

Virtual vs Digital: Examples of Netnography and Digital Ethnography in Tourism Studies for a Comparison between Methods

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With this paper our goal is to formalize the main differences between the applications of ethnographic techniques when they are framed in Virtual or Digital Methods. To be more systematic in presenting these differences, a synoptic table is offered. This table examines the main breaking points between the methods and is used to organize a marked comparison between two tourism studies chosen as being representative; one for the ethnographic application of Virtual Methods, and one for the ethnographic application of Digital Methods. In addition to testing the effectiveness of the proposed classification scheme, the purpose of the comparison conducted between the two tourism studies is to highlight where the changes that have occurred can lead to advances in the method and where these changes have become new limits on which it is necessary to continue to reflect in order to develop the methods involved and place them clearly in line with the evolution of the digital scenario.

Keywords: *Virtual Methods, Digital Methods, Netnography, Digital Ethnography, Tourism Studies.*

Introduction

The Internet logic has drawn spaces and languages for relations, actions and practices and social research examines these in order to understand the complexity of social change: the digital scenario, without doubt, has shown itself to be a not insignificant frame for social science in the last 20 years. This is due to its power of identity building, information and knowledge sharing in the architectures of relations and networks made by users via Computer mediated communication (CMC). So today it is useful to retrace its reshaping steps, looking at the breakpoints of the adapting and arising capacities of social researchers in web (Internet)-based methods, taking digital technologies into account. For Arvidsson and Delfanti (2013: 14), today social researchers are involved in the actual pervasive presence of internet and digital technologies in daily human life and they consider this presence as a manifestation and a direct element of social change. In fact, the main purpose of social science is focused on social change, so the first question that launched our study regarded how today social scientists can study it in the digital scenario. Through the digital scenario, according to Natale and Airoidi (2017:11-18), the application of new methods starts by focusing on

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four potential units of analysis as objects by which to develop any empirical digital research:

- The media context, fundamental in discussing socio-technical features of data and its effect on results. Society reflects itself through media and it is necessary to be confident with the media environment in order to understand the reflected phenomena correctly.
- Public Opinion, when it becomes necessary to study the socio-identity breakpoints of the symbolic sphere.
- Digital behavior, not only interactions, but also the practices are fundamental to study social change. A log-in on a web site, as well as a streaming play or a geo position allow researchers to study cultural consumption thanks to the traces organized as metadata and left on the web.
- Users, but studied as an aggregate. Because of privacy reasons socio-demographic data are in fact not always available or time friendly, so much that, for this type of study, we talk about post-demographic research, in which the subjective component is studied in the aggregation of the actions it produces and of which it leaves traces on the net.

Several studies related to the field of Science Technology and Society (conducted i.e. from Observa Science in Society research Centre¹), or related to the socio-political sphere have followed the path of new methods and described trends for electoral studies (Pentecoste 2013, Consolazio 2017), cultural processes or epistemological examination (Digital methods initiative²). Mostly previous works define the web in a double epistemological way: as object, useful for developing research due to an online transposition of traditional techniques or as source, in the way the web has its own ontological objects and is possible thanks to the hybridization of techniques to study these objects through the devices. These ways have led to significant implications for social science regarding the concepts of substitution or addiction among traditional and new methods.

Starting from the observation “Web-mediated research [...] is already transforming the way in which researchers practice traditional research methods transposed on the Web” (Amaturo and Punziano 2016: 35-36), with this contribution we intend to retrace the main differences that substantiate the strands of *Virtual methods* and *Digital methods*. In the aftermath of several literature reviews about the adoption of new methods related to various research fields, we realized that many scholars have been arguing about the application of online

¹Observa Science in Society is a non-profit, independent, legally recognized research centre promoting the study and discussion of the interaction among science, technology and society, with the aim of stimulating dialogue among researchers, policy makers and citizens. Available at: <http://www.observa.it>

²The Digital Methods Initiative (DMI) is one of Europe's leading Internet Studies research groups. Available at: <https://wiki.digitalmethods.net/Dmi/DmiAbout>

ethnography techniques connected to tourism studies (Leopold 2011, Adams 2012, Wijngaarden 2017). For this reason the tourism cases proposed have been chosen to better explain how the change in society has led to a direct change in the methods to study the societies.

In doing this, we recover Hine's viewpoint (2000), of *Virtual Methods*. He affirms that the classic techniques of social research can be transposed onto the web and theorizes that the web can be interpreted as an object of study. This is how the survey becomes web survey or the interview becomes web-interview or, again, the participant observation becomes netnographic practice.

To this point of view, which keeps the object of study separate from the methodological practice, we intend to contrast another viewpoint, linked to *Digital Methods*, in which the object of study and the methodological practice come to merge into an integrated whole, so as to coin the motto *follow the medium* as a cognitive and methodological imperative together. This is Rogers' vision (2009), for which classical techniques cannot be of help in their only transposition, but it is necessary to hybridize the techniques with the means (the Net) to find the methodological key that allows a deeper, dynamic and truly fitted knowledge of the digital environment. And here, the classic techniques, with which there are directly produced data (survey, interview, observation), leave room for techniques that make use of the data already existing on the net, the natural metrics inherent in digital platforms and the information that indirectly covers the spectrum of knowledge that moves the interest of the social researcher in the digital age.

