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The 'Dark Power' of Instagram: Prospects and Threats for Tourism Organisations

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The key to understand and analyse the dynamic relationship between territories, organisations and tourists is currently undergoing significant changes. Due to both their endogenous and exogenous factors, territories should be read as complex adaptive systems (CAS), i.e. systems structurally composed of different sub-systems which interact with each other and help to improve the central systems thanks to the interconnections established among themselves. Thus, in this scenario, territories evolve into potential tourism destinations if these changes make them particularly attractive and capable of setting a profitable dialogue with new emerging tourists profiles. As a matter of fact, contexts and in which these actors communicate between each other nowadays are unconventional and 'bottom-up oriented': social media represent the main source for territories and organisation of tourist experience to receive feedback. Nevertheless, the established relationship is not always qualitatively relevant nor reliable. Therefore, by utilising both a data and content analysis approach, the authors will analyse users' reactions to Instagram posts by destinations to evaluate their engagement process and their emerging profile.

Key Words: instagram, tourists, territories, organisations, complex adaptive systems, digital tourism

Introduction

Explaining communication complexity

The systemic complexity established in socio-economic interactions between companies, territories, brands, organisations and consumers, tourists, customers and employees is undergoing a profound state of change and it appears sometimes, especially nowadays, difficult to process. That is, because, over time both territories and communicative contexts - places where communication takes place - have changed, as well as interdependencies between the actors involved in the communication exchange, one of the most common practices in everyday life.

Originally, organisations performed their major marketing & communications strategy and practical execution 'in-house' (Miller, 2002) where outputs were kept under control by marketing managers who standardised the related executive processes (press

releases, top-down interviews, standard market surveys and so forth). Nowadays, on the contrary, they tend to delegate social interaction with consumers, customers and/or brand supporters to external creative agencies, which are mainly specialised and skilled to communicate by adopting a bottom-up approach, where individuals are actively involved in the communication process rather than passive (Wilson & Irvine, 2013). Thinking of the organisational environment, this process is reflected in how organisation managers dynamically interact with the in-house resources (Welch & Jackson, 2007), setting therefore the primary strategic steps pivotal to open the organisation up (both public and private) to people.

According to Ballantyne and Varey, the 'act of communicating' is grounded in purposeful social interaction (2006). In the social media (S.M. from now on) era, conversations, sharing, and 'presence' which occur on ecosystems like Instagram, Twitter or Facebook, are symbols for both potential followers /

customers (Paniagua & Sapena, 2014) and public bodies / employees. They express appreciation / negativity through reactions or the '*tastes that rationalise an agent's observed actions*' (Beshears, Choi, Laibson & Madrian, 2008).

The emergence of those digital dynamic ecosystems leads to the creation of sub-systems which, exploiting the democratic structure of S.M. (Kent, 2013), organise themselves in '*self-systems*'. As the literature suggests, it is possible to define a self-organised system (Robertazzi & Sarachik, 1986) when groups of people aggregate in informal groups without any external or central influences (Prehofer & Bettstetter, 2005), sharing a common language and interests.

In addition, S.M. structures enhance the creation of strong bonds between different actors, which are pivotal to spreading information depending on several reasons, such as structural diversity, the number of topics and the communication dynamics (Grabowicz *et al.*, 2012). Nevertheless, a distinction between active and passive users must be made. According to Shirky (2011), active social customers (or simply users) set social trends and agendas in a varied range of topics, and they decide to digitally interact together with those leaders / firms / organisations which are closely related to their interests. Moreover, those actors tend to *communicate with each other* (Keller & Halkier, 2013) especially if they share common semantic and semiotic informal rules (in the social media scenario this could be, for instance, the use of a hashtag, emoticons and creativity). On the other hand, users that receive information from others and see it or consciously choose to ignore it are seen as passive, or at least this behaviour can be considered as 'evidence' for passivity (Romero *et al.*, 2011).

Therefore, company organisation dynamics in the leader / follower relationship cannot be analysed focusing on the leader perspective any longer, since the scenarios in which they interact are constantly changing. Firstly because S.M. *sub-systems* allow the emergence of peculiarities and behaviours which, otherwise, wouldn't show up for different reasons (psychological subjection, shyness, subordination to the manager / organisational relationship). Then secondly, S.M. communication tools are low frequency in structure, i.e. they offer a type of

communication that eliminates critical thinking due to the immediate consumption of information flows, thus allocating the follower to a role that seems active in a first step, but on deeper levels, seems to have no real awareness of their actions.

How do digital tourists communicate?

On the other hand, territories and relative organisations make use of IT platforms (traditional website, blog & app, S.M.) to convey a wide range of information on tourism destinations and facilities (places, properties, restaurants) (Litvin & Hoffman, 2012). Furthermore, this unconventional media communication allows tourists, or consumers of the tourism industry, to '*share their experience*' (Fatanti & Suyadnya, 2015) in 'real time'. This follows a new concept of tourism, characterised by the speed of information flow (Munar, 2012). Over time, there has been a significant change in how tourists share their online travel experiences, and that is mainly due to community reasons. Travellers' participation in groups and the daily life of online communities is rooted in recommending travel destinations on the base of their social and emotional experience. It seems clear that individuals are mainly motivated to share travel information online, to provide practical advice to other travellers about services, itineraries and tourist attractions and to prevent them from stumbling into the so-called '*tourist traps*' (choosing a travel destination because of specific peculiarities but not to encounter them in reality) (Agrifoglio & Opendisano, 2018). Therefore, to avoid and / or contain this phenomena, digital tourists make use of social networks to share visual and textual content because they are sharing (or at least should be) the real evidence of the territories' actual experiences. These are highly useful for travellers' decision-making.

