Preprint version/final version will be available at:

Beneito-Montagut, R. (in-press). Analyzing multimedia social interactions on social media, Atkinson, P.; et al (Ed.) *SAGE Research methods Foundations: An Encyclopedia*

Analyzing digital social data Introduction

Society has become thoroughly mediatised. Every aspect and part of society from the economy, politics and education to civil society and everyday social relations is immersed by media. Today we have the internet, smart phones, apps, social network services, blogs, email, and other social media platforms. Social media has brought changes to the way we inform, communicate with others, learn, play and socialize. Most people are quite well connected and communicate with others and while being connected they obtain, organize, produce and share information on a regular basis. These common routinely activities generate a large amount of information and knowledge of different forms, much of it created by 'ordinary people'. This information is generally referred as digital social data which is potentially of great interest to social scientists (Sloan and Quan-Haase, 2017).

From the emergence of the internet, both quantitative and qualitative research have been interested in analysing digital data for its endeavour. As social media have enlarged the size and variety of the traces of social actors' actions and expressions, the analytical possibilities available for social science researchers have been reshaped too. This has brought to the fore the necessity of methodological innovations and interdisciplinary collaboration for the study of social media data. Conversely, this digital turn has generated lively debates about its potential to know the contemporary social world. While at the beginning of internet research scholars tended to study social life online as a separated from 'real life', researchers disputed this and argued the need for online social life to be viewed as an integral part of social life (Beneito-Montagut, 2011). Nevertheless, linking social media data to what is going on offline is still one of the challenges of digital social science research.

Most of the methodological innovations have been made regarding the analysis of big data and technological tools to make sense of it, but not much has been said about how to qualitatively analyse social media data. This chapter deals with the analysis of social media data and offers a framework which considers the limits and challenges that this kind of data poses. Rather than offering a prescriptive method, it attempts to document the reflective

process to incorporate social media data to qualitative research projects considering how we extract meaning from them. So, it is presented as a toolkit to start thinking about the analytical process instead of a universally applicable model. The aim is to link the analysis of social media data to well-stablished research paradigms, instead of reinventing them.

Modes and media. Multimodality and multimediality

The first section brings some definitions to set together the differences and common grounds of two terms: multimodal and multimedia. We will also put these two concepts in relation to the digital context and explain the reasons why we use multimedia. Yet suggesting multimodal research as a useful analytical framework to analyse social media data.

We first define modes and media. Modes are ways of re-presenting information –the semiotic means used to compose a text. Note that text is understood, in a wider sense, as any socio-cultural artefact or act that embeds communication. Examples of modes comprise words, sounds, still and moving images, animation and colour (see Bella Dicks' chapter). Media, on the other hand, are the tools and material resources used to produce and disseminate texts. Media are technologies, channels, practices and platforms which we use to disseminate share, obtain, store, organize and create information about the world around us through communication and interaction. Examples of media, both broad and narrow casting, include books, radio, television, computers, smartphones, paint brush and canvas, and the body. The internet and digital tools are usually referred as digital media.[1] Hence, although media and modes are different and independent of each other, the media used affects the ways in which meaning can be realized through modes –or each media affords certain possibilities for communication or action. Accordingly, these concepts are independent and interdependent from each other at the same time.

A multimodal text is characterized by the use of several different modes. In multimodal research, communication and representation is more than language, it refers to semiotic approaches as in the analysis of colour, shape, image, gestures and gazes in communicative situations. It assumes that our languages and their modes (written, oral, visual, gestural) attach meanings (semantic, symbolic and affective) and are world making. Its major influence comes from social semiotics. Multimodal analytical approaches have provided concepts, methods and a framework for the analysis of multimodal data.

[1] Also, they used to be called new media.