In order to formalize these differences in approach and highlight the limits and advantages in the use of the two perspectives, examples of research related to the study of tourism (Mkono and Markwell 2014) will be examined.

In particular, the attention will be focused on: a netnographic study, following Kozinets' approach (2010: 8) for whom netnography immediately suggests an approach adapted from the authentic and traditional ethnography techniques to the virtual communities studies in the idea of a «Social aggregation that emerges from the Net when enough people carry on [...] public discussion long enough, with sufficient human feeling to form webs of personal relationships in cyberspace», and one calibrated on the digital ethnography approach, following, this time, the approach of Murthy (2008) for whom digital ethnography suggests a fully digital approach, sometimes covered, but always linked to the use of already existing information examined with the help of other specific techniques, such as content or network analysis.

In this way, the methodological reflection will leave space for a broader reflection linked to ontological and epistemological questions at the root of the separation of the two presented approaches.

From the Origin to the Digital Era: the Ethnographic Method

The Starting Point

“Ethnography usually involves the researcher participating, [...], in people's daily lives for an extended period of time, watching what happens, listening to

what is said, and/or asking questions through informal and formal interviews, collecting documents and artefacts” (Hammersley & Atkinson 2007: 3). This is one of the most widely shared definitions of the classical ethnographical method that brings the attention to some important features that nowadays are being gradually challenged by the fast-paced advent of the digital age.

Ethnography is a method based on direct observation. Of course, when doing ethnography, it is also essential to listen to the conversations of the actors ‘on stage’, read the documents produced in the field under study, and ask people questions. Yet what most distinguishes ethnography from other methods is a more active role assigned to the cognitive modes of observing, watching, seeing, looking at and scrutinizing (Gobo & Marciniak 2016).

Ethnography is a method with more than one hundred years of history. It arose in the Western world as a form of knowledge about distant cultures (typically non-Western ones) which were impenetrable to analysis since we had only fleeting contact or brief conversations (Gobo 2011).

Since the 1980s – and even more with the advent of the Internet – the meaning of ethnography has been expanded to such an extent that it encompasses forms of research that are extremely diverse from a methodological point of view. The stretching of the term ‘ethnography’ has emptied it of its original meaning. Ethnography was born as a technique based upon direct observation. By contrast, interviews and surveys are mainly based upon listening and asking questions. Of course, it is also essential in ethnography to listen to the conversations of the actors ‘on stage’, read the documents produced by them and ask people questions but they are ancillary sources of information because what most distinguishes ethnography from other methods is the active role assigned to observation (Gobo & Marciniak 2016).

Classically, the observation can be covered or uncovered, participating or non-participating. The form of participation largely determines the contents of the experience of the researcher in the field and the empirical basis that will be available. Spradley (1980) distinguishes participation into four ordered classes: passive, moderate, active and complete.

Table 1. *Level of Participation in Ethnographic Practices on the field, according to Spradley (1980)*

Level of participation				
Not participant	Passive participation	Moderate participation	Active participation	Complete participation

on the net, according to Kozinets (2010)

Lurking						Participation
Content Analysis Approach	Informing members about the research purposes	Asking clarifying questions	Posting comments	Getting involved in the community activities	Taking a leadership role	Auto-ethnography

Nevertheless, if all the ordered classes of participation have been the domain of the classical ethnographic method, with the advent of digital the styles of participation have become distorted and are increasingly hybridizing with

unobtrusive forms of research. You certainly stray very far from the ethnographic style and increasingly dangerously close to another family of methods that has its particular soul, history and set of techniques, completely different from ethnography: let's talk about the content analysis.

The internet revolution has had a profound impact on ethnography. For the first time, it has become possible for any researcher to simultaneously access online information, actions, interactions, communities, and cultures located in different places. "Online ethnography" designates variations regarding above all the conduct of fieldwork (Gobo & Cellini 2020). Online ethnography breaks with the traditional methods of the discipline because all the data is usually collected online without meeting the people concerned face-to-face. The problem raised by online ethnography is both theoretical and methodological: can online cultures, communities or interactions ever be sufficiently understood if the ethnographer is not in the field? Does ethnography depend upon the physical presence of the ethnographer while the people are being studied? (Hammersley 2006).

As we will see, online ethnography is a highly differentiated and rapidly evolving field. The different proposals for conducting online ethnography are the result of the ways in which different scholars conceptualize the internet, which ranges from a culture to an instrumental context for social interaction.

Recent examples of online ethnography are evidence that ethnographers can be active observers and participants in the field, even though the field is not physical; or they can have a passive role of indirect not participant observers of the field, by studying it without complete immersion but only through extracting meaning from existing secondary data spread on the net. In the following paragraphs we will examine these changes and new differences in the way of doing ethnography in the digital scenario in order to clarify some interesting but not always such explicit points.

