

The contingent macro

The ephemerality of memes as discursive devices

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Abstract

This paper investigates how internet memes are complex and stratified objects, going beyond the standardized definition of ‘image macro’ habitually employed by scholars. To this end, we take the 2019 Italian government crisis as a case study and analyze a dataset of related 1.269 memes using a combination of computational and qualitative methodologies. Our analysis shows the emergence, proliferation, and fading of popular templates, which remix images and text from the political crisis and occasionally serve as frames for other events: the Contingent Macro. Together with less standardized memetic instances, we found that Contingent Macros concur to create metaphoric narratives, which develop as the event unfolds. Besides formalizing the concept of Contingent Macro, this work provides scholars with a methodological toolkit for the analysis of event-related meme production, which can capture the fluidity of memes. Overall, the article concurs to underline the need for a clear, context-specific definition of memes, tailored to specific social, cultural, and research contexts.

Keywords: Memes; Contingent Macro; Automated visual analysis; Content Analysis; Instagram

1. Introduction

The relevance of internet memes (henceforth referred to as just memes) in contemporary digital society is apparent. Besides being an integral part of users’ online interactions, memes have carved out a significant role in public discourse as well: among other things, their ability to spread ideas and influence debates has been demonstrated during protests and social movements (Milner, 2013). Memes occupy an important space within politics, too: they are employed by users to react to political events in real-time, to challenge mainstream media narratives with alternative viewpoints, and to criticize or support political actors (Burroughs, 2016; Heiskanen, 2017).

However, despite comprehensive definitions of memes (Shifman, 2014), A considerable part of existing empirical research has focused so far on standardized formats, or *image macros* (Milner, 2013; Milner, 2016; Vickery, 2014; Mazzoleni and Bracciale, 2019). This perspective appears to be problematic and severely limiting in many ways. For one thing, the definition of *image macro* rests mostly with the wisdom of the crowd: while one may rely on crowdsourced archives like Know Your Meme, considered the most well-known meme repository, to discern conventionalized formats, it is also true that these tools

may be limited by context and cultural specificities (Rogers and Giorgi, 2023). Thus, considering memes as standardized macros obfuscates a sizable portion of the production of memes, especially relevant in fast interconnected environments, such as in the context of political commentaries and protests (Smith and Copland, 2021). Additionally, this approach overlooks how potential negotiations of meaning and discursive reframing are embedded into a macro's rise to prominence or into its disappearance.

To account for this phenomenon, we introduce the notion of Contingent Macro. With this term, we refer to layouts that emerge, quickly rise in popularity, and (usually) decline just as quickly. These formats sprout from highly mediatized events (e.g., protests, electoral campaigns, and so on) using an iconic image, yet their framing power transcends their contingency, as they are appropriated and manipulated by users to fit with their cultural context.

Contingent macros can somehow be considered potential macro templates: far less popular and context-bound than conventional macros, their meaning and use in context have yet to become fully crystallized. Our intent in introducing this concept is not to capture an ephemeral moment in the genesis of 'real' macros. If anything, by demonstrating how most meme templates fall under the category of contingent macros, our work aims at deconstructing the monolithic approach to the concept of macro in favour of a more nuanced, context-specific, and multidirectional understanding that best accounts for the intricate existence of these digital objects.

In this article, we formalize the definition of Contingent Macro and we propose methodological strategies to approach the study of visual politics through memes. To this end, we explore how memes have been employed to frame the 2019 Italian government crisis on Instagram. First, we extracted all images indexed with the most popular hashtag discussing the government crisis (#crisidigoverno) and identified 5.686 images about the event. We then isolated all memes around the event, based on two inclusive criteria: individual reinterpretation (Shifman, 2013, 2014), and intertextuality (Chagas et al., 2019; Shifman, 2013; Laineste and Voolaid, 2016). The resulting memetic dataset has then been investigated through a combination of automated image clustering (Duhaime, 2021) and qualitative content analysis (Rose, 2016).

Our contribution is threefold: firstly, we propose a definition of Contingent Macros as short-lived memetic layouts that are not able to establish themselves in the visual vernacular of digital cultures; secondly, we propose a series of methodological strategies leaning on a combination of automated and qualitative techniques to identify such macros. Finally, we present a case study revolving around the Italian government crisis, illustrating how a considerable portion of the visual production around the issues is composed of Contingent Macros that would not have been considered based on stricter understandings of memes. While our empirical focus is on visual memes, we attempt to outline a broader methodological approach considering Contingent Macros across a variety of formats.

2. Theoretical Framework

2.1 Evolution of the concept of meme

First introduced by Dawkins in 1976 to indicate the counterpart of genes, the notion of memes has long lost its 'biological' flair to be conceptualized as a fully cultural phenomenon, embedded and regulated by specific social rules (De Seta, 2016; Nissenbaum and Shifman, 2018).

After a long and problematic incubation within the research area of memetics (Blackmore, 1999), media studies scholars resized the importance of diffusion in favor of users' creativity as the central asset of the memetic phenomenon (Shifman, 2014). In this sense, memes can be discerned from other cultural objects, such as the 'virals', which are understood as digital objects (e.g. videos, sounds, images, or combinations of them) circulating unchanged on the web (Shifman, 2014). As opposed to virals, the peculiarity of memes is the stratified message built through several rounds of reappropriation and creative manipulation. As a result, to thoroughly understand memes, users may require an in-depth knowledge of

contextual, and sometimes carefully gatekept, in-jokes and cultural references (Milner, 2016; Laineste and Voolaid, 2016).

While users' creativity and intertextual connections have gained pivotal relevance in the definition of memetic objects, other characteristics are now regarded as less essential to the phenomenon. For instance, although irony is still considered an identifying feature of memes (Davison, 2012; Dynel, 2019), several studies have underlined the presence of humorless memetic trends, such as the video memes backboning the LGBTQ campaign "It Gets Better" studied by Gal et al. (2016).

Condensing more than a decade of studies on this pervasive digital phenomenon, the currently shared definition of memes understands them as collections of multimodal cultural artifacts, that created, remixed, and circulated by users across various digital platforms (Shifman, 2014; Milner, 2016; Davison, 2012).

The diffusion of memes across various digital environments, where they have gradually become the "foundational digital practice" (Miltner, 2018), has resulted in a proliferation of different formats. The fragmentation of formats indicates the limitations of a definition of memes, which looks at them as images or videos. As a result, authors like Zulli and Zulli (2020), have extended this conceptualization, shifting the focus from the products to the platform's infrastructure and describing the architecture of the popular platform TikTok as inherently memetic. According to the authors, technical features of TikTok, such as the possibility to use sounds and to create stitches and duets, foster content imitation and give rise to mimetic (and memetic) forms of sociality - as encapsulated in the concept of 'imitation public'.

Inspired by Zulli and Zulli's analysis, Rogers and Giorgi (2023) propose to look at memes as collections of technical objects, that take peculiar realizations depending on the specificities of the environments hosting them. Adopting a cross-platform approach, the authors identify different understandings of the memes, resulting from the interaction of users with the logics and the affordances of different digital spaces. From an epistemological point of view, the paper identifies different typologies of meme collections, resulting from the combination of distinctive ecological configurations. In turn, this conceptualization has direct implications for meme research: as the authors put it, scholars should be aware of the impact that the selection of one digital space over another may have on the quality of the meme corpus that they can extract. Thus, the identification of the most suitable environment to source memes should depend on the question(s) and the academic intent guiding the research. However, as the next section will show, meme scholars have historically preferred one-size-fits-all to nuanced approaches to meme conceptualization and data collection.

