“Freshly Generated for You, and Barack Obama”: How Social Media Represent Your Life

Jill Walker Rettberg

June 2009: This is a pre-print version of an article that will be published in the Winter 2009/10 edition of the European Journal of Communication. There will presumably be some corrections and revisions made in the final version.

Abstract

This paper discusses the ways in which social media help us craft the narratives of our lives. Many discussions of social media look at self-presentation and the construction of identity on social network sites in particular and the Internet in general. This article switches the focus from the moment of self-construction and instead looks at ways in which social media represent our lives by filtering the data we feed into them through templates and by displaying simplified patterns, visualisations and narratives back to us. The paper argues that social media helps users to see themselves by taking their raw data and representing it in structured form, and gives examples of different ways in which this data is presented.

Keywords

Social media, blogs, self-portrait, narrative, cultural templates
In January 2009, the social network site Dopplr.com sent each of their users a customised one-page visualisation of their travels during 2008. Dopplr.com is a fairly simple site where you can enter details of your trips, connect with friends or acquaintances, and receive alerts when you’re going to be in the same town as somebody you know.

When I received my report I was surprised: I had entered trips somewhat inconsistently, but my report lined everything up along a timeline complete with colours and photographs of the cities I’d visited. Looking at the report, I realised that I hadn’t logged all my trips, and that there were some errors in the trips I had entered. The portrait of my year in travelling was incorrect, and it upset me! I swiftly logged into Dopplr and made the corrections. And sure enough, I later received an updated report (Figure 1).
Figure 1 A visualisation of the trips I told dopplr.com I was taking in 2008. This is the updated version they generated after I’d made corrections to the data I’d originally entered.

In the email containing the customised PDF, Dopplr also included a link to a blog post titled “Dopplr presents the Personal Annual Report 2008: freshly generated for you, and Barack Obama...” (Jones 2009). In the blog post they explained the personal reports, showcasing a report they’d created for Barack Obama. Obama’s report was far more information-rich than mine, with dozens of lines in different vivid colours along the timeline as well as notes about how far he’d travelled and about which of his colleagues with which he had spent the most time in the same place. My report also included the timeline and the notes, but because I had travelled so much less than Obama there was less content in the report.
The report fascinated me because no social network site had sent me such a portrait of my life before – and as a researcher of social media I’ve signed up for dozens of social network sites. By organising my data in this way, Dopplr created a story for me, a representation of an aspect of my life. They put my little story alongside one of the most well known stories of 2008: that of Barack Obama and his successful campaign for the presidency of the United States. Obama’s story, so familiar, became a cultural template or a filter for my own story.

One of the ways we find our place in our culture and among our friends and families is by creating and consuming stories and images. These representations of ourselves and of others connect to larger cultural templates, which we adopt, adapt or reject. The sequence “fall in love, get married, have a baby” is such a cultural template. So is the idea of the hard worker who starts out small, works diligently and finally succeeds. Others are more negative. All are in some sense stereotypes that most of us, on the individual level, will not match. But we still consume and spread these cultural templates in fairy tales, nursery rhymes, fables, sayings, popular songs, movies and narratives, as well as in visual images. We create our own stories about and representations of ourselves – in conversation with friends, in diaries, scrapbooks, Facebook profiles and YouTube videos, and when we do so we can’t help but respond in some way to these cultural stereotypes, whether we adopt them unthinkingly, adapt them to suit ourselves, or reject them explicitly. I have previously discussed how we purposefully create various kinds of self-representations online and how important these are to us, arguing that they express our newfound subjectivity as individuals able to represent ourselves rather than simply succumb to the generalisations of mass media (Walker 2005). In this paper, I look instead at the representations that are created of us by social media. I will discuss representations of user data that have been gathered over time and that has
been compiled by the social network site into a report, narrative, visualisation or other representation intended to provide the user with an overview or image of his or her own activity. I will argue that such representations provide us with new ways of connecting to larger cultural templates.

**Patterns**

How, then, are these representations organised? Dopplr’s visualisation plots my data along three different axes: temporal (there’s a timeline of the year), social (there’s a list of which of my friends were in the same cities as me) and geographical (the map is marked with cities I’ve visited).

