We are IntechOpen, the world's leading publisher of Open Access books Built by scientists, for scientists

6,300

Open access books available

172,000

International authors and editors

190M

Downloads

Our authors are among the

154

Countries delivered to

TOP 1%

most cited scientists

12.2%

Contributors from top 500 universities

WEB OF SCIENCE™

Selection of our books indexed in the Book Citation Index
in Web of Science™ Core Collection (BKCI)

Interested in publishing with us?
Contact book.department@intechopen.com

Numbers displayed above are based on latest data collected.
For more information visit www.intechopen.com

Analysis of Online Conversations for Giving Sense to Sustainable Tourism in the Adriatic-Ionian Region

Gian Luigi Corinto and Fabio Curzi

Additional information is available at the end of the chapter

<http://dx.doi.org/10.5772/intechopen.70371>

Abstract

The role of online conversation analysis on tourism and sustainability is underrated, especially in policymaking and management of sustainability of tourist destinations. The paper reports an analysis of online conversations retrieved from Twitter during the 2016 peak season, referring to four main destinations located in the Adriatic-Ionian region. The focus is analyzing the meaning of the expression “sustainable tourism” as emerging from online texting. Findings are that private users do not talk about sustainability and features of sustainable tourism while using Twitter, enforcing the idea that sustainable tourism has popular “meaning” and “appeal” possibly different from scientific approach. Users tell exclusively on leisure features of destinations, and public bodies neglect the opportunity of using Twitter for image building and web listening. Private companies, public administrators, and policymakers should benefit from the exposed procedures for online conversation analyses in designing and organizing their respective tasks. Researchers and destination managers would be also interested in the existing divide between official documents and statements on sustainability and sustainable tourism and reality of popular perception of the issue.

Keywords: Adriatic-Ionian region, online conversations, sustainable tourism, text analysis, Blue Flag criteria

1. Introduction: problem statement, focus, and research questions

1.1. An introduction on discourse and place branding

Tourism is strongly impacted by the use of the Internet, and the Travel 2.0 phenomenon is boosting. The new opportunities the web gives tourists consist of easy accessibility to online tools dedicated to travel and leisure [1, 2]. Tourists can autonomously organize their travel,

vacation, and leisure time, and also share opinions on destinations and experiences by texting online comments and reviews. These texts are “online conversations” being also a large deposit of information on both the supply and demand sides of tourism [3, 4].

The role of online conversation analysis on “tourism and sustainability” and the emerging problems regarding text analysis are today underrated, especially in policymaking and in managing destinations and their sustainability, image, and reputation.

One emerging problem is that “sustainable tourism” is contemporarily a common language expression, a practical issue, and a research topic largely studied by diverse academic disciplines. Policymakers very often privilege common sense instead of rigorous scientific analyses, so that popular superficial perception is seemingly able to condition any public choice. The risk is to have rhetorical declarations and high ethical statements before a poor practical implementation of effective sustainability policies [5].

Environment is a “common good” essential for tourism practices, and both firms and users should understand the worth of co-creating a sustainable tourism management. Growth and value creation are becoming a “company/client” shared goal also in the tourism sector, as the meaning of value and the process of value creation are increasingly shifting from a product-firm centric view to personalized consumer experiences [6, 7].

In postmodern societies, informed, networked, empowered, and active consumers are increasingly co-creating value together with firms, and rapidly changing the business environment. In this regard, information communication technologies (ICTs) can help the triangular interaction firm-consumer-policymakers in creating value and social wellbeing also using pieces of information retrievable online. Diffusion of ICTs helps the market in becoming a forum for conversations and feasible interactions between individual consumers, consumer communities, public institutions, and firms [8].

As conversations are shaped by spaces in which they are made and spaces are made by conversations, place is the result of space/society relation [9, 10], and the perceived image of the sustainability of a singular place is the result, also of online conversations, narratives, and discourses that are inevitably made by words.

Words and languages are per se metonyms and metaphors of real things, as “firstly stated by Nietzsche about language, in 1873” [11, p. 138]. Yet the distance between real and symbol is originally a linguistic issue *a là* Saussure [12] still having also a geographic nature because: “A society is a space and an architecture of concepts, forms, and laws, whose abstract reality is imposed to reality of senses, bodies, aims and desires” [11, p. 139]. Then, the discourse approach, as a system of statements constructing an object, can clearly be attributed even to places and even more to place branding. Thus, media in general, and within the focus of this paper, the ICTs are powerful means of abstraction in creating sense of place and identity, through the creation of specific media messages [13]. Further, they deal with communications and territorial marketing. Messages running on the web include necessarily the whole user-generated content, mimicking once again the nature of a conversation, and the sense of “sustainable tourism” is originated within the narratives made by suppliers and consumers of the travel and tourism industry.