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2.2 Meme research: a standardized approach

The ontological complexity of the meme is hardly represented in empirical research. While recent studies have acknowledged that memes as a unit of analysis has always been "murky" (Zulli and Zulli, 2020), attempts to include context-dependent conceptualizations are still scarce (Rogers and Giorgi, 2023).

As opposed to this, researchers usually adopt a clear-cut definition of the object "meme": in particular, when faced with the necessity to gather relevant data, some opted for inductive natively-emerging methods of identification. Such is the case of studies like those by de Saint Laurent et al. (2021), who sourced memes from the subreddit r/CoronavirusMemes; Moreno-Almeida (2021), who collected them from memetic pages; or MacDonald (2021), who assembled the corpus by querying for "COVID-19

memes” on a search engine. Works like these rely on user classification through “native digital objects” (Rogers, 2013) like hashtags and dedicated accounts, to collect and classify memes in their datasets.

Other studies have instead preferred deductive, criteria-based definitions to discern memes from other types of content. Giorgi (2021), following an assessment of the literature on memes, proposes to identify memes based on three features: irony, manipulation, and intertextuality. Research on memes also witnessed a rising trend in studies employing computational techniques for the automated recognition and classification of memetic instances (Miliani et al., 2020; Bucur et al., 2022; Theisen et al., 2021). Here, too, memes are identified and sorted depending on the presence of characteristics, like multimodality or recurrent layouts.

To date, scholars consider memes as such once they have reached a certain degree of diffusion and popularity (cfr. Zulli and Zulli, 2020). Memes are oftentimes associated with standardized formats with culturally consolidated interpretations. In this context, the widespread popularity and use of ‘macro’ memes in scholarly research deserve special attention.

The term ‘macro’ has a longstanding tradition within meme culture, as it is commonly employed to refer to captioned popular image-based templates with a fixed interpretation (Lankshear and Knobel, 2019). Macro memes resulting from captioning these images are tightly intertwined with specific digital environments with a strong subcultural footprint, such as 4chan and Reddit, whereby some of the first widely popular macros (e.g. Advice Animals, LOLCats, Rage Comics), surfaced and gained popularity (Phillips, 2015). It is therefore no surprise that a large body of literature on memes in the early years was centered on the analysis of these standardized formats (Vickery, 2014; Brideau and Berrett, 2014; Rintel, 2013), a trend which seems to persist to the present day (Yus, 2018; Ross and Rivers, 2019).

In our view, reducing the study of memes to macro formats appears limiting from both an ontological and epistemological perspective. First, the proliferation of memes across the web led to the emergence of a sheer variety of meme templates that cannot be labeled as ‘macros’ (cfr. Miltner, 2018). In this respect, less standardized formats or, as Wiggins and Bowers (2015) call them, ‘emergent’ memes demand equal analytical attention as more fixed formats. Empirically, there is no objective benchmark to distinguish ‘macro’ memes from other types of memes: most of the time, the fitness of the label appears to rest with the wisdom of the crowd or, in some cases, with geographically and culturally biased archives (e.g. the US-based *Know Your Meme* web database). Finally, the concept gives little indication on the temporality and the ephemerality of the phenomenon (Blank, 2018): in our fast-paced digital information economy, where any major event results in a daily mass-production of memes (Shifman, 2014), only a small percentage of templates rises to popularity, and even so their fame is oftentimes short-lived. In this sense, template-based studies fail to adequately capture not only the rich variety of memetic production but also completely overlook its evolution over time.

To consider the fluidity and ephemerality of memetic production we propose the term Contingent Macro. We intend Contingent Macros as short-lived memetic layouts that might be related to current events or issues that quickly gain a clear, monosemic, interpretation by users. Contingent Macros differ from more standardized layouts due to their social and cultural embeddedness, which concurs to limit their widespread adoption and leads to their rapid fall into disuse.

To date, existing research has barely begun to consider the memetic phenomenon in its fluid diachronic perspective (see Smith and Copland, 2021). The present work seeks to contribute to this debate by analyzing the production of memes connected to a highly mediatized event, the 2019 Italian government crisis, observed in its unfolding. In doing so, we aim to capture the fluidity and ephemerality of memetic production and the popularization of templates.

3. Methodology

To conduct our research, we have analyzed a dataset of digital data using a combination of automated techniques and qualitative content analysis. In the following, we illustrate how Contingent Macros can be collected and analyzed, by drawing on the case of the 2019 Italian government crisis. After illustrating our data collection process, we focus on how we identified and analyzed the Contingent Macros. While detailing the steps leading to our results, we offer insights on how such an analysis can be applied to other contexts, and how Contingent Macros interact with the broader ecology of memes surrounding a digital conversation.

3.1 Identifying a case: the 2019 Italian government crisis

The government crisis refers to the political events taking place in August and September 2019 in Italy. The crisis sprouted from the revocation of political support to the cabinet - led by Giuseppe Conte - by the Lega party and its leader, Matteo Salvini, on the 8th of August. This led to the disruption of the alliance on which the government was formed, between Lega and Movimento 5 Stelle, led by Luigi Di Maio. On the 20th of August Conte resigned from its post, subsequently starting the consultations by then-President Sergio Mattarella to form a new cabinet. As a result, on the 9th of September, a new government led by Conte and counting on the support of Movimento 5 Stelle and that of Partito Democratico, led by Nicola Zingaretti, took charge.

The selection of our case hinged on three main considerations: time, production, and knowledge. These criteria are aimed at providing a case that can be fruitfully analyzed using a combination of qualitative and quantitative techniques. Our case, the government crisis, responded to all three criteria: it is an event unfolding during a limited *time*, allowing us to fully follow the memetic production surrounding it; it has been covered by social and mainstream media, which contributed to a consistent *production* of memes during such a time frame. Finally, it is a public and popular event: this provides *knowledge* fuelling the bottom-up and distributed construction of a cultural context through memes.

3.2 Field and data collection

Despite the fragmentation of memes in many formats, including audio, videos, and texts, here we chose to focus our attention on static images, still considered the most popular format associated with memes (Ross and Rivers, 2017). Following this consideration, we focused on a fitting field (Airoldi, 2018; Caliandro, 2018): Instagram, as users habitually use the platform to comment on major news events (Al Nashmi, 2018), such as a political crisis. Following a brief exploratory analysis using a snowball sampling of hashtags, we collected data indexed through #crisidigoverno (government crisis) based on the digital methods paradigm (Caliandro and Gandini, 2016). Aside from indexing the most substantial production among the hashtags tested, we focused on the identification of a marker that is language-specific and neutral (i.e., not slanted or polarizing).

The dataset has been assembled using an *ad-hoc* Python script. Despite being contested and opposed by platforms (Bruns, 2019), scraping as an approach to data collection is necessary for a post-API research, oftentimes representing the only viable option to access data. Scholars advocating for this practice also maintain that through scraping, researchers are encouraged to critically reflect on platforms' infrastructures and gatekeeping policies (Venturini and Rogers, 2019).

