USING DESTINATION IMAGE TO PREDICT VISITORS' INTENTION TO REVISIT THREE HUDSON RIVER VALLEY, NEW YORK, COMMUNITIES

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Abstract.—This analysis explores the differences in Affective and Cognitive Destination Image among three Hudson River Valley (New York) tourism communities. Multiple regressions were used with six dimensions of visitors' images to predict future intention to revisit. Two of the three regression models were significant. The only significantly contributing independent variable in both models was cultural amenities provided by the communities. The percent of variance accounted for by the entire model and the unique and common variance accounted for by the cultural amenities predictor are limited. Therefore, simply adding more of the same cultural amenities in hopes of increasing visitation may miss the target market and result in expending resources with little return on investment. In light of the destination marketing continuum, these results should be interpreted with caution. The data must be analyzed more thoroughly to identify specific target markets. Other relevant variables (such as experience and place attachment) should be accounted for in the process before making recommendations to the study communities.

1.0 INTRODUCTION

Nature and heritage tourism in the Hudson River Valley (HRV) of New York is increasing in popularity. Nature-based tourism includes activities such as sea kayaking, hiking, bike riding, camping, nature walks, driving for pleasure, and scenic viewing. Heritage tourism includes visiting a destination to see, learn about, and experience the current and historical culture embodied in the destination. Visiting a historic riverfront attraction such as the Rondout District in Kingston or staying at a historic bed and breakfast are heritage tourism activities. Traditional tourism-related activities and expenditures such as shopping, dining, lodging, ground transportation, and local guide services are also associated with the nature/heritage tourism experience.

HRV communities have recently been increasing the opportunities for local nature/heritage tourism. For example, the Scenic Hudson Land Trust developed the Foundry Cove historic site kayak launch and the city of Kingston built a kayak launch site and purchased a fleet of kayaks. Kayaking was already popular at the Constitution Marsh Audubon Center and Sanctuary in Philipstown (adjacent to the village of Cold Spring). The state of New York also created the Hudson River Valley Greenway Communities Council. Its mission is to "preserve, enhance and develop the world-renowned scenic, natural, historic, cultural and recreational resources of the Hudson River Valley" with an emphasis on "appropriate economic development activities" that "remain consistent with the tradition of municipal home rule" (Greenway 2006).

Many rural valley communities face challenges in maintaining stable local economies. Over time, many have come to depend on recreation and tourism as the basis for community and economic sustainability. One topic of interest in such communities is creation of a distinct image that offers a focus for entrepreneurial activity, government investment, and local identity.

The term "destination image" is defined as the sum of beliefs, ideas, and impressions that an individual has of the attributes and/or activities available at a destination (Crompton 1979, Gartner 1989). Destination image has been conceptualized as consisting of distinct cognitive images which focus on the tangible and physical attributes of the site. Affect refers to the mood or feelings that one has during, or as a result of, an experience; affective image is simply the feelings that one has about a destination. Understanding the relationship between residents' and tourists' images of a community can help local leaders, rural planners, and resource managers understand how images might be shaped to develop local entrepreneurship and contribute to economic viability. HRV communities have unique attributes that are marketable and attractive to tourists. Due to increased competition, however, communities in this region must maintain a clear position among alternatives in order to remain attractive and economically prosperous.

Tourism research and practice has identified four important reasons to understand a destination's image (Morgan and Pritchard 1998). First, destination image can be used to provide specific targeting language to potential visitors about the destination's attributes and opportunities. Second, it can be used to reposition the destination relative to surrounding/competing destinations and market demand. Third, it can be used to correct potential visitors' negative images of the destination or to reinforce positive perceptions of the destination. Finally, it can be used to identify and segment target markets. These four uses of image become critical when a destination is attempting to position itself in a competitive market in relation to similar destinations (Echtner and Ritchie 1993, Laws 1995, Baloglu and McCleary 1999, Beerli and Martin 2004, Pike and Ryan 2004).

