Narrative and Interpretation on Twitter: Reading tweets by telling stories

Abstract

Existing research on communication on Twitter has largely ignored the question of how users make sense of the fragmentary tweets with which they are presented. Focusing on the use of Twitter for political reporting in post-revolutionary Egypt, this article argues that the production of mental stories provides readers with a mechanism for interpreting the meaning of individual tweets in terms of their relationships to other material. Drawing on contemporary narratology, it argues that Twitter exhibits key elements of narrativity, but that a creative reading process is nonetheless required to transform this incipient narrativity into coherent, sense-making mental narratives. This foregrounding of the reader's creative role makes stories on Twitter highly fluid and dynamic. Through reference to classic critical theory, I propose that this nonetheless represents an evolution rather than a radical break from earlier forms of narrative reception, which in many cases demanded similarly creative reading practices.

Keywords

Twitter, narrative, interpretation, reader-response, sense making, narratology, computer mediated communication

Introduction

Over recent years, the social networking site (SNS) Twitter has been increasingly recognised as an important venue for news reporting. Since the Iranian protests of 2009, and especially following the Arab uprisings of 2010/11, it has become the norm for Twitter users around the world to report on major (and minor) political events in minute detail, producing vast quantities of information. Yet while political reporting was once largely synonymous with storytelling, and it would have been unproblematic to characterise journalists as storytellers, the role of narrative in reporting on Twitter is less clear. Twitter is in one sense emblematic of Manovich's (2001) proposed shift from narrative to database; hashtags and other kinds of "searchable talk" (Zappavigna, 2015), for example, are more firmly grounded in the open-ended and retrieval based logic of the database than the linear and bounded logic of the narrative. Hermida (2010, 2014), moreover, argues that the growth of Twitter and other SNSs has produced "ambient" forms of reporting, where small fragments of information are constantly added without the need for an overarching structure. He characterises this as a fundamental move away from the story format: "Twitter breaks with the classic, narrative structure of journalism, and instead creates multifaceted, fragmented, and fluid news experiences"

(Hermida, 2014: 365), mirroring similar arguments by Bruns (2005, 2010) concerning a broad shift from news as complete and pre-packaged stories and reflecting earlier arguments that narrative has been fundamentally transformed in the digital era (Alexander and Levine, 2008; Landow, 1997). An alternative approach, differing at least in emphasis, can be seen in the work of Zizi Papacharissi and her collaborators (Meraz and Papacharissi, 2013; Papacharissi, 2015b; Papacharissi and De Fatima Oliveira, 2012). They largely accept the notion of "ambient" reporting on Twitter, but argue that political Tweeting remains fundamentally concerned with storytelling. Rather than an abandonment of narrative, it is the way in which stories are produced that represents the greatest break from the past – instead of being told by individuals to clearly defined audiences, stories are told collectively, although not necessarily collaboratively, by large numbers of users. Through such collective action, and the influence of elite users with large followerships, loosely defined, but nonetheless relatively stable, narrative constellations – groups of tweets loosely bound together through the repetition of keywords and hashtags and connections established through networks of retweeting and favouriting – emerge over time. Discussing the articulation of Palestine on Twitter, for example, Siapera argues that "the narrative on Palestine is co-constructed, often in real time, by a host of produsers who tweet from their own position and perspective" (my emphasis, Siapera 2013: 552). From this perspective, many people, often with different or even conflicting agendas (Papacharissi, 2015a: 80), may contribute to the storytelling process, but the result is nonetheless puportedly a single, recognisable narrative.

A third approach, inspired by the pioneering work of Ochs and Capps (2001), draws parallels between storytelling practices on SNSs and the fragmentary and collaboratively produced narratives of everyday dialogue (e.g. Dayter 2015; Georgakopoulou 2014; Page 2010). Scholars writing from this perspective argue that the "small stories" of everyday interactions should be considered the archetypical form of narrative, rather than the well-formed and globally coherent narratives of literature. Storytelling thus becomes primarily a dialogic form of collective and collaborative sense-

making, rather than a single narrator telling a clear and coherent narrative to a passive audience. This approach suggests that the fragmented and distributed forms of storytelling seen on SNSs are largely in keeping with the prevailing narrative practices of everyday life, if not with the literary models emphasised in much traditional narrative theory. What these approaches share is a concern with narrative production. Although they have brought important insights, the other side of the equation, narrative reception, has received far less attention. It is with this issue that this article is concerned - with reading tweets *as* narrative, rather than with telling stories on Twitter.

To this end, it attempts to answer three questions. 1) Why read Twitter as narrative? While accepting that reading tweets reporting political events as narrative is not the only possible approach, I draw on diverse scholarship on the relationship between storytelling and sense-making to argue that narrative, understood as a cognitive mode, offers the promise of turning vast numbers of atomistic fragments into comprehensible and interpretable units. 2) To what extent does Twitter enable narrative readings? In this section, I explore the distinction between narrative and narrativity with regard to Twitter. I argue that although readers are not presented with readymade narratives on Twitter, the platform, as experienced by readers, exhibits strong narrativity, enabling, if not requiring, fragmentary tweets to be interpreted as nodes within larger mental narrative ensembles, constituted through the act of interpretation. 3) What does reading Twitter as narrative entail? In the final section, I explore the reading process that Twitter demands. I argue that readers must engage in a highly creative interpretive practice in order to read Twitter in terms of narrative as they supply the key elements of a teleological structure and narrative boundaries, giving interpretations scope to vary significantly from reader to reader and suggesting it is reductive to treat narratives on Twitter as multi-authored, but ultimately static. Through reference to literary and reader-reception theory, however, I propose that the creative input demanded from readers on Twitter is different in scale, but not fundamentally in kind from the creative acts demanded by all narrative interpretations, no matter how stable texts first appear. I draw my examples from Twitter reporting

of political events in Egypt since the 2011 uprising that led to the overthrow of long-serving dictator Hosni Mubarak.

Why read Twitter as narrative?