The literature recognises that the digital image / reputation of a tourist destination can play a pivotal role in both reinforcing tourists 'satisfaction' with a travel business operator once they have experienced the product (Kim *et al.*, 2004), and in somehow influencing tourists' travel intentions (Kaplanidou & Vogt, 2006). Trying to provide definitions of tourists' S.M. representations of destination image, the literature makes some attempts:

- an individual user's '*impression of a site other than their residence*' (Hunt, 1971);
- a '*belief of perception and impression held by a tourist toward a destination*' (Crompton, 1979)
- a '*holistic impression of a destination held by a tourist, both perceptually and emotionally*' (Baloglu & McCleary, 1999).

This classification was been provided by Tonghui Lian & Caihua Yu (2019) and it reinforces the pivotal role of tourist destination image, which once uploaded on S.M. could be classified as divergent content that could actually generate a value-in-use for territories and their organisations. A value that requires a deeper analysis.

Aim of the research

The general aim of the research is to analyse the phenomenon of sharing digital tourists experience by simulating an interaction between an emergent Instagram 'opinion leaders' on tourism destinations and tourist / follower behaviours / responses to particular visual stimuli oriented to stimulate territorial experiences.

Both tourism organisations and scholars who are exploring the reliability of this type of communication to improve their strategies are currently asking themselves the following question:

R.Q.: *What would happen if the interactions between territories and new digital followers are bias-influenced?*

What if these influential communications discourage real interaction in favour of a mere quantitative-based relationship? How could this damage territories and their e-reputation?

By adopting both experimental and data / content analysis methodologies, the authors will be focused on classifying the properties of the newly emerging digital tourist. This is paramount in understanding the quality of the interaction between agents inside and outside territories and organisations.

Theoretical Background: The tourism destination as a Complex Adaptive System (CAS)

Complex Adaptive Systems, a strategic overview

There have been many attempts in the literature of both Management and Organisation studies to build a connection between complexity and tourism destinations, and both of them clearly bring out the tendency to separate, at least at first, systemic organisational complexities and practical territory analysis.

Complex Adaptive Systems (CAS) is a system which recognises the difficulty in reducing the number of '*parameters or characterising variables without losing its essential global functional properties*' (Pavard & Dugdale, 2000). The concept of adaptivity is due to the constituent component capability of the system to adapt and / or readapt itself to the different stimuli occurring around it. In other words, CAS generate structures that tend towards maintaining stability when facing continuous change. Nevertheless, it is still challenging to provide an unambiguous definition of CAS, despite the growing academic literature. Many authors' efforts are better focused, instead, on analysing and listing the properties that characterised CAS. A review of literature identifies some of the most relevant attributes, such as:

the **large number of interacting agents** which compose the various level of the system.

The **non-linearity** and **unpredictability of the interactions** among these agents.

Agents' unawareness of **system behaviours as a whole**, means that their interactions are mainly locally oriented.

The **openness of the system** as a whole.

CAS historical roots, their development over time and future behaviours (Cilliers, 1998; Levin, 2003; Ottino, 2004).

To come to a classification, authors like Amaral and Ottino (2004), point out three areas of research to approach CAS: non-linear dynamics, statistical physics and network science. In addressing networks, they noticed that they represent highly complex systems:

the agents' interactions give birth to general behaviours which occurs at global level (as a whole system), surely not observable singularly. Therefore, it happens that they exhibit, in their proprieties, new characteristics typical of a complex system, and above all they exhibit traits of an emerging phenomenon (Baggio *et al.*, 2010).

A CAS, in addition, contains elements which are connected by different *non-linear relationships*, and are characterised by the unpredictability of the external environmental dynamics (Jovicic, 2016). A further classification of CAS proprieties undertaken by the authors, aimed at underlining their emergent and independent structures. In particular, it appears that three main streams of research approach have been adopted over time to collect CAS structural characteristics - these were listed by Dominici and Levanti (2011) as follow:

the Santa Fe Institute approach, including contributions of Gleick (1987), Waldrop (1992), Kauffman (1993) and Casti (1997);

the European view (Prigogine & Stengers, 1981, 1984; Nicolis & Prigogine 1987)

the European epistemological tradition (Piaget 1970, 1971).

These three different research approaches to studying CAS in its complexity, pointed to further characteristic and proprieties:

Self-Organisation: the system organises itself together with both its endogenous and exogenous dynamics, such as learning, process variation, tuning and improvement (Kauffman 1993).

Co-evolution and learning: system agents must continuously adapt to others who populate the system and to external stimuli, in order to operate '*semiautonomous strategies*' - according to the self-organisation principle (Anderson, 1999; Lewin & Volberda, 1999; Volberda & Lewin, 2003).

Emergence: new systemic behaviors emerge from spontaneous interactions among agents (Basile G. *et al.*, 2016).

These proprieties are bonded together. CAS interactions are considered to be a key property of complex adaptive

systems, because they (by deriving from interdependencies and from the mutual causality between agents) are useful in reducing the relevance of the distinction between '*dependent and independent variables*' (Dominici & Levanti, 2011). They are factors that do not necessarily start inside the systems, but precisely thanks to their exogenous origin allow the *emergence* of behaviors which influence somehow the system and stimulate it to adapt itself to this new balance established between the parts of the systems. And then, lastly, this adaptation has led the system to set autonomous strategies.

Tourism as a CAS

The idea of tourism destinations as a complex systems has over time been stressed by the literature, and it gives us the idea of a cluster of '*interrelated stakeholders, both public and private, embedded in a social network*' (Baggio *et al.* 2010). Baggio, in particular, focused on analysing the bond between tourism and CAS. Addressing tourism destinations, it appears that there are many different organisations and businesses which are connected by different polarities of non-linear relations and interactions (2013). Among them, stakeholders' responses to inputs from the external environment are as unpredictable as '*the outcomes of their behaviour*' (Haugland *et al.*, 2011). This means that tourism complex systems show a high sensitivity to apparently unrelated events, that will eventually lead to 'major changes', as Baggio and Sainaghi (2011) suggest. Therefore, reading the territory as a complex adaptive system means searching properties of self-organisation, scalability and dynamic adaptation to the context-environment.