The New Scenario

Internet studies located the turning point for social research in 1990: thanks to the rise of the Web as an environment for mediated interaction and emerging new empirical approaches. First, these approaches tried unsuccessfully to totally replace the traditional ones, by adapting (and then revolutionizing) the classical techniques to the new emerging paradigm.

The first kind of identification of a specific type of method born around Internet Social Research Studies was represented by the formalization of *Virtual Methods*. They were born starting from the idea of cyberspace intended as a place to store large amounts of useful information for discovering how much social culture is present online and considering internet not only a cultural context, but as well a cultural artefact, a flexible, dynamic and pervasive object (Woolgar 1996).

Following these requirements, the vision of Hine (2005: 2) where «the theory of research methods become meaningful only when you start to try them out for yourself, and it has always had to be adaptive» conducts social research to a path where cyberspace, focused on as a new place for methods, has been shaped as a

cultural context where traditional methods could be adapted and transposed online by Computer mediated communication.

The adaptive mood allows, in fact, the transformation of traditional ethnography in its virtual vocation: the *netnographic* practice intended as the *cocktail* that Hobbs (2006) describes as the repertoire needed to understand a particular culture, conducting traditional research actions and most of the observation, in a switch to the web environment where real communities become web-communities preserving, or creating, substantive networks and relations into the cyberspace in the way where netnographic object is the social aggregation that “emerges from the Net when enough people carry on [...] public discussion long enough, with sufficient human feeling to forms webs of personal relationships in cyberspace” (Rheingold 1993:18).

In the 2000s, social research wondered if and how the heritage of traditional methods was exposed to the opportunities of new medium gains (largely in efficiency, costs and breadth of geographic reach) and threats (response rates, loss of representativeness of population and quality of data). The air of innovation and changing, in fact, provided for a sense of anxiety created by the perception that “nothing can be taken for granted” (Rheingold 1993: 5), because of the ontological level of this approach based only on the aspects of the medium that entails high limits to produce reliable and consistent sets of data.

The digital era has been in fact an unquestionably moment of change. Going further from the field of study that identifies awareness, identities, citizenship, policy and corporeal social structures via the exclusive social research path characterized by the human-machine relationship, year per year the idea of connection between internet and territories strengthened, thanks to tailor-made information produced by users’ history, geolocation, etc., and left online.

Starting from the own media infrastructures and techniques, in the 2000s science, social and technology trends drove social research to a revolutionary model made up of the hybridization of classical techniques and digital environment (the net), replacing cyberspace *second life* and refusing the online/offline, virtual/real coexistence. The vision of Richard Rogers (2009) of *Digital Methods*, the second way used to try to explain a new class of methods in Internet Studies, in fact, suggests a dimension focused on a whole dichotomy of *digitalized/digital native* information about social action, relations and practices. In particular, it only considers the perspective of web native elements that, adequately analyzed, permit to recreate a *new internet story* from the inside of the device and its own agency (Rogers 2013:14): “the digital context has become such an additional and integrated social participatory place of people’s daily life where the researchers take account not only the web as the object of study, but the role they play in relation with it as well”.

Digital methods, in this way, does not work as an approach which is useful for confirming the online environment results, but instead it uses the web as a source and not only as the object of study, following the medium evolution and thinking how to rearrange digital objects, going further from the research that “is limited to the study of online cultures” (Rogers 2007: 28). It was no longer important to understand how much culture was online, but instead how to “focus the cultural

change and social conditions through internet” (Ibid.: 48-49). Lazer et al (2009) confirms that digital methods are not simply a series of techniques useful for analysing available web data that describe social actions: the researcher actually works as an investigator through data available on 2nd sources but moves through the labyrinth of media as well, understanding the information produced by users or best by social platforms. Working through reading and observing actions, in fact, this information is translated into data and analyzed approaching several (potentially mixed) methods typical of content analysis, which refers to any kind of analysis that attempts to derive new mining from existing content (Krippendorf 2018).

The ethnographic approach derived from digital methods called *digital ethnography*, differently from *netnography* that is directly connected to the spaces within the subjects movements, arises simultaneously with the environment within it works, and is capable of enlarging and analysing every relations cluster not concerning the subjects in a place as the virtual world (Consolazio 2017: 81), but rather in a temporary association of strangers made for mutual purposes in a cooperation that will lose its properties even after few hours of its highest density moment of sharing (Arvidsson & Caliandro 2016).

Excluding their succession in time, in social research virtual methods have not fallen into disuse, while digital methods are still going through the process of gaining increasing success.

This background marks several differences between these two families of methods, explaining the main break between them that rests on the switch from the ontological to epistemological identities of the methods and stressing the debate about an important clarification regarding the distinction of data identities: *virtual*, *digitalized* and *digital*.

Provoked and User-Generated Data

For virtual data we mean all the information that needed to understand a social setting in fieldwork switched to online so that, for example, a survey becomes a web survey or an interview becomes a web-interview, with a difference for the observation actions that can find a proper use also with a non-intrusive configuration.

