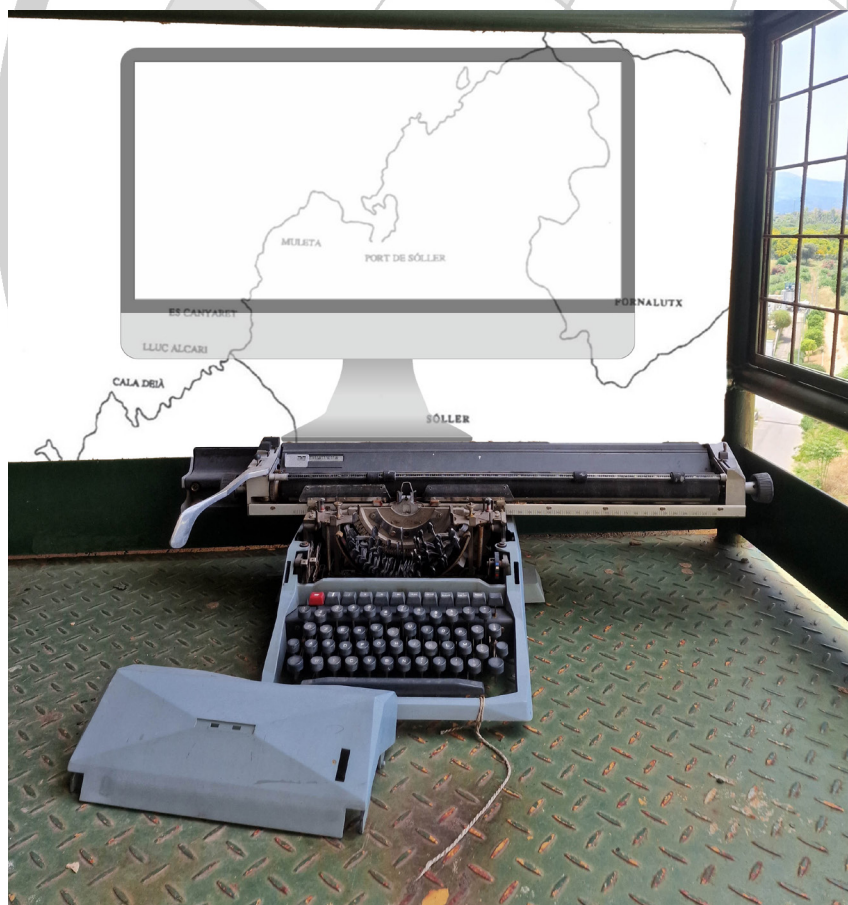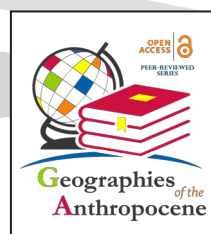# INFORMATION TECHNOLOGIES AND SOCIAL MEDIA: NEW SCIENTIFIC METHODS FOR THE ANTHROPOCENE

Gaetano Sabato, Joan Rosselló (Editors)

il Sileno Edizioni

Geographies *of the* Anthropocene
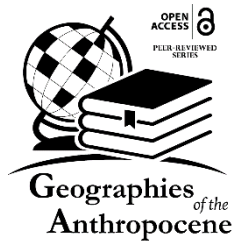
Information Technologies and Social Media: New Scientific Methods for the Anthropocene

Gaetano Sabato, Joan Rosselló

Editors

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The book series "Geographies of the Anthropocene" edited by the International Scientific Publisher "Il Sileno" (Il Sileno Edizioni) will discuss the new processes of the Anthropocene epoch through the various worldviews

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Section IV

Multidisciplinary research

1. Participation, geography and social media. Discussing method

Gaetano Sabato[1]

Abstract

The chapter, from a cultural geographical perspective, offers a reflection on the research methodology used to study some social media. More particularly, starting from the case of the Facebook group "Palermo di una volta" ("Palermo of the past"), subject of a previous study, the results achieved through the analysis of the research process are retraced. The group, in fact, for the many members (hundreds of thousands) who are part of it, is an opportunity to reconstruct the geography of places in the city, both in their contemporaneity and in their historical context, in an intertwining of individual and collective narratives. Regardless of the formal correctness of the information the group members reach, free participation in this reconstruction produces shared knowledge, giving value to interactions, albeit mediated, within the social network. It is a form of spontaneous "participatory geography" which, however, poses an epistemological problem to the researcher: joining the same group to study it, making the social network an object of study but also a means of study. In this sense, it is described how becoming a member of the same online community is a useful option for observing the interactions that take place within it (posts, comments, etc.) and establish a first contact based on trust with the informing members. In this process we cannot forget the positioning of the researcher "in the field", even if virtual.