Tourism destinations are composed of different structural elements and / or actors, i.e. tourism operators, support structures, public and private organisations and associations (Baggio, 2008). Among them, types of nonlinear relationships are possible (Farrell & Twining-Ward, 2004). Since tourism destinations and tourism-based businesses constantly face change pressures, including environmental challenges (natural sustainable resources), social (cultural) and economic (economic conditions and needs-demand) issues (Lew, 2014), it can be stated that – in this complexity - they must reach their and travellers' / tourists' objectives and offer satisfaction (Gunn, 1997). In other words, CAS destinations must

be able to offer to tourists ‘*the opportunity of taking advantage of a variety of attractions and services*’ (Baggio, 2013), because the entire sustainability of the various level of CAS depend on their attractiveness and capabilities of their services-offering.

Methodology of Research: Simulating the destination – tourist interaction

Contextualizing communication tools: explaining Instagram logic

Information and complexity are closely intertwined with each other, since they are not linear at all: excess of information – i.e. information overload (Heylighen, 2002) – may lead over time to bias and / or distortion of information flow, because of the increasing instability of the system’s elements. For this reason, there is an urgent need to reduce the high level of data smog and to manage information flow congestion (Baggio, 2006).

Nowadays, the Internet plays a fundamental role as a source of information for both consumers and organisations in the tourist sector. Communication tools such SM (Instagram, particularly) completely changed the interaction between actors, allowing tourism service consumers to be better informed than ever before, because they are able not merely to share their own experience of the territories, but also to find additional information and pictures - they ‘*tag them with their own keywords (hashtags) for search purposes*’ (Fernando, 2006).

Looking at the details, Instagram uses the power of visual impact and of some specific technical issues arise regarding the elaboration of a post / experience related to a territory:

- individual answers / information requests / comments;
- geo-tagging options to give a clear idea of where the tourist experience takes place;
- real-time video, Instagram stories and direct messages.

Furthermore, several researchers have demonstrated the growing popularity of Instagram, which currently has more daily users than other S.M. like Twitter (Abbott *et al.*, 2013; Hu *et al.*, 2014). Nowadays, Instagram represents the ideal ecosystem within which businesses

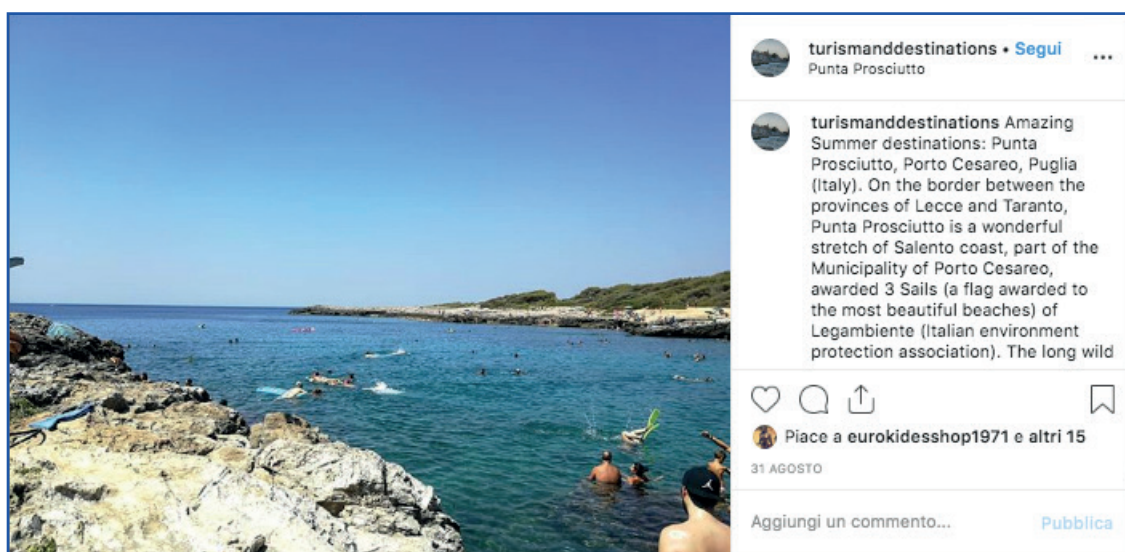
and organisations can dialogue with the external environment to make their strategic decisions. By going into the detail of this relationship, when an Instagram user uploads a picture codified with specific hashtags or direct tags, it could lead to a company website that sells items and / or services related to tourism experience, or tourism influencers, or even tourist institutional offices, which may start to follow user updates.

Once access is made with these pages, it can be observed that followers instantly provide promotional messages, which can be found both in the profile thanks to the profile branding or eventually in the text description of the area. Organisations which possess a professional Instagram page may easily get hold of users of interest, simply by following and interacting with them through a specific syntax (logical structure), made of tags, comments, and direct messages (Conti & Heldt Cassel, 2019). This primary contact may result in a more profitable interaction, where organisations / businesses may start collaborations with Instagram users, by offering them business opportunities (like giving visibility to their products / service), hiring them to be their digital ambassador / influencer or simply promoting themselves.

Experiment and data analysis

The experiment that the authors decided to conduct is the creation of a new Instagram account dedicated to sharing photos / videos and information on tourist destinations, aimed at capturing the attention of Instagram followers looking for destinations for their travels.

Moreover, it was decided to compare two countries that share similar geographic characteristics, such as Italy and Greece. Both are Mediterranean region and countries with extensive rural / agricultural landscapes as well as uncultivated areas and built-up areas. In the last few decades, the two territories have faced radical change in urban structure and increasing demand for tourism, hospitality and related experiences (Cori, 1999; Weissteiner *et al.*, 2011) in addition to changes in food production, maritime economy, migratory routes, and climate. In addition, several Mediterranean regions – including those of Italy and Greece - have only very recently discovered islands and coastal areas as a driving force for tourist development, such as Puglia and Campania in Italy.

