Exploring feminisms on Instagram Reflections on the challenges and possibilities of incorporating digital methods strategies in feminist social media research

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Abstract

Over the past decade, Instagram has become increasingly popular and embedded in the contemporary experience of everyday feminisms. The platform allows for the co-existence of political, personal, mundane, and aesthetically-oriented content, created by both established feminist actors and "ordinary" people (i.e. not activists, career politicians, or celebrities). While feminist media studies have long studied similar practices of online feminism, historically the discipline has tended to privilege qualitative approaches, rather than more quantitatively-oriented digital methods approaches. However, the study of feminist expressions on Instagram can benefit from a critical engagement and selective embrace of some possibilities enabled by digital methods. This article offers a reflection on the use of digital methods' tools and strategies informed by a feminist media studies theoretical and epistemological lens. This draws on an exploratory case study conducted by the author, which combined qualitative and digital methods to explore a wide landscape of feminist hashtags on Portuguese Instagram. Grounded on this case, the article examines the methodological possibilities and challenges brought by digital methods, and the tensions that can arise from their combination with qualitative feminist approaches. It explores how digital analysis tools can be adopted in combination with qualitative analysis, allowing for the emergence of new insights, critical engagements with large amounts of data, intuitive explorations of datasets, while still allowing to zoom in on specific content for in-depth qualitative engagements. Finally, it also reflects on the ethical implications of a feminist approach to digital methods at the data collecting stage, positing methodological alternatives grounded on a feminist ethics of care.

Keywords: digital methods; critical methodologies; social media feminisms; hashtags; Instagram; Portugal

1. Introduction

In the more than 10 years since its introduction, Instagram has become a widely used social media platform, with over 1 billion users worldwide (WeAreSocial, 2023a), and deeply embedded in everyday

live. The platform has also become a part of contemporary experiences of everyday politics (Highfield, 2016), particularly in practices of everyday feminism (Pruchniewska, 2019). Contemporary activist and feminist practices are often imagined as "digital by default" (Fotopoulou, 2016), with social media establishing itself as a site to engage in dialogue, education, sharing of information and resources, community building, and mobilising feminist action across geographical boundaries – in what's been often termed the fourth-wave of feminism (e.g. Chamberlain, 2017; Munro, 2013). However, Instagram as a platform is often associated with aesthetic, entertainment, and commercial practices (Leaver, Highfield and Abidin, 2020). In this context, activist practices co-exist with expressions of popular feminism grounded on contemporary pop cultures (Banet-Weiser, 2018), and on personal practices that can reflect gendered politics (e.g. Caldeira, De Ridder and Van Bauwel, 2020). As such, Instagram everyday feminisms are carried not only by traditional and established feminist actors – such as activists, politicians, or celebrities – but also by so-called "ordinary" people engaging with the platform.

Different social media platforms, with distinct affordances and cultures of use, can facilitate different modes of political expression (Keller, 2019). Yet, much of the scholarship and media imaginaries concerned with online activism tends to be dominated by other platforms, such as Twitter. The ways in which platform vernaculars of Instagram shape political and feminist discourses are still under-researched (Caliandro and Graham, 2020).

This scope of research draws on the scholarship of the field of feminist media studies (e.g. Harvey, 2020; van Zoonen, 1994), which has long studied feminist practices online (Marwick, 2019; van Zoonen, 2011). However, while the field has historically tended to privilege qualitative methods of data collection and analysis (van Zoonen, 1994), engaging with digital objects and cultures can benefit from approaches that employ digital methods and tools to not only conduct research *about* the internet, but to conduct research *with* the internet (Rogers, 2018). Yet, adopting such approaches can be accompanied by tensions and hesitations, as working with social media data can bring forward challenges that need to be reflected upon to embrace of the possibilities enabled by digital methods (boyd and Crawford, 2012).

This article presents a critical methodological reflection on the adoption of digital methods informed by a feminist media studies theoretical and epistemological lens. This departs from the author's own concerns, drawing on the process of designing and conducting an exploratory case study that combined qualitative and digital methods to explore a wide landscape of feminist hashtags on Portuguese Instagram. While feminist methodological considerations can permeate all stages of research, this article focus largely on showcasing how existing digital methods' tools and analytical strategies can be adapted to and incorporated in a multi-method approach for studying feminisms on Instagram, also reflecting on the ethical implications of a feminist positioning, particularly at the research design and data collection stages.

Following the present introduction, the article briefly introduces the disciplinary traditions of feminist media studies and digital methods. We then present a series of reflections on the process of designing and conducting a case study where the use of digital methods was informed feminist media studies theoretical and epistemological lenses. This empirical work has served as a basis to think methodological challenges in practice. The following section showcases the adoption and adaption of digital methods' tools and approaches to smaller-scale qualitative strategies inherited from the traditions of feminist media studies (de Sá Pereira, 2019). As these methodological decisions also have political implications, we then expand on some ethical considerations underlying a feminist approach to digital methods, focusing particularly the adoption of a feminist ethics of care in digital data collection. We conclude with brief considerations on the possibilities and tensions of incorporating digital methods strategies in feminist social media research, opening avenues for future reflections.