Multimedia, in turn, refers to both (1) the media forms emerging from internet based, computing and *interactive* technologies, and (2) the *interactive* content that has been created with digital technologies or computers. A chief characteristic of multimedia data is that integrate text, graphics, drawings, grids, still and moving images, animation, 3D, audio and any other mode that can be displayed, stored, communicated and processed digitally. For instance, a YouTube video is considered a multimedia object, as it is inscribed in an interface, which might contain subtitles and links to other resources. It also has additional kinds of data which tell something about the interactions with the multimedia object -such as who the author is, numbers of views, likes and dislikes, and public comments made by the viewers and authors. These comments can be responded and prompt a conversation. All these forms of data can be analysed. In this definition of multimedia, the emphasis is on the *user* and what the mediated text will allow the user to do with it. There is a greater stress on the interactive affordances of the medium from the perspective of the user, meanwhile, the multimodal idea focuses on the creators of the content/message and their usage of different modes to convey meaning. Likewise, the emphasis in "multimedia" is the technological form or the medium of presentation, whereas the emphasis in "multimodal" is the means to persuasion. While multimodal term is rooted in the semiotic tradition, multimedia is more related with computing and tech-oriented contexts and underlines its interdisciplinary character. It is also more frequently used in public, industry and non-academic spheres.

There is yet another kind of data which is becoming more common in the digital milieu and is potentially interesting for social sciences research: multi-sensory digital data. Recent virtual and augmented reality technologies present social actors with multi-sensory information and 3D effects in real-time. When people interact with a virtual or augmented reality technology they have a sense of being fully immersed in it. It is an embodied immersive experience. For instance, many museums and institutions are offering virtual tours of their buildings and exhibitions, or there are programs that simulate real events such as flying an airplane with the aid of glasses, helmets or rooms/environments. These interactions with immersive technologies are registered with sensors and digital technologies.

In brief, multimedia texts are inherently multimodal, because rather than only being texts that combine various media (such as the book, radio, television, and computer screen), they are texts that combine a variety of modes (as image, animation, sound and senses) disseminated through media (such as a mobile phone devices). For some scholars, multimodal research includes the analysis of multi-sensory data, and this is the position that we take here too. From an analytical perspective, the rationale behind our choice of

multimedia rather than multimodal reflects the analytical focus on the content, the technological infrastructure (how the content is digitally organised and how it affects or matters) and the user. Multimodal research has tended to explore the "modal" analytical capabilities of gathering the data via digital devices (such as video cameras). Multimedia research also recognizes the role of the media, as the medium used have a role in what can be done and said; how it can be done, and what kind of things are more likely to be created, shared or reach to some parts of the population or others. Finally, treating the data as multimedia also places the focus on naturally occurring and user generated data.

Multimedia data and their particularities need to be brought to the fore in social sciences too, in conjunction with multimodal approaches. This task is even more relevant when we are interested in the analysis of current digital data produced in/by/through social media platforms.

Social media data qualities and the role of the social media platform

The emergence of social media platforms has changed the boundaries for social interaction. Social media is conceptualized in this chapter as any internet-based service, operating in any connected device, that allows individuals to share content, opinions and information, promote discussions and build relationships. Social media, then, refers to both the technologies (platforms) and the practices (collaborate, connect, interact, inform, share). Qualitative research is transformed when the researchers try to capture the rapid and always changing traces of online sociality, through digital tools, and attempt to make sense of them. Digital social data are the forms of data emerging from social interactions online. A distinction needs to be made to differentiate digital data generally (such as video recordings or photos which have been broadly used by multimodal and visual research) from digital social data. The first one is data generated and digitally registered for research purposes. Meanwhile, the second refers to user generated data, naturally occurring mediated data (Edwards, et al, 2013, p. 247), digital traces, or the routine generation of data about social life as part of social life (Fielding, Lee, & Blank, 2008; Marres, 2012). This chapter is interested in the second form of data: from now social media data.

There are two clear methodological issues regarding social media data in addition to the multimedia facet. In trying to describe social media data within a continuously changing environment we need to consider a broader range of qualities and add an eight-point typology of different data types. This has also been referred as data variety (Williams et al., 2017). The most important argument here is that while traditionally qualitative social research has relied on one type of data, such as verbal or textual data from interviews, social media and software packages have enabled a more wide-ranging collection and analysis of naturally occurring data –non-obtrusive and theoretically free of researcher bias– which contains more modes and qualities. Hence, the issue are what qualities are collected and what qualities the researcher focuses their analysis on.