Keywords: Cultural Geography, Participatory Geography, Research Methods, Social Media, Space

1. Introduction

Starting from the Web 2.0 revolution which allowed a previously unimaginable level of interactions, social networks have contributed to the

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realization of a new idea of participation on the internet in the last decade. This participation is often based on the sharing of narratives (textual, musical, images, etc.), in a complex inlay of private and public elements that has even raised ethical, legal, political and economic problems. Of course, social media has also begun to be a prolific field of study for social science researchers. This interest has produced many studies on the use of social networks, their impact on daily life and, more generally, on the way they are used by people. Also for cultural geography, social networks (and, more generally social media) represent a particularly interesting field of investigation. Indeed, if as Lefebvre (1991), Foucault (1975 and 2004), de Certeau (1990), Harvey (1989), Soja (1996) and Hooper (1993) have shown, the construction of space is culturally and socially determined, then the study of social media can be counted among the most significant cultural products for the investigation of our daily life, in particular as regards the (re)production of spatialities in a virtual environment. Furthermore, a not insignificant issue is the fact that the study of social media implies an epistemological reflection on one's own positioning in the field. In fact, it is possible to study a social network "from the outside" or "from the inside". The latter means by joining it as a user (see the chapter written by Stefano Montes in this book). Both modalities imply a different arrangement, different methods but, at least, complementary outcomes. For instance, the interaction with other users may be active or even non-existent, but the social network itself will become a sort of "fieldwork" within which the scholar is involved, even if only as an observer. In this chapter I propose a reflection on these issues starting from a case study on which I focused with Giovanni Messina and published in Italian in 2018 (Messina & Sabato 2018). The study was centred on a public Facebook group in which users were invited to reconstruct the places and their (personal and collective) memory of the city of Palermo, Italy. The members of the group were freely invited to share and reconstruct the places of the city, starting from the past or from the present. By sharing various types of texts and documents (textual, photographic, drawings, etc.), users build spatialities that no longer exist, as well as spatialities of the present or they even compare multiple historical eras, placing the emphasis on the transformation of the city. In this way, present and past are reconstructed with many urban places (streets, squares, public gardens, etc.), buildings, commercial activities, public and private transport systems (included insights on cars, buses, trams, etc.). For these reasons, our object of study appeared to us to be a form of participatory geography (Kindon, Pain & Francis 2003; Kindon, Pain and Kesby 2007a), certainly not scientifically structured, and yet capable of offering many insights. In turn, to conduct that research from a cultural

geographical perspective it was necessary to enter the mechanism of the group, exploring the dynamics of sharing and participation. Furthermore, as researcher I have experienced the need for an approach and a method that act "inside", using the same internet platform as a "meeting space" with informants and their cultural products (their "texts" in a semiotic sense) capable of reproducing mental maps and senses of space. As a matter of fact, studying the narratives of places also allows us to reconstruct the way in which they "shape" the urban space through a complex semantization process. Indeed, as de Certeau wrote, «narrative structures have the status of spatial syntaxes» (de Certeau, 2002, p. 115)[2].

2. Research and participatory geography: the case of Facebook group "Palermo di una volta"

The Facebook group "Palermo di una volta"[3], translatable in English as "Palermo of the past" or "The old Palermo" is a public not for profit group, created in 2008 by a private user. In 2018, when the aforementioned study was published, it counted about 59,000 members, but at the time of writing[4] the number of subscribers has almost doubled, numbering more than 117,000 members. A remarkable growth in about four years, also confirmed by the frequency of posts by its members. As can be seen from the title, the group aims to focus on the geographical and historical reconstruction of the ancient aspect of Palermo through the finding and sharing of period images and videos as well as "stories" that describe the past of the city. Besides, alongside the historical interest in the city, there is also a certain interest in the present, as evidenced by many posts and comments (see below in this section).