2. Conflicting disciplinary traditions? Feminist media studies and digital methods

The expansion of social media and digital technologies to everyday life has also shaped disciplinary and methodological practices. Within digital methods research paradigms, social media platforms like Instagram emerge simultaneously as a site for the study of digital cultures, of broader socio-cultural and political issues, and as a source of methods for research itself (Rogers, 2013; 2018). Drawing on the principle of 'follow the medium,' digital methods advocate for the use of 'natively digital' data, approaches, and tools – working with digital objects like search queries, hashtags, engagement metrics, etc. (Rogers, 2013). While digital methods do not necessarily imply big data, a common emphasis on working with larger-scale datasets, automated processes to capture publicly available data, and the use of digital tools for data analysis and visualisation to uncover cultural patterns in large data sets can evoke some epistemic proximity. In the past decades big data has emerged as a prominent research paradigm (e.g. boyd and Crawford, 2012; Zimmer, 2018), inviting necessary criticism of its practices – criticism that can, to a degree, be extended to wider reflections on digital methods.

While some feminist media scholars working on digital or social media have embraced this digital turn, feminist media studies, as a field, remains largely associated with the interpretative and qualitative methods it has historically tended to privilege (Harvey, 2020; van Zoonen, 1994). As a field concerned not only with the gendered politics of representation but also with those underlying the production of knowledge (van Zoonen, 1994), feminist media studies has extended its political lens to discussions on methodology. Feminist scholars have long critiqued positivist claims of objectivity, generalisability, and approaches that uncritically attempt to reduce people's experiences to over quantitative data (e.g. Oakley, 1998). While these critiques were often directed at quantitative research paradigms, they can similarly be extended to the quantitative and positivist mindset that underlies some big data research (e.g. Leurs, 2017). These critiques of big data and computational methods have sought to dispel the myth of objectivity, accuracy, and truth value that large data sets are expected to offer (boyd and Crawford, 2012, p. 663). These associations can at times lead to hesitations in incorporating digital methods and big data approaches in feminist media studies research.

Critiques pointed at big data approaches question the underlying the belief that human behaviour can be collected, measured, and analysed as a series of isolated data points (Markham, Tiidenberg and Herman, 2018, p. 4), from which, at times questionable, patterns can be extrapolated from data correlations (boyd and Crawford, 2012, p. 668). These quantified insights can often ignore or erase the messiness of human experience, failing to acknowledge how social media can be used in non-standard ways – practices that can be richly explored by qualitative approaches (Highfield and Leaver, 2015). Insights from big data can thus gain meaning when combined with the contextualized knowledge provided by 'small' qualitative data (Leurs, 2017, p. 139).

Furthermore, beliefs in big data's objectivity can obscure the subjective decisions necessary for its existence – decisions on what to collect, what to count, or what to ignore when 'cleaning' the data (boyd and Crawford, 2012, p. 667). The narrative of objectivity in big data simultaneously attempts to 'remove' the human from the process of analysis, by foregrounding digital tools (Markham, Tiidenberg and Herman, 2018), and tries to frame these technical and algorithmic processes of data analysis as 'neutral,' despite their inevitable grounding in particular worldviews (Hesse et al. 2019, p. 569).

The adoption of digital methods and big data approaches by more humanistic fields, such as digital humanities, has also gave rise to important critiques. These questioned the over-reliance on digital tools, at times at the expense of critical reflexivity, interpretation and theorisation (Berry and Fagerjord, 2017) or the absence of political commitment and attention to issues of gender, race, class, or sexuality (Gold, 2012). Many scholars also highlighted how big data can also fall into exploitative practices of data collection, giving rise to ethical dilemmas on issues of privacy, safety, or transparency, that require careful

consideration (e.g. Luka, Millette and Wallace, 2017; Markham, Tiidenberg and Herman, 2018) – as will be expanded later in this article.

These criticisms have led to calls for a critical use of digital tools and methodologies (e.g. Berry and Fagerjord, 2017; Leurs, 2017; Markham, Tiidenberg and Herman 2018). These calls ask for a critical and constructive engagements with practices of data collection and digital tools, questioning their technical and ethical limitations. These calls find responses in approaches the critically engage with digital methods, merging qualitative and quantitative approaches to thoroughly engage with rich datasets collected from social media (e.g. Highfield and Leaver, 2015; Rogers, 2013; 2018; amongst many others). Furthermore, scholars concerned with feminist issues and other social-justice oriented research have sought to expand these approaches by incorporating a feminist ethics of care into their research designs (e.g. franzke, 2020; Leurs, 2017; Luka, Millette and Wallace, 2017).

As a field marked both by an interdisciplinary character and by a tradition of epistemological and methodological critique (van Zoonen, 1994), feminist media studies seems particularly poised to engage with digital methods while exploring the challenges brought by these approaches. Feminist media studies are not explicitly bounded to to any particular theories or methodologies (van Zoonen, 1994), rather it recognizes that different methodological approaches can be shaped to fit feminist research questions and political aims (Ramazanoğlu and Holland, 2002). Following this tradition, this article does not offer a normative account on how to "properly" do feminist methods, nor does it advance a complete subversion of the digital methods tradition. Instead, it explores how reflexively transgressing methodological boundaries can be a productive way to enrich feminist scholarship on these topics, allowing us to take advantage of existing digital tools and approaches to engage both with cultural contexts and underlying power dynamics (Leurs, 2017).