For digitalized data we mean all the information that before the transposition online comes from any sources such as books, TV programs, movies etc. and that becomes useful for online content analysis, in a way that is quite different compared to offline not only due to the economic savings and faster elaborations, but also considering more specifically the processes of entry, storage and management of such data.

For digital data, on the other hand, the plentiful literature of digital sociology (see among others Marres 2017, Lupton 2014) intends all the traces left by users during their online activities which produce original empirical elements not attributable to previous approaches, but produced by the natural structure and

dynamics of the net and thus connected to the new idea of *grounded web*³ within which the researcher can move *following the medium*. Therefore, the virtual/digitalized data stand out as «*provoked data*» and digital ones as «*user-generated data*»: both portrayed by the spontaneity value during their production (Natale and Airoidi 2017, Rogers 2009).

The Involvement in the Post-demographics Approach

The constitution of these research methods is also reflected properly by their web-ethnographic approach which defines the related level of involvement of the subject observed.

The migration of information, from offline to online, outlines a dissimilarity compared to Rogers' hybrid viewpoint: the virtual data, in fact, not only can't be persistent in the scenario like the digital data (Boyd 2011), but in addition, "the digital data are natural, spontaneous and not forced by the researcher's requests due to the lack of cooperation between the observer and the observed" (Cardano 2011: 25).

Netnography, in its participant version works on provoked data and involves a not negligible direct involvement of individuals who have to spend time interacting with the researcher, in a way which is quite different for the digital ethnographer who works via querying and reading techniques on already existing digital contents, i.e. social network scraping, spheres compared analysis, source distance analysis, internet as archive, etc., that leaves the authors of the web traces left unaware of the research.

The paradigmatic revolution made by social research through the application of digital methods causes the crossing of the *avatar* concept and is no longer considered as a unit of analysis of the individuals, but rather the users' activities that open to post-demographics opportunities: social research indeed widens its *spectrum* passing over the main focus of the social-demographics properties of subjects (age, location, gender, job, etc.) being also vigilant today of the users' relations, networks and social practices shown via new media platforms in terms of reactivity, behaviour, and preferences.⁴

³Richard Rogers (2007:46) proposes a research practice that can learn from device methods, reworking it for new purposes in order to confirm the assertions about cultural change and social conditions throughout web data and introducing the expression of *online groundedness*.

⁴Purposing the partition of the society and social context in groups aggregated by socio-demographic properties, post-demographics could be thought of as the study of the personal data in social networking platforms, and, in particular, how *metaprofiling* (Rogers 2004) is, or may be, performed with findings as well as consequences (https://digitalmethods.net/Digitalmethods/PostDemographics#Post_45demographics_63).

Data Construction and Data Collection: the Base Models to Set a Comparison between Netnography and Digital Ethnography

The last 20 years of paradigmatic change have clearly reshaped the way how social stories are communicated through the own reshaping of ethnography.

Cultures are still today studied in their natural state, even if they are adapted or discussed within innovative and experimental frameworks.

The research field, described by Bailey (2007: 2) as the «systematic study, primarily through long-term, face-to-face interactions and observations, of everyday life» for example, has switched to different new clear or latent configurations useful for joining the description of cultures «as they really are respecting the aspiration of any methodology» (Hine 2000: 42) permitting researchers to do a proper ethnographic study, following Hammersley & Atkinson's basic definition (2007) regarding the possibility of an overt or covert participation in people's daily life.

The identification of different properties connected to the fields of research connected to netnography and digital ethnography defines and summarizes the breakpoints between them and, then, between their family of methods.

The main question is about the available data needed “to throw light on the issues that are the emerging focus of the inquiry” (Hammersley & Atkinson 2007: 3). It leads the netnographer and the digital ethnographer to different models for research planning and action: the first one, in fact, constructs their own data, reaching for information and translating it simultaneously to the approach of the analysis in a gradual building of interpretation of results.

This way is quite different from traditional ethnography that separates procedures providing the collection of field and methodological notes useful for analysis processing. The digital ethnographer is closer to the traditional model than the netnographer, at least as far as the non-synchronic research and analysis phases are concerned: the hybridization of techniques and the environment of the digital scenario gives the opportunity to the researcher to collect data regarding concepts non imposed *a priori* on 2nd sources, then to organize it by the proper instruments, then to experiment many analytical models, choose the best one(s), and finally to discuss the interpretation of results. This model, moreover, may allow the possible fragmentation of the research mechanism in such a way that a professional actor, such as a computer engineer can collect the online data, a different one such as a data scientist can organize and evaluate it by techniques, and a social scientist can interpret the results.

Methodology

With this paper our goal is to formalize the main differences between the applications of ethnographic techniques when they are framed in the *Virtual* or *Digital Methods*.

To be more systematic in presenting these differences, a synoptic table is offered below. This table examines the main breaking points between the methods

in order to be used to organize a more marked comparison between two exemplary “Tourism studies” chosen as representative, one for the ethnographic application of *Virtual Methods*, and one for the ethnographic application of *Digital Methods*.

