Tracking destination image across the trip experience with smartphone technology

ABSTRACT

The purpose of this study is to examine changes to tourists’ image of a destination throughout a trip experience. Using Blackberry technology, a group of Canadian student travelers to Peru were asked to record images and experience about their trip during several key moments (pre-trip, upon arrival, half-way, departure, and post-trip). The results of this mixed methods study indicate that tourists’ destination image is dynamic and continuously evolving throughout their trip, and various incidents during the trip could impact it. Of particular importance are the impressions made upon arrival and departure, as they are powerful determinants of post-trip images. Affective image appear to be rather haphazard during the trip whereas most respondents’ cognitive image follows a specific pattern where the subjects go through an adjustment period at the beginning of the trip (resulting in lowered scores) but then rebound in a positive direction from that point. Further, post-trip cognitive scores tend to continue to rise significantly while affective scores tend to return to pre-trip levels.
1. INTRODUCTION

One of the challenges with the tourism industry today is to understand how tourists form perceptions of a destination (Echtner & Ritchie, 1991; Li, Pan, Zhang, & Smith, 2009). A tourist’s image of a destination could affect his or her destination choice (i.e., pre-trip decision making) and overall satisfaction with the destination experience (i.e., post-trip evaluation). Conversely, tourists’ travel experience will also affect their destination image, which in turn affects whether or not the tourist will return in the future or spread positive word-of-mouth to others. The present paper focuses on how travel experience shapes one’s destination image.

Although researchers have increasingly recognized that destination image is dynamic in nature, most studies to date have used one-off and cross-sectional designs (Gallarza, Saura, & Garcia, 2002). The result is that most studies are conducted at just one point in time reflecting a ‘snapshot’ of destination image (Beerli & Martin, 2004). While this approach has traditionally generated valuable information in relation to tourists’ overall satisfaction, it is subject to a filtered impression and could produce skewed results. Recording destination images via survey questions at one time point during a trip may only capture a still picture during a continuously flowing process. Further, studies have shown that attitudinal questions are linked with participation propensity and thus, create directional bias (Stinchcombe, Jones, & Sheatsley, 1981; Groves & Peytcheva, 2008). For instance, only those who had a particularly positive or negative experience are more likely to respond to these surveys.

Several studies have been conducted in a before-and-after design, demonstrating the importance of examining the variation between pre- and post-trip images (Chon,
While some of these studies did ask respondents why changes in their image occurred, they focused on post-experience reflection, and thus are examining recalled events and re-evaluated decisions. As recall is often shaped or distorted by events following the trip, this approach may be susceptible to potential recall bias. Further, a pre- and post-trip comparison of destination image implies viewing one’s destination experience as holistic. Nevertheless, it has been suggested repeatedly that travel is an evolving process (Clawson & Knetsch, 1966; Woodside & Dubelaar, 2002), and different contextual factors through the course of a vacation may affect destination image. However, empirical in-situ research on tourists’ image development across a vacation is lacking (see Vogt & Andereck, 2003 for a notable exception).

The purpose of this study is to start to address these issues by examining how image is shaped throughout the tourist experience and explore future research agenda in this direction. By following tourists through several key phases of travel and assessing their destination image at multiple points during their trips, the authors seek a better understanding of the dynamic nature of destination image and the potential effects of temporal, spatial, and other situational factors embedded in this process. Conceptually, this study echoes the recurrent plea of breaking out the prevailing “trait-like ideologies” and “still-life photograph depiction” of leisure (Stewart, 1998, p. 393), and study travel as a sequential and evolving process.
2. REVIEW OF LITERATURE

It has been suggested that often, it is the image of a place rather than its actual characteristics that affects tourist decision-making (Carmichael, 1992). Ryan and Cave (2005) suggest that “the cognitive and affective skills possessed by humans impute values and feelings to images, so images are not always perceived as either neutral or devoid of evocative power” (p. 143). Although collective impression or image of a destination held at the population level is generally hard to change (Gartner & Hunt, 1987; Li & Vogelsong, 2006), images held by individuals could be dynamic (Gallarza et al., 2002) and may be altered by one’s experience. With this, tourists’ image plays a critical role in how they engage and evaluate the product and relate the experience to others. It is therefore critical that tourism planners understand how the destination is being perceived by tourists and how that image is being shaped at different points during the travel experience.