3. A case study for thinking digital methods in practice: an inquiry into the hashtag landscape of feminisms in Portugal

The reflections presented in this article draw on the experience of conducting an exploratory study into practices of online feminism in Portugal. Historically, Portugal has had a complex relationship to feminism, deeply marked by the repression of feminist action throughout the Estado Novo dictatorship (Tavares, 2008) and by its subsequent reliance on practices of state and institutional feminism, rather than on grassroots movements and bottom-up mobilizations (Santos and Pieri, 2020). In this context, online feminist campaigns often failed to gain national traction (Garraio et al., 2020). However, in the past years' feminist discourses have flourished in the Portuguese social media ecosystem. The current political climate, with the rise of anti-feminist far-right parties, as well as a national resurgence of the #MeToo movement, has led to a growth of feminist protest, both on social media and offline (e.g. Caldeira and Machado, 2023; Lamartine and Cerqueira, 2023; Roqueta-Fernàndez and Caldeira, 2023).

Research on online feminist and activist practices in Portugal is still sparse. Reflecting shifting media ecologies, earlier studies focused on platforms like blogs or Facebook (e.g. Campos, Simões and Pereira, 2018; Marôpo, Torres da Silva, and Magalhães, 2017). In the last years, however, Instagram has established itself as one of the most actively used social media platforms in Portugal (WeAreSocial, 2023b). As activists often privilege dominant and familiar platforms with wide potential reach (Campos, Simões and Pereira, 2018, p. 499), Instagram also gained prominence with national activists, who often focus their efforts of content creation and communication on this platform (Lamartine and Cerqueira, 2023).

This study thus emerged from a need to garner a more holistic (even if not exhaustive) overview of the current feminist landscape on Portuguese Instagram – as much of the existing research centers around concrete protests or hashtag movements (Caldeira, 2023b). This study starts from the exploratory research

question: how does the Portuguese landscape of feminist hashtags on Instagram looks like and what dynamics does it encompass? This intersected with questions on how this landscape relates to the ethos of fourth-wave feminism and Instagrammable aesthetics. Given its exploratory scope, the adoption of digital methods strategies facilitated the expansion of the observations beyond assumptions of the researcher as to what deemed to be the constituent elements of the phenomena understudy (Marres and Moats, 2015), identifying aspects and issues that might otherwise be overlooked.

Drawing on a digital methods strategy, the case study presented in this article starts from the engagement with natively digital objects – hashtags on Instagram. Hashtags are differently used and valued in different social media platforms (Highfield and Leaver, 2015). While Instagram is less reliant on hashtags than, say, Twitter, hashtags can still serve as an important methodological tool for constructing theme-oriented datasets for analysis (Literat and Kligler-Vilenchik, 2019, p. 1991). Several studies on feminisms on social media has focused on exploring hashtag practices and movements such as #MeToo, #YesAllWomen, #SayHerName and countless others (e.g. Jackson, Bailey and Welles, 2020; Portwood-Stacer and Berridge, 2014; Pruchniewska, 2019; Quan-Haase, 2020). Hashtags are often understood as placing individual posts in the context of broader public conversations (Bruns and Burgess, 2015, p. 15), but they can also be used in varied ways, for example personal expressions of feelings (Papacharissi, 2016). Furthermore, in the everyday contexts where most social media practices take place (Brabham, 2015), feminist practices on social media often exist outside particular hashtag movements, recurring to more generic hashtags where feminist action is not overtly or strategically mobilised (Caldeira, 2023b).

Reflecting these practices, we sought to produce a holistic overview of the current feminist landscape on Portuguese Instagram by employing a digital methods approach. Seeking to cover different typologies of hashtags with different use cultures (Bruns et al., 2016), this case study started from a set of four hashtags that rely on different feminist and social media strategies, thus reuniting a diverse scope of posts that while oriented around the same topic can still represent different intentions and orientations (Literat and Kligler-Vilenchik, 2019, p. 1991). The four selected hashtags – #FeminismoPortugal (i.e. feminism Portugal), #IgualdaeDeGénero (i.e. gender equality), #NaoPartilhes (i.e. don't share it), and #PortugalMaisIgual (i.e. a more equal Portugal) were purposefully selected, reflecting a clear connection with the topic under study—feminist online practices—and holding a significant number of posts in the context of the Portuguese social media panorama. This selection encompasses generic hashtags that are used bottom-up, such as #FeminismoPortugal; movement-specific hashtags, like #NaoPartilhes; and hashtags created by institutional participants, such as #PortugalMaisIgual which was created in the context of the National Strategy for Equality and Non-discrimination 2018-2030.

It must be noted, however, that this approach does not provide an exhaustive or complete rendition of all feminist hashtags used in the studied context. The selection of the initial hashtags relies on strategies of theoretical sampling (Patton, 2002, p. 238), which are informed by pre-existing theoretical concerns and purposefully guided by the research questions being studied, and there will certainly exist feminist discourses and manifestations outside these parameters. Furthermore, as will be expanded below, the ethical approach adopted also led to exclusions in the studied content.