Figure 1. Instagram post and data/content analysis of Punta Prosciutto, Porto Cesareo, Puglia, Italy

Concerning technical choices to set up interactions with followers and allow the emergence of insights by analysing their behaviours, the authors agreed on three further key points:

- alongside posting pictures and providing a detailed description of destinations, they used hashtags which were consistent with both destinations and topics (travel, tourism, hospitality, destinations);
- they decided to geo-localise the places and tagged accounts which are important stakeholders for the territories, i.e. other profiles that are used to promote the territories on Instagram;
- they deliberately agreed to not sponsor / pay to promote the posts at this stage, to demonstrate the general principles of the new approach to examining the qualities of follower.

Overview of Posts

The first (of six) post (Figure 1) shows a seaside destination located in the Puglia region of Italy. Punta Prosciutto is well-known in Italy for its wonderful coves and dream places. The image description aims to underline those features:

Amazing Summer destinations: Punta Prosciutto, Porto Cesareo, Puglia (Italy). On the border between the provinces of Lecce and Taranto, Punta Prosciutto is a wonderful stretch of Salento coast, part of the Municipality of Porto Cesareo, awarded 3 Sails (a flag awarded

*to the most beautiful beaches) of Legambiente (Italian environment protection association). The long wild and unspoiled beach, mostly public, with some beach resorts, is perfect to enjoy relaxing days and to swim in the crystal-clear water.*¹

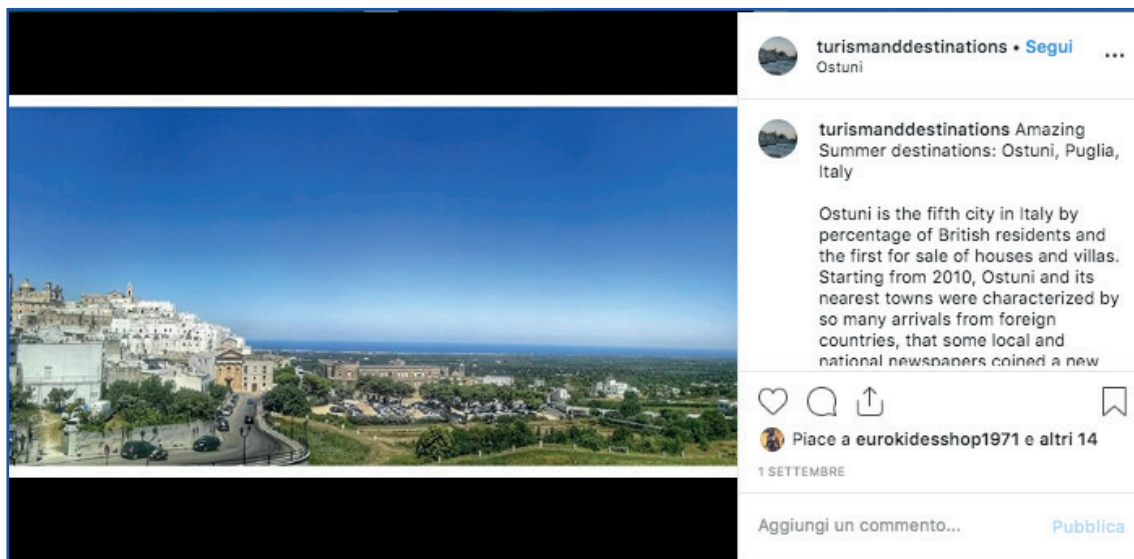
The chosen hashtags aimed to codify not only the geographic location (conveyed also by the geo-localisation) of the place, but also reach followers interested in Italian vacations and tourism attractions:

#puglia #italy #seascape #seaside
 #photooftheday #picoftheday #tourism
 #destination #place #placebranding
 #italianphoto #italytravel #italy_vacations
 #italy_hidden_gems #italy_creative_pictures
 #italyturism #italianturism #instatravel
 #travelphotography #travelblogger #travelItaly
 #italiansea #italiantrip #italylovers #italytour
 #italy_photolovers #italygram #italyvacaion
 #destinationItaly #exploreataly

The results of this interaction are listed as follow:

- + 15 new users started following the Tourism Destination account
- + 16 likes on the picture, of which 8 came from the new followers
- + 35 accounts reached
- + 2 positive comments

¹ The source of this description is the Italian website Viaggiare in Puglia.it

Figure 2. Instagram post and data/content analysis of Ostuni, Puglia, Italy

The second post (Figure 2) represents another Puglia destination - the city of Ostuni. Cityscape, seaside and historical roots were the issues that the authors sought to convey through the picture to the followers:

Ostuni is the fifth city in Italy by percentage of British residents and the first for sale of houses and villas. Starting from 2010, Ostuni and its nearest towns were characterised by so many arrivals from foreign countries, that some local and national newspapers coined a new term, 'salentoshire' to describe this phenomenon, taking the term from the useful 'chiantishire', taken for the similar phenomena that has characterised Tuscany some years ago².

As for the first image, hashtags targeted specific communities of people, including Instagrammers:

#bestdestinations #travel #tourist #travelgram #instatravel #trip #vacation #travelling #italiansea #holiday #italy #photooftheday #photography #travelphotography #instagood #wanderlust #summer #ostuni #igtravel #puglia #travelblogger #travelingram #visiting #adventure #instago #traveller #mytravelgram #love #ig #picoftheday

The results of this interaction were different:

- + 5 new users started following the Tourism Destination account

2 The source of this description is the website Italyinphotos.com

- + 15 likes on the picture, of which 7 were from the new followers achieved
- +32 impressions, i.e. the number of times the content was shown to users (15 from homepage, 13 from hashtags, 1 from the profile, 3 other)
- 0 comments

In the third post (Figure 3) the authors decided to change location and also region. In fact, it was now the turn of the Campania region, the city of Vietri sul Mare (Salerno, the first city of the Amalfitan Coast). the Authors' aim in this picture was to excite the followers by capturing the sea illuminated by the full moon.

Vietri sul Mare is a town in the province of Salerno, in the Campania region of southern Italy. It is situated just west of Salerno, separated from the Port of Salerno by only a harbour wall. The town is known for its polychrome ceramics, a tradition since at least the 15th century, and is considered to be the gateway to the Amalfi Coast³.