The tendency to create Facebook groups in which to reconstruct the past of one's city has a certain diffusion. As Van der Hoeven (2017, p. 303) writes, it is possible to «observe a wide range of grassroots initiatives that aim to document the urban past. Examples are Facebook groups where old photos of cities are shared, blogs with local memories, and online popular music archives. The local Facebook pages in particular are very popular. Nowadays, almost every city has at least one Facebook group with historical photos,

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[2] In the original French text: «Les structures narratives ont valeur de syntaxes spatiales» (de Certeau, 1990, p. 170).
[3] What is described in this paragraph is partially taken from the study already published (Messina & Sabato, 2018) but the contents are adapted to the reflection on the method used for the research.
[4] May, 2022.

provoking reminiscences and nostalgia in the comment sections. Interestingly, these groups bring cultural heritage to the virtual spaces that people use on a daily basis. In so doing, they make the past of cities available on social media in an accessible manner».

Indeed, the purpose of the group is well described in the "Information" section. A sort of appeal to the members of the group that explicitly invite members to share pieces of memory: the aim is to recreate an ideal common archive that can reconstruct the appearance of Palermo as it was in the past. In the words of the founder:

> How many of you know what our city used to be like? Probably few. I was born in the 70s, so I experienced, even as a teenager, the great transformation (not to mention devastation) that Palermo underwent from the 60s to the early 90s.
> […] If you browse the photo albums, which we all have in the family, of our parents or grandparents, where you can see streets, clubs, pubs and old meeting places or everything that has now disappeared or changed (houses, villas, buildings, squares, hotels, restaurants, trees, etc ...) please post them, in order to try to create a large archive that will help us and future generations to get to know this beautiful city better.
> If you do not have photos, write what you remember, what is no longer there, or has been transformed.
> Thanks in advance to all those who join this group and want to share with me this great journey into the past!!
> ("Palermo di una volta" Facebook group – My translation)

The appeal relies on a "bottom-up" perspective, since its author declares his age and recalls his own life experience to involve group members more easily. This could be defined as an identification mechanism which calls into action a wide audience on the social network, willing to put their knowledge into play and, above all, willing to share it. Besides, in this way the members of the group are more encouraged to consult relatives, friends and those who may have documents and information useful for the reconstruction of a past that is becoming or has already become memory. Obviously, the functioning of an online social network is based precisely on the interaction that occurs through the publication and comments of what is published. As Hinton and Hjorth (2013) and Crawford (2010) stated, communication on social networks is made up of comments, status updates and private messages in the form of a question or, even, a statement that does not necessarily intend to provoke a return response, but rather to maintain a link between a user and other contacts reminding them of her/his presence. The latter modality assumes a «phatic» value, that is, the maintenance of communication and «communication channel verification» to use Jakobson's (1980) terms.

From a cultural geographical perspective, the "Palermo di una volta" group is a continuous intertwining of micro-geographies (Elmes, 2005) and micro-stories (Ginzburg 2009) because even minimal elements of one's daily life and elements of collective history and geography converge in a complex narrative available to all members. In this sense, as I have already stated in the previous section, this collective and shared construction of Palermo spatialities can be considered as a form of participatory geography. It is clear that the members of the Facebook group have no scientific intentions, nor do they use methods that are explicitly referable to disciplines such as geography or historiography. However, they contribute in various ways to a form of knowledge that could be defined "from below", both for the open participation of several users, and for the modalities of mutual aid in the reconstruction of the city's geography. Furthermore, group members often show some agentivity (Duranti, 2007, p. 89) in participating in shared knowledge. Indeed, we must also consider that some discussions originated from the post of an image, or a text have often become real virtual debates through which the members exchange important points of view on the current conditions of the city and its administration. In particular, as already explained in the founder's post cited above, references to the so-called "Sacco di Palermo" ("Sacking of Palermo") are frequent. This latter is the post-war building speculation which, between the 50s and 80s of the last century, greatly changed the urban landscape without adequate planning through thousands of concessions and public contracts to front companies or names, or entrepreneurs often linked to the mafia organization. The "building boom" led to the destruction of historic buildings and an important part of Palermo's Liberty-style (sometimes carried out in a single day to avoid constraints from cultural heritage)[5]: episodes that for many members of the group constitute a lived memory. The comments to a post on these issues, therefore, give rise to notations and stories relating to those years and the events that followed with citations from other online media (newspapers, blog) and books.