All this does matter for policymakers and communities interested in designing and “governing” a credible model of sustainable tourism. In general terms, governance is the process, institutions and ways the govern function is practiced aiming at being effective [14]. Its main features are transparency, efficacy, legality, lack of corruption, respect for rights and social participation. These features are immersed in the story, traditions, and polity of a region (locality), and economics can give some feasible analytical means to lawmakers, even not yet having a holistic approach, and necessitating of critical policy analysis before any intervention.

The positivist paradigm, intending to implement quantitative methods also in social sciences, provides little help in determining public policy, as the complete acquisition of (perfect) knowledge and information is quite impossible due to the complexity of the real world, and not simply because it is expensive [15]. This has a double compliance at different levels of significance: in theory making and in marketing practice. Firstly, complexity cannot be reduced in simple quantitative models for their distance from political reality [15]. Secondly, if the market is a conversation [16], and narratives construct objects and shared ideas, then the meaning of words (in marketing and communication) is worth only within the *social discourse*. Thus, the meaning and sense of words are strictly subjective and the narratives of places are unavoidably the storytelling of relations and values that are not the reality, but something else, being a narrative construction [17, 18].

According to scholar Anholt [19], the functional activity of place branding is the extraction of the intimate spirit, the essence of a place, through a coherent set of truths. Place branding is clearly oriented to enhance the advantage of the local community, reinforcing the place capability of tourist attraction, or the export of goods and services, and locating some productive units and company headquarters. In this line, lessons originating from philosophical work of Derrida [20] about concepts that are imagined as stable and homogenous (including the above *set of truths*) give some caveats against the factuality of concepts, because:

“As a means of challenging the operation of logocentrism, Derrida asserts the irreducible textuality of all concepts and terms. Terms and concepts donot mean anything in and of themselves. All concepts are produced within discursive networks of difference and are therefore dependent upon these networks of difference or infrastructures for their identity” [21, p. 50].

Thus, the place branding/truths relation has validity within a discourse, including the *marketing discourse* [22] and must face the fatiguing job of contrasting (or using) ambiguity of words, especially when the sentiment of socioeconomic agents matters as in online conversations analysis [23, 24].

Conversation is usually considered a sociological topic, even though economists have treated it in theory at least by the Austrian economist Friedrich von Hayek, who suggested:

“We must look at the price system as such a mechanism for communicating information if we want to understand its real function—a function, which of course, it fulfills less perfectly as prices grow more rigid” [25, p. 86].

Price changes communicate to consumers that the world is changed and they have to adapt their own behavior, being prices, as a matter of fact, social mediators and resembling language

communication within the social discourse, i.e., within a conversation [26]. In this line of significance, prices and conversations are subjected to the power/knowledge relation *à la* Foucault [27], and then to asymmetry affecting relations between media companies and users. In real markets, as well as in online conversations, asymmetric power and asymmetric information produce speculations and adverse selection behavior [28].

Consequences for practices are many. Policy analysts and researchers must assist policy-makers not in a technical way but in a political one, designing robust basic structure able to resist the constant shifting coming from political and social actors and lobbies, acting in the complexity of real life. Nevertheless, concepts used in formal models are useful criteria, beyond their mathematical rigor, for organizing the information found in case studies, and for evaluating policy alternatives and designing a specific governance in a specific place.

In this line, governance is worthy as an instrumental tool, because it provides the society (producers, consumers, and policymakers) with at least clear game regulations. In designing and managing practices of sustainable tourism, the ways the networks of governance do work at the local level are fundamental. Moreover, effective governance of a tourist destination can be self-improving eventually fostering participation and people commitment, and their perception of being immersed in a democratic selection of satisfying decisions. Providing a place with some tools capable of spreading information, discussion and learning, can make social negotiations effective. The functioning local governance is the central point for a serious approach to a credible sustainable tourism [29]. Thus, sustainable tourism is understandable as a procedure of regulations within the discourse of policy making and analysis, following the constructivist postmodern vision [30].

For all of this, meaning, misusing, and misunderstanding of words matter a lot in co-creating the enhancement of sustainable tourism, especially in the still “virtual” Adriatic-Ionian region and the specific area of social media.