The starting dataset features a total of 5.686 images. Of those, as will be shown, 1.269 have been manually identified as memes and analyzed through content analysis. The time frame selected ranges from the 8th of August 2019 to the 6th of September 2019, identified by the coverage of the crisis by external sources such as mainstream media, marking the boundaries of the government crisis. Additionally, this has been triangulated with the sheer daily occurrences in our dataset. Notably, data was

collected a month after the end of the political crisis, to avoid relevant fluctuations in metadata such as comments and likes.

It is relevant to consider the specificities of the platform(s) from which data is collected, both at a methodological and ontological level. In our case, we attempted to consider the socio-technical characteristics of the chosen platform, and the unique possibilities of action those can engender (Marres, 2017). We thus considered Instagram due to its capabilities of structuring political movements and providing commentaries on current events through visual language (Al Nashmi, 2018). However, some platforms might warrant more focus on how broader platform dynamics can affect the distribution and creation of content (Zulli and Zulli, 2020), or on different understandings of memes, such as textual-based memes, and how these are translated at the junction of platform dynamics and culture (Tuters and Hagen, 2020).

3.3 Identifying and exploring memes: content and visual analysis

Following broader data collection, we needed to extract memes from our complete dataset. To do so we started with a clear-cut definition, understanding visual memes as digital artifacts, often consisting of a combination of varying degrees of visual and written content, and focusing on reinterpretation and intertextual references (see Giorgi, 2021; Chagas et al., 2019). Such a definition mirrors the centrality of creative elaboration and intertextuality to the identification of memes (Shifman, 2013; Laineste and Voolaid, 2016). Also, it purposefully sidesteps the role of macros in determining the memetic nature of images and allows us to consider new, emerging and fast-lived configurations: Contingent Macros. From an empirical point of view, memes have been identified as static images featuring signs of manipulation (i.e. captioned text and/or other visual collages). Figures 1 and 2 show, respectively, an example of a post that we identified as a meme and a post that was not considered a meme. Our data collection procedure featured hashtags as an entry point, thus already acting as a filter; different cases, fields, or formats, might require additional work to restrict considered content to the phenomenon considered.



Figure 1.

Example of meme



Figure 2.

Example of non-memetic content

Following this definition, memes have been extracted from the dataset through manual content analysis. Before doing so manually, we attempted to isolate memes using automated approaches based on image similarity (e.g., Miliani et al., 2020). However, results were limited due to the similarity between general images and Contingent Macros: since in this case, new macros sprouted from iconic images, automated clustering struggled to separate newly emerging layouts and the set of images that propelled it, which widely circulated in more traditional (i.e., non-memetic) formats and media outlets. Conversely, the adoption of automated categorizations based on external repositories has been limited as well, as those often rely on established templates and formats (Rogers and Giorgi, 2023). However, different cases might be able to rely more strongly on automated meme detection at this stage.

These downfalls and the limited size of our dataset led us to adopt a more hands-on approach. The content analysis we performed follows the Ethnographic Content Analysis paradigm (Altheide, 1987; Caliandro and Gandini, 2016), which rejects the idea of a fixed, *a priori* defined codebook in favor of a more flexible approach, where categories and values emerge deductively from data and the context of the study. This allowed us to maintain a certain degree of flexibility in what we considered a meme, embedding some context-specific reflections that might have escaped standardized categorizations. Notably, different cases might have more to gain by incorporating automated approaches to detect memes, as is the case for textual memes (Tuters and Hagen, 2020) or aptly segmented fields (such as #okboomer, see Zeng and Abidin, 2021).

The final codebook consisted of the following categories:

1. *Macro* refers to the relation of the meme templates to widespread, conventionalized formats. They were identified relying on both the authors' meme literacy and their presence on online databases like Know Your Meme and Memebase.
2. *Manipulation* entails the degree of visual modification of images. We considered as instances of manipulation the presence of text lines and certain types of visual digital alteration of the images, i.e. collages and montages.
3. *Actors*: the political actors portrayed in the pictures. Including politicians, relevant related figures, and political parties, and is distinguished between a visual level (pictures, logos, representations) and a textual level (the name is mentioned in the text).

The codebook focused on categories that allowed the separation of memetic and non-memetic instances of content, as well as to contribute to the analysis of narratives.

After manually obtaining a dataset of memes, we turned to automated visual analysis. The goal was to identify recurrent formats of memes within our dataset, with regard to the presence of macro and Contingent Macro templates. To conduct this analysis, we relied on the Python library PixPlot, developed by the Yale Digital Humanities Lab, which creates visual maps of images, clustered based on pixel similarity (Duhaime, 2021). After identifying memetic instances in our dataset, we explored the resulting dataset with PixPlot, to identify clusters of similarly looking memes and evaluating the presence of standardized macros vis-a-vis other, newly emerged yet pervasive, templates. To distinguish standardized macros from other templates, we integrated the automated sorting with a qualitative exploration of the clusters to identify popular and prolific templates emerging from the memetic production around the event. To this end, we introduced another variable to our analysis: time. This allowed us to visualize the rise and fall of standardized formats during the event, empowering a qualitative analysis of macros and linking it to the unfolding of the issue.

3.4 Analyzing narratives

At this step, we have identified all memes included in our dataset using a combination of manual and automated analysis. This includes memes that leverage on established or rising formats (standardized and Contingent Macros), as well as memes that have not been identified as belonging to any particular cluster. Subsequently, memes have been analyzed qualitatively using insights coming from the content analysis,

to unveil the narratives connected to the government crisis as well as their development through time. To this end, we divided our datasets into several sub-events, based on a combination of inductive reasoning (i.e. occurrences per day, see Figure 3) and external sources, such as media coverage.

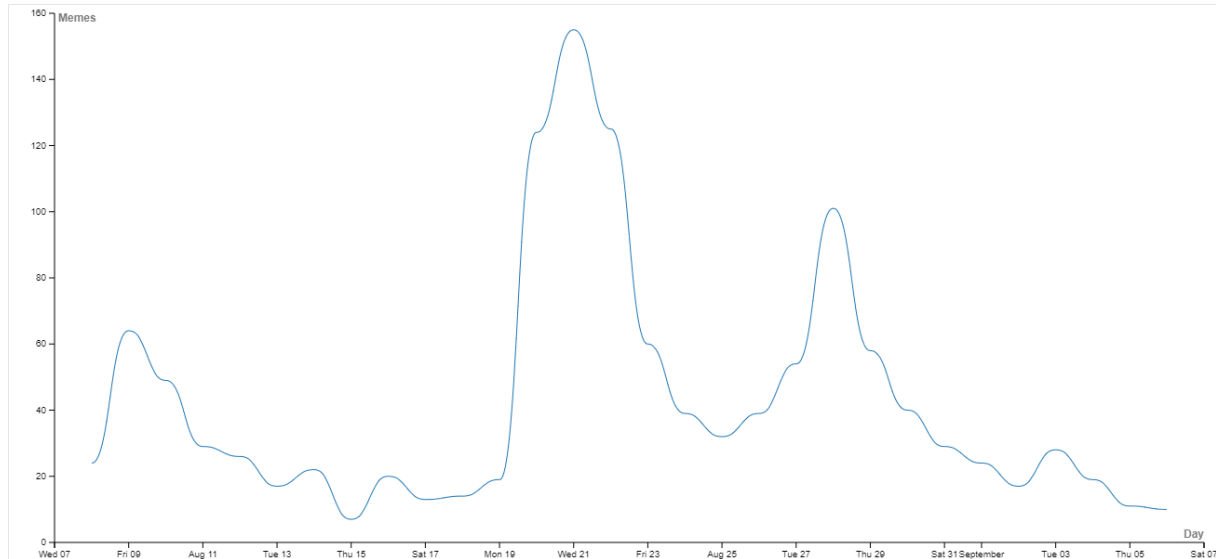


Figure 3.