The hashtags were queried weekly, during five consecutive weeks between April and May 2021. The queries were conducted on Instagram's search function, using an Instagram profile exclusively directed at research and a dedicated researcher browser, free of cookies, to minimise the influence of algorithmic recommendation systems (Rogers, 2017, p. 88). After identifying the 100 most recent posts present in the hashtag on the first query, the queries on the following weeks identified newly shared posts.

Following ethical considerations, all users who posted on these hashtags were contacted via Instagram Direct Message, informed about the research, its objectives, the extent of their participation and of data collection. A total of 101 users consented to participate in the research, and 294 posts were collected, dating from October 2020 to May 2021. Data from each post was systematically collected manually: including the publication date, type of profile, likes, views, and comments counts, captions, hashtags

used, location of the hashtags, and type of post. These include data points commonly studied within digital methods, allowing for the experimentation with existing tools and strategies. A screenshot of each post was also taken. As will be expanded below, this manual data collection allowed both to circumvent technical limitations of automated data collection, and for a purposeful data collection strategy, aligning with a data minimisation principle that limits collection to data relevant to the research questions at hand. As such, the sample generated by this approach is not representative nor generalisable, rather it is an illustrative sample suited for exploratory analysis.

The analysis of this dataset also combined digital methods with qualitative and interpretative feminist analyses. As will be expanded later, the moments of data collection and coding were accompanied by qualitative close readings (Ruiz de Castilla, 2017) and by the taking of analytical memos with emerging interpretations (Maxwell and Chimiel 2014). In parallel, the systematically collected data, organised csv files, allowed for the construction of a hashtag co-occurrences network, using Gephi Version 0.9.2 (Gephi Consortium, 2017), an open-access tool of data visualisation. This allowed for the experimentation with established strategies of data analysis and visualisation, permitting the exploration of different layers of hashtagging practices, including its content, the actors involved, and the relationships established between different hashtags (Omena, Rabello and Mintz, 2020). Furthermore, given the centrality of visual content to the practices and vernaculars of platforms like Instagram (Highfield and Leaver, 2015; Pearce et al. 2020), digital methods were also employed to engage with the visual content of the post collected. Using the open-source digital tool ImageSorter (Visual Computing, 2018), posts were sorted by colour to allow for the exploration of patterns in visual conventions (Pearce et al., 2020; Rogers, 2021), thus inviting questioning on how feminist practices on Instagram relate to the aesthetics of the platform.

This combination of approaches allowed for, on a first level, and overview of how the Portuguese landscape of feminist hashtags on Instagram looked like, and, on a second level, for the development of theoretical engagements on practices of contemporary feminisms on social media (Caldeira, 2023a; 2023b).

4. Critical insights from doing feminist digital methods in practice

The combination of digital methods and qualitative strategies on the development of the case study introduced above has helped to explore this rich thematic dataset, bringing forward various critical insights that expanded our understanding of feminist practices on Instagram. Providing examples from this case study, this section reflects on the potentialities and limitations of incorporating some of the tools and analytical strategies commonly employed by digital methods within a multi-methodological study that is grounded on a feminist media studies perspective.

On a first level, the adoption of a combination of different typologies of hashtags as a starting point of this study has allowed to explore a wider diversity of practices and actors within Instagram feminists. While a lot of social media research focuses on highly visible or remarkable practices, such as those of celebrities, activists, or politicians, most social media practices are conducted within everyday contexts by so-called "ordinary" people (Brabham, 2015). The ability to deal with larger amounts of data afforded by digital methods enabled us to explore hashtagging practices not only from high-visibility actors, but also actions of ordinary actors who do not have established large audiences and whose content tends to receive low engagement metrics (Omena, Rabello and Mintz, 2020). These explorations thus expand our understandings of practices of everyday feminism (Pruchniewska, 2019).

As was introduced above, a strategy of manual yet systematic data collection was adopted. Data was structured in a csv file, emulating the information structure outputted by automated tools or platforms' APIs (Application Programming Interfaces). In order to engage with existing digital methods' tools and analytical strategies, we collected datapoints commonly engaged within the digital methods field, such

as engagement metrics (Rogers, 2018). This structured dataset provides information as discrete elements for analysis that can be plotted into patterns, timelines, graphics, networks, or other formats, using digital tools such as spreadsheet software or network visualisation tools like Gephi.

At the same time, the manual collection process also allows for flexibility in the creation of columns for qualitative observations and analytical memos. This provided thick description about the studied social media practices, but also a record of emerging insights, ideas, questions, theoretical connections, analytical hunches, links, and patterns (Benaquisto, 2017, p. 85–86). This qualitative approach thus helps to bring forward the messiness and tensions that are inherent to the studied phenomena, complementing the overview afforded by digital methods.

The use of digital methods of data visualisation allows for an overview and intuitive exploration of large amounts of information. This can help to reveal trends and patterns within datasets (Highfield and Leaver, 2015), while allowing for the analysis of complex relationships established between different elements under study. Drawing on a feminist perspective, we can think of these insights gained from digital methods not as positivist 'truths', but rather as offering a sense of "directional orientation" (Oakley, 1998). They can help to make sense of larger amounts of data, contextualizing how qualitative insights fit within the broader dataset, but also broaden analytical perspectives, directing subsequent qualitative and in-depth engagement in an iterative process.

