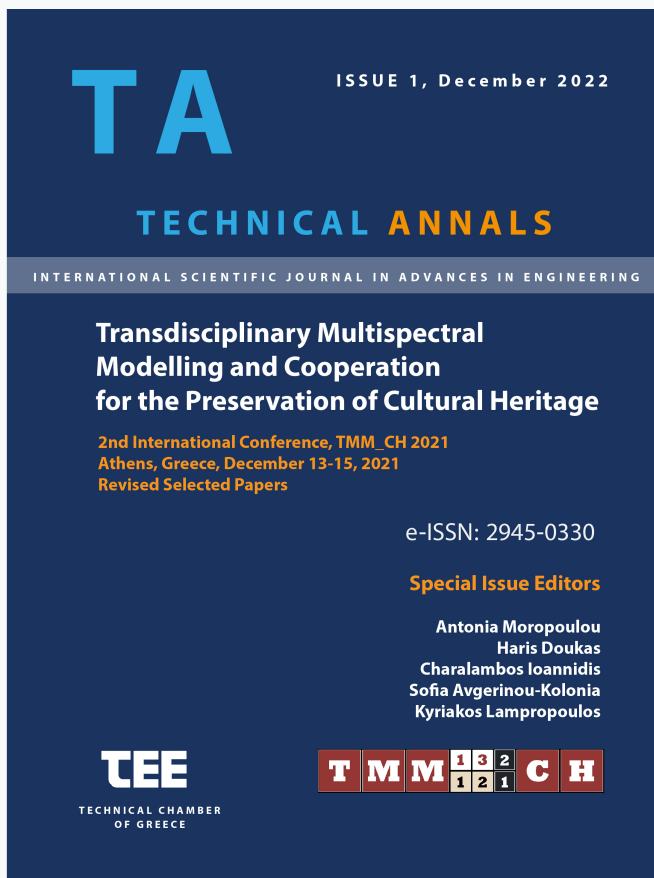


Technical Annals

Vol 1, No 1 (2022)

Technical Annals



Heritage and Tourism - In the age of digital transition and pandemic

Alfredo Ronchi

doi: [10.12681/ta.32083](https://doi.org/10.12681/ta.32083)

Copyright © 2022, Technical Annals



This work is licensed under a [Creative Commons Attribution-ShareAlike 4.0](https://creativecommons.org/licenses/by-sa/4.0/).

To cite this article:

Ronchi , A. (2022). Heritage and Tourism - In the age of digital transition and pandemic. *Technical Annals*, 1(1), 228–251. <https://doi.org/10.12681/ta.32083>

Heritage and Tourism In the age of digital transition and pandemic

Ronchi Alfredo

M. Politecnico di Milano,
alfredo.ronchi@polimi.it

Abstract. Digital transition together with all the related side effects plus the pandemic imposed a true stress test to tourism and cultural institutions. Extended lockdowns deeply impacted citizens' lifestyle, significantly reducing social life and cultural enjoyment. Following the fil-rouge of the evolution of tourism indifferent forms up to overtourism impacting both residents and heritage. The paper explores the key indicators of overtourism and related causes. From the advent of models based on the number of visitors and the carrying capacity of tourist locations, to the most recent assessments which also consider visitor behaviour, time dimensions and concentration phenomena of people in certain places. The term overtourism is an umbrella that covers a wide range of causes including urban planning, infrastructures, city managers, different stakeholders, citizens and of course tourists and daily visitors. This to do not forget undertourism and its origins.

Keywords: *Cultural Heritage, Cultural Tourism, Overtourism, Sustainable Tourism*

1. Setting the scene

Cultural heritage has always been an interdisciplinary sector, a wide range of applications involved from investigation to restoration, conservation, exploitation, education and communication each of them enjoying a different mix of expertise: art history, anthropology, social science, philosophy, science of materials, chemistry, art, structural engineering, etc., more recently, economy and marketing plus more and more high technology, from multispectral images to ICTs and bio-tech.

Such an articulated scenario with intrinsic richness of links and relations is potentially generating new skills and professional profiles, often as a result of a “crossover” of already existing professional profiles. As a follow-up of such a scenario both basic and applied research and educational strategies have to be duly tuned.

Our diverse and rich cultural heritage is one of Europe's greatest assets in the

emerging “global” society. Europe has over 5000 major museums and art galleries: They attract over 500 million visits every year, they are one of the most relevant income in tourism market and moreover represent, in some cases, a relevant component of local or national GDP. Nevertheless, Europe’s Cultural Heritage is currently very poorly exploited, in terms of its accessibility to the public, schools/universities and the media/publishing industry.

Most museums and galleries are only open about 30 of the 168 hours each week and only about 20% of collections are on display. Up to now Cultural Heritage has rarely contributed effectively either to creating new jobs or in economic activity. Starting from recent trends and events including the contingency plans organised by cultural institutions this document will focus on the specific sector usually termed “cultural tourism” and the combined effect on it due to both digital transformation and recent pandemic.

2. Recent trends and events

As a follow up of the pervasive diffusion of online position aware mobile devices, both materialised as smart phones or tablets, digital communication became part of our daily life as well as such devices became part of our wardrobe as our wallet or wristwatch. Through time this trend was synthesized in a buzzword “Digital Transformation (DX or DT)” the tight penetration of “digital” in every sector of our life from manufacturing to government, services, entertainment and more. Of course, independently from the weight that each one of us assigns to “culture” DT impacted the cultural sector mainly through the Internet if we focus on fruition and communication. Albeit relevant contributions to research and preservation have been provided as well.

On the move to this new scenario another unexpected actor came on stage, the pandemic. This “extra”⁷³ surprised institutions and governments and suddenly the life of billions of people around the world has changed, extended lockdowns, the diffuse idea of sailing in some uncharted waters, led to the paralysis of major parts of the activities including the traditional ones in the field of culture: concerts, operas, museums, exhibits, travels, etc.

These aspects characterised the recent pandemic, long term lockdowns imposed to find the way to reconnect with researchers, passionate visitors and, why not, attract newcomers. Technological advances have provided ever-improving information processing and communication infrastructures. Cultural Institutions discovered the power of digital media especially on the occasion this unexpected event. Museums reacted to the lockdown creating virtual⁷⁴ guided tours⁷⁵, thematic on-line lectures⁷⁶, webinars and more.

⁷³ Movimaker term - is a performer in a film who appears in a nonspeaking or nonsinging (silent) capacity, usually in the background

⁷⁴ <https://rusmuseumvrm.ru/?lang=en>

⁷⁵ <http://www.museivaticani.va/content/museivaticani/it/collezioni/musei/tour-virtuali-elenco.html>

⁷⁶ https://www.youtube.com/watch?v=U9UUIkr0l2U&feature=emb_imp_woyt

Anyway, as a positive follow-up of the present crisis we can envisage different benefits: first of all, the acceleration of the switch to distant fruition of cultural heritage on the way to an improved resilience of the cultural ecosystem but even an empowered knowledge transmission and acquisition from the end of the crisis onward. “Resilience” another buzzword very popular in this period. All these technologies and services are not aimed to surrogate the direct fruition and enjoyment of cultural heritage but will improve its knowledge and understanding securing its access. To find a positive follow up of this combination of events, we can consider that now is the time to think about the future organization of cultural institution system bytaking advantage from the experience gained and adopting the best solutions to achieve a resilient infrastructure. What does it mean “resilience” in the specific field of culture, ensure continuity in visiting museums and cultural institutions even in case of disasters let’s term it “cultural enjoyment continuity”.

