Ca' Foscari
University
of Venice

Single Cycle Degree programme

in Marketing and Innovation
Second Cycle
(D.M. 270/2004)

Final Thesis

Fragile cities: how Venice and Barcelona communicate their need for sustainability

Supervisor
Ch. Prof. Michele Bonazzi

Graduand
Emma Rottigni
Matriculation Number 861366

Academic Year
2018/ 2019

El futuro no se predice: se construye.
PLAN DEL TURISMO ESPAÑOL 2020

You do not predict the future: you build it.
PLAN OF SPANISH TOURISM 2020

Acknowledgements

I am using this opportunity to express my gratitude to the people who, in different ways, supported me during my academic path.

Above all, I would like to thank my family. I owe it all to you.

Furthermore, I am profoundly grateful to my supervisor, Professor Michele Bonazzi for providing me with unfailing support and helpful feedback throughout the writing of this dissertation.

Besides, I gratefully acknowledge the thesis prize received by the *Associazione Veneziana Albergatori* in memory of Giuseppe Bortolussi, to whom this thesis is dedicated. Heartfelt thanks go to the *Associazione Veneziana Albergatori* and especially to its director, Doctor Claudio Scarpa, to the Bortolussi family and to Professor Michele Tamma, for believing in the initial stage of this work.

Last but not least, I am immensely grateful to Antonio, whose patience, support and kindness are always invaluable.

Index

Introduction

The main purpose of this work is to compare the social media strategies used by the main institutional accounts in Barcelona and Venice with a focus on how they seek to promote sustainable behaviours related to tourism. For this reason, this dissertation starts with an introduction about sustainability (Chapter 1). First, sustainability in general is analysed and then the focus is shifted towards sustainable tourism. Particular attention is devoted to the theoretical foundations of sustainability in tourism, to the concrete actions aimed at reducing the environmental consequences of tourism and to the communicative techniques used for promoting and encouraging sustainability in tourism. Chapter 1 also deals with criticism toward this concept: inequalities among stakeholders, measurement difficulties and *greenwashing* practices are among the main negative observations. Finally, sustainable tourism is analysed based on geographical areas. First, the European Union is taken into account: sustainability-related projects, organisations and regulations are examined; subsequently, plans, regulations and initiatives related to sustainable tourism in Spain and Italy are analysed at a national, regional and local level.

Chapter 2 is devoted to casting a light on how public authorities communicate in the Internet era. Not only it deals with public communication in Web 2.0, but also Chapter 2 focuses on how the advent of the internet influenced touristic communication. Both touristic websites and touristic-related social networks are studied throughout the Chapter.

Chapter 3 concerns the analysis of three problems that affect each city. For what Barcelona is concerned, the main focus is on housing: paragraphs 3.2.1 and 3.2.2 respectively cast a light on the reasons why estate prices are increasing and on the phenomenon of illegal rents; furthermore, in paragraph 3.2.3 we discuss which neighbourhoods in Barcelona have the worst relationship with tourists and the underlying causes. In addition, some of the solutions proposed for each problem are also analysed. With regards to Venice, we focus on how locals and tourists deal with the complex logistics of the city and how institutions seek to deal with the suburbs and their issues. Finally, problems related to littering and garbage

collection are considered: these issues are exacerbated by the structure of the city as well as by the presence of a significative number of tourists in the city.

Chapter 4 is dedicated to the text analysis of the Twitter and Facebook messages posted by Barcelona and Venice. The analysis is conducted both with quantitative and with qualitative methods. For what the quantitative approach is concerned, the data is elaborated in order to gather insights about the most frequent words and hashtags, the sentiment of the messages and the relationships among words. Subsequently, a subset of the database concerning sustainability-related messages is analysed in detail: the evolution in the number of sustainability-related posts is taken into account, together with the main clusters related to sustainable tourism. For what the qualitative approach is concerned, the problems mentioned in Chapter 3 are considered with the objective to cast a light on how and how often they are addressed in the texts. Subsequently, a selection of the most significant messages is examined in order to understand and compare the different communicative techniques used.

1. Chapter 1: Sustainable tourism

This chapter aims at casting a light on the concept of sustainable tourism. In order to have a broad idea of the topic, we initially describe, in a nutshell, the (positive and negative) impact that tourism can have on destinations.

Afterwards, we move on to the theoretical foundations of sustainability in tourism and we illustrate the conferences and charters that shaped the concept of sustainable development first and of sustainable tourism later.

Subsequently, we examine the concrete actions that have been taken with the view of making sustainable tourism a widely adopted concept: we underline the importance of planning as well as the benefits of a close coordination between authorities at a local as well as at a macro level.

The fourth section is devoted to eco-tourism and responsible tourism because sustainable tourism acts like an umbrella concept for these subsects: ecotourism deals with touristic activities in contact with nature, whereas responsible tourism prioritizes respect for local population.

In order to give a complete and objective idea of the topic, we also take into account the work of some scholars who criticized sustainable tourism by challenging its premises and/or the actions taken in order to implement it.

In paragraph 1.6 we move on to the approach that the European Union took with the objective of enhancing sustainable tourism: some of the main the projects that have been created with this purpose are described, together with the main institutions that work for sustainability in tourism.

In the next section we draw attention to the formal certifications and ecolabels that have been created in order to inform customers and users about the sustainability of a destination or touristic enterprise: we illustrate the procedure necessary for creating an ecolabel as well as the main institutions managing them, and we also briefly analyse some of the most well-known ecolabels.

Afterwards, we examine the main communication methods that can be used to transmit the importance of sustainable tourism and we describe an adaptation of the traditional marketing mix model as well as social marketing and demarketing approaches.

The two final sections are devoted to sustainable tourism in Spain and Italy.

1.1. Positive and negative impacts of tourism in general

Before investigating sustainable tourism in detail, we take into account tourism in general in order to cast a light on its positive and negative impacts on destinations. Tourism is a sector which has increasingly grown in the last years (WTO, 2004) and has a positive impact on destinations in connection with:

- Job positions, economic development, investments, satellite activities and, more in general, revenues (WTO 2004; De Carlo & Caso, 2007); such revenues are particularly important because they can be reinvested in the conservation of existing resources (WTO, 2004);
- Facilities and infrastructures: both tourists and local residents will benefit from these amenities (WTO 2004; De Carlo & Caso, 2007);
- Increase in value of cultural heritage and environmental resources (De Carlo & Caso, 2007);
- Intercultural relationships between locals and visitors (De Carlo & Caso, 2007);

By contrast, tourism may also have negative consequences on local communities:

- Consumption of scarce resources (e.g. water, soil, landscapes, marine ecosystems) (De Carlo & Caso, 2007);
- Damage of ecosystems with negative consequences on wildlife (De Carlo & Caso, 2007);
- Crowding out, which can be defined as the induced need for local inhabitants to move away from the tourist destination (De Carlo & Caso, 2007). Among the causes of this phenomenon there can be raise of prices, privatization and lack of physical space (for example in restaurants, beaches or property market) (WTO, 2004);
- Waste and pollution both at a local level (due to bad management of solid waste and littering) and at a global level (due to global warming and climate change) (Neto, 2003; WTO 2004; De Carlo & Caso, 2007);
- Damage of cultural values (WTO, 2004);
- Increase of prices (ITF-SDT, 2009);
- Visual impact (e.g. littering, sewage, poorly-designed architecture) (Hunter & Green, 1995).

These threats not only endanger the local community, but also threaten the value of the touristic destination itself (Neto, 2003; Pomering et al., 2011). This phenomenon is linked to the concept of *life-cycle* of the destination: in this view, the cycle starts with the discovery of the location and the fruition by a restricted élite of tourists; subsequently, various institutions and enterprises will invest in the destination and thus enhance its visibility and facilities (Butler 1980). However, after the resources available at the destination will have been exploited, it will become difficult for the destination to attract tourists and it will gradually lose its popularity (ibidem). Another factor which may cause tourists to start avoiding a destination is the hostility of residents (WTO, 2004). In fact, the *life-cycle* metaphor can also be employed to describe the attitude of locals: most of them greet the first tourists with enthusiasm, but they increasingly resent visitors as more tourists exploit the destination; as time goes by, residents will end up being intolerant towards tourists (Butler, 1980).

In spite of the negative consequences mentioned above, it is important to note that tourism itself does not have a higher negative impact on the environment than other economic activities; however, a careful management of tourism activities (i.e. control of the number of visitors as well as of the impact of touristic enterprises) is crucial for avoiding negative consequences on resources (Galli and Notarianni, 2002).

It should also be highlighted that assessing the impact of tourism is often a challenging task: in some cases, in fact, activities are so inter-linked with each other that it becomes difficult to state exactly which activity is threatening the system; furthermore, natural change is strictly intertwined with tourism-generated change, which makes it strenuous to distinguish between the two; it is also problematic to quantify the indirect impact of tourism, especially in the long-run (Hunter & Green, 1995).

The current tendency is to evaluate a destination by considering the number of arrivals; however, a more sustainability-driven approach would take into account the economic and social impact that tourism has on the destination; for example, using commodities and services produced locally is an investment which can foster local economy and augment the positive impact of tourism (ITF-SDT, 2009). Most

of the pollution generated by the tourist sector is caused by cars and airplanes; however, there is still a lot to do to reduce this negative impact (EEA, 2012). The actions aimed at reducing the negative impact of tourism should be focusing on a more accurate use of energy and water (EEA, 2012).

Many destinations seek to communicate to individual tourists the impact of their behaviour on the environment (De Carlo & Caso, 2007). These projects stem from the idea that the "citizen-traveller" can understand the consequences of his/her actions and act in a sustainable way in order to preserve the destination and the community that is hosting him/her (Musarò, 2014). On the other hand, local authorities seek to empower local communities in order to reach an agreement on the importance and value of tourism and on the consequences (both positive and negatives that it can have) (WTO, 2004).

We discuss concrete actions and communication techniques for sustainable tourism more in detail later in this chapter.

1.2. Definition and theoretical foundations of sustainable tourism

In order to provide a thorough definition of sustainable tourism, we begin with the definition of the more general concept of sustainability or sustainable development.

One of the first and most accredited definitions of sustainable development is the one provided by the 1987 Brundtland Report *Our common future*; in this document, sustainable development is defined as the development that allows current generations to meet their needs without jeopardizing the chances of future generations to do the same. In other words, sustainable development consists of managing the technological, social and environmental resources in order to let economic growth be enjoyed by every person worldwide, both now and in the future (Brundtland et al., 1987).

In 1988, the idea of sustainable development was enlarged to include sustainable tourism, which was defined as the kind of tourism that meets the current needs of both tourists and destinations, while also preserving the chances of the destination to attract visitors in the future (WTO, 1999).

Nevertheless, it is important to note that even before the above-mentioned theoretical acknowledgements of sustainable tourism, during the 1980s, small

associations, especially in northern Europe, had begun recognizing the need for travellers and touristic enterprises to begin taking responsibility for the sustainability of their conduct (Davolio and Somoza, 2016).

In 1989 the The Hague declaration, which regards predominantly tourism in general, recognized the importance of a careful planning for minimizing the negative impact of tourism (WTO, 1989).

In 1993, during the United Nations Rio de Janeiro Earth Summit, an action programme for sustainable development called Agenda 21 was developed. According to Agenda 21, there are three major and interdependent dimensions of sustainability: economic, social and environmental (United Nations, 1993). The former concerns the need of equally distributing wealth; social sustainability deals with poverty alleviation and respect of human rights; finally, environmental sustainability involves management of resources (both renewable and not renewable) with the objective of hindering pollution and safeguarding natural heritage (ibidem).

Agenda 21 also deals with sustainable tourism: the document, in fact, recognizes the need for the promotion of a tourism which complies with the importance of the environment and of the local culture (United Nations, 1993). Sustainable tourism is thus seen as a way to reach sustainable development of both cities and countryside and especially to level out the touristic presence in order to reduce inequalities in the number of visitors throughout destinations and time periods (ibidem).

In 1995, the World Tourism Organization, the Earth Council and the World Tourism and Travel Council published a version of the Agenda 21 specifically adapted for sustainable tourism (WTTC et al., 1995). The principles stated in the *Agenda 21 for the Travel and Tourism Industry* can be summarized as follows (WTTC et al., 1995):

- Tourism should contribute to the healthy lifestyle of tourists and to the preservation of natural and cultural resources;
- Consumption and production of touristic services, facilities and resources should be sustainable and environmentally friendly (ibidem);
- The economic system should be open and non-protectionist (ibidem);

- Touristic development should be carefully planned and the opinions of all the stakeholders should be taken into careful consideration during this process (ibidem);
- Local inhabitants should benefit from tourism and from the workplaces created (ibidem).

It was thanks to these developments that tourism ceased to be considered a "soft impact activity" and was acknowledged as actually having an impact on resources and on the lives of residents (Garrod and Fyall, 1998).

In 1999, the *WTO Guide for Local Authorities on Sustainable Tourism Development* stated the main requirements for sustainable tourism: it should safeguard natural and cultural resources, both for future and for current generations; moreover, it is fundamental that both tourists and natives benefit from tourism (Bryman and Cramer, 1999).

Several conferences were held after the United Nations Rio de Janeiro Earth Summit mentioned above (Rio+5 in New York in 1997, Rio+10 in Johannesburg in 2002, Rio+15 in Jakarta in 2007 and Rio+20 in Rio de Janeiro in 2012) (Ruíz, 2013). These conferences underlined the slowness of the international community in adopting sustainable approaches (ibidem). During the Rio +20 conference, in particular, the importance of increasing the support to sustainability in tourism was underlined (United Nations, 2012). Supporting initiatives should be aimed at granting access to credit to needy people and small or medium enterprises, as well as providing regulations and policies that can encourage sustainable practises (ibidem).

The ways these theoretic principles have been applied are discussed in the next paragraph.

1.3. How to implement sustainable tourism: concrete actions

After remarking theoretical definitions of sustainable tourism, we now analyse the concrete steps taken in order to implement a sustainable tourism strategy.

Sustainability in tourism is an approach that encompasses diverse sectors (e.g. accommodation providers, carriers, travel agencies, etc.) as well as diverse points of view (i.e. societal, cultural and environmental): concrete actions aimed at

enhancing sustainability should then include all of these aspects (Ciuchete and Lefter, 2011).

In its *International Task Force on Sustainable Tourism Development*, the Marrakech Process on Sustainable Consumption and Production developed the following guidelines for policy makers with regards to sustainable tourism: firstly, the importance of an integrated approach involving all the levels of governance is recognized; it is also advised that touristic enterprises commit to corporate social and environmental responsibility; finally, the Task Force recognizes the need to measure the results of the initiatives undertaken, in order to be able to adapt the upcoming campaigns and regulations (ITF-STD, 2009).

Another document providing important guidelines for the implementation of sustainable tourism is the Local Agenda 21 (from now on LA21), developed by the United Nations Environment Programme (Vourc'h & Denman, 2003). According to LA21, even though tourism has traditionally developed thanks to private investment, public contribution and support is needed, especially at a local level (ibidem). It is also important to make sure that public investment at a macro level (i.e. national or regional) is strictly coordinated with investment at a micro level (i.e. local) (ITF-SDT, 2009). Public investment in the tourism sector has gained importance due to the complex nature of touristic products: in fact, the perception of destinations is made up of a vast variety of factors, such as transport, overall information, infrastructures, natural resources, safety, culture and mentality of locals (Vourc'h & Denman, 2003). Private bodies alone are unable to change these perceptions (due to their fragmented nature) and need help and coordination coming from local authorities (ibidem). The intervention of decentralized public authorities is only possible thanks to the tendency, common to many countries, to increasingly empower local authorities, rather than centralize decisions (ibidem). Local authorities are considered the best actors for fostering sustainable tourism for the following reasons: (1) if the sector was only regulated by market pressures, sustainability would not be a priority; (2) local authorities are democratic and long-lasting bodies that are able to control development, space usage, community infrastructures and services (Vourc'h & Denman, 2003; De Carlo & Caso, 2007).

According to the LA21 approach, in order to effectively invest in local sustainable development it is fundamental, firstly, to carefully plan such development: preliminary discussions about the main issues and the goals are the basis of planning and should be done in a networked way, involving all the actors in the environment (bottom-up approach) and possibly coordinated by a higher political authority, in order to ensure that all the community and interests are acknowledged (via direct participation as well as via press conferences with local media, surveys, websites etc.) in a two way communication approach (Vourc'h & Denman, 2003; ITF-SDT, 2009). Subsequent studies analysed more in detail communication between stakeholders and public authorities for sustainable tourism (Budeanu et al., 2015). These studies found some issues that are currently preventing a clear and effective communication between governments and stakeholders, these issues have to do with (1) disagreement on the definition of sustainability; (2) complexity of the relationships among destinations, local inhabitants, governments and shareholders (especially those focusing on short-run objectives) with regards to sustainability; (3) difficulties in communicating the importance of sustainability; (4) trade-off between regulating the sector and letting stakeholders adopt the sustainability actions that they prefer; (5) reluctance to look at other sectors (i.e. outside the touristic practices) to search for innovative approaches (Budeanu et al., 2015).

LA21, also highlights the importance of a strategy that is not only focused on tourism, but rather takes into account sustainable development across all the economic sectors (Vourc'h & Denman, 2003).

The main objectives of the LA21 approach are the following (Vourc'h & Denman, 2003):

- Maintain an already high-quality management of environmental resources;
- Deal with problems caused by a former unsustainable approach to tourism (e.g. uncontrolled consumption of natural and cultural resources);
- Counterbalance the interests of tourists and residents;
- Encourage sustainable tourism;
- A combination of the above (ibidem).

In order to develop a useful plan for sustainable tourism, it is fundamental to conduct preliminary research, including an analysis of the tourism market structure (Vourc'h & Denman, 2003). In doing so, it is important to examine touristic demand (i.e. tourist segments, seasonality etc.) and offer (i.e. hosts, infrastructures, attractions and the facilities they provide) (ibidem). Moreover, it is crucial to gather information about the context (i.e. environment, society and the business environment) and the possible consequences of tourism development (ibidem). Planning should carefully consider:

- Spatial planning, which deals with the use of land as a resource; spatial planning should be consistent with the overall strategy (e.g. building permissions should not be granted if the main objective is to reduce the population overload) (Vourc'h & Denman, 2003);
- Carrying capacity, which can be defined as the maximum number of tourists that a location can absorb without being threatened (Vourc'h & Denman, 2003). Carrying capacity can be physical (concerning land), psychological (which is outreached when tourists feel no longer welcome in the destination), social (i.e. the maximum tolerance of residents with regards to tourism) and economic (which concerns the economic activities that the destination can absorb without displacing local activities) (Hunter & Green, 1995). Some scholars argue in favour of setting tangible limits for possible changes, rather than thinking carrying capacity in terms of number of people (Vourc'h & Denman, 2003).
- Environmental charges, which consist of additional amounts of money charged on tourists or tourist enterprises with the aim of generating a revenue for public authorities (Vourc'h & Denman, 2003). This revenue will be invested in contrasting the environmental damages caused by the sector (ibidem).
- Evaluation and assessment methods, which can be used by institutions and firms in order to gather information about former initiatives and, possibly, improve the results obtained (Budeanu et al., 2015). Some scholars point out the scarce usage of some of the most powerful instruments in the tourism

sectors, such as life cycle assessment, ecological footprint and environmental risk assessment (ibidem).

It is also important to keep tourist satisfaction in mind when planning about tourism; satisfied tourists will endorse the destination and thus contribute to destination branding (WTO, 2004). Tourist satisfaction depends on quality of services, facilities and infrastructure, relationships with local population, initial expectations (compared with actual experience) (ibidem). The strategy resulting from the planning process should take into account both the needs and goals of the community, and the technical advice of experts in the sector (Vourc'h & Denman, 2003).

The concrete actions advised by the LA21 approach, can be summarized as follows: (1) managing and controlling the environment with actions that are normal local authority tasks, but also have an impact on tourism (e. g. monitor water and air quality, improve systems of sorted waste collection); (2) promoting the use of non-polluting transport; (3) accurately managing the cultural and natural heritage sites (e.g. with admission fees and communications campaigns); (4) encouraging sustainability for tourism enterprises (e.g. provide guidance and funds for environmentally friendly initiatives) and certificate sustainable actors; (5) making sure that the whole community benefits from tourism (e.g. by incrementing work opportunities or by allowing locals to enjoy natural and cultural resources at a reduced cost); (6) actively communicating both with residents and tourists (Vourc'h & Denman, 2003; De Carlo & Caso, 2007).

Sustainable tourism should not only be managed by destinations, but it is a global issue and should thus be addressed by nations, by taking into account the connections among them (Hunter & Green, 1995).

Hunter and Green (1995) categorize and sum up the actions that can push sustainable tourism as follows:

- Communication toward tourists, residents and private actors in the sector;
- Subsidies and taxes aimed at imposing extra costs on unsustainable activities;
- Policies and agreements (being the former stricter and the latter voluntary), which may involve environmental certifications or quotas;

- Infrastructure, such as improved public transport or waste management plants;
- Investments (ibidem).

1.4. Similar concepts: eco-tourism and responsible tourism

Inside the *umbrella concept* of sustainable tourism there are similar and/or complementary concepts worth an analysis.

Firstly, we describe ecotourism. Ecotourism is a subset of sustainable tourism and can be defined as the kind of tourism chosen by people who want to get in touch with nature in uncontaminated areas and to travel in a conscientious way with the purpose of preserving the natural environment (Galli and Notarianni, 2002). As can be noted from the definition, ecotourism only focuses on natural resources, and leaves out the cultural and historical ones (ibidem). It is not clear how this form of tourism originated, some identify the naturalists travelling together with the conquerors in 1500s as the first ecotourists: these people were travelling to unexplored lands with the objective of studying and discovering the different species living there (ibidem). Other interpretations consider the opening of the Yellowstone National Park in 1872 as the beginning of the genuine attention towards natural preservation and divulgation (ibidem). Subsequently, modern ecotourism emerged between the 1970s and 1980s when environmentalists started looking for an alternative to mass tourism, while at the same time underdeveloped countries started recognizing the opportunity of ecotourism for their economy (ibidem). As well as by the increasing responsibility people are taking for environmental preservation, ecotourism is motivated by a deepening aversion for crowded destinations, improved touristic marketing and growing interest towards educational tourism and foreign cultures (ibidem).

We now examine responsible tourism: this concept encompasses journeys that are carefully planned and aim at building relationships with local inhabitants (Davolio and Somoza, 2016). Actions typical of responsible tourism are: looking for accommodation at the locals' houses, using public transport or low impact transport, using local guides and, more in general, supporting local activities (ibidem). The prices paid for services should also be fair in order to avoid jeopardizing the right of local populations to earn money from tourism (ibidem). As

a consequence of these behaviours, most of the wealth generated by tourism will remain within the destination, rather than being absorbed by foreign corporations (ibidem).

1.5. Critiques of sustainable tourism

In order to provide a complete description of sustainable tourism, it seems sensible to also look at the criticism that this phenomenon inspired. In fact, despite the large amount of literature produced on this topic, only few scholars analysed sustainable tourism with a critical and pragmatic approach (Budeanu et al., 2015). First of all, critics underline the importance of taking touristic demand into account; in fact, it cannot be taken for guaranteed that touristic demand that exists now will continue to exist in the future (Liu, 2003). Tourism actors work with the objective to harmonise resources and demand (i.e. to improve facilities in order to respond to tourists' needs or to increase demand when not enough tourists are visiting the destination) (ibidem). Even though at a global level touristic demand is currently rising, this may not happen in the future: in fact, demand may fall due to global events (e.g. 11th September 2001), competition among destinations and rising sophistication of tourists (ibidem).

Critics also remark that there is no evidence that tourists (or at least a consistent part of them) showed interest for environmentally friendly holidays (Sharpley, 2010).

Another frequent critic is that the dynamic nature of resources is not considered: in sustainable tourism literature it is often ignored that the value that future generations will give to resources may be different from the value we give them now (Liu, 2003). Sustainable tourism critics thus insist on the importance of finding an equilibrium between completely exploiting resources and leaving nature untouched (ibidem).

Despite equality claims in sustainability literature (WTTC et al., 1993), critics highlight that often stakeholders in tourism activities are not given equal importance: in fact, local populations, especially in third world countries, do not benefit of most of the advantages of tourism (despite being themselves part of the experience for tourists), nonetheless, they bear a large part of the costs (Liu, 2003). On the other hand, stakeholders whose voice is most often listened to are mostly

big tourism firms or governmental bodies (Budeanu et al., 2015). Additionally, several critics underline how literature focuses on the importance of inclusion of stakeholders without providing specific directions on how to select stakeholders and on how to communicate with them (ibidem).

Most scholars (Kotler and Levy, 1971; Hunter & Green, 1995; Rivera & Rodríguez, 2012; Davolio and Somoza, 2016) consider detrimental the cultural and social changes introduced as a consequence of tourism. Nonetheless, changes in local cultures and societies may also be positive (Liu, 2003). For example, new ideas, mindsets and cultures can positively impact third world countries in some cases (ibidem). Westernalisation is of course not desirable, but an exchange of ideas or cultural values can benefit destinations (ibidem).

Moreover, the difficulty of measuring sustainable tourism in an unambiguous way makes it a far less significative approach according to several scholars (Butler, 1999; Liu, 2003).

Critics also state that, in some cases, sustainable tourism can be counter-productive (Liu, 2003). In fact, some sustainability driven forms of tourism encourage visits to unspoilt nature, which is the most endangered habitat and for this reason needs the highest degree of protection (Butler 1999; Liu, 2003).

Furthermore, sustainable tourism relies on small groups, which makes it impossible for it to cope with the same demand as mass tourism; for this reason, mass tourism cannot be substituted by sustainable tourism (Liu, 2003). Therefore, sustainable tourism is depicted as "a micro-solution to a macro-problem" (Liu, 2003; Sharpley, 2010). Nevertheless, critics recognize the importance of sustainable tourism as a marketing strategy aiming at offer diversification (Liu, 2003).

A further critique to sustainability is that this kind of discourse may push companies to utilize *greenwashing* practises (Sharpley, 2010). Greenwashing can be defined as the promotion of products with sustainable labels in order to leverage the environmental guilt of customers or the value that the environment has for them (ibidem). Of course, if enterprises are not actually taking considerable steps in order to be environmentally friendly, this is a hypocrite claim (ibidem).

Furthermore, critics of sustainable tourism highlight the need of policies to regulate sustainable tourism in a concrete and viable way, as well as widely-agreed theoretical foundations (Liu, 2003; Sharpley, 2010; Budeanu et al., 2015). In fact, critics state that little has been done to incentivise the adoption of a sustainable approach (Sharpley, 2010).

Sharpley (2010) also argues that sustainability and the tourism sector are not compatible. First of all, due to the opposition between the holistic approach required by sustainability and the fragmentation of the tourist sector (Sharpley, 2010). Secondly, he underlines that companies in the tourist sector often seek profit, especially in the short run: this conflicts with the attention given to future generations by sustainable development (ibidem). Furthermore, these companies are often controlled by élites (either at a local or at a global level) and this makes it unlikely that equity can be reached through tourism (ibidem).

Nevertheless, research on sustainable tourism is still in progress and new and more efficient policies are being developed and experimented. In the future, sustainable tourism will hopefully adapt in a better way to the need of the society and the environment.

1.6. Sustainable tourism in the European Union

Since both Venice and Barcelona, the destinations that we analyse in the next chapters, are part of the European Union, it seems meaningful to focus on how sustainable tourism is managed within this institution.

Despite the economic crisis, the European Union is still one of the most famous tourist destinations worldwide (EEA, 2012).

In 2003 the European Commission formally recognized the need and the importance of sustainable tourism (EC, 2003). This institution acknowledges the primary role played by local authorities and direct stakeholders in dealing with touristic issues: self-regulation should be the first step for the development of a sustainable tourism policy; nevertheless, the EC also recognizes the importance of regulations on a large scale, which affect (both positively and negatively) touristic activities and can guarantee coordination among nations and destinations (EC, 2003).

The EC identified challenges for sustainable tourism management and highlighted the importance of the contribution of other stakeholders (such as private enterprises, local authorities, residents and tourists) for their realisation; the identified goals are the following: (1) develop sustainable activities that allow tourism to grow in *quality* rather than in quantity; (2) balance the three way relationship between profit, environmental preservation and social responsibility; (3) enhance sustainable consumption ways: on the one hand, it will be necessary to level out the monthly number of visitors by incentivising tourism in the least crowded periods and discouraging tourism in high season (deseasonalisation); on the other hand, it will be important to promote sustainable means of transport; (4) encourage sustainable production ways (i.e. sustainable supply chain) and sustainable destination development (i.e. preserving the destinations with special attention to carrying capacity, wise land use, local population's demands and avoidance of over reliance on tourism) (EC, 2003).

In spite of the ambitious goals set, sustainable tourism progressed at a slow pace: tourists do not seem to receive, understand and put into practice sustainability values (EC, 2003). The policy changes suggested by the European Commission in order to address these issues involve (1) a "micro" approach addressing issues at a local level; (2) information focusing on tourists as consumers: this way, tourists will demand sustainable processes from tourism actors and thus contribute to shape the market (ibidem).

In 2009 with the Lisbon Treaty, the European Union was formally conferred the power to draft legislation with regards to tourism: since then, the EU played a crucial role of coordination and support in this field (Messina and Santoamato, 2013).

The main institutions (within the European Union) currently working on themes concerning sustainable tourism are the following (Messina and Santoamato, 2013):

- The *Tourism Advisory Committee (TAC)* is composed of representatives of member states and candidates. This institution gives its viewpoint on decisions taken by the EC about tourism and collaborates in planning big events related to tourism;

- The *Global Sustainable Tourism Council (GSTC)* elaborates a detailed action plan of sustainable tourism activities, as well as an activity calendar; GSTC also evaluates the achievement of the goals stated in the action plan and is composed of representatives of destinations, private actors, as well as representatives of member states and of WTO;
- The *Network of European Regions for Competitive and Sustainable Tourism* (NECSTouR) is a system connecting touristic destinations with the objective of improving coordination in sustainable tourism policies with regards to social and environmental responsibility, preservation of cultural heritage, sustainable transportation, deseasonalisation and residents' wellbeing (ibidem).

The European Commission also organizes projects, activities and events with the objective of promoting sustainable tourism:

- *EDEN* (European Destinations of ExcelleNce) is an initiative aiming at promoting little-known destinations: every year the European Commission chooses a theme and selects an excellent destination for each country, the chosen destinations are then encouraged to associate into a network of destinations exchanging ideas and best practices (Messina and Santamato, 2013);
- *Calypso* is an initiative aimed at promoting and incentivizing tourism for people with economic difficulties belonging to the following categories: elderly people, youth, people with reduced mobility and families with children (Messina and Santamato, 2013);
- *Tourbench* is a project aimed at providing benchmarks for sustainable tourism. Tourbench allows also small and medium enterprises to identify and improve their environmental performance at an affordable price (EEA, 2012);
- *Eurobarometer* is a survey proposed by the EC with the purpose of gathering data about changing trends in tourism. The survey aims at delivering information to policy-makers and tourist enterprises, so they can promptly react to changes in their environment (Messina and Santamato, 2013);

- The EC also endorsed the *European Charter for Sustainable and Responsible Tourism*, a document that aims at promoting sustainable tourism, spreading best practices throughout the EU and at raising awareness about sustainability especially for smaller enterprises (EC, 2012);
- Because the European Union is not commonly considered as a destination alone, but rather as a system of many touristic destinations, *European branding communications campaigns* have been developed (e.g. the visiteurope.com website) with the objective of promoting the EU as a single destination (Messina and Santamato, 2013);
- *VISIT* is an initiative, promoted by the EC with the objective of coordinating the high number of certification programmes working in Europe; the VISIT project is determined to create a network for tourism certification programmes in the EU by joining them under the same logo (Sanabria et al., 2003).

Finally, the European Commission recognizes the importance of correctly implementing and monitoring the initiatives endorsed in order to understand if the planned objectives are being met (EC, 2012).

1.7. Certifications and ecolabels

Green marketing (i.e. the promotion of environmentally friendly products and services) has become an important trend in the latest years, not only because it is a source of competitive advantage with regards to customers, but also because it improves the image of the company from the public authorities' point of view; nevertheless, it is very difficult to certify these practices because touristic products are intangible, fragmented and because certifications often refer to the quality of the destination, not to the consequences of the activities of the enterprises (Font & Buckley, 2001).

In order to give a clear idea of the certification phenomenon, it is firstly necessary to define some specific terms.

- A *standard* is a generic way of measuring: standards can be sets of abstract principles, but they can also consist of more precise measurements intended

to determine whether a body matches specific criteria (Sanabria et al., 2003).

- Among the most wide-spread ways to certify the eco-friendliness of a firm or destination, there are *ecolabels*: an ecolabel is a warranty of a specific level of attention to the environment in the production and delivery of a touristic product which is based on specific and measurable criteria (Buckley, 2002).
- *Certifications* are documentations that were originally issued for the manufacturing sector; only towards 1985 they started being awarded to organizations, enterprises and local authorities for their commitment for sustainable tourism (Font, 2002; Sanabria et al., 2003). The most tangible difference between certifications and ecolabels is that the formers are always backed by a formal certification carried out by an independent certifying body; however, the distinction is blurred because most ecolabels, just like certifications, are verified by a third- party body (Rodríguez et al., 2017). For this reason, the two terms are often used interchangeably (ibidem).
- *Awards* are prizes given to a restricted number of winners of a contest, they differ from ecolabels and certifications because the latter are available to any organisation that meets predefined criteria, not only to winners (Font & Buckley, 2001).

In the next part of the paragraph the focus is on ecolabels (i.e. certifications that may or may not be verified by a third independent body).

Among the benefits of ecolabels there are: employment of environmentally efficient solutions, availability of information about eco-friendly methods, control over tourism enterprises (Sanabria et al., 2003).

Normally, ecolabels are created by a funding body which aims at enhancing sustainability in a specific industry sector (Font, 2002). In order to create an ecolabel, it is firstly necessary for the funding body to do some preliminary work in order to define the role, the objective, the target and the positioning of the ecolabel (Font & Buckley, 2001). After that, it is important to select the criteria that the organisations will be required to meet: in doing so, it is important to take into account the consequences that the accomplishment of such criteria may have

on the specific environment; it is also essential that the criteria are clear and measurable (ibidem). Especially in wide-range fields like sustainable tourism, it can be particularly hard to define criteria that can be applied to every division: in such cases, broad criteria tend to be adopted at first; after the certification becomes rooted, the criteria will be adapted to the different fields (Buckley, 2002). After defining the criteria, the funding body may negotiate with potential awarding bodies: funding and awarding bodies may correspond to the same organisation when the ecolabel is small or new, but the endorsement of a credible and honourable awarding body may give the ecolabel a high level of respectability within the sector; in fact, most sustainable tourism certifications highly rely on government and local authorities' support concerning funds and publicity (Font & Buckley, 2001; Sanabria et al., 2003). Finally, it will be possible to communicate the existence of the label to the actors in the sector in order to understand if they are interested in the idea (Font & Buckley, 2001).

