The power of Instagram in tourism: visual content categories in small destinations

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Abstract

The advent of the web and its evolution have brought to an enormous production of data. Different forms of content such as textual, visual and audio-visual can be posted online but tourism is a sector particularly linked to imaging. Photos have several roles in documenting and shaping the tourist's experience and this is the reason why in the tourism sector photo-based social media use is constantly growing. Following this trend, this research would like to adopt a content analysis to the photos of small destinations uploaded on Instagram, to categorize the different image contents. In the literature this analysis was applied referring to big and famous cities mainly, but since small destinations have different features, more studies about this topic are needed. The objective is to shed light on which contents are uploaded as pictures related to small destinations. A framework for analysing contents can help destination management organizations to obtain useful insights for better answering to tourists' needs and wants and to exploit user generated images to provide both an economic and a social contribution to the tourism industry.

Keywords: user generated content, tourism, image categories, small destinations

Introduction

Today social media are becoming a relevant marketing and communication tool for many industries. Looking at the tourism sector, competition is increasing, and this leads to the need of innovative tools to properly manage destinations. Destination management organizations (DMOs) have to start analyzing and understanding users-generated contents posted online (Kim et al., 2017). Many research are actually focused on the use of social media, but literature on the visual contents shared by tourists is still limited and mainly related to large cities or famous destinations (Galí and Donaire, 2015, Mukhina et al., 2017).

Image contents can represent small destinations and thus what is shared by tourists on Instagram can offer social, cultural and political insights. For these reasons we want to understand 1) which photos' contents are shared by tourists about small destinations and 2) whether the photo categories previously used in literature to study big cities can be useful for smaller tourist destinations too.

Literature review

Social media and visual contents in tourism
Tourism has always played an important role in the development of social media (Minazzi, 2015), with a lot of contents linked to travel experiences.

Among the different forms of content such as textual, visual and audio-visual shared online, tourism is deeply related to visual media (Negri, 2018). Since photography can both build and transform an intangible experience into something tangible, photo-based social media use is constantly growing in tourism (Mukhina et al., 2017).

More specifically, Instagram has become an effective place to find travel inspiration (Tenbarge, 2019) portraying the most "instagrammable" spots. Several places that have their own uniqueness became a tourism destination due to a post in Instagram (Mariani and Amir, 2016).

DMOs are aware of these ongoing trends and thus they try to explore the opportunities to produce online contents and use tourist-generated ones for their destinations, by developing and implementing new communication strategies (Zeng and Gerritsen, 2014, Kim et al., 2017).

Tourism in small destinations
Different analyses have been carried out to shed light on the potential of small cities and rural communities to position themselves more effectively in the tourism market (OECD, 2014, Brouder, 2012, Pierce et al., 2011).

On the one hand, we can see the growing power of a number of major urban centres, on the other, nowadays with the advent of a networked society smaller communities have found new opportunities to effectively compete with larger places in attracting visitors (Richards, 2019).

In fact, tourism has gone through enormous changes, with small unknown destinations that take a leading role in many countries, as they are able to combine the beauty of the landscape with history, culture, and traditions that are frequently missing in large mass destinations (Cracolici et al., 2008, Papatheodorou, 2002).

Using a quantitative research approach, Pabel & Prideaux (2016) have analysed how tourists who visit small destinations use social media - focusing on the pre-trip information search - and have considered how DMOs can use this knowledge to develop more effective social media strategies. They have demonstrated that social media have the potential to boost the online visibility of small destinations.

The research questions
Before Internet and social media diffusion, small destinations remained largely unknown, especially for international tourists. Now the situation has changed and these destinations already account in many countries for a sizable share of the total tourist flows (Istat, 2019, Sharpley, 2012, Jordan, 2000) but there is scarce research on how these destinations are portrayed online and how to analyse contents devoted to them.

Therefore, our research questions are:
RQ1: Which are the photo contents that are mostly shared about small destinations?
RQ2: Are the photo categories previously used in literature to study big cities representative of smaller tourist destinations too?