In order to attract and involve a wide variety of travellers, the strategic choice of hashtags was to bond the post to the concept of 'travel' without specific geographical distinctions:

#tourism #travel #tourist #travelgram #instatravel #trip #vacation #travelling #traveling #holiday #nature #photooftheday #photography #travelphotography #instagood

3 The source of this description is Wikipedia

Figure 3. Instagram post and data/content analysis of Vietri sul Mare, Salerno, Italy



#wanderlust #summer #turismo #igtravel #tour
 #travelblogger #travelingram #italy #adventure
 #salerno #traveller #mytravelgram #vietri
 #amalficoast #bhfyp

According to the results, the authors reached their goal:

- + 5 new users started following the Tourism Destination account
- + 15 likes, of which 6 came from new followers
- + 57 impressions (33 from homepage, 7 hashtags, 6 location, 11 other)
- + 1 comment, from a male user who asks people to look at his profile

Preliminary results suggest a first overview of user profiling due to the exhibited behaviours. The Authors' effort was to divide the interactions into two different streams based on the emerging digital tourist propertities. In the first stream they decide to classify users' actions which can lead to a passive status:

I) The **passive follower**, is a digital tourist who would rather scroll on their personal homepage, and that of followers and simply look at destinations rather than leaving any kind of feedback. They are '*committed*' to the location (because they search for it on the search bar), but not the leader account which promotes the image;

II) The **shy follower**, a digital tourist who is a bit more oriented to interact with the leader account, but is not yet mature or convinced of the interaction trustworthiness. In fact, they prefer to simply leave a 'like' on their favourite posts;

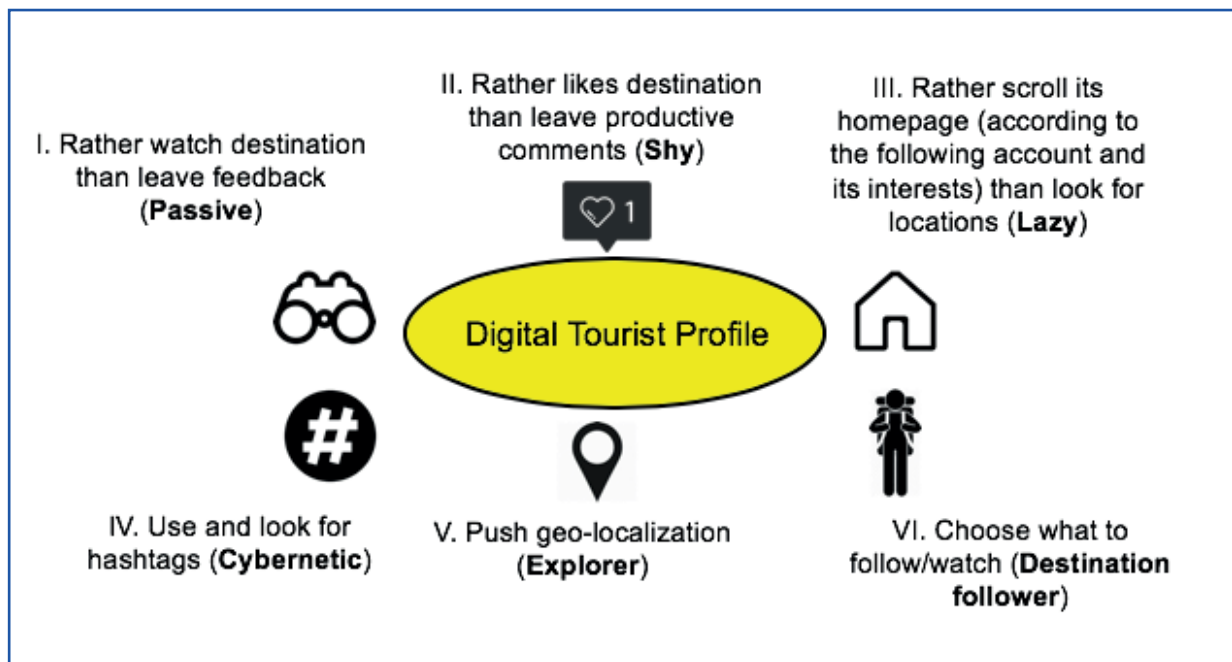
III) The **lazy follower**, a digital tourist who, in contrast to the previous ones, does not look for locations nor leave comments on the accounts they follow. In other words, they act like an observer of what they already have and don't need any new locations / images / information.

The second stream includes attributes and propertities which identify the follower / digital tourist as 'active'. This is a step above the others in terms of maturity and interest in exploring the tool (Instagram), setting and improving the conversation with leading accounts and so forth:

IV) The **cybernetic follower**: This tourist makes use of / interacts with Instagram syntax (hashtags) to search for destinations and to codify their personal content;

V) The **explorer follower**: the tourist reached a high-level of communication maturity - because they trust following accounts - and start to look for destinations not only by tags or search bar but also by geolocation service (Bo Liu *et al.*, 2014);

Figure 4. Authors' Classification of Digital Tourists / Followers



VI) The **destination follower**: this person reaches a full maturity level. They are now ready to entirely explore the tool and converse with the community of digital tourists (and not only the organisation's ones) to the full potential. Moreover, they are in full possession of knowledge about tourism destinations, searching for them autonomously.

Both the classifications are summarised in Figure 4.

However, there is still one attribute – perhaps the most relevant – that should be considered by looking at the next steps. Once provided with a simulation to engage with the standard-oriented interaction between an Instagram destination account and potential interested followers/tourists – thereby gaining their profiles - the authors made a different choice: they tried to ‘pass-off’ pictures of tourist destinations which were different from their real location. In other words, they posted pictures of a place, but changed the geographic location by using geo-location, hashtags and inaccurate descriptions, to make users believe what the ‘account’ wanted. The aim was to test / increase users’ critical thinking, challenging their real attention in processing the content that they look at. A further objective was to test the quality of interactions and the communication tool’s reliability in establishing a profitable dialogue between potential tourists and organisations representing both destinations and businesses.