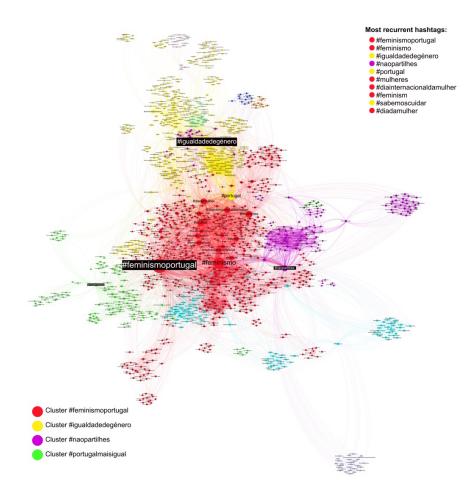


Figure 1.

Co-occurence network of Instagram hashtags #FeminismoPortugal, #PortugalMaisIgual, #NaoPartilhes e #IgualdadeDeGénero. Visualization created with Gephi, Iayout: Force Atlas 2. Size of nodes indicates the most frequently used hashtags. Colours indicate different clusters.

Using the case study of Portuguese hashtags as an example, the hashtag co-occurrences network constructed using Gephi allowed us to visualise all the 1341 unique hashtags used in the 294 posts originally collected from the four queried hashtags, clustered by their co-appearance in posts (see *Figure 1*). The graphic exploration of this network revealed the existence of a range of topics and concerns within feminist hashtags: from pregnancy to fitness, anti-racism and LGBTQ+ rights to feminist media and literature, sexual harassment, body and sex positivity, but also beaty and commercial concerns. This helped to illuminate the complexities, tensions, and contractions that can exist within Instagram feminisms, moving us beyond initial assumptions – albeit not providing an exhaustive representation of the landscape of hashtags in Portugal, as seen above.

The analysis of this hashtag network was done alongside the qualitative exploration of the dataset. While the distant reading enabled by the network allowed for the identification of larger patterns, this approach still invited a qualitative zoom in into specific practices (Omena, Rabello and Mintz, 2020, p. 6). After surpassing an initial barrier of technical mastery, tools like Gephi allow for an intuitive engagement with a high volume of data – one can zoom in, highlight certain nodes, link back to the detailed information contained in the spreadsheet, in an iterative process. The combination of these experimental and visual engagements with data, with qualitative analysis, and with an exploration of the existing scholarship allowed for new insights on how different feminist hashtagging practices that coexist on Instagram. Drawing on existing analytical strategies of network reading and analysis (e.g. Omena and Amaral, 2019), we could observe that the broad scope of more generic keyword hashtags (Bruns et al., 2016, p. 35) - e.g. #FeminismoPortugal and #IgualdadeDeGénero - was not conducive to the formation of focused topical discussions or well-defined communities, condensing instead different yet related topics, as shown above. Zooming in these pluralised clusters also made apparent the co-existence of varied, and at times contradictory, visions of feminisms - with critical positions co-existing with more postfeminist concerns with beauty, fashion, and self-love (e.g. Gill, 2016). Exploring the network and contrasting these pluralised practices in contrast with the strategically mobilised action of hashtag movements like #NaoPartilhes thus allowed us to identify both common and non-standard practices within this context (Highfield and Leaver, 2015).

In a similar manner, the adoption of digital methods also made possible the overview and exploration of the visual content in these hashtagged posts. Experimenting with visual tools widely used in digital methods, like ImageSorter, not only allows for an inductive exploration of a relatively large data set, but can also create analytical and interpretative arrangements of image collections (Rogers, 2021), automatically grouping and organising collections of images by colour, similarity, date, etc. For the case study at hand, the images manually collected from the selected hashtags were sorted by colour (see *Figure 2*). This visualisation of all collected posts allows for a distant reading that highlights dominant patterns. In this case, the dominant colour pallet of light or pastel tones, particularly soft pink, became evident. This aligns with the "girly" aesthetic that is currently used by popular feminist posts within the platform (Crepax, 2020).

Digital tools like ImageSorter allow simultaneously for distant and close readings, as they retain individual images in the visual arrangements, rather than simplifying them into numeric or textual data points (Rogers, 2021, p. 18). These tools allow for an intuitive exploration of data: re-arranging the plot, zooming into specific clusters or even individual images for qualitative close readings. The overview provided by ImageSorter led to the data-driven observation that the studied aesthetic landscape was dominated by graphic rather than photographic content, despite the common cultural imaginary of Instagram as a photo-based platform (Manovich, 2017). Feminist content often took the form of graphic conventions of compositions used by for other social justice movements on Instagram (Dumitrica and Hockin-Boyers, 2022), these feminist graphic compositions combine Instagrammable aesthetics with educational content for accessible informal learning. This style has become part of the popular cultural

imaginary of a feminist "genre" on Instagram, drawing on a memetic logic in which posts are created by different users in (direct or indirect) reference to similar posts, sharing common visual characteristics, while still allowing for a degree of individual variation and creativity (Caliandro and Anselmi, 2021).