Memetic occurrences in the timeframe

This led us to four major sub-events: (1) the beginning of the crisis, peaking on the 9th of August with the announcement of a vote of no confidence against Conte’s cabinet; (2) the 21st of August: the beginning of consultations involving the political parties and the President, Sergio Mattarella, to find a new majority in the Chambers. This followed a harsh resignation speech held by the then Prime Minister Giuseppe Conte in the Senate, criticizing Matteo Salvini; (3) 28th of August: Giuseppe Conte is called by the President to form a new government: similarly to the first government, he takes on a *super partes* role, mediating between two different parties: 5 Star Movement and Democratic Party. As customary, he accepted with reserve; (4) 3rd of September: the 5SM holds a vote on his direct democracy platform, Rousseau; the voting members of the party will bless the new government, which will be sworn in two days later, on the 5th of September, ending the 2019 Italian government crisis. Time ranges and number of occurrences per sub-event are visible in Table 1. This division guided us analytically but did not compartmentalize our analysis. Rather, it allowed us to consider the narrative at large while incorporating specific events into a broader negotiation of meaning. This is particularly relevant in this case, as discrete sub-events are, in this case, the driving force behind the rise of contingent macros.

Table 1.

Subsets, occurrences (memes), peaks

Sub-event	Peak day	Sub-event begins	Sub-event ends	n
1	8th August	9th August	11th August	166

2	21th August	19th August	23th August	483
3	28th August	26th August	30th August	292
4	3rd September	1st September	5th September	99

4. Findings

Before delving deeper into the analysis of Contingent Macros, it is worth paying attention to the proportion of memes in the dataset. As shown in Figure 4, memes are 22% of the items considered: 1.269 memes out of 5.686 images. Of the remaining images not included in our final meme dataset, some (31%) were not related to the government crisis at all, most likely gaining visibility by exploiting a popular hashtag; a minor proportion of images (22%) referred to the crisis using media posts, charts, opinions and, in general, without deploying memes. As a preliminary consideration, then, most of the visual material related to the government crisis in our sample does not frame the issue using memes.

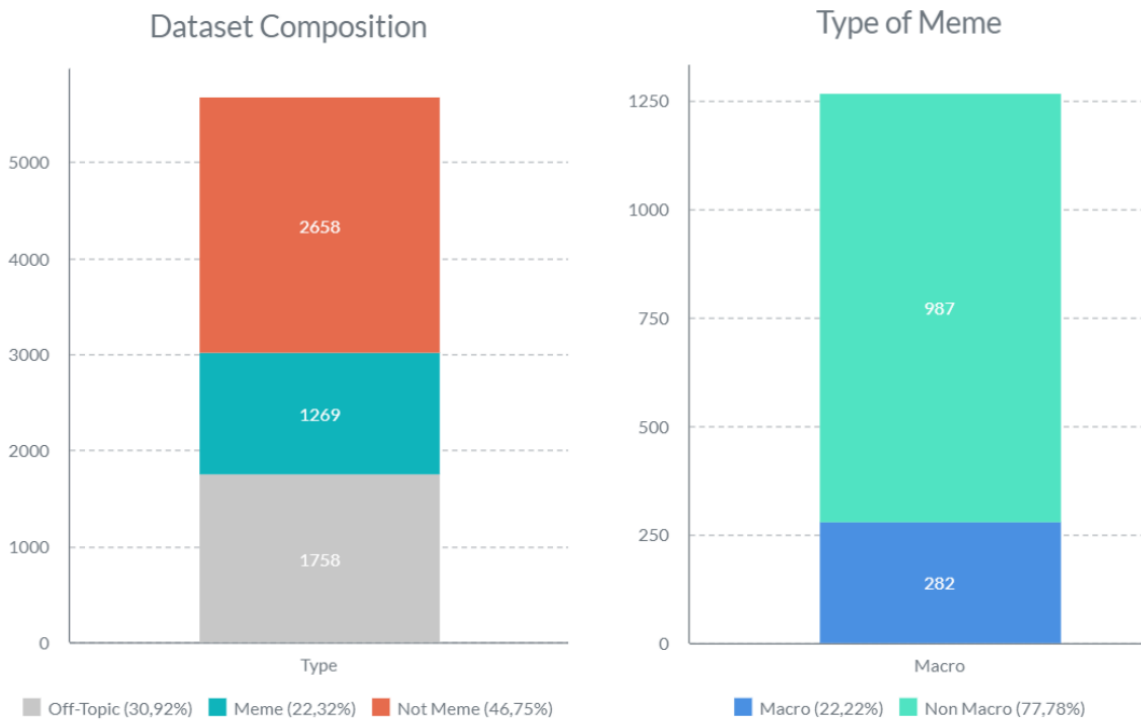


Figure 4.
The composition of the dataset, type of image and type of meme respectively

4.1 Memes temporality and ephemerality: standard and Contingent Macros

The visualization obtained with Pixplot (Figure 5) allows us to draw some inferences regarding the development and the temporality of the memetic production surrounding the political crisis. The vast central area of the graph, including the majority of memes of our dataset, is composed of pictures with

captions and/or digitally edited images. The templates are not amenable to established macros, certified both inductively, as they are not clustered based on similarity, and qualitatively.

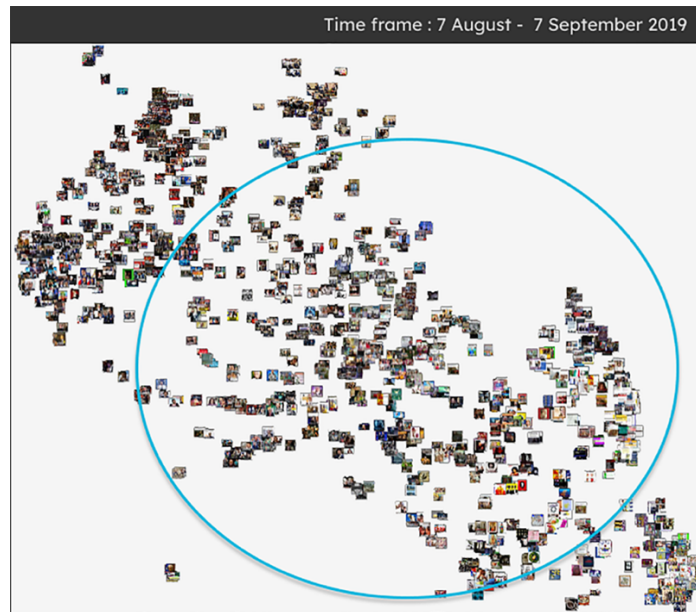


Figure 5.