In his influential monograph, The Language of New Media, Manovich (2001) argues that we are witnessing a general shift from the dominance of narrative towards database forms of organising information. In this context, narrative becomes "just one method of accessing data among many" (Manovich, 2001: 220). Although published five years before Twitter's launch in 2006, Manovich's words have important implications for the way we think about the presentation of information on Twitter. At first glance, the site is structured much more like a database than a traditional narrative – it functions as a database of billions of individual tweets which can be easily retrieved through searches and are not presented in the clearly defined linear sequences typical of narrative. As Manovich predicted, data can be retrieved in multiple ways – users receive the tweets of those they follow on their home timelines; they can visit the timelines of individual users; they can search for tweets based on their content or metadata. Depending on the approach chosen, the time at which retrieval takes place and, owing to Twitter's algorithm-based attempts to deliver relevant content, the characteristics of the searcher, different users are presented with different data. The presentation of information on Twitter is therefore clearly some distance from that of a traditional narrative. Why, then, would a user choose to interpret Twitter in terms of narrative? The answer, I suggest, is also provided by Manovich: "if traditional cultures provided people with well-defined narratives (myths, religion) and little "standalone" information, today we have too much information and too few narratives that can tie it all together" (Manovich 2001: 217). This emphasises that narrative is not only a form for the presentation of information but also a means for sense making. As scholars including Mink (1970, 2001), Polkinghorne (1988) and Bruner (1986, 1991) have argued, narrative is one of the primary cognitive mechanisms available to us for making sense of the world. It functions as a "basic human strategy for coming to terms with time, process, and change" (Herman,

2009: 2) by allowing us to imbue events with a sense of "coherence and continuity" (Mishler, 1990: 427/8). It allows us to see concrete, atomistic occurrences in terms of their relationships to larger wholes. It is from these relationships that the perceived significance of individual elements is produced – meaning does not inhere within events themselves. Causal links are the most important, although not the only, type of relationship (Bruner, 1991; Richardson, 1997; Somers, 1994; Todorov, 1981). It is this emphasis on causality that furnishes narrative with its power to explain how situations came to be and project what their implications will be. The same event emplotted in different narratives, characterised by different networks of relationships, can take on wholly different meanings. Contrast, for example, the conflicting narratives regarding the overthrow of Egypt's Muslim Brotherhood-affiliated president Mohammed Morsi by the Egyptian Armed Forces on 3 July 2013. Supporters of the Brotherhood by and large presented Morsi's removal as a grab for power by the Army and as a major step away from democracy. Many of Morsi's opponents, on the other hand, presented the Army's actions as an exercise of the popular will, essential to save Egypt's nascent democracy. Opponents of the 2011 revolution presented the Army's actions as a correction of the "mistakes" of the 2011 revolution while many liberal commentators viewed the Military's actions as concerning but unavoidable given Morsi's autocratic behaviour as president. The material facts of the military intervention remain the same in each of these narratives, yet interpretations of the justifiability and implications of the Armed Forces' actions change greatly, depending on the causal networks within which they are positioned.

The issue of narrative wholeness raises three key points for the present discussion. First, the positioning of individual elements within larger wholes allows for the functioning of the hermeneutic circle – the constant metonymic movement of interpretation that allows us to understand the significance of the whole in terms of its parts, and the significance of the parts in terms of the whole. Significantly, the whole in question does not precede the act of interpretation but is rather a result of it. The unity and boundedness implied is "synthetic" (Dray, 1971) in that it has no ontological basis in the world prior to interpretation by human actors. Complex phenomena such as the "Arab Spring"

or "Egyptian Revolution" come into being as discrete units that form the contexts for the interpretation of individual occurrences through the interpretation of those individual occurrences. That such narratives are collectively negotiated and produced means they are not fully under the control of any individual narrator. Second, the necessary obverse of wholeness is exclusion – to identify what is "inside" is also to define what is "outside". The narrative mode therefore also provides a mechanism for identifying what constitutes the relevant context of interpretation, as perceived by the interpreter, rather than requiring us to interpret everything in terms of everything else, thus playing an important, if potentially dangerous, simplifying role (Ochs and Capps, 2001). Third, it draws attention to the issue of narrative closure. Many narrative theorists, following Aristotle, contend that a teleological beginning, middle and end structure is a defining feature of narrative and essential component of wholeness. Although all narratives must at least imply an origin, it is commonly held that it is endings that play the most significant part in shaping the overall meaning of narratives (Brooks, 1984; Burke, 1950; Kermode, 1967; Sternberg, 1992; Wolf, 2003). An end need not be directly supplied (Carroll, 2007) but must be at least implied and projected.

The information expressed in individual tweets is necessarily limited. The value of reading Twitter in terms of stories therefore lies in narrative's power to create sense from jumbled and fragmentary information by interpreting it in terms of larger narrative ensembles. Consider, for example, the following tweet by Egyptian activist Mahmoud Salem (@Sandmonkey), reporting on the clearance of Muslim Brotherhood (MB) protestors from public squares in Cairo in 2013:

Trains all over Egypt are stopped. Reports that major roads into Cairo are also blocked. The security forces is stopping MB reinforcements 12:22 14/08/13

Taken in isolation, this tweet, which uses 138 of a maximum of 140 characters, communicates little and leaves key questions unanswered: Why have trains been stopped? What and where are the Muslim Brotherhood trying to reinforce? It scarcely constitutes a narrative, or even a "small story" (Dayter, 2015; Georgakopoulou, 2007) in its own right. We can only make sense of individual tweets

like this by fitting them into larger narrative wholes which provide the necessary context to identify how these events came to pass and what their future significance is likely to be. This does not simply mean reading tweets in terms of their relationships to other tweets. As Chadwick (2013) and Page, Harper and Frobenius (2013) recognise, Twitter is not used in isolation and individual tweets are not merely read in relation to other tweets which together constitute "digital objects" (Murthy, 2013); readers of this tweet from Salem might relate it to articles in the press, TV news reports, comments from friends, statements by politicians and so on almost ad infinitum, resulting in narratives which stretch across many platforms and are almost impossible to trace. Nor are the resulting narratives necessarily stable. Readers may continue to entertain multiple possible explanations, which evolve as more tweets are posted and more information becomes available.