The fourth post consisted of a video boat excursion featuring the island of Ischia (Naples, Italy), but the authors promoted a highly crafted presentation of the island of Lesbos (Mytilene, Greece). Playing on the similar geographical features of the coastal regions, the authors simulated a positive post by a potential tourist who experienced a boat trip in a different nation from that where the video was recorded. In addition, in order to support users in noting the difference, the original audio in an Italian dialect (instead of Greek) was included.

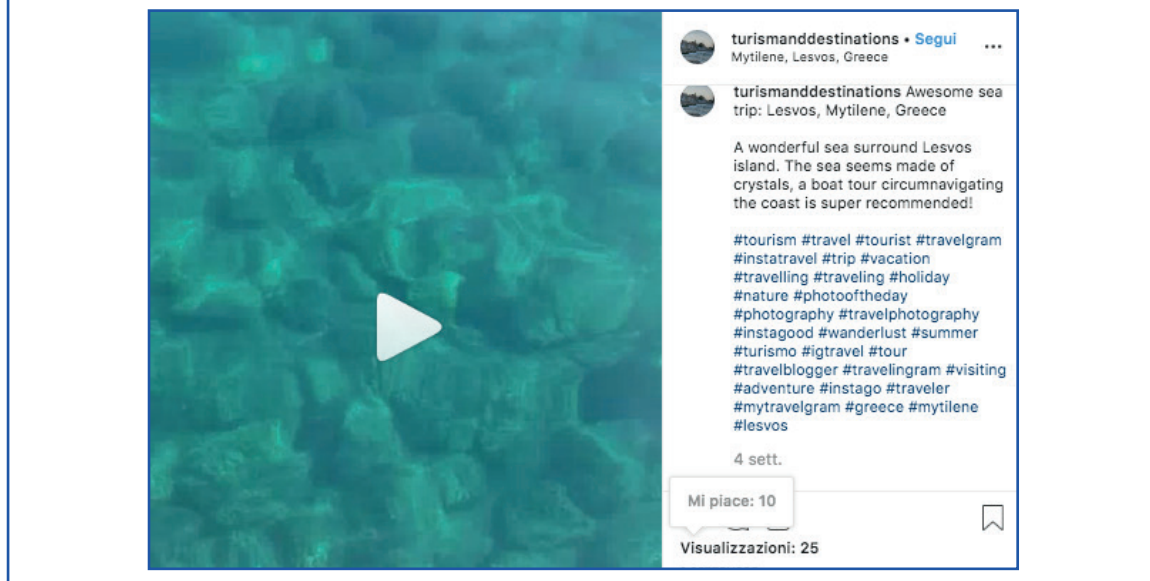
*Awesome sea trip: Lesbos, Mytilene, Greece
A wonderful sea surround Lesbos island.
The sea seems made of crystals, a boat
tour circumnavigating the coast is super
recommended*

Alongside the travel narrative, hashtags were chosen to support biases in identifying the real location:

*#tourism #travel #tourist #travelgram
#instatravel #trip #vacation #travelling
#traveling #holiday #nature #photooftheday
#photography #travelphotography #instagood
#wanderlust #summer #turismo #igtravel
#tour #travelblogger #travelingram #visiting
#adventure #instago #traveller #mytravelgram
#greece #mytilene #lesvos*

The interesting data that emerges is that none of the accounts that saw the post questioned the fake location.

Figure 5 Instagram post and data/content analysis of bias Mytilene, Greece / Ischia, Naples, Italy



Instead, on the contrary, they appreciated the post giving positive feedback:

- + 5 new followers
- + 8 likes (of which 3 of the new followers)
- + 51 impressions (21 from homepage, 7 hashtags, 7 place, 16 other)
- 0 comments

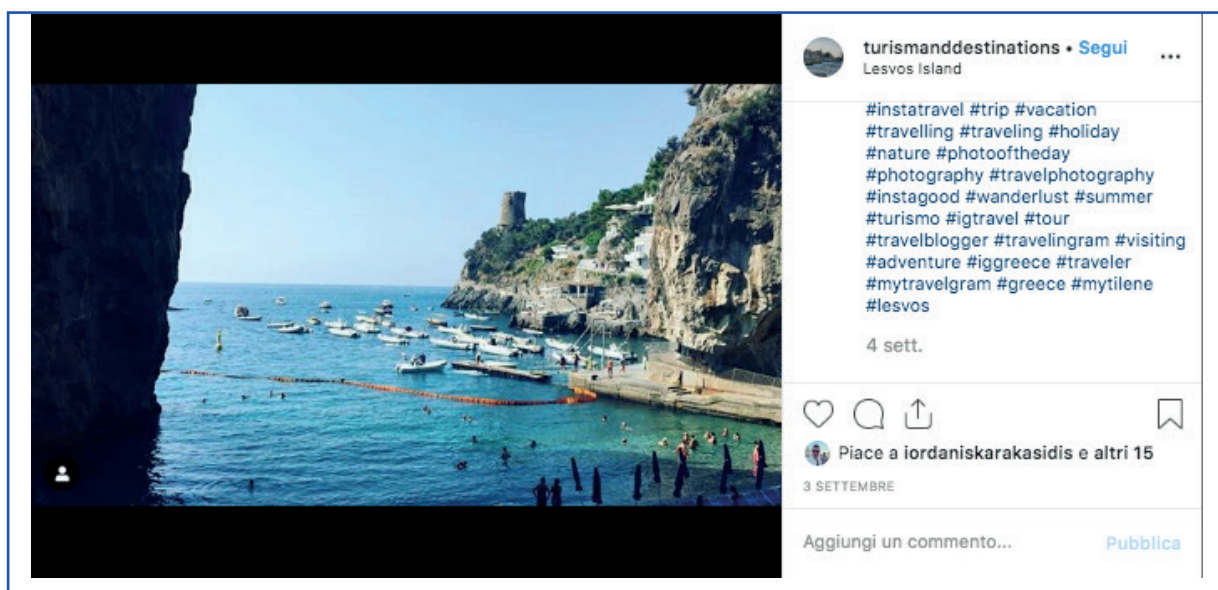
The sixth post was also meant to confuse tourists by playing on the geographic binomial of Greece-Italy. In this instance, Lesvos island was the chosen (fake) destination, instead of Marina di Praia, Salerno, Italy (the

real one). This time authors meant to not pass off two similar islands, but an island for a coastal destinations of the Amalfi coast. The aim was to highlight the differences that could emerge from two similar but, likewise, different destinations.

