

Notas Livres

**HISTORY AND CITY: REPRESENTATIONS FOR THE WAY OF
TOURISM DRIVEN BY DATA**

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INTRODUCTION

Considering what historians call "displacement of concepts" of one area to another, in the case, of journalism, of information and computer science (for the Big Data perspective), among others, for Tourism, the research will look to draw the first rough for the concept of Tourism Driven by Data (TGD) which, in turn, could be a tool of great value in a sense of visibility and/or image representations throughout history of the cities through social media.

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Concepts travel and it's better that they travel knowing they travel. It's better for them not to travel in secret. It's also better that they travel without being noticed by costumes. In fact, the clandestine circulation of concepts at least allowed the disciplines to breathe, it unblocks. Science would be completely trapped if concepts didn't migrate in a clandestine matter. Mendelbrot said that great discoveries are the result of errors in the transfer of concepts from one field to another (...) (Morin, 2005, pp. 117 apud FRANCELIN, 2010).

The term itself - TGD - was inspired by "Data Driven Journalism" - a practice formerly called "Computer Assisted Reporting" and "Precision Journalism" whose principles came from the 1950s and were boosted in the middle of 2000 by the development of Computing. "The application of computational and scientific techniques in the calculation, edition, publication and circulation of journalistic products, which can take the form of texts, audiovisuals, hypertextual narratives, graphic visualizations, or news applications" (TRASEL, 2014, p. 15) and, in the context of Tourism, will contribute to two complementary routes: on the one hand, by the managers and planners of the activity and, on the other, by the final user / tourist. The TGD concept will therefore encompass three levels: data collection, definition of standards and forecasts derived from previous analyzes that may involve statistics, data mining, etc., as well as techniques from the Social Sciences.

BIG DATA

"A fundamental characteristic of our age is the raising of data - global, diverse, valuable and complex"³. The data are linked to the daily life of urban life, the corporate world in all its instances and science - both as raw material for the construction of knowledge and in its epistemological sense - "data visualization". Data growth is exponential. Every second thousands of information, often scattered, are produced by all individuals in different formats. In this context, numerous studies approach the big data from different perspectives and the authors can be framed if we turn the work of Umberto Eco (as a reference to the Frankfurt Critics and the functionalists) into

3 WITTENBURD, Peter; LINDEN, Krister. Riding the Wave after the EU HLEG Report Vision (and reality) about Accessing Research Data. Disponível em: <<http://indico.cern.ch/getFile.py/access?>

"integrated" and "apocalyptic". Still, those who are in the "middle", observing a current of thought and the other formulating other hypotheses / perspectives. This research falls into the latter category, thus analyzing the big data on a look of complexity, not neglecting the negative aspects (such as privacy issues), but at the same time, trying to find interesting ways that can contribute to the tourist activity, history and cities.

Big data is perhaps the biggest opportunity in a generation for travel businesses to embrace the changing structure of data and maximize its use. It offers the potential for a substantial shift for all travel companies, empowering them to enhance both the business and experience of travel. As with any generational shift in technology, however, the opportunities attain hand-in-hand with the potential for significant disruption, which naturally bring many challenges – competitive and creative – for the tourism sector to consider (Akekar; 2012).

Much of the value of the data work by news organizations is derived from the 'sense making'; creating content and applications that make a complex world easier for people understand. (Leimdorfer; Thereau, 2012).

DATA DRIVEN TOURISM - METHODOLOGICAL CONSIDERATIONS AND PARTIAL RESULTS

The methodological strategies of the research are comprehensive and involve a series of phases that we are not here to detail. The structure is therefore multifaceted along the lines of some of the European Union's "Seventh Framework Program" (FP7) projects which have been the focus of our previous research.