In addition, we consider these events a good opportunity to rethink about cultural organisations trying to expand and extend the audience to include young generations such as millennials and generation “Y”. Before the outbreak of the coronavirus pandemic, the world was already dealing with a crisis in communication between cultural institutions and young generations, traditional methodologies were already outdated. A cultural and communication divide was already on stage between millennials (generation Y) and the educational and cultural system. A new model for communication processes is required. The global lockdown represented a unique opportunity to bridge a number of gaps and reshape our future, thinking out of the box, identifying what is useless, deleting biases due to customs, rethinking processes and protocols. Cultural system can take this opportunity to develop a new approach to improve its resilience and “generate deep knowledge” and critical thinking in millennials.

The following part of this document will focus on a specific sector laying under the heritage umbrella: heritage and tourism extending what it was termed time ago “cultural tourism”.

3. Tourism: appearance and evolution

To better deal with Cultural Tourism, we will start taking into consideration tourism [Ronchi A. M., (2019 H)] and the main stages characterizing its evolution starting from the era of aristocratic tourism, “grand tourers” and then moving on to mass tourism and finally reaching cultural tourism and sustainable tourism, the latter often associated with the concept of “positive experience”. This to better understand evolution of tourism and tourists including the newcomers. Before the twentieth century, tourism was reserved for a category of privileged travellers. Tourism was in all respects a luxury asset. The eighteenth century marks the beginning of tourism, the beginning of the industrial revolution in England corresponds to an evolution of Western society, this habit extended in the nineteenth century. The development of transport induced by the industrial society provided tourism with better means and a more abundant clientele: the bourgeoisie, anxious to see and to show itself. The large hotel thus becomes a very lucrative investment, which stimulated the entrepreneurship of charac-

ters who have become famous, like the Swiss César Ritz. Another great classic of tourism sees the light in 1900: the first edition of the Michelin guide. In 1910 the Office National de Tourisme was created in France, in 1913 the law on the protection of historical monuments was promulgated. The beginnings of modern tourism can be found around the Thirties.

"I believe tourists are very useful to the modern world: it is very difficult to hate the people one knows"
(J. Steinbeck, *Shaping the Culture of Peace in a Multilateral World* 2005 page 66).

By the end of the 1950s, however, with the spread of the automobile and the expansion of the motorway network throughout the countries internal tourism became increasingly common, developing the accommodation system of hotels, villages, campsites, holiday homes and the like.

4. "Mass tourism"

The process of diffusion or "democratization" of tourism originated at the beginning of the twentieth century, the growth of population wealth and the consequent increase in consumption were the basic signals of the birth of mass tourism [Ronchi A. M., (2019 H)]. After the second world war, tourism has considerably developed. But it was a mass tourism, first of all the "bathing tourism" that invaded the planet. People essentially seek rest, peace and the sun.

Later on, in the 1960s this tourism was defined, in English, the 4S (sand, sea, sun, sex). The typical approach of city managers was mainly oriented to increase the number of tourists visiting the area; no specific focus was posed on excursionists (daily tourists) and resident tourists as well as on the typology of tourists involved. Few locations carefully planned which "typology" of tourists to attract thanks to: facilities, accommodation and attractions or sport opportunities. Some authors consider this trend as the birth of "overtourism". Over several decades this mass tourism has consumed without discernment, without respecting the bathing areas, the urban and heritage areas and even the mountain areas both in winter and summer time.

In the second half of the 20th century the intellectual level of the populations has increased thanks to the increase of the level of education and knowledge, the strengthening of communications, faster and cheaper transport, computer technology, namely the Internet. Tourism changed again the focus aiming to provide unforgettable experiences to travellers, the overall score assigned to a travel was, since that time, represented by the quality of the experience that it provides to tourists.

More recently under the "tourism umbrella" many other branches arose like spa, operas/concerts, surgery, dentistry, specific communities' meetings and tours, but even criminal and more.

As recently underlined, if a factor of 50 in communication speed has led to the incredible development enjoyed in the transition from horse to jet, perhaps we cannot even imagine what will bring us a speed increase equal to that offered by new forms of communication.

5. Tourism meets Globalisation

Globalisation is one of the key terms used to describe actual trends, but there are many aspects of this concept that should be carefully considered, such as the impact on cultural identity [Ronchi A.M. (2017 UG)]. There is a need to preserve and transfer to future generations people's cultural identity many times jeopardised and blurred by dominant cultural models and languages; local cultural behaviors, lifestyle, food, artistic expression and more tend to disappear under the pressure of global trends. Uniformity is the nightmare concerning our future, one currency, one language, one "culture", one food, one taste, ... Cultural diversity as biodiversity means richness, it is an asset that needs to be preserved, and to do so cultural models must be considered. Cultural diversity is the engine of cultural and economic growth; it provides incredible richness as well as traditions.

The internet, apart from different potential benefits, gave an incredible boost to globalisation trend, platforms and regulations-vacancy opened the way to new monopolies deeply influencing society. In such ascenario Cultural Institutions [Ronchi A.M. (2017 RF)] can play a relevant role in reconnecting globalised people with their own cultural roots. In the age of "googling" information and consuming them without any further critical evaluation and elaboration, a kind of surface "culture" made by islands and archipelagos of information quite different from knowledge and "Culture", Cultural Institutions through their active role in communities can elicit a positive behavior.

The explosion of tourism world-wide, a kind of "global" tourism, was boosted by the increasing number of low-cost airlines and the opening of new markets in the actual millennium, due to the opportunity and increasing interest to travel abroad that animated people living in big countries that before were "closed" within their borders or even metropolitan areas. This phenomenon increased both internal and international tourism, their airports once populated by foreign travellers are now crowded by locals. Consumers have greatly appreciated the offers by "low cost" companies and have favoured short distance journeys. These companies will continue to develop, despite COVID-19, even if, the general economic conditions will improve, because the public has easily adapted to the new standards of service⁷⁷ appreciating the savings achievable. This new scenario can benefit both cultural tourism in general and specifically museums thanks to the opportunity to spend a week end abroad visiting museums or even flying abroad day travel to enjoy a specific temporary exhibit. In fact, travellers have become increasingly accustomed to the low prices charged by these airlines. At the same time, they appreciated the convenience of small airports to get later by bus to the main locations, e.g., Cultural Capitols. This custom to use cheaper airports located sometimes in a different country close to the main destination offered the opportunity to revitalise some heritage assets located outside the big of well-known locations on the way to get from or to the small airport.

Despite the opportunity to easily reach a far bigger number of destinations, some areas and location/museums are still suffering the overcrowding problem that, if on

⁷⁷ We can term it "all exclude", so tourists will pay for what they really need.

one side can jeopardise heritage, on the other side generates a citizen's negative feeling. Different approaches have been applied to minimize these aspects: to limit the number of visitors, apply an entrance ticket, differentiate transportation tickets' costs⁷⁸, differentiate the offer adding some alternative appealing locations, to offer virtual visits or create clones to setup temporary exhibits travelling around the world.

The pandemic has gradually reduced and finally stopped the flow of tourists, diverting interests towards online content and services. The lockdowns acted as a compression on a spring that returns to its initial state as soon as it is released, tourists quickly resume planning visits and trips. A slow onset change is represented by the general aging of the population, mainly in Europe and in the United States, but not limited to, this will soon lead to the development of types of travel, such as cruises or cultural holidays, to the detriment of traditional holidays. We add to this that the development of e-Commerce offers consumers greater flexibility and allows them to organize their trips in their own way; holidays are "sewed" increasingly tailored. The "adventure" holidays will have to be more developed, as they are appreciated by both young consumers and the elderly. A certain part of the population increasingly avoids organized holidays, for these consumers the holidays represent the freedom, the lack of schedules, the absence of commitments and constraints, an "experience". It is foreseeable that short-term holiday offers will develop, stays will become shorter and more frequent.

6. Tourism and cultural heritage

As we introduced before, the evolution of tourism through the centuries met "Cultural tourism" as one of the trends, some years ago this approach was many times merged with the idea to spend vacations in historical towns, arts cities, enjoying monuments, museums, art galleries and sometimes adding operas, concerts and, why not, food and drinks if typical in that area. Of course, this option is still valid but, in the meantime, many relevant things happened and on one side the taste or, if preferred, the expectations of citizens changed, on the other side, due both to changes in socio-political conditions and the continuous need to invent new appealing offers.