Narrative's tendency towards exclusion, compared to database's emphasis on inclusion (Hayles, 2007), allows interpreters to navigate the huge volume of data with which they are presented without being overwhelmed. Rather than trying to interpret in the manner of a database, ever hungry for more data, the narrative mode provides a mechanism to cut through the noise on Twitter, disregarding vast amounts of information as irrelevant to the storied interpretation at hand. It provides a means for transforming ambient news into coherent mental narratives. This highlights the importance of distinguishing between production and reception. It is simple to publish fragmentary reports of events on Twitter. Twitter culture's oft-mentioned emphasis on instantaneity and immediacy (Hermida, 2013; Page, 2010, 2013; Papacharissi and De Fatima Oliveira, 2012) has led to a situation where users frequently share information, adding to the database, without necessarily having a clear idea of its (in)significance. If Twitter is to be read as meaningful, however, narrative cannot be done away with so easily. As Hayles (2007), and indeed Manovich (2001), note, the growth of the database does not obviate our need for narrative.

Narrative is clearly not the only way of interpreting Twitter. The "paradigmatic" mode, characteristic of scientific writing and argumentation (Bruner, 1986; Mink, 1970; Polkinghorne, 1988), based

around universal laws and truth conditions rather than specific relations between concrete happenings, can also be used to make sense of Twitter. Tweets about the Tunisian uprising of 2010, for example, can be interpreted through reference to general theories of revolution, rather than through what they say about specific events taking place in specific places. In recent years, moreover, producing visualisations of patterns of interaction between vast numbers of tweets and users has become a popular method for making sense of vast datasets scraped from Twitter and other SNSs (see Halpern 2015 on the growth and development of data visualisation). Both approaches can analyse and represent far larger volumes of data than narrative methods but ultimately produce fundamentally different types of understanding and explanation, grounded in appeals to universality and spatial and distributional metaphors rather than the relatively linear chains of cause and effect characteristic of narrative. Nonetheless, there are three main factors that encourage interpretations grounded in the logic of narrative, at least in the context of political reporting.

First, and most obviously, human readers are not computers. This immediately makes visualisation-based understanding impractical in day-to-day use of SNSs for most users. Second, the interpretive mode brought to bear depends on the purpose to which the interpretation is directed (Rorty, 1992). To explore the relationships and interactions between users tweeting about the Occupy Wall Street protests of 2011, for example, visualisations showing likes, retweets and @replies of the kind presented in Papacharissi (2015a) are ideal. If our goal were to be that of developing our understanding of anti-capitalist protest discourses, conceived as an abstract category, we might produce and analyse a corpus of tweets tagged with #OWS or #Jan25. Yet to understand the significance of protests in their own unique particularity, how they developed over time and what their causes and consequences were, narrative interpretation is demanded. Fitting fragmentary reports of events into larger narrative units is the only way to convert that barrage of information into situated knowledge of the unique characteristics of specific events and their significance.

Second, there is a basic human propensity, which appears to be a rare human universal, for seeing the world in terms of narrative. Fisher (1987: 24) argues that we "experience life as a series of ongoing narratives" while Ricoeur proposes that there is a "prenarrative quality" of human experience – our experience of the world may not provide us with ready-made stories but nonetheless contains the ingredients necessary for narrative interpretations to be possible. Crites (1971) and Carr (1997), following Husserl, go further, arguing that it is impossible to perceive events without their being filled with meaning as a result of their relationships with earlier and subsequent events. In different ways, both argue that storytelling is deeply engrained in the act of perception itself – rather than a two-stage process of perception with narrative situated at a second, sensemaking stage, events are storied as we first perceive them. Events cannot be voided of explicit or implicit relations to other events, relations which greatly shape the form we understand them to take, with the consequence that events, as we perceive them, are effectively constituted rather than merely described by the narratives in which they appear (Bruner, 1987; Mink, 1970). Polkinghorne (1988) and Bruner (1991) argue that the narrative mode is particularly well suited to understanding intentional human action, precisely the kind of action we see strongly emphasised in political reporting on Twitter. If it is true that these factors often, if not always, lead us to interpret our experience of the world in terms of stories, there is nothing to suggest that we would be any less strongly disposed to read Twitter in terms of narrative.

The third factor lies in the extent to which Twitter presents information in a manner which enables narrative interpretation. Far from representing a radical break from narrative, there are a number of factors concerning communication on Twitter which facilitate narrative interpretation. Given the complexity of this issue, it demands a more thorough treatment in a section of its own.

Twitter and storied interpretation: from narrative to narrativity

The approach to narrative elaborated in the first section describes it as a primarily mental phenomenon. Stories are the product of a sense-making cognitive function rather than pre-existing

textual objects. From this perspective, stories, as they exist in the minds of interpreters, are guided by, but irreducible to, narrative texts, which function only as "blue-prints" (Ryan and Thon, 2014). Adopting a similar approach from a reader-response theory perspective, Iser (1974) describes the material appearing on the page as "texts" and interpreted narratives, as they exist in the minds of readers, as "works": "the work is not identical to the text and is more than the text as the text only takes on life when it is realised [through the act of interpretation]" (Iser, 1974: 274). Such perspectives highlight that stories are not reducible to the texts from which they are produced and that interpretation is always an active process, an idea I explore in detail in the final section. If narratives exist in the mind, rather than on the page, it is consequently impossible to define texts as either narrative or non-narrative. Reflecting this, contemporary narratology avoids binary distinctions between narrative and non-narrative texts and talks instead of narrativity – the extent to which texts exhibit key features which enable and encourage narrative responses. Narrative can therefore be viewed as a "fuzzy" (Ochs and Capps, 2001) or "prototypical" (Wolf, 2014: 129) phenomenon with texts displaying greater or lesser amounts of narrativity (Herman, 2009). This makes it possible to discuss a scale of narrativity (Wolf, 2002) ranging from strong, for example traditional fairy tales, to weak, as in certain sculptures or musical compositions which merely hint at a narrative structure (Wolf, 2003), requiring significant input from readers if they are to be interpreted as narratives.