1.2. Objective, focus, and research questions

The objective of the paper is to illustrate the results of an explorative research of online conversations as retrieved from Twitter within a geographical area. Twitter microblogging is one of the social media used in the tourist sector, even its credibility should be contextualized [31]. The paper reports findings from a case study treating four tourist destinations located in the Adriatic-Ionian region, aiming at comparing the Eastern and Western coasts. The focus of the research was to analyze the meaning of *sustainable tourism* as possibly emerging from the texts produced by social media users.

Thus, the research questions are as follows: (i) how do suppliers, customers, and public agencies use Twitter for talking about sustainable tourism within the Adriatic-Ionian region? (ii) is there a difference in doing that between the two coasts of the Adriatic Sea? (iii) are public institutions using the web for designing and promoting their policy of sustainable tourism?

2. Approaches and procedures for data achievement

The approach of the research was explorative aiming at testing the possibility to use analysis of online conversation for delineating the meaning of *sustainable tourism* emerging from web users, including policymakers, within the Adriatic-Ionian region. For this purpose, the definition of the region was borrowed from European official documents [32]. In the region, four main tourist destinations of similar tourist appeal and dimension have been chosen. Singular destinations were selected based on the criteria of past reputation, established notoriety, the level of the main tourist indicators, such as tourism intensity per residents and area [33]. Thus, Cesenatico and San Benedetto del Tronto in Italy, and Makarska and Split in Croatia have been named as the most representative places, even considering all of them are destinations awarded by the Blue Flag program.

For each of them, the mass of themed texts retrievable from Twitter was collected during the last seasonal peak period, namely from July 15th to August 31st, 2016. Text analysis [34] of tweets can help to give the meaning of *sustainable tourism* as emerging from texting of actual actors. The definition of sustainable tourism given by a reputed eco-label tool was considered a useful proxy. For this, the Blue Flag program for beaches and marinas [35], run by the Foundation for Environmental Education (FEE) has been chosen and some sketches are given here following.

The Blue Flag program was started in France in 1985 and it has been operating in Europe since 1987, and outside Europe, since 2001, when South Africa joined. Today, Blue Flag has become a truly global program with an ever-increasing number of countries participating:

“The Blue Flag program promotes sustainable development in freshwater and marine areas. It challenges local authorities and beach operators to achieve high standards in the four categories of: water quality, environmental management, environmental education, and safety” [35].

For this, the choice is properly in line with the aim to consider *sustainable tourism* within the *marketing discourse*, as put in the previous paragraph. It appears valid to consider the Blue Flag program as a credible indicator of communicated sustainable tourism, and the above four categories as benchmarks for selecting keywords to be detected.

On the side of social media, the rationale for choosing Twitter is the following. This online medium is a huge deposit of pieces of information, being a website with 313 millions of users, 1 billion of accesses per month on websites embedding tweets, having 82% of mobile users, 3860 employees, and 35 offices worldwide, while having 79% of accounts registered abroad the US, 40 languages used, and 40% of technicians on total employees [36]. Even though at the present time, Twitter is reputed in a declining phase, it still has the capability of gathering content produced on other websites, such as Instagram, Facebook, and Tumblr and allows, even with some limitations, to survey user-generated data.

In order to optimize the process of gathering data, the web-based free service IFTTT (www.ifttt.com/wtf) was used. It allows connecting different online services furnished by other web tools, by using such a conditional recipe as “If This Then That”—the acronym of the service.

Data have been downloaded in a spreadsheet stored on Google Drive adding a row whenever the designed “recipe” matched a new web-generated content. For instance, if someone did tweet the word “Cesenatico,” the corresponding text was recorded, with date, hour, and user reference, in a dedicated spreadsheet. **Table 1** reports surveyed places and alternative location terms (tags) for selecting texts from Twitter. Alternative terms are related to common typing modes and languages of web users. **Table 2** reports different languages and keywords.

A geo-referenced condition was also given to IFTTT, namely if someone tweeted keywords within a 5 km radius area from the center place, the text was registered in a separated spreadsheet. Thus, data relating to a radius area from all the destinations have been collected.

Case sensitive and with and without hashtag (#) have not been used, accepting the burden of collecting fuzzy data and clearing them in the subsequent phase of analysis, aiming at not excluding any typing mode in texting.

Text analysis aimed at individuating the words displayed in **Table 2** when used in tweets and understanding the expressed sentiment. It seems important to remind that the searched terms are actually the Blue Flag criteria for defining sustainable tourism and the text mining was not robotized but manual.