2.0 OBJECTIVES

The primary objective of this paper is to explore the differences between affective and cognitive destination images among three HRV communities that provide nature and heritage tourism opportunities. Specifically, multiple regression analyses explore the relationship between six dimensions of visitors' images and their intention to revisit the destination in the future. This research is directed at providing HRV communities with strategies for highlighting their unique social, cultural, and environmental qualities in sustainable tourism development. The information can be directly applied by tourism providers to convince potential visitors to choose one destination over another.

3.0 METHODS
3.1 Site Description
Three tourism destinations along the Hudson River were investigated: the village of Cold Spring, the city of Kingston, and the city of Beacon. The communities were chosen based on variation in their levels of tourism development, their abundant natural resource amenities, and the sizes of local populations. The village of Cold Spring in Putnam County has a population of about 2,000 people and is located on the east bank of the Hudson River approximately 50 miles north of New York City. Cold Spring's riverfront and village are accessible by boat, Metro-North Railroad, automobile, and bicycle, and the village has a long history of nature/heritage tourism. Cold Spring is currently working on a waterfront revitalization plan and is drafting a master plan update that includes a tourism development plan. A private marketing firm has been contracted to assist in creating and distributing a marketing campaign titled "Explore the Secrets of the Hudson Highlands."

The city of Kingston in Ulster County is located on the west bank of the Hudson River, approximately 80 miles north of New York City, and has a population of approximately 23,000. Kingston has nine marinas and five businesses that provide river tourism opportunities such as sailing instruction, river tours, and boat rentals. The West Strand Waterfront Park/ Rondout Landing Dock is located on a tributary to the Hudson. The historic Rondout District has boat docking facilities and summer band concerts. It is within walking distance of the Urban Cultural Center, Trolley Museum, and Hudson River Maritime Museum Center. The riverfront park provides a setting for concerts, theatrical events, and festivals. The

plaza faces a row of restored Italianate buildings that now house restaurants, boutiques, and antique/craft shops. Kingston's Department of Parks and Recreation provides a host of nature-based activities for both residents and tourists, such as naturalist-guided kayak tours. The city also offers kayak rentals.

The city of Beacon in Dutchess County has a population of approximately 14,000 people. It is on the east bank of the Hudson River approximately 60 miles north of New York City. Beacon is accessible by train, car, boat, and bicycle and is home to a growing arts movement, including world-class art institutions, art production facilities, regional galleries, and outdoor sculpture gardens. Historic sites include Industrial Revolution-era factories and mills and remnants of the Mount Beacon Incline Railway (one of the world's steepest when it opened in 1902). Approximately 1 mile from the riverfront, boutiques, antique shops, and restaurants line the restored historic districts on Main Street's east and west ends. A kayak outfitter/ guide service in Beacon provides equipment and tours on the River. A small environmental education center, city park, and boat launch marina are located at the waterfront.

3.2 Survey Design, Sampling, and Analysis

First, a content analysis of marketing materials from each community was conducted. Text and images from the materials were used to identify themes that reflect the areas' images, amenities, and recreation opportunities. These themes were used to develop a survey of non-resident tourists visiting the three communities. This paper focuses on 26 questions from the survey that directly addressed visitors' images of the destination. All 26 image variables were measured on a 5-point Likert-type scale (-2=strongly disagree to 2=strongly agree, 0=neutral). Respondents were asked whether they agreed that the community provided the image attribute listed. Affective Image was measured using a 5-point semantic differential scale consisting of the four items listed in Table 1. Intention to visit the community again was measured with the single questions: *How likely are you to return to <insert*

community name> in the next two years? Responses were measured on a 5-point response scale ranging from extremely unlikely to extremely likely.