The overall structure of the tourist sector has been revolutionised since the web technology become popular, some of the new trends were:

- Direct selling of travels and accommodations
- New mediators such as tourism internet portals
- Easy access to the distribution channels once utilised by tour operators
- Customers' expectations satisfaction thanks to constant interaction online
- Constant updating and customisation of the touristic services
- Improved transparency in costs and terms
- Introduction of added value services such as the opportunity to publish a feedback concerning any part of the experience.

⁷⁸ E.g. Venice – Canal Grande cruises are more expensive than the Giudecca's ones.

Tourists nowadays are constantly dealing with web sites and apps, platforms and navigation systems are stimulating them thanks to push messages promoting “nearby” points of interest so cultural institutions, hotels, restaurants, relevant sites must be included in the lists of navigation systems as a first approach to new tourists’ trend. Managers must create new “experiences” enriching the life of tourists.

Often the cultural heritage is perceived by most as something obsolete, cryptic, with no appeal to the audience, unable to provide real added value to citizens and ultimately a pure “cost” in terms of conservation, maintenance, custody, etc. On the contrary cultural heritage represents one of the key attractors for tourists, the promotion of heritage addresses two issues: cultural enrichment and economic sustainability of the sites. The exploitation of such values will not, necessarily, jeopardise our heritage; cultural assets are not rivalling, and a wise exploitation will not “consume” them. “Wise” means not damaging the artefacts or sites, as a consequence a limited number of visitors may be admitted at a specific time, online booking of visits managed by optimisation algorithms will harmonise the flow of visitors. The “standardisation” of visitors’ numbers and timing are often based on a briefing that introduces the cultural asset and outlines its most relevant features. Other approaches aiming to reduce the “pressure” of visitors are based on the promotion of alternative locations offering similar an appeal.

The upgrade of tourism consumption is the driving force behind the globalization of tourist towns. With the increase of economic income, the development of information exchange and the change and upgrade of national concepts, the personalized experience needs of tourists have been fully released. The in-depth experience of consumers from sightseeing to vacation and leisure, and the continuous improvement of consumption levels are conducive to optimizing the transformation and reform of the supply structure.

The consumer's travel concept is not limited to simple sightseeing tours. According to global tourism experience, characteristic towns and tourist towns are the targets of tourists' choice. The increase in tourism demand leads to an increase in the supply of tourism and related industries, which will change the production structure of tourist towns and promote the sustainable development of tourist towns. The boundaries of the tourism industry are gradually blurring and shrinking, and the tourism industry continues to merge. In tourist towns, the superposition of cultural experience, entertainment, service provision, holiday lifestyle and other tourist functions is a necessary supplement to traditional tourist products and has become the focus of market development through cultural transition. For towns with insufficient tourist resources, the tourist market is restricted; in such a case to expand the tourism resource market is a must, both from the perspective of leisure and vacation, this could be achieved through innovation and improvement of tourism product functions. Some middle-ages towns rediscover ancient tournament with horses and knights, other locations offer cultural festivals and happenings. We will come back on these aspects in the “under-tourism” paragraph.

From point to line - “point of interest”-based development hinders the development of tourism activities, management and industry. The income of simple tickets is no longer the core of the tourism economy, and the planning of exquisite tourism routes,

such as the hiking trails of the Cinque Terre, and the choice of different boat tour in Sankt Petersburg. It breaks the space restriction between the scenic spots and connects the dots into a line to give tourists the best experience. The development of tourism and the continuation of cultural heritage are closely related to two types of people (tourists and local residents). The first category is tourists. Whether it is their contribution to the local economy or exposure to cultural heritage, tourists play a vital role in the tourism industry. The economy of the town will eventually provide a better life for local residents, and the world heritage will be left to future generations. Cultural heritage is generated and evolved based on the architecture, living environment and production methods of local residents and their ancestors. Therefore, another important significance of developing tourism is to protect the interests of local residents, the second category, who are in fact part of the cultural heritage. Only by enabling local residents to live better on this land can they better protect and continue cultural heritage. This aspect will be explored in the following paragraph devoted to “overtourism” and its impact on citizens.

Tourism generally refers to industries that provide tourists with leisure facilities and services. It is a complex social phenomenon, involving politics, economy, culture, history, geography, law and other social fields. Tourism is also a kind of leisure and entertainment activity, which has the characteristics of remoteness and temporality. According to the latest annual research report of World Travel & Tourism Council⁷⁹, the travel and tourism industry grew by 3.5% in 2019, surpassing the global economic growth of 2.5% for nine consecutive years. In the past five years, the tourism industry has created a quarter of new jobs, making tourism the government's best partner for job creation, these are good news considering the usual cultural heritage performance in job creation rate.

With the further democratization of travel, this brings great potential to the sector and the global economy. Emerging economies contribute a greater proportion of travellers to this global trend and are increasingly becoming ideal destinations because they show greater competitiveness in travel and tourist.

According to statistics from the World Bank⁸⁰, the number of international tourist arrivals increased from less than 500 million in 1996 to 1.44 billion in 2018. In the past two decades, Europe and North America have continued their reputation as popular tourist destinations. The emerging international tourism market represented by the Middle East and East Asia is developing rapidly.

7. International Tourism Flows

In order to have a clearer idea of the importance of valorisation of cultural heritage to enhance tourism and other cultural and economic activities, we will analyse briefly the tourism flows in the last few years taking data mainly from UNWTO⁸¹ (United

⁷⁹ [WTTTC 2020] Economic Impact Reports . <https://wttc.org/Research/Economic-Impact>

⁸⁰ [World Bank 2019] International tourism, number of arrivals.
<https://data.worldbank.org/indicator/ST.INT.ARVL>

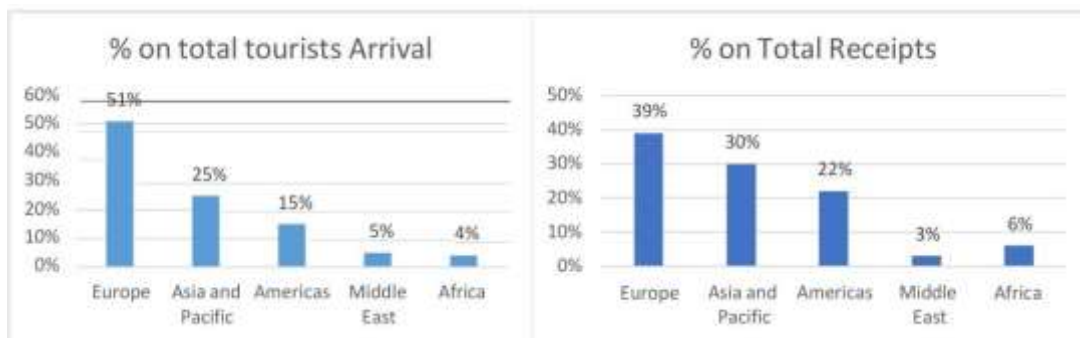
⁸¹ <https://www.unwto.org>

Nations World Tourism Organisation) research-inbound tourism dashboard. Due to evident reasons, we will not include 2020 and 2021 as significant data, they will be considered while evaluating the impacts created by the pandemic, relevant to plan a mitigation strategy in case of further similar events both due to natural and human disasters.