Visual map of the memes outputted by Pixplot, focusing on unclustered memes

These memes are usually assembled by creatively editing the faces of political leaders on pictures taken from internationally popular cultural texts. Such is the case of the meme in Figure 6, which depicts Lega leader Salvini on the throne of the TV series *Game of Thrones*. As we can see, the caption contains a pun playing on the similarity of the English word ‘throne’ and the Italian ‘*poltrone*’ (seats), hinting at the political game enacted by politicians to preserve their seat at the government. Still about this group, we find several memes specifically referencing Italian popular culture: in Figure 7, for example, the face of Italian President Sergio Mattarella is edited on the body of Italian actor Giovanni of the comic trio ‘Aldo, Giovanni e Giacomo’. The frame used for the meme is taken from a movie scene where one of the characters is taken hostage by a criminal and tries to escape by writing “help” on his hands. The ironic message is here created by drawing a parallelism with Sergio Mattarella, serving President, unwillingly caught in the middle of the government crisis.



Figure 6.

Example of unclustered meme

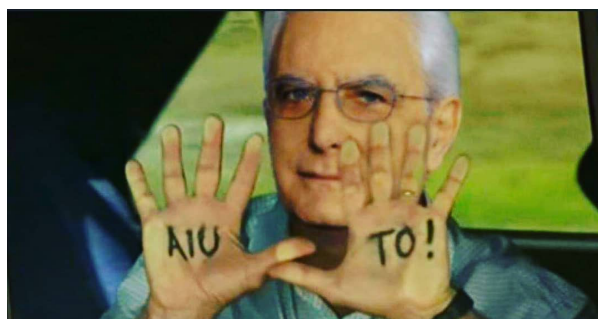


Figure 7.

Example of unclustered meme

After considering unclustered memes, we moved to the three well-defined and identifiable groups of memes. We considered clusters based on image similarity, represented by spatiality, and their distribution over time. This led us to three main clusters (see Figure 8), two of which we identified as Contingent Macros and one composed of all memes sharing the same visual style (cartoon-based templates).

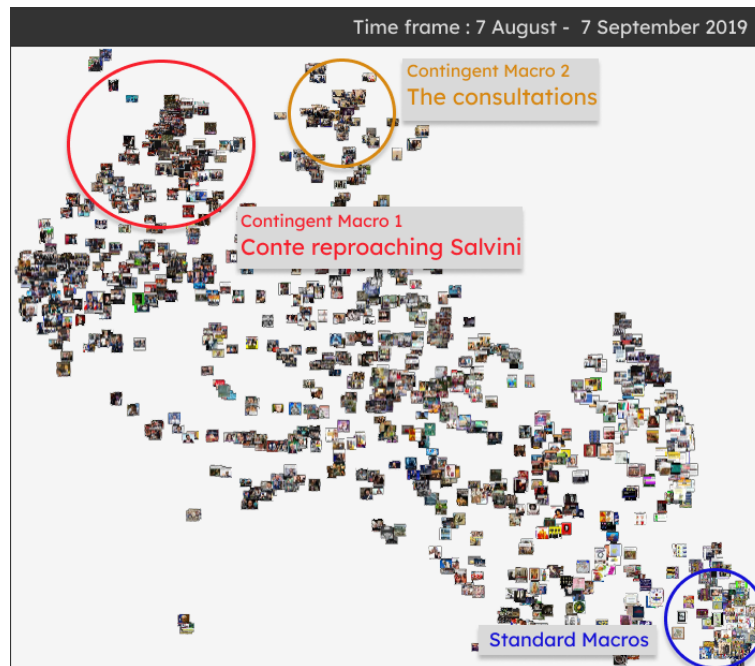


Figure 8.

Visual map of the memes, focus on clusters of Contingent Macros and standard macros

3.3.1 Contingent Macros

PixPlot is useful to identify what we have defined as Contingent Macros: memes employing templates related to current events (e.g. a picture depicting, narrating or derived from it) that quickly gained a clear, monosemic, interpretation by users, and were reappropriated as they spread virally. In the visualization created through PixPlot, two main clusters related to distinctive Contingent Macros can be recognized:

Contingent Macro 1 - Conte Reproaching Salvini

The first Contingent Macro, in the red circle, is labeled *Conte Reapproaching Salvini* (Figure 9). The template stems from a precise moment during Conte's speech before the Senate on the 20th of August, in which Conte harshly criticized Salvini and the political stance of his party. Starting from this date, the frame began circulating as a meme template, reaching its productivity peak in the following days. It is worth noting that the productivity of this macro extinguished around ten days later: starting from August 30, no new occurrences of the meme were produced, meaning that the template ceased to be prolific around that time. While several variations exist, the most employed frame depicts the Prime Minister standing and talking while holding his notes, resting one hand on Salvini's shoulder, while he reacts to Conte's speech with a thoughtful side glance.

The meme is used to represent the mismatch of power or authority between Conte and Salvini, with the former having the upper hand and Salvini in the role of the underdog. The analyzed versions of this meme also feature elements taken from pop culture (e.g. Pokémon, Star Wars), shared subcultural knowledge (e.g. memes from specific university students' pages), and dialectal jokes. At a certain point,

we note that the macro transcends the contextual political event and starts to be used to represent power mismatches in a variety of contexts: in this macro Conte gains the high ground, drawing from the memetically evergreen Star Wars, or becomes the professor about to ask a question to an unprepared student (Figure 10).

Time frame : 20 August - 30 August 2019

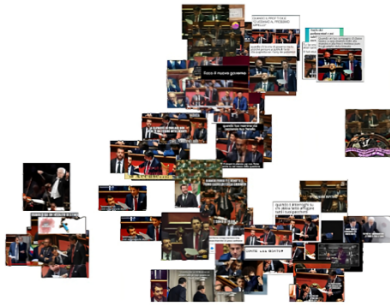


Figure 9.
Close-up of the cluster 'Conte reproaching Salvini'



Figure 10.
Example of Conte reproaching Salvini

Contingent Macro 2 - The Consultations

The second Contingent Macro that we found is *The Consultations* (circled in orange). The frame used by these memes depicts Sergio Mattarella’s oversight of the consultations to form the new government. Sitting before him, a variety of weird personas contribute to the construction of the humorous undertone: among them, Italian TV presenter Maria de Filippi, the comedian Antonio Albanese, and The Teletubbies (Figure 12). The meme wants to convey the idea that, due to the unexpected and rushed nature of the consultations, Mattarella is forced to take into consideration the most improbable candidates. As the consultations started on the 21st of August (see division in sub-events in the methodological section), memes using this template started to spread around the same time as those using the *Conte Reapproaching Salvini* template. This Contingent Macro appears to be slightly more durable than the previous one, as memes using the template are still found up until the end of the dataset.