Two field technicians used on-site convenience sampling to find nonresident tourists to participate in the survey between May 21 and August 6, 2007. A total of 875 usable surveys were collected. Five hundred eight people were approached in Beacon and 269 filled out surveys for a 53-percent response rate. Cold Spring had 625 contacts and 344 completed surveys (55-percent response rate) and Kingston had 526 contacts and 262 completed surveys (50-percent response rate).

A factor analysis using principal components (PCA) extraction and varimax rotation was performed to reduce the 26 cognitive image variables to a smaller number of domains that could be combined to create scales. Affective image was hypothesized to be uni-dimensional and was not submitted to a PCA. Factor loadings of greater than 0.4 were required for a variable to be included in a factor. Variables with multiple loadings (within .3 of each other) were excluded from further analysis. Scales were created by averaging the items in each factor for each community.

Multiple regression procedures were performed using the image factors for each community as the independent variables to predict future intention to revisit the community (the dependent variable) (see Table 1). Significance levels were set at .05 for all procedures and all analyses were performed using SPSS version 16.

4.0 RESULTS

A four-factor model provided the simplest solution, accounting for 59 percent of explained variance. All eigenvalues for this model were greater than 1 and the variance of each individual factor was greater than 5 percent. Cronbach alphas ranged from .6 to .8.

Three standard multiple regressions were performed using the six image variables and intention to revisit the community. Table 2 displays the results of the

Table 1.—Manifest variables for each of the image factors and mean scores for each of the Hudson River Valley communities

Cognitive Image Factors	Community	Community Factor Average
Cultural Offerings	α=.82	
A diversity of sites to visit	Beacon	0.73
Opportunities to learn about history	Cold Spring	1.05
Interesting architecture	Kingston	0.95
Good antique shopping		
A good place to see and buy artwork		
A variety of festivals, concerts, and events		
Good restaurants		
Nature Offerings	α =.78	
A lot in terms of natural scenic beauty	Beacon	0.81
Varied and unique flora and fauna	Cold Spring	1.36
A variety of LAND recreation activities (e.g. hiking, biking)	Kingston	0.84
A clean environment		
A good romantic getaway		
Local Character	α =.77	
Quality accommodations	Beacon	0.14
Opportunities for experiencing how the local people live	Cold Spring	0.41
Good night life	Kingston	0.42
Opportunities to learn new recreational activities.		
River Connection	α =.74	
A variety of RIVER recreation activities (e.g. fishing, kayaking)	Beacon	0.80
Excellent opportunities to view the River	Cold Spring	1.35
Easy access to use the River for recreation	Kingston	1.30
Infrastructure	α =.61	
Beacon is a convenient place to visit	Beacon	0.57
Parking a vehicle is convenient in Beacon	Cold Spring	0.45
Beacon is crowded	Kingston	
Beacon has traffic congestion problems		
Goods and services in Beacon are expensive		
Beacon has limited choices for accommodation		
Shopping in Beacon is pleasant		
Affective Image		
sleepy-arousing	Beacon	0.88
unpleasant-pleasant	Cold Spring	1.22
gloomy-exciting	Kingston	0.88
distressing-relaxing		

overall models. The models for Beacon and Kingston were significant at .05 and the model for Cold Spring was not significant.

Tables 3 and 4 show the unstandardized regression coefficients (B), standardized regression coefficients (β), and the semipartial correlation (Sr^2) for each of the independent variables. The only significantly contributing independent variable in both models was cultural amenities provided by the communities. The r^2 (Table 2) for the overall models indicates that slightly less than 10 percent of the variance in intention to revisit the site was accounted for by the image factors. The semipartial correlation (Tables 3 and 4) indicates that approximately 20 percent of the variance accounted for by all predictors (20 percent of 10 percent) is uniquely contributed by the amount of cultural amenities provided by the host community. Even though none of the other five factors was significant, they collectively contributed 80 percent of the significant variance in the model (80 percent of 10 percent). In addition, the significant relationship between cultural amenities is positive, indicating that as visitors' awareness of available cultural amenities increases, the likelihood that they will revisit that destination also increases.