There is considerable disagreement, however, as to what the defining features of narrativity are. Bruner (1991), for example, identifies ten key features; Ochs and Capps (2001) five; Page (2010), studying Facebook, three; Somers and Gibson (1994) four; Sternberg (2010) three and Fludernik (1996) just one. These differences are indicative principally of differing areas of focus, rather than of contradiction, but show that there can be no single, all-encompassing definition. Following the approach elaborated in the previous section, four features are particularly salient in terms of narrative as a sense-making tool for Twitter: relationality; temporal and spatial specificity; causal emplotment; and wholeness. Clearly, user behaviours on Twitter are too diverse for definitive

statements regarding the narrativity of Twitter. Nonetheless, the site has two main characteristics which imbue it with significant narrativity and facilitate narrative readings.

First, a significant proportion of tweets, especially in the case of political reporting, are concerned with the relation of temporally and spatially specific events. This is crucial given, as argued in the previous section, temporally and spatially specific events are the basic stuff of stories, without which there can be no narrative. During the 2011 Egyptian uprising, for example, users posted millions of tweets detailing major and minor happenings, covering everything from former President Hosni Mubarak's resignation on 11 February 2011, to the movements of security forces, down to mundane details such as where food and drink were available in Tahrir square. Consider the following tweets posted by the prominent Egyptian citizen journalist, @Zeinobia, on 25 Jan 2011:

7000 protestors are having a sit in in Alexandria at Misr station #Jan25 #Egypt 12:26 25/01/11

thousands of protesters are heading to Alexandria Bibliote. to have a sit in there 12:28 25/01/11

tear gas grenades are being fired now at Tahrir square #Jan25 12:37 25/01/11

the twitter website is blocked in Egypt , we are using alternatives like applications and proxies software #Jan 25 $12:47\ 25/01/11$

there is unconfirmed news of Curfew !!! #Jan25 12:55 25/01/11

people are speaking about new protests across the country tomorrow #Jan25 13:02 25/01/11

Individually, these tweets tell readers little about what was happening and even less about the significance of the events they describe. Nonetheless, if read together, they provide the necessary base material for interpreters to produce detailed mental narratives of the events of the period.

Second, tweets are generally presented in reverse chronological orderⁱ, and, at least in the context of political reporting, events are frequently reported on Twitter in near real time with the order in which they appear on Twitter closely matching their real-world chronology, as in the tweets from @Zeinobia shown above. This form of presentation, coupled with a strong emphasis on reporting

temporally and spatially specific events, makes Twitter closely resemble what historians describe as "chronicle" (Cronon, 1992; Danto, 1985; Walsh, 1958; White, 1980), a resemblance Page (2010) has also noted with regard to Facebook status updates. Chronicles are lists of chronologically ordered events which nonetheless exhibit comparatively weak narrativity due to their omission of explicit causal links between events and lack of an overall archaeological and teleological structure. While narratives conclude, chronicles merely stop (White, 1980: 27). Yet as Cronon (1992) and Danto (1985: 122) argue, it is difficult to read chronicles without fitting their constituent elements into an overarching plot, in other words by reading them in terms of their positions within a narrative whole. Cronon (1992: 1351) proposes that "in a chronicle we easily lose the thread of what was going on at any particular moment. Without some plot to organize the flow of events, everything becomes much harder—even impossible—to understand". Although chronicles may lack key elements of narrativity, they still call for narrative interpretation. Yet to do so, readers must go beyond the chronicles with which they are presented and adopt a creative role to transform them into meaningful mental narratives through the provision of global structure and coherence (discussed in the final section).

There are two key reasons for this chronicle-like presentation of events. First, the platform's 140-character limit makes fragmentation unavoidable – users have little space within individual tweets to both describe occurrences and contextualise them in terms of their relations to other happenings.

This compels Twitter users to make frequent use of ellipsis and implicature, relying on readers to supply missing information and position the events reported in individual tweets into overarching plots. As discussed in more detail in the final section, interpretation always requires input from readers, yet, in traditional forms, writers can greatly influence the way readers do this by using storytelling techniques to limit and control the range of likely interpretations (Herman, 2013). As Bruner (1991: 8) argues, "great storytellers have the artifices of narrative reality construction so well mastered that their telling pre-empts momentarily the possibility of any but a single interpretation". It would be wrong to suggest that Tweeters have no control over reader interpretations – they retain

the ability to "selectively appropriate" (Baker, 2006; Somers and Gibson, 1994), choosing what to report and draw attention to, and also make strategic use of images, videos and links to material hosted off Twitter to influence interpretation. They can also contextualise individual events, as in the following from the Egyptian analyst @Bassem_Sabry, posted during the final hours of the Muslim Brotherhood-affiliated government of Mohammed Morsi:

Cant find other explanation for Morsi's ability to standoff except idea he's scaring the military that his supporters can use violence. 16:23 02/07/13

Morsi's "tweet" will really heat things further, also shows that it's likely the president had no other communication option but to "tweet." 13:52 02/07/13

Yet Twitter's fragmentation greatly limits tweeters' ability to control readers' responses to their tweets, regardless of their storytelling skill, continuing the gradual lessening of authorial control and weakening of Foucault's 'author-function' (Foucault, 2003), noted by Cover (2006). Twitter users can (and do) use multiple tweets to produce more detailed accounts than is possible in individual tweets yet can never be sure which of their tweets will be read by which readers and in what orderⁱⁱⁱ.