Design and methodology

The research is carried out in three main phases:
● Phase 1 – Context selection: among different classification of small destination and a great numbers of small destination in most countries, we selected Italian *borghi* (typical small towns) as research setting. Italy is one of the world's major destinations, and according to the Association "*I Borghi più Belli d'Italia*", a *borgo* represents a prestigious assembly of territories

with: (1) a population less than 2,000 inhabitants in the historical centre, and less than 15,000 inhabitants in the whole municipality; (2) a remarkable urban and architectural heritage, certified by the Superintendence of Fine Arts.
● Phase 2 - Data collection: due to its explorative purpose, photos on Instagram about a sample of Italian *Borghi* were downloaded through the name of the town hashtag.
● Phase 3 - Content Analysis was applied to downloaded photos. Visual content analysis is an unobtrusive and nonreactive method specifically selected for the analysis of photographs (Negri, 2018; Galí and Donaire, 2015). A deductive content analysis using categories adopted in previous research and an inductive one are combined based on the image analysis. First, the items selected for content analysis are classified into categories, in accordance with suggestions by Bernkopf and Nixon (2019), then, some adjustments to the previously identified categories are made in order to better fit the territorial context. A final list of categories and subcategories are then defined. The inter-coder reliability for categories is tested on a 35 images subset (10% of the sample) using Krippendorff's alpha coefficient (Hayes and Krippendorff, 2007).

Results: categories and sub-categories definition

The sample
The analyses are made on a limited sample of Italian *borghi* (small destinations) in order to test and define the image categories and sub-categories. These small destinations are selected among the northern part of Italy ones. Considering just the *borghi* that have an official Instagram account because of homogeneity (official accounts can increase the spread of specific hashtags). Only 5 *borghi* match these criteria. Images are downloaded from Instagram using the hashtag of the small destination name. The photos posted between 15 and 18 of August 2019 are considered. Sample is composed by 341 pictures (Table 1).

Table 1: Sample analysis

Destination Name	#Bienno	#Etroubles	#Sabbioneta	#Venzone	#Volpedo
Number of photos	60	34	86	156	5

Main findings
Starting from the existing literature (Bernkopf and Nixon, 2019, Sonne and Erickson, 2018, Ferwerda et al., 2016), main photos features and content categories are identified and tested in our sample. Main findings related to RQ1 are summarized in table 2 and table 3.

Table 2: Human presence relevance in photos

	Relative frequencies %	Relative frequencies for sub-categories %	SUB-CATEGORIES
Human presence as main element	19.65%	19.40%	With people posing alone (not selfie)

(Adapted from Sonne & Erickson, 2018 and Hausmann, Toivonen et al. 2018)		7.46%	With people posing with others (not selfie)
		9.00%	With people taking a selfie alone
		14.93%	With people taking a selfie with others
		26.87%	With people doing something specific (for example a craft job)
		22.39%	Other

Despite of the context in which human presence appears, we found out that in 19.65% of the sample people are portrayed (Table 2). To classify this content, we adapted the sub-categories from Sonne & Erickson and Hausmann, Toivonen et al. (Hausmann et al., 2018, Sonne and Erickson, 2018) by focusing on both the way the photo is taken (selfie or not) and if it includes the tourists or general people doing some specific activity. Human presence is a cross-section category since it also appears in other sub-categories in an explicit (i.e. in leisure and recreation) or implicit way (i.e. pictures with a person and parts of a building as main subjects).

Table 3: Main findings of the photo categories

CATEGORY	Category relative frequencies %	Relative frequencies for sub-categories %	SUB-CATEGORIES
Culture history and art *(Bernkopf & Nixon, 2019)*	52.79%	29.61%	Quarters of the *borgo [new]*
		14.53%	Food (both dishes or typical products such as fruit or mushrooms) *[modified]*
		13.97%	Buildings *[modified]*
		11.17%	Parts of a building *[new]*
		7.63%	Sculptures and monuments *[modified]*
		6.70%	Details such as frescos *[new]*
		5.59%	Churches *[modified]*
		1.12%	Folklore