Kindon, Pain and Kesby showed how the «PAR [Partecipatory Action Research – ed.] [has the] potential to transform unequal power structures and relationships to research and knowledge production» (2007b: 18). If we consider the group "Palermo di una volta" as a narration that collects many other narratives and which presents itself as a geographic and historical document of free compilation, is it partially comparable to a PAR, even if lacking a real planning and conduction? The answer to this question is not

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[5] On the theme of the "Sacco di Palermo" there is a near-endless bibliography, both in terms of non-fiction and chronicle. See at least Sisti, 2007.

obvious. What is missing is surely the most important element, that is, the scientific, organic intent to arrive at knowledge according to a disciplinary epistemology. On the other hand, there are many occasions when the debate on the most current issues of the city becomes predominant. In these cases, group members exchange views that even lead to open conflict. In this sense, the group becomes a sort of virtual *forum* where citizens confront each other on hot topics, building forms of collective critical knowledge.

3. The methods used to study the group

The research on the Facebook group was based on 15 interviews carried out with as many members: 8 women and 7 men. Interviews were conducted using the ethnographic method, with open dialogues organized around some guiding questions in order to avoid the rigid structure of a questionnaire. Below, Tables 1 and 2 show respectively the distribution of the ages of the interviewees and their composition based on their place of origin and residence:

Table 1- *Age distribution of respondents*

15 members interviewed of which	
20-30 years old	5
31-40 years old	6
50-60 years old	4

Table 2 - *Composition of interviewees by location*

15 members interviewed of which	
12 Italians	9 people born in Palermo (5 resident in Palermo; 2 in other Italian regions; 2 abroad)
	3 people born and resident in other Italian cities
3 Foreigners (Born abroad)	2 residents in Palermo 1 resident abroad

Specifying the origins of the interviewed group members is important to understand some dynamics. Indeed, from the composition of the interviewees

it can be deduced that the users are not only inhabitants of the city who want to know better the places and history of Palermo. The latter represent a third of the total, while less than half of the informants were born and lived in the Sicilian capital. The interviewees came from different locations, but the majority were Italians and, more in particular, Sicilians, with a minority of foreigners. About half of those who had lived part of their lives in Palermo from birth to the time of the interview had not lived in Sicily for years. Comparing these data with those obtained from the interviews, it seems that the members of the group use it for at least three different reasons: 1) learning more about the places and the past of their city (users originally from Palermo); 2) getting in touch with their origins, with their family members, historical or personal (Palermo users who no longer reside in Sicily); 3) learning about the geography and history of the city in which they have been residing for some years (foreign users).

Research on the group consisted of several phases. From the beginning it was considered more effective to study the group from the inside rather than from the outside. This opportunity seemed more suitable because in this way it would have been possible to study the dynamics of interaction. A first phase therefore consisted in observing the group. This was possible after a registration as a member. Various posts containing text and images, or videos were analyzed. The analysis also considered the interaction of users through posts in response to an initial question or observation.

In a second phase, I took part in some discussions already started to better understand the interactions with other members. For this purpose, I published posts in response to some requests for help by users who wanted to reconstruct historical places of the city. In effect, the contents most frequently published by users consist of one or more images accompanied by a short descriptive text. This becomes a caption for the published period photos (and therefore shared with other members) or it may contain a request for help (more or less explicit) addressed to members in order to reconstruct the places depicted in the image. This happens because the images often portray urban places in ways that are no longer recognizable in the present. Participation in this process was helpful in understanding what the priority was for several of the members who took part in the same discussion. In particular, a great curiosity and attention to the veracity of the information reported in the various reply posts emerged. Users paid particular attention to the answers in which expert sources were cited on the places photographed. This expertise was rarely supported by the direct citation of historiographical sources. However, more often the answers to requests for help in reconstructing a place drew on personal experience, personal knowledge of the places and the inlay between

stories reported or directly narrated. Considering many of the posts in the group, it is possible to detect a similar pattern of action: users find period images of Palermo online that portray landscapes, buildings, streets, passers-by or people intent on their traditional craft and, not having a caption for the images, they publish them on the group asking other members to help them recognize the subjects depicted in the photos. A typical request could be summarized as follows: «I found this photo on the Internet. Does anyone recognize this place?». Other times the question is accompanied by a different starting document: a family photo, or a recent photo taken by the users.