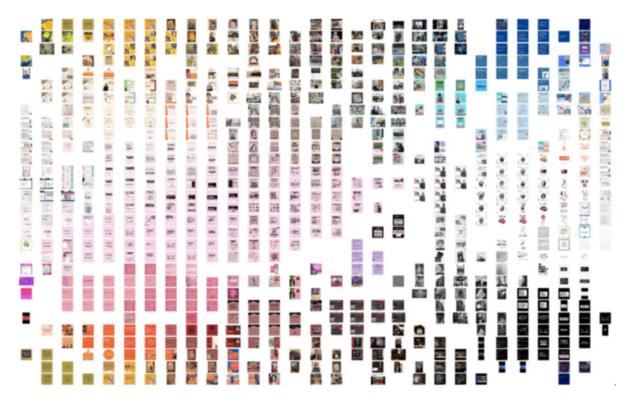


Figure 2.

All posts in the dataset, sorted by colour. Visalization created with ImageSorter. Blurred to respect the privacy and anonymity of the participants..

At the same time, ImageSorter also allowed to zoom into the individual examples of photographs and illustrations that do not fit the dominant pattern identified above. Through an analytical interplay between the visual data and the information organised in spreadsheets, we were able to explore how these images act as attention-grabbing within the visual layout of Instagram, while often acting as expressive or symbolic illustrations to accompany long written captions about feminism. These multi-modal observations thus point to text, in both captions and compositions, as a key site for sharing feminist knowledge on Instagram.

As was introduced earlier, the conducting of this case study also showcased how digital methods can be used to provide a sense of "directional orientation" to qualitative feminist research (Oakley, 1998), as insights from an initial exploration and overview of the collected data can guide further in-depth engagements in the research. Rather than being understood as objective findings in themselves, the patterns observed in these visualisations invited more qualitative analysis of certain posts and prompted the engagement with existing scholarship. As an example, the pluralisation of hashtagging practices noted above was then contextualized within the fourth-wave feminist cultural imaginaries of intersectional awareness (Pruchniewska, 2019, p. 28), noting how these hashtag landscapes could open space for experiences coming from diverse backgrounds. At the same time, the contradictions noted in this hashtag landscape also brought forward critiques of the potential fracturing fourth-wave feminisms (Rivers, 2017, p. 24). These and other emerging theorisations on Instagram feminist practices were expanded in other articles (Caldeira, 2023 a; 2023b).

However, while the present case study helps to illustrate some of the potentialities brought by the combination of digital and qualitative approaches for feminist media studies, it is important to critically acknowledge the limitations of the chosen research design. Firstly, using hashtags as a starting point can limit the types of feminist online practices that can be studied. Feminisms on Instagram often occur outside these public hashtags - in non-hashtagged posts, Instagram Stories, or in private online conversations. As such, this hashtag landscape does not provide a full picture of these practices. Furthermore, as was mentioned earlier, this work relies on a theoretically-informed sample, guided by the research questions at hand, and essentially suited for a qualitative approach (Rapley 2014, 59). The four queried hashtags were carefully selected to include popular yet diverse uses, and to limit the heavy presence of posts from other national contexts with shared linguistic similarities. These are qualitative and interpretative decisions that shape what can be learned from digital methods, thus foregrounding the inevitable role of the researcher in these processes often mistaken for 'objective' (Breuer and Roth, 2003). This approach was also marked by the underlying political dimension that shapes feminist media studies (van Zoonen, 1994) – this directed our choice in the topic of study, but also shaped our analytical attention, for example leading to reflections on how different hashtagging practices can have varying symbolical and political impacts. However, we do not see this overt political positioning as a methodological weakness. Rather it offers a productive opportunity for thematic and methodological innovation (Breuer and Roth, 2003; Ramazanoğlu and Holland 2002), shedding light on issues that might otherwise go unnoticed if not for this feminist focus, and pushing for the adaption of existing methodologies for feminist research. Yet, it is important to critically acknowledge this positionality, maintaining a self-reflexive position that is intrinsic to a feminist approach, especially given the ethical implications of these decisions (Ramazanoğlu and Holland, 2002, p. 10), as will be expanded in the next section.

5. Ethical consideration from doing feminist digital methods in practice

Working with social media, both as a place of study and as a source of data to be collected, has long been a fertile ground for ethical questionings (e.g. Luka, Millette and Wallace, 2017; Markham, 2005; Markham, Tiidenberg and Herman, 2018; Zimmer, 2018). Adapting commonly espoused principles of research ethics (such as minimizing harm, informed consent, protecting privacy and confidentiality) to digital and big data research can often raise challenges (Zimmer, 2018).

The case study at hand drew on the idea of "ethics as method and methods as ethics" (Markham, Tiidenberg and Herman, 2018), that sees the combination methodological and ethical concerns as mutually enriching and leading to better research. From this perspective, there are no universal guidelines that can be uniformly applied to all research on social media (Markham, 2005). Ethics is understood as a situated case-by-case practice, adapted to the specifics of each project, and reified by practical research decisions. This section shares some of the ethical reflections that emerged with the present case study, which might help to elicit considerations that can be adapted to other contexts.