Earlier image studies mainly focused on the cognitive aspect of the construct (Li et al., 2009). Cognitive image can be described as the logical perspective one develops regarding a product based on a variety of evaluative criteria (Schlosser & Shavitt, 1999). In a tourism context, cognitive image typically relates to the perception of whether the destination has sufficient resources needed to ensure tourists’ comfort and safety (Stabler, 1995; Beerli & Martin, 2004). This view focused on the “pull” aspect of travel. In particular, items such as weather at the destination, being ‘all inclusive’, or being a ‘safe’ destination are critical items. There are, however, potential constraint components such as price, tour availability, ease of access, and time availability. In the case of this study, how crowded the city is, whether proper infrastructure is available (e.g. access to enough
bathrooms during the visit), and whether or not tourists think they have received a good value for the money spent, all play critical roles in gaining a positive perception of the destination and are considered as the components of cognitive image.

Affective image refers to the emotional perspective one has related to image (Beerli & Martin, 2004). Most researchers conceptualize affective image as the subjective and affective responses to one’s cognitive knowledge of a destination, with the cognitive and affective images interacting and forming the gestalt of overall image (Li et al., 2009; Pike & Ryan, 2004). Compared to the plethora of studies measuring cognitive image, there is less research that delves into the emotional state, and there are even fewer studies examining both cognitive and affective images (Stepchenkova & Mills, 2010). Methodologically, affective image does not easily lend itself to structured, quantitative analysis (Tasci, Gartner, & Cavusgil, 2007), and researchers hence opt to employ unstructured, qualitative approach to elicit and analyze free, individualistic responses on affective image (with notable exceptions such as Baloglu & Brinberg, 1997; Pan & Li, 2011; Stepchenkova & Li, 2012). Despite the difficulty of modeling emotion and its resultant non-rational state of decision-making in this study, it is expected that travel experience-related emotion will contribute greatly to tourists’ overall destination image.

In terms of operationalizing destination image, there has been recurring criticism within the tourism literature on the use of attribute lists in determining image (Dann, 1996), particularly cognitive image. Nevertheless, no consensus has been reached on the method to replace the multi-attribute measurement. There has been, however, a move towards using a mixed methods approach to image research (Li, Pan, Zhang, & Smith, 2009; Pan & Li, 2011). Indeed, Tasci and Gartner (2007) and Tasci et al. (2007) noted
that most studies measuring affective image, or both cognitive and affective images, used a combination of quantitative and qualitative approaches, which was originally advocated by Echtner and Ritchie (1991; 1993). The use of mixed-methods has been shown to provide both the depth and breadth needed to understand the complex undercurrents related to destination image.

2.1 Conceptualizing Image Formation

There seems to be at least two streams of studies on destination image formation. One line of research focuses primarily on agents and factors affecting destination image formation (Baloglu & McCleary, 1999; MacKay & Fesenmaier, 1997). Tasci et al.’s (2007, p. 209-210) review identified that “respondent characteristics such as region of residence/origin of tourists, distance from the destination, religious orientation, age, gender, income, class standing, household status, familiarity through previous visitation, and other variables such as ad exposure, media, and travel context” have all been “tested as possible determinants of destination image.” Some of other traits include image holders’ marital status, education, and geographic distance, etc. (Tasci & Gartner, 2007).

Another line of studies directly investigated the development process of image per se. For instance, Gunn (1972, p. 120) conceptualized the image formation process as intertwined with tourists’ travel experience, involving seven steps —“accumulation, modification, decision, travel to destination, participation, return travel, and new accumulation.” For the first two phases, which are accumulation of mental images about vacation experiences (Stage 1) and modification of the accumulated mental images by further information (Stage 2), Gunn coined the terms “organic” and “induced” images. The former refers to image developed from noncommercial sources of information,
whereas the latter is derived from commercial sources of tourism information. Once in
the destination, tourists start developing “modified induced image” (or “complex image,”
using Fakeye and Crompton (1991)’s term), based on actual travel experiences (Echtner
& Ritchie, 1991; Jenkins, 1999). A similar image formation model (organic image→
projected image→reevaluated image) was proposed by Selby and Morgan (1996).

As for research on tourists’ pre-trip image, Li et al. (2009) recently argued that in
the Internet age, no image can be truly “organic” anymore. They proposed that potential
tourists’ destination image went through two phases—tourists first constructed their
“baseline image” from passive or ongoing information gathering, which would become
“enhanced image” after an active and intentional information search.