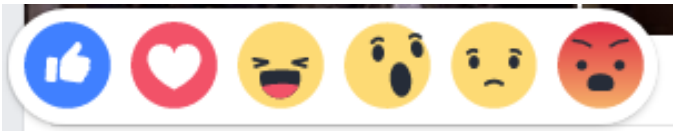
As an illustration of the qualities of the data let's scrutinize a post in a Facebook group page and the data qualities on it (figure 1).

Figure 1: A post in a Facebook group

It contains (1) verbal data, as a textual post, and this might incite an online conversation in form of comments and replies to that post; (2) visual data, as posts and online conversations might include emojis, GIFs, maps and can also take place around photos. Similarly, it might contain (3) audiovisual data such as videos or screen recordings. An interesting type of data which is possible in Facebook is (4) the digital actions, "gestures" or concurrent actions that the platform includes such as the "like", "love", "wow" and so on, including frequencies (figure 2). Beyond what can be seen through the interactive interface,

there is (5) meta-data –or data that describes other data. It is not always visible but some tools available to gather digital data (such as NCapture) collect this information too.

Figure 2: Digital actions



The connection of Facebook with other applications (such as running apps) through mobile devices and wearables (such as Fitness-tracking bands, smartwatches and so on) allows the display of (6) self-tracking and sensor data. Likewise, Facebook can be analyzed as an (7) interface that restricts or permits certain actions; in relation to how the information is organized and displayed; how the algorithms work and what kind of knowledges privileges or hinders. Finally, there are (8) social network data too which informs about the relationships among social actors. In the following section, we will provide exemplars of digital social science research that qualitatively analyzes the data looking at one or more of their qualities and modes. There are different analytical angles and possibilities in one data set, as we will see.

A second relevant issue to consider when doing qualitative digital research is the role of the social media platform. This adds an additional layer of complexity to the data qualities one. Social media can be conceptualized as both a *setting for data collection or generation* and *a digital social phenomenon* by itself. The first possibility refers to the kind of research interested in any aspect of *live experiences*, and to do so, uses social media data as naturally occurring traces of those experiences. It uses digital social data to respond at the 'coming crisis of empirical sociology' (Savage and Burrows, 2007) and advances these arguments by suggesting the need for qualitative research too. An example of that can be found in the innovative research studying Twitter campaigns, which provides an analytical framework to connect Twitter interactions –and users expressions– with the real-time identification of local uncivil behaviour (Housley et al., 2018). The final goal is to use Twitter data as a real-time information system to detect civil unrest. This body of work has highlighted the need of qualitative research to inform big data analysis.

The second option understands social media as a social phenomenon by itself. Social media has its own particularities, and research in this area dedicates its endeavour to study them and their effects. It includes the research interested on the specificities of online

sociality and culture, technological innovation, adoption and use. A more particular example comes from a quite developed body of research studying the digital self. In Tiidenberg and Gomez Cruz (2017), for instance, the digital body is understood as a distinctive experience. The focus is on the possibilities that the digital offer for the lively experiences of the body, so the social digital data is not the proxy or the trace of anything else. It is the matter of interest.

Eventually, it is also necessary to mention that in digital social science research, as in social science research generally, data collection cannot be treated just as a technical process and completely separated from the analytical stage. How the data is collected and what qualities are being registered in the data set affects the kind of analysis that will be possible later. Several technological advances have been done regarding the collection of social media data (such as COSMOS, NCapture for Nvivo or Chorus). These pieces of software usually offer "analytical" tools too, but the analytical possibilities inscribed on them are also affected by technological and social affordances. Consequently, digital social data is sensitive to context of production (Housley and Smith, 2017). Moreover, for those of us that think that analysis entails a reflective process, not just a technical one, these analytical tools just support the management, organization and visualization of the data, but not the analysis itself. They are not a substitute for the sociological imagination.

Analysing social media data and the role of the social media platform

The main question when analysing social media data, then, is: what are we analysing? As introduced above it is complicated to differentiate, first, that the digital data could be the trace of actions and behaviours which happen physically or could also be the action itself. Second, the data have many qualities as seen above. And the question now is what interpretations each quality of data admits. Indeed, each of the qualities of social media data can speak to a different analytical paradigm and each analytical approach primes towards different analytic objectives.