Table 2.—Results of the initial regression models for each of the Hudson River Valley communities

	df	F	β	r²
Beacon	6	2.4	.02*	.08
Kingston	6	2.4	.02*	.09
Cold Spring	6	2.4	.09	

*significant at p = .05

Table 3.—Detailed regression results for image factors predicting intention to revisit Beacon

Beacon

Variables	B	β	Sig	Sr²
Affective Image	.114	0.89	.286	
Cultural Amenities	.409	.249	.012*	.191
Nature Interaction	-.122	-0.71	.468	
Local Character	.270	1.96	.095	
River Amenities	-.079	-.038	.660	
Infrastructure	-.255	-.152	.236	

*significant at p = .05

Table 4.—Detailed regression results for image factors predicting intention to revisit Kingston

Kingston

Variables	B	β	Sig	Sr²
Affective Image	.182	.113	.202	
Cultural Amenities	.687	.282	.023*	.185
Nature Interaction	-.179	-.077	.446	
Local Character	.264	.128	.224	
River Amenities	.287	.107	.209	
Infrastructure	-.309	-186	.140	

*significant at p = .05

5.0 DISCUSSION

The number and level of significant results was lackluster. The only image variable able to account for variance in intention to revisit was cultural amenities. The items that loaded on the "Cultural Offerings" factor represent the basic elements promoted in all of these tourism destinations. One interpretation is that planners should concentrate on providing more of the elements that are already emphasized on-site. However, these results should be interpreted with caution for two reasons. First, the percent of variance accounted for by the entire model is low and the distribution of unique and common variance accounted for by the significant predictors is also

limited. Therefore, increasing the number of festivals and shops with the hope of increasing visitation may miss the target market; such an investment may neither encourage repeat visitors nor draw new visitors. Second, it is important to note that the image variable was not a count of the cultural amenities offered—it was a measure of the visitors' perception that the community offers amenities. It would be more appropriate to target potential visitors' attitudes toward the availability of amenities in the destination community. A campaign that targets attitudes toward existing amenities may be more cost-effective than simply increasing the number of amenities offered.

The authors feel that additional data analysis including multidimensional constructs is necessary prior to making recommendations to the HRV communities. Research has found that the relationship a tourist has with a destination varies depending on engagement with the destination and length of time spent there. Variance in tourists' relationship with the destination can be reflected in how they engage with the destination and whether they will revisit. If our intention is to use the data to create a marketing program that will attract first-time visitors and promote repeat visitors, then differences between these groups must be accounted for in the analysis.

Two paradigms in marketing research literature are transactional marketing and relational marketing (Jackson 1985, Dwyer et al. 1987). Transactional marketing involves providing information about discrete transactions with the destination in the form of goods or services. Transactional marketing assumes that decisions concerning destinations are based on a rational process of evaluating the attributes of the destination that are presented in the marketing campaign and assessing the destination's ability to fulfill tourists' needs. Relational marketing is directed at tourists who have already visited a site, have knowledge of the available resources, and know that the destination is capable of fulfilling their needs. Relational marketing is designed to evoke a response from tourists by reminding them of the positive experiences they had while visiting the destination in the past. Researchers have hypothesized that tourists

fall along a continuum ranging from transactional to relational (Lin and Morais 2008). First-time visitors start on the transactional end of the continuum and progress toward the relational end as they gain experience and develop bonds with the destination.

In light of the destination marketing continuum presented above, we wish to re-emphasize that the results of this analysis should be interpreted with caution. The tourist population of the three HRV communities was analyzed as a single group and past experience was not controlled for in the analysis. The data must be analyzed more thoroughly to target specific markets. Past experience along with other relevant variables (e.g., place attachment) should be accounted for in the process prior to making recommendations to the communities or using this information in the planning process.

6.0 CITATIONS

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