In addition to testing the effectiveness of the proposed classification scheme, the purpose of the comparison conducted will be to highlight where the changes that have occurred can lead to advances in the method and where these changes have become new limits on which it is necessary to continue to reflect in order to develop the methods involved and place them clearly in line with the evolution of the digital scenario on which they try to intervene.

Table 2. *Systematization of Breaking Point Occurred in Time and with the Advent of Digital Era on the Ethnographic Approach*

From the level of definition and conceptualization			
Breaking point	Classical Ethnographic Method	Virtual Method with Netnography	Digital Method with Digital Ethnography
Principal definition of the method and kind of understanding actions required to the researcher by level and kind of participation	<i>In-depth understanding</i> of social scenario and social life using different levels of <i>direct participation</i> in this scenario.	<i>Web transposition</i> of the classical method to construct understanding of digital scenario using different levels of <i>direct or indirect participation</i> in this scenario.	<i>Innovation</i> of classical method to extract understanding from digital scenario using the Net as object and as methodological tool using <i>lurking techniques</i> not necessarily connected to direct participation.
Conceptualization of the field	Physical place in which communities, their cultures and social and daily life take place. The social scenario can be useful to detect the culture of a specific community regardless of its aims, objectives, and purposes.	Internet as scenario in which pieces of daily life, communities, cultures, etc. are proposed. Cyberspace is intended as a place allowed to store large amounts of useful information for realizing how large the part of the social culture present online could be and considering internet not only as a cultural context, but as a cultural artefact, a flexible, dynamic and pervasive object as well.	Internet as object/place to study and as a methodological tool for studying. It is considered the only perspective of web native elements that, adequately analyzed, help to recreate a <i>new internet story</i> from the inside of the device and its own agency. The digital context thus becomes an additional and integrated social participatory place of people’s daily life where the researchers take into account not only the web as the object of study, but the role they play in relation with it as well.
From the operational level			
Breaking point	Classical Ethnographic Method	Virtual Method with Netnography	Digital Method with Digital Ethnography

<p>Main technique</p>	<p>Ethnography usually involves the researcher participating in people's daily lives for an extended period of time, watching what happens, listening to what is said, and/or asking questions through informal and formal interviews, collecting documents and artefacts.</p>	<p><i>Netnographic</i> practice intended as a repertoire needed to understand a particular culture, that conducts the traditional research actions, most of the observation, in a switch to the web environment where real communities become web-communities preserving, or creating, substantive networks and relations into cyberspace in the way where netnographic object is the social aggregation that emerge from the Net when enough people carry on public discussion long enough, with sufficient human feeling to form webs of personal relationships in cyberspace.</p>	<p><i>Digital ethnography</i> uses the web also as a source and not only as the object of study, following the evolution of the medium and thinking how to rearrange digital objects, moving further away from the research that is limited to the study of online cultures or web-communities. It is no longer important to understand how much culture is online, but how to focus the cultural change and social conditions through internet instead.</p>
<p>Research actions and their level of importance</p>	<p><i>Observing</i> as main research action + a series of research actions that produces ancillary sources of information such as <i>passive listening</i> + <i>querying</i> + <i>reading</i> (the actions of observing and listening are functional to extrapolating knowledge from the participant experience; the action of asking is functional to asking clarifying questions about the way in which the researcher is interpreting the situation; the action of reading is also functional to informing the interpretation of the phenomena which the researcher reaches).</p>	<p><i>Observing</i> as main research action + a series of research actions that produces ancillary sources of information such as <i>passive listening</i> + <i>querying</i> + <i>reading</i> Here the transposition on the web of the classical methods by adopting all the heritage of actions and the inequality in level assigned to their importance is valid.</p>	<p><i>Observing also by reading</i> + <i>asking second source digital materials</i> + <i>active retrieval instead of passive listening</i>, all these actions are considered to be of the same level of importance. The researcher works as an investigator through data available from 2nd sources but also moving through the medium labyrinth understanding the information produced by users or best by social platforms: working through reading and observing actions, in fact, this information is translated into data and analyzed approaching several (eventually mixed) methods typical of content analysis.</p>