Temporal or chronological organisation is the most common in narratives and in social media. The standard way of telling a story is with a beginning, middle and an end, as Aristotle stated in his *Poetics*, although there are many exceptions to this. Social media are also heavily time-based, but the standard chronological organisation is reversed: on Facebook, Youtube or a blog, the most recent item is usually presented at the top of the page, privileging the instant and the now rather than the whole story.

Even in traditional narratives such as we find in novels or movies, there are other ways of organising events than their temporal succession. Gerard Genette, one of the most well known narratologists, writes about how events in a plot can be connected in the narration by different kinds of kinship, such as space or time. He calls all such “anachronic groupings” syllepses:
Geographical syllepsis, for example, is the principle of narrative grouping in voyage narratives that are embellished by anecdotes (..). Thematic syllepsis governs in the classical episodic novel with its numerous insertions of “stories,” justified by relations of analogy or contrast. (1980: 85)

Organising plot events by anachronic syllapses is not very common in traditional narratives. In fact, Genette’s note is literally a footnote in his treatise on narratology. However, these sorts of anachronic syllepsis are often used in hypertext fictions (Walker 1999), which were among the first narratives to be created specifically to be read on computers (Hayles 2008). They are also common in non-timebased and non-narrative representations, such as visualisations, graphs and diagrams.

The kinds of grouping – or, to use Genette’s word, syllepsis - that were apparent in Dopplr’s report of my travels are typical of the ways in which social media sites organise our personal data for us. As noted above, Dopplr uses temporal, social and geographic organisation. A fourth common form of organisation in social media is close to that which Genette calls thematic syllepsis in narrative. Perhaps it would be more accurate when speaking of social media to call it semantic organisation, as it has to do with meaning and semantic connections.

Often the live feed of a social media site allows users to choose between different ways of viewing data that correspond to these four kinds of organisation. From the front page of Flickr.com, a popular photo-sharing site, I can choose to look at the most recent photographs uploaded to Flickr in general (temporal organisation), at photos taken by my friends and family (social organisation), at photographs taken in a particular location (geographic organisation) or at photographs about a particular topic that are tagged with specific tags (semantic organisation).
However the reports and summaries generated by social media sites – like the report sent by Dopplr – tend to emphasise just one or a few kinds of syllepsis.

Let me give you some examples of representations that emphasise each of the four kinds of organisation.

**Temporal Organisation**

Organising our data by when it was created or when it was uploaded is probably the most obvious and often the most effective form of structure, just as it is the most common form of organisation in narrative. Temporal syllepsis tends to narrativise information. When we see a list of events or a set of images one after the other we tend to assume that they are organised chronologically, and we also tend to fill in the gaps to create a causally coherent narrative (Iser 1988).

Two of the best known temporally organised sets of digital photographs are Miles Hochstein’s *A Documented Life* (2009) and Noah Kalina’s popular time-lapse video ‘Noah takes a photo of himself every day for 6 years’ (2006). Hochstein has gathered photos of himself from each year of his life, leaving space for the remaining years he hopes to live. A headshot of himself is presented in a grid on the first page of the site, and if you click one of the images, you are presented with a page showing more images and some verbal narrative about the photographs and about his life that year – thus the photos function as both a summary of his life and as a table of contents providing easy and organised access to more details. This kind of organisation is automatically generated by Flickr, a social photo-sharing site, where you can view your archives shown as a monthly calendar with a photograph displayed on each day. While Flickr doesn’t, like Dopplr, send these calendars out as
“Personal Annual Reports”, they do function in a similar way, providing the user with an automated diary of their life.

Noah Kalina took a photo of his own face every day for six years, and put them all together into a 5:45 minute video showing him slowly grow older. The video, which Kalina posted to YouTube, became immensely popular and started a craze of similar videos. Today sites such as dailybooth.com and dailymugshot.com prompt users to take daily photos of themselves with their webcam. The sites provide a social infrastructure where users can follow or friend other users and watch their photo streams, but the main goal of the sites seems to be the ways in which they will organise the photos for you: for instance in a video very similar to Noah Kalina’s original.