The second is a broader cultural shift in journalistic and communicative practices from providing clearly defined narratives which offer relatively stable meanings to providing information which allows for the production of sense-making narratives, but less strongly guides the resultant meanings. Stories, in so far as they can be said to exist on Twitter, are fragmented and dispersed, never closed or whole (Hermida, 2014; Meikle, 2016; Meikle and Young, 2012). Only rarely do individual tweets appear as part of relatively clearly bounded narrative sequences (see Page (2013) and Sadler (2017) for examples of exceptions to this norm). As Bruns (2005: 58) argues, we are witnessing a shift from journalistic storytelling practices that "make sense of the world for us" and towards the provision of information that enables us to "make sense of the world for ourselves", where we must draw our own connections between diverse happenings in order to interpret their significance to a far greater extent. This shift led Alexander and Levine to argue that, while stories were traditionally "told by one person or by a creative team to an audience that is usually quiet,

even receptive" they are now "open-ended, branching, hyperlinked, cross-media, participatory, exploratory and unpredictable" (Alexander and Levine, 2008: 40). Rather than seeing coherent and whole stories published on Twitter, individual fragments are posted – the task of assembling them into bounded and comprehensible narrative units is left to readers. It is to the process required to achieve this that I now turn.

What does reading Twitter as narrative entail?

To read sequences of chronologically ordered events on Twitter as narrative therefore demands creative input from readers. They must frequently supply causal links, determine the relations between events and produce an interpretation of an overall teleological structure. To what extent does this represent a break with earlier reading practices? Critical theorists have been studying issues similar to those discussed above for decades, beginning long before the emergence of SNSs. To begin with the supply of supplementary information, Iser (1974), following Ingarden (1979/1931), emphasises the ubiquity of "gaps" in narrative texts which must be filled by readers with the consequence that all narrative texts demand "overreading" (Abbott, 2002), as readers fill in information not provided in the original stimulus in order to enable a cohesive mental narrative interpretation. Gaps mean that all narrative texts possess "hermeneutic potential" (Kermode, 1979) and enable variant readings. Barthes (1975a) goes as far as to claim that the human tendency to read causality where none is explicitly expressed is the basic wellspring of narrative and one of its defining features. Similarly, it is hardly unusual for literary narratives to withhold obvious closure, instead leaving readers to draw their own conclusions as to the significance of events that have been explicitly narrated based on the future events they anticipate. The problem with approaches to narrative such as Alexander and Levine's (2008), therefore, lies not in their characterisation of web 2.0 narratives as open and branching, but in their implication that traditional narratives are static and unchanging. As Ricoeur (1991: 26) argues, the process of narrative composition has always been completed in the reader, not the text.

Similarly, the boundaries of narrative texts are never as clearly defined as they might first appear. As argued extensively by poststructuralist literary scholars, such as Kristeva (1980) and Barthes (1975b, 1977), following earlier work by Bakhtin, texts do not exist in isolation but rather in complex webs of dialogic intertextual relations. The meaning of texts and their constituent signs derives in large part from their relations to other texts and the previous contexts within which words have been used. This blurs the boundaries of texts, making it impossible for any interpretation to remain solely within the apparent bounds of the written text in front of the reader. Yet in practice, the intertext applicable to any individual reading is limited by the knowledge and outlook of the reader (Riffaterre, 1980). A universal intertext may exist in theory, but in practice the intertext applied to any given reading varies according to the reader and moment of reading. This is especially salient in multilingual contexts, such as Twitter reporting of political events in Egypt which involves many languages, but most prominently Arabic and English. Thus, the intertextual networks within which tweets are positioned also vary depending on the linguistic competence of the reader, on the basis that readers cannot read tweets in terms of their dialogic relations to material written in languages they do not understand. The narratives produced in this context by monolingual Arabic or English readers or bilingual Arabic and English readers are thus almost guaranteed to vary significantly. The limits of mental narratives, therefore, are never reducible to the texts on the basis of which they are produced and variant interpretations are always possible. The creative interpretive processes needed to transform texts, even traditional novels, into meaningful mental narratives mean that stories are never as "ready-made, packaged [and] universally acceptable", as Bruns (2005: 58) and others suggest them to be.

Clearly, however, texts vary in the level of creative interpretation they require. Consequently, they can be positioned on a cline with highly "writerly" (Barthes, 1974) or "open" (Eco, 1979) texts at one extreme, and "readerly" (Barthes, 1974) or "closed" (Eco, 1979) texts at the other. In "open" texts, as Castellet (2001: 50/51) argues, the reader becomes an "active agent of construction". The more "writerly" a text, "the less it is written before I read it" (Barthes, 1974: 10); although interpretation is

never completely free, interpreting highly "writerly" texts demands a creative act of "writing". The product of writerly processes of reading is not a static object, but an ongoing process interpretation remains provisional and never becomes closed or concluded (Castellet, 2001: 50). The more "readerly" a text, on the other hand, the more it presents itself as a ready-made object for consumption, and the less creative input it demands from readers. There are, however, factors that push Twitter to a degree of openness that takes it beyond the examples used by Barthes and Eco. In all but the most experimental literature, readers are presented with an at least apparently bounded textual stimulus. The boundaries of the text may be porous, as it bleeds into the intertext (Kristeva, 1980), but a relatively stable textual "nucleus" (Zorrilla Abascal, 2015) or core text can be identified and a boundary between text and intertext can be drawn, even if interpretation inevitably constantly shifts between the two. Even in highly 'writerly' texts where interpretations can differ greatly, the basic semiotic content of at least the core text, from which interpretation begins, is typically fixed. Depending on whom they follow and the search terms they use, different Twitter users are presented with different tweets. Even in the unlikely situation of multiple users following exactly the same group of other users, they would almost certainly see different tweets depending on when they access Twitter, even if in principle exactly the same tweets are delivered to each of their home timelines. The basic material from which interpretation would proceed for these users would therefore differ, even before differences of individual interpretation and the way in which tweets were understood to relate to the broader intertext are considered.