A third and last phase concerned the actual interviews. It was decided to propose open interviews to some users of the group using the same social network, in line with the desire to remain within the dynamics of the group. This choice turned out to be fruitful and allowed us to interview several informants who lived not in Palermo and who, therefore, it was difficult to meet personally. As mentioned, 15 informants completed the interview. However, it must be remembered that initially the interviews were offered to over double the number of users (32), but more than one in two refused to answer the questions. Users were initially contacted using the chat made available by the social network with some "filter questions". The reason for the request was explained to the users contacted, with some information about the research I was carrying out. At the same time, they were asked if they would like to freely participate in the research and, therefore, answer some stimulating questions. Furthermore, users were informed that the anonymity of the source would be maintained: no personal data would be disclosed, with the exception of age and origin (inhabitant of Palermo or not; Italian or foreign), since any other personal data would be useless for the purposes of the research. In refusing the interview, almost all users replied that they considered the research topic interesting, and in at least a dozen cases, the members of the group asked for some additional information about the study. The following reasons were given as reasons for refusing the interview, expressed on the basis of the number of responses: 1) lack of time; 2) little interest in participating. Instead, four informants gave no answer. On the contrary, those who accepted the interview freely answered some stimulus questions via the chat. Subsequently, the available informants were contacted outside the chat and social network for some more in-depth interviews.

The first approach to informants through the same channels of the social network made it possible to easily establish a first exchange. As researcher, I was also a member of the same group and had personally participated in some public discussions. Certainly, belonging to the same media platform was perceived as positive and allowed informants to accept the first contact.

However, the first chat interviews showed some limitations. The answers to the open questions were concise and only in some cases did the members express some opinions going beyond the questions posed to them. The subsequent interviews, on the other hand, carried out mostly by telephone and always through open-ended questions, gave more detailed results. In this manner, it was possible to understand better the value assigned by the members of the group to a sort of reconstruction of "truth", both in a geographical-spatial and historical sense. The attitude towards the correctness of the information found is sometimes ambivalent. And this ambiguity is not entirely deducible from the analysis of the posts: the interviews were the most useful source to explain this dynamic. Indeed, if it does not seem fundamental for many users of the group to arrive at a presumed "authenticity" of the narratives that are intended as objective as possible, nevertheless they manifest the desire to reach a "truthful" geographical and often historical (shared) knowledge of their origins. Rather, what matters seems to be the collective (re)construction of a "plausible narrative" (Messina & Sabato, 2018). This way of proceeding with the "reconstruction of the truth" uses a method similar to the contemporary historiographical one, as it is based on direct testimony (as well as on other sources), although this is not always available or verifiable. Furthermore, for more distant times, for example some images published date back to the first half of the nineteenth century – where direct testimony is now impossible – members based ideas on unverified and unverifiable hypotheses. A similar reasoning can be made with regard to the geographical reconstruction: the reliability of certain reconstructions is based precisely on the ability to recognize some places from the references present in the images, often marginal. The level of interactions seems to confirm this attribution (or negotiation) of meaning (Geertz, 1977) to the images and places to be reconstructed. Actually, during the interviews it emerged that almost all the informants in the group since their registration had responded to at least one post with a request for help in rebuilding a place. Additionally, group members usually continue to respond (or, at times, are prompted to do so by specific requests from others) to the initial post until the subject of the photo (often a place) and the source of its online retrieval can be established with some confidence. In this process, official historical sources are sometimes cited. On the contrary, the origin of the image that could include the photographer, the client, any paper publications are, in many cases, ignored or otherwise they fade into the background.

Moreover, exchanges and interactions between members of the group emphasize the fact that the city is in constant transformation, without a truly systemic vision of its changes being possible. As Amin and Thrift (2002, p.

8) well explained: «Contemporary cities are certainly not systems with their own internal coherence. The city's boundaries have become far too permeable and stretched, both geographically and socially, for it to be theorized as a whole. The city has no completeness, no center, no fixed parts. Instead, it is an amalgam of often disjointed processes and social heterogeneity, a place of near and far connections, a concatenation of rhythms; always edging in new directions».