The feminist positioning of this research calls for a socially-responsible and ethically-committed approach that puts "human subject squarely in the center" (Markham, 2005, p. 815). This can be answered by adopting a feminist ethics of care in digital research, foregrounding a commitment to respect diversity, and seeking to minimise harm for the people or communities that participate in our work (Luka, Millette and Wallace, 2017, p. 23–24). These principles highlight the importance of research transparency, and responsible data practices that respect the rights and desires of participants. These ideas should permeate all stages of research, thus shaping decisions regarding data collection, storing, and sharing.

The responsibility to research subjects underlying a feminist ethics of care (franzke, 2020) was also reflected in the decision to seek the informed consent of research participants before data collection.

Social media can blur the boundaries between "public" and "private" information, with some researchers understanding this data as public by default (Zimmer, 2018, p. 9). However, while social media users can be aware that their content can be viewed by vast audiences and despite agreeing to (rarely read) Terms of Service that at times grant data access to third parties, users do not necessarily expect that their data can be used for research purposes (Fiesler and Proferes, 2018). Users can be ambivalent and even uncomfortable with the idea of being studied (Fiesler and Proferes, 2018, p. 6), and this can be exacerbated when we focus on users coming from traditionally minoritised communities (e.g. Klassen and Fiesler, 2022). Drawing on the concept of "contextual integrity" (Nissenbaum, 2004), distinctions between private and public in digital contexts should be understood as context dependent – varying according to the expectations of privacy of different types of users, practices, platform cultures, etc (Fiesler and Proferes, 2018, p. 3). Research ethics decisions should then be grounded on everyday practices and on the sensitivities of those being studied (Fiesler and Proferes, 2018, p. 1). For the present case study, although hashtags are often understood as part of a public conversation (Bruns and Burgess, 2015, p. 15), the awareness that they can also encompass diverse and personal uses (Papacharissi, 2016) has led to the decision of seeking consent.

The smaller dimension of the sample of study ensured the feasibility of asking consent from every participant. In line with the cultures of use of Instagram, consent was sought in a simplified and informal manner, contacting the users identified via hashtag query through Instagram Direct Message. This contacted explained how their profiles were found, and informed them about the research project and its aims, as well as the scope of their participation and their rights as participants. This approach also allowed for the identification of the researchers, not only by sharing a brief introductory statement, but also through the creation of a research Instagram account with an identifying bio and links to institutional websites with more information. In addition to the ethical advantages, this approach also created an important contact point with the feminist community on Instagram, which can be helpful for later stages of research, for example for recruiting interview participants, and for allowing the researcher to 'give back' to the participants by sharing the results of the research.

However, it is important to recognise that adopting an informed consent practice carries its challenges. Firstly, it can limit our access to the phenomena under study by limiting the sample only to those people who are comfortable with the public scrutiny of being studied. The response rate for the contacts was also quite low - out of the 181 users identified and contacted in the hashtags only 101 accepted to participate, a 44% rejection rate. In most cases these were not overt rejections to participate, rather there was a lack of response, motivated, in part, by the affordances of Instagram Direct Messages itself - messages sent by an unknown account are relegated to a secondary inbox, which many people ignore or simply delete the messages assuming it is spam. In the case study at hand, these difficulties in response were also exacerbated by the nature of some of the contacted accounts. For example, accounts from institutional users (such as governmental or military institutions) often failed to respond in a timely manner due to the bureaucratic procedures needed to secure the authorisation to participate in the study. This particularly affected the data collected for the #PortugalMaisIgual hashtag, which was dominated by institutional users. As was introduced earlier, this highlights that the data set analysed for this case study should not be taken as exhaustive or representative of the full scope of the hashtags as they are searchable on Instagram. Rather it is a theoretically oriented sample which encompasses a set of users who openly consented to participate in the research.

Considerations on informed consent and accountable practices of data collection can clash with the reliance that big data and digital methods approaches can have on automated processes of data collection, where asking informed consent of each participant is often unfeasible. In the past, platform sanctioned avenues for data collection, like APIs, have facilitated automated data collection practices. Yet, platforms have since started restricting or altogether eliminating API access (Bruns, 2019; Freelon, 2018). In 2016, Instagram has limited access to its public API, privileging commercial interests and largely excluding researchers (Leaver, Highfield and Abidin, 2020). The ease with which platforms can restrict access to

data has led scholars to rethink their reliance of APIs, prompting technical and methodological experimentation in response to API closures (Bruns, 2019; Freelon, 2018). Yet, many of the solutions proposed can still draw on technical and automated strategies; for example data scrapping, which requires considerable technical expertise and poses legal questions by breaking the Terms of Service of many social media platforms (Freelon, 2018). Other alternatives can include the use of black-boxed and commercially-driven social media analytics services, or accessing data via platform-provided alternatives such as Twitter's paid API access or Meta's CrowdTangle. However, these alternatives can reinforce a digital data divide (boyd and Crawford, 2012, p. 674), locking out researchers that do not have the resources to buy or secure access to data.