Tweets are rarely marked as belonging to clearly defined texts, leaving readers to decide what should be read with what and in what order. Consequently, interpreting tweets requires not only reading-in causality and identifying the relations of individual elements to larger wholes, but determining in the first instance which tweets constitute part of the "text" of interpretation itself. Even the illusion of a bounded text is removed and readers can, and must, "write" as they read to a significant degree. Key to this is Twitter's inherently live nature – readers must not only interpret pre-existing bodies of material into comprehensible narratives, but cope with the constant addition

of new material, which may demand the reappraisal of previously published content. This reemphasises that the narrative wholes produced are themselves only ever tentative, provisional and subject to change. Not only can different readers interpret tweets in entirely different ways, depending on what they read, but even the interpretations of individual readers may change greatly as the narrative wholes within which individual tweets are positioned shift and change. They may also entertain different narrative possibilities simultaneously. In this sense, the process of narrative interpretation Twitter demands diverges from that described by Barthes and Eco, based as they are on the provision of a fixed initial stimulus, albeit one characterised by uncertainty and positioned within a changing network of intertextual relations, subsequently interpreted by readers. It comes to approximate more closely the hermeneutic process of producing narrative interpretations of history where, as Iser, following Droysen, suggests, "the task of interpretation is thus twofold: it has to constitute its subject matter, and it has to furnish understanding of what has been constituted" (Iser, 2000: 59), with the added twist that the activities of reading and production are in many cases near simultaneous. Readers must "write" the "texts" they are attempting to interpret at the same time as making determinations of what they mean as even the relative stability granted by a fixed initial stimulus is removed, the text/intertext boundary becomes impossible to draw and the ground continues to shift under their feet as new material is added. As mentioned earlier, this is partly a consequence of Twitter's 140-character limit which makes the fragmentary presentation of information unavoidable. But openness can also be a conscious writing strategy, a rejection of attempting to pin down and limit the range of possible interpretations, rather than a mere failure to do so. The cultural shift noted by Bruns (2005) might therefore be conceptualised as an ideological shift from the 'readerly' to the 'writerly', a shift parallel in certain respects to that observed by Barthes and Eco in artistic production. Rather than begrudgingly accepting openness as an undesirable but inevitable aspect of storytelling on Twitter, users subsume it "into a positive aspect of production" (Eco, 1979: 50). We must take care not to extend this argument too far and present Twitter as a utopian realm of free interpretation – writers continue to employ traditional and new

narrative techniques to influence interpretation. Yet we nonetheless see writers leaving readers to write the story to a far greater extent than in the past. If Cover (2006) described the early and mid-2000s as characterised by a struggle between authors striving for narrative control and readers eager for greater interactivity, perhaps, at least with political reporting on Twitter, authors have finally admitted, at least partial, defeat.

Conclusion

This article has made three main arguments. First, reading tweets using the narrative mode, although not the only way of making sense of them, provides a mechanism for effectively contextualising fragmentary tweets within larger narrative configurations and identifying objects of interpretation, enabling interpretation of their meaning. Second, at least in the context of political reporting, Twitter often exhibits significant narrativity due to its chronological presentation of tweets and events, and frequent emphasis on temporally and spatially specific occurrences, thus facilitating narrative interpretations. Third, despite this incipient narrativity, significant creative input is needed from readers to produce well formed, sense-making mental narratives. Consequently, rather than recovering pre-existing stories, readers must use individual tweets as material for narrative interpretations. Narrative on Twitter is thus intrinsically dynamic and dependent on reader interpretation for its very existence, making it impossible to speak of stable narratives, independent of their reception by readers, on the site.

My discussion has been based solely on the interpretation of political tweeting in the context of the Egyptian revolution by users accessing material via the Twitter site itself. This highly unusual, and very widely reported, sequence of events was undoubtedly able to command more focused attention from many readers than reporting of day to day political events. In other situations, an even more complex reading process may be demanded as readers collate, sort and assemble narrative fragments pertaining to many different issues simultaneously – perhaps discussions regarding the Ireland/Northern Ireland border post-Brexit, accounts of the devastation caused

across the Caribbean by hurricane Irma, commentary of a football game, a colleague live tweeting from a conference and so on. Such diverse subject matter demands the creation of many narratives, at times separate from each other and at times blurring together. We must also not ignore the fact that many advanced Twitter users employ tools such as TweetDeck or Hootsuite to manage their Twitter feeds, producing personalised feeds grouped by factors such as hashtag, keyword or geotag. Such tools provide a means to reduce Twitter's inherent writerly nature, as presented here, effectively outsourcing at least an initial degree of narrative organisation to algorithms. In other words, they allow for a degree of narrative control to be sacrificed in exchange for a simpler and more manageable reading experience. This further highlights the challenges of theorising reading on the site, given the range of mechanisms available to users for sorting and accessing information. While I have argued that the reading process Twitter demands draws on existing narrative competencies and does not require the development of wholly "new literacies" (Hermida, 2014) or interpretive procedures, these issues highlight that the site demands a higher degree of interpretive input and skill than was typically seen in the past. Although readers have always had to interpret multiple viewpoints, often representing different agendas, in the social media age readers must mentally sort and organise vastly greater volumes of jumbled and uncategorised data than were previously available. Nonetheless, the fact that the reading process demanded by Twitter appears to differ from earlier forms primarily in degree rather than kind, suggests that much existing narrative theory can be usefully employed, although in many cases extension and adaption will be necessary. Reception studies, strangely rare in social media research, will also have an important role to play in this regard, providing deeper insights into both the phenomenology of Twitter use and real-world user practices. A greater emphasis on real reader responses will also help to move away from viewing stories on Twitter as relatively static entities, produced as the sum of huge numbers of tweets, and towards more fluid conceptions which recognise the varied responses of real, and often highly diverse, audiences.

Notes

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ⁱ Since 2016, Twitter has gradually increased its use of algorithmically selected tweets, appearing out of strict reverse-chronological sequence (Sawers, 2016; Yeung, 2016). Reverse-chronological presentation, however remains the norm.