In comparison, much more attention has been given to complex image and the
role of visitation in image development (Li et al., 2009). A number of studies have been
conducted along this line (Chon, 1991; Fakeye & Crompton, 1991; Li & Vogelsong,
2006; Martín & Rodríguez del Bosque, 2008; Pearce, 1982). As indicated, most of these
studies view one’s destination experience as holistic. Nevertheless, the classic model by
Clawson and Knetsch (1966) suggests travel is an evolving process, including five
temporally distinct phases: (1) anticipation (travel planning); (2) travel to the destination;
(3) on-site experience and activities; (4) travel back; and (5) recollection. Although
researchers generally view Clawson and Knetsch’s model as “a useful starting point
rather than a final framework for application” (Stewart, 1998, p. 393), subsequent studies
have shown that tourists’ behavior (e.g., information use, decision making) indeed vary
over different stages of a vacation (Nichols & Snepenger, 1988; Snepenger, 1987; Vogt
& Stewart, 1998). For instance, by surveying panel respondents in situ during the course
of their trip, Vogt and Stewart (1998) found that prior experience and trip length influenced respondents’ perception of how information impacts their vacation experience. In another example, Markwell (1997) asked tourists to record their experiences using photos and diaries during a nature-based tour. He identified spatial, temporal, and social dimensions of photography during a tour experience. For example, the decreasing number of photos during the later stage of a tour indicated a change of tourists' roles from spectators to participants. Similarly, Groves and Timothy (2001) analyzed photos from a group of American student tourists to Quebec City and identified five themes. However, the focus of these studies is on the investigation of evolving experience rather than destination image.

Presumably, destination image may also be affected by contextual factors and experience through the course of a vacation, and vary across the stages. For instance, Tyagi (1989) suggested that similar to how tourists pack different things in luggage to prepare themselves for different situations, they also carry various destination images. Only selected images become relevant and meaningful during a trip, while some other images may change as a result of unexpected situations. However, very few empirical studies have been conducted in this direction. A notable exception is the study by Vogt and Andereck (2003), who revealed that affective destination perception (in terms of destination desirability) tended to be high at the onset of a trip, and remained relatively stable throughout the rest of the trip. In contrast, cognitive destination perception (destination knowledge) improved during the course of the trip and was hence deemed “an easier psychological state to influence during the course of a vacation” (Vogt & Andereck, 2003, p. 353). However, because the authors only measured destination
perception before and after trip, their findings were mainly inferred through aggregated analysis and compared across subgroups with different prior experience and trip lengths. Presumably, their conclusion involves a shift “from the level of interindividual variation to that of intraindividual variation in time and place” (Molenaar & Campbell, 2009, p. 112). As such, Vogt and Andereck (2003, p. 353) recommended that future research “studying the stability of image components … across pre-trip and post-trip stages” may complement their findings. Put simply, it seems that directly tracking individuals’ real-time destination perception changes across different trip stages, despite the methodological challenges involved, would be the most desired approach. In this study, the authors intend to measure images not only during arrival and departure, but also before, half-way, and after trip — which could collectively paint a more complete picture of image evolution along a trip.

2.2 Conceptual Development

In this study, the authors adopt the definition of destination image as "all that the destination evokes in the individual; any idea, belief, feeling or attitude that tourists associate with the place" (Alcaniz, Garcia, & Blas, 2009, p. 716). It is operationalized via four measures: a cognitive component, an affective component, a measure of country image, as well as an overall tourism destination image (Gartner 1996). Destination image is formed by life experience, modified by actual travel experience, and further morphed by post-trip evaluations (See the model in Figure 1). Tourists to a destination develop a pre-conceived image before arrival. This image is often based on marketing and media information gathered during the product search, and individuals’ previous experience with the product, if any. This impression is altered during the experience as individuals
engage with each component of the product. At the end of the trip, the experiences at the
destination are then re-evaluated. Further, the proposed model includes a recall
component. This image is based on tourists’ recollection of the experiences and how the
experiences have been modified over time. The recall image is likely most important in
relation to marketing as it would form the basis of one’s return intention and word-of-
mouth.

Insert figure 1 about here

The main goal of this study is to gain a greater understanding of how image is
altered throughout a tourist’s experience. Unlike previous image research which
typically examines image at one or two snapshots, this research examined image over
multiple points in time. Comparing to most quantitative destination image studies which
take a “variance theorization” approach (i.e., explaining phenomena as relationships
among dependent and independent variables), this study mainly takes a “process
theorization” approach (i.e., explaining phenomena as sequences of events leading to
particular outcomes) (Langley, 1999; Mohr, 1982). The data were captured and analyzed
using a mixed methods approach of quantitative analysis and qualitative inquiries.
3. STUDY METHODS