Amazing Summer destinations : Lesvos Port, Mytilene, Greece GR You cannot start discovering Lesvos unless you have first walked along the port, sat for a coffee at Panellinion, strolled down Ermou St. And, enjoy the landscape!

#tourism #travel #tourist #travelgram #instatravel #trip #vacation #travelling

Figure.6: Instagram post and data/content analysis of bias Mytilene, Greece / Marina di Praia, Salerno, Italy



#traveling #holiday #nature #photooftheday
#photography #travelphotography #instagood
#wanderlust #summer #turismo #igtravel
#tour #travelblogger #travelingram #visiting
#adventure #iggreece #traveller #mytravelgram
#greece #mytilene #lesvos

Even then, the experiment showed the lack of digital tourists' interest in verifying the post. No one, in fact commented or got in touch with the account to ask for a rectification. On the contrary, there were several positive interactions and / or appreciations:

- + 5 new followers
- + 14 likes (of which 5 of the new followers)
- + 36 impressions (25 homepage, 8 hashtags, 1 profile, 2 other)
- 0 comments

The last two destinations concerned consistently different geographic locations from those falsified in the previous posts. In this circumstance, the Island of Santorini (Greece) has been made to look like Lapio, an internal rural area in Campania region (Italy). This was not a random choice: both the locations are famous for their white wine production, in particular Santorini (Stavrinoudis *et al.*, 2012) for 'Assyrtiko' and Lapio for 'Fiano'. Furthermore, they both focus on Wine Tourism as a core place attraction, promoting lots of dedicated events during the entire year.

Thus, the authors oriented their hashtags and the image description to support storytelling around Santorini wine, alongside that of tourism and travel in general.

turismanddestinations Awesome wine trip in Santorini, Greece. Santorini wines are amazing! Wine production on the island dates back to the ancient times and the famous 'Assyrtiko' variety of Santorini is famous all over the world.

#tourism #travel #tourist #travelgram
#instatravel #trip #vacation #travelling
#traveling #holiday #nature #photooftheday
#photography #travelphotography #instagood
#wanderlust #summer #turismo #igtravel
#tour #travelblogger #travelingram
#visiting #adventure #greekwine #traveller
#mytravelgram #greece #vineyard #santorini

Even in this experiment, no users commented or wrote to ask for a geolocation change. The account kept growing constantly, clearly outpacing (for followers KPI) the number of initial following accounts:

- + 5 new followers;
- + 12 likes (of which 3 of the new followers)
- + 28 impressions (17 homepage, 10 hashtags, 1 other)
- 0 comments

Figure.7 Instagram post and data / content analysis of bias Santorini, Greece / Lapio, Avellino, Italy



Discussion

Practical Implications

This research is geared to focus on both practitioners (organisations, tourist managers and so forth) and destination management / organisation science scholars.

In the first place, tourism organisations are nowadays called to meet the information needs of current tourists and / or potential ones. The spread of new ITs for tourism is a *double-edged sword*, especially for tourism planners and destination managers. Digital communication contexts like S.M. allows them to get in touch with many more customers and analyse lots more experience touchpoints than in the past (Oliveira & Panyik, 2014), however, in parallel it must be considered that information flows are challenging to manage, starting with the quality of interaction (biased, fake news, useless information), but also considering the volume of big data.

The experiment in this paper meant to illustrate how the relationship between tourists and territory has changed in the era of digital communication. In particular, the environment that constitutes and/or influences the territory as a complex-adaptive system consisting of interactive, interdependent and complementary dynamics which are worth analysing and discussing in holistic ways that consider their whole parts and characteristics. By focusing on communication, the authors tried to examine this complex relationship. While this may generate a value for tourism organisations dealing with territories,

on the other hand – if bias driven – may led to the construction of a representative image of the territories quite far from reality.