To start unpacking these issues, the first stage for a qualitative digital research project is to identify what is the focus of the study: communication, action or experience. In this respect, and following Dicks' proposal (2014, p. 657), there are three broad qualitative analytical paradigms to study multimodal, multisensory and *multimedia* (our addition) data

which can also be applied to digital contexts: social semiotics, ethnomethodology and experience oriented (including material and sensory). This is important because each implies a distinctive way of knowing the social world and because inexperienced researchers usually struggle to realize that each way of knowing the social world implies a decision on what is understood as meaningful data and where our attention should be focused upon. The decision will also entail one way of generating/collecting data or another. Moreover, applying this framework overcomes a single focus on the platform and offers analytical strategies that will transcend specific social media platforms and their ever-changing socio-technological affordances.

The typology of analysis, data qualities and the analytical paradigm summarized in table 1 describes a way of relating the variety of data with the potential analytical lens. We do not intend to set up unwarranted boundaries and distinctions amongst analytical approaches neither treat each paradigm as homogeneous. It is necessary to acknowledge that there are many crossovers. Whilst putting them together and in relation with the varieties of social media data we try to support students and new researchers in the area by pointing at well-established analytical traditions in social sciences. These could be adapted, re-invented, augmented and mixed in qualitative digital research projects. This position attempts to reconcile the continuity of methods and the novelties in social media research.

Table 1: Examples of types of data, typical analytical approach and typical analysis.

Data qualities	**Examples in Social Media data**	**Digital data**	**Typical approach(es)**	**Typical Analysis (examples)**
Verbal (and textual) data (1)	Expressions, ideas, opinions, attitudes, etc. Online conversations. (e.g. Facebook posts and or comments, Youtube videos' comments, Tweets, etc.)	Text	Social-semiotics	Discourse Analysis Thematic analysis Content analysis (including sentiment analysis, semantic analysis)
		Act	Ethnomethodology	Conversational analysis Interaction order Membership categorization
Visual data (2)	Photos, emoticons and other visual productions such as maps, graphs, GIFs, etc. (e.g. selfies, maps, etc.)	Text	Social-semiotics	Thematic analysis Visual analysis Discourse Analysis
		Experience	Affects and materiality	Visual analysis
Audio-visual data (3)	Videos, screen recordings, video-games recordings, etc.	Text	Social-semiotics	Thematic analysis Content analysis Visual analysis Multimodal discourse analysis

	(e.g. Youtube or Vimeo videos)	Experience	Affects and materiality	Sensory analysis Visual analysis Multimedia analysis Multimodal discourse analysis
Digital actions (4)	"Gestures" or concurrent actions. (e.g. like, Retweet, Favouriting, Endorsing, etc.)	Act	Ethnomethodology	Conversational analysis Interaction order Membership categorization
Meta data (5)	Data which is not always visible from the interface. (e.g. such as geo-location, logs, frequencies, interactions.)	Act	Ethnomethodology	Interaction order Content analysis
		Experience	Affects and materiality	Sensory analysis
Sensors data or self-tracking (6)	Data from wearables, mobile apps, GPS, self-tracking technologies (e.g. miles running, calories burnt, movements, etc.)	Act	Ethnomethodology	Interaction order Content analysis
		Experience	Affects and materiality	Sensory analysis
Interfaces (7)	Interfaces' design of social media or mobile apps.	Text	Social-semiotics	Discourse Analysis Thematic analysis Content analysis Visual analysis
Social Network data (8)	Information about the links and relationships in social media (e.g. Follow/Followers, Friends, Connexions, etc.)	Acts	Ethnomethodology	Interaction order Qualitative social network analysis (SNA)

Source: Own source

At the same time that we present these analytical approaches, we also want to warrant about the thinness and limits of these models and data types. So, they need to be assessed regarding their capabilities to capture the phenomena under study. What is important to highlight at this point is that each orientation demands different analytical lenses and focus. Finally, as we will see in the following section, many times social media data are collected in conjunction with data collected using 'traditional' methods (such as fieldnotes, interviews or focus groups) in an attempt to link the digital facets of social lives with social life.