Before awarding an ecolabel to an organisation, a verifying body should concretely examine whether the institution meets the required criteria: this is a truly challenging task (Font & Buckley, 2001). Verification can be first-party (i.e. carried out by the organisation itself; this method should be complemented by another one, in order to avoid over-tolerant verifications), second-party (i.e. implemented by the awarding body: this mechanism may not be impartial, as the awarding body has interest in augmenting the number of labelled organisations); third party (i.e. a costly but trustworthy verification executed by an independent body; verification and supervision by a reliable organisation make the ecolabel much more significant) (Font, 2002; Font & Buckley, 2001).

Most of the standards developed for tourism are absolutely ambitious to apply, due to the fragmentation of the sector: it is in fact difficult for small enterprises to match the expensive and time-demanding criteria of standards such as ISO 14001 (developed by the International Standards Organization) and EMAS (the Eco-Management Audit Scheme, developed by the European Commission) (Sanabria et al., 2003; Font & Buckley, 2001). Performance-based standards, on the other hand, better match the needs of small organizations and for this reason they are largely employed in the tourist sector (Sanabria et al., 2003).

In 1998, a study of the United Nations highlighted that, up to that moment, certification programmes were mostly conducted in Europe (with limited exceptions) (Sanabria et al., 2003). Agencies belonging to the European Union together with NGOs and governments have constantly conducted research on sustainable tourism programmes in order to have an overall idea of the phenomenon (ibidem).

Ecolabels are important consumer decision instruments because they provide accessible information on environmental practises; however, effectiveness of ecolabels and customers' willingness to pay for labelled products varies according to how much customers value environmental issues and according to the perceived difference between a non-labelled and a labelled company (Font & Buckley, 2001; Buckley, 2002).

Ecolabels vary greatly in spread and in technical depth: some of them are world famous but do not convey a great amount of information (e.g. Green Globe 21); this kind of ecolabels is likely to be appreciated by customers who are not experts on environmental issues (Font & Buckley, 2001). On the other hand, ecolabels focusing on providing a greater amount of information to customers will be appreciated by more environmentally aware customers, but this implies that it is very difficult for them to become famous across countries (ibidem).

Ecolabels can be categorized into (Font & Buckley, 2001):

- Those that take into account the impact of tourism on the destination (i.e. the impact of tourist products, tour operators and tourists);
- Those that certify the quality of the environment (regardless of the damages that tourists can cause to the destination);
- Those that consider the two interdependent aspects mentioned above (ibidem).

Numerous certifications labels exist, but they are vastly fragmented: for the future it is desirable a clearer organization as well as a more stable ability to generate funds in order to avoid over-dependency on funding institutions (Sanabria et al., 2003).

Up to 2002, data showed that ecolabel tourism programmes have not had a great impact on directing the behaviour of private actors towards sustainable tourism

(Sanabria et al., 2003). This is probably due to the fact that the existence of award-winning accommodation and restoration enterprises is not adequately communicated (ibidem). A more recent research carried on in 2016 confirmed these results: only a small part of tourists is influenced by ecolabels (Karlsson & Dolnicar, 2016). Anyway, most scholars (Font & Buckley, 2001; Karlsson & Dolnicar, 2016) feel like a greater amount of accurate research aiming at understanding real impacts of ecolabels on tourists' attitudes should be carried out.

We now examine some of the most prominent ecolabels.

Green Globe 21 was created with the original name of Green Globe by the World Travel and Tourism Council with the objective of making it a world-wide ecolabel scheme; at the beginning it was based on very broad criteria and was seriously criticised for it (Buckley, 2002). More recently, Green Globe 21 stated its intention to adapt criteria to local environments (ibidem). This ecolabel can be applied both to companies and to entire destinations and thus encompasses the whole tourism industry (ibidem).

Blue Flag, on the other hand, is a regional certification awarded to the beaches that every year manage to meet its stringent criteria (Buckley, 2002). Blue Flag is a performance-based standard, which can also be gained by small organizations (Sanabria et al., 2003).

Travelife is a web-based ecolabel aimed at creating a network of actors of the tourism industry that meet specific sustainability criteria (EEA, 2012). Travelife was jointly created by EU and the Association of British Travel Agencies and can be awarded to tour operators, travel agencies and accommodation enterprises (Ciuchete & Lefter, 2011).

Finally, Biosphere Destination Standard is a certification issued by the Responsible Tourism Institute, an institution which is part of UNWTO and aims at spreading the principles of the World Charter for Sustainable Tourism, sprung from the Rio de Janeiro Conference of 2002 (Rodríguez et al., 2017). Biosphere Destination is awarded to destinations that prove to make a cautious and efficient use of natural resources, as well as to protect social and cultural heritage both in residents' and tourists' interest (ibidem).

In this last part of the paragraph, we briefly analyse how touristic enterprises deal with sustainable issues. From an entrepreneurial point of view, initiatives for environmentally friendly actions can be driven by the following factors: green marketing, green management or a combination of the two (Font & Buckley, 2001). Green marketing consists of advertising touristic experiences in contact with nature, even when the environment is the main attraction for tourists, but very few (if any) concrete actions are taken in order to protect it: this is among the most common practices (ibidem). According to Chan (2013), these practices may threaten the business because customers may perceive that what is being done is green washing (i.e. using the advertising of sustainable actions as an excuse to look sustainable).

Green management, on the other hand, takes actions (e.g. product or service design) in order to improve the conditions of the environment where the enterprise is settled with clear objectives and planning; in some cases, companies who use a green management approach also communicate this attitude outside and thus combine green management and green marketing (Font & Buckley, 2001; Chan, 2013).

1.8. Communicating sustainability

As well as implementing actions aimed at enhancing sustainability, it is also valuable for the actors involved in tourism to communicate the importance of such practices in order to positively impact the behaviour of tourists (ITF-SDT, 2009). This can be done by leveraging Web 2.0 and Digital Marketing techniques, as well as with traditional media: event-based marketing, for example, is a useful technique for increasing awareness on sustainable tourism (ibidem). Communicating the importance of sustainable tourism is not only a way to instruct tourists, but it can also represent an important marketing opportunity for firms: some tourists, in fact, are interested in these topics and welcome the idea of a tourism that has a positive impact on destinations (Rivera & Rodríguez, 2012). However, it is important that communications campaigns underline that sustainable tourism is not an alternative to traditional tourism only valuable for specific niches, but a new type of tourism which should increasingly be put into practice by all tourists (ibidem).

Marketing has traditionally been perceived as an obstacle to sustainability: the main goal of marketing activities has always been that of increasing the number of visitors regardless of the environmental consequences (Dinan and Sargeant, 2000; Pomering et al., 2011). Nonetheless, there can be marketing models that serve the cause of sustainable tourism, although it is necessary to adapt traditional models to the new objective (Pomering et al., 2011).

According to Pomering et. al (2011), the traditional marketing mix model (i.e. Product, Price, Promotion and Place) can be adapted to sustainable tourism by partially changing the traditional ideas associated to the four Ps in order to meet the needs of sustainability; moreover, it is necessary to add new Ps with the objective of enlarging the scope of the model. The adaptation of the model is summarised below (Pomering et al., 2011):

- *Product*, in general, is what is promoted on the market; in the touristic sector product can be an overnight stay, a sightseeing tour or the organization of a whole trip. Some features of the touristic product are beyond marketers' control (e.g. residents' attitude or weather); nevertheless, local authorities may force marketers to collaborate with local communities in order to improve some of these situations (ibidem).
- *Price*: tour operators often seek to charge the lowest price possible for their products, in order to push consumers to buy. However, this strategy jeopardizes the ability of tourism to pay back communities for the negative consequences that touristic activities may have on the destinations (ibidem).
- *Promotion*: marketing communications in the touristic sector should concentrate on three main objectives; firstly, it is necessary to inform users about the sustainable services available; secondly, it is important to convey information about the company in its entirety; finally, attention should be paid to the methods used in order to communicate sustainability: it would, in fact, be meaningless to communicate the negative consequences of resource wasting on shiny coloured brochures delivered in thousands of copies; online materials are, on the other hand, environmentally friendly and easy to share (ibidem).

- *Place* can be exemplified, with regards to tourism, with transportation companies, incoming travel agencies or accommodation providers; in other words, place consists of all the actors and actions that make experiences available for tourists. The methods used by the afore-mentioned actors can improve or jeopardize the destination's resources: it is thus important that sustainability practices are prioritized by these institutions (ibidem).
- *Participants* are all the people who take part in the fruition of services, i.e. the staff of the enterprise, the customer himself as well as the surrounding customers. The fact that both workers and customers are part of the destination implies that it is important to invest in training and informing all of them (ibidem).
- *Physical evidence* is concerned with the physical location where customers and touristic bodies connect. It is important to preserve locations in order to avoid excessive massification that can endanger the destination (ibidem).
- *Process* concerns the set of activities and procedures used for delivering the service. Processes that can enhance sustainable tourism are online booking, use of renewable energy sources, sustainable supply chains (i.e. well organized and with low-polluting means of transport), waste-reducing methods (e.g. automated lightning in hotels) and sourcing systems (i.e. systems that inform consumers where the products they are purchasing are from) (ibidem).
- *Packaging* is the merger of different services into the same offer (also known as bundling). This kind of strategy may allow the collaboration and networking of sustainability-oriented firms (ibidem).
- *Programming* deals with the organization of events or other activities with the objective of increasing the visibility of the destination. This kind of activities can be an important chance to equilibrate the quantity of visitors throughout the year, it is thus important to keep carrying capacity in mind and avoid unsustainable saturation in the parts of the year where the destination is already full of visitors (ibidem).

- *Partnerships* are actions taken together by enterprises and other actors in the tourist sector. Partnerships are indispensable in order to reach an integrated approach on sustainable tourism (ibidem).

The paradigm underlined above is an example of societal marketing because it addresses the needs of both tourist actors (tourists and touristic enterprises), and those of society (Pomering et al., 2011).

As well as the marketing mix model, other marketing models can be adopted for communicating sustainability issues: social marketing, for example, is an approach that encompasses the marketing activities promoted by a public body in order to solve a social problem (Pomering et al., 2011). Social marketing for sustainable development stems from the idea that attracting *everyone* to a destination can seriously threaten natural and cultural resources; social marketing should thus focus on attracting customer segments that are most likely to respect the destination (Dinan and Sargeant, 2000). Among the techniques used for social marketing there can be de-marketing, which consists of dissuading people from taking certain actions (e.g. discouraging them from visiting a location in a certain moment of the year) (Pomering et al., 2011). In other words, de-marketing consists of taking long-term objectives into account when addressing touristic demand (Kotler & Levy, 1971). Kotler and Levy (1971) refer to the set of actions aimed at reducing demand from certain users as selective demarketing.

Another method worth mentioning is cause-related marketing, which consists of integrating the activities of an institution with corporate social responsibility towards a cause (Kotler, 2006). The main advantage of cause-related marketing is that it builds a relationship between the organization and its users and thus improves brand awareness and image (ibidem). In order for a cause-related marketing campaign to be effective, it is crucial that the image of the brand is consistent with that of the cause (ibidem). In some cases, touristic companies may use this approach in order to promote their sustainable actions and contrast the risk of perceived green washing (Hudson & Miller, 2005). In fact, customers may sometimes perceive that companies communicate their sustainable actions only with the objective to *look* sustainable, rather than actually *be sustainable* (ibidem). A strategic approach to cause-related marketing, i.e. the link between the company

and a consistent cause, may strategically improve the perception of the firm as actually sustainable (ibidem).

1.9. Sustainable tourism in Spain

In order to give a complete overview of sustainable tourism, we here focus on how this phenomenon is dealt with in Spain.

In Spain, sustainable tourism started being an important discussion topic in the 1990s: in this period, significant initiatives about sustainability in tourism were held (e.g. the Barcelona Convention in 1994 and the Lanzarote World Conference on Sustainable Tourism in 1995) (Kelejyan, 2011).

In 2000, the Spanish government released the Integral Plan of Tourism Quality in Spain (Plan Integral de Calidad del Turismo Español, PICTE) aiming at planning and organising touristic activities up to 2006 (Kelejyan, 2011). This plan underlines the importance of maintaining and improving quality in destinations, businesses and training and focuses on crucial topics, such as cooperation, innovation, promotion and performance assessment (ibidem). Moreover, the PICTE also focuses on sustainable tourism as a way to maintain economic stability and states that the collaboration among local administrations is fundamental for the accomplishment of sustainable tourism objectives (ibidem). The plan also calls for the imposition of growth limits for the most crowded areas (ibidem).

In 2002, the Spanish Government released the *Spanish Strategy for Sustainable Development* (Estrategia Española de Desarrollo Sostenible), which aims at increasing cooperation among institutions in order to meet the requirements listed in the LA21 (Moralejo & Miguel, 2003). Critics of this document point out that it is not specific about *how* the cooperation should be accomplished and *how* the tasks should be taken care of (ibidem). Therefore, the Spanish Strategy for Sustainable Development has been accused of only aiming at giving the impression of environmental concern, rather than being a concrete and fruitful action towards sustainability (ibidem).

The *Spanish Tourism Plan 2020* (Plan de Turismo Español Horizonte 2020) recognizes tourism as a crucial factor for the economic development of Spain, as well as for the well-being of its inhabitants (Bureau, 2007). Moreover, the importance of environmental issues is recognized, together with the need of specific

policies that can contribute to make tourism a more sustainable activity (ibidem). Among the main objectives of the plan there are: reduction of seasonality, improvement of job quality in the touristic sector, extension of the touristic benefits to lesser-known destinations (ibidem). These objectives stem from the idea that the future should not be predicted, but rather it is necessary to take responsibility and build it (ibidem). In order to positively impact on the future of the sector, sustainable stimuli should be carefully planned, adapted to each specific context and should as well compromise between public and private needs (ibidem).

Spain is among the most visited countries in the EU (Kelejyan, 2011). Tourists visit Spain mainly for its seaside resorts (which are particularly attractive due to its climate and its large coastline) (Carrillo & Jorge, 2017). However, the Government (together with local authorities) is endeavouring to enlarge the idea of "España sol y playa" (Spain sun and beach) with the purpose to attract visitors who also appreciate the cultural heritage of the destinations they visit; these attempts are also due to the fact that the coastal tourism has a greater environmental impact than cultural tourism (Delgado, 2010; Ruíz, 2013; Pulido & López, 2013; Carrillo & Jorge, 2017). Pulido and López (2013) claim that public authorities have not been able to guide the country towards the accomplishment of the above-mentioned objectives: in fact, Spanish authorities are not spurring tourists to demand higher quality services, innovation and sustainability (Pulido & López, 2013). Moreover, public authorities shall use more selective approaches in attracting tourists in order to avoid the *banalization* of the destinations (ibidem). These issues also have an impact on the perceptions that foreigners have about Spain and damage its image as a sustainable destination (ibidem). Unsustainability also concerns distribution; in fact, a large part of tourists in Spain takes advantage of the intermediation of foreign tour operators (which tend to decrease prices in order to increase their margins) and experts therefore call for Spanish hotel chains and tour operators to take control over the sector; this way, local companies will be able to charge a fair price for their services and the social and environmental costs of their activities will be internalized by the prices (Municipality of Barcelona, 2012; Pulido & López, 2013).

In spite of the conferences and plans flourishing at a national level, local authorities are the most empowered for improving sustainability in touristic destinations (Moralejo & Miguel, 2003). Several Autonomous Communities support municipalities in their initiatives with this purpose (ibidem). Catalonia is among the best performing regions in Spain concerning sustainable tourism (Carrillo & Jorge, 2017). In fact, in this region a high number of initiatives with sustainable purposes is promoted (Moralejo & Miguel, 2003). For example, Catalonia is part of the above mentioned NECSTouR (i.e. the network of European Regions working with the objective to promote sustainable tourism) (Delgado, 2010). Catalonia is also among the Autonomous Communities which developed a Local Agenda 21 specifically addressed to its territory, the *Agenda 21 de Catalunya: el compromís d'un país pel desenvolupament sostenible global* (Agenda 21 of Catalonia: the compromise of a country for the global sustainable development) (Moralejo & Miguel, 2003). The Agenda 21 de Catalunya aims not only at giving a guideline for future development, but also at being recognized as an agreement between the Catalan citizens and the *Generalitat,* by means of an active participation of the population during the writing phase of the document (Generalitat de Catalunya, 2002). The plan calls for sustainable production and consumption, as well as for a careful management of the environment aiming at contrasting climate change (ibidem). Even though this document only indirectly mentions sustainable tourism, it shows how important sustainability is for authorities in Catalonia (ibidem).

For what the city of Barcelona is concerned, it is important to point out the two ten-year plans for a sustainable city developed in 2002 and in 2012. The latter (*Compromís Ciutadà per la Sostenibilitat 2012-2022*, from now on Compromís 22) derives from the basic principles of the former plan, i.e. variety (of offers in the city), diversity (with the objective to offer different services in an efficient way), order and productivity (Ajuntament de Barcelona et al., 2012). However, the new plan was then adapted to the new needs that have arisen (ibidem). Among the main objectives of the Compromís 22 there is the need to push sustainable tourism by making both institutions and private bodies responsible for natural resources usage, environmental quality and cultural heritage preservation (ibidem). The

effort of the city for sustainability is proven by the award of the Biosphere World Class Destination certification (ibidem).

1.10. Sustainable tourism in Italy

This paragraph takes into consideration the theoretical foundations and plans for sustainable tourism in Italy.

Already in 1997, the Italian association for responsible tourism published the *Identity Card for Sustainable Travel* (in Italian Carta d'Identità per viaggi sostenibili) (Associazione Italiana Turismo Responsabile, 1997). This document provides tourists, tourist planners and destinations with advice on how to implement sustainable tourism (ibidem). Travellers should get in touch with and respect the cultural and social characteristics of the destination, as well as acting in a sustainable way with regards to means of transport, tour operators chosen, accommodation and waste reduction (ibidem). Travel planners, on the other hand, should provide tourists with transparent and genuine information about their activities and the destination; they are also advised to work with small groups and well-instructed tour guides (preferably locals); moreover, travel planners should promote a kind of tourism where local economy can be integrated with touristic activities (ibidem). Finally, local communities are encouraged to carefully plan their actions with regards to tourism and to communicate the importance of sustainability in this context; furthermore, destinations should work in order to conciliate tradition and new touristic fluxes (ibidem).

In 2009, the Italian ministry of the environment developed a national strategy for pursuing biodiversity in tourism (Giupponi, et al., 2009). Among its main objectives there are: improving the research about tourist impact at a national level; incentivize the creation and diffusion of ecolabels and awards for the most virtuous destinations and businesses; communicating the importance of sustainable approaches directly to tourists; fostering the diffusion of best practices (ibidem).

The *Strategic Plan for Tourism Development 2017-2022* (Piano Strategico di Sviluppo del Turismo) developed by the Ministry of Cultural Heritage is based on three transversal principles: sustainability (not only concerning the environment, but also with regards to widespread economic well-being, competitivity and mobility), innovation and accessibility (MiBACT, 2017). The plan is conceived with

an open and participatory method and its rationale is providing touristic activities with a homogeneous guideline in order for them to be managed with an integrated approach (ibidem). The plan also takes recent trends into account, such as globalization and sharing economy, as well as encompassing environmental and social issues such as sustainable mobility, deseasonalisation, funding to institutions with sustainable objectives and digitalisation of touristic activities (ibidem).

At a regional level, among the main documents, there is the *Touristic and Environmental Plan of 2016* issued by the Veneto Region, which aims at increasing the quality and scope of the touristic offer, at developing profitable collaborations among public authorities, as well as at promoting initiatives and approaches that take the sustainability and accessibility into consideration (Regione del Veneto, 2016). In particular, for what sustainability is concerned, the Veneto Region aims at promoting sustainable ways of doing tourism, such as cyclotourism and rowing (ibidem). The Veneto region is also part of the NECSTouR network for sustainable regions (ibidem).

For what the city of Venice is concerned, in 2017 the Municipality issued the *Plan for territorial governance of tourism in Venice* (Progetto di Governance Territoriale del Turismo a Venezia) (Municipality of Venice, 2017). Among the initiatives proposed in the plan there are extraordinary maintenance of the historical centre (i.e. both infrastructures and historic buildings), progressivity of the hotel taxes paid by tourists, promotion and development of suburbs in order to attract tourists (ibidem). The plan also includes initiatives about the Venice harbour and the industrial sector in Porto Marghera in compliance with the principle that tourism, in order to be sustainable, should be integrated with other economic activities (ibidem).

The *Destination Management Plan 2016-2018* issued by the municipality of Venice underlines that sustainable tourism should be seen as an opportunity, thanks to the increased awareness of tourists of their impact on destinations (Organizzazione di Gestione della Destinazione Turistica "Venezia e Laguna", 2017). However, it is also important for public authorities to provide tourists with

information about the importance of sustainability, this task is accomplished by IATs (tourists offices) and by the website Veneziaunica (ibidem).

2. Chapter 2: Public administration and communication

This chapter aims at casting a light on how public authorities approach communication after the introduction of the Internet. The first paragraph is about the main sociocultural and technological changes that concern this domain: we see that, thanks to the Internet, a greater number of communication channels is available, and we analyse the criteria for choosing among them (from the public bodies' and the users' point of view); in the final part of the paragraph we focus on the impact that the internet has on touristic communication by public authorities. The second paragraph is devoted to the use of websites and e-mails for public communication: it describes how websites can be organised and the main features that they should have in order to be easily usable. At the end of the paragraph, we examine how touristic websites can be useful and appealing for users who are looking for information about a destination; moreover, we illustrate the importance of touristic websites in the construction of a destination image.

Finally, in the third paragraph we describe how social networks can be used by public administrations, their advantages and disadvantages, as well as the rules that should be applied in order to avoid conflicts (i.e. the social media policy). We also focus on how Destination Marketing Organisations can exploit the opportunities offered by social media with a well-defined strategy that takes into account how social media are used differently throughout the different phases of a journey.

2.1. Public communication in the Internet era

In this paragraph we briefly analyse public communication and the changes that it underwent due to the introduction of the Internet.

A specific process should be undergone when a public body engages in public communication actions (Foglio, 2003). Firstly, a careful market analysis is crucial: this operation implies gathering information about citizens, institutions, groups, opportunities and trends in the environment (ibidem). After understanding the environment, it is necessary to analyse the target segments and to precisely define the objectives and the priorities among them: objectives should be compliant with the resources of the organisation and (unless the aim is communicating with the

entire audience) it is necessary to select the segments that should be prioritized (ibidem). Subsequently, it will be necessary to define the marketing strategies, as well as the timeline for the achievement of the results (ibidem). Another important step is the definition of the methods for evaluating the accomplishment of the goals, together with the reasons of success or failure; after that, it will be possible to adjust the initial strategy according to the lessons learnt (ibidem).

The core of communication is undoubtedly the message, with this regard, organisations should decide (1) what to communicate (i.e. the content of the message, which should be understandable, informative, useful and simple); (2) to whom to communicate (e.g. institutions, citizens, service receivers, media, the public in general); (3) how to communicate (i.e. the means of communication, which should be adapted to the target); (4) how much to communicate; it is also important to consider that the communication flow should be constant (Foglio, 2003).

Public administrations making a good use of the Internet should embrace the principles of Citizen Relationship Management (CRM) (Cogo, 2012). CRM is an approach traditionally applied in the private sector (where CRM stands for *Customer* Relationship Management) and adapted to the needs of public authorities (Forghieri & Mele, 2005). This vision stems from the idea that citizens and customers are somehow similar: consequently, also citizens, just like customers, have an opinion on the actions taken by public authorities and these opinions should be taken into account (Cogo, 2012). Some scholars, however, underline the differences in the information provided to customers and citizens: private enterprises, in fact, are allowed to segment the market and deliver different information and services to different customers; conversely, public authorities should deliver plain and objective information to all citizens (Forghieri & Mele, 2005). Another difference between CRM in private and public sector is that in the former, the price that customers are willing to pay reflects the degree of satisfaction that they are experiencing; au contraire, in the public sector, where price is not applicable, CRM can be used to gather information about citizens' needs, expectations and opinions (Forghieri & Mele, 2005). Moreover, CRM can improve the efficiency of the services provided (ibidem). Thanks to CRM it is possible to deliver services online; normally, the online channel coexists with the

offline channel in order to allow also people who do not have access to the internet to take advantage of the services (ibidem).

Technological innovation and, consequently, the introduction of the internet in public services is only possible thanks to a change in the sociocultural context (Cogo, 2012). As O'Reilly points out, in fact, since the early 2000s the internet has undergone a deep change: initially, the internet (web 1.0) was a set of platforms providing information and allowing mostly one-way communication (O'Reilly, 2005). Web 2.0, however, allows interactivity, user control and participation (ibidem). Also in their relationship with public bodies, nowadays, users are empowered by the interactivity of web 2.0 and they can generate content in first person (User Generated Content), rather than passively avail themselves of contents published by institutions, organisations and businesses (Cogo, 2012; Sigala, 2012). In spite of the changes in the context, it should be underlined that the average employee in the public sector is quite aged and thus often not keen on discovering new ways of communication (Cogo, 2012). For this reason, in addition to the change in the context, it is necessary to push a change in the culture inside the organization, which should happen in an across-the-board way and involve all the levels of the organisation (Forghieri & Mele, 2005; Cogo, 2012).

The activities of public authorities revolve around two opposite objectives: decrease costs versus increase and improve the services provided (Forghieri & Mele, 2005). The creation of new channels (made possible by information technologies) may facilitate the accomplishment of both objectives (ibidem).

When public authorities decide whether to invest or not in a new channel, they take different needs into account (Forghieri & Mele, 2005). Firstly, it is crucial that the introduction of the new channel adds value both for the organisation and for citizens; it is also necessary to make sure that the specific channel is known and utilized by the users that the institution aims to attract (ibidem). Moreover, it is relevant that the new channel is scalable, i.e. that it does not require organization and competences completely different from those already in place (ibidem). Another essential factor is the use of human resources: public bodies tend to prefer channels that allow their employees to use their qualifications, rather than performing repetitive tasks (e.g. the use of a screen for providing basic information

is appreciated because it allows to optimize the time of employees who will not need to reply to the same doubts repeatedly) (ibidem). Finally, public bodies may decide to use a channel because of the image that it may provide to the institution, this is especially true for innovative technological means of communication (ibidem).

On the other hand, users evaluate different factors when deciding whether to use a certain channel or not (Forghieri & Mele, 2005):

- Information about the existence and availability of a specific channels (e.g. citizens may not know that a certain institution has a website if it does not appear among the first results in search engines);
- Phase of the service: users may be happy to discuss a small problem via e-mail, but they may prefer to talk in person if the problem is more complex and difficult to be explained in written form;
- Flexibility: online channels are always available, whereas call centres and offices are not;
- Usability, i.e. the easiness of finding relevant information;
- Time: the time required in order to complete an operation can be a determining factor in selecting a certain channel;
- Perceived safety of the channel: when it has to do with providing data, users may prefer using offline rather than online channels in order to avoid potential exposure of their data (ibidem).

The different channels available to public bodies can be categorized into (1) *informative channels* that mostly allow one-way communication aiming at informing citizens in the most efficient way (e.g. websites, brochures, newsletters) (2) *relational channels* where the focus is on obtaining feedback from users and building a relationship with them (e.g. telephone, e-mail, chat), this kind of channel is often the most expensive because human resources must be carefully trained (3) *transactive channels* where the main purpose is providing a service (e.g. certified e-mail, specific sections of websites); some channels may accomplish more than one of the main functions listed above (Forghieri & Mele, 2005).

Channels can also be outsourced in order to obtain economies of scale and savings (Forghieri & Mele, 2005). However, it is important to take into account the risk of

losing the informal relationships among employees, which in some cases may represent an important asset (ibidem). Moreover, outsourcing a channel may jeopardize the relationship with citizens, as well as the overall quality of the service offered (ibidem).

The internet is a channel that can put in contact citizens and public bodies and make citizens increasingly participate in public activities (Foglio, 2003). In general, governments can use the web in three main ways: firstly, they can deliver services using the internet (provide); secondly, public authorities can build a relationship with citizens (engage); finally, the web can be used for making data publicly available (enable) (Alonso et al., 2009).

It is useful for public authorities to transparently provide citizens with information via the world wide web; however, attention should be paid to the balance of this kind of communication (Cogo, 2012). Excessive one-way communication may decrease trust of citizens, rather than increase it (ibidem). In fact, it is important to take into account that web 2.0 radically changed the way of doing marketing and promotion: this kind of communication, in fact, is not anymore only about transmitting a message, but rather it concerns engaging in a conversation with users and understanding their point of view (Sigala, 2012). Two-way communication, in fact, allows citizens not only to be informed about the actions taken by public authorities, but also to engage and take part in first person in the initiatives of the institution, for example by commenting or signalling issues by means of social networks, blogging or microblogging platforms (Alonso et al., 2009).

2.1.1. Touristic communication in the Internet era

We now focus on the implications that the advent of the World Wide Web had on public communication in the touristic sector. The primary objective of touristic communication is motivating people to leave their hometowns and head to a specific destination; in other words, the objective is turning them into tourists (Hallett & Kaplan-Weinger, 2010). In order to do that, it is necessary to create a positive image of the destination in the mind of users (Hallett & Kaplan-Weinger, 2010; Mak, 2017)

According to Gunn (1972), there are two fundamental kinds of destination image: organic and induced. The former is acquired through general knowledge, e.g. at school, in books or newspapers, word-of mouth (Gunn, 1972; Mak, 2017). Induced image, on the other hand, comes from guidebooks, specialized websites or any other source of specific tourist information (Gunn, 1972; Mak, 2017); induced image (and increased amount of information in general) tends to improve the impression of the people about a certain destination and, for this reason, induced image is generally known in literature as image evolution (Fakeye & Crompton, 1991; Jeong et al., 2012).

As Hallett and Kaplan-Weinger (2010) point out, the main function of tourist guidebooks has always been that of forming the expectations of future tourists and to providing them with preparatory information about the tourist destination that they are going to visit; with the advent of the internet, not only a part of this function is executed by websites, but also users have turned from passive readers to active contributors, without the need for them to leave their homes.

The awareness of the importance of a strong brand has traditionally been more embedded in the private sector; however, recently, also public institutions adopted strategies that allowed them to be more and more recognized as brands (Rubini, 2011). Concerning the tourism sector, it has become increasingly evident that the infrastructures and the offer of a destination are not the only drivers for the choice of visiting a destination: personal motivation and destination image, in fact, play a very important role as well (Rubini, 2011; ETC, 2008).

In the tourism sector, using the Internet for advertising destinations implies several advantages (ETC, 2008). First of all, the world wide web enables the spread of a great deal of information, accessible from tourists all around the world also from mobile devices (ibidem). Moreover, the internet and networked platforms allow two-way communication both on a one-to-one and one-to-many basis (ETC, 2008; Oliveira & Panyik, 2015). One-to-one communication allows tourists to exchange information, while one-to-many communication allows Destination Marketing Organisations (DMOs) to build a brand (which, together with recommendations, is the main travel decision driver) (ETC, 2008). Moreover, the internet can be helpful in the construction of a consistent image of the destination

by means of integrated online and offline material (ibidem). The internet also allows tourists to publish their pictures, videos, comments and recommendations (user-generated content, UGC) (Oliveira & Panyik, 2015). Therefore, it is important to consider that single tourists and the content they publish can strongly contribute to the creation (or destruction) of the destination brand (Moutinho, 2013; Oliveira & Panyik, 2015; Minazzi, 2015). In order to persuade tourists to engage in a conversation with the organisation, it may be necessary to directly ask for a feedback (Minazzi, 2015). Finally, the use of the internet in destination promotion allows integration with other institutions within the sector in order to develop services together or exchange experiences and best practices (ETC, 2008). This integration is also useful for providing a coherent and consistent image of regions within the same nation and cities within the same region: the internet makes this task easier because it enables different organisations to work in a networked way, despite the physical distance (ETC, 2008; Minazzi, 2015).

Before the development of information and communication technologies, travellers tended to strongly rely on packaged tours, which did not require a careful (and often difficult) search of information (Buhalis & Law, 2008). Nowadays, on the other hand, it has become more and more common and convenient for tourists to autonomously look for the information they need on the Internet and to book their own services without the intermediation of travel agencies and tour operators (ibidem). This way, tourists can personalize their journey and experience a high degree of satisfaction (ibidem). Moreover, research shows that the use of the internet for finding touristic information can trigger loyalty for tourist destinations (Almeida-Santana & Moreno-Gil, 2017).

The internet is an important instrument for constructing the image of a destination (Linden & Linden, 2016). It should be taken into account that destination image is not plain and unchangeable, but it is socially constructed and thus may be affected by social changes (Moutinho, 2013; Linden & Linden, 2016). It is possible for destinations to rebrand themselves (similarly to companies) with the (re)introduction of traditions, reinvention, event organisation (e.g. festivals, sport competitions etc.) (Linden & Linden, 2016). In order to create an effective brand for a destination, consistency should be applied throughout the different

channels used for communication (i.e. websites, social media and offline communication channels) (Oliveira & Panyik, 2015).

As mentioned above, it may take a long time for innovation in the public sector to be introduced and this has consequences on Destination Marketing Organisations (DMOs), which also tend to be slow in adopting new technologies (Sigala et al., 2012). In fact, the intensity of the innovation process is strictly linked to the selection of novelties that can be theoretically fruitful and those that are practically feasible (ibidem). Noticeably, the degree of innovation varies greatly across the countries, as well as across the organisations (ibidem).

It is worth mentioning that the use of the world wide web for trip planning purposes varies greatly among users (Kim et al., 2015; Almeida-Santana & Moreno-Gil, 2017). Different countries, in fact, use different social media: DMOs should thus adapt their social media strategy to the target different nationalities (Almeida-Santana & Moreno-Gil, 2017). For what age is concerned, it is important to take into account that the internet is the most used information source in travel planning for all generations, yet with differences among them (Kim et al., 2015). Young people are noticeably the main users of the internet and more specifically of search engines, online travel agencies and social media (Kim et al., 2015; Almeida-Santana & Moreno-Gil, 2017). On the other hand, older generations mostly rely on more traditional channels, such as destination marketing organisations websites, automotive clubs, accommodation and attractions official websites (Kim et al., 2015). Touristic enterprises should also take into account that senior tourists tend to appreciate and request printed material, because they see online information as a complement for offline services (e.g. booking platforms or contextual information) (ibidem). Younger travellers, on the other hand, consider the internet as the most important source of information and are used to look for material with their smartphones; for this reason, they require mobile friendly websites (ibidem). Moreover, it should be underlined that young people tend to engage in first person in the trip planning part and evaluate a high number of potential destinations before booking their trip (ibidem).

2.2. Websites and e-mails

Websites and e-mails are among the main instruments that public bodies use for communicating: we now consider the main usages and best practices.