The sample consisted of 19 respondents who took an international studies course while visiting Peru over the course of 14 days (everyone participated in the study). Of the 19 who agreed to participate, 17 completed as requested and were used for the analysis. This small and homogeneous sample is considered acceptable because this study mainly focuses on understanding theoretical relationships (i.e., the “formal approach” according to Martin & Sell, 1979) rather than the explication of particular real-world phenomena (i.e., the “descriptive theoretical approach”, Martin & Sell, 1979). The study attempts to achieve “theory application” generalizability rather than the common “effect application” generalizability (Calder, Phillips, & Tybout, 1981). Homogeneous respondents are more desirable and small sample size, though not ideal, is less of a concern (Small, 2009). In addition, the college students were considered an appropriate sample given their relative comfort adapting and embracing new technology (Jones, 2002). Students are comfortable with taking photos/videos and recording their feelings and emotions. This means that the participants were not being asked to behave outside of their usual norm as opposed to using an older sample.

Prior to leaving for Peru, the respondents were asked if they wished to participate in the project. Those who agreed were given a pre-trip survey which asked them about their expectations and image related to Peru. Following that, participants were provided a Blackberry smartphone and asked to respond when prompted by phone alerts. On alerts, they were also asked to take a panoramic video of their present location and provide their own commentary related to what they were seeing and feeling. The mixed methods could generate extensive and rich data and afford more in-depth analysis in tourists' perception.
and behavior. The participants were asked to participate in the research four times during the trip: arrival, after 72 hours, half-way, and departure. In addition, one month after returning home, the respondents were asked to fill out a post-visit survey. In a total of six times of surveying, five were used, because a technical glitch caused one of the reports at after 72 hours to be unreliable and thus it was dropped from the analysis. The final captured stages are pre-trip, arrival, half-way, departure, and post-trip.

The image surveys (Table 1) were based on measures used by Ekinci and Hosany (2006), who adopted their cognitive image measures from Ong and Horbunluekit (1997) and affective image from Russell (1980). In addition, one question was employed to ask about the respondents' overall rating of Peru as a tourist destination (overall destination image) and another question was about their overall rating of Peru (country image). The variations in scores across various time points were critically examined through the use of autoregressive modeling technique. Autoregressive modeling measures variations in time-varying processes in that it specifically examines changes in the linearity of the variables’ previous values (Song & Li 2008). The goal was to test if evaluations at one point are dependent on evaluations at the previous point. If the evaluations were found to follow autoregressive patterns, it means individuals constantly modify their perspective as new events occur. For example, a negative event half-way through the trip would create more negative evaluations afterwards under an autoregressive pattern. However, if pre-trip expectations dominate evaluations then the negative event experienced half-way would not impact later evaluations which would instead stay at pre-trip expectation level. The digital videos produced by the tourists along with their commentaries were also content-analyzed.
3.1 Autoregressive Pattern Analysis

To study whether the five evaluations follow autoregressive patterns or are simply based on pre-trip expectations, the authors regress image scores on both previous evaluations and pre-trip scores. The sample includes each evaluation \( v \) from individual \( i \) at time \( t \), which is denoted as \( v_{i,t} \). Given that the subjects have similar experiences throughout the trip, the authors control for the various events that may impact the group by including indicator variables, \( I_A, I_H, I_D \), and \( I_T \), for the time of the evaluation whether at arrival (A), half-way (H), departure (D), or post-trip (T). The regressions follow below:

\[
v_{i,t} = \beta_v v_{i,t-1} + \beta_A I_A + \beta_H I_H + \beta_D I_D + \beta_T I_T + \epsilon_{i,t} \tag{Eq. 1}
\]

\[
v_{i,t} = \beta_P v_{i,P} + \beta_A I_A + \beta_H I_H + \beta_D I_D + \beta_T I_T + \epsilon_{i,t} \tag{Eq. 2}
\]

If the pre-trip expectations, \( v_{i,P} \), can statistically determine all future evaluations (\( \beta_P \) is significant) then individuals are unlikely to adapt their responses as new events occur. However, if evaluations are autoregressive (\( \beta_v \) is significant) then individuals constantly revise their assessments according to their evolving experience.

3.2 Digital Video Elicitation Analysis
As indicated, the participants were asked to take a panoramic video each time after completing the questionnaire. They were asked to describe what they were seeing and their related feelings while the video was being taken. Each video was linked to its corresponding questionnaire scores.

The digital video elicitation methodology is an extension of photo elicitation studies in which tourists were asked to take photos while on their trips (Stedman, Backley, Wallace & Ambard, 2004; Loeffler, 2004). In Stedman, et al. (2004), tourists were asked to discuss the photos with the researchers in post-exploration. These studies have illustrated that the descriptions of place-meaning (Loeffler, 2004), destination image (Jenkins, 1999), and place attachment (Stedman, et al. 2004) can provide valuable marketing intelligence for the specific destination.