Communication, action or experience

The initial and necessarily incomplete proposal presented in table 1 functions as a starting point to answer the questions: what can be known with a particular social media data set (i.e. such as Tweets)? It allows to identify analytical models to understand what is going on and which approach should be given priority subject to the goal of the research. It also helps to know beforehand what kind of knowledge can (or cannot) be achieved with a determined data set with specific data qualities. Furthering on this framework proposal, we

offer a description of each orientation in the context of the digital society. We also provide illustrations of research using each analytical framework to shed light on the issues discussed.

Social media data as text and discourse

Within the communicative approach, social media data is understood as text in context –remember that text is conceptualized in a very broad sense which considers written expressions but visual data, interfaces and graphics too. The analysis is interested in the ways social actors use semiotic resources to produce communicative artefacts and investigate how these choices have implications for meaning making or making worlds. It is also interested on the actors' interpretation of them in context, as meaning is only activated in social situations. Texts in social media can be studied to learn about power, politics, social relationships, families, equality/inequality, and many other social phenomena. They include expressions of attitudes, intentions, identity, opinions, relationships, locations and representations. Aspects to consider within this approach relate to the technological and social affordances of the specific social media platform. For instance, the communicative acts in Facebook are technologically devised in a particular way (public wall and comments, private space for more intimate communications, group pages, friendship politics, and so on). But also, there are particular groups of users that dominate the understandings of the communicative practices in the determined social situation. Some of the most common qualitative analytical approaches within this broad category of communicative practices are:

- *Thematic analysis* generally aims to identify, study, organize, define and report themes emerging from a data set. It focuses on the verbal quality of the data. For example, Das (2017) analyses 1930 posts in 12 discussions threads on the *Mumsnet* website. She found three themes arising from the digital data set: "the multi-pronged functions of writing birth narratives, the discursive and perceived silencing of difficult stories, and the overt individualization and self-management evident in women's accounts" (p.1). Thematic analysis can be applied to visual data as well. Gibbs et al. (2015) analyzed 1330 photographs shared on public profiles tagged with #funeral to understand photo sharing practices in social media.
- *Discourse analysis* (DA) and *critical discourse analysis* (CDA) focus on what social actors say or write (text and talk) and propose that all meaning making processes occur discursively (Boréus and Bergström, 2017). In their research, Veum and Moland Undrum (2018) explored a data set of 100 selfies and the attached captions

shared on Instagram. The analysis focused on the embedded ideological meaning in digital communications through self-portraits. The analytic lens was critical multimodal discourse analysis and the focus was on visual and linguistic qualities.

- *Multimodal (critical) analysis*, in turn, refers to an analytical frame which includes data beyond written text. It is interested in the different modes employed in communication. The previous example regarding critical discourse analysis, also serves to illustrate what multimodal data analysis means, as it analyses both, written text and images. Another example can be found in Tiidenberg and Baym (2017) work, interested in normative pregnancy discourses in Instagram. The social media data used in their research were images, hashtags and captions in pregnant women's Instagram accounts "to understand the authorative knowledge(s) they enact or resist" (p. 3).
- The previous examples have focused on the analysis of social media data which is user generated through digital platforms. But we also want to bring here a frame for analysis based on the *rethorics* of social media applications (as this is data also generated by individuals -software developers- and might imbedded a script). In this case, the analysis focuses on the semiotics of the platform itself. An interesting example of this strategy can be found in Lupton and Gareth work (2016) who analysed all the pregnancy related apps found on the Apple Store and Google Play. They described how the apps configure pregnant embodiment.

This is only an exemplar list, not exhaustive and complete, of potential analytical frames using a semiotic perspective. What we have learnt from these examples is that most of the recent research using social media data combines different analytical strategies. Yet, this body of research is not only interested in documenting discourses but also in studying how and why these discourses are enacted for use on particular occasions.