Websites of public authorities can be institutional or thematic (Belisario et al., 2010). Institutional websites aim at displaying and describing a public body and its organisation, purposes and services (ibidem). Thematic websites, au contraire, focus on an event, a service, an initiative or a topic, touristic websites often belong to this category (ibidem).

There are different ways to categorize and organize information in websites, all of which aim at facilitating users in finding the information they are looking for (Forghieri & Mele, 2005). We list here some of the most common:

- The *life events metaphor* approach consists of connecting information with the moment in life that users are experiencing (e.g. having a child, studying, working, paying taxes, using public transport etc.) (Forghieri & Mele, 2005);
- *Alphabetical* order (which is especially convenient when users do not have a mouse or a keyboard at their disposal) (ibidem);
- *"Who are you? / What is your condition at the moment?"* This method provides users with guided paths divided based on their condition, some examples are: student, unemployed, firm, entrepreneur etc. Normally, this approach is not the only one available, but it has the advantage of dealing with the most common needs that people have in a simple way (ibidem);
- The g*eoreferenced approach* consists of dividing information according to the spatial location of the services provided. Users may be asked to select on a map where they need the service, or the GPS technology may be used to get information about where the user is (ibidem);
- The *time-oriented approach* consists of presenting information based on deadlines (e.g. events) or on the last update (ibidem);
- *Decision trees* involve a set of questions and, according to the answers given by the user, information is presented step by step: this process simulates the interaction with a clerk (ibidem);

- The *organisational structure* approach reflects the hierarchical structure of the institution. This is among the most common methods (Alonso et al., 2009);
- The *search engine approach* gives users the possibility to request information from the system in plain language (Forghieri & Mele, 2005);

When developing web content for public bodies it is crucial to keep accessibility in mind (Alonso et al., 2009). Accessibility can be defined as the property of a content to be available for all the users, including disabled and elderly people (ibidem). A website needs to have the following features in order to be accessible (Belisario et al., 2010):

- Perceptibility i.e. the possibility of using content with different senses, e.g. the availability of textual and audio explanations of the pages;
- Usability, which concerns the ability of everyone to use the commands and the interface (e.g. keyboard accessibility);
- Understandability, i.e. the characteristics that make a page and the services it provides understandable for all the users;
- Solidness, which has to do with the integration and usage with different software (e.g. the specific software designed to help disabled people) (Belisario et al., 2010).

When designing a website, it is also crucial to keep in mind that mobile phones are increasingly common and that webpages should be conveniently accessible from this kind of devices (Groth & Haslwanter, 2015). Moreover, Websites should be usable (i.e. follow common standards that are convenient and understandable by most users: appropriate screen dimensions, congruous design, suitable input modes and small file size) and employ a responsive web design (i.e. the adaptability to different screen sizes) (ibidem).

Thanks to the diffusion of the internet, also e-mails and newsletters have become an increasingly useful instrument of communication between public authorities and citizens (Forghieri & Mele, 2005). A large part of internet users owns an e-mail address which is useful for communicating in a relatively quick way (ibidem). Nevertheless, e-mails also imply that it is neither possible to unquestionably verify

the identity of the sender, nor possible to make sure that the receiver read the message (ibidem). These obstacles can be overcome by certified e-mail (ibidem).
Finally, it seems worth mentioning newsletters, which are e-mails that are sent on demand to users in order to inform them about the activities of the institution (Forghieri & Mele, 2005). This way, users do not need to actively research public authorities' websites in order to be updated about their initiatives (ibidem). Noticeably, it is important that newsletters are not too frequent, otherwise the user will probably unsubscribe (ibidem).

2.2.1. Touristic communication via websites

This paragraph is devoted to a focus on the communication of travel destinations via websites.
The introduction of the Internet has deeply changed the way public authorities communicate with tourists (Horng & Tsai, 2012). Websites, in fact, are a crucial source of information for tourists who can freely access them from everywhere in the world (also in their mobile version): this means that an effective tourism marketing campaign starts from the destination website (Horng & Tsai, 2012; Del Vasto-Terrientes et al., 2015). Relative inexpensiveness and control are among the main advantages of websites, but it is important to keep portals always up-to-date, possibly with interactive and customizable features integrated with social media (Horng & Tsai, 2012; Fernández-Cavia & Castro, 2015). Moreover, touristic websites (and the information they provide) positively impact the image that tourists have of the destination (Jeong et al., 2012). Another fundamental trait of official destination websites is that they are believed to officially represent the destination and its image because they provide reliable information in several languages organized in only one source (Fernández-Cavia & Castro, 2015). Finally, it is worth mentioning that websites enable organisations to publish information in detail at a low cost, therefore other means of communication often redirect to the website (Lo Surdo, 2013).
Since websites aim at attracting visitors to the destination, Ibrahim et al. apply Robert Cialdini's six persuasion techniques to tourism websites (Ibrahim et al., 2013).

- *Reciprocation* consists of giving something to a user and leveraging on his or her feeling of obligation for that. For not-for-profit websites like touristic portals, the gift to the user should be something that holds a symbolic value, such as a space for exchanging ideas with other users; the institution would also get useful feedback in return.
- *Commitment and consistency* consist of pushing users to make a decision because it is consistent with a previous one. Normally, vendors investigate on the criteria that their customers use in order to make a decision and propose products matching those criteria: more often than not, the customer will feel like taking a decision that is consistent with the criteria he or she mentioned earlier. Similarly, touristic websites should offer the possibility to search for information in order to retain users.
- *Social proof* has to do with the inner desire to emulate the actions of peers. Touristic websites can exploit this impulse by showing the most popular activities and destinations and inviting users to experience them as well.
- *Liking* deals with the positive expectations that users have about a product or service; touristic websites should thus have a good and interactive design in order to grant a positive image of the destination.
- *Authority* is the tendency of users to follow the advice of leaders or celebrities; this also happens in the touristic domain, therefore it can be appropriate to show feedback of an influencer or popular person in order to encourage a certain behaviour.
- *Scarcity* consists of giving the impression that products are in short supply with the objective to augment the demand (e.g. limited-edition products): informative websites, however, seldomly have the chance to use this technique (Ibrahim et al., 2013).

In tourist destination websites, language is easily understandable by the general public (Malenkina & Ivanov, 2018). However, there can be differences in the language used in this kind of platforms; in fact, scholars highlighted that when the main purpose of the texts is promoting the destination, the language is persuasive, emotional and rich in adjectives (subjective); on the other hand, whenever the purpose is providing information, language turns objective and analytical

(Malenkina & Ivanov, 2018). The degree of subjective and objective language in website discourse varies according to the kind of institution promoting the destination; different degrees of objectivity and subjectivity generate different social impacts on the users (ibidem). Giorgio Lo Sudro (2013) adapted the concept of *heritage interpretation,* first introduced by Freeman Tilden, to touristic communication. According to this paradigm, touristic information should be original and distinctive, in order to avoid confusion among destinations (Lo Sudro, 2013). Furthermore, in order for information to be captivating, it is important that it is commented and interpreted, even though it is important that it remains unbiased (ibidem).

Research investigated the main strategies for creating and developing destination brands. Firstly, the importance of a unique selling proposition (USP) is underlined; a USP should be strongly and consistently associated to the slogan in order to deliver a clear message (Lee et al., 2006). Moreover, concrete images are claimed to be much more effective than abstract ones (ibidem). The opportunities created by alliances with other destinations within the same region (co-branding) should not be underestimated (ibidem). The home page is what gives users a first visual impression of the website; for this reason, it should be carefully designed in order to be clear and captivating (Del Vasto-Terrientes et al., 2015). Information for foreign tourists should be promptly available and updated (Lee et al., 2006). In order to be understandable and valuable for users, tourist destination website content should not only be translated, but rather *transcreated*: in other words, concepts should not be merely turned from one language to another, but it is important to make sure that the meaning that they convey is correctly transmitted also by the target language (Malenkina & Ivanov, 2018).

When designing touristic websites, it is important to take into account that often users look for contextual information when they are already visiting their destination (Groth & Haslwanter, 2016).

In spite of the difficulties in assessing the performance of a website (Del Vasto-Terrientes et al., 2015), Giannopoulos and Mavragani (2011) sum up the main features that are useful to evaluate a touristic website. *Visual appearance* is the mix of graphics, images and text and should be structured in a coherent way; visual

appearance should reflect the image that the destination aims at providing (ibidem). *Quality and variety of information* are a proxy of the degree of usefulness of the website for the user: useful websites provide pertinent and up to date information, links to relevant websites and images (ibidem). *Ease of use* is the set of characteristics that facilitate users in their information research (e.g. internal search engine, sitemap, translations) (ibidem). *Interactivity* concerns the integration of the website with external information and services (e.g. maps, blogs, newsletters, contact details), with the owners of the webpage or with other users; an interactive website holds users on the webpage for a longer time (Giannopoulos & Mavragani, 2011; Del Vasto-Terrientes et al., 2015). Finally, *personalization* deals with adapting information to the specific user's needs (e.g. possibility to bookmark and organize relevant information, feedback collection etc.) (Giannopoulos & Mavragani, 2011).

The main advantages of using websites for destination promotions were identified by Jeong et al. (2012): firstly, websites are a valid instrument for building a brand perception for the destination; moreover, websites allow institutions to reach the potential consumers in a relatively easy, accessible and fast way; finally, in relation to the advantages provided, websites are inexpensive.

Web 2.0 implies that users can not only access information provided by organisations on their websites, but also that they can access opinions of other users about it (we analyse users' opinions more in detail later in this chapter) (Mak, 2017). Hence, it is important to consider that, in case the image reflected in websites is not consistent with the one provided by other users, the effort made to convey a positive image of the destination may be seriously damaged (ibidem).

A useful way to drive tourists to DMOs' websites is advertising them on brochures and other offline material (ETC, 2008). Moreover, if other similar organisations provide links to the website, it will be easier for tourists to find it (ibidem).

When creating content for DMOs' websites it is important to take a user-oriented approach and identify the values that should be conveyed to the tourists; in order to do it, it is useful to create a set of keywords, graphic elements and images that vehicle the right message for the brand (ETC, 2008). Moreover, it is important to create content that can be adapted to different channels (ibidem). Certainly, it is

crucial that the information provided by the content shared is accurate (which implies that it should be disclosed when content is advertised or sponsored), timely and up-to-date, objective and interesting (i.e. attractive and stimulating) (ibidem).

2.3. Social networks

New media are becoming increasingly important in the communication practices of public authorities, for this reason we now aim attention at how they are used in this domain (Forghieri & Mele, 2005). Among the advantages of social media for public communication there are lower communication costs (at least for what media costs are concerned), opportunities to communicate globally, virtual ubiquity (thanks to videoconferences, chat etc.), more direct language and approach, which enables also citizens with a lower degree of education to be involved in the communication process (Forghieri & Mele, 2005; Cogo, 2012). Moreover, another important change introduced by social media is the potentiality to communicate in different modalities, which are broadcast, narrowcast and peer to peer (Forghieri & Mele, 2005; Cogo, 2012; Bennato, 2012). In *broadcasting* (one-to-many communication) a single source passes a message to multiple receivers: this kind of communication implies a cultural meaning because it enables institutions to transmit their news and information to a large public; with the advent of the Internet, the term broadcasting has been changed to *webcasting* (Bennato, 2012). Social Networks, in addition, allow *narrowcasting*, which is the possibility to communicate to a narrow audience, i.e. a specific audience (Bennato, 2012). *Peer to peer* communication can be defined as one-to-one communication among users Forghieri & Mele, 2005; Cogo, 2012).

Institutional spaces are often organized as a billboard where users can gather information, but chances of two-way communication are hardly given: language is often bureaucratic and self-referential (Alonso et al., 2009; Cogo, 2012). Social media, on the other hand, are a valuable instrument for changing this tendency and improving the mutual communication between citizens and public authorities (provided that social networks are not used similarly to traditional websites); this way, social networks give users the opportunity to *ask* for information, rather than passively read the information published (Cogo, 2012).

In order to enhance dialogue with citizens (rather than simply posting updates like in a billboard), public administrations are increasingly hiring community managers: the mains task of these professionals include (1) building a community with the objective to develop two-way communication with citizens (2) managing and containing flames (i.e. negative messages posted in the page) (3) improving the reputation of the institution via a careful analysis of the sentiment (i.e. the general opinion that can be detected in the comments) (Cogo, 2012).

The disadvantages of introducing social networks into public administration practices mainly deal with two aspects (1) the loss of control (2) the increased expenditures (which will be indirectly paid by citizens) (Cogo, 2012).

Social networks imply specific (and often not written) rules (Cogo, 2012). In fact, communication in social media should happen in a quick and practical way: questions should be answered fast and new content should be published often, otherwise users may have the impression that the profile is abandoned (Cogo, 2012; Uşaklı et al., 2017). Sometimes it may be difficult to instruct employees on how to deal with the public in social media (Cogo, 2012). A way to avoid conflicts is to develop a social media policy; normally, social media policies are developed in two versions: an internal version is delivered to workers inside the institution in order to thoroughly identify rules, best practices, tasks, responsibilities and a common tone of voice that gives the impression that it is always the same person who is writing the messages; furthermore, an external social media policy is published with the objective of establishing rules that can govern the relationship with users (ibidem)

Noticeably, it is not only important to develop new channels for providing services, but it is also crucial to effectively inform citizens about the existence of such channels, possibly with a marketing-oriented rather than bureaucratic perspective (Foglio, 2003). The marketing approach implies identifying and satisfying public demand, optimize positioning, maximize the social value created and adapt to environmental changes (ibidem).

2.3.1. Touristic communication via social media

The final section of this chapter is devoted to social media strategies in the tourism domain. Social media have increasingly gained influence in the tourist sector, in fact, tourists use social media for their information research and increasingly trust opinions of users who visited the destinations before them (Zeng and Gerritsen, 2014). However, it is important to note that social media have developed from an information-research tool to a way to link every-day life with tourism experience (Choe et al., 2017) Social media also imply different schemes for DMOs and touristic enterprises (Zeng and Gerritsen, 2014; Choe et al., 2017).

Touristic activities and social media have some characteristics in common: they are both socially constructed activities which obtain new meanings when they are shared with others; sharing tourist experiences with peers is helpful both for positive and negative experiences: the impact of negative experiences can be reduced by sharing them, whereas, sharing positive events improves the tourist's attitude (Choe et al., 2017). However, it is important to take into account that from the organisations' point of view it is challenging to measure word of mouth online (Bughin et al., 2010). It may seem meaningful to only consider the volume (i.e. the number) of the messages available online concerning the organisation (ibidem). However, as well as the number, it is important to understand the impact of the messages; this can be done by analysing the network, the source, the sender and the content of the message (ibidem). If a message comes from a tight and reliable network, it tends to have a greater impact on the receiver (even though the number of receivers is smaller than in bigger networks) (ibidem). Word of mouth messages tend to have a greater impact when they come from the personal experience of an influential source (ibidem). Finally, the more the content of messages is compatible with the most important service features for the users, the more the message will be effective (ibidem).

Towards 2008, the first official tourism promotion accounts were opened on social media: at the beginning this was a non-strategical activity carried out without the necessary planning (Heeley, 2010). According to Tuten and Solomon (2014), an initial trial phase is necessary when an organization approaches social media; it is however important that this phase is seen as the initial step of a more complex

process: a transition phase should follow and the organization should finally understand the importance of establishing thorough objectives (e.g. increasing destination awareness, improving destination image, increasing the number of visitors, targeting different tourist segments), and strategize in order to accomplish them (Tuten & Solomon, 2014; Kiráľová & Pavlíčeka, 2015). A well-defined strategy is crucial for dealing with the increasingly competitive tourism environment (Oliveira & Panyik, 2015). For example, a coherent strategy should shape users' conversations so that they can enjoy an appropriate environment for communicating their feedbacks and benefit from other users' opinions (Sigala et al., 2012). This can be done by creating a sense of community and by giving the opportunity to share reviews and recommendations in an interactive environment (Oliveira & Panyik, 2015; Kiráľová & Pavlíčeka, 2015). Moreover, during social media planning, it is necessary to define the approach that will be taken towards social media (e.g. romantic, informative, competitive – which implies contests and prizes for the winners) and to select which social media will be used (social media mix) (Minazzi, 2015; Kiráľová & Pavlíčeka, 2015). A careful strategy should also consider the importance of integration among different channels: in fact, social media activities should be consistent and integrated with other online activities (e.g. e-mail marketing and websites etc.), as well as offline activities (e.g. billposting, publications etc.) (Sigala et al., 2012). Moreover, a strategic approach also deals with responding (in an appropriate amount of time) to the requests made on the DMO's social media accounts, in order to avoid potential business damage (Uşaklı et al., 2017). Finally, an essential part of the social media strategy is the assessment of the results: it is thus crucial to compare the results of the social media campaign with data concerning the number of arrivals at the destination (Kiráľová & Pavlíčeka, 2015).

Social media are essential to travellers because they are an important source of information that enables them to read and find electronic word-of-mouth, as well as reliable experience (Ricci et al., 2012; Oliveira & Panyik, 2015; Minazzi, 2015). Moreover, social media enable touristic organisations to take a user-centric approach and thus create a direct relationship with tourists and adapt services to different needs; information about different touristic needs is available to

organisations thanks to user generated content (Minazzi, 2015). On the other hand, it must be taken into consideration that not all the content posted on social media is authentic and, due to the lack of control, some organisations may be reluctant in using social media (Ricci et al., 2012).

It is important to note that travellers use social media in different ways throughout their journeys; three main stages can be identified: before the trip, during the trip and after the trip (Choe et al., 2017). A great majority of social media users change social media platform at least once throughout these phases (especially young people who tend to be more flexible) (ibidem). In the pre-trip phase, travellers gather information, create beliefs and make decisions about the destination (Minazzi, 2015). During the trip, the information research continues, often on mobile devices and in some cases content (especially visual) is shared (Minazzi, 2015; Uşaklı et al., 2017). In the post-trip phase, tourists normally have time to judge several aspects of the trip and it is during this phase that the largest amount of user generated content is published (Minazzi, 2015; Groth & Haslwanter, 2016; Uşaklı et al., 2017). Travel reviews are hardly ever consulted and written during the trip, but they are often utilized before and after the trip (Choe et al., 2017). Minazzi (2015), however, points out that, thanks to mobile technology, an increasingly wide part of the information research is carried on during the trip, rather than before. Social networks and photo/video sharing platforms, on the other hand, are mostly used after and during the trip (Choe et al., 2017). Personal blogs are updated after the trips, whereas microblogs and online communities are consulted at a similar extent during the three phases (ibidem). Location-based utilities are especially useful during the trip, as they allow tourists to look for restaurants, attractions and other services located nearby (Minazzi, 2015).

Social networks have become more and more important in touristic promotion, thanks to their ability to put into contact future tourists with tourists who have already experienced the services that they are interested in, by creating a word-of-mouth platform available in all the phases of the trip (Milano et al., 2011; Uşaklı et al., 2017). This spread of knowledge is possible thanks to the shift from Web 1.0 to Web 2.0, which makes interaction a central feature of the internet experience, which also has consequences on the offline lives of users (Rheingold, 2007; Mak,

2017). This ability of the internet to generate user contribution is often referred to as *architecture of participation* (O'Reilly, 2004). The experiences shared by travellers are commonly called tourist generated content (as opposed with more general user generated content) (Mak, 2017). The greatest potential of tourist generated content lies in its accessibility: it can be freely read from everywhere in the world and thus it greatly contributes to the image formation of a destination (ibidem). This kind of content is also credible because it is neither promotional nor paid content (ibidem). Among the main reasons why internet users publish reviews and comments about their experience there are gratification, altruism towards other tourists, devotion to the firm, rarely they receive benefits and, in some cases, they are moved by venting or revenge (Morozov, 2013; Sigala et al., 2012). On the other hand, some users may be frightened by the risk of losing control over the information spread and their privacy and thus decide not to publish their review, but this does not seem to be very common (Morozov, 2011; Morozov, 2013; Sigala et al., 2012). Normally, people who publish their review are frequent travellers and/or people who actively participate in the planning phase of the trip (ibidem). Most reviewers are male, young and have good internet skills (ibidem). It is estimated that roughly 20% of travellers post their travel experiences online (ibidem).

Among the tools that DMOs can use in their social media there are hashtags (Oliveira & Panyik, 2015). Hashtags are folksonomies, i.e. ways for users to define content and topics based on their personal meanings and perceptions (Tuten & Solomon, 2014). Hashtags enable content to be visible for a greater number of users and are increasingly popular in different social media (Oliveira & Panyik, 2015).

As Milano et al. show, social networks are an important resource for augmenting the number of visits to official touristic websites (Milano et al., 2011; Ricci et al., 2012). Moreover, social networks are used with product distribution, marketing and management (financial and crisis management) purposes (Uşaklı et al., 2017).

3. Chapter 3: Problems related to tourism

3.1. Main Issues of Venice

As well as direct costs (e.g. maintenance and support), tourism implies indirect costs, such as higher service prices and overcrowding (Van der Borg, 2005). It is significant to mention that a consistent amount of these costs is born by local population, whereas external subjects (e.g. tour operators) benefit from a consistent part of the advantages of tourism but are only marginally affected by its costs (ibidem).

As we see more in detail in the next chapter, in order to tackle a part of the problems caused by tourism, the Municipality of Venice developed the communication campaign #EnjoyRespectVenezia, which aims at spreading the culture of a sustainable tourism that respects the inhabitants and the fragility of the city (#EnjoyRespectVenezia, 2018). However, before we analyse the solution proposed from the communicative point of view, it seems meaningful to examine some of the most relevant costs of tourism. The next three paragraphs will cast a light on causes and consequences of difficult logistics, littering and isolated suburbs in Venice.

3.1.1. Logistics

As time goes by, distinctive and traditional ways of life in Venice are gradually disappearing; this can be noticed by focusing on transportation in the historical centre: boats used to be the most common and convenient mean of transport within the city (Minoia, 2017). Nowadays, however, mooring has become more and more difficult and expensive; therefore, even though boats can circulate without heavy constraints, only a minority of them can stop (ibidem). As a consequence, boats are more frequently used for tourism, rather than for ordinary transport (ibidem).

Licensed private transport boats (i.e. those watercrafts which provide a service upon specific request), such as taxis are 250 in total and their shifts are planned by the municipality which establishes the minimum number of active vehicles in each moment of the day (Gasparoli & Trovò, 2014). The local public transport companies provide the population with about 1 400 daily routes (ibidem). Water buses, however, are not only used as means of transport, but tourists also exploit

their journeys on the *vaporetti* to enjoy the sights that the city has to offer without walking; consequently, the municipality carried out a price discrimination with higher waterbuses fees for tourists than for residents (COSES, 2009). Nonetheless, it is important to note that the preferred mean of transport for tourists within the city remains walking (COSES, 2009).

A high proportion of the inhabitants underlines that the *vaporetti* are often very crowded: for this reason, they sometimes decide to walk instead (Quinn, 2007). Locals who decide to reach their destination on foot, on the other hand, may be faced with a similar problem and consequently decide to avoid certain areas because they are often overcrowded; this is especially true in high season or during big events (Russo, 2002; Quinn, 2007). In fact, logistics in Venice is also influenced by seasonality: the number of visitors steadily increases from January until it reaches its maximum in August; after that, it decreases until December when it reaches approximately the same level as in January (COSES, 2009). Over the last years, however, demand peaks are increasingly extended in time and high season is increasingly long (COSES, 2009).

3.1.2. Littering and garbage collection

Veritas SpA is the company that takes care of garbage collection in the Venice area (Veritas SpA, 2017). One of the peculiarities that Veritas faces in the historical centre of Venice is the high volume of tourists compared to inhabitants: 54 000 people live in the 7-square-kilometer area, while every year 24 million tourists and day-trippers visit the city; in other words, in a not too busy day 60 000 tourists and commuters populate the historical centre, in addition to the 54 000 locals (ibidem). This unbalanced proportion noticeably impacts garbage collection costs that in Venice are far above the national average (ibidem).

The high touristic presence not only affects the collection of garbage from private houses or commercial business, but also the emptying of trashcans (Bertasi, 2018). In fact, even though litter bins are emptied three or four times a day, it is not unusual to find them completely full (ibidem). According to Veritas, this is partially due to the fact that some locals illegally leave their domestic garbage in the trash

bins on the streets (La Nuova di Venezia e Mestre, 2017). However, it is not uncommon to see trash on the streets as well as inside the canals (Bottazzo, 2018a). Among the solutions proposed by the municipality of Venice there is the IRIS platform, which since 2009, allows citizens to inform the Municipality about issues in the maintenance of the city (Cogo, 2012).

Furthermore, in order to hinder littering and the excessive amount of garbage left in the trash cans, the Municipality of Venice has prevented authorisations for take-away venues for three years (Bottazzo, 2018a). In addition, take-away bars and restaurants already operating in the historical centre will have to undergo stricter rules; these rules are not yet defined in detail at the moment of writing, but they will most likely demand take-away venues to provide their customers with trash cans and to take care of cleaning the area around their venue (ibidem).

The garbage left on the streets (and sometimes inside the trashcans) may sometimes attract seagulls, pigeons and rats, with serious consequences on the hygiene of the city (Gasparoli & Trovò, 2014).

3.1.3. Recovery of suburban areas

The mainland, from the touristic point of view, plays an important role because its extensive spaces allow an enlargement of the touristic offer, which would not be possible in the historic centre due to the lack of space (Zanon, 2004). The relevant presence of accommodation facilities in the mainland is also the consequence of laws implemented at the end of the 1960s until the end of the 1990s, which made it difficult for owners to change the intended use of the buildings in the historic centre: this regulation aimed at avoiding the depopulation of the main island (ibidem). Nowadays, this law is not in force anymore and, due to the development of the sharing economy, accommodation platforms such as Airbnb allow also private citizens to rent their houses or a part of them to tourists for short periods (Van der Borg, 2017). Airbnb accounts for 35% of the number of hotel beds in Venice (Camatti, 2018).

A better involvement in touristic fluxes of peripheral areas such as Mestre and Marghera may not only improve the liveability of these areas, but also augment

the quality of life for residents in the historical centre who will not have to bear the touristic pressure alone (Van der Borg and Costa 2004).

The contrast between Venice and Mestre has always been evident: on the one hand, we have the so-called *historical city* with its culture, art and romantic atmosphere; on the other hand, we have the *modern city*, a dormitory suburb mainly populated by immigrants and venetians who do not stand to live in the historical city anymore (Barbiani, 2010). This vision indirectly conveys the idea that the two cities are hardly seen as a sole entity (ibidem). In fact, Mestre and Venice were two separate municipalities until 1926 and there are still some controversies over their division; in fact, in the past, three referendums have been held concerning the potential division of the city (Barbiani, 2010; Veneziatoday, 2018). Nowadays, however, the administration is striving to fill the gap between the two areas: the historical centre of Mestre was renovated, and increased attention has been paid to the liveability of the suburban areas (e.g. with the creation of green areas or the construction of new residential buildings) (Barbiani, 2010). In order to create an equilibrium between the different realities, the administrations are trying to plan the *Metropolitan City* with a holistic approach both on the political and managing level (ibidem). Mestre is also known for its train facilities: from Mestre several railways are coordinated throughout the Veneto Region (Facchinelli, 2017). Mestre station is one of the first facilities that many tourists see as soon as they arrive to Venice; for this reason, the internal part of the station has been renovated and the space for commercial businesses has been reorganized (ibidem). However, as soon as tourists go out from the station, they often find a situation of disrepair and scarce safety (ibidem). Among others, the commercial businesses located nearby are undergoing initiatives aiming at improving the situation; an intervention by public authorities in this domain, however, is desirable and necessary (ibidem). One of the initiatives aiming at revamping Mestre is the creation of the M9: the project encompasses not only a museum of the 20th century, but also an auditorium, spaces for commercial businesses, spaces for exhibitions and other facilities (Achilli et al., 2010; Barbiani, 2010). The main collaborators of the projects are the *Fondazione di Venezia* (Venice Foundation), the Municipality, the Veneto Region and the Authority for the Heritage of Venice and its Lagoon (Achilli et al., 2010).

These authorities established the constraints for the design of the buildings and the planning was entrusted to an international architectural contest (ibidem). The museum will open the 1st December 2018 and it is expected to have beneficial effects on the quality of the city (Bottazzo, 2018b). The idea behind the M9 Museum is to overcome the stereotypes that describe Mestre as an ugly suburban area (ibidem). Another project related to the relaunch of Mestre is the extension of opening hours of commercial businesses (so that tourists who stay in Mestre find shops open when they return to their accommodation in the evening); furthermore, economic contributions to commercial districts and marketing investments have been intensified (Chiarin, 2018).

Marghera (which some like to call Porto Marghera) is the part of Venice that developed around the harbour and the industries that are located in that part of the city since 1917 (Aiello, 2006). Local industries polluted the area and left dross in the surroundings (Kipar, 2007). New environmental conscience generated attempts of reconversion, among these, the scientific park Vega (Venetian Gateway for Science and Technology), which is a network of enterprises and Universities aiming at improving and facilitating scientific research; Vega supports several projects aiming at boosting innovation in the area (Aiello, 2006; Kipar, 2007). Furthermore, the presence of green areas has been incentivized and the project is advertised with the slogan “from Grey to Green"; among the objectives of the project there is the coexistence of the old industrial city with the natural environment (Kipar, 2017).

3.2. Main Issues of Barcelona

In the last few years, Barcelona has increasingly become a mass tourism destination (Dirección de Turismo, Gerencia de Empresa y Turismo, 2017). This implies that nowadays it is not only important to promote the touristic attractions of Barcelona, but also it is necessary to reach an equilibrium between locals and tourists; in other words, it is important to coordinate touristic activities so that they do not negatively affect the lives of local residents (ibidem). In the following paragraphs we analyse some of the main cohabitation issues between locals and tourists in the Catalan capital and some of the solutions proposed to each of them.

3.2.1. Rising estate prices

Housing is 16% more costly in Barcelona than in an average Spanish city (Dredge et al., 2016). Tourism is said to be among the main causes of the raise in estate prices because houses are increasingly converted in hotels and other accommodation facilities, thus causing a shortage in offer (Dirección de Turismo, Gerencia de Empresa y Turismo, 2017; Abril Sellarés et al., 2015). These changes in the intended use of houses are mainly due to the fact that renting houses for short periods to tourists offers higher profit than renting for longer periods (ibidem). In addition, in the past few years, sharing economy platforms entered the market of accommodation facilities (Dredge et al., 2016). Airbnb, among others, is an intermediary between hosts and guests that offers 50% of the beds for tourists in Barcelona (Sans & Quaglieri, 2016). On the one hand, the platform allows people to earn money by renting a spare room or apartment; on the other hand, Airbnb allows tourists to find low cost and diversified accommodation in a safe and reliable way (ibidem). This kind of accommodation especially meets the needs of groups and families who look for independence and bigger spaces (Duatis et al., 2016). At the beginning, the platform advertised itself as a provider of *authentic experiences* because it allowed tourists to live with locals and get in touch with them (Sans & Quaglieri, 2016). Nowadays, however, Airbnb has evolved and the *authentic experiences* have become more and more infrequent, whereas the most common condition is that owners rent out second homes (ibidem).

Even though it is not certain that the presence of sharing economy accommodation facilities is the main cause of the rising of estate prices in the city centre, it cannot be denied that these new platforms exacerbated the matter (Dredge et al., 2016). Sharing economy platforms are so popular among owners due to the higher profit that they can make with short-term, rather than long-term rentals (ibidem). The characteristics of the market also accelerated the diffusion of this kind of platforms: entry barriers are low, demand has risen in the last years because people tend to travel more and the internet has enabled systems that facilitate communication and economic transactions (Dredge et al., 2016; Sans & Quaglieri, 2016).

Supporters of sharing economy-based accommodation claim that these platforms allow the redistribution of tourism outside the city centre thanks to the increased availability of accommodation facilities in the peripheral parts of the city (with a positive influence on local commercial businesses) (Dredge et al., 2016). This is a controversial view because it is argued that even though tourists stay overnight in peripheral areas, they will tend to spend most of their day-time (and money) in the city centre (ibidem). Furthermore, the density of this kind of facilities is much higher in central areas than in the suburbs (Dredge et al., 2016; Sans & Quaglieri, 2016; The Guardian, 2017). Another argument supporting this kind of accommodation is that hosting tourists can be an additional source of income for destitute families; however, the Neighbourhoods' Assembly for a Sustainable Tourism in Barcelona argues that a large part of the rented apartments in the city belong to a small number of people (Dredge et al., 2016; The Guardian, 2017).

Airbnb supporters also claim that the properties listed in the website in Barcelona are only 2% of the total; this entails that the availability of this low number of properties on the long-term rental market, would not cause a significant variation of the prices (El País, 2015a). However, it has been argued that the problem is not the proportion of tourist-rented properties compared to the total number of properties; the real issue is the excessive concentration of this kind of properties in certain parts of the city (e.g. Barceloneta, El Raval or the Barri Gotic) (ibidem). Anyway, Airbnb, in its Community Compact, recognizes the concern of certain cities regarding the lack of long-term housing on the rental market (Airbnb, 2018a). For this reason, the firm is seeking to encourage only the rental of permanent homes (i.e. the apartments and houses where hosts are living permanently) and of non-permanent homes which would not be rented in the long run anyway (e.g. second homes that are used by the owners during holiday periods) (ibidem). Moreover, since May 2017, Airbnb does not allow hosts to advertise the rental of more than one entire house within the Old Town, unless the host has not obtained a specific authorisation (Airbnb 2018a; Airbnb, 2018c).

In order to have a complete view of the problem, it is also important to notice that the rising estate prices are not only due to tourism (The Guardian, 2017). In fact, in spite of the 23% increase in rental prices in Barcelona since 2013, Airbnb notes

that estate prices were already increasing before the expansion of the platform (El País, 2015a; The Guardian, 2017). Furthermore, after the economic crisis in 2007, it has become increasingly difficult for private citizens to obtain loans from banks: this paved the way for speculators in the sector (ibidem). The Tenants' Union of Barcelona claims that rent prices should be proportionated to the income of residents: speculators should not be allowed to raise prices and send residents away just to increase their profits (ibidem). A consequence of the increase of estate prices is that, in some cases, as soon as rental contracts expire, owners demand an extraordinary higher price for the same dwelling: if the tenant cannot afford to pay, the only solution will be leaving the apartment (Rabanal, 2018). Another common practice is the purchase of entire buildings by investors or international estate agents: in this case, companies wait until the rental contracts expire and do not allow renewals, therefore, tenants will be forced to find somewhere else to live (ibidem). If tenants have permanent rental contracts, they are offered money for leaving (ibidem). The final objective of this kind of projects is transforming the buildings in houses for people with higher economic means, for students (renting single rooms is more profitable than renting entire apartments) or for short-term tourist rent (ibidem).

The municipality is striving to fight the displacement of the population by means of a more careful planning: for example, it is strictly forbidden to turn houses into touristic apartments or hotels in the Old Town and a special plan for touristic activities has been developed (Dirección de Turismo, Gerencia de Empresa y Turismo, 2017; Crespi-Vallbona & Mascarilla-Miró, 2018).