From the technical level			
Breaking point	Classical Ethnographic Method	Virtual Method with Netnography	Digital Method with Digital Ethnography
Involvement of the observed	Possibility to inform or not to inform the members about the research purposes.	Possibility to inform or not inform the members about the research purposes.	Not necessary to inform the members about the research purposes.
Involvement of the observer	Getting involved in the community activities.	Getting involved or not involved in the web-community activities.	Not involved in the community activities.
Level of involvement by time	Direct involvement in people's daily life for an extended period of time in order to better understand the community.	Direct or indirect involvement in people's daily internet life for an extended period of time in order to better understand the web-community.	Indirect involvement for a brief period of time, generally functional to confirm the main interpretation of the research.
Kind of data used	Not digital	Virtual or Digitalized	Digital
Kind of access	Face to face access to information actions, interactions, communities and cultures located in the same place.	Online access to information, actions, interactions, communities and cultures located in different places.	Online access to information, actions, interactions, communities and cultures located in different places.
Way of collecting secondary data	<i>Collecting</i> documents and artefacts by asking the community's permission.	<i>Collecting</i> documents and artefacts by asking the web-community's permission.	<i>Construction and extraction</i> of data, documents, artefacts just deposited on the net and with free access for the researcher to extract the material to analyze.
Way of collecting/constructing primary data	Construct field-notes, diaries, mind maps and all the material necessary to organize the knowledge construct process.	Construct field-notes, diaries, mind maps and all the material necessary to organize the knowledge construct process.	Web scraping and API's use to extract material from the net directly connected to the social phenomena that the researcher will analyze making primary use of secondary data.
Where is the ethnographer?	Ethnographer is in the field.	Ethnographer is in the online field.	Ethnographer is not in the field.
Level of intrusion	Intrusive and unobtrusive: the data is usually collected meeting the people concerned face-to-face.	Intrusive and unobtrusive: the data is usually collected meeting the people concerned virtually.	Unobtrusive: all the data is usually collected online without meeting the people concerned face-to-face or virtually.

From the organizational level			
Breaking point	Classical Ethnographic Method	Virtual Method with Netnography	Digital Method with Digital Ethnography
Propensities and extremes in ethnographical practices	<i>Auto-ethnography</i> in which the identification, the “being part” of the investigated community prevails and is approached through a collection of pieces of knowledge produced by the direct sense of the researcher.	<i>Virtual endo-ethnography</i> in which the identification, the “being part”, of the investigated community prevails and is approached through a collection of pieces of knowledge produced by the direct sense of the researcher jointly with a collection of documents and artifacts that are analyzed directly and indirectly leading to ethnographic style to be defined as an endogenous.	<i>Digital exo-ethnography</i> where there is the absence of identification, of that “being part”, of the investigated community which is instead approached through a collection of documents, contents and artifacts that are analyzed indirectly, leads the ethnographic style to be defined as an exogenous.
Evolutionary framework of research	Circularity among all the phases from the research design to data collection to interpretation to the return to the analyzed actors and scenario.	Circularity among all the phases from the research design to data collection to interpretation to the return on the analyzed actors on the internet scenario.	Separation of the collecting and interpreting phases. Different subjects could be responsible for the different actions so that the research design becomes an integrated path of analysis, disciplines and capabilities.
How to reach the interpretation?	More active role assigned to the cognitive modes of observing, watching, seeing, looking at and scrutinizing, in order to reach a total interpretation of the investigated phenomena by analyzing provoked and not-provoked data.	More active role assigned to the cognitive modes of observing, watching, seeing, looking at and scrutinizing, in order to reach a total interpretation of the investigated phenomena on the Net by analyzing provoked and not-provoked data.	More active role assigned to the capacity of interconnecting different kinds of data coming from the net, generally user-generated that indirectly talks about the observed under-investigation phenomena.
From the reflection level			
Breaking point	Classical Ethnographic Method	Virtual Method with Netnography	Digital Method with Digital Ethnography
Gains	Long-term in-depth studies of communities circumscribed in space and data sets that are not too large. Strong control over representativeness of population and quality of data.	Medium gains largely in efficiency, costs and breadth of geographic reach.	Medium gains largely in efficiency, costs and breadth of geographic reach.

Threats	Long period of time, costs, geographical weight, as well as the fact that the researcher is alone and must develop and take charge of all the research phases by themselves.	Impossibility of having control over response rates, loss of representativeness of population and quality of data.	Impossibility of having control over response rates, loss of representativeness of population and quality of data.
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Following all the recalled differences among the Classic, Virtual and Digital approaches to the ethnographical method, the following paragraph will offer an application of this framework to better understand the introduced differences in applying ethnographic research on the digital scenario. According to the common interests of the authors, the following paragraph refers to two example of Tourism studies, the best found in literature that lent itself to the comparison aim: one by A. Rageh, T.C. Melewar, and A. Woodside, in 2013 on “*Using netnography research method to reveal the underlying dimensions of the customer/tourist experience*”, used to explain the main breaking point involving the netnographical practice; and one by M. Muskat, B. Muskat, A. Zehrer, & R. Johns, in 2013 on “*Generation Y: evaluating services experiences through mobile ethnography*” used, on the other hand, to recall the main differences with the digital ethnographical practice.

Findings: Studies on Tourism and Comparison of the “Virtual Netnographic” and “Digital ethnographic” Perspective

Culture, choices, experiences, and consumption are often the properties elected by social science to study the change of societies from several perspectives such as political, sociological and anthropological points of view. As mentioned in the introduction, this prelude of elements is the basis for ethnographic research and finds many examples in the literature focused on tourism studies chosen this paper as the preferred field of investigation from which we have selected our case studies. Also, apart from the common interest of the authors for the topic, the following cases have been selected because of their precise approach in the application of netnography and digital ethnography occurring appropriately for comparison purposes.

In 2013 the research group composed of Rageh et al. worked on the study “*Using netnography research method to reveal the underlying dimensions of the customer/tourist experience*”. This study was focused on the *customer tourism experiences* and aimed to identify *its underlying dimensions* through the validation of concepts isolated *a priori* and dealt with the tourist industry in Egypt.