4. Conclusions

In this chapter, through the case study of the Facebook group "Palermo di una volta" (Messina and Sabato 2018), I showed how it is possible to understand the construction of a shared knowledge based on the free participation of various users in the same virtual platform. In particular, I focused on the manners in which I conducted this research, considering that two of the three phases of the research indicated in the previous section were carried out entirely online. To better understand some internal dynamics to the group studied by Messina and myself, I became a "member" of the same virtual community. This allowed us not only to better observe how the various members interacted, but also to be able to interview our informants more easily. The complete interviews, as mentioned, were also carried out outside the social network, but the first approach with the members was facilitated by belonging to the same group. In this sense, the use of a digital resource has been both a research object and a method. The attention given to observation, interviews and the qualitative approach could place at least part of the methodology of this research in the riverbed of netnography (Kozinets, 2010, 2015; Kozinets & Gambetti; see also the chapter by Montes in this book) in a case of participatory geography. The reference to participatory geography needs to be clarified since it can be understood on two levels. The fact that the members of the group collaborate on a collective writing of the geography (and history) of the city is neither really organized, nor does it have a strictly scientific intent. The way of proceeding is almost always casual, spontaneous, animated by a generic intent of knowledge. However, when the research "on the group" began, having become an active member of the same group, having "observed by participating" as in the more structured ethnographic (or, if you like, netnographic) experiences, it passed to a different meaning attributable to participatory geography. Indeed, the meta-reflection on the group, on the members and their activities, the interactions between members and between the members and the researcher has opened a new perspective,

more organized and, at least partially, planned. Indeed, participatory geography has as one of its epistemological objective the awareness of the spaces for action and participation by citizens, for example. This awareness can also be articulated through one's participation in digital media. The "collective writing" of the city is a modality that even goes beyond the narration of the individual members to create a geography of space and time (Lefebvre, 1991; Lowenthal, 1985) and which implies a community agency, albeit mediated by the internet. About this, already in 2002 Amin and Thrift wrote that «in cities […] many […] communal bonds are no longer localized: they successfully persist at a distance, posing new tests of reciprocal resolution and commitment, constructing new forms of intentionality, building new types of presence» (Amin & Thrift, 2002, p. 43). From the point of view of the methodology applied to study the virtual community, it must also be said that even the first interviews carried out within the social network contribute to this process of the collective writing of the experience of the city. Actually, if the researcher is a member, like the others, of the same virtual group, he or she is involved in a process of knowledge that is both individual and collective, especially if – as in this case – the intentions and methods of the research are explained to the informants.

To conclude, the case study analyzed so far allows us to reflect even on another point. This regards the matter of how the methodology used to study, from the perspective of cultural geography, an online community that questions urban spaces and their history is a problem that fully pertains to (inter)disciplinary epistemology. This means that beyond the results obtained, it also concerns the agency and positioning of the researcher "in the field", even when this latter becomes "virtual".

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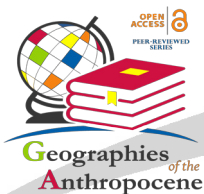
Sitography

Palermo di una volta Facebook group: https://www.facebook.com/groups/palermodiunavolta (last visit 7th May 2022)

The development of technology during the Anthropocene has affected science and the ways of "doing science". Nowadays, new technologies help scientists of several disciplines by facilitating knowledge and how to manage it, but also allow for collaborative science, the so-called "Social Science", where everyone can be a scientist and be involved in providing data and knowledge by using a computer or a smartphone without being a specialist. But is it really that simple? Actually, the daily and integrated use of different digital technologies and sharing platforms, such as social media, requires important reflections. Such reflections can lead to a rethinking of epistemologies and scientific paradigms, both in human geography and social sciences. This volume titled "Information Technologies and Social Media: New Scientific Methods for the Anthropocene" includes 10 chapters exploring some changes related to the way to do science with a multidisciplinary approach. From classroom experiences to the use of Citizen Science, from Artificial Intelligence use to how Social Media can help researchers, the book reflects on the ICT influence during the last few decades, exploring different cases, complementary perspectives and point of views.

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