3.2.2. Illegal rents

The growth of tourism in the city implied (together with the increase in the number of beds in hotels and in other accommodation facilities), the boost of illegal rents (Dirección de Turismo, Gerencia de Empresa y Turismo, 2017). The Municipality of Barcelona in 2016 estimated that about 4 000 announcements of illegal apartments for tourists (i.e. apartments without an official licence) were published on sharing economy platforms such as Airbnb, Niumba or Homeaway (Municipality of Barcelona, 2016a).

Catalan regulation does not specifically address rented rooms in shared apartments, which are approximately 6 500 in Barcelona (Municipality of Barcelona, 2016a; Dirección de Turismo, Gerencia de Empresa y Turismo, 2017). Among the negative consequences of these practices there is the deterioration of social contacts in the neighbourhoods due to the control and constant monitoring of neighbours aimed at detecting and denouncing illegal touristic rentals (Crespi-Vallbona & Mascarilla-Miró, 2018).

Accommodation in Barcelona is governed by three authorities together: the Municipality of Barcelona (which regulates the sector with the highest degree of detail; for example, in the past the Municipality reduced the number of authorisations for touristic accommodation facilities in certain parts of the city), the Government of Catalunya (which imposes the payment of taxes to owners) and the Spanish Government (whose legislation is the basis for more detailed regulations) (Dredge et al., 2016). Furthermore, in order to specifically address the issue of collaborative accommodation, the Catalan Government created the Interdepartmental Commission of the Collaborative Economy (ibidem). The objective of the Commission in this field is to develop a clear, simple and proportioned tax regime, which allows sharing economy platforms to continue providing accommodation without endangering the traditional accommodation sector (Generalitat de Catalunya 2017). A clear and simple regulation in this field is necessary because a large part of those who decide to host tourists in their properties thanks to sharing economy platforms are private citizens; at the moment, however, regulations in the city mainly refer to professional businesses, for this reason, it is often difficult for private citizens to know exactly which obligations they should undergo in carrying out their activity and to comply with the puzzling regulation initially addressed to businesses (Generalitat de Catalunya, 2017; Airbnb, 2018b). Tax regulation, for instance, is often complicated and costly, therefore Airbnb declared itself available for collecting tax money on account of its hosts in Barcelona and in many other cities with the objective to simplify the paperwork for hosts and assure the income for authorities (ibidem).

Furthermore, the legislation of touristic accommodation in Barcelona involves a licence for touristic houses; if a property obtains the touristic licence, it cannot be

used for residential use (Sans & Quaglieri, 2016). Properties can only obtain touristic licences if the "Plans of Uses" allow it; owners of the apartments are also required to prove that the house has insurance and that its conditions are safe (Citylab, 2015; Sans & Quaglieri, 2016). Licences also imply the payment of a small amount of money at the beginning of the activities and the taxation of the revenues generated by the businesses (Citylab, 2015). Moreover, local regulation requires the licence number to be displayed in every advertisement of the property (Sans & Quaglieri, 2016). However, inspectors of the city noticed (and fined) a high number of advertisements on Airbnb with fake or no licence numbers (The Guardian, 2017). Importantly, the shutdown of accommodation activities does not imply the expiration of licences; as a consequence, a market for licences has developed and speculators are taking advantage of it (Duatis et al., 2016).

In order to fight the phenomenon of illegal rents, it is firstly necessary for the lawmakers to clearly distinguish between the activities that are exploiting collaborative economy platforms for creating added value and those that are endangering the rights of the local population in the name of profit (Dirección de Turismo, Gerencia de Empresa y Turismo, 2017). On the one hand, it is important to support and empower the former activities; on the other hand, it is necessary to sanction and block the activities that are exploiting the deregulation of the sector for illicit profits (Dirección de Turismo, Gerencia de Empresa y Turismo, 2017; Crespi-Vallbona & Mascarilla-Miró, 2018). In order to do so, it is crucial to increase the number of inspectors and to provide them with the technological instruments necessary for carrying out their tasks (Dirección de Turismo, Gerencia de Empresa y Turismo, 2017).

In order to contrast the phenomenon of illegal rents, the Municipality developed an internet platform which integrates urbanistic information (e.g. cadastral information, information about road networks etc.) with the information provided by the accommodation platforms and the owners of the buildings (Barcelona Global, 2018). The objective of this project is to constantly monitor and manage touristic rents (ibidem). Moreover, the Municipality is using a software that scans the touristic houses available on the internet and checks whether they have a licence or not (Citylab, 2015). Furthermore, the *Flat detector* was introduced; the

Flat detector is a website where tourists can check whether the accommodation facility they are staying at is legal or not; it also allows citizens and visitors to report illegal rents to the Municipality (Municipality of Barcelona, 2016a; Flat detector, 2018). However, some argue that these measures are not enough to oppose the phenomenon: fines are not discouraging owners and a careful planning (similar to the plan developed for touristic accommodation) is also necessary for commercial businesses (Crespi-Vallbona & Mascarilla-Miró, 2018).

Airbnb also took action in order to limit the phenomenon of illegal rents (Airbnb, 2018c). Not only, since the 1st June 2018 the platform is informing hosts about the requirements of the law in Barcelona and Catalonia, but also Airbnb is requesting personal data of the hosts (e.g. name, ID number, address of the property) in order to share them with public authorities and facilitate the control and management activities (ibidem). These initiatives have been discussed and agreed between the platform and the Municipality of Barcelona (ibidem).

In addition to regulating the sector, it is important to enable and facilitate communication between public authorities and stakeholders (e.g. hotels, sharing economy platforms, residents etc.), so that policies and laws can be coordinated and agreed by all the interested bodies and disagreements can be solved in the quickest and most efficient way possible (Dirección de Turismo, Gerencia de Empresa y Turismo, 2017). In fact, opposing the new collaborative platforms would be anachronistic and counter-productive: sharing economy platforms should be supported and especially controlled in order to enable them (and their users) to properly pay taxes for their activities (Crespi-Vallbona & Mascarilla-Miró, 2018).

3.2.3. Noisy neighbourhoods

George Doxey (1975) studied and evaluated the different attitudes of locals towards tourists and conceived the Irritation Index, which is composed of four phases describing the evolution of the sentiment that inhabitants have towards tourism. The initial phase of the index, euphoria (i.e. optimism towards the newly-established touristic phenomenon and the economic opportunities it carries) is normally followed by apathy: in this phase tourism tends to be taken for granted and the exploitation of the profits generated by the sector reaches a peak (Doxey,

1975). Afterwards, a phase of irritation follows: the industry is saturated and the gentrification of the destination appears as a concrete possibility; public authorities normally take actions in this phase in order to enhance a peaceful cohabitation between tourists and locals, these actions mostly concern infrastructure enlargement, rather than tourism limitation (Doxey, 1975; Abril Sellarés et al., 2015). The final phase is antagonism: protests are organized in order to show dislike and sometimes hostility towards tourists, which are openly blamed to cause or exacerbate the problems of the destination (ibidem). The phase of antagonism seems to have been reached in Barcelona (Abril Sellarés et al., 2015), this can be confirmed by the several protests organized throughout the city (Farrés, 2015, El País; 2015b; Canto-Alamilla, 2016; The Guardian, 2017; Crespi-Vallbona & Mascarilla-Miró, 2018).

Among the objectives of the municipality of Barcelona there is the supervision of the social aspects of sustainable tourism; for this reason, the Municipality aims at guaranteeing liveability of the city, as well as a good cohabitation and rest of both tourists and locals (Direcció Operativa de Turisme, 2017). Acoustic complexity in Barcelona is not only due to tourism, but also to the high density of population, temperate climate, as well as other contextual factors (Farrés, 2015).

According to a study carried out by the Municipality, even though a clear majority (90%) of the inhabitants of Barcelona see tourism as a benefit for the city, 43% of residents feel that tourism is close to reaching the carrying capacity of the city (Municipality of Barcelona, 2016a). Concerning the attitude of locals towards tourists in general, it is worth mentioning that 75% of the population mentions no cohabitation problems with them (noticeably, this proportion is slightly lower in the most touristic areas, such as the Old Town and Barceloneta) (Municipality of Barcelona, 2016b). On the other hand, almost 15% of the interviewees acknowledges questionable behaviour of tourists, especially for what noise, drunkenness and vandalism are concerned (ibidem).

With regards to touristic apartments, according to the Municipality, almost 50% of the inhabitants of Barcelona think that this kind of accommodation causes inconveniences for the neighbours; residents dissatisfied with the behaviour of tourists in apartments are especially numerous in the Barceloneta, Gràcia and Old

Town districts (ibidem). On the other hand, the population segments that are less involved by this problem are younger people and foreigners (ibidem).

Accommodation offer is concentrated in the Old Town, the Eixample and Sant Martí (Municipality of Barcelona, 2016a). Tourism-addressing commercial offer is mostly located in the city centre, as well as in the Eixample, Gràcia, La Rambla and El Raval (Municipality of Barcelona, 2016a).

Since 2002 (and still today) meetings are held in El Raval (which is a traditionally poor neighbourhood) in order to discuss the problems of the area (Frekko, 2009). Problems mainly concern excessive noise (especially near bars and discos) and cleaning issues; until 10 years ago, the main issue was the cohabitation and cultural shock between locals and immigrants, whereas nowadays, with the advent of a lively touristic activity, tourists and their noise are a significant part of the problem (Frekko, 2009; El País, 2015b).

Furthermore, residents of the Sagrada Familia district complain about the touristic busses and the high number of tourists heading on foot to the Cathedral every day (El País, 2017). Of the 60 000 passers-by who get to the Cathedral in an average summer day, only 15 000 pay the entrance ticket (ibidem). This massive amount of people and buses negatively affects the lives of the people living around the Sagrada Familia (ibidem).

The residents of the Barceloneta district (a former fishermen's neighbourhood which nowadays has a high concentration of tourists) claim that "drunken tourism" is seriously affecting their lives and sometimes causing them to move to other neighbourhoods; the most mentioned problems are not only related to noise, but also to dirt in the streets, crowding, alcohol consumption and criminal behaviour (El País, 2015b; Abril Sellarés et al., 2015; Canto-Alamilla, 2016). According to a study specifically referred to the Barceloneta district, people tend to feel to a greater extent the negative aspects of tourism, rather than the positive effects of such activities (Canto-Alamilla, 2016).

The situation is similar around the main attractions of the city (e.g. the Ciutat Vella district, Parc Güell and the Gràcia neighbourhood) (El País, 2015b). In particular, in the district Gràcia (which is central but residential), complaints have

been registered due to young people and tourists who drink and speak loudly in the streets and squares during the nights (BBC News, 2018).

In some cases, the problem has been partially solved thanks to noise sensors installed by the inhabitants: the data collected by these devices is used as a proof to demand public intervention (Farrés, 2015; BBC News, 2018). The police now monitor the situation more accurately and often intervene (BBC News, 2018).

Noise, however, does not only regard streets and public venues; tourists, in fact, tend to be especially noisy in the apartments where they are staying also due to the lack of control (hotels normally have a receptionist, whereas touristic apartments generally have no one to check whether guests are behaving properly) (Abril Sellarés et al., 2015). Airbnb is committed to containing the problem of noisy guests by means of a platform providing a section where neighbours can report problems in order for actions to be taken (Airbnb, 2018b).

The problem of noisy neighbourhoods could be tackled, as well as with appropriate communication actions of public authorities, also by enhancing the control and punishment for bad-mannered tourists (Crespi-Vallbona & Mascarilla-Miró, 2018). Furthermore, the creation and support of cultural spaces could attract different types of tourists and decrease the proportion of tourists who seek nights out and beach in Barcelona (ibidem).

4. Chapter 4: Text analysis

4.1. Methodology

Woodside and Martin (2008) describe two distinct approaches to text analysis: quantitative and qualitative. The former implies clustering and categorisation of data, whereas the qualitative approach involves non-statistical explorations and interpretation of data. According to Krippendorf (2004), however, the distinction between the two approaches is blurred because they both imply qualitative reading, even though quantitative approaches tend to use computers in order to speed up the process. The initial part of this analysis is carried out with quantitative methods, subsequently, qualitative techniques are used in order to deepen the research. The quantitative part involves counting, sorting and visualizing words. Visualisation is performed by means of a network analysis which enables the identification of clusters. After that, in paragraph 4.4 some of the most significant messages published are examined and interpreted.

The data gathering for Facebook was made using Facepager 3 (Jünger & Keyling, 2018): this allowed the extraction of data for a time period stemming from 1st July 2015 until 30th June 2018. Twitter data, conversely, was downloaded using R Studio version 1.1.456 and the Rtweet package (Kearney, 2018). Due to a limitation in the data gathering, the analysis for the Twitter accounts only concerns 3 200 messages from the 24th August 2018.

Once acquired the data, the detect language function of Google Spreadsheets was used to separate languages and a spot check was conducted in order to make sure of the accuracy of the function. The data was divided into six databases and analysed separately: three databases for Facebook posts (Venice in English, Venice in Italian and Barcelona in Catalan) and three databases for Twitter (Venice in English, Venice in Italian and Barcelona in Catalan).

For what Twitter is concerned, emojis were not excluded from the database, due to their high frequency in the texts. The UTF-8 code of each emoji was therefore substituted with a textual description surrounded by at signs in order to allow a quick identification of each code. The list of emoji descriptions used was developed by Kate Lyons (2017) based on an idea of Jessica Peterka-Bonetta (2015).

Afterwards, the analysis was carried out with R. The main R libraries used were Quanteda (Benoit and Nulty, 2016) and TidyText (Silge and Robinson, 2017; Silge et al., 2018).

Quanteda was employed for preliminary operations: firstly, messages were tokenized (i.e. broken up into words). After that, capital letters, stopwords (i.e. very common words such as and, of, by etc.), punctuation and symbols were removed (exception made for hashtags and at signs). Links were removed as well, but the *http* prefixes were kept, in order to be able to analyse how frequently pages post external links. The next step was stemming the texts: stemming consists of reducing words with a common root to their base form (Lovins, 1968). The stemming algorithm for Italian and English was available in the Quanteda package. For what Catalan is concerned, there are no stemming algorithms available for R at the moment; for this reason, a *manual stemming* was conducted by substituting derived words with their base form (i.e. feminine or plural adjectives and conjugated verbs were substituted with the corresponding masculine singular adjectives and infinitive verbs) (see as a reference the methodology adopted by Choi et al., 2018). This was done for the 400 most common words in both databases in Catalan.

The tokenized and stemmed words were converted to a Document Frequency Matrix, which is composed of a row for each message and a column for each word: each cell contains a numerical value indicating how many times a word is contained in a single message (Benoit and Nulty, 2016). Row sums display the total number of words in each message, while column sums indicate how many times each word appears throughout all the database (ibidem).

In parallel, a corpus was created (i.e. an R object containing all the messages). Stopwords were removed from the sentiment and variables from the initial document (i.e. date and language) were added. Based on the corpus objects, one wordcloud per database was built using the package wordcloud2: wordclouds provide a quick visualisation of the most common words (Lang and Chien, 2018).

With the objective to analyse lexical diversity, we calculated the TTR index for each database. TTR (also known as t/T or type Token ratio) is the ratio between the number of unique words (types) and the total number of words (Tokens) in a

message (multiplied by 100) (Jockers, 2014). The result is a percentage of unique words in a text (ibidem). Since this index is deeply affected by message length, we consider it in relation with the number of Tokens (stopwords excluded) (ibidem).
The Tidy Text approach was also employed. According to the tidy text principle, messages are stored in objects constructed as follows: each token (each word, in our case) is displayed in a single row of a so-called tibble object (Silge and Robinson, 2017). The columns of the tibble correspond to word, identification number of the message and count (i.e. the number of occurrences of the word within the message). If a word appears in x documents, then there are x rows displaying the word (ibidem). Tidy objects were manipulated with the functions contained in the package Dplyr (Wickham et al., 2018).
Message sentiment was analysed by means of the tidy approach. The tidy corpus object (which is the base for the sentiment analysis) was not stemmed in order to be compatible with sentiment dictionaries that are composed of non-stemmed words. Firstly, we focused on a sentiment analysis that only took the single words into account. In order to do it, we used the AFINN dictionary by Finn Årup Nielsen (2011). The English version of the dictionary contains 2 477 words classified within a scale from -5 to 5. For the Italian and Catalan versions of the analysis, the AFINN dictionary was translated using the Google Spreadsheets translator and carefully checked in order to correct the mistakes affecting automatic translations. Some context-specific hashtags have been added to the sentiment dictionaries, such as #bestoftheday, #lecittàinfesta (party atmosphere in the cities), #soroll (noise). Furthermore, a specific analysis was made for the word *grande* in the databases in Italian. In fact, even though this word means great (which has a sentiment score of 3 in English), *grande* is often used in different contexts in Venice, such as *Canal Grande* or *Scuola Grande*. In such contexts (approximately 40% of the total), this word does not affect the sentiment of the sentences. For this reason, the sentiment for this word in Italian was lowered to 1.
With the technique described above, only sentiments of the single words are taken into account; in order to have a broader vision of the sentiment, a proxy of the sentiment by sentence was used (sentiment by sentence is not applicable for this study because it is only available in English). The average score for each message

was calculated and subsequently the average sentiment based on each single date was determined. For example, if in one day two messages with average sentiment -1 and 5 were posted, the average sentiment of the day would be 2.

Finally, by means of the Tidy Text approach, the pairwise correlations among all the words in each database was calculated in order to understand which words appeared most often together. These correlations were used for producing graphs showing a visual representation of the correlations among the most frequent words.

Furthermore, the Quanteda Keywords in Context function was applied to tokenized and stemmed texts in order to retrieve words that can be associated to sustainability. This way, it was possible to verify whether words were significant for our field of analysis. A subset of messages related to sustainability was constructed using the regular expressions mentioned below (asterisks indicate stemmed words):

- For messages in English: Tourist Report, #EnjoyRespectVenezia, detour*, muoversivenezia (i.e. move around Venice), sustain*, bin, crowd*, respect*, Mestre, Marghera, mainland, outflow.
- For messages in Italian: #EnjoyRespectVenezia, detour*, muoversivenez* (i.e. move around Venice), puliz* (i.e. clean), vaporett* (i.e. waterbus), rispett* (i.e. respect), Mestre, Marghera, terraferm* (i.e. mainland), deflusso (outflow), affoll* (crowded).
- For messages in Catalan: #fairtourismBCN, #compartimBCN (let's share Barcelona), habitatge (i.e. housing), gentrificació (i.e. gentrification), sostenib* (i.e. sustainable), vein* (i.e. neighbours), molest* (i.e. disturb), soroll (i.e. noise), dormir (i.e. sleep), il·legal (i.e. illegal), descansar (i.e. to rest), llicencia (i.e. licence), xxxt (i.e. shhh).

Clusters specifically related to sustainability were analysed more in detail by means of a graph similar to the graph mentioned above. Furthermore, the number of sustainability-related messages published in each day was calculated and plotted in a series of graphics showing the evolution of sustainability-related messages over time.

Subsequently, the qualitative analysis was carried out. Significant messages were analysed in detail with the objective to understand how problems listed in chapter 3 are tackled. Furthermore, a comparison of the approaches used by the two institutions was carried out.

4.2. Facebook

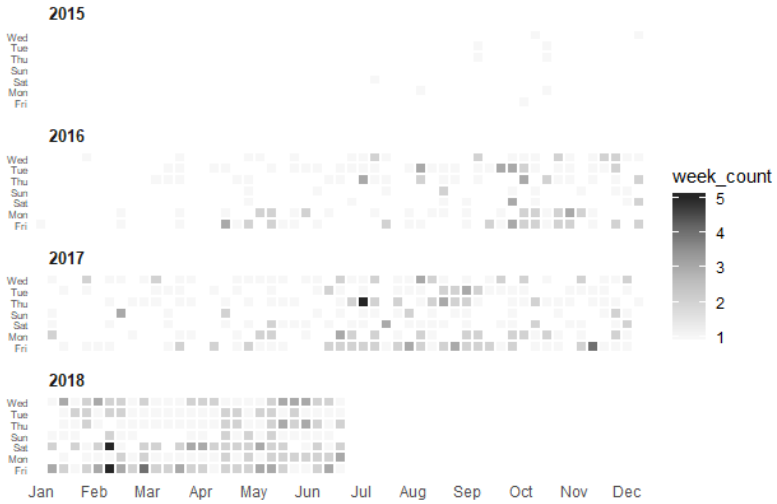
4.2.1. Venice

Figure 1: @VeneziaPaginaUfficiale – wordcloud with the most common words in English

Figure 2: @VeneziaPaginaUfficiale – wordcloud with most the common words in Italian

As we will see by means of the analysis, the page publishes a high number of posts aiming at promoting events, museums and lesser known parts of the city.

The Venezia Unica Facebook page (@VeneziaPaginaUfficiale) counts 29 621 likes and is followed by 29 718 users (last data update 30th August 2018).

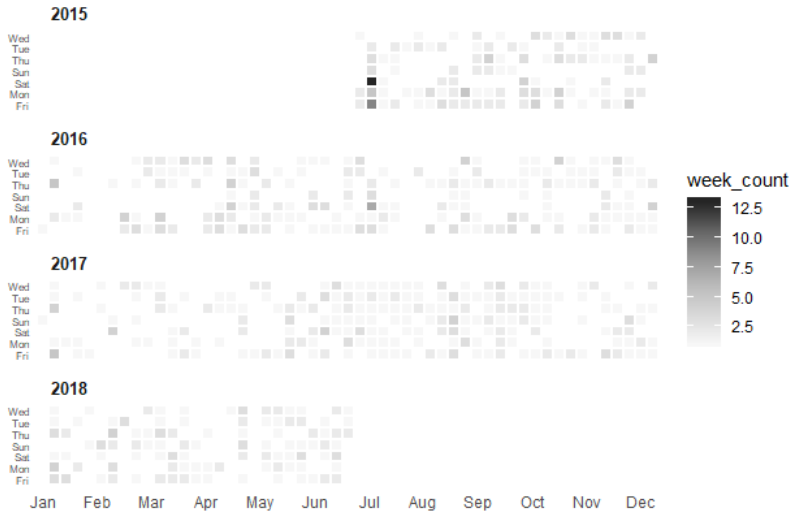


Graphic 1: @VeneziaPaginaUfficiale weekly posts in English

The total number of posts published in the considered period is 1 764: among these, 741 messages (42%) are in English, while 962 (54.5%) are in Italian. The remaining part (61 messages, 3.5%) is composed of empty messages and messages in French

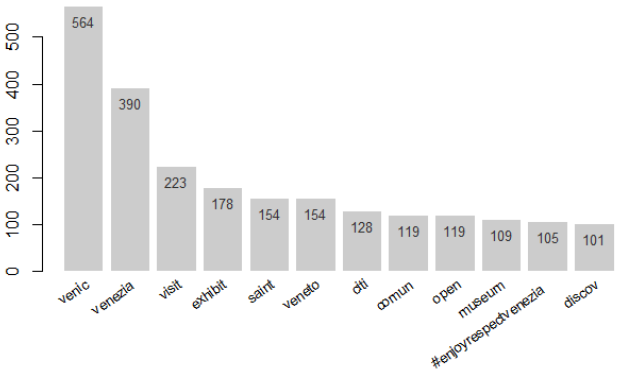
and Spanish: these posts are not part of the analysis. A parallel analysis was conducted for messages in Italian and messages in English.

Graphic 1 shows the distribution of posts in English within the considered period: it is worth mentioning that the number of messages per year increased steadily within the three-year period considered (10 messages in the last six months of 2015, 179 in 2016, 274 in 2017 and 278 in the first six months of 2018). The main peaks were registered during the Carnival weekend in 2018 and before the Redentore celebrations in 2017: both of these events attract several visitors to the city (Municipality of Venice, 2018).

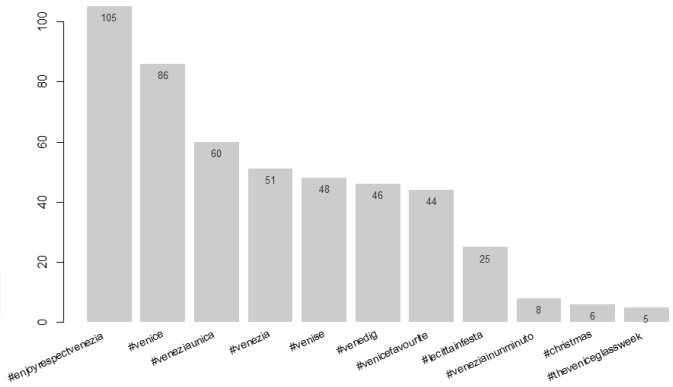


Graphic 2: @VeneziaPaginaUfficiale weekly posts in Italian

Graphic 2 shows the frequency of posts in Italian; messages were more frequent in 2015 and slightly decreased throughout the years (209 messages were posted in the last six months of 2015, 300 in 2016, 298 in 2017 and 156 messages were posted in the first half of 2018). The peaks registered towards the second week of July correspond to the Redentore celebrations.



Graphic 3: @VeneziaPaginaUfficiale most frequent words (English)

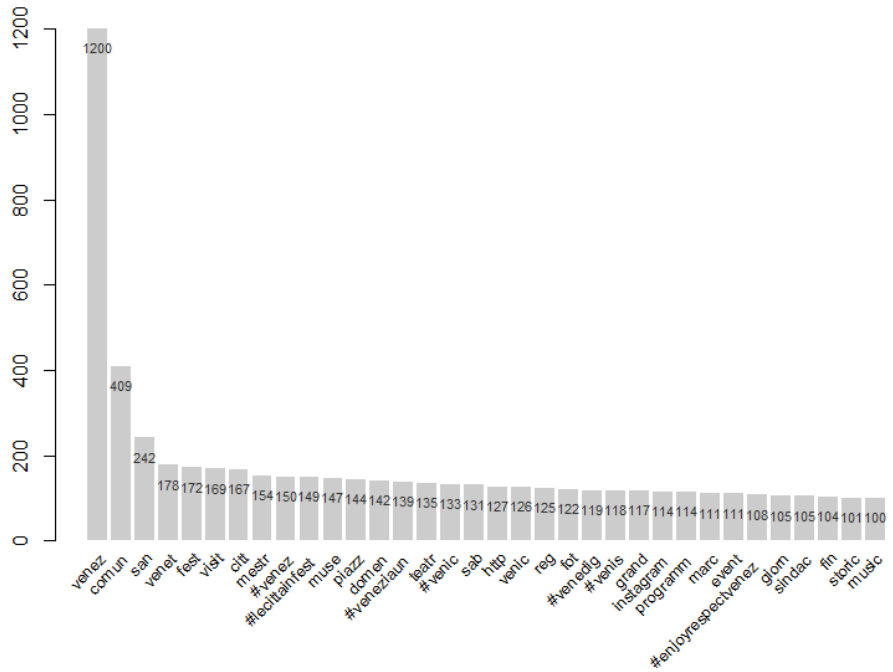


Graphic 4: @VeneziaPaginaUfficiale most frequent hashtags (English)

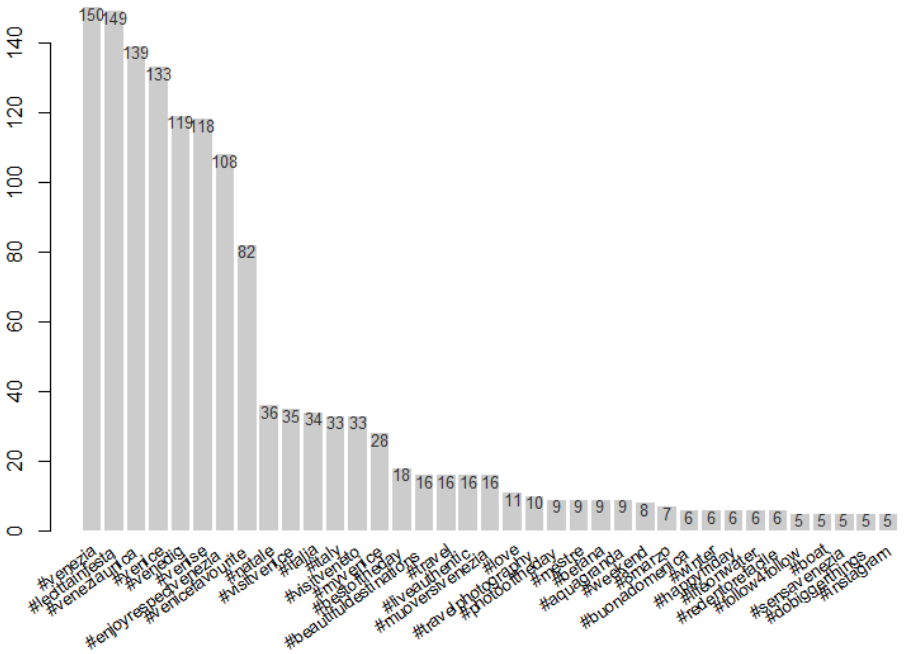
In Graphic 3 we can observe the most common words used in the messages in English (frequency ≥ 100). Noticeably, the word frequency is decreasing in partial compliance with the Zipf's law (Jockers, 2014). According to the linguist George Kingsley Zipf, the frequency of the nth frequent word can be calculated by dividing the frequency of the most frequent word by n (Jockers, 2014). Strictly speaking, the rank of a word (n) is inversely proportional to its frequency (ibidem).

Among the most common words, there are those strictly related with the name of the city (e.g. Venice, Venezia, etc.), but it is also important to notice words associated with touristic promotion (e.g. exhibition, saint, museum, etc.). In fact, the large majority of the messages posted by @VeneziaPaginaUfficiale advertise temporary initiatives, events, museums and other activities organized throughout the city. It is worth mentioning that #EnjoyRespectVenezia is the most common hashtag. This can also be seen from Graphic 4, which only takes hashtags into account (frequency ≥ 5). Again, the distribution is decreasing, and it is interesting to note that, among the most common hashtags, #EnjoyRespectVenezia is the only one dealing with sustainable tourism and is used 105 times, i.e. in 14% of posts in English.

Concerning the most common words in Italian posts, Graphic 5 shows that most of them are related to the city and to its promotion. The distribution of the bar plot is decreasing. Interestingly, Mestre is among the most common words, showing an increased interest for this suburb in the Italian version of the account. Furthermore, it is interesting to notice that the prefix *http* (which in our analysis



Graphic 5: @VeneziaPaginaUfficiale most frequent words (Italian)

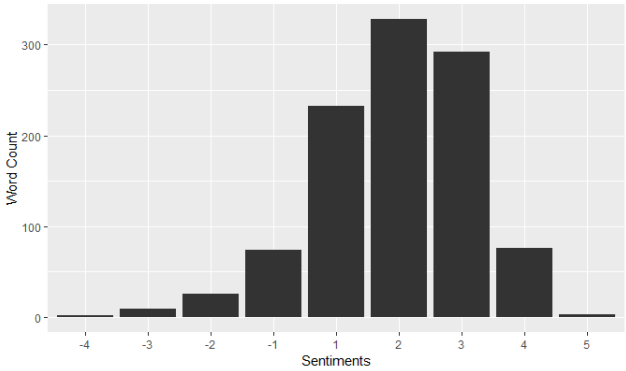


Graphic 6: @VeneziaPaginaUfficiale most frequent hashtags (Italian)

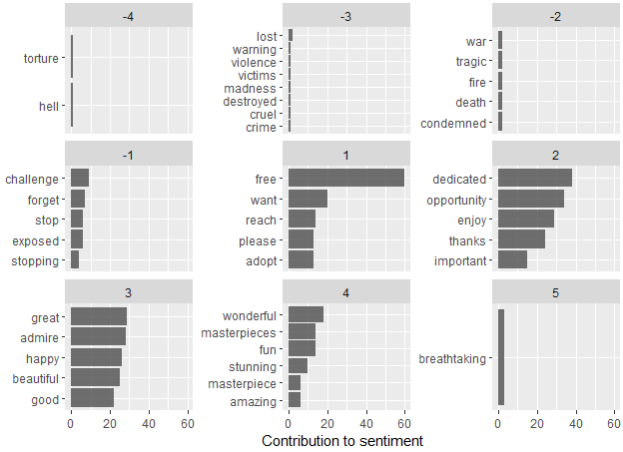
generally indicates all the external links provided) is among the most frequently used terms with 127 occurrences.

Moreover, notice that the hashtag #EnjoyRespectVenezia appears 108 times throughout the database in Italian with a higher absolute value compared to English, but a lower percentage (11% of messages). Furthermore, in the Italian

version of the messages, city-related hashtags (e.g. #venezia, #lecittainfesta, #venice, etc.) are more common than #EnjoyRespectVenezia. Other hashtags are related to tourist promotion (e.g. #bestoftheday, #travel, #love, etc.).



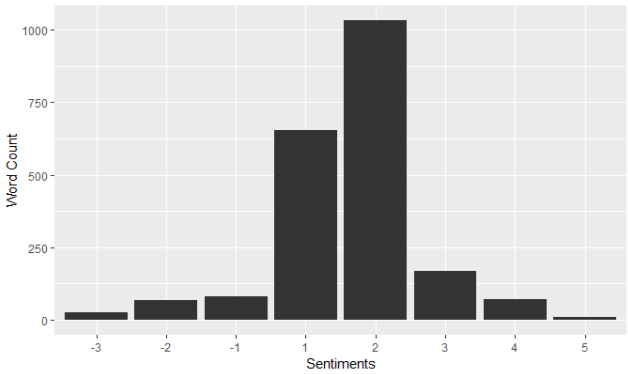
Graphic 7: @VeneziaPaginaUfficiale sentiment (English)



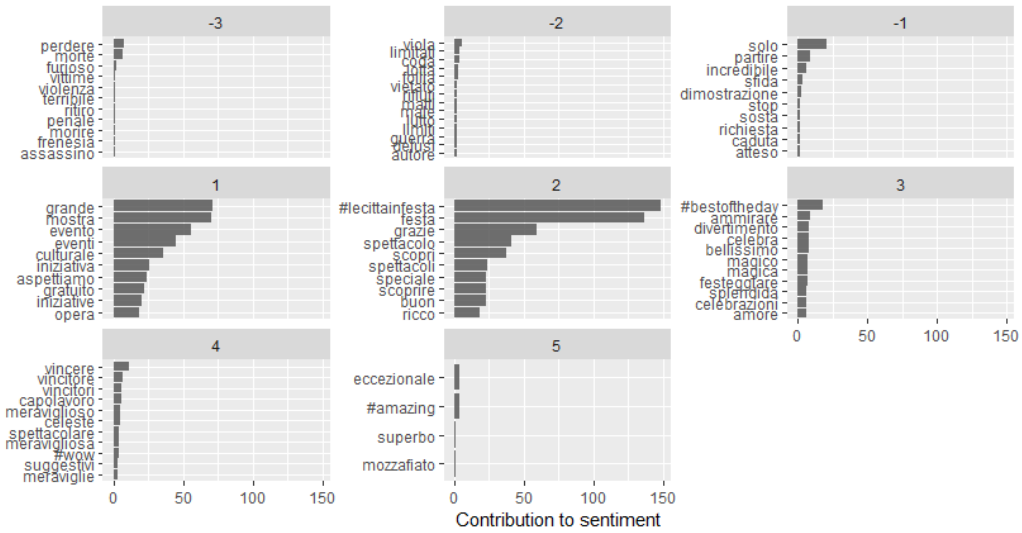
Graphic 8: @VeneziaPaginaUfficiale contribution to sentiment (English)

The next step was taking into account the sentiment of the messages: Graphic 7 shows the most common sentiments on a scale from -5 to 5 in messages in English. The function is distributed as a left-skewed bell, which indicates a severe tendency towards positive sentiment (as we will see later in this chapter, this database has the highest average sentiment). Graphic 8 shows, for each sentiment score, the words that contribute the most to its formation (i.e. the most common words for each sentiment score). It is worth noting the abundance of adjectives related to touristic promotion, such as enjoy, great, admire and beautiful. Furthermore, it is important to mention the words “please” and “adopt” (score 1), which have a great impact on the sentiment because they are often used in messages containing the Tourist Report. The Tourist Report is an initiative aiming at communicating the

levels of congestion of the city as stated in the Flow Management Calendar available on the Municipality Website (Municipality of Venice, 2018). When days are especially crowded, @VeneziaPaginaUfficiale suggests alternative destinations in the metropolitan area. Tourist Report messages also provide a link to the #EnjoyRespectVenezia main page, where users can access information about the campaign as well as tips and rules for a sustainable behaviour in Venice (an example is provided in Figure 11) (#EnjoyRespectVenezia, 2018).