The first instance of the survey conducted in March (2017) involved the collection of bibliographic material data in order to identify other investigations on big data and tourism - regardless of the period of publication. The results revealed that articles that combine the Big Data universe with Tourism are very rare. In Web of Science, for example, the return was null with the descriptor "big data" and "tourism"; Already in Scopus we find, with the same keyword, quantitatively some results, however, almost all, mostly, irrelevant in relation to the adherence of the content to the object that interests us.

FIGURE 1 - RESULTS WEB OF SCIENCE - "BIG DATA" AND "TOURISM"

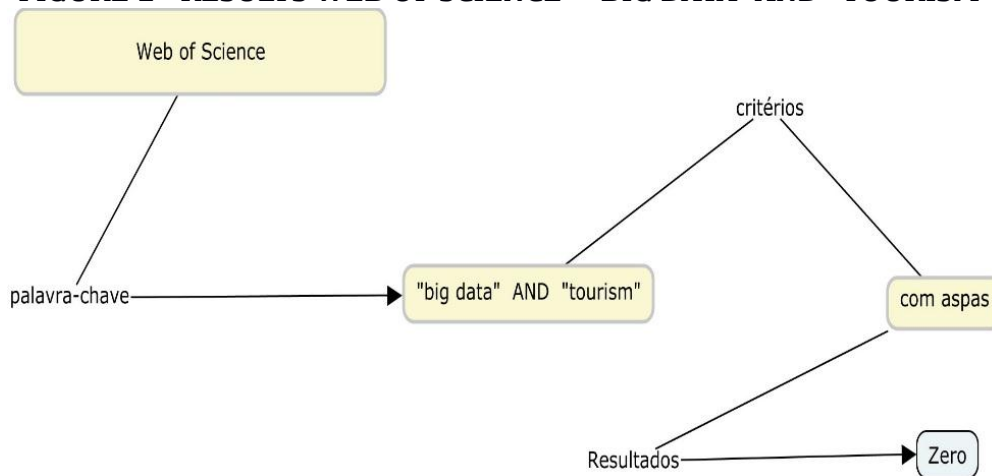


TABLE 1 - SCOPUS RESULTS - "BIG DATA" AND "TOURISM"

Categories	Result = 92
Author Name	Koo, C. (3); Cassavia, N. (2); Chung, N. (2); Dicosta, P. (2); Fuchs, M. (2); Höpken, W. (2) Masciari, E. (2); Pan, B. (2); Saccà, D. (2); Song, E.J. (2)
Years	2017(5); 2016(40); 2015(28); 2014(14); 2013 (5)
Subject Area	Computer Science (55); Business, Management and Accounting (27); Social Sciences (18); Engineering(12); Mathematics(10); Decision Sciences (6); Energy (4); Agricultural and Biological Sciences(3); Economics, Econometrics and Finance (3); Environmental Science (3)
Document Type	Conference Paper (39); Article (37); Conference Review (10); Editorial (3); Article in Press (2)
Source Title	ACM International Conference Proceeding Series (8); Tourism Management (5); Journal Of Destination Marketing And Management (4); Lecture Notes In Computer Science Including Subseries Lecture Notes In Artificial Intelligence And Lecture Notes In Bioinformatics (3); Annals Of Tourism Research(2); Applied Geography (2); Communications In Computer And Information Science (2); EPJ Data Science (2); Iotbd 2016 Proceedings Of The International Conference On Internet Of Things And Big Data (2); Journal Of Travel And Tourism Marketing (2)
Keyword	Big Data (63); Data Mining (11); Tourism (9); Internet (8); Social Media (8)
Country/ Territory	China (28); United States (15); Italy (8); South Korea (7); United Kingdom (7); Japan (5); Taiwan (5); Australia (4); France (4); Germany (3)
Language	English (92)
Source Type	Journals (42); Conference Proceedings (42); Book Series (7); Books (1)

That is, the so-called "central" science does not contemplate the interface of Big Data with Tourism. The "peripheral", through a basic Google search returns, with the same keywords, a much larger number of works - texts that are few or nothing quoted by other researches but that can be included in our analysis from the approaches that articulate the big data to the world of tourism. In relation to the duality "central science" and "peripheral" we agree directly with the statements of Guédon (2010) that:

[...] the adoption of an international principle of scientific competition makes the scientific field gradually evolve into a two-tier system: national and international. The latter becomes the main arbiter of quality, while the national level includes more complex combinations of quality assessment with institutional policy and sometimes pure and simple policy. Guidelines issues are also central at the national level, as many governments aim to mobilize the power of science to improve people's well-being. However, once again, it is emphasized that the national and international levels are not isolated categories; Provide useful ways of analyzing divergent forms of scientific behavior whenever they are encountered, but the transition from an eminently national performance to an essentially international one, up until about or shortly after World War II, was still viewed as a step-by-step change step and not as abrupt discontinuity. Until then, the two plans define a ramp to be galvanized, instead of a barrier to be overcome (GUÉDON, 2010).

National and international levels can also be analyzed from the perspective of their isolated crosses from one to the other and from the conjuncture of the two to a macroenvironment of equal and / or unequal proportions depending on the historical period. Besides that:

It is also possible to analyze the term contribution to world science. The intended meaning is clear in the sense of claiming that it only works if the international scope is noticed. The excellence of such work is guaranteed by the filtering devices of the predominant publications, particularly, it is presumed, by the peer review. However, even without questioning the peer review process itself, other parameters, besides the search for excellence, are obviously involved in the selection of accepted articles for a given title. The credibility of the institution and / or the laboratory is not insignificant when evaluating an article, just as the author's name is not. By excluding the name of the author (s) and their affiliation, many journals try to avoid or reduce the biases of this prior knowledge. The title itself adopts some editorial policy, explicit or otherwise, that allows it to exclude articles based on quality rather than relevance. In this case, relevance means a series of elements, from a set of topics related to a specific field of knowledge to issues that attract the interest and attention of researchers from rich countries. It can also refer to hot topics, which attract readers and thus increase the chances of citation, in addition to the impact factor of the magazine [...] In any case, however, the term

contribution tends to impart new meaning, which has much more to do with the need to adapt to the thematic standards considered appropriate or fashionable by centrist scientists. At this point, the researcher from a peripheral country needs to use scarce resources to focus on an object of study that may be of little or no interest to the institution or country in which it operates. This hypothetical researcher is actually contributing something really extraordinary as he is trying to "buy" some visibility to make his career move forward by dealing with issues not directly useful to his community. [...] The end result is a paradoxical and unexpected form of foreign contribution (or aid) flowing from poor to rich countries (GUÉDON, 2010).

The above by Guédon (2010) is something that involves innumerable lines of different natures. Why was the system set up like this? What are the historical roots that conditioned our present? Is there, therefore, the intention of change on the part of the social actors? For what context, with what arguments? All of this is covered by forces of nature, beyond economic, political, social, cultural, history, among others, that are difficult to be measurable in concrete terms. The social actors themselves who are treated as a "set", because they have shared interests, bring different individuals and their cultures together at the same time, and each actor can perform one or more functions according to the circumstances of the action. What we can find, not to solve (even because one does not have clearly what one wants to change) but to bring a visible map of the subject matter of this research, are indicators of different orders coming from a relatively large arsenal of investigations that are happening at this time in disparate contexts - and it is through this line that we will follow in the approach of Big Data in interface with Tourism, Communication, History and Cities.

Other data - of methodological nature and the specific results - can be consulted in the reports coming from the final result of this research. In concrete terms we are in the data processing phase; Analysis and interpretation.

FINAL CONSIDERATIONS

Overall, therefore, the present research will bring greater visibility on the theme of Big Data in the area of Tourism and will provide reliable data, through the design of the TGD concept, for the future planning and prognosis of the area from the perspective

of the manager and the tourist and, consequently, almost in a "return" to the "concept-
inspiration" for the universe of Communication and History with impact on cities.

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