Each video and the subjects' verbalization were transcribed and coded first without correlating with the questionnaire results to minimize bias in interpretation. The videos were coded using a triangulated approach. First, three researchers independently coded each video by specific actions that were interpretable. For instance, if a respondent was smiling and laughing, they would be recorded as having a positive experience. Upon completion of the independent coding, the three researchers reviewed the results. In instances where the independent coding differed, they reviewed and discussed the sections of the videos until consensus was reached. The interpretation was then matched to the survey responses at that time point in order to cross-check the interpretation. Afterward, a trip profile for each participant was constructed. The profile as a whole was then examined to validate whether the given scores reflected the video evidence. This process revealed that the sample demonstrated internal consistency — reactions to events
were similar across the participants. Further, a high level of trustworthiness within the
data was also found — participant responses to the quantitative components of the
surveys matched with what was expressed in the video clips.

As is outlined below, the video clips were then used as explanatory evidence to
support the changing scores throughout the trip experience and specifically includes: 1)
positive and negative interactions with hosts; 2) personal situations (e.g. illness); 3)
perceptions of space and place; and 4) structural issues (e.g. long bus trips). Each of these
factors is demonstrated using screen captures from the videos. While ideally the authors
would prefer to present the entire video, this is not possible due to publishing technology
constraints and research ethics reasons. Therefore, screenshots of the videos in
conjunction with the transcript of the statements are provided below. Readers may also
note that a concerted effort was made not to use captured subjects’ faces; however, in
cases where it was unavoidable, the faces were blurred to avoid recognition.

4. RESULTS

This section starts with a description of the subject profile, followed by the
quantitative results, and concludes with qualitative results.

4.1. Profile of the subjects

Among the 17 subjects, eight of them are males (47%). Their average age was 23
with a median of 21. All of the respondents were students studying geography at a
university in Canada. Sixteen of them had traveled outside of Canada (95%). Overall,
they were educated, young, and experienced tourists.
4.2 Evolving destination image across the trip

As illustrated in Figure 2, all four measures of image (affective, cognitive, overall, and country images) began at time point 1 (pre-trip). The pre-trip score then serve as the base to which all of the following time points are measured against. At time point two (arrival), all four scores show a significant dip from the pre-trip average. All of the scores shift and rise towards or above the level of the pre-trip mean in time point three (half-way) with cognitive scores rising significantly. At time point four (departure), cognitive scores rise slightly while the affective and overall scores continue to be normalized. At time point 5 (post-trip reflect), cognitive scores rise significantly; however, the affective, overall, and country image scores are normalized.

Insert Tables 2 About Here

Insert Figure 2 About Here

As shown in Tables 2, all four types of evaluations consistently follow autoregressive patterns (p-values of .002, .010, .002 and .096 for affective, cognitive, overall, and country image respectively). The subjects’ responses evolve constantly as new events transpire. As outlined in Figure 1, the descriptive evidence shows an individual’s perceived destination image is dynamic and fluid, and is reevaluated constantly throughout the trip experience.

4.3 How experience change images
Combining quantitative survey results with coded videos could provide valuable insights on the tourists' experience of various incidents which changed the tourists' destination image. The following paragraphs discuss specifically how the changes happened in different phases of the trip, including affective, cognitive, overall, and country image.

Affective valuations follow no clear pattern which suggests that affective sentiments are driven mostly by random events throughout the trip. In all 17 cases, respondents gave various affective scores based on individual incidents. For example, upon arrival, respondent A reported a local man leering at her and making a kissing action. She stated unequivocally that she felt ‘harassed’ as a result (Figure 3). Unsurprisingly, her affective score lowered dramatically compared to her pre-trip score (from 4.9 to 2.9 on 6 point Likert scale). The scores on all four of her measures did rise slightly throughout the trip and finished at pre-trip levels upon completion due to many positives outweighing that one negative incident. However, she also had no other incidents of that nature occur during the trip. Student L was not so lucky. Upon arrival, everything was perceived as being positive in her assessment. However, during her trip, the bus that the students were travelling on caught fire. This event was immediately followed by the bus having to take a "long detour" to avoid a workers’ strike where the road was blocked off. After this experience, Student L called the entire trip experience "trashy and dirty" and was quite upset. Her score may have risen back to pre-trip levels if there had not been another incident at the airport where some members of the group was searched "extensively" while others were just "let through". In this case, her scores reflected the whole experience (from pre-trip 4.3, half-way 2.8, to post-trip 2.5). Multiple
incidents, especially one occurring during the latter part of the trip, had a greater effect on the post-trip affective score. Generally, in almost all cases, incidents which happened close to the end of the trip seemed to have a greater effect on the post-trip recall scores than those that occurred during earlier parts.