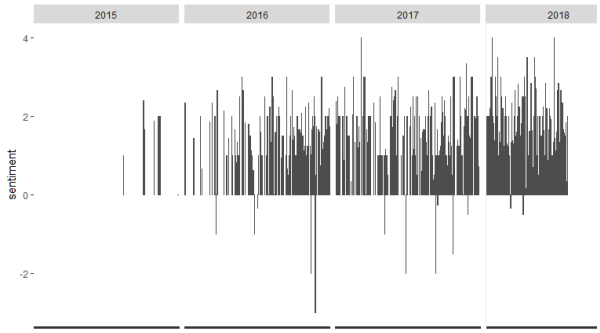


Graphic 9: @VeneziaPaginaUfficiale sentiment (Italian)

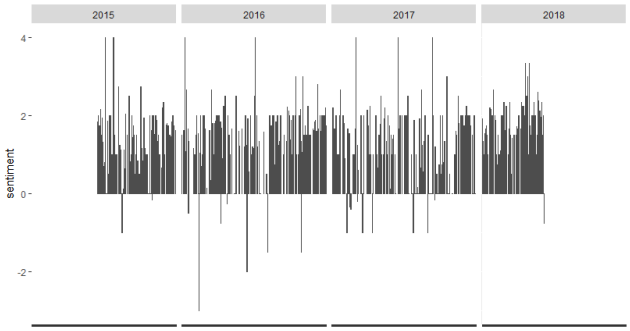


Graphic 10: @VeneziaPaginaUfficiale contribution to sentiment (Italian)

Similarly, words used in Italian posts are mostly positive with a high concentration of sentiment scores 1 and 2 (see Graphic 9). Graphic 10 shows the score contribution. Most of the words are related to event promotion and sightseeing. None of the words with the highest contribution to sentiment seems to be directly related to sustainability.

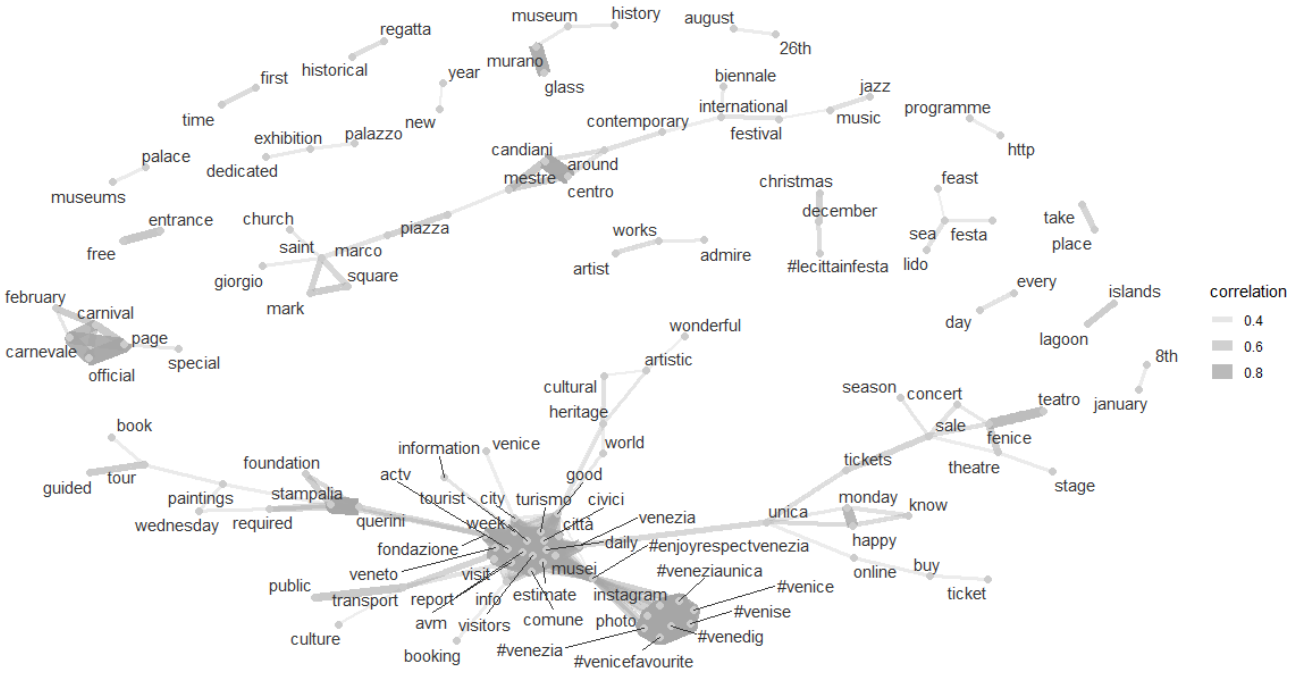


Graphic 11: evolution of sentiment through time (English)



Graphic 12: evolution of sentiment through time (Italian)

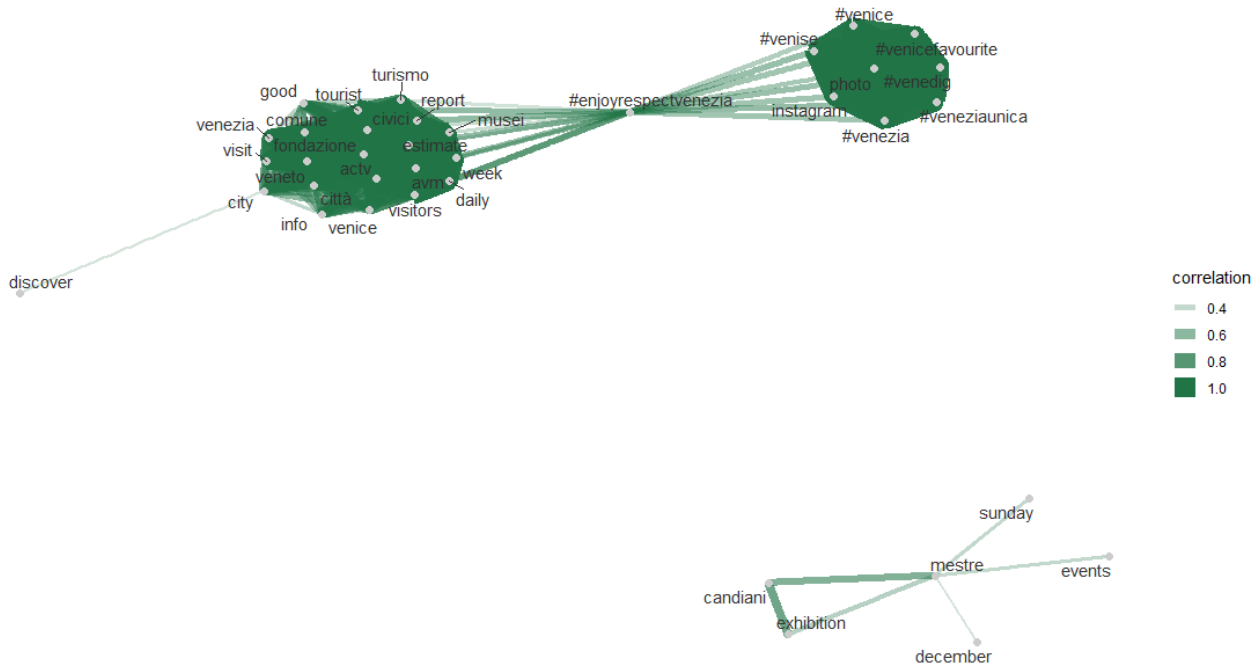
Graphic 11 and Graphic 12 show the sentiment evolution over time. From both graphics it is evident that sentiment is positive in the vast majority of the messages. Messages with negative sentiment deal with violence against women initiatives, commemoration of historical events and Tourist Reports stating that the city will be very crowded (only in English). Conversely, particularly positive messages concern free events and anniversaries of positive historic facts.



Graphic 13: graph with most frequent words (English)

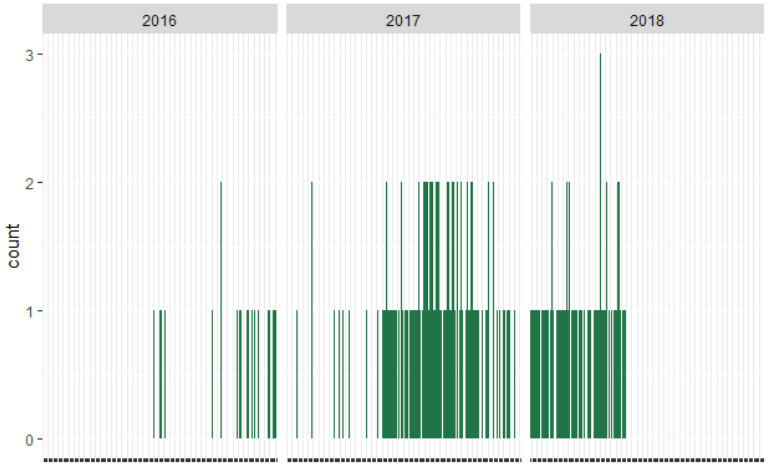
Graphic 13 shows a graph with the most common words (frequency ≥ 15) in English and the connections among them (correlation ≥ 0.25). The most significant clusters are the hashtag cluster and the sustainability cluster; interestingly, the point of connection between the two is #EnjoyRespectVenezia. The sustainability cluster contains words related to the Tourist Report, as well as logistic recommendations

and informative content. Words outside the main clusters are mostly connected with touristic promotion in general. It is interesting to note that tourist promotion is also focused on suburbs and islands (see words such as Mestre, Centro Candiani, Murano, islands etc.).



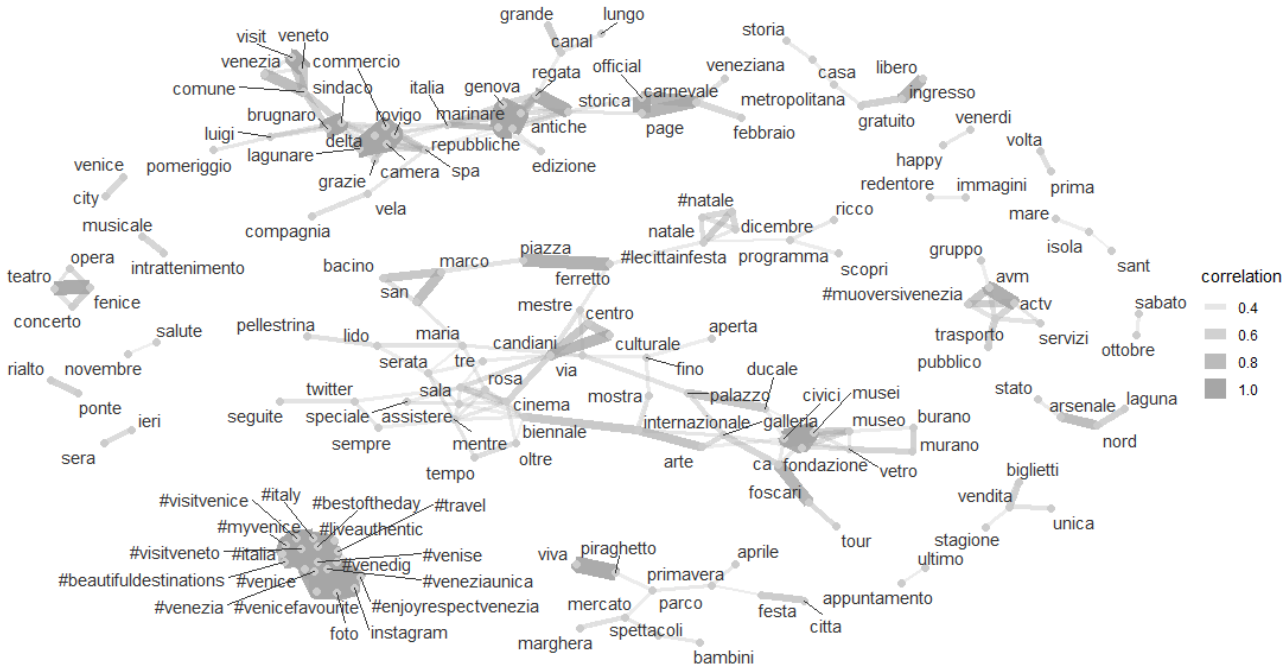
Graphic 14: graph with sustainability-related words (English)

We now focus on the messages concerning sustainability. Among the 741 English messages, 179 (24%) concern sustainability. Among these, 39 messages (5% of the total) advertise the Tourist Report. Graphic 14 displays relationships among words (frequency ≥ 15, correlation ≥ 0.25), but only takes messages concerning sustainability into account. Similarly to Graphic 13, #EnjoyRespectVenezia is the point of connection between two clusters: one concerns promotional hashtags, whereas the other concerns tourism and touristic advice. Within this cluster, several words indicate attention towards sustainability: Tourist Report, visitors, AVM, ACTV (i.e. the two public transport companies in the Venice area). Furthermore, it is interesting to note the smaller cluster centred around the word Mestre aiming at promoting activities and events in Mestre.



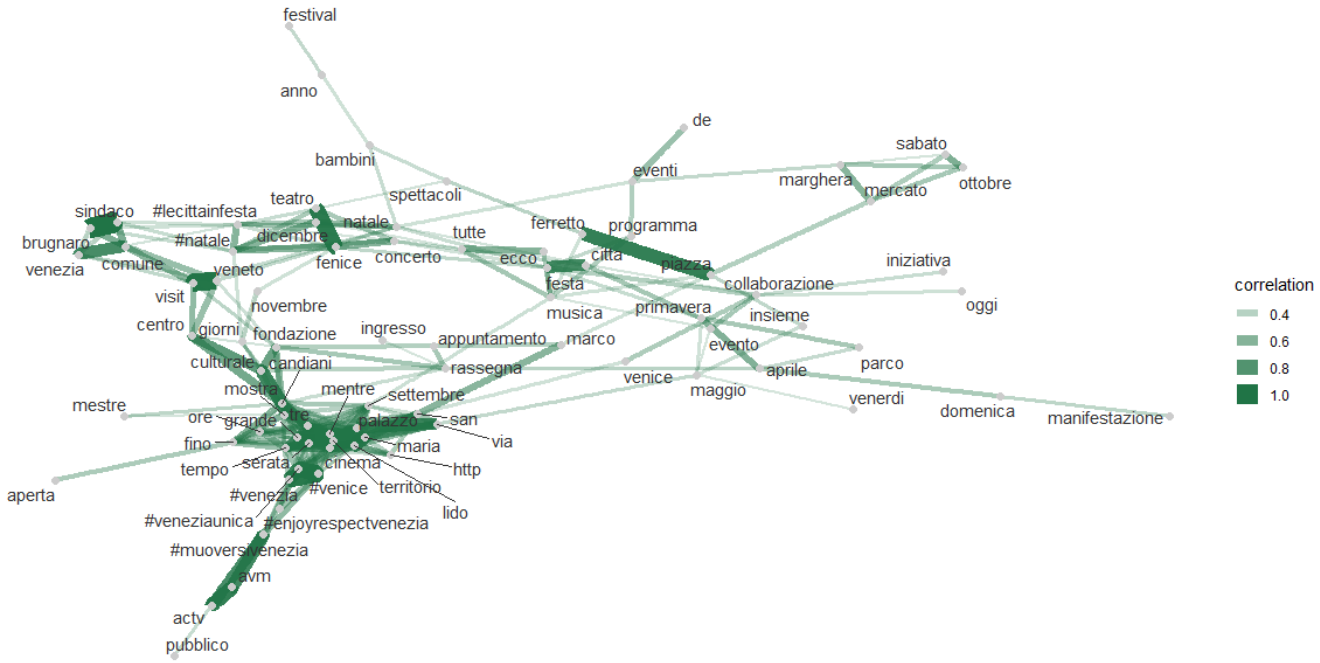
Graphic 15: number of sustainability-related posts per day (English)

Moreover, it seems interesting to focus on the evolution in the number of messages concerning sustainability over time. Graphic 15 shows the number of messages related to sustainability published every day. It is relevant to observe the steady increase in the number of posts concerning the topic, especially in the second half of 2017: the #EnjoyRespectVenezia campaign, in fact, was launched during the Redentore Celebrations that year (13th July 2017). Furthermore, it is relevant to observe the steady decrease in the number of days in which no sustainability-related message is published.



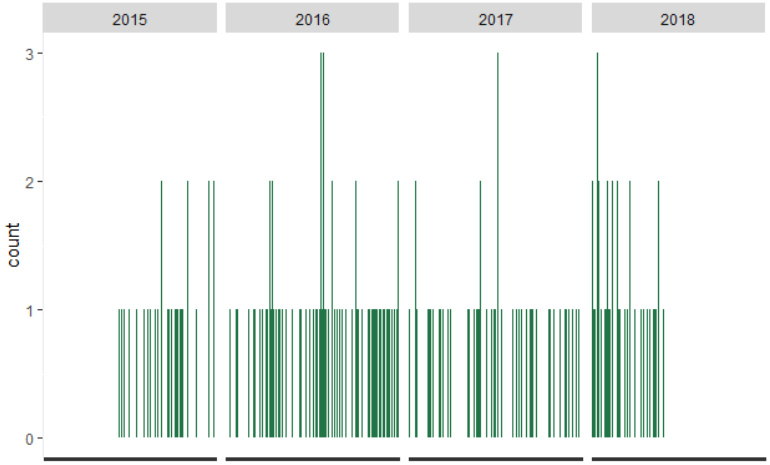
Graphic 16: graph with most frequent words (Italian)

Graphic 16 shows the connections among words in Italian (frequency ≥ 15, correlation ≥ 0.25). At the centre of the graph there is a big but scattered cluster concerning events and attractions, with words such as *palazzo* (palace), *serata* (night), *mostra* (exposition); interestingly, words such as *Piazza Ferretto* and *Centro Culturale Candiani* (i.e. two of the attractions of Mestre) are part of this cluster. Notably, the hashtag #EnjoyRespectVenezia is part of the hashtag cluster, but it is linked to another interesting cluster, i.e. the small one related to transport in the central-right part of the graphic (e.g. avm, trasporto, #muoversivenezia).



Graphic 17: graph with sustainability-related words (Italian)

Subsequently, the analysis was deepened by taking specifically into account messages concerning sustainability: they are 192 (19.9% of the database in Italian) and their relationships are represented in Graphic 17 (frequency ≥ 10, correlation ≥ 0.20). In the graph, together with #EnjoyRespectVenezia, strictly linked to hashtags concerning mobility, it is important to notice words promoting initiatives and events in the mainland, such as *Mestre* and *Piazza Ferretto*.



Graphic 18: number of sustainability-related posts per day (Italian)

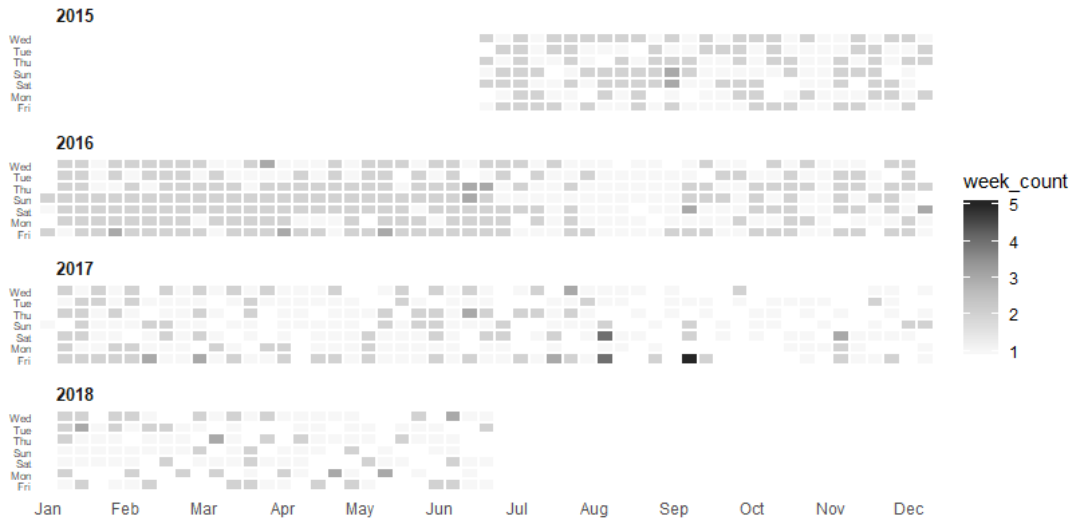
Graphic 18 shows the evolution of the sustainability-related posts through time. Unlike in the English version of the page, messages concerning sustainability in Italian seem to have been published at a relatively constant pace. The four major peaks concern messages promoting events in Mestre.

4.2.2. Barcelona

Figure 3: @bcn.cat – wordcloud with the most common words

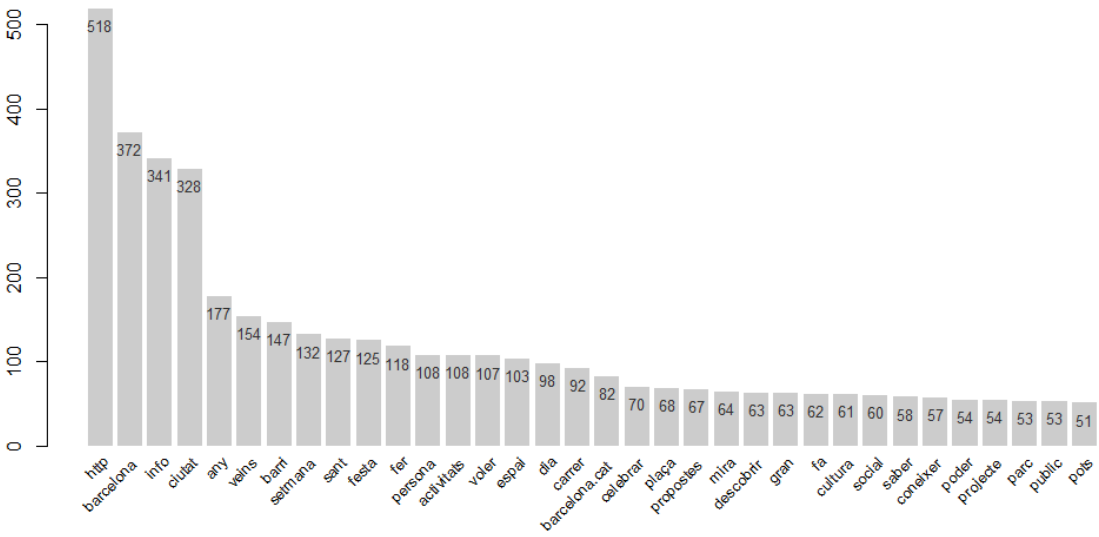
The Barcelona.cat (@bcn.cat) Facebook page has 235 757 likes and 231 586 followers (last data update 1st September 2018).

In the considered period, the page published 1 383 messages, among which 1 369 (98.9%) were in Catalan. The remaining part was in English and Spanish. Due to the sacristy of messages in other languages, we only consider messages in Catalan for the purpose of this study.



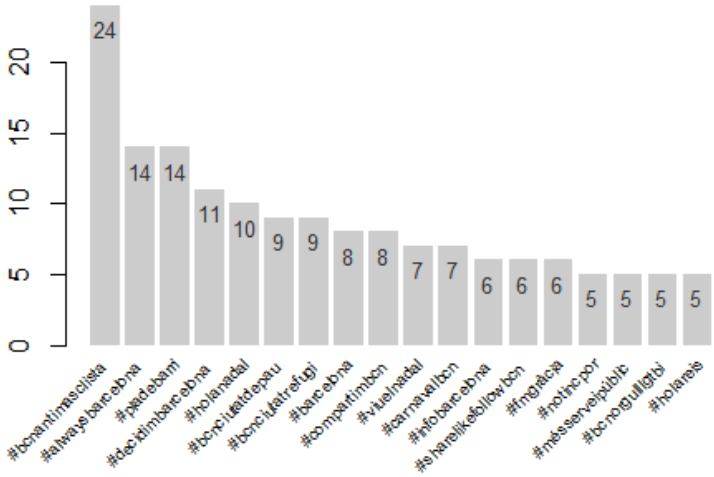
Graphic 19: @bcn.cat weekly posts

Graphic 19 shows the publishing frequency of the considered period. The number of posts per year is decreasing: in the second half of 2015, 270 messages were published, while in 2016 and 2017 respectively 575 and 356 messages were posted, in the first half of 2018, 168 posts were published. Some of the peaks in publishing frequency can be traced back to big events in the city (e.g. the peaks in the penultimate week of September 2017 and 2015 correspond to the *Mercé* celebrations and the peaks towards the end of June 2016 correspond to the celebration of the *Nit de San Juan*). The peaks in mid-August 2017 correspond to the days after the terroristic attack that hit the city the 17th August 2017.



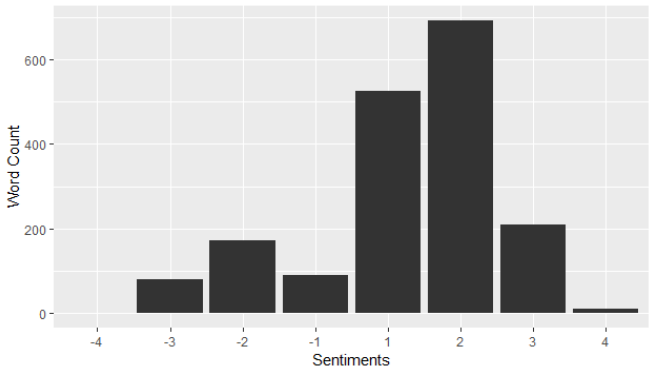
Graphic 20: @bcn.cat most frequent words

Graphic 20 shows the most frequent words (frequency ≥ 50) in the Barcelona Facebook messages. Again, the distribution is decreasing. Noticeably, words such as *http* (a generic indicator of links) and *info* are among the most common: this reveals the informative purpose of the page. It is also relevant to notice that the word *veins* (i.e. neighbours) occurs 154 times and is normally used in messages demanding peace and quiet in the neighbourhoods; a similar purpose can be inferred for words such as *festa* (party), *barri* (neighbourhood) and *activitats* (activities).

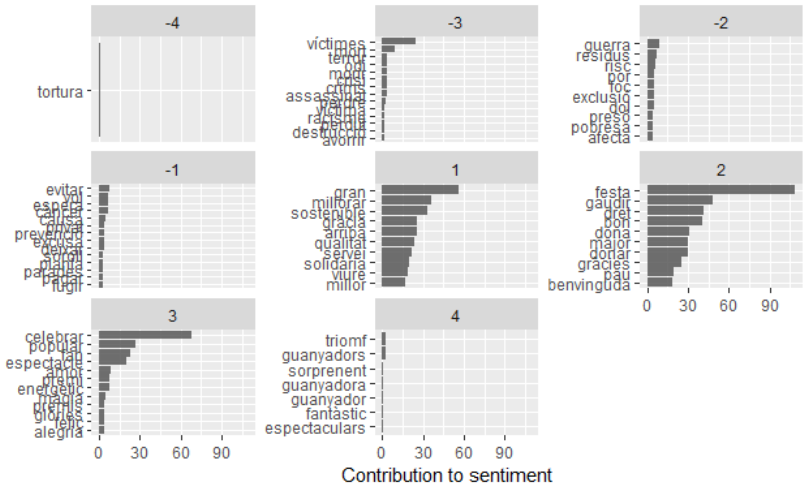


Graphic 21: @bcn.cat most frequent hashtags

Most frequent hashtags are displayed in Graphic 21. Some of them concern social issues, such as violence against women (#barcelonaantimasclista, Barcelona anti male chauvinism) and inclusion (#BCNciutatdepau, Barcelona city of peace; #BCNciutatrifugi, Barcelona shelter city). The hashtag #infobarcelona is used to introduce informative content.

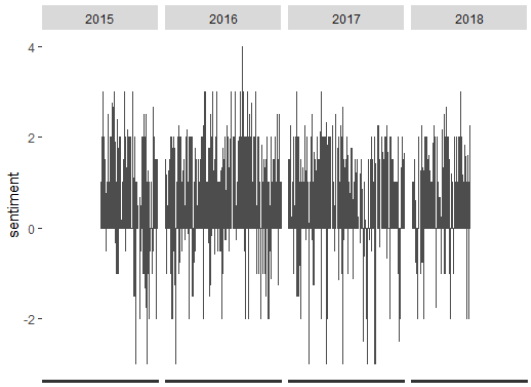


Graphic 22: @bcn.cat sentiment



Graphic 23: @bcn.cat contribution to sentiment

The sentiment of the messages of @bcn.cat is once again mostly positive (see Graphic 22), even though the average sentiment for this database is fairly low, as we will see in the next section. In fact, a peak in the sentiment -2 is registered. This is mostly due to words connected to the above-mentioned violence-against-women campaign and to the terrorist attack of 17th August 2017, as shown in Graphic 23.

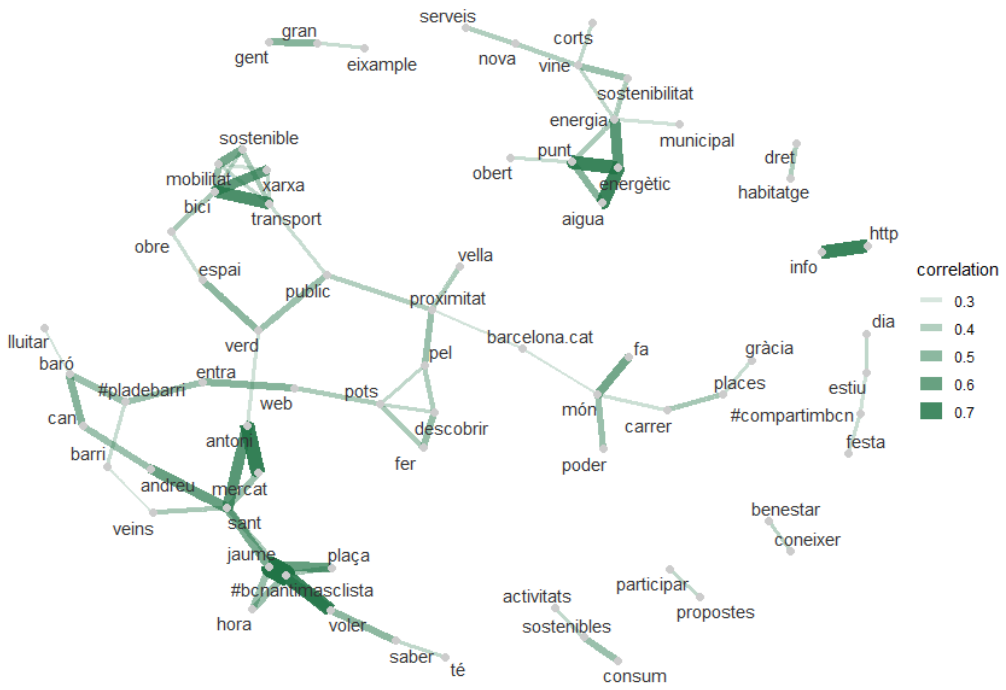


Graphic 24: evolution of sentiment through time

Sentiment grouped by message and date is shown in Graphic 24: once again, sentiment is mostly positive. Negative sentiment is normally related with commemoration of historic events (e.g. terrorist attacks, murders etc.) or with anti-hate or anti violence against women campaigns. Notably, negative sentiment also comes from messages advertising the shut-down of illegal tourist apartments.

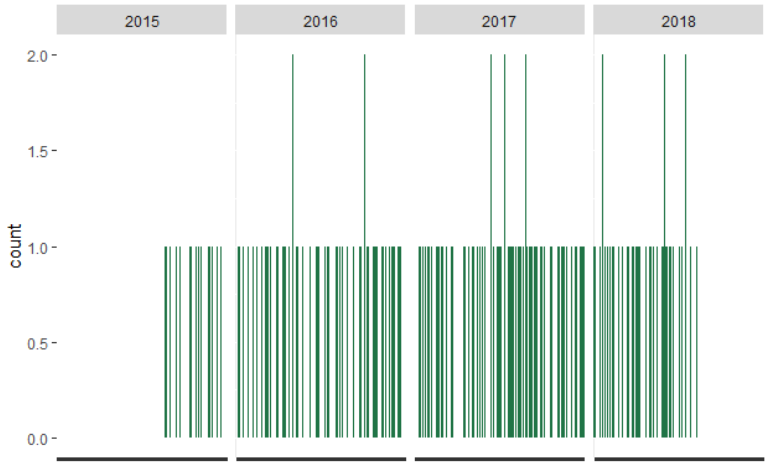
Graphic 25: graph with most frequent words

Graphic 25 shows the connections among words (frequency ≥ 10, correlation ≥ 0.25). Even though the word frequency set for this graphic is lower than that of others graphs, what immediately catches the eye is the absence of big and significant clusters. Interestingly, one of the small clusters available concerns public transport and sustainable mobility.



Graphic 26: graph with sustainability-related words

In order to deepen the analysis, we focused on messages related to sustainability (192 messages, i.e. 14% of the messages), the connections among them are displayed in Graphic 26 (frequency ≥ 5, correlation ≥ 0.25). Still no significant cluster is present, however it is interesting to note words such as *veins* (neighbours), *dret habitatge* (housing right) and words related to sustainability in transport.