Time frame : 7 August - 7 September 2019



Figure 11.
Close-up of the cluster 'The Consultations'



Figure 12.
Example of Consultations macro

3.3.2 Cartoon-based Macros

The fourth and last identifiable cluster circled in blue in Figure 8, includes memes using cartoon-based templates. The majority of templates contained in this cluster, which counts a total of 94 memes, are amenable to the definition of established macros. We considered as standard or established macros the templates that are cataloged in the web archive *Know Your Meme* (Rogers and Giorgi, 2023). Among the most popular meme characters, we find templates connected to SpongeBob SquarePants, Scooby-Doo, and various other contexts (Figure 13). This concurs to underline the iterative nature of the process: clusters need qualitative validation, considering the contexts in which the conversation is nested. In this case, the explaining power of the cluster is limited, but it concurs to underline how clustering by image similarity can assist in identifying broader clusters, in this case based on format.

Time frame : 7 August - 7 September 2019



Figure 13.

Close-up of the cluster with cartoon-based macros

4.1 Memes temporality and ephemerality: standard and Contingent Macros

The insights from the content and visual analysis contribute to our understanding of how memes have been used to comment on the event. We found that, if observed in its unfolding through time, memes create a narrative that employs metaphors to represent power relations, political alliances, rivalries, and positioning among the political spectrum. Also, the narrative surrounding the government crisis shifts over time: while the political actors depicted remain somewhat constant, their framing changes significantly.

At the onset of the crisis, the pervasive narrative is that of a changing bond between the two co-governing leaders, Di Maio and Salvini. In this context, the working alliance connecting the two politicians is transformed into a romantic one, where the possible double-meaning of words like “trust” and “betrayal” are played upon to apply to the semantic domain of personal relationships. Both leaders are thus represented as a couple in a troubled relationship, trying to solve their quarrels in a setting derived from a reality show, *Temptation Island* (Figure 14). While the aforementioned memes focus mostly on possible reconciliation between the parts, that is not always the case; the government is also perceived as already over, despite being only hours into a potential crisis: Di Maio and Salvini are depicted with a popular cartoon outline (“That’s all folks”) signaling the end of their (mis)adventures (Figure 15).



Figure 14.
Example of meme portraying Salvini and Di Maio as a couple



Figure 15.
Example of meme portraying Salvini and Di Maio as a comic duo

Matteo Salvini is portrayed as a dominant figure, especially when compared to the co-governing party and its leader, Luigi Di Maio. This predominance is, however, bound to change coinciding with Conte’s harsh speech in front of the Senate on the 20th of August: from here on his position intertwines with that of Giuseppe Conte to form the narration of a troubled Salvini, in a subordinated position when compared to that of the then Prime Minister. The discourse depicting Salvini as troubled is perhaps aptly summarized by the numerous memes sprouted by the already presented Contingent Macro *Conte Reproaching Salvini*, which emerges and gains a foothold during this phase. As seen, the narrative conveyed is that of a clash going on between the two politicians, in which Conte is getting the upper hand: in this context, we find memes in which the Prime Minister is represented as the good facing the villain, like the one with Obi-Wan’s quote to Anakin: “I have the higher ground” (Figure 17). The relationship between Salvini and Di Maio changes as well, as depicted in Figure 18, where they are represented as a couple - as widely shown previously - but their power relation is inverted, with Salvini shown as trying to get closer to a cold and rejective Di Maio.



Figure 17.
Example of meme using the contingent macro ‘Conte reproaching Salvini’



Figure 18.
Example of meme portraying Salvini and Di Maio as a couple

On the 21st of August, the consultations start: President Sergio Mattarella is the absolute protagonist of this phase, with the emergence of the Contingent Macro *The Consultations*. The memes relying on this layout introduce the figure of Mattarella into the debate, contextualizing it into the broader context of the political crisis; the political negotiations here are understood as fragmented and complex, which is visually depicted by the President having talks with a variety of improbable characters (Figure 11, above).

Finally, Conte is called to form a new government, and the final coalition will be between the 5 Star Movement and the Democratic Party. Here, the narrative of a defeated Salvini is reiterated and extended, as he is represented in a subordinated position not only to Di Maio but to Conte and Mattarella as well. In one instance Conte whispers to his ear a quote from the popular TV show *Game of Thrones* (Figure 19).



Figure 19.

Example of meme portraying Salvini in a subordinated position



Figure 20.

Example of meme portraying Conte in a subordinated position

While both Conte and Salvini look content, the quote is a widely diffused meme template that is rather unequivocal: those who whisper such a quote - Conte in this case - have just gained a sound victory against their rivals - Salvini. Other memes focus on the newly formed coalition, highlighting the uneven power among the political actors involved. Interestingly, Zingaretti and Di Maio are represented as a couple of lovers, in which Di Maio takes the female role. Conte, on the other hand, seems to submit to the newfound government, as he is depicted carrying the cart on which Zingaretti and Di Maio take solace - yet, another possible interpretation may perceive Conte as the one who is doing all the work. Nonetheless, it is relevant to notice how Conte's depiction shifts from one of power to one of submission as Salvini is replaced by Zingaretti (Figure 20).

4. Conclusions

To date, research on memetic visual cultures has given particular weight to macro formats, often ontologically conflating standardized layouts and memes as a whole (Milner 2016; Grundlingh 2018; Mazzoleni e Bracciale 2019; Vásquez and Aslan, 2021). As we demonstrate, the concept of Contingent Macro crucially differs from long-standing traditional macros: Contingent Macros can emerge in the context of an event and abruptly disappear after a, more or less brief, moment of glory. While we believe most Contingent Macros are short-lived, it is not excluded that some of them may resurface the memetic

scene in the future and eventually rise to the status of established macro templates. However, we argue, their popularization ultimately does not matter. The conceptual relevance of the Contingent Macro is that it allows us to analytically consider formats that cannot break through and become popular enough to achieve widespread diffusion but, regardless, provide a rich and often untapped source of data to analyze issues, events, and platform dynamics.

By following how the 2019 Italian government crisis was framed through memes, we have observed how meme production is skewed toward the proliferation of new layouts, which significantly outnumber established macros. To account for this, we introduced the notion of Contingent Macro, which refers to layouts that emerge in response to socially, politically, or culturally relevant events (e.g. protests, electoral campaigns, social movements, and so on), quickly rise in popularity, spawn a sheer variety of derivatives, and then fall into disuse. Aside from commenting on the event specifically, their framing power may transcend their contingency, as they are appropriated and manipulated by users to fit with their cultural context.

In our case, two different events - Conte's Speech before the Senate and the beginning of the consultations to form a new coalition - generated two different short-lived macros: *Conte Reproaching Salvini* and *The Consultations*. The templates are built by taking and creatively remixing a specific frame from the events, which was originally spread by traditional media outlets, such as television broadcasts or newspapers. Through our diachronic exploration, we demonstrated that these macros quickly gained a shared univocal interpretation – e.g. a visual depiction of power mismatch – and experienced a viral and explosive popularity in the days or weeks following the triggering event. During this period, *Conte Reproaching Salvini* was also employed to frame events outside of the political sphere, while *The Consultations* never became a frame for other events. Finally, our work showed that these Contingent Macros extinguished their creative potential in a short time and just as quickly faded to oblivion.