ⁱⁱ This understanding of chronicle should not be confused with the journalistic genre of chronicle, popular throughout the 20th century in Latin America (González, 1993; Sefchovich, 2009).

[&]quot;Although rare at the time of the 2011 Revolution, it has since become increasingly common for users to employ sequences of self-replies to elaborate more detailed narratives, illustrating how storytelling practices on the site have continued to evolve.

Bibliography

Abbott PH (2002) The Cambridge Introduction to Narrative. Cambridge: Cambridge University Press.

Alexander B and Levine A (2008) Web 2.0: digital storytelling. Liberal Education (december 2008): 11.

Baker M (2006) Translation and Conflict: A narrative account. London & New York: Routledge.

Barthes R (1974) S/Z. Malden, MA & Oxford: Blackwell.

Barthes R (1975a) An Introduction to the Structural of Analysis Narrative. *New Literary History* 6(2):

237–272. Available from: http://www.jstor.org/stable/468419.

Barthes R (1975b) The Pleasure of the Text. New York: Hill and Wang.

Barthes R (1977) Image Music Text. London: Fontana Press.

Brooks P (1984) *Reading for the Plot: Design and intention in narrative*. Cambridge, MA & London: Harvard University Press.

Bruner J (1986) Actual Minds, Possible Worlds. Cambridge, MA: Harvard University Press.

Bruner J (1987) Life as Narrative. Social Research 54(1).

Bruner J (1991) The Narrative Construction of Reality. Critical Inquiry 18(1): 1–21.

Bruns A (2005) Gatewatching: Collaborative online news production. New York: Peter Lang.

Bruns A (2010) News Produsage in a Pro-Am Mediasphere: Why Citizen Journalism Matters. *News Online: Transformations and Continuities*: 1–22.

Burke K (1950) A Rhetoric of Motives. London: Prentice-Hall Inc.

Carr D (1997) Narrative and the Real World: An argument for continuity. In: Hinchman LP and Hinchman S (eds), *Memory, Identity, Community: The idea of narrative in the human sciences*,

Albany, NY: State University of New York Press, pp. 7–25.

Carroll N (2007) Narrative closure. Philosophical Studies 135(1): 1–15.

Castellet JM (2001) La hora del lector. Bonet L (ed.), Barcelona: Ediciones Península.

Chadwick A (2013) The Hybrid Media System: Politics and power. Oxford: Oxford University Press.

Cover R (2006) Audience inter/active. New Media & Society 8(1): 139–158.

Crites S (1971) The Narrative Quality of Experience. *Journal of the American Academy of Religion* 39(3): 291–311.

Cronon W (1992) A place for stories: Nature, history, and narrative. *The Journal of American History* 78(4): 1347–1376.

Danto A (1985) Narration and Knowledge. Cambridge: Cambridge University Press.

Dayter D (2015) Small stories and extended narratives on Twitter. *Discourse, Context and Media,*Elsevier 10: 19–26.

Dray WH (1971) On the Nature and Role of Narrative in Historiography. *History and Theory* 10(2): 153–171.

Eco U (1979) The Role of the Reader. Bloomington & London: Indiana University Press.

Fisher WR (1987) *Human Communication as Narration: Toward a philosophy of reason, value, and action.* Columbia, SC: University of South Carolina Press.

Fludernik M (1996) Towards a 'Natural' Narratology. London & New York: Routledge.

Foucault M (2003) What is an Author? In: Rabinow P and Rose N (eds), *The Essential Foucault:*Selections from the essential works of Foucault. 1954-1984, New York: New Press, pp. 377–391.

Georgakopoulou A (2007) *Small Stories, Interaction and Identity*. Amsterdam & Philadelphia: John Benjamins.

Georgakopoulou A (2014) Small stories transposition and social media: A micro-perspective on the 'Greek crisis'. *Discourse & Society* 25(4): 519–539.

González A (1993) *Journalism and the Development of Spanish American Narrative*. Cambridge: Cambridge University Press.

Halpern O (2015) Beautiful Data. Durham, NC: Duke University Press.

Hayles K (2007) Narrative and Database: Natural Symbionts. PMLA 122(5): 1603–1608.

Herman D (2009) Basic Elements of Narrative. Malden, MA & Oxford: Blackwell.

Herman D (2013) *Storytelling and the Sciences of Mind*. Cambridge, MA: Massachussets Institute of Technology.

Hermida A (2010) Twittering the News: The emergence of ambient journalism. *Journalism Practice* 4(3): 297–308.

Hermida A (2013) #Journalism. Digital Journalism 1(3): 295–313.

Hermida A (2014) Twitter as an Ambient News Network. In: Weller K, Bruns A, Burgess J, et al. (eds),

Twitter and Society, New York, Washington D.C./Baltimore, Bern, Frankfurt am Main, Berlin,

Brussels, Vienna, Oxford.

Ingarden R (1979) *The Literary Work of Art: An investigation of the borderlines of ontology, logic, and theory of language*. Evanston, IL: Northwestern University Press. Available from: http://www.nupress.northwestern.edu/content/literary-work-art.

Iser W (1974) The Implied Reader: Patterns of communication in prose fiction from Bunyan to Beckett. Baltimore & London: Johns Hopkins University Press.

Iser W (2000) The Range of Interpretation. New York: Columbia University Press.