Social media data as acts

Under this heading we refer to studies that are interested in online –and offline– actions rather than in communicative practices *per se*. It is mainly ethnographic research keeping the analytic scrutiny focused on social actors, their precise acts, and the objects and materials they use (more about ethnographies in online environments in flagship XX). Therefore, it attends to a range of diverse data. Acts in this arena mean ordinary and everyday

actions that social actors assemble within mediated conversations, situations and practices. So, meaning arises strictly in naturally-occurring situations. This is probably one of the reasons of the popularity of ethnographic approaches to analyse social media data.

Yet, the particularity of this analytical orientation is the kind of knowledge that emerges not only from closeness but also from the intersubjectivity of social actors in place. It observes how meaning emerges from within the acts and with talk and material objects. Now, we present a few possible analytical venues within it.

- *Interaction order(s):* Much has been said about how the interaction order has been reshaped by social media (Housley and Smith, 2017). These studies generally focus on notions of identity, self and communities. It implies analysing conversations (*conversational analysis*), and the contingent acts (likes, Retweets, favouriting, tagging and so on) that sustain or enhance these conversations, given the lack of visual and gestural cues of mediated communication. We can found an example in a study demonstrating the value of an interactional approach toward social media analysis by examining Twitter data (Housley et al., 2018).
- *Self-tracking data* analysis responds to a growing interest in both, social actors using technologies to "measure" and track their behaviours (or acts) and researchers employing these data to study social life. Thus, this analytical frame encompasses the study of data generated through the use of smart 'sensors' or self-tracking applications. Hall and Smith (2014) documented through the use of mobile GPSs the spatial distribution of a team of urban outreach workers' practices, as they search for and locate rough-sleeping people. Another recent qualitative research strand analysed self-tracking data and what people do with these data (e.g., Ruckenstein, 2014).
- *Membership categorization analysis* is a ethnomethodological approach that observes "the practical methods of categorization work in relation to the local accomplishment of social and moral organization and order" (Housley and Fitzgerald, 2009). An early example in social media research is found in a study of online forums data to discern the masculinized parameters through which 'metrosexuality' is taken up (and rejected) (Hall et al., 2012).
- *Social network analysis* is a specific technique for exploring patterns of networked relations among social actors (Scott and Carrington, 2011). It is broadly acknowledged that SNA has roots in the qualitative tradition. Few researchers rely only on social network data, even though ethnography can generate rich data about

particular interactions. An illustration can be found in the so-called "network ethnography" (Howard, 2002) in which qualitative social network analysis is used to studying complex organizations that operate digitally at distance.

Following Housley and Smith arguments (2017), suffice to say that social media data offer exciting opportunities for interactionist research although, as mentioned, also raise questions about what can be known about social life with digital data.

Digital data as experience

An analytical framework which proposes understanding data as experience responds to a recent move towards a re-integration of the senses and to the so-called "affective turn". In social media research, it also responds to a call for deep and thick investigations into the human experiences with and through digital technologies – as a counterargument to the big data deluge and its analytical promises. It is interested into the processes as they assemble in everyday life. There is a concern with multisensoriality and multimodality –and multimediality too– and it takes the sensing-self as a way to know and experience. It also welcomes affects as valid knowledge(s). The goal is to grasp a broader social significance of social media for the human experience. All in all, in order to achieve this, various frames of analysis are usually needed, some of them already introduced above. Social media data, then, is understood as live, felt, experienced and relational to other material or non-material things. This is obviously a task which is well suited to ethnographic approaches.

- *Multi-sensorial analysis* "entails taking a series of conceptual and practical steps that allow the researcher to re-think both established and new participatory and collaborative ethnographic research techniques in terms of sensory perception, categories, meanings and values, ways of knowing and practices" (Pink, 2015: 7). A recent example of this approach can be found in Pink et al. (2017) analyses of video, self-tracking apps and interview data to make sense of the cycling experiences of commuters.
- *Digital data materialities* responds to a body of work which is increasingly (ontologically) concerned with questions of materiality. This interest can be interpreted as both, a reaction to the myth of the immaterial or "virtual" nature of digital communications and technologies, and a willingness to access to the "affects" of the technologies not just to the effects. Humans can feel, touch, see, hear and

experience through mediation too and scholars want to know about technological things and their doings. An example can be found in Lupton's (2018) work about food consumption apps, although it should be highlighted that the analyses is based on interview data and the analytical input from the apps themselves is not explicitly presented in the article.