*Insert Figure 3 About Here*

On the other hand, cognitive evaluations significantly fell from the pre-trip levels upon arrival but rose above pre-trip levels after the trip ended. In all 17 cases, the respondents reported having to make adjustments related to language/communication, food preferences, and purchasing habits. For instance, Respondent G reported having trouble figuring out how much the local currency was worth compared to Canadian dollars. Another example was the participants’ experience of navigating public transportation. In the example shown in figure 3, two respondents (I and R) were taking a local form of public transportation. At first, they were intimidated by the trip, but they came to realize that the driver was acting normal according to local standards. By the end of the trip, Respondents I and R began to have "fun" with the experience. In the majority of cases, when the respondents had made these adjustments to accept the ways of the local culture, the cognitive scores generally began to rise back to the pre-trip levels.

*Insert Figure 4 About Here*

As for the overall and country image scores, they appear to follow similar patterns as the affective image: a significant change on arrival in comparison to pre-trip expectations, denoting that the overall destination image dipped immediately on first experiencing the destination. Many of the respondents reported feeling very nervous before the trip. Later in the trip experience after becoming immersed in the local culture,
14 of the 17 respondents reported in various manners that the interactions with local peoples — in particular with their host families — increased their positive feelings towards the destination and country. Further, as they learned about the local culture, they came to respect Peruvian people. On a visit to an island in Lake Titicaca where 10 families lived in houses made of reeds, Respondent E reported being amazed by what she witnessed (Figure 5). This example demonstrates that tourists’ respect for the local people could be gained via education which also lead to an upping of the overall destination image and country image scores. Generally, the overall and country images score while immersed in the experience seems to be following similar trends with affective scores rather than cognitive ones. This is further reflected when this enhanced evaluation of the overall/country dissipates after returning home and is not significantly different from pre-trip expectations. It is as if the emotion of the moment dissipates over time and a more moderate perspective takes its place. In the post-trip analysis, 13 of the 17 respondents discussed poverty and social ills while only 4 mentioned it on-site. This may be indicative of why Peru’s country image scores slightly lower than it did as a tourist destination (overall).

5. DISCUSSION

The findings of this study reveal an interesting evolution of the destination image. Extending the study by Vogt and Andereck (2003), the authors measured destination images across pre-trip, during trip, and post-trip stages. Capturing and measuring tourists' images across five points painted a more comprehensive picture of image evolution. In
addition, the study revealed those incidents which caused the image changes and the
differences between affective, cognitive, destination and country image. These tourists' 
destination images evolve with new incidents occurred during the trip. The results 
provide support to the theoretical model proposed in Figure 1.

Similar to the findings of Smith et al. (2009), the participants demonstrated a 
preconceived notion of what their destination experience will entail. While nervous about 
travelling to an unknown place, the participants let an excited, romanticized version of 
the destination image balance against the fear of the unknown. As the cognitive scores 
indicate, the participants knew about realities of the destination but let the emotional 
aspect of the trip drive the overall perception of the destination. Upon arrival at the 
destination, a "shock" of the reality of the destination leads to an image reformation 
process. The participants demonstrated a sharp decrease in both affective and cognitive 
image scores upon arrival; both of which rose gradually later on during the trip as the 
participants became used to their surroundings. As the trip experience continued, 
affective image tended to demonstrate a positive trend in scores. This effect may mirror a 
phenomenon which was once referred to as ‘puppy love’, wherein one sees all of the 
benefits of the other because of the emotion involved and none of the flaws. Upon 
leaving the destination however, the sober second thought brought the affective levels 
back to the mean. Post-trip cognitive scores rose greatly as most of the participants from 
an evaluative perspective viewed the positives of the trip to outweigh the negatives. 
Presumably, unless major negative incidents occurred during the trip, participants tend to 
appreciate the positives of their trip better post hoc to avoid cognitive dissonance.
The results of this study demonstrate that upon arrival and upon departure, there seems to be some image reformation or at least adjustment. Upon arrival, the image reformation occurs as the participants became more acclimatized to the environmental differences. In the recall stage, the trip is analyzed and image reformation occurs as a result. The question which arises, however, is whether affective image drives the overall image in the recall stage? To use the "puppy love” relationship analogy again, this is similar to reflecting on a relationship years after it was broken up. The specific memories put a smile or frown on one’s face but the emotion of the events have dissipated over time leading to an overall image that is more muted than immediate after the experience. The muting of the overall emotion seems to lead to a more internally reflective view rather than a raw emotion image recall of the trip as a whole.