Graphic 27: number of sustainability-related posts per day

Graphic 27 displays the number of messages related to sustainability for each day. Some peaks are present, but they are neither significant in number (8 peaks in a 3 year's period) nor in size (the highest number of sustainability-related posts per day is 2). However, it is interesting to note that the days with no sustainability messages published seem to diminish through time. In fact, the days with 0 sustainability related messages were 157 in the last six months of 2015, 310 in 2016, 293 in 2017 and 141 in the first six months of 2018.

4.3. Twitter

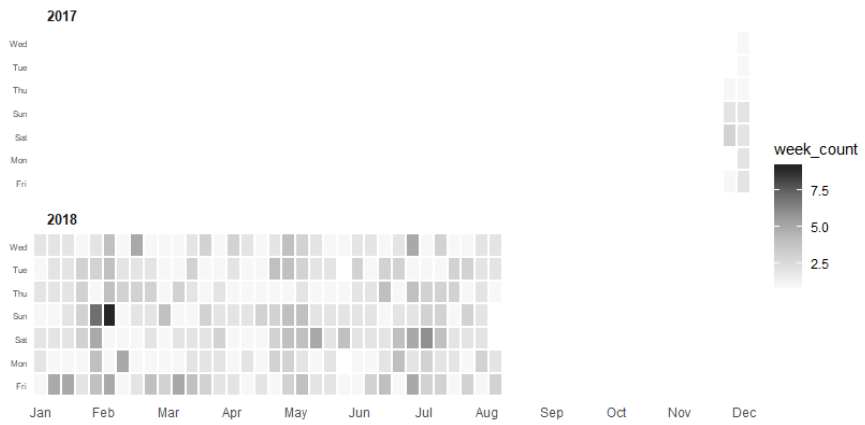
4.3.1. Venice

Figure 4: @veneziaunica – wordcloud with the most common words (English)

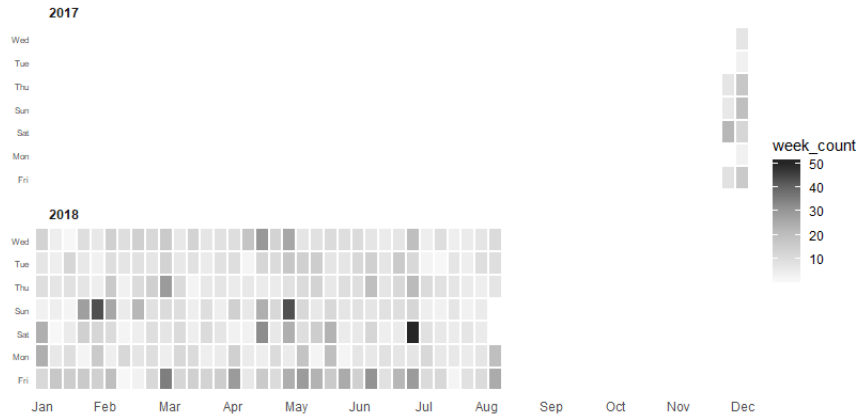
Figure 5: @veneziaunica – wordcloud with the most common words (Italian)

The Venice Twitter account (@veneziaunica) is followed by 8 748 people (last data update 8th September 2018).

Among the 3 200 messages downloaded, 17% (549) is in English and 82% (2 625) is in Italian. The remaining part is composed of empty messages or messages which cannot be traced back to a specific language (e.g. links or tags). As well as original content, we are also considering retweeted messages for the analysis: the idea behind this choice is that the communication strategy is also influenced by filler content (i.e. non-original content) (Tuten & Solomon, 2014). In English posts, retweeted messages are 38%, while 63.7% of the posts in Italian are retweets.

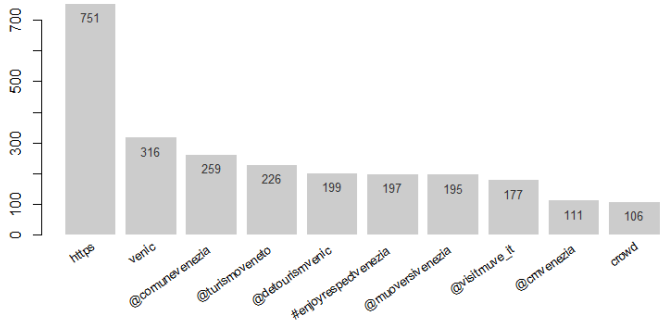


Graphic 28: @veneziaunica weekly posts (English)

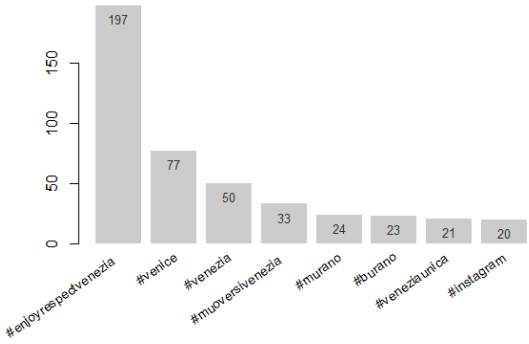


Graphic 29: @veneziaunica weekly posts (Italian)

Graphic 28 and Graphic 29 show the posting frequency for tweets. Messages in English posted in the last days of 2017 are 18 (3%), while the remaining part was posted in the first 8 months of 2018. Similarly, 2.7% (72) of the posts in Italian were published in 2017. In both languages, peaks in posting frequency are registered in correspondence of Carnival and Redentore celebrations.



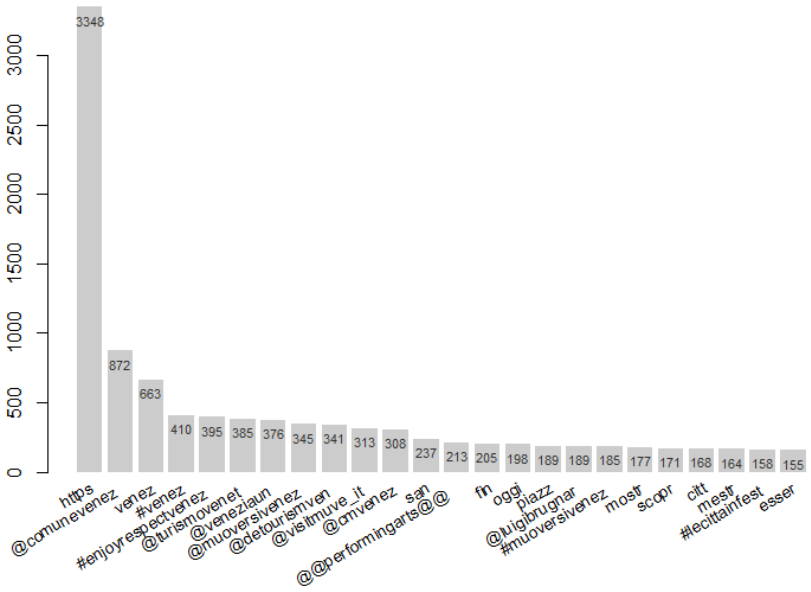
Graphic 30: @veneziaunica most frequent words (English)



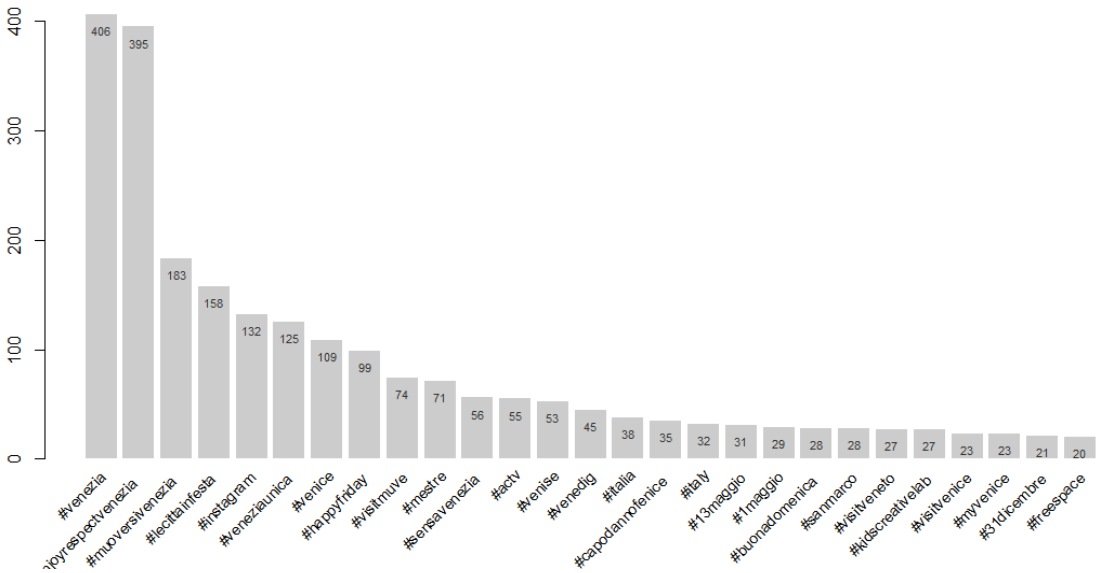
Graphic 31: @veneziaunica most frequent hashtags (English)

Graphic 30 shows the most common words within messages in English (frequency ≥ 100). Interestingly, the tag @detourismvenice is the fifth most common word. @Detourismvenice is an institutional account specifically focused on the promotion of sustainable tourism in Venice: the great majority of the posts available are retweets and own posts mostly concern itineraries and suggestions about lesser-known parts of Venice. Moreover, the account @muoversivenezia (i.e. the official account of the public transport company) is often tagged in the messages: this reveals that information about logistics in Venice is often provided by the @veneziaunica account. Finally, it is interesting to note that "crowd" is among the most frequent words: in fact, several messages (108 messages, 20% of

the total) are devoted to informing users about touristic fluxes and the sustainable alternatives for when the historic centre is too crowded. Graphic 31 concerns hashtags (frequency ≥ 20) and shows that promotional and generic hashtags are the most common (e.g. #venice, #veneziaunica etc.) However, it is relevant to mention that the hashtag that occurs most often is #EnjoyRespectVenezia.



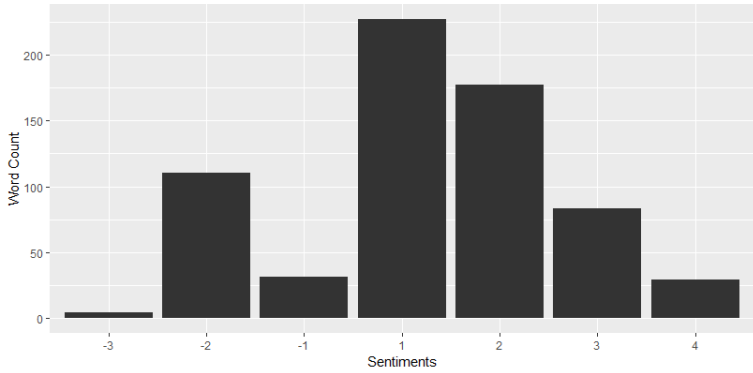
Graphic 32: @veneziaunica most frequent words (Italian)



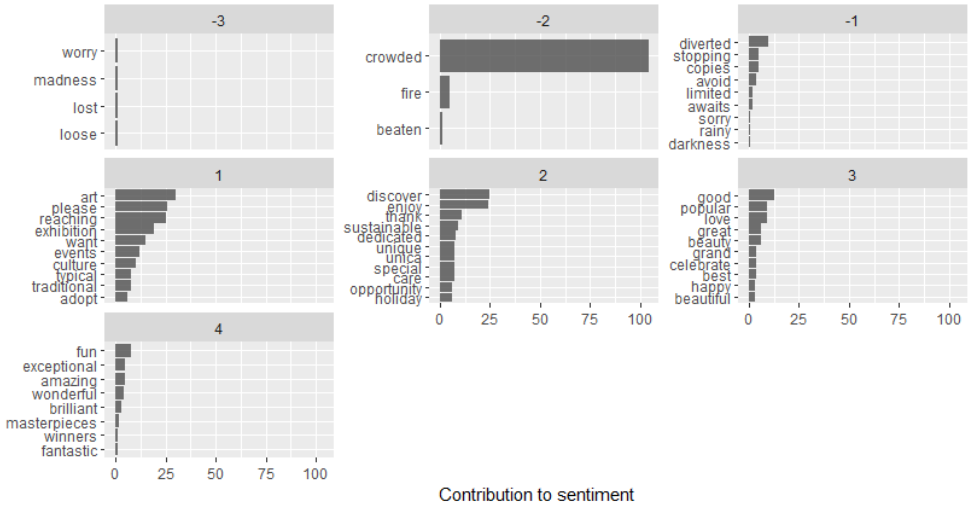
Graphic 33: @veneziaunica most frequent hashtags (Italian)

Graphic 32 shows the most frequent words (frequency ≥ 150) in the posts in Italian; as it normally happens with this kind of graphics, the distribution is decreasing: this indicates that there are only a few very common words, while most words only occur a few times. Once again, @detourismvenice and @muoversivenezia (and its

corresponding hashtag) are among the most common words. Moreover, it is interesting to notice the presence of the words *Mestre* and *affollata* (crowded). Graphic 33 displays the most common hashtags (frequency ≥ 20). Again, #EnjoyRespectVenezia is among the most popular and is almost as frequent as #venezia. Moreover, it is interesting to mention the presence of #mestre. The remaining hashtags are mostly promotional.

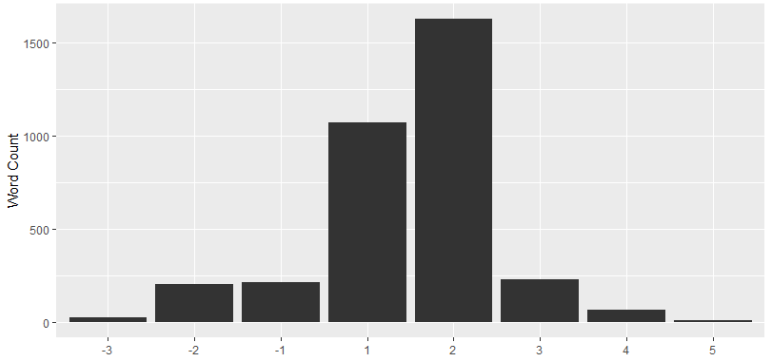


Graphic 34: @veneziaunica sentiment (English)

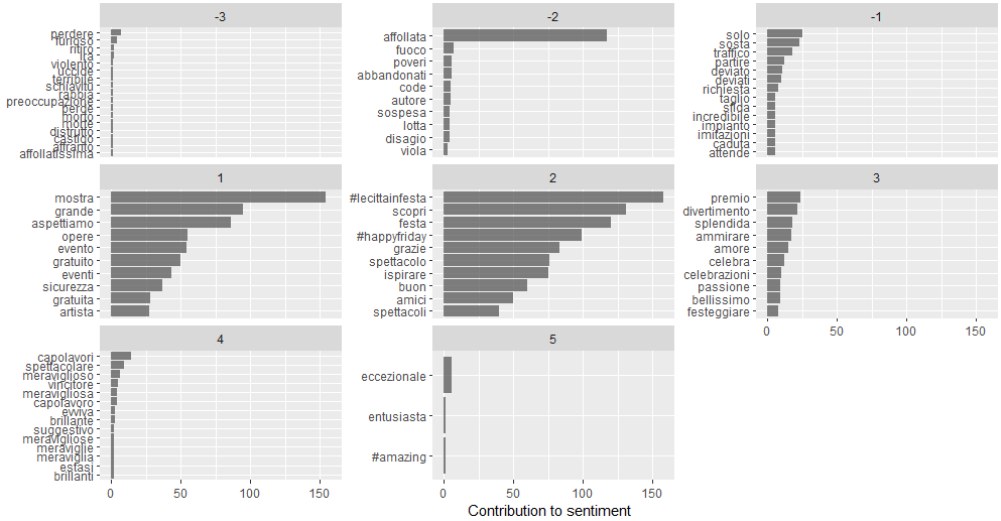


Graphic 35: @veneziaunica contribution to sentiment (English)

Graphic 34 shows the distribution of the sentiment in English the average sentiment in this database is the lowest in our analysis. As can be seen from Graphic 35, the high incidence of sentiment -2 is caused by the great number of messages containing the word "crowd". Otherwise, the sentiment is generally positive, due especially to words such as art, discovery, explore, please, good etc.

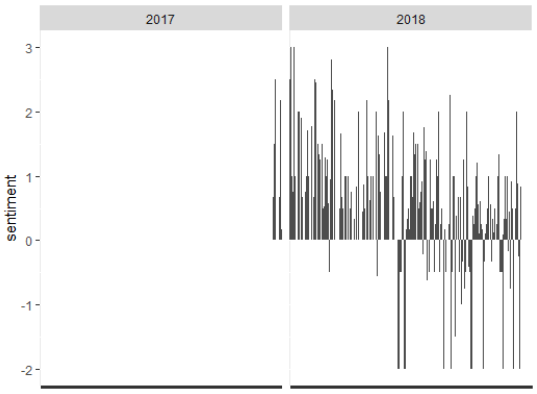


Graphic 36: @veneziaunica sentiment (Italian)

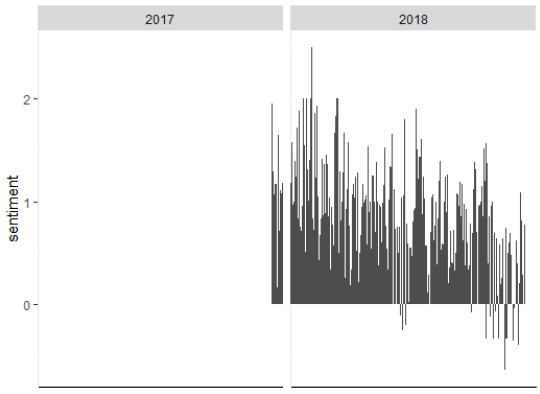


Graphic 37: @veneziaunica contribution to sentiment (Italian)

Sentiment for Italian messages is summed up by Graphic 36 and Graphic 37. Sentiment scores are mostly positive. The greatest contribution to sentiment comes from words aiming at advertising events and initiatives, such as *#lecittàinfesta* (celebrations in the city), *spettacolo* (spectacle), *ispirare* (inspire), *evento* (event), etc.

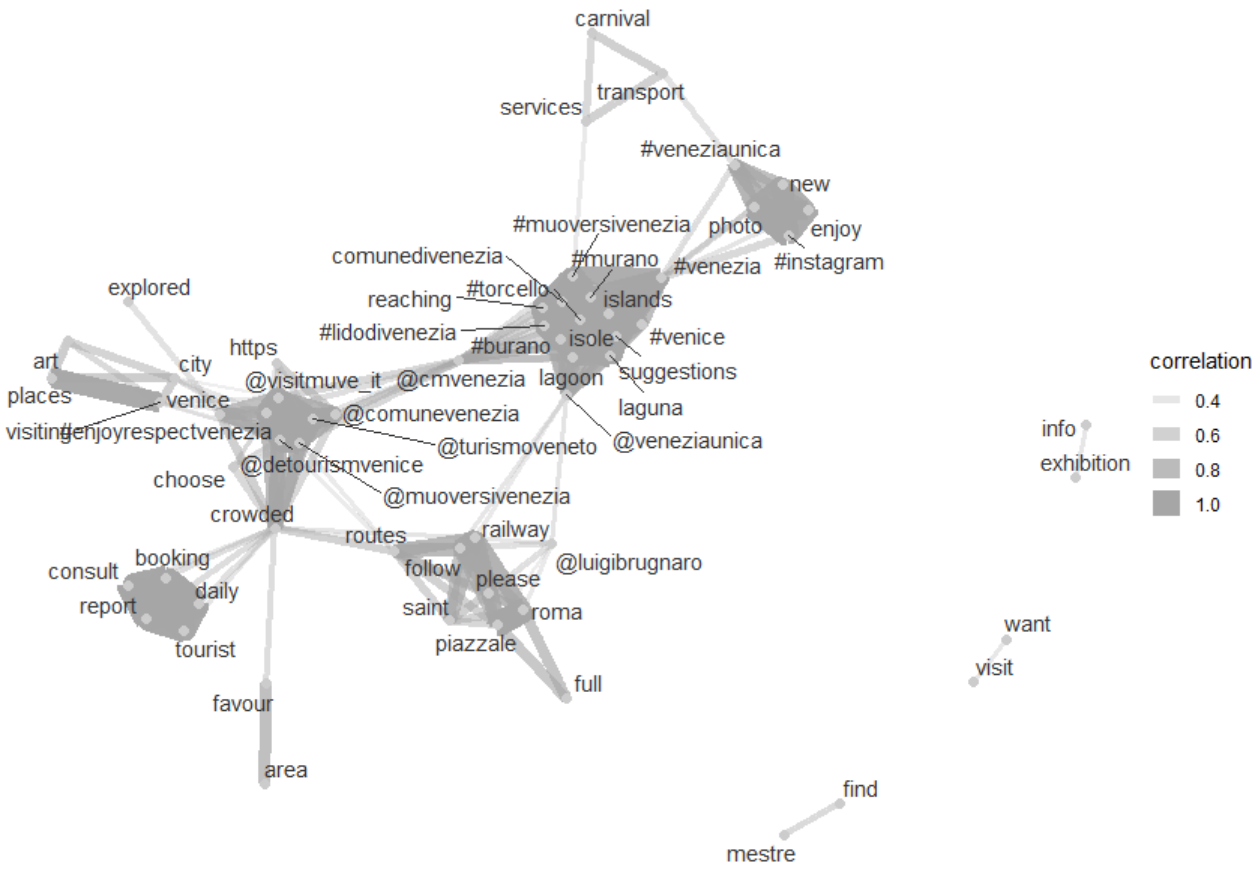


Graphic 38: evolution of sentiment (English)



Graphic 39: evolution of sentiment (Italian)

For what the sentiment grouped by date is concerned, once again sentiment tends to be positive for both languages (see Graphic 38 and Graphic 39). Negative sentiment is mostly associated with crowded days in the historic centre.

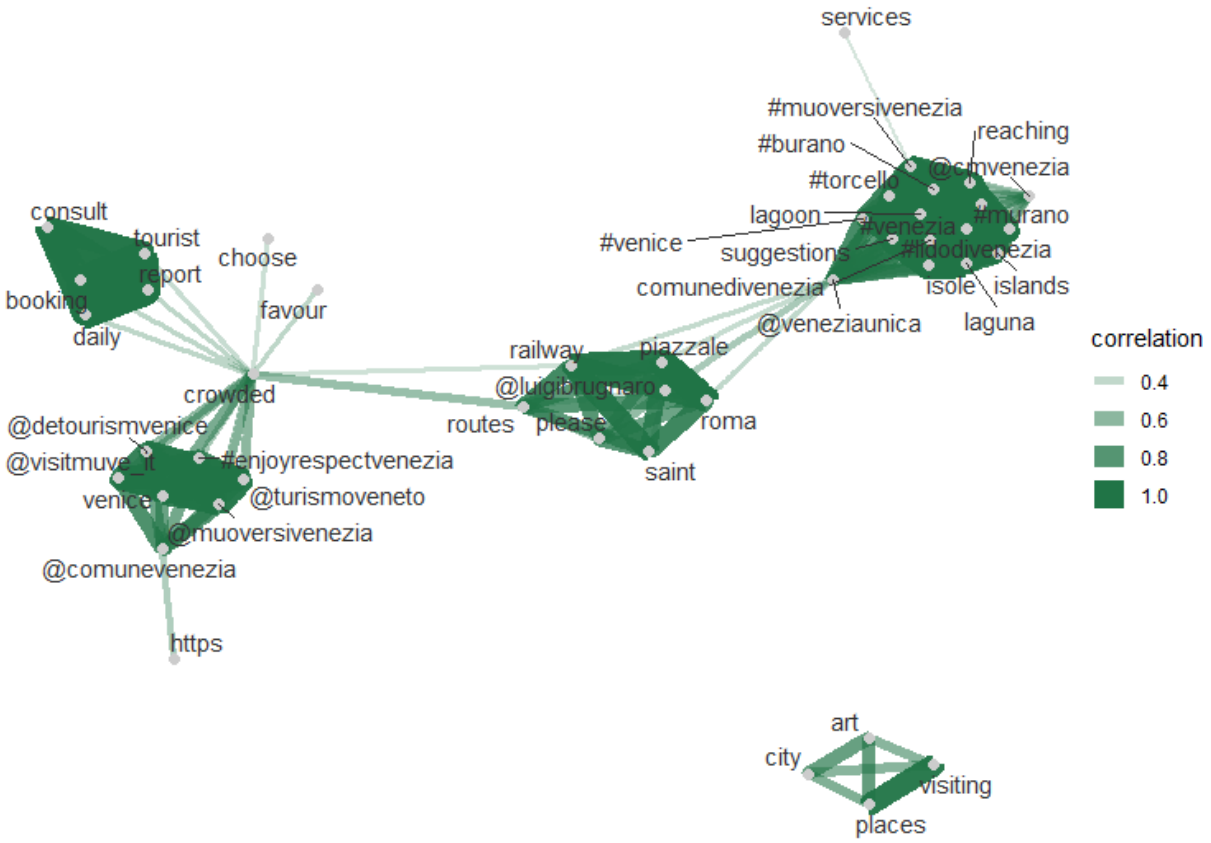


Graphic 40: graph with most frequent words (English)

Graphic 40 shows a graph with the connections among the most frequent English words (frequency ≥ 15, correlation ≥ 0.25). On the top right part of the graphic there is the promotional cluster, which contains most of the hashtags. Furthermore, it is interesting to note that the word crowded in the central left part of the graph: it is the point of connection among three clusters, the smaller of the three contains words related to the tourist report, the cluster above contains tags to institutional accounts as well as informative content (e.g. https, explored, city etc.) and the bottom cluster seems to be related to logistic instructions (see for example words such as Piazzale Roma, full, railway etc.).

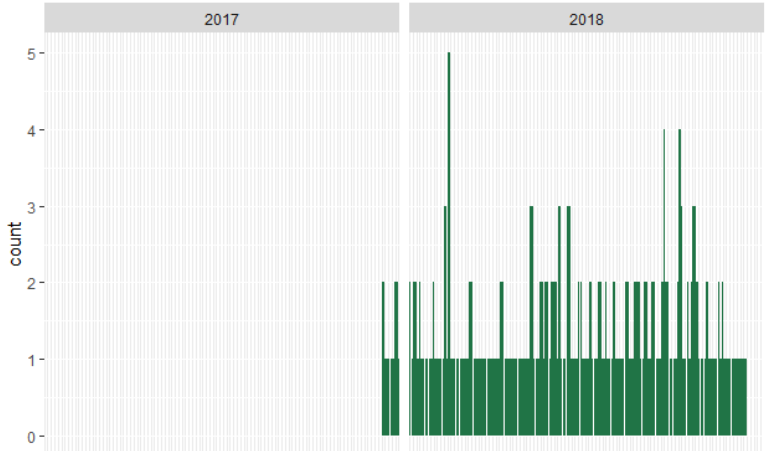
English messages concerning sustainability are 256 (i.e. 46% of the total) and relationships among the words contained in these messages are shown in Graphic 41. The network is composed of five clusters. Similarly to Graphic 40, the word "crowded" is the point of connection among three clusters. The lower-left one

contains hashtags and tags, such as @detourismvenice, #EnjoyRespectVenezia, @muoversivenezia and *https*. The second cluster contains words normally used for introducing the Tourist Report (e.g. consult, tourist report, daily etc.) and the third sustainability cluster contains logistic information. The two remaining clusters concern promotional content (hashtags and tags) and sightseeing (visiting, art etc.).



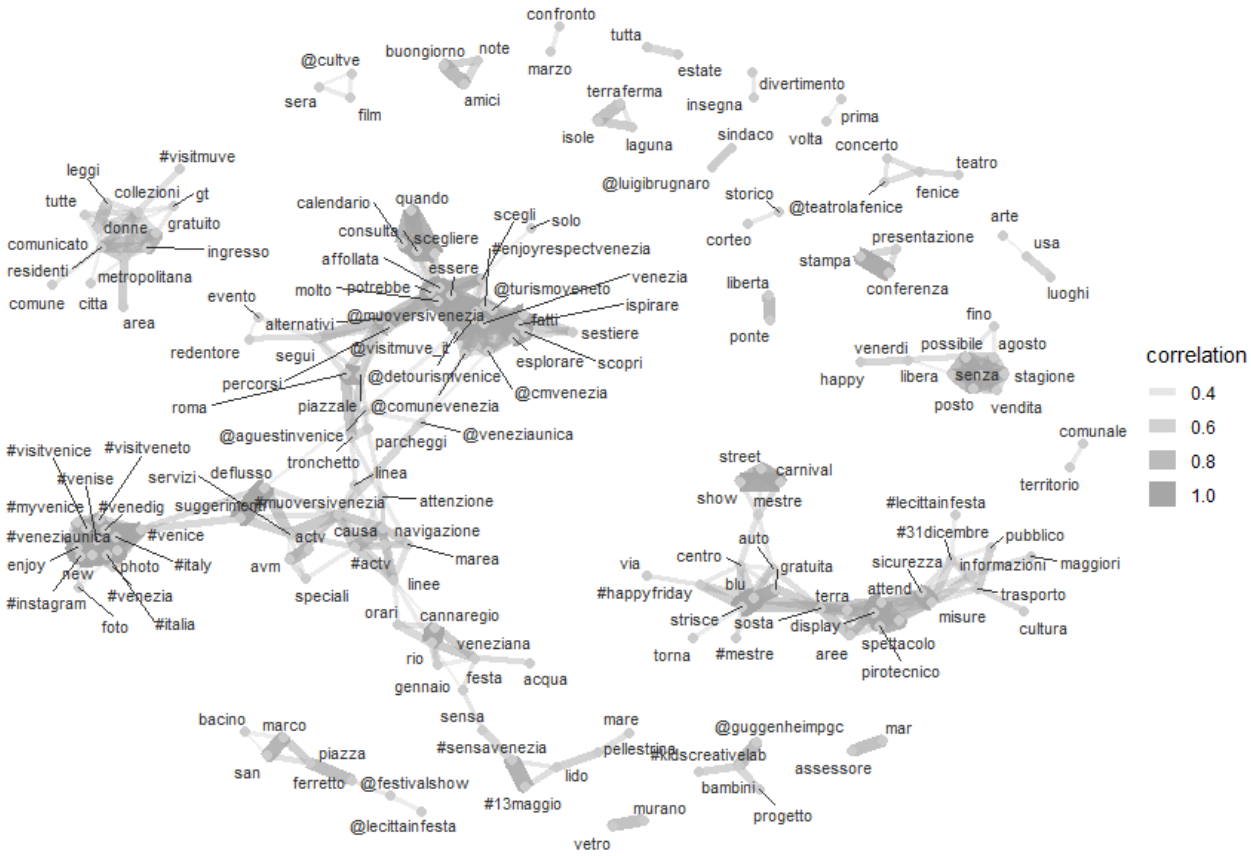
Graphic 41: graph with sustainability-related words (English)

Graphic 42 shows the number of messages concerning sustainability per day. The distribution appears fairly constant, even though some peaks are registered. The first peak (5 messages) is registered on 11th February: in fact, during the Carinval period, suggestions concerning logistics and events promotion are often published. Two other peaks (4 messages) are registered in July: the former corresponds to the Redentore celebrations (13th July) and the latter (21st July) concerns a particularly crowded day in which suggestions about sightseeing outside the city centre were published.



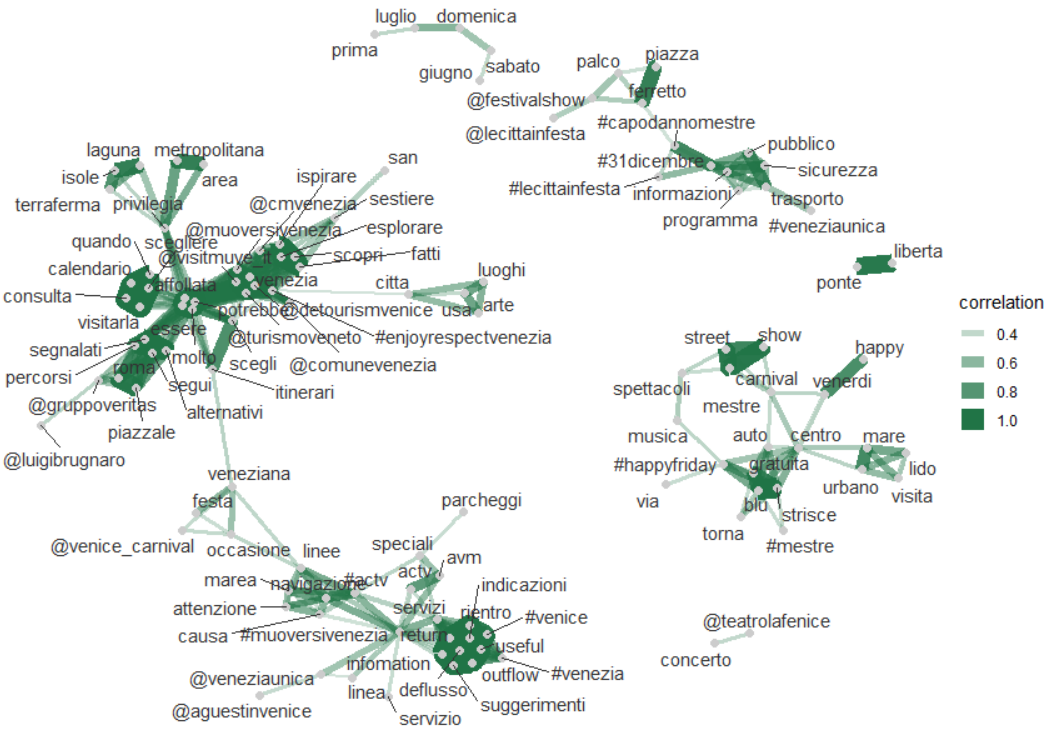
Graphic 42: number of sustainability-related posts per day (English)

The graph concerning the whole Twitter database in Italian (Graphic 43: frequency ≥ 20, correlation ≥ 0.25) displays a cluster concerning sustainability: it contains words such as *affollata* (crowded), @muoversivenezia, @detourismvenice, #EnjoyRespectVenezia, *calendario* (calendar), *percorsi* (itineraries), *terraferma* (mainland) and *residenti* (inhabitants). Unlike on Facebook, the Italian version of the Twitter account provides a sort of Tourist Report, even though the name Tourist Report never appears across the messages (see Figure 12).