Place	Alternative location terms (tags)
Cesenatico	Cesenatico
San Benedetto del Tronto	San benedetto del tronto
	Rivieradellepalme
	Sambenedetto
	Sanbeach
	Sanbenedetto
	Sanbenedettodeltronto
Makarska (Macarsca)	Makarska
	Macarsca
	Makarskariviera
	Makarskarivijera
Split (Spalato)	Split
	Spalato
	Splitriva
	Splitriviera
	Spljet
	#Split*

*The term #split was added in order to avoid confusion with the English “to split.” However, a certain “white noise” remained, due to the movie of M. Night Shyamalan, *Split*, featured just on July 27th, which produced a lot of online conversations.

Table 1. Places and alternative location terms for selecting texts from Twitter.

English	Italian	Croatian
Accessible	Accessibile	Dostupni
Algae vegetation	Alghe	Alge vegetacija
Bathing water	Acqua balneabile	Kupanje
Beach	Spiaggia	Plaža
Beach management committee	–	Upravljanje odbor
Beach operators	Operatori balneari	Plaža operatori
Beach user	Bagnante	Plaža Korisnik
Bicycling	Bicicletta	Biciklizam
Blue Flag	Bandiera Blu	Plava zastava
Blue Flag season	–	Plava zastava sezona
Camping	Campeggio	Kamp
Clean	Pulito	Clean
Code of conduct	Codice di condotta	Kodeks ponašanja
Dogs	Cani	Psi
Driving	Guida	Vožnja
Dumping	Scarico dei rifiuti	Odlaganje
Eco-label	Eco-label	Eko-oznaka
Eco-system	Ecosistema	Eko-sustav
Education	Educazione	Obrazovanje
Enterococci	Enterococchi	Enterokoka
Environment	Ambiente	Okoliš
Environmental management	Gestione ambientale	Upravljanje okolišem
Escherichia coli	Escherichia coli	Escherichia coli
Facilities	Servizi	Ustanove
First aid	Pronto soccorso	Prva pomoć
Flag	Bandiera blu	Zastava
Freshwater	Acqua dolce	Slatkovodni
Habitats	Habitat	Staništa
Health	Salute	Zdravlje
Industrial	Industriale	Industrijska
Information	Informazione	Informacije
Lifesaving	Salvamento	Spašavanje
Local authorities	Autorità locali	Lokalne vlasti
Local eco-system	Ecosistema locale	Lokalni eko-sustav
Map	Mappa	Map

English	Italian	Croatian
Marine areas	Aree marine	Morskih područja
Oil	Petrolio	Ulje
Physically disabled	Disabile	Tjelesnih invalida
Pollution	Inquinamento	Zagađenje
Recyclable	Riciclabile	Reciklirati
Safety	Sicurezza	Sigurnost
Sea	Mare	More
Sensitive area	Area sensibile	Osjetljivom području
Sewage	Fognature	Kanalizacija
Sustainable development	Sviluppo sostenibile	Održivi razvoj
Toilet	Bagno	WC
Waste bins	Cestini della spazzatura	Košarica za otpad
Waste containers	Contentitori per la spazzatura	Spremnici za otpad
Waste-water	Acque inquinate	Otpadnih voda
Water	Acqua	voda
Water quality	Qualità dell'acqua	Kakvoće voda

Table 2. Languages and words used (keywords) for text analysis.

3. Data and results

A total mass of nearly 35,000 tweets (short texts of maximum 140 characters each) has been retrieved from the Twitter web platform during the survey period. All of them have been subjected to text analysis for individuating the use of Blue Flag program keywords.¹ Only recent data have been collected, because older data might be partial due to random deletion, and thus unfeasible. **Table 3** reports their distribution in relation to place-destination and keywords as assumed in the above **Tables 1** and **2**. **Table 4** reports data relating to tweets emitted within a 5 km radius area from the center place.

The adopted research method is qualitative. Yet, the collected data allow some descriptive quantitative analysis. Numbers show some neat pieces of evidence that are worthy of mention.

The first finding to be stressed is that the most used “keywords” found in the collected tweets are the “names” of the singular destinations. This result was expected because tourists “must” obviously cite the name of the singular place when talking about it. Anyway, this data is useful too because it can help in sorting the places along two significative ladders. The first one is the sort

¹All recorded data are retrievable at the authors’ digitalized archive.