The authors based the research method in a way that was useful for focusing the reflexive narratives that people publish online about their experiences, so clearly stated in the netnographic approach deriving from Kozinets’ vision of the “adaptation of ethnographic research techniques to study the cultures and communities that are emerging through computer-mediated communications”

(2010: 131). The authors consider the web as a flexible, dynamic and pervasive object, where, throughout cyberspace, it is possible to study the visitors' experiences thanks to their online reviews: the chance, indeed, to capture offline phenomena via online activities. This is perfectly in line with the aims and the delineated perspective on the side of the ethnographical practice in the framework of the *Virtual Methods*, where the identification, the "being part" of the investigated community prevails and is approached through a collection of pieces of knowledge produced in a collection of documents and artifacts that are analyzed directly and indirectly, causing the ethnographic style to be defined as endogenous.

They adapted ethnographic techniques starting from transposing a traditional structure of investigation on the online research field. First, they accessed the most important online groups composed of tourists from all over the world via the best platforms on which to gather data (TripAdvisor.com and holidaywatchdog.com), then they selected needed contents discarding off-topic reviews, short messages with no information, and promotional messages, then they analysed data with the help of an IT tool called Nvivo⁵ and finally they respected research ethics stating that the websites utilised for this study are "established as public forums of communication and that consent has become unnecessary for the analysis of public postings" (Rageh et al. 2013: 135).

The research action adopted was the observation in a non-participant way that and, even if not expressed in the methodological description of the article, is hybrid-shaped with reading techniques. These are useful to approach the unit of analysis (reviews) first constructing field notes and maps, i.e. as for the kind of review chosen for the analysis (ibid 134), and then collecting only the necessary data from a second source (the websites) with the permission of community admins. This research has therefore not concerned the involvement users, who were unaware of their participation, and obviously the researcher participation was not intrusive. The latter is not such an obvious feature since generally the classical ethnographic observational practice transposed online should also include the full involvement of the observed community. However, it is clear that for the type of community observed this would have been impossible. The authors' choice, therefore, was to hybridize the method by choosing a curvature towards non-intrusiveness instruments and the secondary digital data already present on the network, in a way more close to the rationale of the ethnographical practices in the framework of *Digital Methods*.

The study, in any case, respects the active role assigned to the cognitive modes of observing, watching, seeing, looking at and scrutinizing, in order to reach a total interpretation of the investigated phenomena on the Net and exploiting the potential gains in efficiency, costs and breadth of geographic reach.

⁵This study analyzed the informants' experiences from the journal entries by following the principles for the analysis and interpretation of qualitative data as recommended by Spiggle (1994), Strauss & Corbin (1990) and Arnould & Wallendorf (1994). Relevant themes to research hypotheses were identified and then the emergent themes were compared with preconceptions derived from the literature (Rageh, Melewar, & Woodside, 2013:135).

In this case, being based only on virtual non-provoked data, this entails some threats to the reliability of findings: the trustworthiness of users' networks, relations, habits and identities, in fact, urges the researchers to be reassured by long-term indirect engagement with the participants for an extended period of time in order to better understand the web-community. The participants, in any case, can't produce feedback to the researcher because of the unobtrusive research action that stops the classic netnographic circularity among all the phases from the research design: to data collection to interpretation to the return on the analyzed actors on the internet scenario.

The study conducted in 2013 by Matthias Muskat, Birgit Muskat, Anita Zehrer, Raechel Johns entitled "*Generation Y: evaluating services experiences through mobile ethnography*" is also based on the *concept of experience*.

The exploration-study aim was to understand how museums are experience-centered places and how they are perceived by Generation Y⁶ thanks to the identification of the customer journey, providing an insight into service experience consumption and deriving managerial implications for the museum industry on how to approach Generation Y.

The method is based on the innovated idea of *mobile ethnography* that sees the individuals dressed simultaneously as consumers and as active investigators capable of giving back opinions about their personal view of a product, a service or an experience. The absence of identification, of that "being part", of the investigated community which is instead approached through a collection of documents, contents and artifacts that are analyzed indirectly, leads the ethnographic style to be defined as exogenous. *Digital exo-ethnography* is the closer style to the post-demographic approach that no longer pays its attention to the individual characters, but rather to the users' relations, networks and social practices shown in this case via the digital device in terms of reactivity and preferences.

The empirical basis has been built concerning only the digital native elements: data are not in fact transposed from other media sources, but directly produced, and then collected via digital connected technologies⁷: thus extracting material

⁶Generation Y, which is often referred to as Generation Next, Millennials or the Net Generation, usually refers to people born between 1982 and 2002, distinguishing three generation units: Generation Why (born 1982-1985); Millennials (born 1985-1999); iGeneration (born 1999-2002).