Findings of this study are different from Vogt and Andereck (2003) who found tourists’ affective perception started at fairly high level, but remained pretty much the same during the rest of their trip, while cognitive perception improved across the vacation. First, these differences may be due to the nature of the subjects, the trip, and the context. In this study, the sample was students in their early adult lives, taking a study abroad trip to a foreign country which is culturally distant from Canada. This is different from American adults taking a trip in Arizona (Vogt and Andereck, 2003). Second, the different findings may be also attributed to the substantially different measurements. For instance, Vogt and Andereck (2003) used destination desirability and knowledge to respectively represent affective and cognitive images, while this study measured cognitive and affective images through two semantic differential scales. Further, Vogt and Andereck (2003)’s findings were mainly inferred through aggregated analysis of pre-
and post-trip answers provided by respondents of different subgroups, while the present study involved real-time responses from tourists while their vacation unfolded. Nevertheless, the seemingly conflicting findings warrant future research on different and larger samples, as well as on different types of vacations. Thus, while the specific destination changes may be applicable only to Canadian students' study abroad trips, the conclusion on evolving images based on trip incidents could be more generalizable due to cross-validation of rich data.

As shown in the literature review, this study is certainly not the first one examining image change over the course of a trip. However, in addition to the innovation in data collection (i.e., a mixed method study collecting image information at multiple points via Smartphone), this study also took a different conceptual perspective from most extant image studies, which focus on quantitatively examining construct-to-construct relationships. As indicated, this study takes a “process theorization” perspective, which is particularly suitable to analyzing dynamic phenomena (Langley, 1999). To these authors, destination image is not merely a construct, or an antecedent or consequent of some other constructs, but represents the outcomes of a dynamic process. In this sense, the authors believe the present study contributes to the image literature by introducing a new perspective potentially complementing the current dominant approach. With the collection and analysis of process data becoming increasingly feasible, this process-based approach may bring a new research angle to not only destination image studies, but also tourism research in general.

5.1 Managerial Implications
The results of this study indicate that similar to many other cases, expectation and impression management does matter. The idealized version of a destination that is sold to individuals through marketing efforts seems to be further romanticized by the tourists (at least the first-timers) to, at times, create unrealistic expectations. Then upon arrival, when the world is viewed with a reality lens, the customer has to spend a great deal of effort to realign preconceived notions with reality. The participants in this study were no exception, spending the first half of the trip getting their image perception back to where it had begun. A challenge for destination marketers is that destination image may essentially be a double-edged sword: on one hand, most likely it is the romanticized destination image that motivates tourists to choose one destination over others. That is, without such rosy expectation, a destination may not be able to attract tourists to come in the first place. On the other hand, once the tourists are on site, service providers need to combat the tourists’ almost surreal image in order to reduce expectation disconfirmation and secure customer satisfaction. Destination marketers are hence advised to focus on creating positive images, but not illusions. Still, a positive first impression upon arrival seems to be the key in avoiding any expectation disconfirmation.

The qualitative results combined with survey results indicate that personal experience can center on every aspect of the trip and on very minute details, which can be considerably influential to their image changes. A stranger’s leering, an extensive body search at the airport, or a long detour due to traffic jam, may all contribute to a less favorable image that is hard to reverse back. Tourists holding such images are unlikely to become repeat tourists and spread positive word-of-mouth to others. Thus, destination managers should work toward the totality of destination experience beyond “tourism-
specific experience” at hotels, restaurants, or attractions. This once again reminds readers
the challenge destination marketers face in managing tourists’ experiences. Although it is
primarily impossible to control tourists’ entire experiences, destination marketers today
are equipped with sophisticated tools and technologies to at least monitor tourists’
experiences. Recent development in big data analytics, internet and mobile devices, and
social media has provided destination marketers unprecedented access to follow,
understand, and engineer tourists’ experiences (Wang, Li, & Li, 2013). They should work
with government agencies and even infrastructure management to guarantee a pleasant
and positively surprising experience throughout a tourist's trip. This calls for more
collaboration between different parties in a destination and continuous dialogs between
them. A suggestion would be to have organizations such as Convention and Visitor
Bureaus to take a more active role in providing hospitality providers service expectation
guidelines to ensure overall quality across the destination and not just focus on the
marketing aspects of the destination. For instance, CVBs could be catalysts for providing
guest services training, work to create cohesive partnerships between service providers
and create an atmosphere where they can almost provide an ombudsman type service
between the guests and local business. In essence, the destination marketing
organizations need to be transformed into destination management organizations.