Place	Alternative location term (tag)	Number of tweets									
		Place name	Beach	Sea	Blue Flag	Flag	Marine area	Water quality	Toilet	Ecolabel	Other ¹
Cesenatico	Cesenatico	3895	188	301	150	1	45	6	390	36	188
San Benedetto del Tronto	San benedetto del tronto	2041	112	181	6	1	30	0	42	15	95
	Rivieradellepalme ²	100									0
	Sambenedetto	25									0
	Sanbeach ³	11									0
	Sanbenedetto ⁴	294									0
	Sanbenedettodeltronto ⁵	371									0
Makarska Macarsca	Makarska	1471	142	83	12	0	8	0	25	10	40
	Macarsca	0									0
	Makarskariviera ⁵	242									0
	Makarskarivijera ⁵	27									0
Split Spalato	Split										0
	Spalato	470									0
	Splitriva	0									0
	Splitriviera	0									0
	Spljet	1									0
	#Split	14982	118	142	124	4	3	2	33	135	374

¹To be compared with **Table 2**.

²Tag near exclusively used by tourist agencies in the Riviera Ligure.

³Tag for only local users.

⁴White noise related to Saint Benedict of Norcia.

⁵Promotionally used by tourist operators.

Table 3. Tweets per place and keywords.

Center place	Total	Per keywords								
	From 5 km radius area	Beach	Sea	Blue Flag	Flag	Marine area	Water quality	Toilet	Ecolabel	Other ¹
Cesenatico	3861	171	326	16	0	14	3	87	44	126
San Benedetto del Tronto	3252	98	239	33	5	11	3	40	40	84
Makarska	292	41	27	4	0	8	2	5	2	2
Split	3344	171	196	49	2	46	0	36	31	123

¹To be compared with **Table 2**.

Table 4. Tweets emitted in a 5 km radius area from the center place per keywords.

of places per number of citations, indicating the popularity of the singular destination. The second is the sequence of environmental criteria per number of citations and per singular destination. This sorting can indicate the grade of importance attributed to each criterion. Anyway, this sorting of destinations and criteria is strictly dependent on the twittering behavior of tourists.

The most cited destination is Cesenatico, followed by San Benedetto del Tronto, then Split and Makarska. The latter is surprisingly mentioned in fewer tweets than expected notwithstanding it is a very known and reputed Croatian seaside destination. As already said, the search term “split” is affected by white noise due to contingencies, for the English meaning of the word and a homonymous movie aired in the period of the survey. Adding the #split search term, the eventual white noise was put in evidence.

Both the two Italian destinations are more cited than those situated on the Croatian coast. Furthermore, another evidence regards the sorting of the two Italian resorts. Namely, Cesenatico, located in the Emilia-Romagna, does precede San Benedetto del Tronto, situated in the Marche region. This is an expected finding because Emilia-Romagna is much more renowned than the Marche region as a seaside destination.

The quantitative analysis regarding the “environmental criteria” also gives some ex-ante expected results about the most used keywords in twittering. Within the Blue Flag criteria, the keywords “sea” and “beach” are the most used ones in all the considered languages. Nevertheless, it is worth to compare this sorting with the preceding ladders regarding the Italian and Croatian destinations. In fact, when linked to singular destinations, they put the two Italian destinations before the Croatian ones. Data say with sufficient evidence that twittering tourists talk more about the two Italian destinations than the Croatian ones.

The preceding findings derive from the analysis of tweets talking about the singular destination without considering the geographical source of emission. They can come from everywhere, and they have been gathered because they contain a reference to a selected place. As stated in the previous section about the procedure for data achieving, also a geo-referenced constraint has been adopted in order to gather the tweets coming from the close area surrounding the singular resort.

Data exposed in **Table 4** show the total amount and distribution per keywords of tweets emitted from a 5 km radius area from the center place. These data cannot be compared to those in **Table 3** due to different languages used by tweeters. Anyway, they are useful because they can help in understanding if far or close twitters were talking about the four destinations. Then, a sorting using this criterion can be made.

Findings are intriguing because they show only partially a similar sorting dependent on keywords related to sustainable tourism. The two Italian resorts are together more “locally” commented than the Croatian ones. Cesenatico is in the first position, but the second is Split, followed by San Benedetto del Tronto, and Makarska. Anyway, the distance between Split and San Benedetto del Tronto is very thin. Prudently, one could say that the Italian resorts attract local tourists more than the Croatian ones.

It must be stressed that the global amount of tweets talking about the environmental issues of the four destinations are a very residual part. This is valid even for tweets emitted from the close area around each singular destination. The finding is remarkable also because no substantial differences emerged between the two coasts. This evidence is even more empowered by the fact that keywords referring directly to the eco-label Blue Flag are literally zero.

Besides the exposed quantitative analysis of data, a text analysis has been made by directly reading the texts of tweets. The main findings are described in the following.