- Two additional examples of combining analytical frames on the above lines can be seen in Keller et al. (2016) study of responses to rape culture and Beneito-Montagut et al. (2017) research on later life online, who made use of online and off-line data generation and collection strategies. This body of research has combined the discursive, interactionist and material affordances of social media data by combining several analytical frameworks and applying creative and innovative methods for the analysis of the data.

These research strategies of combining online and offline methods and analytical frames allow to overcome some of the idiosyncratic limitations of social media data. The analytical limitations of each approach should be placed alongside results to confirm that they are not inappropriately drawn. It is necessary to consider that social media expressions are performative social actions, so not free from observer or group effects. Thus, potential changes in users' behaviours might occur. For instance, publications in Twitter might be profoundly affected by reputation and promotion concerns. In the same lines, as performative actions, it is difficult to know how reflective online behaviour (social media data) is of offline behaviour. As an illustration of this, it is generally acknowledged that people tend to over-state (positively or negatively) and, furthermore, there is a 'echo-chamber' effect that skews the content somebody is exposed and reacts to.

A reflective process

As we have seen, the methods to analyse social media data are very diverse. Qualitative analysis of social media data is more than digital text analysis.

There are many choices on the process of doing research in this arena, some are ontological –concerning to what is 'real' in social media– and some epistemological. More pragmatically, once the researcher has a research problem and is aware of the role of the platform, data collection actually begins with the critical decision of where and how to collect the social media data. Some of the options are to select a (1) *social media platform* (i.e.

Facebook, *Twitter*, *Instagram*, online forums), (2) the [online and offline] social phenomenon (i.e. friendship, social movements, motherhood), (3) the participants [through sampling techniques] or to choose an (4) instrumental case study (such as analysing a topical hashtag on Twitter). In table 2 puts everything together. As we have seen, the social media data can also be mixed with 'traditional' data collection methods but we keep the focus on social media data in table 2.

Table 2: Reflective process to analysing digital social data and tools

Stage	**What to focus on?**	**Reflect upon…**
(1) Role of technology	Place for data collection	How the platform affects the data (the possibilities that any object, within a social media platform, offers for action) and social affordances (how dominant groups shape the kind of practices that can be observed)
	Phenomenon per se	
(2) Collecting the digital data	Social media platform (e.g. Instagram)	On what can (or cannot) be known with the data that will be generated from each of these initial approaches. (e.g. what Facebook friendships means? Will it be possible to known something about friendship offline using data only from a FB group?)
	Social phenomenon (e.g. Friendship)	
	Participants (e.g. 10 feminist activists)	
	Instrumental case study (e.g. #metoo on Twitter)	
(3) Analytical model	Communication	What data qualities the project is interested in? What are the underpinnings of the research and what is the relationship between the data generated and the focus of the project. Explore the options for reconciling what people say that they do with what they actually do.
	Interaction	
	Experience	

We do not want to finish without pointing out as well at the various mix-methods analytical possibilities arising from the use of digital social data, including quantitative data analysis. Digital social media interactions offer rich data –multimedia, multimodal and multisensory– and triangulation is possible even within the same data set. That is also true for all those projects that combine online and offline data.

The questions posed along this chapter reflect ongoing demands for increased reflexivity. But at least, we hope this chapter has offered a starting point to support this necessary reflective process. It attempts to point towards the key aspects that a researcher needs to think about when analysing social media data qualitatively. Researching digital

society requires researchers that are even more critical and more reflective than in other scholarship areas where analytical models have already been proved valuable once and once again. They need to deal with further complexities than those accepted regarding the study human beings. The technologies add complexities to the equation.

In this context, we would like to conclude bringing here the idea of methodological bricolage, which requires to ensemble an analytical frame, in a coherent way, with the research goals and underpinnings. We need to think carefully about the ways to integrate digital social data in qualitative research endeavors.

Further Readings

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