The results of this research indicate the need for more studies on how image
evolves over the trip experience. Specifically, more research is warranted on whether
affective image, particularly post-trip, is more influential in relation to overall destination
and country images than cognitive image. There is also a need for more studies on the
evolution of image over time and space. It would be interesting to follow individuals over
several trip experiences to see if their scoring pattern is consistent over time. One question future studies should try to answer is: is it the individual characteristics or the trip experience that determines image? Further, final impressions seem to have a disproportionately greater impact upon the respondents’ overall perception of the trip experience. If these results are accurate, the industry needs to emphasize on both arrival and departure experiences as they are critical in shaping the overall perception of one’s travel experience. For instance, while hotels, restaurants, and airlines often work hard to create a positive, memorable first impression, they are recommended to pay equal attention to seeing customers off and to ensure guests’ final impression is favorable.

Lastly, the mixed methods approach with the use of technology can provide interesting insight into the tourists’ mind set. The images and commentary given by the participants demonstrated how Peru was perceived by the participants. This methodology would be useful for market researchers to gain real-time insight into one’s experience.

5.2 Limitations

As with most studies of this nature (e.g., Bliss et al., 2011; Pan & Fesenmaier, 2006), the small and homogeneous sample means that the results have to be interpreted with caution. Future studies on a more representative tourist group are warranted to gain a greater understanding of the evolution of in situ image throughout the trip experience.

The second limitation lies in the intrusive nature of the method. Prompting the subjects with phone alerts and asking them to shoot videos and provide their commentary may interfere with their natural touring experience. Moreover, asking respondents to take
a panoramic view may force them to focus on macro perception and natural environment rather than the details of their experience and their interactions with other people.

Even though the authors measured images changes at five points in time, the actual experience along a trip is always fluid and evolving. Thus, although this research could advance the image studies in the right direction, it still employed a rather inelegant approach. Ideally, a more organic measurement technique could be employed to this type for study. For instance, using GPS technology one could page people to respond in moments where they are waiting in line or other instances where the experience would be uninterrupted.

Another limitation concerns the presentation of research results. The digital video elicitation methodology generated rich information, which is somewhat hard to present in a traditional journal article format. The authors hence call for more discussion on creative approaches to present video/audio data in journal articles, in order to take full advantage of technological development in data collection and analysis.

6. CONCLUSION

Over a decade ago, Stewart (1998, p. 396) contended that “leisure research has a strong tradition of being detached from the context of leisure” as one of the key challenges leisure scholars faced. One may argue that this is equally applicable to travel and tourism research and that the challenge is still relevant today. When travel is depicted as “an enduring still-life photograph”, most case assessments will not be necessary “while the photographic image is in the making” (Stewart, 1998, p. 396). But if travel is viewed as a lived experience susceptible to temporal, spatial, and contextual influences,
innovative, real-time assessments become not only necessary but also a more appropriate way to make sense of travel experience. This paper, from a process theorization perspective, attempts to shed some light on this.
7. REFERENCES


Figures

Figure 1 – Proposed Model of Image Evolution
Figure 2: Distance from the Pre-Trip Image Scores

- Destination Image
- Country Image
- Affective
- Cognitive

Figure 2 - Affective Vs. Cognitive Factor Effects
Respondent A is introducing friends and is happy

Capture 2 - Local is making a kissing gesture at Respondent A

Capture 3 – Respondent A - “I got kissed at, harassed, kissed at – but we’re tourists.”

Capture 4 – Respondent I – “Right now we are riding – rippin’ – through the streets of Puno”

Capture 5- Respondent A is introducing friends and is happy...Going through some small alleys... Respondent A – “Get ready here, we’ll be going through some small alleys... Get ready here, we’ll be going through some small alleys... We’ll be fine... We’ll be fine... We’re going it!”

Capture 6- Respondent R “We’re coming in hot!” Respondent I “We got it!”

Respondent I – “Quite an interesting scene there, as you can see we have a lot of action on this street.”

Figure 4 – Respondents’ I & R taking a ‘taxi’
Capture 7 - Respondent E – “Right now we are on a lookout. We are on an island made out of reeds floating around here on the lake. It is quite impressive.”

Capture 8 - Respondent E – “They make the boats and houses of this here reed. There is about 10 families living here.”

Capture 9 - Respondent E – “Amazing!”

Figure 5 - Respondent E on island in Lake Titicaca