Our work has several ontological and epistemological implications for meme culture and its study. First, the notion of Contingent Macro is a useful heuristic to delve deeper into the nuances of meme as a stratified and fluid cultural object. At a broader level, this enables a more in-depth exploration of the phenomenon of meme standardization and its relevance to the definition of memes. While templatability is an important asset of meme theory (Rintel, 2013; Lou, 2017; Dancigyer and Vandelanotte, 2017), our study deconstructs the previously clear-cut-idea of meme (and template) standardization tracing its evolving and multidirectional path. In doing so, we contribute to the already established argument that memes are but one realization of a spectrum of digital objects, together with viral content and spreadable media (Shifman, 2014; Jenkins et al., 2013). In all, the notion of Contingent Macro provides more analytical and contextual depth to the concept of 'emergent meme' proposed by Wiggins and Bower (2014): with this term, the authors refer to instances of culture jamming and altered (*aka* remixed) digital content, which – unlike memes – is “not iterated and remixed further as separate contributions” (p. 1898). Our intention here is neither to undermine the validity of prior categorizations nor to add yet another label to already existing taxonomies. Rather, our contribution is empirical: through the analytical process and the heuristic of Contingent Macro, the study provides empirical insights into the genesis and evolution of memes, considering the broader digital and cultural environment of meme production and circulation.

Our study has methodological implications as well. Firstly, we want to provide meme scholars with a toolkit to identify and analyze memes in datasets connected to mediatized events. Traditional approaches to meme study are often unable to capture the hyper-memetic logic fuelling our contemporary society (Shifman, 2014): in particular, we believe that macro-based research is oftentimes too tied to subcultural, niche digital environments to adequately account for a society where memes are pervasive and take a multitude of forms. We argue that the concept of meme goes beyond conventionalized templates; its popularity emerges from the combination of several aspects, including the contingency (the nature of the triggering event), the technical and the cultural ecology of the platforms (e.g. affordances, user base demographics) and so on. Given this, we maintain that a methodologically (and culturally) sound approach to meme research should attempt to embrace the complexity of the memetic phenomenon,

instead of relying on ready-made concepts like that of macro, contextually challenging the methodological hegemony of culturally situated repositories in favor of more inductive approaches. Moreover, although comprehensive definitions of memes are found, there are hardly any indications of how to translate them into empirical research. Our work provides replicable methodological steps for meme research, involving: (1) a theoretically grounded analytical definition of memes, to identify memetic instances in miscellaneous datasets; (2) a part of automatic-driven visual analysis of the memetic formats, which provides insights on recurring templates and their evolution over time; this was complemented by (3) a phase of qualitative analysis of content, which integrates the meme instances into a coherent narrative flows, which runs parallel to the case considered.. The combination of automated and qualitative methodological approaches allows less formalized memetic instances, such as contingent macros, to emerge deductively from the dataset.

Finally, we want to address several structural and methodological limitations, which may have variously affected the present work. While it was necessary to select a case study to illustrate our methodological process, we believe it may have had an impact on the generalizability of the results, especially given the specificity of our case. As memes are cultural objects and, thus, deeply embedded into a social, cultural, and, in this case, political context, further research might want to test such an approach on a variety of cases. This extends to how we defined memes as well. We underlined the importance of specific, case-tailored definitions of memes. However, in doing so, some details are necessarily lost: while our work focuses on static images, which remain the most pervasive format, video memes are also studied (Shifman, 2012) and have come back to the scene thanks to TikTok (Zulli and Zulli, 2020). Similarly, broader definitions extend to include formats such as written text (Tuters and Hagen, 2020). This translates and extends to our choice of platform as well. Instagram affected the typology of memes we retrieved, both in format and content; more comprehensive approaches could aim at cross-platform or transmedial approaches.

As is the case for the evolving ontological boundaries of memes, the concept of contingent macro advances the conversation on the methodological pitfalls of studying memes and macros. However, focusing on visual content heavily affected the methodological steps detailed in the article. While the conceptual definition of contingent macro is flexible enough to be applied to a variety of objects and contexts, formats can heavily impact and stretch the conceptual boundaries of what a contingent macro can be. The contingent macro we identified in our case sprouted from an image that originally circulated on traditional media. Other memetic formats, such as audio or video, might instead draw less from easily identifiable similarities, and more on abstract or harder-to-detect cultural patterns. While we clustered images using PixPlot, for example, grouping the same type of dance on TikTok through computational means is considerably harder; this might be however mitigated by platform affordances such as the indexing of content through audio (Vizcaíno-Verdú and Abidin, 2022).

The complexities of memetic content require consideration of a combination of social and cultural contexts, platform affordances, vernaculars, and ecologies, as well as physical and digital circulations. This requires flexible definitions and methodological steps that, as in this case, are deeply intertwined with one another and strongly benefit from comprehensive approaches that can hold both dimensions together.

References

- Airoldi, M. (2018). Ethnography and the digital fields of social media. *International Journal of Social Research Methodology*, 21(6), 661–673. <https://doi.org/10.1080/13645579.2018.1465622>
- Al Nashmi, E. (2018). From selfies to media events: How Instagram users interrupted their routines after the Charlie Hebdo shootings. *Digital Journalism*, 6(1), 98–117. <https://doi.org/10.1080/21670811.2017.1306787>
- Blank, T. J. (2018). Folklore and the Internet: The challenge of an ephemeral landscape. *Humanities*, 7(2), 50. <https://doi.org/10.3390/h7020050>
- Blackmore, S. (1999) *The Meme Machine*. Oxford University Press, New York.