The narrative about the selected destinations is focused on the leisure time tourists were spending during the vacation period. It is possible to state that all the texts are oriented to describe the leisure aspects of the singular destinations rather than their environment and sustainability features.

As an example of the detected typical behavior of tourists, a screenshot from a private Twitter account is reported in **Figure 1**.

Figure 1. Screenshot from Twitter. Private user.

The text says: “Yes, rather than Rio or Ipanema... Cesenatico is much better! @On the Beach in Cesenatico.”

The date of the tweet is coincident with the Olympic games in Brazil. The Italian tourist is spending his vacation in Italy, and a comparison between the most famous Brazilian beach and Cesenatico could be quite daring, so the tone is ironic. Anyway, the immediate attention is oriented to leisure time, at least in a satisfactory way and in a domestic destination. No mention of any environmental issue is detectable.

Even the following tweet displays a typical way and mood of texting: “Water of the pool is green because I’m actually in Cesenatico. #Rio2016 #RioOlympics2016.”

It helps illustrating the ambiguity of texting and the necessity to interpret the mood and the sense of the sentiment. The green color is usually used for labeling good environmental conditions. In this case, the tone is ironic against the quality of water in Cesenatico that shows the same color of the accidentally polluted swimming pools of Rio de Janeiro Olympic games instead of the usual blue.

Only a few other tweets talking about the water conditions have been detected. They are mainly referred to Italy using the same ironic tone for describing the bad quality of the sea or the general scarce cleaning of places.

Figure 2. Screenshot from Twitter. Public user.

A fundamental finding of the research is that no public body used Twitter for supporting its own activity and reputation about tourism and sustainability. They used this web tool in a very sparse mode, often privileging a security vision.

As an example of this behavior, a screenshot from a public Twitter account is reported in **Figure 2**. The twittering body is the Municipal Police of Cesenatico and the text says: “#safebeaches #Cesenatico To buy from #abusive vendors is not convenient: don’t do it! And the text in the attached picture is: Do you know why an abusive seller costs less? Because you pay his/her own taxes.”

4. Discussion

The survey on twittering about “sustainable tourism” in the Adriatic-Ionian region put in light some remarkable findings notwithstanding it was explorative and actually having limitations, due to mainly have analyzed only one social media and a few destinations.

The use of Twitter as a source of credible information is confirmed as problematic [31]. It was impossible to avoid disturbances and white noise affecting terms such as “split” and “Riviera delle Palme.” This latter is the alternative name both for the beaches of San Benedetto del Tronto in the Marche region and of part of the western coast of Liguria, situated in Northern Italy. Further, the term “sanbenedetto,” may be referred both to the place in the Marche and to Benedict, a very important and all over Italy venerated saint. Anyway, it is possible to consider both of them as capable of inducing a weak disturbance because the detected quantity was very limited. On the contrary, the search keyword “split” caused the necessity to use the “#split” (with hashtag) in order to avoid confusion with both the English word and the movie *Split* featured in 2016.

The research confirmed some preceding findings on the use of Twitter for scientific purposes [31]. Namely, information retrievable from this kind of new media to be useful should be compared with a solid knowledge of the geographical area and the specific social media topic. Considering all things, the research highlights that tourists have mainly used Twitter as a sort of stage where they can show their presence in a resort to a large audience. They were evidently interested in showing their leisure performances. It appears that the environmental characteristics of places are a tacit and obvious prerequisite for being an attractive seaside resort. Then, they do not make any narrative about them. On the contrary, when tourists perceive a bad environmental condition, they voice opinions by texting, but frequently using an ironic tone. In general, the concept of sustainability is treated in a very cursory way, being very distant from scientific approach and definitions.

In the theoretic section, a particular point was stressed discussing if policy analysts and researchers could assist policymakers extracting useful knowledge from the complexity of real life. In fact, policymakers do need to make governing choices by tempering complex scientific issues with common sense and popular perception of reality. Twitter is a web tool largely used by people for communicating their ideas. Policymakers could use it both for communicating and listening to opinions of people spread through the web. It could be properly

and more usefully used even about the delicate but fundamental issue of sustainable tourism. Obviously, political institutions may have used other social media rather than Twitter, and any finding of the research should be tested in alternative contexts. Notwithstanding this limitation, the research did confirm the very substantial problem posed by Derrida [20] on textuality of ideas and concepts.

Even in the narrow analytical space of Twitter texting, a distance between “scientific,” “political,” and “popular” approach to the definition of sustainable tourism is confirmed.