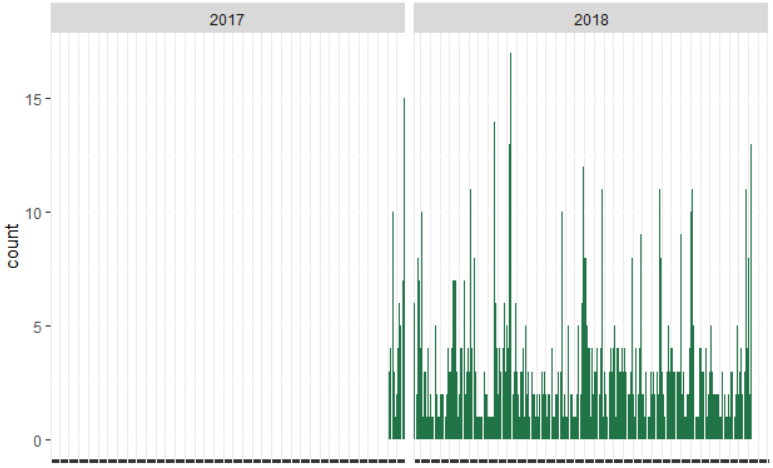
Graphic 43: graph with most frequent words (Italian)

Italian messages related to sustainability are 852 (i.e. 32% of the database). Relationships among words in these messages are displayed in Graphic 44. Almost every cluster in the graph contains words related to sustainability. In particular, the lower one concerns alternative routes and suggestions for crowded days, such as *città metropolitana* (metropolitan city), *terraferma* (mainland), *fatti ispirare* (get inspired), *percorsi alternativi* (alternative routes), *calendario* (calendar), *affollata* (crowed). Furthermore, the hashtag cluster contains words related to mobility as well as instructions for outflow from the historical centre in crowded moments. Other clusters concern suburbs and contain words such as Mestre, #capodannomestre, #mestre, *piazza Ferretto*.



Graphic 44: graph with sustainability-related words (Italian)

Graphic 45 shows the evolution of the number of sustainability-related messages published every day in the Italian version of the Twitter account. It is interesting to observe the generally high number of posts concerning sustainability published per day (on average 3.44 sustainability-related posts are published every day). The highest peaks correspond to the 31st December (when Venice was very crowded and several events in the whole metropolitan city were promoted) and the 9th March (when #happyfriday and other events were promoted in Mestre).

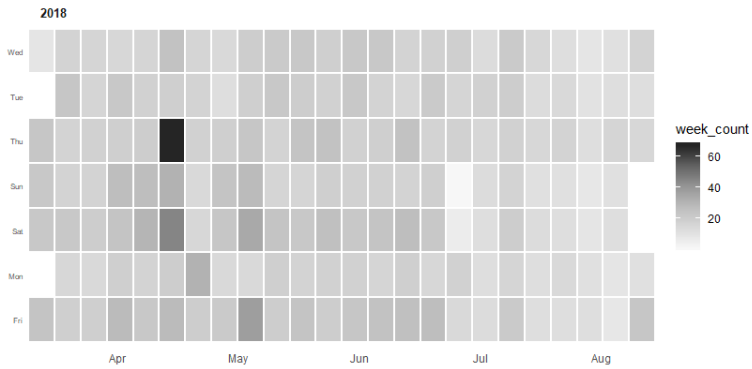


Graphic 45: number of sustainability-related posts per day (Italian)

4.3.2. Barcelona

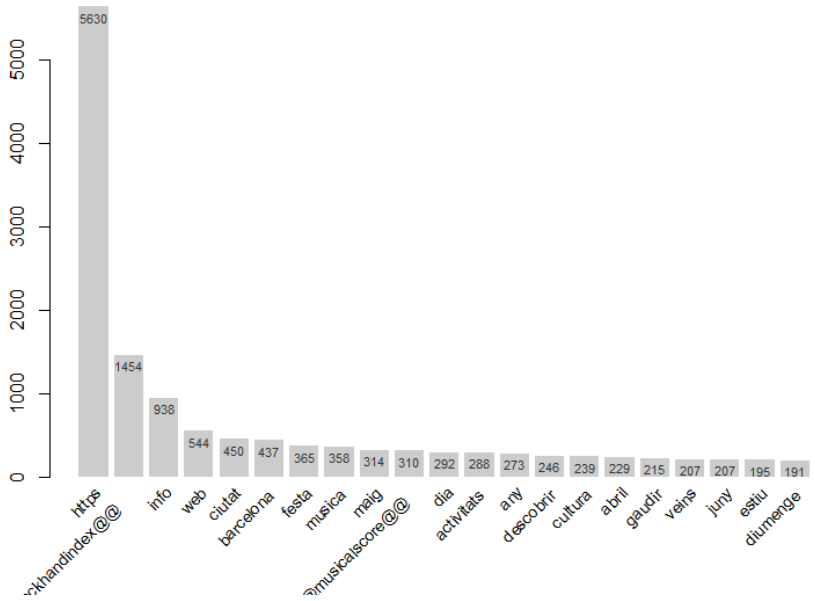
Figure 6: @barcelona_cat – wordcloud with the most frequent words

The @barcelona_cat Twitter account is followed by 395 000 people (last data update 8th September 2018). Of the 3 200 posts downloaded, 3 053 are in Catalan (95%) and the remaining part is in English, German, Portugal, Spanish, French

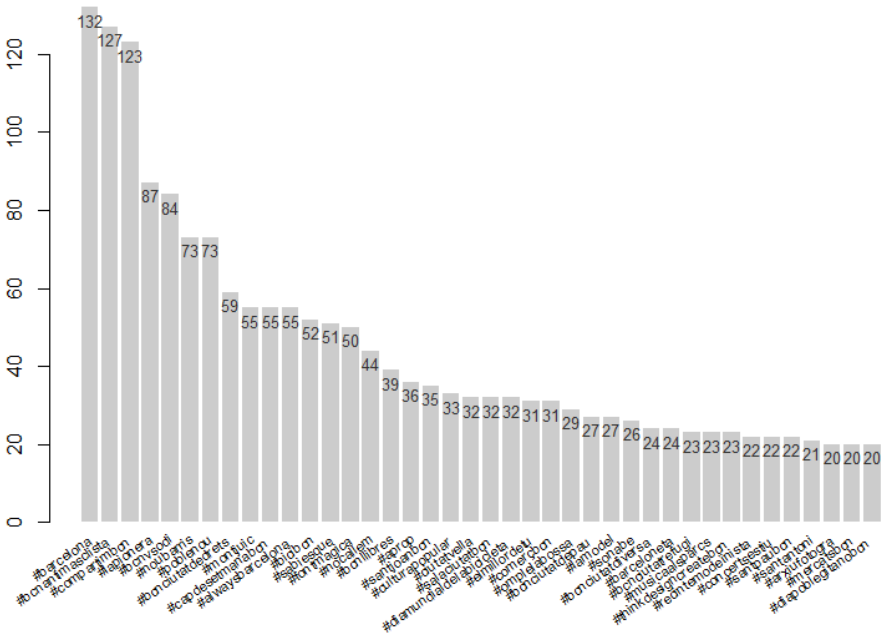


Graphic 46: @barcelona_cat weekly posts

and Italian. Due to the high fragmentation of the non-Catalan posts, only posts in Catalan are part of the analysis. Among the posts in Catalan, 6% are retweets. Graphic 46 displays the publication frequency. Since @barcelona_cat publishes more often than @veneziaunica, the range of time analysed only stems from 14th March 2018 to 24th August 2018 (with a total number of 3 200 posts in both cases). A high number of posts (67) was published on 19th April: most of these concern the world biking day and a campaign for sustainable mobility.



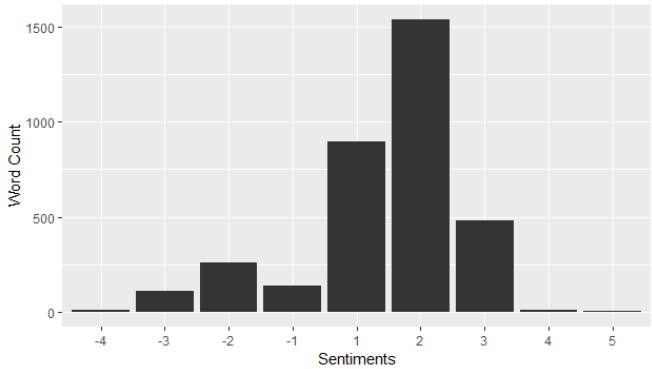
Graphic 47: @barcelona_cat most frequent words



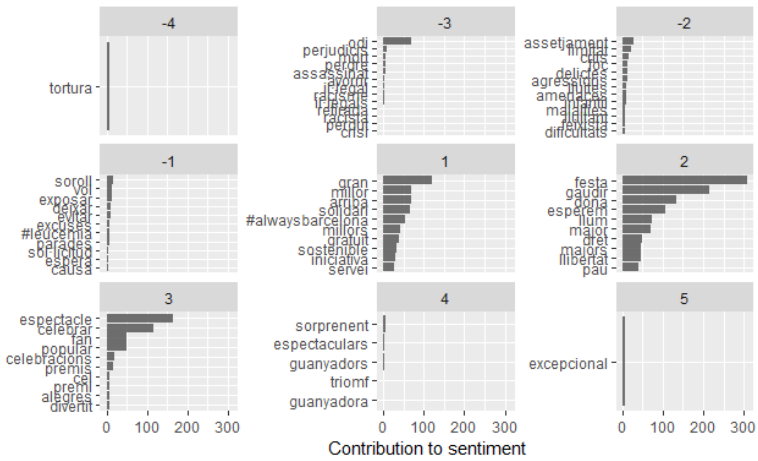
Graphic 48: @barcelona_cat most frequent hashtags

By observing Graphic 47 about the most frequent words (frequency ≥ 175), it is possible to notice the importance of the informative content: 5 630 links are inserted in the 3 053 messages and informative words such as info, web, *ciutat* (city), *activitats* (activites), *descobrir* (discover), *cultura* (culture) are among the most common.

By taking into account the most frequent hashtags (Graphic 48, frequency ≥ 20) we can notice that the hashtag *#compartimBCN* (i.e. let's share Barcelona), the third most frequent, aims at encouraging sustainable behaviours that improve the cohabitation in the city. This hashtag is relatively common because it concerns sustainability in general, not only in tourism; in fact, it also introduces messages concerning sustainable mobility and considerate energy consumption. Moreover, hashtags such as #biciBCN (bicycle Barcelona) and #diamundialdelabicicleta (world cycling day) promote biking instead of using cars (and are often used together with #compartimBCN). Finally, it is worth mentioning hashtags against



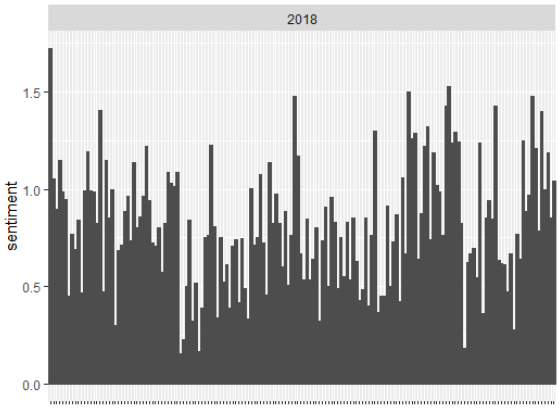
Graphic 49: @barceona_cat sentiment



Graphic 50: @barcelona_cat contribution to sentiment

hate, such as #BCNantimasclista (anti chauvinist Barcelona), #BCNciutatdedrets (Barcelona city of rights) and #BCNciutatdepau (Barcelona city of peace).

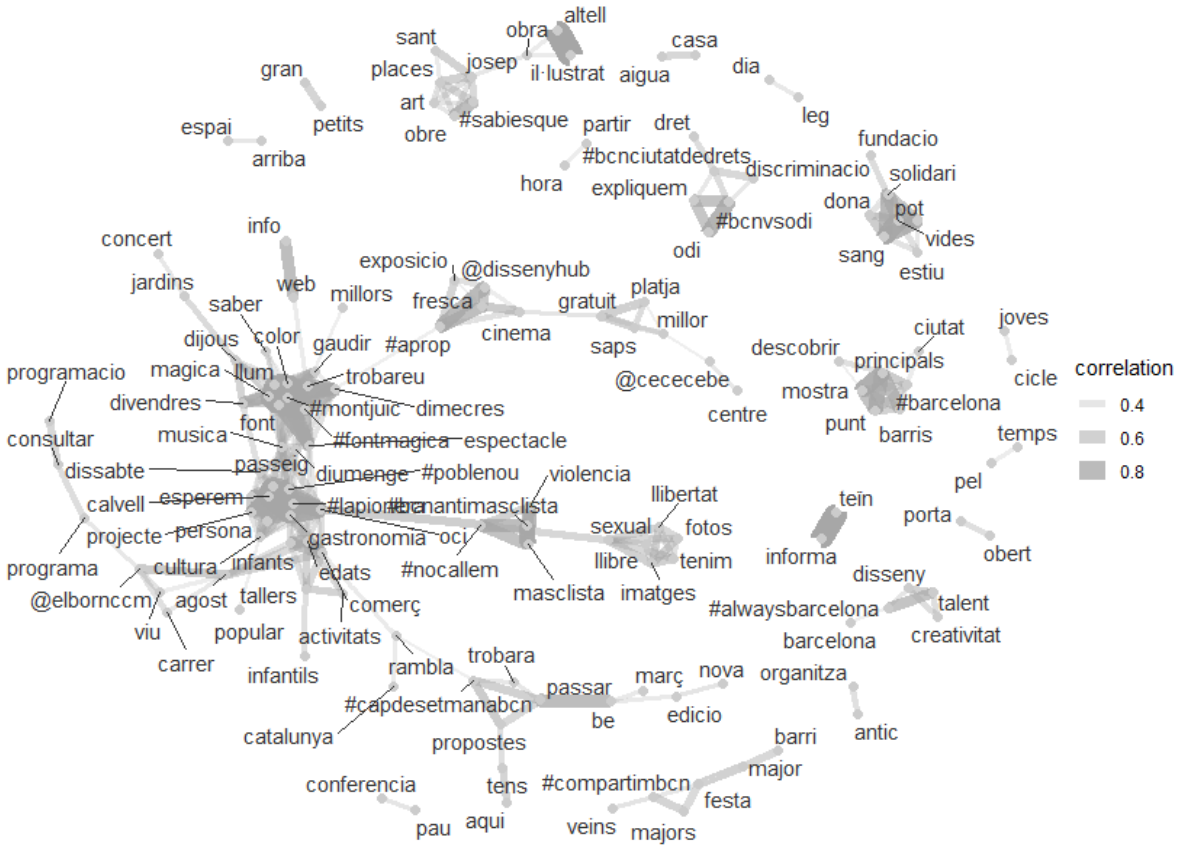
Graphic 49 and Graphic 50 show the sentiment scores of the messages. In Graphic 49 we can see how sentiment is mostly positive and Graphic 50 shows the words that influence each sentiment value. Interestingly, the word that mostly affects sentiment -2 is *odi* (hate), even though, as mentioned above, messages contain campaigns *against* hate. Moreover, we can observe the high incidence of the word *soroll* (noise) in the sentiment score -1: messages containing this word normally aim at encouraging people to respect the peace and quiet of their neighbourhoods at night. It is also worth noticing that the word *sostenible* (sustainable) is among the most common for sentiment score 1. Finally, as mentioned above, a great number of words introduce informative content, such as *gaudir* (enjoy), *espectacle* (spectacle), *premis* (awards) etc.



Graphic 51: evolution of sentiment

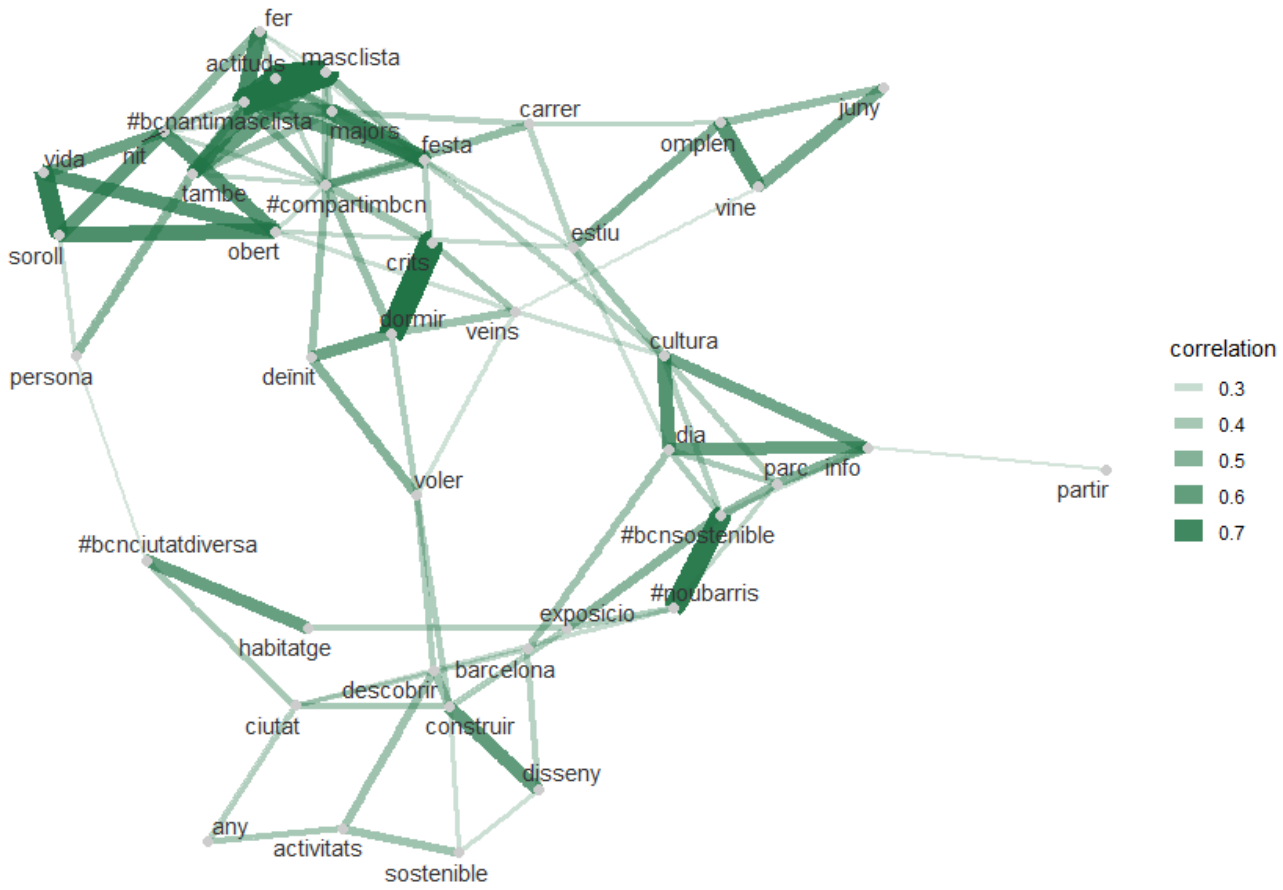
Graphic 51 shows that if we take the average sentiment of single days into account, no negative sentiment is registered.

From Graphic 52 it is easy to see the predominance of informative content: the two most significant clusters (in the central-left part of the graphic), in fact, concern the promotion of events, initiatives, and projects, the main words used are *spectacle* (spectacle), *musica* (music), weekdays and months, *gaudir* (enjoy), *comerç* (commerce) and #capdesemanaBCN (Barcelona weekend). Furthermore, the word *veïns* (neighbours) is often used in order to request peace and quiet throughout the most central districts.



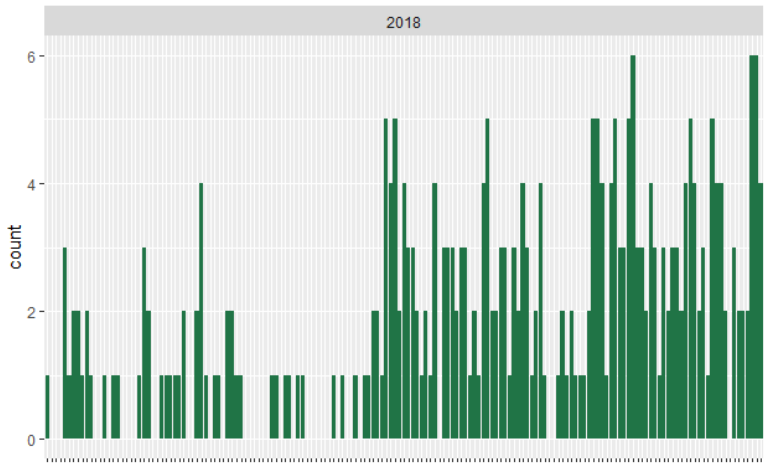
Graphic 52: graph with most frequent words

The total number of messages concerning sustainability is 297 (i.e. 10% of the total messages analysed). Graphic 53 shows the relationships among words in messages related to sustainability. What immediately catches the eye about the graph is the absence of well-defined clusters. However, exception made for some words regarding anti-hate campaigns, the majority of the words concerns the relationships between tourists and residents: *voler* (want), *dormir* (sleep), *respecta* (respect), *descans* (rest), *veins* (neighbours). Moreover, the word *habitatge* (housing) indicates the importance of the topic.



Graphic 53: graph with sustainability-related words

Graphic 54 shows the progression in the number of messages concerning sustainability posted every day. A steady growth is evident from the graph. Furthermore, the number of days without sustainability-related posts seems to be decreasing over time.



Graphic 54: number of sustainability-related posts per day

4.4. Discussion and results

Before proceeding with the comparison between the two cities, it seems necessary to specifically focus on how the texts analysed address the issues mentioned in Chapter 3.

Regarding Venice, we first take the logistic problems into account. As can be seen from the graphics shown in the previous paragraphs, both Venice accounts provide a significant amount of information concerning logistics and public transport. Most of the messages have a structure that is similar to Figure 7, i.e. they are composed of a general message (which can be a suggestion, a piece of information or a recommendation) and of a direct link or a tag (like in Figure 7), which users can utilize for obtaining more specific information. In other cases, messages provide more specific content: this normally happens when the institutions aim at quickly spreading real-time information. This, however, is an exception and specific content related to mobility is mostly provided by the official accounts of public transport operators.

For what littering is concerned, only four messages among the four Venice databases directly address the problem and all of them are published on Twitter. One of them is displayed in Figure 15 and will be considered more in detail later

Figure 7: "Venice is a city on water! Use public transport for moving around the city and buy tickets from the #VeneziaUnica purchasing network or use AVM Venezia Official App!".

Figure 8: an example of a general sustainability message.

in this paragraph. However, it is interesting to mention that some of the messages concerning sustainability in general indirectly address the topic, like the message shown in Figure 8.

Furthermore, for what the suburbs of Venice are concerned, it is worth noting that a lot of the words displayed in Graphic 13, Graphic 16, Graphic 40 and Graphic 43 are related to the topic (e.g. Mestre, Centro Candiani, Isole, Terraferma, etc.). In fact, Venice accounts promote not only sightseeing in the city centre, but also attractions and events in the suburbs: Figure 12, Figure 17 and Figure 21 are examples of this tendency.

Concerning Barcelona and the housing market prices, it should be pointed out that, as mentioned in Chapter 3, the most important action to take to address the problem is regulation. However, it is interesting to note (Figure 22) that events and informative campaigns are part of the strategy aimed at addressing the problem. Other messages related to this topic advertise the availability of public houses for destitute citizens.

For what illegal rents are concerned, we have seen in Chapter 3 that the Municipality developed the *Flat detector*, a website where citizens and tourists can

Figure 9: "Would you like to find out whether a tourist apartment has a licence? There is a webpage that you can consult!".

Figure 10: "When concerts end, do not start a party! There are people who want to sleep and your screams do not let them sleep. Respect the neighbourhood! #compartimBCN – When the dance ends, take a rest! DO NOT TORTURE US, WE WANT TO SLEEP!".

check whether a dwelling is legal and inform the Municipality about illegal apartments. Therefore, Barcelona accounts also encourage the usage of the *Flat detector*. See for example Figure 9, showing a message containing a direct link to the Flat detector. Furthermore, it is not uncommon to read messages informing the population about the number of illegal apartments closed down. Similarly, the Barcelona accounts also publish messages aiming at discouraging people to rent illegal apartments (see Figure 16, which will be discussed more in detail later in this paragraph).

Finally, regarding the issue of noisy neighbourhoods, it is interesting to point out that most of the messages concerning this topic contain the word *veins* (or other words with the same root), see for example Figure 10. Interestingly, this word is among the most common words both on Facebook and on Twitter messages (see Graphic 20 and Graphic 47) and this suggests that communicating this topic is perceived as important.

After considering how the two cities face different topics, it seems useful to compare and contrast the styles that they use in order to do so.

The main difference between the two approaches lies in the target: Venice accounts almost exclusively address tourists, whereas Barcelona pages are also directed to residents. Languages give us evidence of this: while Venice shares posts in English as well as Italian, Barcelona almost exclusively posts in Catalan, a language that is almost only spoken by locals.

Another difference concerns the sources of the content published on Twitter; for example, the Barcelona account mostly publishes original content (retweets are only 6% of the total messages), whereas Venice tends to publish retweeted content more often (see Table 1). The higher proportion of retweeted content in Italian can be explained by the fact that most of the other institutional accounts of the city mostly publish in Italian (e.g. @comunedivenezia, @detourismvenezia, @turismoveneto).

		Venice		Barcelona
		English	Italian	Catalan
Number of followers	Facebook	29 718		231 586
	Twitter	8 748		395 000
Number of posts analysed	Facebook	741	962	1 369
	Twitter	549	2 625	3 053
Percentage of Retweets		38%	63.7%	6%
Average posts per day	Facebook	0.69	0.88	1.25
	Twitter	2.22	10.63	18.62
Average sustainability-related posts per day	Facebook	0.25	0.18	0.18
	Twitter	1.04	3.44	1.81

Table 1: recapitulatory table

Table 2 is useful for comparing the lexical variability among the messages because it displays the average percentage of unique words per message (TTR, type Token ratio). Since this index is affected by message length, the table also shows the average message length (in token, i.e. words) for each database. Notably, the database with the longest average message length (posts in English in the Venice Facebook page) is also the database with the smallest TTR. Due to the character limitations on Twitter, however, we would expect Twitter messages to be shorter: this happens for both languages in @veneziaunica, but not in @barcelona_cat. Tweets, in fact, are composed of 19 words on average, whereas the average length of Facebook posts is 14 words.

	Venice		Barcelona
	English	Italian	Catalan
Facebook	93 %	91 %	96 %
	25	31	14
Twitter	95 %	96 %	93 %
	16	19	19

Table 2: TTR and average post length

Table 3 shows the average sentiment for each database. For what Venice is concerned, it is interesting to note that sentiment is more positive on Facebook than on Twitter. Barcelona, au contraire, has messages with a more positive sentiment on Twitter. The difference in sentiment between the two platforms might be biased by the different time extension of the data analysed. Anyway, it should be noticed that the overall sentiment of the Barcelona messages is lower than that of Venice messages. As explained above, this might be connected with

the anti-violence campaigns carried on by the Barcelona's institutional accounts (especially on Facebook).

	Venice		Barcelona
	English	Italian	Catalan
Facebook	1.83	1.53	1.07
Twitter	1.04	1.43	1.31

Table 3: average sentiment

Communication strategy on social networks is often supported by hashtags. Table 4 shows the percentage of unique hashtags for each database compared with the number of tokens (i.e. unique words). Hashtags are evidently more common on Twitter than on Facebook, but it is interesting to note that the Barcelona accounts use less unique hashtags than Venice in both social networks. Furthermore, as we have seen in paragraph 4.3.2, #Barcelona, which is the most frequent hashtag in the Barcelona database on Twitter, only appears in 4.3% of the messages. On Facebook, the most used hashtag is even less significant (see Graphic 21). In short, Barcelona accounts use a limited number of hashtags in very few messages.

	Venice		Barcelona
	English	Italian	Catalan
Facebook	3.6%	4.9%	2%
Twitter	9%	11%	5%

Table 4: percentage of unique hashtags

Among the hashtags used by both cities, it is interesting to focus on those related to sustainability. For what Venice is concerned, the main hashtag is #EnjoyRespectVenezia (#muoversivenezia might be considered applicable, but it only concerns logistics, public transport and mobility, rather than sustainability in general). The Barcelona accounts, on the other hand, use two sustainability-related hashtags: #compartimBCN and #fairtourismBCN. Table 5, Table 6 and Table 7 show the percentage of messages containing the main sustainability hashtags for each database. Even though #compartimBCN only appears in 4.2% of the messages on Twitter, it is interesting to point out that it is the third most frequent hashtag (this is due to the fact that this hashtag is often used in order to promote sustainable behaviours in general, not only related to tourism). In all the other cases, sustainability hashtags appear less frequently. Conversely,

institutional accounts of Venice use the sustainability hashtag much more often, especially on Twitter. A wide use of hashtags is important in destination marketing because not only it makes content more visible, but also it makes it more connected to similar content (also user-generated content) across channels (Oliveira & Panyik, 2015).

#EnjoyRespectVenezia	Venice	
	English	Italian
Facebook	14%	11%
Twitter	36%	15%

Table 5: occurrences of #EnjoyRespectVenezia

#compartimBCN	Barcelona Catalan
Facebook	0.6%
Twitter	4.2%

Table 6: occurrences of #compartimBCN

#fairtourismBCN	Barcelona Catalan
Facebook	0%
Twitter	0.3%

Table 7: occurrences of #fairtourismBCN

Table 8 shows the percentage of posts related to sustainability for each database. Venice published a higher proportion of sustainability-related posts than Barcelona. Furthermore, Venice tends to publish more on the topic on Twitter, whereas Barcelona publishes more posts related to sustainability on Facebook. However, the percentage of sustainability-related posts is always higher in Venice than in Barcelona.

	Venice		Barcelona
	English	Italian	Catalan
Facebook	24%	20%	14%
Twitter	47%	32%	10%

Table 8: percentage of posts related to sustainability

If we only consider sustainability-related communications, we can see how Venice messages in English tend to be more structured: Tourist Report messages, in fact, tend to be homogeneous and provide the same information: Facebook messages in English normally have the title Tourist Report and the dates concerned, subsequently, an estimate of the number of visitors is provided, together with advice and good practices. The attached picture generally shows a scheme of the situation: colours green, yellow, orange and red are used in order to quickly display whether the city is crowded or not (see an example in Figure 11). Likewise, Italian messages tend to have a similar structure, even though they do not have an explicit

title (see Figure 12). This structured format is probably due to the fact that these messages have a specific informative content which can be actively consulted by users and thus needs to be simple, easily recognizable and easy to remember (Gretzel, 2006).

Figure 11: an example of Tourist Report.

Figure 12: "Venice could be very crowded: favour islands and the mainland. Forecast of visitors to Venice".

Conversely, sustainability messages posted by the Barcelona accounts tend to follow a more educational approach and, for this reason, they do not need to adopt a fixed framework. These messages tend to be homogeneous in content but have a different structure in order to avoid repetitions. Figure 13 and Figure 14 show two examples of messages concerning the problem of noisy neighbourhoods.

Figure 13: "There are many ways to live Barcelona and all of them can be shared: if you go out at night, do not make noise. Neighbours are sleeping. #CompartimBCN – Here we like to dream at night. In silence we share Barcelona".

Figure 14: "In the squares, on the streets, at parties or while going to work... Remember that the city is a shared space. Take care of it and contribute to make a cleaner, quieter and more respectful city: we will all live better! We will all enjoy it! #compartimBCN. – Let's share Barcelona. Let's take care and enjoy the city!".

Since one of the objectives of sustainability communication is changing users' behaviours, it also seems relevant to analyse more in detail some of the messages published with this purpose. Two examples are shown in Figure 15 and Figure 16. Both tweets have a similar structure: an introductive sentence explaining the state of things, followed by an imperative sentence and a media enclosed. The tweet from @veneziaunica concerns environmental issues: after stating that Venice needs to be protected, the message invites users to avoid littering and to follow the garbage disposal rules. The image is similar to those enclosed in the Tourist Reports (Figure 11 and Figure 12) and shows the estimated number of visitors in Venice for that week. Figure 16 concerns illegal rents: the text, after stating that fair tourism is a shared responsibility, invites users neither to dwell in nor to rent out illegal apartments. The media object is a promotional video in English and Catalan introducing the campaign #fairtourismBCN (Municipality of Barcelona, 2018a). The video also encourages citizens to check whether the apartment they are staying at is legal and to denounce illegal flats (ibidem).

Figure 15: example of behaviour-changing tweet.

Figure 16: "We are all responsible for a fair, sustainable and respectful tourism. Remember, do not rent (out) apartments without a licence".

Another strategy used by both cities in order to promote sustainable behaviours is providing information to users. Figure 17 and Figure 18 provide two examples of messages with this structure. The Facebook page @VeneziaPaginaUfficiale encourages the visit of suburban areas by means of the promotion of Forte Marghera, a cultural centre which was hosting an exhibition at the moment the post was published. Similarly, Figure 18 shows a Facebook post where the institutional account of Barcelona explains that the Old Town is the part of the city with the most serious problems connected to noise coming from the streets at night and lists some of the initiatives launched in order to tackle the issue. Furthermore, a link to a study conducted in the Old Town is provided (Municipality of Barcelona, 2018b). Similarly to the previous one, this message encourages a positive behaviour (i.e. an increased attention towards loud noises at night) and at the same time provides information and data concerning why the problem should be solved and the solutions already put in place in order to do it.

Figure 17: an example of informative post encouraging a behaviour.

Figure 18: "Noise is not just an inconvenience. In the #Oldtown, the areas with the highest noise pollution at night and in the weekends are those adjacent to the Rambla. People living there have a high probability to experience disturbed sleep, stress or psychological or emotional decline. We are starting a series of initiatives with the purpose of avoiding noise pollution in the area. Among these, silence promoters, civic agents, cooperation with operators of nightlife and the telephone number 092".

The narrative approach is another technique worth analysing (Gretzel, 2006). A narrative is a series of events with relationships among them and is used for making information less complex and easier to remember (ibidem). Figure 19 shows a message containing a sentence retrieved from a book: the message states that, in spite of what some people may think, the most common and traditional way to move around Venice is walking. This is a narrative approach which also involves a personification of the city. Figure 20, conversely, uses narration to inform citizens about the initiatives carried out by the Municipality. The caption only contains short titles with emojis, but the video enclosed extensively explains the accomplishments of the institution (Municipality of Barcelona, 2018). Narrations are educational, therefore giving information by means of stories is a way to make them more understandable and connected to personal experiences (Gretzel, 2006).

Figure 19: "Venice goes on foot. A mental habit makes people believe that Venetians mostly move by boat. On the contrary, the most used and most human mean of transport are legs".

Figure 20: "Support for house renewal and for tentants' rights. – Sant Antoni gets back its market and gets a super block – Better remote assistance service – The dancing egg – Four minutes for finding out what the Municipality has done during the month of May".

Another interesting pattern in the communication strategy of both cities is the promotion of sustainable behaviours by means of events.

Figure 21 shows a Facebook message published by the Venice institutional account promoting an exhibition in Mestre. Similarly to the post in Figure 17, the purpose is incentivising users to visit Mestre. In the database analysed, several other messages have a similar structure and objective. Figure 22 shows a tweet from @barcelona_cat where an event concerning housing right and gentrification is promoted. This event was probably ideated for local residents, but it is interesting for our analysis because it raises awareness about the theme.