		9.68%	Other
Additional *(Bernkopf &Nixon, 2019)*	14.37%	46.94%	A specific object (as a bike wheel, a GPS device etc) *[new]*
		42.86%	Urban details (most of them are architectural ones framing especially windows and doors) *[new]*
		10.20%	Other
Natural resources *(Bernkopf & Nixon, 2019)*	11.14%	89.47%	Landscapes
		1.47%	Partial views *[new]*
		0.59%	Plants and animals *[modified]*
		8.47%	Other
Tourist infrastructure *(Bernkopf & Nixon, 2019)*	5.28%	77.78%	Store windows or store products *[modified]*
		22.22%	Restaurants, bars and ice-cream shops *[modified]*
Leisure and recreation *(Bernkopf & Nixon, 2019)*	5.51%	75%	People doing sport (mostly riding a bike or a motorbike) *[modified]*
		25%	People enjoying dinner out *[new]*
General infrastructure *(Bernkopf & Nixon, 2019)*	2.35%	100%	Urban centre street view *[modified]*
People *(added by authors)*	8,56%	100%	People as unique subject *[new]*

Table 3 shows the main results in applying Bernkopf and Nixon (2019) categories to the *borghi* territorial realities. It is important to underline that considering small territories as Borghi, two out of eight categories do not appear and one new category (people) was added. The category list was adapted by deleting "political and economic factors" which refers to elements such as parliament, safety, terrorism, and "natural environment" which refers to factors such as crowds, smog, traffic. Also looking at sub-categories, we detect that some of them are not applicable, some need to be modified while others need to be added in an inductive way. Results show that the most relevant sub-categories (higher number of recurrences) are part of "culture, history and art". In this category, some adjustments were needed. For example, we found that considering only buildings was not enough in order to explain the photo contents and we added the "parts of a building" dimension. The same happened for the "landscapes" sub-category, since a lot of shots did not show a full landscape, the "partial views or quarters" sub-category was introduced. Also in the "additional" category, we included a new sub-category which considers the photos that focus on any "urban detail". Moving to "natural resources" the "sky" is added. Furthermore, elements such

as "fruit" and "other local products" are selected for the "food" sub-category. While, by evaluating photos about stores, we realized that "typical food shops" are so relevant that they could even represent a separated sub-category (RQ2).

Conclusions and managerial implications

This research focuses on images shared on Instagram about Italian small towns called *borghi* and has an explorative purpose. Results identify the most shared contents in small destinations and demonstrate that the existing content categories proposed in literature in order to represent a territory and mainly adopted for big and crowded cities do not perfectly fit these realities. Since a *borgo* is a small village made of high cultural values and ancient traditions, several elements representing big cities cannot be applied, and other new elements emerge.

We found that the most portrayed elements of a *borgo* are the ones that deal with architecture, moving from photos of entire buildings, to small architectural details such as a window, a column, a door peephole. Instead, due to the nature of the considered territories, there is almost a total absence of portrayed infrastructures (RQ1).

Starting from the photo categories previously used in literature to study big cities, we found out that some readjustments are needed. In fact, categories such as "political and economic factors" and "natural environment" are not applicable and also some adjustments to sub-categories are found to be required. Furthermore, the need of considering the human presence in the picture, normally considered in social media analysis, arises in this specific tourism perspective (RQ2).

Listening and monitoring images posted online by users can benefit both the public government and companies involved in the tourism industry. This paper provides a categorization that fits small destinations, adapting previous classification and thus filling the gap found in the literature and providing new knowledge about online visual contents. Further analysis considering a larger sample is needed to confirm our findings. Analysing data through this framework can offer new opportunities for small destination managers. In fact, DMOs will have a detailed understanding of what is the projected image of the destination and tourists desire in relation to their time spent in small locations. Moreover, they will learn how to develop their social media strategy correctly to better face the actual increasing competition.

Furthermore, two future studies could be implemented. First study could relate the analyzed pictures of this research with its metadata such as likes, comments and hashtags in order to understand the photos which are perceived as highly engaging according also to the different categories of contents. A second study could be aimed at analyzing the effect of photo categories on tourists' response adopting a quantitative approach based on a questionnaire distributed to a sample of tourists to confirm results of the first study that are based on insights data. Representative images from each category identified in this research could be selected in order to test the effects on respondents in terms of cognitive, affective and conative response.

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