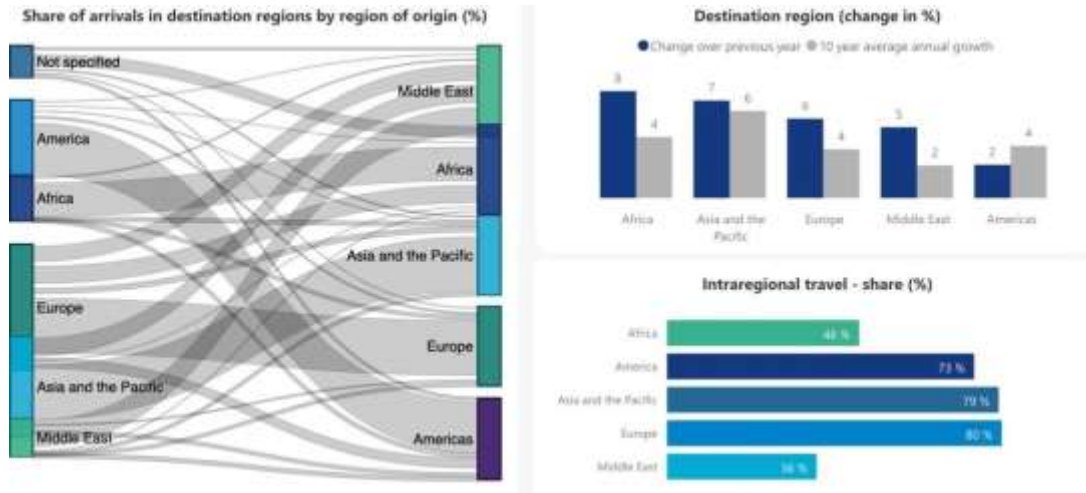
The tourism industry is a fast-growing sector across many parts of the globe. Today, this industry needs to be reconciled with new challenges such as the increased customer expectations, intensified global competition, and tourism demand fluctuations [Bulencea & Egger (2015)]. In this sense, having competitive advantages such as the provision of memorable experiences for tourists is considered an essential key by academics and practitioners alike [Bulencea & Egger (2015)]. Each and every year, thanks to the emergence of new facilities ranging from accommodation and transportation to new means of entertainment and attraction in destinations, many visitors tend to embark on new touristic experiences. This flow of tourism can bring about positive and negative consequences, which opens a whole new world for research. In order to delve into these consequences, it seems necessary to go through the concept of sustainability as we will see later.

Considering for a while the larger picture and having a look on touristic flow all over the world, we can note that, considering the last year for which “normal”-reliable data are available, Europe accounted for more than 50% of the total flow of Tourism at global level, Asia and Pacific for 25%, Americas for 15%, Middle East for 5% and Africa for 4%. The distribution of receipts divided by country has a similar share, but it is interesting to note that, generally, travelling into Asia and Pacific and in Americas result to be more costly than in Europe, also due to costs of means of transport.

Europe indeed results to be the most desired country to be visited but also the continent which contributes the most to touristic international flows all over the world as shown in the charts below [source UNWTO research-inbound tourism dashboard].



In the following charts instead is reported a snapshot of the international tourism trend:



In particular, it can be interesting to highlight that in Americas, Asia & Pacific and Europe the major tourism flows are Intraregional travels, accounting for 80% in Europe and the remaining 20% is split in:

7% from Americas

7% from Asia and Pacific

4% from not specified countries 1% from Africa

1% from Middle East.

This element can be explained by several factors as, for example:

- duration of the travel and the availability of times to be spent for vacation since going in a country in the other part of the world requires much more time also due to jet lag disorders
- budget available as for making a trip in a country near the one of origin requires a lower expenditure compared to very far locations
- cultural proximity
- better knowledge of places closer to the region of origin
- higher frequency of intraregional exchanges due to working experiences and business travels
- other reasons.

If we refer to the period of the pandemic, we can observe that immediately before the early lockdown as well as after, citizens were looking for short distance accommodations with the option to stay there longer in case of lockdowns, during the “opening” periods, vacations were planned, in general, inside the country and many times within the same region, this to minimize both risks and bureaucratic procedures.

8. Reasons of Travels



Looking to the reason of travels, according to UNWTO, for travellers coming in Europe, the most relevant reasons is leisure, recreation and holidays, follows personal reasons (as health or religion) and finally business and professional purposes. Among these different reasons, the one that is showing the higher growing trend is the one related to leisure and recreational purpose which currently accounts for 59% of the total travels organized in Europe. Follows personal reasons as health, religion and other for which it has been registers an annual average growth rate of 4% from 2008 but which still cannot be compared with the predominance of leisure trips. Finally, Europe confirms to be an important destination also for business reasons (especially for intraregional exchanges) since this aspect covers about the 15% of the tourism industry in the region.

To briefly comment also other countries situation, it can be noted that the general distribution is quite uniform since the predominant purpose of travel remain, in any case, leisure, recreation and holidays. A quite peculiar situation can be registered in Middle East where, thanks to the concentration of religious places of particular relevance for religions spread all over the world, travels for personal causes equal in dimension the one for recreation.

Other two small misalignments can be noted in Africa and Americas: in the first indeed the % of travels for business purposes results to be much higher than in any other country and then the worldwide average, while, for the latter, it is difficult to add further comment since a high portion of trips (18% vs 5% on average) are registered without specified motivations.

9. “Overtourism”. Loving places to death

Although tourism and tourists have been the subject of complaints for decades, if not centuries, specific term “overtourism” is relatively recent [Ronchi A. M., (2020 H)]. According to Google, the word “overtourism” was first used as a search term in 2006. This relatively new term, also sometimes called “loving places to death”, “dealing with success” and “tourismphobia”⁸², has been defined as “the excessive growth of visitors leading to overcrowding in areas where residents suffer the consequences of temporary and seasonal tourism peaks, which have enforced permanent changes in their lifestyles, access to amenities and general well-being”⁸³. Overtourism as a term has proven very marketable and was trademarked by online travel magazine *Skift*⁸⁴ in 2018 “Overtourism: Will the World be able to Handle Two Billion Tourists?”. This phenomenon is usually strictly connected with the terms “mass tourism” and “globalisation”. More recently even the term “resilience” has been associated with this phenomenon. The concept of resilience, in this domain, outlines the ability of locations to absorb shocks and troubles and recover autonomously as well as the ability to adapt to changing circumstances⁸⁵. According to Goodwin⁸⁶, destinations experience overtourism when “hosts or guests, local or visitors, feel that there are too many visitors and that the quality of life in the area, or the quality of the experience has deteriorated unacceptably”. Researchers created additional terms to identify this phenomenon, namely “carrying capacity”, “resilience in environmental, economic and socio-cultural terms”, as well as health and safety issues. Anyway, the preferred term among tourism scholarship is “overtourism”, due to the relevance of the prefix “over” that directly recalls that there is too much tourism; tourism exceeds the ability, limits or capacity of the specific destination. The effects of “overtourism” are overuse of local resources such as shops, mobility, local goods, like for instance bakeries, restaurants, roads, parking and trams or beaches, environmental oasis, mushroom picking

⁸² Dianne Dredge (2017), “Overtourism”. Old wine in new bottles?, URL: <https://www.linkedin.com/pulse/overtourism-old-wine-new-bottles-dianne-dredge/> (accessed: 20.12.2019); Harold Goodwin (2017), “The Challenge of Overtourism”, Responsible Tourism Partnership Working Paper 4, October 2017; Majorca Daily Bulletin reporter, Tourism minister plays down “tourismphobia” anxieties, URL: <https://www.majorcadailybulletin.com/news/local/2017/03/09/47196/tourism-minister-plays-down-%20tourismphobia-anxieties.html> (accessed: 05.07.2021).

⁸³ URL: <https://www.majorcadailybulletin.com/news/local/2017/03/09/47196/tourism-minister-plays-down-tourismphobia-anxieties.html> (accessed: 05.07.2021).

