conducted. This test for *place attachment* was found to be statistically non-significant ($p = .743$). Further, Cohen's effect size value ($d = .07$) suggests low practical significance.

Table 3.
Comparison of locals and tourists on place attachment,
PI and PD (n = 52 locals and 34 tourists)

Variable	M	SD	t	df	p
Place attachment			-.32	83.94	.743
Locals	45.17	10.22			
Tourists	45.76	6.47			
Place identity (PI)			3.20	84	.002
Locals	21.92	5.27			
Tourists	18.59	3.70			
Place dependence (PD)			-3.46	84	.001
Locals	23.25	5.47			
Tourists	27.18	4.56			

Additionally, testing for the types of attachment, the test was found to be significant both for *place identity* [$t(84) = 3.20, p = .002$] and *place dependence* [$t(84) = -3.46, p = .001$]. These results suggest that locals ($M = 21.92$) are more emotionally attached to Călimani National Park than tourists ($M = 18.59$), but tourists ($M = 27.18$) are more emotionally dependent than locals ($M = 23.25$). Cohen's effect size value for both tests ($d_1 = 0.69$; $d_2 = 0.75$) suggests a medium to large practical significance (1988).

4. CONCLUSIONS

The study tried to answer two research questions: *Which are the main features and types of place attachment developed within the Land of Dorna for the Călimani National Park?* and *Is there any difference of place attachment between local residents and tourists?* Employing a mean comparison analysis, the following general conclusions emerged:

- There is a strong positive correlation between place identity and place dependence among the respondents.
- The community and tourists develop different types of place attachment for the same area, namely Călimani National Park. Tourists displayed higher levels of place dependence, while local residents displayed higher levels of place identity.

The discussions are limited because we did not find similar Romanian studies focusing on this topic.

These results can be explained as a result of a long cohabitation between the locals and the environment and by the relationship developed between them. In this kind of regions (the 'lands'), the bond formed between the community and the environment drew mostly upon the natural resources and the beauty of the place. It is very strong and has been formed throughout the years. Kaltenborn and Williams (2002: 196) also concluded in their study regarding the meaning of place attachment to Femundsmarka National Park that the residents of Røros identify stronger with the area of the Femundsmarka National Park than tourists do. The main reason is that they have a long and strong bond with the natural area and its natural resources and with the cultural elements. In our case, both samples display attachment, but the content is different. The fact that the community is more emotionally attached to Călimani National Park than the tourists is a result of the connection, perception and belonging that the inhabitants have for their own place in which they live. Another possible explanation is that all three communities considered in this study are rural. The behaviors, mentalities and attachment of the rural communities are different from those of the urban communities (where the visitors come from). The evolution and the influence of the inner and/or external factors lead to major differences between rural and urban cultures (Petkov, 2007: 30). In rural communities, the persons who were born there develop a stronger bond with the places than the tourists.

Another interesting finding is that the local community develops a stronger emotional attachment than a functional relationship, despite the existence and diversity of natural resources. One possible explanation may be the legal status of the area that imposed several limitations. In the last years, most of the natural resources of the studied area could not be capitalized anymore. Therefore, the functional connection with the place is suspended and the emotional bond became stronger. On the other hand, the tourists display functional attachment to the Călimani National Park. This is expected as they already belong to another place (their emotional relationship is for their place of origin most likely) and they perceive this particular area as a place for relaxation. Here they allow themselves to see and do new things that may be censored in other circumstances. Here, their needs come first, while in their places of origin the collective needs are first.

All these aspects mentioned above show that both the inhabitants of the Land of Dorna and the tourists value and appreciate the beauty and the positive characteristics of Călimani National Park, but in different ways and with different meanings. In conclusion, the findings are in the direction also pointed by other similar studies focusing on the same topic (Kaltenborn and Williams, 2002; Williams and Vaske, 2003; Kyle *et al*, 2004). This reinforces the strong link existing between people and environment and their importance within it.

Limitations

There are several study limitations that deserve appropriate comments. First, the sample size reduces the ability to generalize the findings. Repeating the current study with larger samples may provide better accuracy and the ability to generalize findings to a larger population. Second, the instrument used was not previously used on a Romanian sample so cross-validation and reliability cannot be computed. Additionally, the use of Likert rating on items can have deficits due to the participants' response patterns.

Statement of authorship

Izabela Amalia Mihalca wrote the main manuscript text and Mihai-Bogdan Iovu prepared the Method and Results sections. Both authors reviewed the manuscript.

Acknowledgement

This paper is a result of a doctoral research made possible by the financial support of the Sectoral Operational Programme for Human Resources Development 2007-2013, co-financed by the European Social Fund, under the project POSDRU/159/1.5/S/133391 - "Doctoral and postdoctoral excellence programs for training highly qualified human resources for research in the fields of Life Sciences, Environment and Earth".

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