- Brideau, K., & Berret, C. (2014). A brief introduction to impact: 'The meme font'. *Journal of Visual Culture*, 13(3), 307-313. <https://doi.org/10.1177/1470412914544515>
- Bruns, A. (2019). After the 'APocalypse': Social media platforms and their fight against critical scholarly research. *Information, Communication & Society*, 22(11), 1544-1566. <https://doi.org/10.1080/1369118X.2019.1637447>
- Bucur, A. M., Cosma, A., & Iordache, I. B. (2022). BLUE at Memotion 2.0 2022: You have my Image, my Text and my Transformer. *arXiv preprint arXiv:2202.07543*. <https://doi.org/10.48550/arXiv.2202.07543>
- Burroughs, B. E. (2016). Political Memes: Bernie Sanders Dank Meme Stash. In *Media Res (A Media Commons Project)*.
- Caliandro, A. (2018). Digital Methods for Ethnography: Analytical Concepts for Ethnographers Exploring Social Media Environments. *Journal of Contemporary Ethnography*, 47(5), 551–578. <https://doi.org/10.1177/0891241617702960>
- Chagas, V., Freire, F., Rios, D., & Magalhães, D. (2019). Political memes and the politics of memes: A methodological proposal for content analysis of online political memes. *First Monday*, 24(2). <https://doi.org/10.5210/fm.v24i2.7264>
- Dancygier, B., & Vandelandotte, L. (2017). Internet memes as multimodal constructions. *Cognitive Linguistics*, 28(3), 565-598. <https://doi.org/10.1515/cog-2017-0074>
- de Saint Laurent, C., Glăveanu, V. P., & Literat, I. (2021). Internet memes as partial stories: Identifying political narratives in coronavirus memes. *Social Media+ Society*, 7(1), 2056305121988932. <https://doi.org/10.1177/2056305121988932>
- de Seta, G. (2016). Neither meme nor viral: the circulationist semiotics of vernacular content. *Lexia: rivista di semiotica*, 25-26.
- Dynel, M. (2016). "I has seen Image Macros!" Advice Animals memes as visual-verbal jokes. *International Journal of Communication*, 10, 29.
- Duhaime, D. (2021). *PixPlot*. Yale Digital Humanities Lab. <https://github.com/YaleDHLab/pix-plot>
- Gal, N., Shifman, L., & Kampf, Z. (2016). "It gets better": Internet memes and the construction of collective identity. *New media & society*, 18(8), 1698-1714. <https://doi.org/10.1177/1461444814568784>
- Grundlingh, L. (2018). Memes as speech acts. *Social Semiotics*, 28(2), 147-168. <https://doi.org/10.1080/10350330.2017.1303020>
- Heiskanen, B. (2017). Meme-ing electoral participation. *European journal of American studies*, 12(12-2). <https://doi.org/10.4000/ejas.12158>
- Jenkins, H., Ford, S., & Green, J. (2013). *Spreadable media*. New York University Press.
- Lankshear, C., & Knobel, M. (2019). Memes, macros, meaning, and menace: Some trends in internet memes. *The Journal of Communication and Media Studies*, 4(4), 43. <https://doi.org/10.18848/2470-9247/CGP/v04i04/43-57>
- Laineste, L., & Voolaid, P. (2016). Laughing across borders: Intertextuality of internet memes. *The European Journal of Humour Research*, 4(4), 26-49. <http://dx.doi.org/10.7592/EJHR2016.4.4.laineste>
- Lou, A. (2017). Multimodal simile: The "when" meme in social media discourse. *English Text Construction*, 10(1), 106-131. <https://doi.org/10.1075/etc.10.1.06lou>
- MacDonald, S. (2021). What do you (really) meme? Pandemic memes as social political repositories. *Leisure Sciences*, 43(1-2), 143-151. <https://doi.org/10.1080/01490400.2020.1773995>
- Marres, N. (2017). *Digital sociology: The reinvention of social research*. John Wiley & Sons.
- Mazzoleni, G., & Bracciale, R. (2019). *La politica pop online. I meme e le nuove sfide della comunicazione politica*. Il Mulino.
- Miliani, M., Giorgi, G., Rama, I., Anselmi, G., & Lebani, G. E. (2020, January). Dankmemes@ evalita 2020: The memeing of life: Memes, multimodality and politics. In *EVALITA 2020*.
- Milner, R. M. (2013). FCJ-156 Hacking the Social: Internet Memes, Identity Antagonism, and the Logic of Lulz. *The Fibreculture Journal*, (22 2013: Trolls and The Negative Space of the Internet).
- Milner, R. M. (2016). *The world made meme: Public conversations and participatory media*. MIT Press.
- Moreno-Almeida, C. (2021). Memes as snapshots of participation: The role of digital amateur activists in authoritarian regimes. *New Media & Society*, 23(6), 1545-1566. <https://doi.org/10.1177/1461444820912722>
- Nissenbaum, A., & Shifman, L. (2017). Internet memes as contested cultural capital: The case of 4chan's/b/board. *New media & society*, 19(4), 483-501. <https://doi.org/10.1177/1461444815609313>
- Phillips, W. (2015). *This is why we can't have nice things: Mapping the relationship between online trolling and mainstream culture*. MIT Press.
- Rintel, R. (2013). 'Crisis memes: The importance of templatability to Internet culture and freedom of expression', *Australasian Journal of Popular Culture* 2: 2, pp. 253–271. https://doi.org/10.1386/ajpc.2.2.253_1
- Ross, A. S., & Rivers, D. J. (2019). Internet memes, media frames, and the conflicting logics of climate change discourse. *Environmental communication*, 13(7), 975-994. <https://doi.org/10.1080/17524032.2018.1560347>
- Rogers, R., & Giorgi, G. (2023). What is a meme, technically speaking?. *Information, Communication & Society*, 1-19. <https://doi.org/10.1080/1369118X.2023.2174790>
- Rose, G. (2016). *Visual methodologies: An introduction to researching with visual materials*. sage.
- Shifman, L. (2013). Memes in a digital world: Reconciling with a conceptual troublemaker. *Journal of computer-mediated communication*, 18(3), 362-377. <https://doi.org/10.1111/jcc4.12013>
- Shifman, L. (2014). *Memes in digital culture*. MIT press.

- Smith, N., & Copland, S. (2021). Memetic moments: The speed of Twitter memes. *Journal of Digital Social Research*, 4(1), 23-48. <https://doi.org/10.33621/jdsr.v4i1.95>
- Theisen, W., Brogan, J., Thomas, P. B., Moreira, D., Phoa, P., Weninger, T., & Scheirer, W. (2021). Automatic Discovery of Political Meme Genres with Diverse Appearances. *Proceedings of the International AAAI Conference on Web and Social Media*, 15(1), 714-726. <https://doi.org/10.1609/icwsm.v15i1.18097>
- Tuters, M., & Hagen, S. (2020). (((They))) rule: Memetic antagonism and nebulous othering on 4chan. *New media & society*, 22(12), 2218-2237. <https://doi.org/10.1177/1461444819888746>
- Vásquez, C., & Aslan, E. (2021). “Cats be outside, how about meow”: Multimodal humor and creativity in an internet meme. *Journal of Pragmatics*, 171, 101-117. <https://doi.org/10.1016/j.pragma.2020.10.006>
- Venturini, T., & Rogers, R. (2019). “API-based research” or how can digital sociology and journalism studies learn from the Facebook and Cambridge Analytica data breach. *Digital Journalism*, 7(4), 532-540. <https://doi.org/10.1080/21670811.2019.1591927>
- Vickery, J. R. (2014). The curious case of Confession Bear: The reappropriation of online macro-image memes. *Information, Communication & Society*, 17(3), 301-325. <https://doi.org/10.1080/1369118X.2013.871056>
- Vizcaíno-Verdú, A., & Abidin, C. (2022). Music challenge memes on TikTok: Understanding in-group storytelling videos. *International Journal of Communication*, 16, 26.
- Wiggins, B. E., & Bowers, G. B. (2015). Memes as genre: A structurational analysis of the memescape. *New media & society*, 17(11), 1886-1906. <https://doi.org/10.1177/1461444814535194>
- Yus, F. (2018). Identity-related issues in meme communication. *Internet Pragmatics*, 1(1), 113-133. <https://doi.org/10.1075/ip.00006.yus>
- Zeng, J., & Abidin, C. (2021). ‘# OkBoomer, time to meet the Zoomers’: Studying the memefication of intergenerational politics on TikTok. *Information, Communication & Society*, 24(16), 2459-2481. <https://doi.org/10.1080/1369118X.2021.1961007>
- Zulli, D., & Zulli, D. J. (2022). Extending the Internet meme: Conceptualizing technological mimesis and imitation publics on the TikTok platform. *New Media & Society*, 24(8), 1872-1890. <https://doi.org/10.1177/1461444820983603>