⁸⁴ The document created by Rafat and colleagues is entitled Overtourism: Will The World Be Able to Handle Two Billion Tourists? <https://docs.google.com/document/d/1OMyiOzBMxZjuSHNzfnBW8crPPIhAUkzITkRr13bwGI/edit?ts=57620cb9>

⁸⁵ Richard Butler (2018), “Sustainable Tourism in Sensitive Environments: A Wolf in Sheep’s Clothing?”, *Sustainability* 2018, 10, 1789; doi:10.3390/su10061789, www.mdpi.com/journal/sustainability (accessed: 05.07.2021); Josef Cheer and Alan A. Lew (2017), *Understanding tourismresilience: Adapting to social, political, and economic change*, ISBN: 9781138206786, Routledge, London.

⁸⁶ Harold Goodwin (2017), “The Challenge of Overtourism”, Responsible Tourism Partnership Working Paper 4, October 2017.

and any other local resource subject to competition between locals and visitors. This means that different touristic locations – cities, natural parks, mountains, lakes and seaside, deserts – feel the impact of tourists.

The diffusion of the Internet boosted the DIY (do it yourself) tourism once limited to the “Lonely planet” addicted travellers. In addition, sea and river cruise tourism is seen as a potential problem in cities like Venice, Barcelona, Cannes, Genova, Amsterdam, Copenhagen, Lisbon, Salzburg and Tallinn. Ships are becoming bigger and bigger, MSC and Royal Caribbean cruise line ships have a typical capacity of nearly 5,000 passengers. This increase in size of cruise ships caused negative side effects on harbours and maritime infrastructures and, last but not least, accidents. As cruise ships get larger, more people can flow into a destination at one time causing negative effects on local population. In this specific case there are not so many economic benefits for locals due to the fact that passengers are accommodated and have meals on the ship. The extremization of such an effect is usually termed bio-piracy when tourists use and consume local resources without compensation. Findings like this confirm criticism on using carrying capacity as an “objective” means for measuring tourism impacts. The same happens in case of travel agencies, navigation companies and airlines; as other stakeholders they do not care too much about the carrying capacity and impact on the environment and local community, the focus is on yield.

Tourism is considered by many stakeholders, including governments, a relevant source of incomes; countries having reduced opportunities to rely on industrial production or trade, if possible, they focus on tourism as one of or the key income generator. When tourism is the main source of incomes natural or human disasters can represent a real nightmare, simply consider the recent case of Sri Lanka⁸⁷. When profit is the key objective of the strategic agenda very often there are no specific plans concerning job creation, increasing quality of life, poverty alleviation and community well-being. As a consequence of profit-oriented tourism plans the objective is almost always focused on increasing, as much as possible, the number of tourists instead to further develop third parts related business. Considering the growth of tourists in the recent period, in 2018⁸⁸, last figures provided by WTO the international tourists arrivals were 1,407,1 million and the corresponding tourist revenues of 1,458,4 billion USD. The UNWTO forecast for 2020 and 2030 is globally up to 1,40 billion in 2020 and 1,80 billion in 2030⁸⁹.

Another relevant aspect concerning the increasing number of tourists⁹⁰ is due to the easing of visa restrictions for many travellers and the better economic situation of some countries. As a consequence, new tourists’ segments are emerging. For instance, before the Olympics Chinese airports were populated mainly by foreigners and few

⁸⁷ June 2021 - The Singapore-registered X-Press Pearl had been on fire for almost two weeks before the blaze was put out, hundreds of tonnes of oil from fuel tanks could leak into the sea, devastating nearby marine life.

⁸⁸ Source UNWTO 2017.

⁸⁹ Overtourism? Understanding and Managing Urban Tourism Growth beyond Perceptions, UNWTO: Madrid, Spain, 2018.

⁹⁰ As already stated we do not consider the 2020 -2021 years, they effects of the pandemic are considered separately.

locals, after this event the situation is reversed: airports are crowded by Chinese travellers and to a lesser extent, Indians. Dealing both with China and India the key aspect is related to numbers and percentages, in 2018 only 4% of the Chinese population had passports, the 2025 forecast considers a growth up to 12% that means 220 million potential Chinese travellers and according to the China Outbound Tourism Research Institute (COTRI⁹¹) the number of Chinese travellers in 2030 will reach 400 million people.

10. Is overtourism due to tourism?

Referring to the typical effects of overtourism [Ronchi A. M., (2020 H)] is it correct considering overtourism only as a tourist problem, rather than a social and urban one⁹²? Numbers without the contexts and effects are meaningless, the focus must be shifted from numbers to the perception of benefits and drawbacks. Both benefits and drawbacks are tightly connected with the responsibilities of political managers, stakeholders and tourists themselves. So, we prefer to speak of visitor pressure or overcrowding typical of the spring months, while in the summer peak the cities empty themselves of the residents. Getting more in detail, looking at stats and data collected by local authorities we discover that “visitor pressure” or overcrowding is not only due to foreign tourists but even to locals and neighbours exceeding the resilience of the location. This phenomenon is favoured by the extension of the tourist season, more flexible work arrangements, the dilution of holidays in shorter and more repeated periods during the whole year, so it makes the inhabitants of some cities perceive the phenomenon throughout the year. Key aspects characterising “pressure” are concentration, timing, visitor behaviour, location, experience with tourism, local etiquette and more. These aspects are indeed as important as tourist numbers. Analysing the “pressure” in detail, on the one side, it is relatively easy and reliable to foresee the impact of tourists on the physical environment, while it is much more difficult and less reliable to estimate the impact on the social side, due to different perception of disturbance in different areas and different level of tolerance of the host community. Some case study outlines that the top-down promotion of a touristic point of interest may impact the level of tolerance of the local population, they may suffer because of the “invasion” of their territories and impact on their lifestyle due to others will. To ensure success it is paramount to reach the local community consensus. This discourse overlaps with overtourism in that it both describes an exclusion of residents and other local stakeholders and the “touristification” and “museumfication” of popu-

⁹¹ China Outbound Tourism Research Institute/ URL: <https://china-outbound.com> (accessed:17.12.2019).

⁹² Ko Koens, Albert Postma, Bernadett Papp, “Is Overtourism Overused? Understanding the Impact of Tourism in a City Context”, *Sustainability* 2018, 10, 4384; doi:10.3390/su10124384 www.mdpi.com/journal/sustainability

lar tourist areas⁹³; this phenomenon is particularly evident in Malastrana (Prague) and Venice. Online platforms such as Airbnb, Amazon or Uber, low-cost carriers or cruises, Instagram and other social media complete the accused bench, but how guilty are they really? Factors that cannot be considered at the same time as something to be hindered in the name of corporate interests or anachronistic ideological battles. Displacement due to Airbnb and similar platforms and excessive pressure on the local environment are separate causes of concern. Airbnb looks like an appealing source of revenues; real estate owners increasingly prefer to rent their properties for a short period of time through Airbnb than to rent it to locals. This trend induced two main effects: a quick increase of real estate value and displacement of locals outside the “hot” areas. If residents are forced to move out of the city due to tourism improvement, this puts further pressure on the city infrastructure: “People are leaving the city [because] rental prices are way too high. There are many people moving to the surroundings and then commute by car every day. It is a circle that never ends”⁹⁴. Actually, some local administrations are working on new regulations to manage this problem (e.g., Berlin, Paris) setting limitation on the number of days a property can be rented out, the fact that a house- owner needs to live in the rented place, taxation, registration systems, etc. If we focus on the “pressure” or overcrowding looking at the stats it appears that day visitors, coming both from neighbouring cities and from abroad, constitute up to 50% of the people that visit the city for leisure purposes, they blend in relatively well and are often not viewed as tourists by residents, they also cause overcrowding and bothers. Drawbacks on local societies are often associated with global platforms as it happens with Uber, Amazon, Expedia, etc. The relevant increase of online shopping further impacts the perceived crowdedness, as an increasing number of different delivery vehicles blocks roads and causes congestion and pollution. Time ago, governments and key stakeholders preferred not to regulate tourism opting to open market a kind of self-regulation. This choice powered a rush to big numbers. In dealing with overtourism issues, recent research emphasises the need for regulation and government leadership. Before pointing a finger at certain alleged culprits, administrators of cities should think about toilets, waste disposal, electric vehicles, parking lots and green areas, as well as optimise control and surveillance activities.