Kermode F (1967) The Sense of an Ending: Studies in the theory of fiction. Oxford, London & New

- York: Oxford University Press.
- Kermode F (1979) *The Genesis of Secrecy: On the interpretation of narrative*. Cambridge, MA & London: Harvard University Press.
- Kristeva J (1980) *Desire in Language: A semiotic approach to literature and art*. Roudiez LS (ed.), New York: Columbia University Press.
- Landow GP (1997) *Hypertextuality 2.0: The Convergence of contemporary critical theory and technology*. Baltimore: Johns Hopkins University Press.
- Manovich L (2001) The Language of New Media. Cambridge, MA & London: The MIT Press.
- Meikle G (2016) Social Media: Communication, sharing and visibility. London & New York: Routledge.
- Meikle G and Young S (2012) *Media Convergence: Networked digital media in everyday life.*Basingstoke & New York: Palgrave Macmillan.
- Meraz S and Papacharissi Z (2013) Networked Gatekeeping and Networked Framing on #Egypt. *The International Journal of Press/Politics* 18(2): 138–166.
- Mink LO (1970) History and fiction as modes of comprehension. New literary history 1(3): 541–558.
- Mink LO (2001) Narrative Form as a Cognitive Instrument. In: Roberts G (ed.), *The History and Narrative Reader*, London & New York: Routledge, pp. 221–221.
- Mishler EG (1990) Validation in Inquiry-Guided Research: The Role of Exemplars in Narrative Studies. *Harvard Educational Review* 60(4): 415–442.
- Murthy D (2013) *Twitter: Social communication in the Twitter age*. Cambridge & Malden, MA: Polity Press.
- Ochs E and Capps L (2001) *Living Narrative: Creating lives in everyday storytelling*. Cambridge, MA: Harvard University Press.

- Page R (2010) Re-examining narrativity: Small stories in status updates. *Text and Talk* 30(4): 423–444.
- Page R (2013) Seriality and Storytelling in Social Media. Storyworlds 5: 31–54.
- Page R, Harper R and Frobenius M (2013) From Small Stories to Networked Narrative: The evolution of personal narratives in Facebook status updates. *Narrative Inquiry* 23(1): 192–213.
- Papacharissi Z (2015a) *Affective Publics: Sentiment, technology and politics*. Oxford: Oxford University Press.
- Papacharissi Z (2015b) Affective publics and structures of storytelling: sentiment, events and mediality. *Information, Communication & Society* (January): 1–18.
- Papacharissi Z and De Fatima Oliveira M (2012) Affective News and Networked Publics: The Rhythms of News Storytelling on #Egypt. *Journal of Communication* 62(2): 266–282.
- Polkinghorne DE (1988) *Narrative Knowing and the Human Sciences*. Albany, NY: State University of New York Press.
- Richardson B (1997) *Unlikely Stories: Causality and the nature of modern narrative*. Newark, DE & London: Delaware University Press.
- Ricoeur P (1991) Life in Quest of Narrative. In: Wood D (ed.), *On Paul Ricoeur: Narrative and interpretation*, London & New York: Routledge.
- Riffaterre M (1980) Syllepsis. Critical Inquiry 6(4): 625–638.
- Rorty R (1992) The Pragmatist's Progress. In: Collini S (ed.), *Interpretation and Overinterpretation*,

 Cambridge: Cambridge University Press, pp. 89–108.
- Ryan M-L and Thon J-N (2014) Storyworlds Across Media: Introduction. In: *Storyworlds Across Media: Toward a media conscious narratology*, Lincoln & London: University of Nebraska Press.

- Sadler N (2017) Analysing Fragmented Narratives: Twitter reporting of the 2013 military intervention in Egypt. University of Manchester.
- Sawers P (2016) Twitter begins switching its algorithmic timeline on by default. *Venture Beat*.

 Available from: https://venturebeat.com/2016/03/17/twitter-begins-switching-its-algorithmic-timeline-on-by-default/ (accessed 16 May 2017).
- Sefchovich S (2009) Para Definir la Crónica. Chasqui 38(1): 125–150.
- Siapera E (2013) Tweeting #Palestine: Twitter and the mediation of Palestine. *International Journal of Cultural Studies* 17(6): 531–555.
- Somers MR (1994) The Narrative Construction of Identity: a Relational and Network Approach. *Theory and Society* 23: 605–649.
- Somers MR and Gibson G (1994) Reclaiming the Epistemological 'Other': Narrative and the social constitution of identity'. In: *Social Theory and the Politics of Identity*, pp. 37–100.
- Sternberg M (1992) Telling in Time (II): Chronology, Teleology, Narrativity. *Poetics Today* 13(3): 463–541.
- Sternberg M (2010) Narrativity: From Objectivist to Functional Paradigm. *Poetics Today* 31(3): 507–659.
- Todorov T (1981) Introduction to Poetics. Minneapolis: University of Minnesota Press.
- Walsh WH (1958) 'Plain' and 'Significant' Narrative in History. *The Journal of Philosophy* 55(11): 479–484.
- White H (1980) The Value of Narrativity in the Representation of Reality. Critical Inquiry 7(1): 5.
- Wolf W (2002) Das Problem der Narrativität in Literatur, bildender Kunst und Musik: Ein Beitrag zu einer intermedialen Erzähltheorie. In: Nünning V and Nünning A (eds), *Erzähltheorie transgenerisch, intermedial, interdisziplinär*, Trier: WVT, pp. 23–104.

- Wolf W (2003) Narrative and narrativity: a narratological reconceptualization and its applicability to the visual arts. *Word & Image: A Journal of Verbal/Visual Enquiry* 19(3): 180–197.
- Wolf W (2014) Framings of Narrative in Literature and the Pictorial Arts. In: Ryan M-L and Thon J-N (eds), *Storyworlds Across Media: Toward a media conscious narratology*, Lincoln & London: University of Nebraska Press, pp. 126–150.
- Yeung K (2016) Twitter starts showing search results by relevance, not reverse chronological order.

 Venture Beat. Available from: https://venturebeat.com/2016/12/19/twitter-starts-showing-search-results-by-relevance-not-reverse-chronological-order/ (accessed 16 May 2017).
- Zappavigna M (2015) Searchable talk: The linguistic functions of hashtags. *Social Semiotics*, Taylor & Francis 25(3): 274–291.
- Zorrilla Abascal ML (2015) Transmedia Intertextualities in Educational Media Resources: The case of BBC Schools in the United Kingdom. *New Media & Society* 18(11): 2629–2648.