Figure 21: "Until 15th January it is possible to visit the exhibition «From Venice to the Dolomites» by Maurizio Gasparon in the exhibition room in Torre Belfredo street, 1 in Mestre".

Figure 22: "This Thursday we are going to reflect on housing right and gentrification. Conversation and movie projection. Glories square at 7pm #housingBCN".

Conclusion

During this work, we firstly reviewed literature concerning communication in the tourism domain and sustainable tourism. For what sustainable tourism is concerned, we outlined the theoretical foundations of the concept and the strategies that can be employed to improve sustainability in tourism. Furthermore, we reviewed criticism towards this approach as well as methodologies adopted with the objective to promote sustainable tourism in the European Union, in Italy and Spain.

Subsequently, we examined communication techniques in public administrations' websites and social media, both in general and applied to tourism.

After that, we specifically focused on Venice and Barcelona: two cities that are seeking to encourage a more sustainable tourism. In Chapter 3 we reviewed causes and solutions proposed to three problems for each city. For what Venice is concerned, the focus was on logistic and transportation problems and we examined how transportation works in a city built on water. Subsequently, we analysed the problem of littering as well as garbage disposal: in the historic centre of Venice, in fact, a consistent amount of garbage is produced, especially in relation with its dimensions and inhabitants. Finally, the suburbs of Venice were considered, in particular Mestre and Marghera. Concerning Barcelona, we analysed the increasing prices in the housing market and we tried to cast a light on the connections between this phenomenon and mass tourism. Furthermore, illegal rents and the legislation related to the matter were discussed. The last problem analysed was that of noise pollution in central districts, especially when it is connected with drunkenness, disturbance and night life.

After that, we analysed texts published in the two cities' institutional Facebook and Twitter accounts in order to understand whether social networks were used as means for promoting sustainable behaviours in tourism. The analysis was conducted with both quantitative and qualitative methods.

The data shows that Venice publishes messages related to sustainability more often than Barcelona. However, if we take the problems mentioned above into account, we see that not all the issues are addressed to the same extent. The problem of noisy neighbourhoods in Barcelona, for example, is often tackled with

messages inviting people to think about the neighbours who are resting while going out at night. Similarly, the complex logistics of Venice is often addressed throughout the messages by means of informative messages and links to more specific sources. Au contraire, the problem of littering in Venice is hardly ever addressed directly.

For what the communication strategy is concerned, we have seen that the campaign #EnjoyRespectVenezia has been widely advertised both on Facebook and on Twitter. Conversely, in the Barcelona pages, even though hashtags connected to sustainability campaigns are present (see #fairtourismBCN and #compartimBCN), they are only used in a limited number of posts.

Furthermore, it is interesting to note that while Venice tends to use a similar structure for messages concerning the same topic (like for example the Tourist Report messages), Barcelona publishes more various messages (also when they deal with similar topics). On the one hand, homogeneous messages are easily recognizable and familiar, on the other hand, messages written in different styles avoid repetitions and monotonous content.

Moreover, it is meaningful to note that event planning, narrative and informative techniques are used by both cities in order to encourage positive behaviours.

Limitations and future research

There surely are some limitations for this study. First of all, only two cities were taken into account: this is not a representative sample, but rather a starting point for getting an initial idea of the strategies used by touristic destinations for communicating sustainability in tourism. It would be interesting to expand the research to other cities and to gather data for longer periods of time.

Furthermore, the two cities are different in size and face different problems: they surely have in common a controversial relationship with tourism, but they use different institutional, regulatory and communicative approaches to face mass tourism.

Another limitation lies in the different software used to gather the data: while for Facebook it was possible to collect data for a three year's period, for Twitter the limitation of 3 200 messages per account imposed a shorter time range.

In the future, it would also be stimulating to combine these data with information regarding the extent to which the messages of the campaigns caused a change in the users' behaviours.

References

Bibliography

- Abril Sellarés, M., Azpelicueta Criado, C., & Sánchez Fernández, M. D. (2015). ¿ Vale todo en turismo? Residentes frente a turistas. Estudio comparativo entre el barrio de La Barceloneta, Barcelona y la localidad de Magaluf, Calvià. Impulso al desarrollo económico a través del Turismo: VIII jornadas de investigación en turismo (2015), p 493-510, 493-510.
- Aiello, A. (2006). Ciminiere ammainate: trent'anni di opposizione al declino industriale (Vol. 10). Nuova Dimensione Edizioni.
- Almeida-Santana, A., & Moreno-Gil, S. (2017). New trends in information search and their influence on destination loyalty: Digital destinations and relationship marketing. Journal of destination marketing & management, 6(2), 150-161.
- Alonso, J., Ambur, O., Amutio, M. A., Azañón, O., Bennett, D., Flagg, R., ... & Sheridan, J. (2009). Improving access to government through better use of the web. World Wide Web Consortium.
- Associazione Italiana Turismo Responsabile. (1997). Carta d'identità per viaggi sostenibili.
- Barbiani, E. (2010), "Mestre paesaggi per il futuro", In: "My Venice", year VII, n. 3, December 2010.
- Barcelona Global. (2018). 1st Barcelona Global Summit – Innovation in Urban Tourism.
- Belisario, E., Cogo, G., & Scano, R. (2010). I siti web delle pubbliche amministrazioni. Norme tecniche e giuridiche dopo le Linee Guida Brunetta (Vol. 41). Maggioli Editore.
- Bennato, D. (2012). Sociologia dei media digitali: relazioni sociali e processi comunicativi del web partecipativo. Gius. Laterza & Figli Spa.
- Brundtland, G., Khalid, M., Agnelli, S., Al-Athel, S., Chidzero, B., Fadika, L., & Singh, M. (1987). Our common future.
- Bryman, A., Cramer, D., (1999). WTO Guide for Local Authorities on Sustainable Tourism Development.

- Buckley, R. (2002). Tourism ecolabels. Annals of tourism research, 29(1), 183-208.
- Budeanu, A., Miller, G., Moscardo, G., & Ooi, C. S. (2016). Sustainable tourism, progress, challenges and opportunities: an introduction. Journal of Cleaner Production. Special Volume.
- Bughin, J., Doogan, J., & Vetvik, O. J. (2010). A new way to measure word-of-mouth marketing. McKinsey Quarterly, 2, 113-116.
- Buhalis, D., & Law, R. (2008). Progress in information technology and tourism management: 20 years on and 10 years after the Internet—The state of eTourism research. Tourism management, 29(4), 609-623.
- Bureau, T. G. (2007). Plan de Turismo Español Horizonte 2020. Documento Ejecutivo. Madrid: Ministerio de Industria, Turismo y Comercio, División de Información, Documentación y Publicaciones. Retrieved from: https://www.tourspain.es/es-es/Conozcanos/Documents/HistoricoPoliticaTuristica/PlanTurismoEspanolHorizonte2020.pdf. Last access: 3rd April 2018.
- Butler, R. W. (1999). Sustainable tourism: A state-of-the-art review. Tourism geographies, 1(1), 7-25.
- Butler, R. W., (1980). The concept of a tourist area cycle of evolution: implications for management of resources. The Canadian Geographer/Le Géographe canadien, 24(1), 5-12.
- Camatti, N., (2018). La capacità di carico di tipo turistico di Venezia nel 2018. Università Ca' Foscari di Venezia.
- Canto-Alamilla. C. (2016). Análisis de los impactos socioculturales desde la perspectiva del residente que el turismo genera en el barrio de La Barceloneta, España. Rotur: revista de ocio y turismo, (11), 1-11.
- Carrillo, M., & Jorge, J. M. (2017). Multidimensional analysis of regional tourism sustainability in Spain. Ecological Economics, 140, 89-98.
- Chan, E. S. (2013). Managing green marketing: Hong Kong hotel managers' perspective. International Journal of Hospitality Management, 34, 442-461.

- Choe, Y., Kim, J., & Fesenmaier, D. R. (2017). Use of social media across the trip experience: An application of latent transition analysis. Journal of Travel & Tourism Marketing, 34(4), 431-443.
- Choi, S., Lehto, X. Y., & Morrison, A. M. (2007). Destination image representation on the web: Content analysis of Macau travel related websites. Tourism management, 28(1), 118-129.
- Ciuchete, S. G., & Lefter, G. (2011). European tour-operators environmental risk management. Quality-Access to Success, 12(125), 165-170.
- Cogo, G. (2012). I social network nella PA. Santarcangelo di Romagna: Maggioli Editore.
- Consell de Turisme. (2017). Presentació Bones pràctiques de guiatge. Retrieved from: https://ajuntament.barcelona.cat/turisme/sites/default/files/bones_practiques_guiatge.pdf. Last access: 8th July 2018.
- COSES (2009). Rapporto 141.0 turismo sostenibile. Di Monte, Santoro et al. Achilli F., Ferraio A., Guerzoni G. (edited by), 2010, M9 STEP BY STEP, Marsilio Editori, Venezia.
- Crespi-Vallbona, M., & Mascarilla-Miró, O. (2018). La transformación y gentrificación turística del espacio urbano. El caso de la Barceloneta (Barcelona). Revista EURE-Revista de Estudios Urbano Regionales, 44(133).
- Davolio, M., Somoza, A., (2016). Il viaggio e l'incontro – Che cos'è il turismo responsabile. Altreconomia.
- De Carlo, M., Caso, R. (2007). Turismo e sostenibilità: principi, strumenti, esperienze (Vol. 2). FrancoAngeli.
- Del Vasto-Terrientes, L., Fernández-Cavia, J., Huertas, A., Moreno, A., & Valls, A. (2015). Official tourist destination websites: Hierarchical analysis and assessment with ELECTRE-III-H. Tourism Management Perspectives, 15, 16-28.
- Delgado, A. T. (2010). Sostenibilitat i modalitats turístiques. Una anàlisi de casos a Catalunya. Documents d'anàlisi geogràfica, 56(3), 479-502.
- Dinan, C., & Sargeant, A. (2000). Social marketing and sustainable tourism: Is there a match. International Journal of Tourism Research, 2, 1–14.

- Direcció Operativa de Turisme, Gerència d'Empresa, and Cultura i Innovació. (2017). Memòria de sostenibilitat turística Barcelona 2016.
- Dirección de Turismo, Gerencia de Empresa y Turismo. (2017). Turismo 2020 Barcelona. Una estrategia colectiva para un turismo sostenible.
- Doxey, G. V. (1975). A causation theory of visitor-resident irritants: Methodology and research inferences. In: Travel and tourism research associations sixth annual conference proceedings (pp. 195-98).
- Dredge, D., Gyimóthy, S., Birkbak, A., Elgaard Jensen, T., & Madsen, A. K. (2016). The impact of regulatory approaches targeting collaborative economy in the tourism accommodation sector: Barcelona, Berlin, Amsterdam and Paris.
- Duatis, J., Buhigas, M., & Cruz, H. (2016). Impacte del lloguer vacacional en el mercat de lloguer residencial de Barcelona. Barcelona: Ajuntament de Barcelona.
- El País. (2015a). El 'efecto Airbnb' en el vecindario. Daniel Verdù. 15th December, 2015.
- European Commission (2015), Guida sui finanziamenti europei per il settore del Turismo (2014-2020), retrieved from: http://ec.europa.eu/DocsRoom/documents/18164/attachments/3/translations/it/renditions/native. Last access: 15th September 2018.
- European Commission. (2003). Basic orientations for the sustainability of European tourism. Retrieved from: http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52003DC0716. Last access: 31st March 2018.
- European Commission. (2012). European Charter for Sustainable and Responsible Tourism.
- European Environment Agency (2012), Consumption and the Environment - Update to the European Environment State and Outlook 2010 (SOER 2010) thematic assessment.
- European Travel Commission. (2008). Handbook on E-marketing for tourism destinations. World Tourism Organization (WTO).
- Facchinelli, L., (2017). Atti del convegno Mestre, la ferrovia e la città. Marghera, 27 gennaio 2017.

- Fakeye, P. C., & Crompton, J. L. (1991). Image differences between prospective, first-time, and repeat visitors to the Lower Rio Grande Valley. Journal of travel research, 30(2), 10-16.
- Farrés, J. C. (2015). Barcelona noise monitoring network. Proceedings of Euronoise2015 (31May – 3 June 2015), 2315-2321.
- Fernández-Cavia, J., & Castro, D. (2015). Communication and branding on national tourism websites. Cuadernos. info, (37), 167-185.
- Foglio, A. (2003). Il marketing pubblico. Il marketing dello stato, degli enti locali, degli enti pubblici nazionali e territoriali, 1ª ed., Franco Angeli editore.
- Font, X. (2002). Environmental certification in tourism and hospitality: progress, process and prospects. Tourism management, 23(3), 197-205.
- Font, X., & Buckley, R. (Eds.). (2001). Tourism ecolabelling: certification and promotion of sustainable management. CaBI.
- Forghieri, C., & Mele, V. (2005). Gestire i rapporti con i cittadini. Maggioli Editore, Rimini.
- Frekko, S. E. (2009). Signs of respect: Neighborhood, public, and language in Barcelona. Journal of Linguistic Anthropology, 19(2), 227-245.
- Galli, P., Notarianni, M. (2002). La sfida dell'ecoturismo. Istituto geografico De Agostini.
- Garrod, B., & Fyall, A. (1998). Beyond the rhetoric of sustainable tourism?. Tourism management, 19(3), 199-212.
- Gasparoli, P., & Trovò, F. (2014). Venezia fragile: Processi di usura del sistema urbano e possibili mitigazioni (Vol. 2). Altralinea Edizioni.
- Generalitat de Catalunya (2002). L'Agenda 21 de Catalunya: el compromís d'un país pel desenvolupament sostenible global.
- Generalitat de Catalunya. (2017). Informe de la Comisión Interdepartamental de la Economía Colaborativa: Propuestas para un buen encaje de la economía colaborativa y de plataformas en Catalunya.
- Giannopoulos, A. A., & Mavragani, E. P. (2011). Traveling through the web: A first step toward a comparative analysis of European national tourism websites. Journal of Hospitality Marketing & Management, 20(7), 718-739.

- Giupponi, C., Galasso, S., & Pettenella, D. (2009). Verso la strategia nazionale per la biodiversità. Definizione del metodo per la classificazione e la quantificazione dei servizi ecosistemici in Italia.
- Gretzel, U. (2006). Narrative design for travel recommender systems. Destination Recommendation Systems: Behavioral Foundations and Applications. Cambridge, MA: CAB International, 171-179.
- Groth, A., & Haslwanter, D. (2015). Efficiency, effectiveness, and satisfaction of responsive mobile tourism websites: a mobile usability study. Information Technology & Tourism, 16(2), 201-228.
- Gunn, C. (1972). Vacationscape. Bureau of Business Research, University of Texas, Austin, TX. (f).
- Hallett, R. W., & Kaplan-Weinger, J. (2010). Official tourism websites: a discourse analysis perspective (Vol. 23). Channel View Publications.
- Heeley, J., (2010). Social media and its relevance to the marketing of cities as urban tourism destinations. Retrieved from: http://www.risposteturismo.it/Public/lePaginediRT/cinque2010_lePaginediRT_J.Heeley.pdf. Last access: 15th March 2018.
- Horng, J. S., & Tsai, C. T. S. (2012). Culinary tourism strategic development: An Asia-Pacific perspective. International journal of tourism research, 14(1), 40-55.
- Hudson, S., & Miller, G. A. (2005). The responsible marketing of tourism: the case of Canadian Mountain Holidays. Tourism Management, 26(2), 133-142.
- Hunter, C., & Green, H. (1995). Tourism and the environment: A sustainable relationship?. Routledge.
- Ibrahim, N., Shiratuddin, M. F., & Wong, K. (2013). Persuasion techniques for tourism website design. In: The International Conference on E-Technologies and Business on the Web (EBW2013) (pp. 175-180). The Society of Digital Information and Wireless Communication.
- ITF-STD, 2009. A Three-Year Journey for Sustainable Tourism. International Task Force on Sustainable Tourism Development under the Marrakech Process on Sustainable Consumption and Production.

- Jeong, C., Holland, S., Jun, S. H., & Gibson, H. (2012). Enhancing destination image through travel website information. International Journal of Tourism Research, 14(1), 16-27.
- Jockers, M. L. (2014). Text analysis with R for students of literature. New York: Springer.
- Karlsson, L., & Dolnicar, S. (2016). Does eco certification sell tourism services? Evidence from a quasi-experimental observation study in Iceland. Journal of Sustainable Tourism, 24(5), 694-714.
- Kelejyan, Z. (2011). La sostenibilidad en el ámbito del turismo y una correcta planificación y desarrollo sostenible en los destinos turísticos. El ejemplo de España (Doctoral dissertation).
- Kim, H., Xiang, Z., & Fesenmaier, D. R. (2015). Use of the internet for trip planning: A generational analysis. Journal of travel & tourism marketing, 32(3), 276-289.
- Kipar, A. (2017). Marghera, idee per il future. In: Rotary Club Mestre. Supplemento della rivista Trasporti & Cultura, (edited by) Facchinelli, L., Giovinazzi O., Martini V. (2017).
- Kiráľová, A., & Pavlíčeka, A. (2015). Development of social media strategies in tourism destination. Procedia-Social and Behavioral Sciences, 175, 358-366.
- Kotler, P., & Keller, K. L. (2006). Marketing Management. 12th edition. New Jersey.
- Kotler, P., Levy, S. J. (1971). Demarketing, yes, demarketing. Harvard Business Review, 79, 74-80.
- Krippendorf, K. (2004). Content analysis: An introduction to its methodology. Sage Publications.
- Lee, G., Cai, L. A., & O'Leary, J. T. (2006). WWW. Branding. States. US: an analysis of brand-building elements in the US state tourism websites. Tourism Management, 27(5), 815-828.
- Linden, H., & Linden, S. (2016). Fans and Fan Cultures: Tourism, Consumerism and Social Media. Springer.

- Liu, Z. (2003). Sustainable tourism development: A critique. Journal of sustainable tourism, 11(6), 459-475.
- Lo Surdo, G. (2013). Il marketing delle nuove vacanze. Comunicazione e mezzi di promozione del turismo rurale, enogastronomico, della natura, del wellness. Milano: IBS.
- Lovins, J. B. (1968). Development of a stemming algorithm. Mech. Translat. & Comp. Linguistics, 11(1-2), 22-31.
- Mak, A. H. (2017). Online destination image: Comparing national tourism organisation's and tourists' perspectives. Tourism Management, 60, 280-297.
- Malenkina, N., & Ivanov, S. (2018). A linguistic analysis of the official tourism websites of the seventeen Spanish Autonomous Communities. Journal of Destination Marketing & Management.
- Messina, S., Santamato, V.R. (2013). Esperienze e casi di turismo sostenibile, Franco Angeli.
- MiBACT - Ministero dei Beni e delle Attività Culturali e del Turismo (2012), Piano Strategico di Sviluppo del Turismo 2017-2022.
- Milano, R., Baggio, R., & Piattelli, R. (2011). The effects of online social media on tourism websites. (pp. 471-483).
- Minazzi, R. (2015). Social media marketing in tourism and hospitality. Heidelberg: Springer.
- Minoia, P. (2017). Venice reshaped? Tourist gentrification and sense of place. In: Tourism in the City (pp. 261-274). Springer, Cham.
- Moralejo, I. A., Miguel, C. E. (2003). Medio ambiente y desarrollo sostenible en España. Boletín económico de ICE, Información Comercial Española, (2786), 21-30.
- Morozov, E. (2011). Whither Internet Control?. Journal of Democracy, 22(2), 62-74.
- Morozov, E. (2013). The real privacy problem. Technology Review, 116(6), 32-43.
- Moutinho L, Rate S and Ballantyne R (2013) Futurecast: an exploration of key emerging megatrends in the tourism arena. In: Costa C, Panyik E, and

Buhalis D (eds) Trends in European Tourism Planning and Organisation. Bristol/Buffalo/Toronto: Channel View Publications, pp. 313–325.

- Municipality of Barcelona (2016a). Plan Estratégico de Turismo de Barcelona 2020: Diagnosis Estratégica.
- Municipality of Barcelona (2016b). Percepció del Turisme a Barcelona. Retrieved from: https://ajuntament.barcelona.cat/turisme/sites/default/files/documents/r16002_percepcio_del_turisme_informe.pdf. Last access: 8th July 2018.
- Municipality of Barcelona. (2012). Àrea d'Ecologia, Urbanisme i Mobilitat. "Compromís Ciutadà per la Sostenibilitat 2012-2022.
- Municipality of Venice, (2018). Exceptional Measures for Visitor Flow Management in Venice - Summer 2018. http://www.comune.venezia.it/sites/comune.venezia.it/files/infografica_flussi_ENG.PDF. Last access: 1st September 2018.
- Municipality of Venice. (2016). Annuario del Turismo della Città di Venezia 2016, settembre 2017.
- Municipality of Venice. (2017). Progetto di governance territoriale del turismo a Venezia. Retrieved from: https://live.comune.venezia.it/sites/live.comune.venezia.it/files/articoli/allegati/Prog.governance%20terr.%20turismo_13_luglio.pdf. Last access: 3rd April 2018.
- Musarò, P. (2014). Responsible tourism as an agent of sustainable and socially-conscious development: reflections from the Italian case.
- Neto, F. (2003). A new approach to sustainable tourism development: Moving beyond environmental protection. In: Natural resources forum (Vol. 27, No. 3, pp. 212-222). Blackwell Publishing Ltd.
- O'Reilly, T. (2004). The architecture of participation. Retrieved from: http://archive.oreilly.com/pub/a/oreilly/tim/articles/architecture_of_participation.html. Last access: 10th May 2018.
- O'Reilly, T. (2005). What is Web 2.0. Retrieved from: http://www.oreillynet.com/pub/a/oreilly/tim/news/2005/09/30/what-is-web-0.html. Last access: 10th May 2018.

- Oliveira, E., & Panyik, E. (2015). Content, context and co-creation: Digital challenges in destination branding with references to Portugal as a tourist destination. Journal of Vacation Marketing, 21(1), 53-74.
- Organizzazione di Gestione della Destinazione Turistica "Venezia e Laguna". (2017). Destination Management Plan 2016-2018.
- Pomering, A., Noble, G., & Johnson, L. W. (2011). Conceptualising a contemporary marketing mix for sustainable tourism. Journal of Sustainable Tourism, 19(8), 953-969.
- Pulido Fernández, J. I., & López Sánchez, Y. (2013). Propuesta de contenidos para una política turística sostenible en España. PASOS. Revista de Turismo y Patrimonio Cultural, 11(4).
- Quinn, B. (2007). Performing tourism Venetian residents in focus. Annals of Tourism Research, 34(2), 458-476.
- Rabanal, L. C. (2018). Procesos de desplazamiento y desposesión en contextos urbanos. El caso de Sant Antoni (Barcelona). Perifèria. Revista d'investigació i formació en Antropologia, 23(1), 31-55.
- Regione del Veneto. (2016). Piano turistico ambientale 2016. Retrieved from: https://bur.regione.veneto.it/BurvServices/pubblica/Download.aspx?name=228_AllegatoA_318618.pdf. Last access: 20th March, 2018.
- Rheingold, H. (2007). Smart mobs: The next social revolution. Basic books.
- Ricci, F., Fuchs., Cantoni, L., (2012). Information and Communication Technologies in Tourism 2012. Springer.
- Rivera Mateos, M., & Rodríguez García, L. (2012). Turismo responsable, sostenibilidad y desarrollo local comunitario. Universidad de Córdoba. Cátedra Intercultural.
- Rodríguez, R. A., López, A. G., & Caballero, J. L. J. (2017). Has implementing an ecolabel increased sustainable tourism in Barcelona?. Cuadernos de Turismo, 93-134.
- Rubini, P., (2011). Politiche e strategie di destination branding. Retrieved from: http://www.risposteturismo.it/Public/lePaginediRT/due2011_lePaginediRT_P.Rubini.pdf. Last access: 10th September 2018.

- Ruíz, M. D. C. C. (2013). Sostenibilidad y turismo: de la documentación internacional a la planificación en España" Horizonte 2020". Boletín de la Asociación de Geógrafos Españoles, (61), 67-92.
- Russo, A. P. (2002). The “vicious circle” of tourism development in heritage cities. Annals of tourism research, 29(1), 165-182.
- Sanabria, R., Skinner, E., Font, X., Maccarrone-Eaglen, A., Sallows, M., & Fredericksen, M. (2003). Sustainable Tourism Stewardship Council-raising the standards and benefits of sustainable tourism and ecotourism certification.
- Sans, A. A., & Quaglieri, A. (2016). Unravelling airbnb: Urban perspectives from Barcelona. Reinventing the Local in Tourism: Producing, Consuming and Negotiating Place; Channel View Publications: Buffalo, NY, USA, 209.
- Sharpley, R. (2010). The myth of sustainable tourism. CSD Center for Sustainable Development.
- Sigala, M., Christou, E., & Gretzel, U. (Eds.). (2012). Social media in travel, tourism and hospitality: Theory, practice and cases. Ashgate Publishing, Ltd.
- Silge, J., & Robinson, D. (2017). Text mining with R: A tidy approach. " O'Reilly Media, Inc.".
- Tuten T. & Solomon M.R. (2014), Social Media Marketing, Pearson, 2nd edition.
- United Nations (1993). Agenda 21: Programme of action for sustainable development; Rio Declaration on Environment and Development; Statement of Forest Principles: The final text of agreements negotiated by governments at the United Nations Conference on Environment and Development (UNCED), 3rd-14th June 1992, Rio de Janeiro, Brazil. New York, NY: United Nations Dept. of Public Information.
- United Nations (2012). Rio +21: the future we want. 20-22 June 2012. Rio de Janeiro, Brazil.
- United Nations Environment Programme., Vourc'h, A., Denman, R., & International Council for Local Environmental Initiatives. (2003). Tourism

and Local Agenda 21: The role of local authorities in sustainable tourism. Paris: United Nations Environment Programme.

- Uşaklı, A., Koç, B., & Sönmez, S. (2017). How 'social' are destinations? Examining European DMO social media usage. Journal of destination marketing & management, 6(2), 136-149.
- Van der Borg, J. (2005). Verso una politica turistica moderna a Venezia. In: Ortalli, G. (Ed.). (2007). Turismo e città d'arte. Ist. Veneto di Scienze.
- Van der Borg, J., Camatti, N., Bertocchi, D., & Albarea, A. (2017). The Rise of the Sharing Economy in Tourism: Exploring Airbnb Attributes for the Veneto Region.
- Van der Borg, J., Costa A. (2004) "Turismo a Venezia", In: J. van der Borg, A. Costa (edited by), "Insula – Quaderni. Documenti sulla manutenzione urbana di Venezia", n. 20 year VI, September 2004.
- Veritas SpA. (2017). Servizio di igiene ambientale. Veritas Spa.
- Woodside, A. G., & Martin, D. (Eds.). (2008). Tourism management: analysis, behaviour and strategy. Cabi.
- World Tourism Organization, (1989), Inter-Parliamentary Union WTO News, World Tourism Organization, 1(21).
- World Tourism Organization, (2004), Indicators of Sustainable Development for Tourism Destinations: A Guidebook.
- WTO, World Tourism Organisation. (1999). Sustainable Development of Tourism: An annotated Bibliography.
- WTTC, OMT, Earth Council. (1995). Agenda 21 for the travel and tourism industry. Towards environmentally sustainable development, 1-78.
- Zanon, G. (2004) "La giostra non è finita!", In: J. van der Borg, A. Costa (edited by), "Insula – Quaderni. Documenti sulla manutenzione urbana di Venezia", n. 20 year VI, September 2004.
- Zeng, B., & Gerritsen, R. (2014). What do we know about social media in tourism? A review. Tourism Management Perspectives, 10, 27-36.

Sitography

- #EnjoyRespectVenezia. http://www.comune.venezia.it/enjoyrespectvenezia. Last access, 30th August 2018.

- Peterka-Bonetta, J. (2015). Emoticons decoder for social media sentiment analysis in R. http://opiateforthemass.es/articles/emoticons-in-R/. Last access: 4th September 2018.
- Lyons, K. (2017). Emoji Dictionary. https://lyons7.github.io/portfolio/2017-10-04-emoji-dictionary/. Last access: 4th September 2018.
- Benoit, K., and Nulty, P. (2016). Quanteda: Quantitative Analysis of Textual Data. https://CRAN.R-project.org/package=quanteda. Last access: 4th September 2018.
- Kearney, M., W., (2018). Rtweet: Collecting Twitter Data. https://CRAN.R-project.org/package=rtweet. Last access: 5th September 2018.
- Silge, J., Robinson, D., Misra, K., Keyes, O., Hvitfeldt, E., De Queiroz, G., (2018). tidytext: Text Mining using 'dplyr', 'ggplot2', and Other Tidy Tools. Retrieved from: https://cran.r-project.org/web/packages/tidytext/index.html. Last access: 4th September 2018.
- Lang, D., Chien, G., (2018). Wordcloud2: Create Word Cloud by 'htmlwidget'. https://cran.r-project.org/web/packages/wordcloud2/index.html. Last access: 4th September 2018.
- Nielsen, F. Å., (2011). AFINN. Informatics and Mathematical Modelling, Technical University of Denmark. http://www2.imm.dtu.dk/pubdb/p.php?6010. Last access: 4th September 2018.
- Wickham, H., François, R., Henry, L., Müller, K., (2018). Dplyr: A Grammar of Data Manipulation. https://CRAN.R-project.org/package=dplyr. Last access: 4th September 2018.
- Municipality of Barcelona (2018a). Video campaign #fairtourismBCN. Retrieved from: https://twitter.com/i/videos/1035824614453243904. Last access: 10th September 2018.
- Municipality of Barcelona (2018b). D'on ve el soroll a Ciutat Vella i com podem posar-hi remei. Retrieved from: https://www.barcelona.cat/infobarcelona/ca/don-ve-el-soroll-a-ciutat-vella-i-com-podem-posar-hi-remei_516939.html. Last access: 10th September 2018.

- Municipality of Barcelona (2018c). InfoBarcelona Maig 2018. Retrieved from: https://www.facebook.com/bcn.cat/videos/1926439107409037. Last access: 12th September 2018.
- Airbnb. (2018a). Community Compact. Retrieved from: https://www.airbnbcitizen.com/community-compact/. Last access: 6th July 2018.
- Airbnb. (2018b). Discover Airbnb's commitment to Barcelona. Retrieved from: https://www.airbnbcitizen.com/discover-airbnbs-commitment-to-barcelona/. Last access: 6th July 2018.
- Airbnb. (2018c). Airbnb launches new responsible home sharing tool in Barcelona and Catalonia. Retrieved from: https://www.airbnbcitizen.com /airbnb-launches-new-responsible-home-sharing-tool-in-barcelona-and-catalonia/. Last access: 6th July 2018.
- BBC News. (2018). Tomorrow's Cities: How Barcelona shushed noise-makers with sensors. Jane Wakefield. 3rd June 2018. https://www.bbc.co.uk/news/technology-41015486. Last access: 14th June 2018.
- Bertasi, G. (2018). Cestini differenziati e app «Scoasse» Un piano rifiuti destinato ai turisti. Corriere del Veneto (Venezia e Mestre). 5 maggio 2018. Retrieved from: https://www.pressreader.com/italy/corriere-del-veneto-venezia-e-mestre/20180505/281668255603295. Last access: 14th June 2018.
- Bottazzo, F. (2018a). Venezia, stop al cibo da passeggio. La giunta blocca per tre anni i take away. Corriere del Veneto (Venezia e Mestre). 9 maggio 2018. Retrieved from: https://corrieredelveneto.corriere.it/venezia-mestre/cronaca/18_maggio_09/stop-cibo-passeggiovenezia-firma-bloccaper-tre-anni-take-away-30f84b08-5350-11e8-b476-6031113bd88a.shtml. Last access: 13th June 2018.
- Bottazzo, F. (2018b). Il museo M9 si «riveste» con i colori di Mestre. La corsa contro il tempo di 600 operai. Corriere del Veneto (Venezia e Mestre). 13 aprile 2018. Retrieved from: https://corrieredelveneto.corriere.it/venezia-mestre/cultura-tempo-libero/18_aprile_13/m9-si-riveste-colori-mestrela-

corsa-contro-tempo-600-operai-b9df22ae-3eea-11e8-aa79-6dc42e1f0596.shtml. Last access: 16th June 2018.

- Chiarin, M., (2018). Mestre studia il rilancio con i negozi aperti la sera. La Nuova di Venezia e Mestre. 21 giugno 2018. Retrieved from: http://nuovavenezia.gelocal.it/venezia/cronaca/2018/06/21/news/mestre-studia-il-rilancio-negozi-aperti-la-sera-1.16985612. Last access: 12th September 2018.
- Citylab. (2015). Tourist-Heavy Barcelona Is Cracking Down on Airbnb. Feargus O'sullivan. 23rd December 2015. Retrieved from: https://www.citylab.com/equity/2015/12/barcelona-airbnb-tourism/421788/. Last access: 25th June 2018.
- El País. (2015b). Barcelona residents in revolt over city's 'tourism monoculture'. Sam Edwards. 4th May 2015. Retrieved from: https://elpais.com/economia/2015/12/10/actualidad/1449738303_311413.html. Last access: 1st July 2018.
- El País. (2017). Los vecinos de Sagrada Familia piden limitar el turismo en su barrio. Alfonso L. Congostrina. 25th October, 2017. Retrieved from: https://elpais.com/ccaa/2017/10/25/catalunya/1508962075_638222.html. Last access: 12th September 2018.
- Flat detector. (2018). http://meet.barcelona.cat/habitatgesturistics/en. Last access: 30th August 2018.
- Jünger, J., Keyling, T., (2018). Facepager 3. An application for generic data retrieval through APIs. Source code and releases available at https://github.com/strohne/Facepager/. Last access: 20th July 2018.
- La Nuova di Venezia e Mestre's editorial staff. (2017). Venezia, cestini pieni di rifiuti: 6,5 milioni di raccolta in conto ai veneziani. La Nuova di Venezia e Mestre. 30 maggio 2017. Retrieved from: http://nuovavenezia.gelocal.it/venezia/cronaca/2017/05/30/news/Venezia-cestini-pieni-di-rifiuti-raccolta-in-conto-ai-veneziani-1.15414990. Last access: 15th July 2018.
- Venezia Today's editorial staff. (2018). Referendum sulla separazione tra Venezia e Mestre, 30 settembre 2018. Venezia Today. 13 marzo 2018. Retrieved from: http://www.veneziatoday.it/politica/referendum-

separazione-venezia-mestre-30-settembre-2018.html. Last access: 14th June 2018.

- The Guardian (2017). Barcelona cracks down on Airbnb rentals with illegal apartment squads. 2nd June 2017. Retrieved from: https://www.theguardian.com/technology/2017/jun/02/airbnb-faces-crackdown-on-illegal-apartment-rentals-in-barcelona. Last access: 12th September 2018.