11. “Touristification” and carrying capacity

The complexity of overtourism reveals itself again when looking at the effects of policy measures. It is revealed that these have been, at times, different from what was expected. Thus, to plan for sustainability in a tourism context is to plan to operate within the carrying capacity limits of the destination and its resilience capabilities and avoid a state of overtourism. Posing the focus on the concept of sustainability, the links between the level of tourism and the quality of social and environmental factors

⁹³ Maria Gravari-Barbas and Sandra Guinand (2017), *Tourism and Gentrification in Contemporary Metropolises: International Perspectives*, ISBN: 9781138642782, Routledge London,

⁹⁴ Ibid.

in a destination are evident with the logical conclusion that tourism levels should not exceed a point at which immitigable impacts occur and where tourism becomes “unsustainable”. The “touristification” of city centres and online accommodation platforms also needs further clarification, tourism has strongly impacted city centres and suburban neighbourhoods, but this impact can at least partially be attributed to real-estate developments. This implies the responsibility of “managers” because of the direct impact on the carrying capacity and the resilience to overtourism due to tourism management. It is evident that there are different causes that merged together to create the “overtourism” effect so the solution could not be based on tourism alone. There is a need for a global approach to the problem putting around the table all the stakeholders and authorities involved in the process; single initiatives, such as admission fees, expensive tickets for parking and local transportation, do not solve the problem. In recent times there is an increasing number of decision makers and stakeholders that, driven by the anti-tourism sentiment, curbs the growth of measures to regulate traffic, creating coach free zones, or to regulate tourist behaviour, for instance, in tourism hotspots at night, taxes for daily visitors, cruise ships restrictions and more. Nevertheless, as it usually happens, policy measures and regulations play often the role of followers and have up to now had difficulty keeping pace with the rapid development seen within this sector.

12. The opposite side of the coin

While there is still a lot of confusion about overtourism, a new keyword is on stage: undertourism. This is on the other extreme side of the tourism sustainability spectrum, which is yet to be thoroughly studied, and there is a lack of references among the literature to this concept. This term is used in English but has not yet been verified by any dictionary [Mihali T. (2019)].

This term represents the places still little visited or not performing enough in relation with their beauties. Many times, this is due to the lack of a proper “value analysis”⁹⁵ [Ronchi A. (2014)] outlining all the potential “values” associated to the asset and the existent gap between each value and actual situation [Montella M. (2015)]. One of the typical aspects concurring in generating undertourism is lack of infrastructures: hospitality, transportation, entertainment, and more. The risk is that the less visited destinations face too many illusions about being able to overturn their tourist fortunes with marketing campaigns and messages such as “come to us, there are fewer people, but the experience is more authentic, etc”. The already famous ones boast about the fact that without promotion flows can calm down. Fertile ground and excellent starting points for conferences and academic articles, they are always happy to insist on concepts such as relocation and experiential tourism, but risk diverting attention once again from the real problems of hospitality and tourism. The problems that actually limit the growth of the less visited places are the infrastructural ones, which, together with an often ineffective, if not non-existent, marketing, are the main factors

⁹⁵ This methodology analyzes the different families of values: cultural, social, economic, communication, etc.

of what we can define as the structural and ancestral sub-tourism.

The World Economic Forum WEF⁹⁶ based on an analysis of 136 countries draws up a ranking of the results achieved by the various countries analysed. In detail, human capital appears to be one of the most deficient aspects in addition to the supply-demand conditions for assignments in the tourism sector. This variable is particularly strategic and probably one of the most alarming data in this field is the one that reveals the lower percentage of qualified personnel employed in the tourism sector compared to the other main European attractions: the share of graduating workers operating is, in fact, among the lowest in Europe.

Furthermore, as partially anticipated, the WEF survey highlights a serious and persistent lack for some countries in the effectiveness and ability of marketing policies to affect the country's attractiveness for foreign tourists. This aspect, which continues to worsen, represents one of the weakest aspects of some national tourism system which, once again, weighs upon problems such as the coexistence of various competences of different levels of government and the limited long-term strategic vision that have characterized the policies in some countries in the last two decades.

A final element that contributes to the mismanagement of a huge wealth owned by some countries is the inability to collect a sufficient number of data, the timeliness in carrying out this activity and the ability to extract strategies from them.

Probably the most important aspect highlighted by the institution is the need to adopt an integrated approach to tourism policy management which is expressed in the importance of a "whole of government approach" [Ronchi A.M. (2019 D)] characterized by:

- Vertical integration between the different levels of central and local government,
- Horizontal integration between the different levels of government e.g., between ministries of tourism, transport, economy, etc. ...

The OECD⁹⁷ [OECD (2020)] also recommends effective and continuous involvement of all stakeholders potentially included in the tourism industry processes such as involved economic operators, residents in the areas visited and tourists. OECD affirms that tourism is an economically important sector, globally and locally it represents the 4.4% of the GDP, the 6.9% of employment and 21,5% of service exports. Domestic tourism is the backbone of the sector in the majority of OECD countries, 75% internal tourism and 25% international tourism. If we consider the global arrivals and travel spending OECD countries receive more than 50%: 56,9% of global arrivals and 61,1% of the global travel spending. Each single dollar spent by international tourists generates 89 cents of value added in the domestic economy⁹⁸.

One element on which OECD and UNWTO are completely in agreement is the de-

⁹⁶ "World Economic Forum": an independent international organization "committed to improving the state of the world by engaging business, political, academic, and other leaders of society to shape global, regional, and industry agendas".

⁹⁷ <https://www.oecd.org/cfe/tourism/oecd-tourism-trends-and-policies-20767773.htm>

⁹⁸ Source OECD Tourism Trends and Policies 2020

velopment of a “sustainable tourism” which is a tourism system that reconciles the demands of economic agents, residents and tourists, taking into account present and future economic, social and environmental impacts. All this is possible, according to the aforementioned entities, through the identification of financial instruments (public, private or "mixed") for the realization of "green investments" aimed at improving the management of resources, promoting the care of the territory, biodiversity and the cultural heritage of each country.

Another strategic priority identified by the OECD is the promotion of an integrated and intermodal transport system: "seamless transport system" that allows travellers - especially international ones - to reach the desired destinations and to easily reach the destination country by reducing the time and costs of displacements. Furthermore, an integrated and widespread transport system capable of ensuring full accessibility even to lesser-known places, would allow to limit the negative externalities generated by over-tourism and would limit the environmental impact generated by poorly coordinated systems.

All this would guarantee greater sustainability of tourist activities as well as better management and distribution of flows.

The last element of attention of the OECD on which we intend to finally focus, is the need to promote heritage and territories less known to the general public and to fully exploit their natural, cultural and human resources, so reducing undertourism problems. In this perspective, in fact, the OECD considers the care as well as the promotion of the whole national territory and of all the goods - of any kind - that a country is able to offer to tourists and residents to be of fundamental importance. It would be utopistic to think of being able to completely redistribute the tourist flows by making known territories less infrastructurally connected but still rich in places of interest at the expense of well-known locations or large cities of art, but the objective it is not exactly this as we will see later in this paragraph.

When talking about undertourism, we are coping with the generation of income and economic viability. Nevertheless, it is worth mentioning that income generation cannot directly improve sustainability, but higher income can provide the destinations with more resources to invest in sustainability (McKercher and Ho, 2006). Having fewer visitors in a given destination, taking unchanged other conditions, brings fewer negative impacts on the natural, cultural, and social environment. By the same token, too small a volume may not allow for full economic sustainability activation. This trend might lead to the destination's failure to cover the operation costs and force them to compensate the situation through inappropriately increased prices unit cost of the product [Mihali T. (2019)]. Thus, failing to reach a critical mass of positive impacts stemming from tourism possibly undermines tourism profitability and drives potential visitors back for the overall experience.