⁷MyServiceFellow is the result of multiple publicly funded research projects and is one of the first prototypes of a mobile ethnography app (see www.myservicefellow.com). The app enables users to capture touchpoints right now of an experience. It allows adding and evaluating touchpoints on a five-point Likert scale (ranging from +2 to -2) and documenting touchpoints with text, audio, photos or videos, which can be each individually flagged as positive or negative. Participants can download MyServiceFellow to their smartphones (i.e. Android phones, iPhone, iPad, iPod Touch, etc.) from the Android Market Place or the AppStore. The caption of date, time and GPS data of each touchpoint allows the construction of a customer journey based on either route or time sequence of the user, even for complex tourism products. The data of each user is then uploaded to a web-based analysis software called ServiceFollow, which visualizes the touchpoint sequences of different users as a

from the net directly connected to the social phenomena that the researcher will analyze making primary use of secondary data.

The process concerns the information delivered from the user and the data collection from the researcher at the same time, and in the real time of the action: the reporting of the evaluation of the visitor's experience, at the same time as the experience. This leads to considering the web no longer only as an object but also taking into account the role the actors (users and researchers) play within it in a context that becomes a social participatory place in people's daily life. The "user-centered design of this method" (Muskat et al. 2013:59) is based on the user's spontaneous and generated content. Here is, in fact, the customer who decides how, when, and what to evaluate of his experience: all through a device that, thanks to its open manner configuration, brings to the researcher translated data that could not be intended as the result of a singular research action, but rather a new kind of output that involves observation, querying and reading action all together in an unobtrusive way.

Taking into account these specifics, different threats for the application of the study and its further evolution emerge.

Firstly, not perfect control over response rates, a potential loss of representativeness of the population and the quality of the data: the software used was developed to also capture GPS signals allowing the creation of maps that are useful to look at to see the participants' journey in their service experience, but during the experiment it was not possible to capture GPS data exploiting the benefit of the technology feature at the museum.

Secondly: the limits to the exploratory nature of the study. There is a necessary involvement of the awareness of being observed because of his/her spontaneous participation during the process, but at the same time a non-involvement of the researcher who is not in the field and has no identity for participants. The indirect involvement over only the time of the exploration study was not sufficient to confirm the interpretation of the main results of a study that needs more in-depth work beyond the limit of the single case study conducted in the only museum of Canberra (ibid, 60).

As has emerged in the description of the case studies, there are several threats among the two ethnographic approaches that mainly do not offer an acceptable helpfulness of results to the research. The cases have also demonstrated that it is possible to utilise a hybridization of methods, so now it is important to ask how we can reduce these threats while avoiding the exclusive and separated use of methods, but rather approaching them in a well-adapted and defined case by case cross adoption exploiting their singular gain powers.

touchpoint matrix. While the rows visualize each customer journey as a horizontal sequence of touchpoints, columns can be used to represent the same touchpoints of different users. The users' touchpoint assessments are aggregated to mean values to identify critical incidents immediately. These critical touchpoints (positive or negative) and their consolidated documentations can be the starting point for further in-depth research. (Muskat, Muskat, Zehrer, & Johns, 2013:59)

Open Conclusions and New Challenges for Ethnography to Test the Digital Scenario and the Introduced Method Revolutions

The evidence discussed highlights a particular suggestion for the proposed theoretical classification framework: although the understood practices can be used as extremes, netnography and digital ethnography can no longer be thought of as placed on a continuum that allows gradualness in the intermediate choices to be made by firmly fixing the starting points, the cognitive objectives and the results to be achieved.

This specific reflection leads us not to close this paper with a canonical discussion and conclusion, instead it moves us to a plane on which it becomes decidedly more appropriate to conclude the discussion by leaving room for the questions that remain open regarding the reflection that needs continue to be developed around the future of ethnographic practice in the digital age. Without claiming to be exhaustive, some of the lines of research on which to continue the reflection could be drawn from the questions that we leave here at the end.

Considering what has been shown, can it still be said that ethnographic practices are always so appropriate to the new scenario? Do these really work better than their classic version? What classic structures could, instead, be recovered/re-assessed? What is the scope of exclusivity of the two methods and to what extent can they coexist or merge? What happens to ethical issues? Can they really be shelved without particular reflection? How much will it be necessary to use digital or digitized data instead of shifting the research to the data produced by sensors completely reversing ontology and research actions?

The reply to these questions is not an easy nor fast task, but initial answers are already available in the results of our comparison: it becomes appropriate to draw partial conclusions and will become surely useful for required further in-depth advancements for the object of this study. The comparison shows for example, how unobtrusive observation can be valid for netnography as well for digital ethnography: in this way a partial reassessment of the structure of the traditional ethnographic research actions seems clear. Furthermore, in the study conducted by Rageh, Malewar and Woodside where there the application of the netnographic logic is clear, the partial hybridization of the method by choosing the secondary digital data already present on the network is equally clear, in a way that is closer to the rationale of the ethnographical practices in the framework of Digital Methods.

These are just some of the questions that can be brought to the reader's attention, and certainly do not cover the vastness of the semantic field touched upon. However, they clearly reveal the concerns and possibilities that the digital scenario is opening up for ethnographic practice and digital ethnographers.

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