As the present case study posits, the adoption of a consented, manual yet systematic strategy of data collection can be a way to subvert these platform restrictions on data access, and to avoid replicating exploitative data practices that scholars so often criticise in relation social media platforms themselves (franzke, 2020, p. 68). As was introduced above, a spreadsheet was created emulating the structure of information collected from social media, allowing us to experiment with already established digital methods' tools and analytical strategies. As many currently available tools for Instagram data collection scrape information that is visible in the platform's graphic interface, the same data can be collected manually, albeit in a more labour-intensive and time-consuming manner. In this way, manual data collection can be a way to circumvent the use of black-boxed commercial tools and to take into consideration users' expectations, while also circumventing the often-inaccessible technological expertise required by alternative data scrapping methods, especially for scholars coming from noncomputational backgrounds (boyd and Crawford, 2012, p. 674). While some scholarly communities, like the DMI Amsterdam, have contributed to the critical expansion of digital methods through the creation of tools that address issues of data access, these need to be continuously updated to respond to platform changes (Rogers, 2018). In this way, manual approaches can be a further alternative to engage with social media data in a way that both allows for digital data exploration and reflects the feminist politics and epistemologies that guide this study.

The methodological decision to manually collect data also reflects an ethical care to minimise risks of harm for research participants (Luka, Millette and Wallace, 2017, p. 23–24). As was seen earlier, this manual approach enables a purposeful data collection strategy which can limit the inadvertent collection of potentially identifiable metadata. This also facilitates the creation of datasets for analysis that are pseudonymised from the start. This care to minimise harm is especially necessary given the sensitive political nature of the topics often studied in the field of feminist media studies, as feminist practices online can attract significant online hate and misogyny, and, as such, carry additional risks for participants – especially for those with marginalised identities (Harvey, 2020, p. 140).

This labour-intensive approach of manual and purposeful data collection is fitted for work that focus on a smaller dataset, which allows for both digital exploration and qualitative in-depth analysis. As such, contrasting with the large scale of big data and of some digital methods projects, this study follows a "deep-data" approach, comprehensively studying a smaller number of cases and attentive to their individual complexities (Manovich, 2012), thus foregrounding the value of small data and rich interpretative insights (boyd and Crawford, 2012, p. 670). Rather than big data, this approach draws on the idea of "good enough data", which understands the nature of data collection as dependent on the purpose of the study, foregrounding alternatives do conventional big data and automated collection (such as the use of data collected or created by ordinary people), while still emphasizing the robustness of this data to produce trustworthy analyses and visualisations (Gutiérrez, 2019, p. 62).

While the time-consuming nature of this manual strategy of data collection can be seen as a limitation, it can simultaneously be perceived in a productive manner. The process of manually collecting and inputting the information on the spreadsheets creates a first moment of in-depth familiarisation and qualitative engagement with the object of study, allowing the researcher to start conducting close readings and noting the diversity of meanings these posts could encompass (Ruiz de Castilla, 2017). As was

explained above, this process was also accompanied by attentive notetaking and writing of analytical memos with emerging interpretations (Maxwell and Chmiel, 2014), thus creating a first analytical moment that is iteratively reiterated and expanded throughout the research.

6. Conclusion

The increased presence of social media in everyday life and everyday experiences of contemporary feminisms (Pruchniewska, 2019) has underscored the need to not only conduct research *about* the internet but also *with* the internet (Rogers, 2018). This article departs from the epistemological and methodological hesitations of engaging with digital methods coming from the historically qualitative field of feminist media studies (van Zoonen, 1994). It reflexively works through the potentialities and tensions of productively transgressing methodological boundaries.

This article grounds and illustrates these methodological reflections by drawing on a case study that explored feminist hashtagging practices on Portuguese Instagram. This case study engaged with existing digital methods' tools and analytical strategies, while adapting them to a smaller scale study (de Sá Pereira, 2019), allowing for practices of data collection informed by framework of ethics of care (franzke, 2020), and for the combination with in-depth qualitative engagements. This facilitated a critical engagement with large amounts of data, inviting an intuitive exploration of the dataset, an overview of the information, while still foregrounding the qualitative complexities of these texts and practices. This case study also highlights how ethically-oriented practices of manual data collection can complement or, at times, substitute the automated data collection practices commonly associated with digital methods, helping to surpass technical limitations while minimising harm for participants and, simultaneously, allowing for a productive qualitative engagement with the data.

This article primarily focused on how existing digital methods tools and analytical strategies can be adapted to and incorporated in feminist media studies, and how this feminist positioning affects the data collection stage. This feminist epistemological and methodological lens can, however, shape all stages of research – including what research questions can be asked, which tools can be used and how can these be subverted, what analytical readings can be made, and even how research results can be presented. As such, we echo earlier calls to continue critically questioning digital tools and methodologies in future scholarship (e.g. Berry and Fagerjord, 2017; Leurs, 2017; Markham, Tiidenberg and Herman 2018).

Rather than claiming to invent a new methodological approach to research, this article hopes to offer a small contribution by engaging with critical feminist traditions to adopt and adapt existing approaches to concrete research contexts and needs. As such, while this article does not propose universal methodological or ethical guidelines that can be widely applied to all feminist media studies, we hope that these reflections can be useful for those who wish to engage with tools that are often felt to be outside our disciplinary toolbox. By sharing these methodological reflections, we seek to highlight the messiness and the struggles underlies all research, illustrating how these challenges can foster a critical engagement with digital methods from a feminist media studies framework.

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