In its reality, the perception of sustainable tourism may be plural, depending on the language and the grammar of very different discourses. There is a specific discourse for any of different circles, those of researchers, policymakers, and the common people on vacation. These latter speak about environmental problems only when occasionally must face them.

This finding should not be underrated for any future research, ever beyond the strict area of web content analysis.

In responding to the posed research questions, from the case study, it appears that users of tourist services and destinations do tweet for talking about any destination referring to some self-evident qualifications such as being the resort “on the sea” and “having a sunny beach.” Detected texts are quite all oriented to narrate the leisure aspects of the singular destinations rather than their environment and sustainability. The fact that environmental features seem to be tacit and given by twittering tourists, should be considered not as a scarce attention to the environment, but in the context of a popular discourse. People are neither scientists nor policymakers but do have cogent opinions. It is important to underline that no differences emerged between the Italian and Croatian coasts.

Then, it is quite evident that public bodies use Twitter neither to promote their institutional activities nor for web listening to extract useful knowledge, notwithstanding they have social media accounts. In this condition, co-creation seems to be an item far from reality and “sustainable tourism,” an expression indicating a per se evident feature, not necessitating a more committed attention. This is not a good thing because co-creation for giving sense to sustainable tourism has the necessity to use a common discourse to be capable of producing an effective behavior.

It should be lastly stressed that the main limit of the research consists in having only Twitter being used and not also Instagram or Facebook, and other social media actually used by companies, tourists, and public bodies for their different purposes.

5. Follow up and further steps

Results of the present work should be useful both for research and economic or political purposes. The realms of private companies, public administrators, and policymakers involved in tourism should benefit from easy and free procedures for analyzing online conversations for sustaining policies and interventions. Researchers and destination managers would be also interested in the existing divide between official documents and statements on sustainable tourism and the reality of popular perception of the issue.

The Adriatic-Ionian region is fit for analyzing the formation of a new socio-economic area in the Mediterranean basin and for testing the possibility to join different cultures and traditions that are too long separated. Indeed, it is a challenging area for testing the actual possibility to make international policies on naturally trans-border issues such as sustainable tourism. The poor public interventions weaken the positive use of Internet and the web tools. Public bodies of the area are far from understanding the potentiality of using the new media facilities for innovating purposes. They do not properly use them for spreading or extracting information from the web. On the contrary, they could use accessible web applications for governing, between many others, the tourism phenomenon.

The continuing diffusion of social media users suggests deepening the topic in future, even though theoretical and practical problems are paramount, specifically in the topic of the use of new media for connecting people to public institutions. Next steps in this topic will strictly necessitate the analysis of other web-based social media.

Author details

Gian Luigi Corinto* and Fabio Curzi

*Address all correspondence to: gianluigi.corinto@unimc.it

Department of Education, Cultural Heritage and Tourism, The Section of Environment and Territory, University of Macerata, Italy

References

- [1] Conrady R. Travel technology in the era of Web 2.0. In: Conrady D, Buck M, editors. *Trends and Issues in Global Tourism*. Heidelberg and Berlin: Springer Verlag; 2007. pp. 165-184
- [2] Milano R, Baggio R, Piattelli R. The effects of online social media on tourism websites. In: Law R, Fuchs M, Ricci F, editors. *Information and Communication Technologies in Tourism*. Vienna: Springer; 2011. pp. 471-483
- [3] Donath J. A semantic approach to visualizing online conversations. *Communications of the ACM*. 2002;**45**(4):45-49
- [4] Godes D, Mayzlin D. Using online conversations to study word-of-mouth communication. *Marketing Science*. 2004;**23**(4):545-560
- [5] Corinto GL. Per una prospettiva di governance del processo politico di gestione sostenibile di una destinazione turistica: il caso di Cala Gonone. In: Pecoraro-Scanio A, a cura di. *Turismo sostenibile: Retorica e Pratiche*. Ariccia (RM): Aracne editrice; 2016. pp. 179-200
- [6] Prahalad CK, Ramaswamy V. Co-creation experiences: The next practice in value creation. *Journal of Interactive Marketing*. 2004;**18**(3):5-14