As some authors believe, addressing undertourism phenomenon not only does it alleviate the problem of overtourism and strike a balance to better reach sustainable tourism, but it also opens up to discovering new hidden destination [Mihali T. (2019)] in her paper about economic sustainability, explains in this respect a roughly vicious cycle. She claims that too low volume of visitors causes the destinations not to achieve the advantage of economies of scale and does not make sufficient use of the

economic capacity of tourism development, therefore on the demand side the purchasing power of visitors and their willingness to pay for tourist products is not in line with the offered touristic facility and consequently a smaller number of visitors would be willing to diminish, which per se add fuels to the undertourism phenomenon.

Some of the approaches to reduce undertourism have been already mentioned in the previous paragraphs: low-cost flights, take advantage from the long transfers by bus from minor airports to capitols stopping on the way in heritage locations, reroute visitors to similar locations (e.g., Terracotta army), and more. One of the strategies to overcome undertourism activated time ago in China is to organise international events in locations usually not included in touristic tours, such international events, conferences, fairs, sport competition, shows, attract a relevant number of visitors that activate thanks to word of mouth the promotion of the location.

Time ago some software applications were designed to integrate different already existing services and, accordingly with the specific tourist profile, create on the fly a tour taking into account user interests, extracting information from the tourist's previous tours, tourists' remarks (e.g., TripAdvisor), dates, season, weather, transportation, meals and pit stops. This integrated solution use to include/discover fewer known locations to enrich the experience. The basic outcomes of the application were:

- For the realities already known to the large national and international tourist flows (large metropolises and cities of art or the most well-known naturalistic locations) a well-structured application would allow to limit the time needed for travel, the "dead times" for waiting in places of interest or for the purchase of entrance tickets as well as a better distribution of the flows of people within the cities and a better organization of the time available for visits a greater knowledge of places of potential interest;
- For the more unknown realities, on the other hand, this tool would be extremely useful in the field of promotion and enhancement of the territory since, through the "power of sharing" and the possibility of uploading content by other users or local inhabitants, the database available results to be continuously updated. In this way, any user, at any time, could be struck by an image of "new" places, activities and cultures that are not known but absolutely of interest. The project also aims to integrate and implement a series of already existing but not completely proper services such as the suggestion of the most suitable and convenient means of transport to reach even remote areas of the country.

Other options are based on typical marketing tools like the creation of "bundle" offers including in the subscription a selection of point of interest mixing the key ones with less known ones. Once more marketing tools suggest creating "customers" profiles and subdivide the offer by profile. Such offers are usually packaged at different levels of geographic scale: city, province, region usually including public transportation fares.

To conclude let's add some remarks on the impact of COVID 19 on tourism this year and in near future. Tourism continues to be one of the sectors hardest hit by the coronavirus pandemic. The outlook for the tourism sector in the near future remains

highly uncertain due to the different policies applied in the different EU countries ranging between full openings, COVID 19 as a normal flue and partial or full locks imposing the green pass for restaurants and bars. The coronavirus (COVID-19) pandemic continues to hit hard in 2020, with international tourism expected to decrease by around 80%. Domestic tourism is helping to soften the blow, at least partially even if a number of potential tourists doesn't want to use airplanes and other public transportation means. Governments have taken impressive immediate action to restore and re-activate the sector, while trying to protect jobs and businesses. Many countries are also now developing measures to build a more resilient tourism economy post COVID-19 taking advantage from the experience acquired in more than 18 months emergency. These include preparing plans to support the sustainable recovery of tourism, promoting the digital transition and move to a greener tourism system, and re-thinking tourism for the future. To achieve such goals key policy priorities include:

- Restoring traveller confidence
- Supporting tourism businesses to adapt and survive (digital transition, better infrastructures, ...)
- Promoting domestic tourism and supporting safe return of international tourism (clear homogeneous regulations,...)
- Providing clear information to travellers and businesses, and limiting uncertainty (to the extent possible)
- Evolving response measures to maintain capacity in the sector and address gaps in supports
- Strengthening co-operation within and between countries
- Building more resilient, sustainable tourism as in many other sectors this is the key challenge.

13. Sustainable tourism

Sustainability is considered one of the most relevant issues facing the tourism sector in recent decades. Usually scholars consider "sustainable tourism" a subcategory of sustainable development⁹⁹ and is defined as all forms of activities, management and development of tourism that preserve natural, economic and social integrity and guarantee the maintenance of natural and cultural resources.

The definition of sustainability is a unitedly accepted territory, while the scope and nature of this term are confused areas [Ren & Han (2018)]. One of the most significant definitions of sustainability focuses on three factors, namely economic, environmental, and social factors in decision-making [Ren & Han (2018)]. Speaking of sustainable development in economic terms, this concept is most often described as the need to sustain a constant amount of income generated from non-declining assets so that overall return remains positive [Spangenberg J. (2005)].

⁹⁹ Sustainable development is a development that "meets the needs of the present without compromising the ability of future generations to meet their own needs" (World Commission on Environment and Development (WCED), 1987)

In addition to these factors, UNESCO's Universal Declaration on Cultural Diversity in 2001, added a fourth dimension to the sustainable development definition which is the cultural factor¹⁰⁰.

These pillars¹⁰¹, although each of them has a separate definition, are interconnected, and the synergy among them demands challenging considerations. In fact, unless having interaction and integration among these dimensions, achieving sustainability and its appraisal seem undoable [Ren & Han (2018)]. For a system to be sustainable, each of the abovementioned four aspects has to maintain its capability to survive and evolve, while the connection between them must enable a permanent assessment [Spangenberg J. (2005)].

Since the early 1990s this term has become commonly used encompassing an approach to the tourism community, the way the staff are treated and the desire to maximize the economic benefits of tourism for the host community. Businesses, governments, non-government organizations, destinations and, increasingly, tourists are looking for ways to reduce their environmental impacts and negative social impacts while simultaneously continuing to enhance the economic and experiential benefits that tourism can bring [Gross et al. (2015)]. For a long time, the European Commission is engaged in the promotion of sustainable development concerning tourism in Europe [European Commission (2016)]. A number of initiatives, including:

1. the EU eco-management and audit scheme (EMAS), and the EU Ecolabel,
2. the Tourism and Environment Reporting Mechanism (TOUERM),
3. the Corporate Social Responsibility initiatives (CSR),

are applied to facilitate sound environmental, social, cultural and economic management for businesses and destinations [European Commission (2016)]. Moreover, several private organizations representing the tourism industry or destinations have established monitoring tools and certification schemes regarding sustainable tourism. Being the leading paradigm in planning, monitoring, and managing tourism, sustainable tourism growth and development is the prevailing matter of interest in tourism destination development [Kuščer & Mihalič (2019)].

The principles of sustainable tourism stem from the four pillars of sustainable development. The implementation of sustainable tourism principles is followed by three implications:

- The environmental aspect which contains optimized use of natural resources. What this factor deals with is mainly related to the preservation of the cultural heritage, primary ecological processes, and biodiversity.
- Regarding the social and cultural aspects, the authenticity of host communities should be preserved. The traditional values and intercultural perception of the built and living cultural heritage is another factor in the need for conserva-

¹⁰⁰ Noting that culture is at the heart of contemporary debates about identity, social cohesion, and the development of a knowledge-based economy (UNESCO Universal Declaration on Cultural Diversity - 2001) http://portal.unesco.org/en/ev.php-URL_ID=13179&URL_DO=DO_TOPIC&URL_SECTION=201.html

¹⁰¹ Economic, environmental, social, and cultural factors in decision-making

tion.