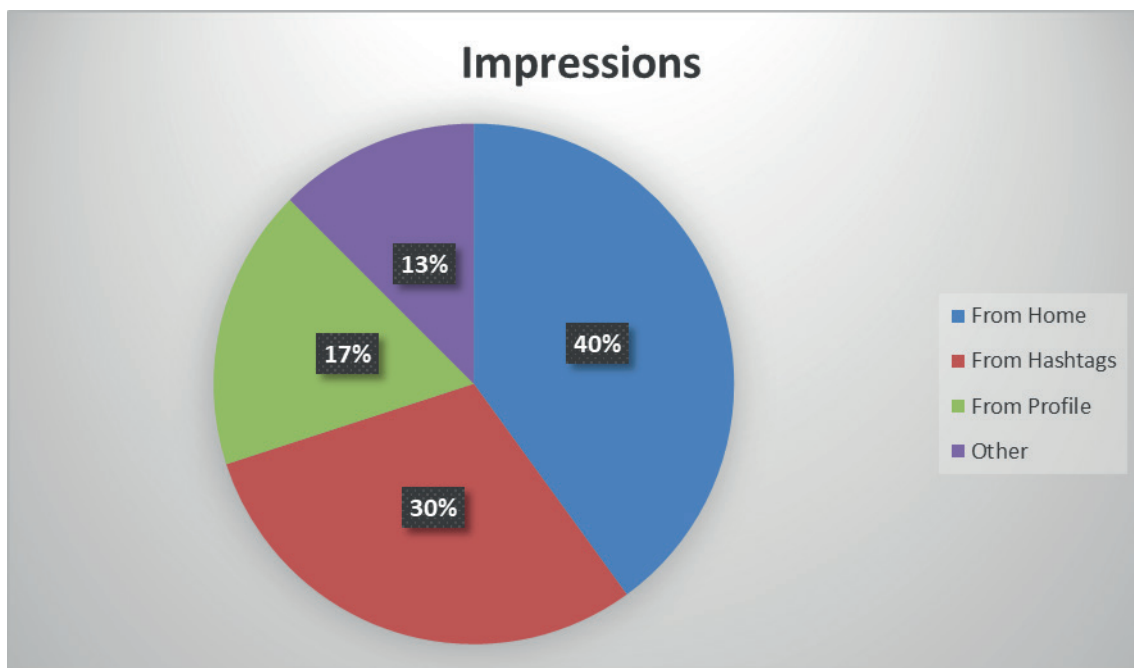
Considering the general data, an overall total of 239 accounts saw the pictures, however, no one noticed and corrected authors' falsifications. Moreover, the most relevant – and perhaps serious – consideration that emerges from the test is that, among those digital tourist, followers and accounts who appreciated the posts of fake locations were people who should have known better such as : people from the locations; travel bloggers; travel agencies; stakeholders and tourism destinations 'ambassadors' such as IG (Instagrammers - i.e. from Lesvos); an 'admin' of a photography account for Greek islands; an individual with a business in Lesvos, and so on. Furthermore, the 'Travel Destinations' profile has been added to several chats on tourism destinations on Instagram Direct Messages.

The graph (Figure 8) shows where the various account that were reached come from / look for. The vast majority of impressions gained by the authors' experiment emerge from individuals' personal homepage (40%, - this includes those digital users that are included in the previous classification as '*passive*', '*shy*' or '*lazy*'- or from hashtags (30%, communicative maturity and interest is enough to click on the tag and search for place of interest). Thus, in line with the active classification, only a small portion of users (17% from the profile, 13% from geolocation, rebounding, Instagram Stories and so forth) may be considered 'mature' enough to set a profitable dialogue with leaders' accounts.

Table 1: Analysis of 'Post' Data

Posts	Followers	Like interactions	Impressions	Comments
p.1	15	16	35	2
p.2	5	15	32	0
p.3	5	15	57	1
p.4	5	8	51	0
p.5	5	14	36	0
p.6	5	12	28	0
Overall	40	80	239	3

Figure 8: Impressions graph



Limitations

This research has some limitations. In the first instance, the number of interactions was quantitatively too small to apply a clear profiling of digital tourists, although – especially as a first attempt at research - it is not particularly important to consider the volume of the sample. However, the work does establish a methodology to establish foundations classifying relationships with the digital tourist. As a matter of fact, the authors aimed at clarifying appropriate qualitative processes to allow the development of a methodology for identifying the new digital tourist, and consequently how that tourist prefers one destination over another.

Concerning the tool (Instagram), its structure and its communicative process, some marketing consultants propose a strategy whereby the user decision to leave feedback in the form of a ‘like’ – even randomly – should be followed up by clicking ‘like’ on a post of the new follower, or encouraging followers to ‘like’ each other’s posts. Thus the follower becomes the followed and this increases overall ‘followers’. The authors verified that none of the users who followed their account this, yet, they gradually increased the number of followers. Interestingly, one of the small data advantages is that processes are easy to analyse, which is impossible if working with big data.

It would be interesting, perhaps in a second step of the research, to sponsor / promote the posts to significantly amplify their range, and thereby reach more interactions.

Lastly, it could be useful to insert other visual bait that could help the digital tourist to better experience the destination.

Conclusions

The present work does not pretend to universally explain the behaviour which affects the relationship between users / tourist and territories / organisations in the current digital scenario. Indeed it would be pretentious to reduce – and, perhaps, trivialise – the processes which belonging to complexity adaptive systems. Territories, in fact, should be interpreted as phenomena to be observed from the outside, while considering multiple key-factors:

- the extent of the environmental;
- the number, distinction and heterogeneity of parts which compose the system
- the variety of social roles and personalities;
- the social mechanisms’ ability to integrate and adapt these parts and roles into a productive and efficient whole (Barile, 2011).

Into this whole new system is positioned the authors' desire to tackle a complex process such as that of communication between territories and / or organisations and their external environment, aiming at understanding if this interaction is properly structured as to produce value for all stakeholders. On the one hand is the territory (and its organisations / businesses), which benefit from the positive experiences shared by users, because they strengthen - and eventually re-adapt – their perception and reputation; on the other is the environment based agents (digital tourists' community for instance), that create and disseminate a volume of information that is useful in the decision-making process of future tourists, i.e. choosing a travel destination.

Therefore, by adopting an experimental methodology to examine this communicative process, the authors shed light on the quality of the interaction established, pointing out that this may be subject to distortions, communication gaps and systemic biases.

According to the observation, a variety of biases may occur in this case:

- **Cognitive bias**, when a users' cognition reliably produces biased representations if compared with 'some aspect of objective reality' (Haselton *et al.*, 2015).

- **Emotional bias**, when users' attention, perception and expressions are influenced by personal emotional issues (Magai *et al.*, 2000).
- **Trust and commitment bias**, which occurs when users' level of trust placed in other users, destinations and territories, businesses and organisations (Kelley & Huff, 2003) or ambassador accounts to such as level as to not even question the contents they propose.
- **IT tools bias**, in the sense that S.M. infrastructure promotes a particular hit-and-run communication, which does not always produce lasting and sustainable value.

To conclude, it appears - now more than ever – necessary that territories (or organisation managers, operative marketing managers and other professional figures working for them) that make use of this kind of interaction to attract or communicate with tourists, should take into account these dynamics and apply a series of filters that preserve the quality of the interaction between territories and digital tourists, to preserve their reputation and a positive image in an ethical and lasting way.

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