- [7] Prahalad, CK, Ramaswamy V. *The Future of Competition: Co-creating Unique Value with Customers*. Boston, MA: Harvard Business Press; 2013. 272 p
- [8] Levine R, Locke C, Searls D, Weinberger D. *The Cluetrain Manifesto: The End of Business as Usual*. Cambridge, MA: Perseus Publishing; 2001. 147 p
- [9] Smith SJ. Society-space. In: Cloke P, Crang P, Goodwin M, editors. *Introducing Human Geographies*. London: Hodder Arnold; 2005. pp. 18-35
- [10] Tuan YF. *Space and Place*. Minneapolis, MN: University of Minnesota Press; 1977. 248 p
- [11] Lefebvre H. *The Production of Space*. Translation of Nicholson-Smith D. Oxford: Blackwell; 1991. 454 p
- [12] Prampolini M. *Ferdinand de Saussure*. Teramo: Giunti & Lisciani; 1994. 126 p
- [13] Dell'Agnese E. Welcome to Tijuana: Popular Music on the US–Mexico Border. *Geopolitics*. 2015;**20**(1):171-192
- [14] Acemoglu D, North D, Rodrik D, Fukuyama F. *Governance, Growth, and Development Decision-making*. Washington DC: World Bank; 2008. 35 p
- [15] Bobrow DB, Dryzek JS. *Policy Analysis by Design*. Pittsburgh, PA: University of Pittsburgh Press; 1987. 247 p
- [16] Storr VR. The market as a social space: On the meaningful extraeconomic conversations that can occur in markets. *The Review of Austrian Economics*. 2008;**21**:135-140
- [17] Bruner J. The narrative construction of reality. *Critical Inquiry*. 1991;**18**(1):1-21
- [18] Gordon C, editor. *Power/Knowledge: Selected Interviews and Other Writings, 1972-1977*. Michel Foucault. Paris: Pantheon; 1980. 271 p
- [19] Anholt S. Some important distinctions in place branding. *Place Branding and Public Diplomacy*. 2005;**1**(2):116-121
- [20] Derrida J. *Of Grammatology*. Translated by Chakravorty Spivak G. Baltimore, MD: John Hopkins University Press; 1997 [1967]. 369 p
- [21] Ó Tuathail G. *Critical Geopolitics, The Politics of Writing Global Space*. London: Routledge; 1996. 314 p
- [22] Skålén P, Fougère M, Fellesson M. *Marketing Discourse: A Critical Perspective*. London: Routledge; 2008. 196 p
- [23] Hillmann R, Trier M. Sentiment polarization and balance among users in online social networks. In: *Proceedings of the AMCIS; 9 August 2012; Seattle, WA: AMCIS: 2012*. Paper 10
- [24] Pang B, Lee L. Opinion mining and sentiment analysis, *Foundation and Trends in Information Retrieval*. 2008;**2**:1-135

- [25] Hayek FA. Individualism and Economic Order. Chicago, IL: The University of Chicago Press; 1980 [1948]. 86 p
- [26] Horwitz S. Monetary exchange as an extra-linguistic social communication process. *Review of Social Economy*. 1992;**50**(2):193-214
- [27] Hall S. Foucault: Power, knowledge and discourse. In: Wetherell M, Taylor S, Yates S, editors. *Discourse Theory and Practice: A Reader*. London: Sage; 2001. pp. 72-81
- [28] Akerlof GA. The Market for 'Lemons': Quality Uncertainty and the Market Mechanism. *The Quarterly*. 1970;**84**(3):488-500
- [29] UNEP. Annual Report [Internet]. 2003. Available from: <http://www.unep.org/annualreport/2003/>. [Accessed: 14-10-2016]
- [30] Rickly-Boyd JM. Authenticity & aura: A Benjaminian approach to tourism. *Annals of Tourism Research*. 2012;**39**(1):269-289
- [31] Castillo C, Mendoza M, Poblete B. Information credibility on twitter. In: *Proceedings of the 20th International Conference on World Wide Web*; 28 March–01 April 01, 2011: Hyderabad, India: WWW11; 2011. pp. 675-684
- [32] European Council. EU Strategy for the Adriatic and Ionian Region [Internet]. n.d. Available from: http://ec.europa.eu/regional_policy/en/policy/cooperation/macro-regional-strategies/adriatic-ionic/. [Accessed: 12-06-2016]
- [33] Dupeyras A, MacCallum N.. Indicators for Measuring Competitiveness in Tourism: A Guidance Document. *OECD Tourism Papers*. Paris: OECD Publishing; 2013. p. 62
- [34] Holsti OR. *Content Analysis for the Social Sciences and Humanities*. Reading, MA: Addison-Wesley; 1969. 235 p
- [35] Blue Flag. A world-renowned eco-label trusted by millions around the globe [Internet]. n.d. Available from: <http://www.blueflag.global> [Accessed: 12-06-2016]
- [36] Twitter. n.d. <https://about.twitter.com/it/company> [Accessed: 12-06-2016]