- The third aspect deals with the economic operations and provision of economic advantages to all the stakeholders. This aspect possibly involves the introduction of job opportunities and increased income for the host community, and in the end, it contributes to poverty eradication.

It is inferred that besides the optimal use of resources and the environment as mentioned above, sustainable tourism requires the sustainable growth of tourism's contribution to the economy and society, which will be gained by a deep perception and proper management of tourism demand [Liu S. (2013)].

While the concept of sustainable tourism has been strongly promoted, many if not most tourism destinations and attractions have failed to meet the requirements of sustainable development, partly as a result of vested economic interests [Ren & Han (2018)]. Therefore, economically speaking, societies not only are deprived of a significant income source, but they face a loss. In order to overcome the adversity of this trend, it is necessary to delve into the administrative aspects of sustainable tourism regarding both macro and micro territorial scales of policymaking. It is helpful to mention that achieving sustainable tourism is a continuous process, and it requires constant monitoring of impacts, introducing the necessary preventive and/or corrective measures whenever necessary. Moreover, sustainable tourism should also maintain a high level of tourist satisfaction and ensure a meaningful experience to the tourists, raising their awareness about sustainability issues and promoting sustainable tourism practices.

14. Conclusions

In recent times cultural and memory institutions faced a new challenge, the combined impact of two relevant factors: digital transformation and the pandemic. Extended lockdowns interrupted touristic flows and stopped citizens' fruitions of almost any form of cultural enjoyment. This situation forced them to find solutions mainly taking advantage from digital technology. Almost all the sectors from education to memory institutions reacted positively inventing new opportunities to meet the expectations of citizens ensuring as much as possible cultural enjoyment continuity. Cultural tourism, based on onsite visits to heritage in all its forms suffered a relevant crisis far bigger if we consider, as necessary, the indirect key beneficiaries of cultural tourism, the galaxy of travel agencies, hospitality infrastructures, restaurants, shops and more.

The great number of discussions and papers surrounding cultural tourism, overtourism and its impact on heritage has helped to draw attention to the negative consequences of unconstrained tourism growth. It has pointed out the limitations of market-oriented voluntary approaches to effectively deal with this issue. Instead, possibilities for more regulatory, government-led approaches to manage tourism that seemed to have gone out of fashion since the start of the century are up for discussion again as key partners in ensuring tourism resilience. However, overtourism issues can also be rooted in wider societal developments, like changing lifestyles and seemingly unrelat-

ed things, like the increase of internet shopping and social media. This suggests that overtourism should no longer be perceived as a tourism problem or as an urban problem, but rather as a social problem within a city context.

On the opposite side, we find undertourism, this is, many times, caused by the lack of appropriate infrastructures, transportation, hospitality, and more plus the lack or inappropriate marketing strategy.

Bibliography

1. Bulencea, P., Egger, R (2015), "Gamification in tourism", Books On Demand
2. Deterding Sebastian, et al. (2011) - From Game Design Elements to Gamefulness: Defining "Gamification", Conference: Proceedings of the 15th International Academic Mind-Trek Conference: Envisioning Future Media Environments - DOI: 10.1145/2181037.2181040
3. Döpker Andreas (2013), Use Cases for Gamification in Virtual Museums, Conference: Jahrestagung der Gesellschaft für Informatik, https://www.researchgate.net/publication/259703868_Use_Cases_for_Gamification_in_Virtual_Museums
4. European Commission. (2016). "The European Tourism Indicator System", pp. 1- 27, <https://doi.org/10.2873/982144>
5. Gross, S., Klemmer, L., Weber, F., Stettler, J., Priskin, J., Rosenberg-tauffer, B., Barth, M. (2017). "Tourism destinations under pressure - Challenges and innovative solutions", Available at <https://doi.org/10.13140/RG.2.2.31472.66566>
6. Koutoura, A., X (2014). "Edutainment in museums: a tool for disseminating knowledge". *Museum Management and Curatorship*, 29(1), pp. 66-82, Available at: 10.1080/09647775.2013.869855
7. Kuščer, K., & Mihalič, T. (2019). "Residents' Attitudes towards Overtourism from the Perspective of Tourism Impacts and Cooperation—The Case of Ljubljana". *Sustainability*, 11(6), pp. 1-16. <https://doi.org/10.3390/su11061823>
8. Liu, S., & Idris, M. Z. (2018). "Constructing a framework of user experience for museum based on gamification and service design". Available at: 10.1051/mateconf/201817604007
9. Mencarelli, R., & Pulh, M. (2015). "Museoparks and re-enchantment of the museum visits: an approach centred on visual ethnology". *Qualitative Market Research: An International Journal, Emerald*. 15(2), pp.148- 164 Available at: <https://doi.org/10.1108/13522751211215877>
10. Mihali, T. (2019). "Over- or under-tourism: comparative analyse of economic sustainability of slovene tourism", *Economic and Business Review*, Vol. 21, Special issue, pp. 333-342.
11. Montella, M. M., & Cerquetti, M. (2015). Museum networks and sustainable tourism management . the case study of marche region's museums (italy). *Enlightening Tourism: A Pathmaking Journal*, 5, pp. 100-125
12. OECD Tourism trends and policies 2020 (2020), ISBN ISBN 978-92-64-70314-8, OECD Publishing, Paris
13. Ren, W., & Han, F. (2018). "Indicators for Assessing the Sustainability of Built Heritage Attractions : An Anglo- Chinese Study". *Sustainability*, 10(7), 2504, Available at: <https://doi.org/10.3390/su10072504>

14. Ronchi Alfredo M. (2014). Axiology in the domain of heritage: The concept of „Values” and its potential impact, 978-5-88812-572-5 , Boundaries of memory: Museum and Heritage of modern culture, State Hermitage.
15. Ronchi A.M. (2017 UG). National Languages and "Minoritized" Languages in a Long-Term Perspective. pp.269-274. In Multilingualism in Cyberspace. Proceedings of the Ugra Global Expert Meeting (Khanty-Mansiysk, Russian Federation, 4–9 July, 2015) - ISBN:978-5-91515-068-2, Interregional Library Cooperation Centre, Moscow, Russian Federation
16. Ronchi Alfredo M. (2017 RF). Museums Exhibitions in the Age of Digital Communication, Muzej, pamâtnik, nasledie 1/2017, pagg. 146,154, Russian Federation
17. Ronchi Alfredo M. (2019). e-Services: Toward a New Model of (Inter)active Community, ISBN 978-3-030-01842-9, Springer (D)
18. Ronchi Alfredo M. (2019 D) e-Democracy: Toward a New Model of (Inter)active Society, ISBN 978-3-030-01595-4, Springer (D)
19. Ronchi Alfredo M., (2019 H). Once upon a time there was the age of "cultural tourism", Museums and Problems of Cultural Tourism, ISBN 006-91-0063-47704, State Hermitage Sankt Petersburg
20. Ronchi Alfredo M., (2020). Digital transformation, proceedings ICCA New Delhi, CyberLaw
21. Ronchi Alfredo M., (2020 H). Understanding Overtourism “Drivers”, The Museum and the problems of cultural tourism, ISBN , State Hermitage Sankt Petersburg
22. Ronchi Alfredo M., (2021) - Original, copy, digital original: The path toward virtual museums, Proceedings “Museums and Problems of Cultural Tourism”, State Hermitage.
23. Spangenberg, J. H. (2005). "Economic sustainability of the economy : Concepts and indicators". International Journal of Sustainable Development, 8(1-2), Available at: <https://doi.org/10.1504/IJSD.2005.007374>
24. Surowiecki J (2004) The Wisdom of crowds: why the many are smarter than the few. Doubleday, Anchor. ISBN:978-0-385-50386-0
25. Xu F., et Al. (2014), Gamification in Tourism, In book: Information and Communication Technologies in Tourism - DOI: 10.1007/978-3-319-03973-2_38