Another kind of temporal organisation of data is provided by Trixietracker.com, a site where parents can enter data about their babies: when they eat, sleep and have their nappies changed. The system generates graphs showing patterns from day to day, allowing parents to see trends in their babies’ activities and to compare their babies’ sleep patterns to other babies of the same age.
Figure 2 A graph of my baby Jessica's sleep patterns at four months based on data I entered at Trixietracker.com. The grey and white bar at the top shows probabilities of her being asleep or awake at any time of the day.

You enter data into Trixietracker.com much as you do at Dopplr.com, though far more frequently. You click a button when you put your baby down to sleep, when she actually falls asleep and when she wakes up – or when you give up on trying to get her to sleep. Over time, the system will not only
show you graphs of each day, as seen in Figure 2, but will also generate graphs showing the probability of your baby being asleep at any particular time or day and allowing you to compare your baby’s sleep patterns to other babies that age.

There are many other sites that allow you to track anything from your moods (http://moodlog.org) to how often you have sex (http://www.bedposted.com: “For your eyes only, Bedpost offers zero social networking features other than partner logins.”) These sites generate overviews for you, displaying your data based on time – allowing you perhaps to discover that you’re more likely to be grumpy at 4 pm than in the morning as you had though.

**Social Organisation**

There are dozens of social network analysis tools for visualising explicitly articulated social networks online. One of the more well-known examples is the Facebook Friend Visualiser, which is an application you can add to your Facebook profile that will generate visualisations of your network of friends on Facebook, showing connections between groups of your friends. There are a number of other tools that will perform similar tasks for other social network sites, such as Twitter Friends. Maps of blog networks are often drawn with lines between blogs representing the frequency of the links between them. Likewise, Flickr will allow you to view your photos according to how popular they are – how often they have been viewed, commented on and favourited.

Reports emphasising social organisation tend to be diagrams rather than narratives, although they may include images and other content.
Semantic Organisation

I mentioned the calendar view of a user’s photos on Flickr as an example of temporal organisation. Flickr also allows users to access the archives of their photos on Flickr through the keywords they have used to “tag” each photo. So you might click on the tag “Mum” and see all your photos of your mother, in a sense generating a visual diary of your relationship to your mother over the time you have used Flickr.

Semantic organisation filters data according to meaning rather than according to time, geography or social connections. So photographs can be organised according to who is in them or what is happening - “sleeping” or “smiling” or “eating” are common tags. Semantic organisation may become more common as search engines become more sophisticated: for now, the most common kinds of semantic organisation are based on metadata explicitly entered by the user: tags on photos like on Flickr, for instance, or happiness levels as on the knitting site Ravelry.com.

Ravelry.com is a site where knitters and crocheters document their projects and discuss projects, yarns, patterns and supply shops. Each user has a “notebook” (rather than a profile) where all his or her projects are displayed. This notebook is organised very much as a scrapbook or, literally, a notebook, where the user stores information for her own future use, such as whether she liked the yarn, what her gauge was knitting that yarn on those needles, and any modifications made to the pattern. Ravelry doesn’t generate automated reports, but the notebook becomes an important documentation for the user. It can be viewed in chronological order, but also using semantic organisation, for instance showing the projects in order of “happiness” and using each project’s happiness ranking according to how much the crafter enjoyed making it. On Ravelry, a user is thus
represented by the knitting and crocheting she makes, as well as by her blog posts, contributions to forums and patterns that she has designed and shared.

Tag-clouds or text clouds are another way in semantic relationships can be shown. These so-called clouds measure how frequently a word is used in a text, on a blog or by a user and displays the most frequently used words in a cloud where the most used are shown in larger, bolder type than the others. Sometimes words that tend to be used together are shown more closely to each other. Figure 3 shows a cloud of the text of this essay. While the semantic organisation in such a cloud is currently limited to font size representing the frequency of word use, when a user generates a cloud from a blog he or she has kept for years, it can be a powerful representation of issues that are important to the user – and that the user has perhaps not been conscious of prioritising as clearly as shown by the cloud.
Geographic Organisation

As GPS is becoming built in to more and more of our cameras and phones, geography is one of the simplest and most effective ways of organising user content. GPS-enabled devices allow photos, text and other content to be automatically placed on a map, but sites often also allow users to place themselves on a map manually, as with Google maps. Dopplr’s report uses geographical organisation heavily. I can choose to see my photos in Flickr displayed on a map, and sites like Brightkite.com and Plazes.com allow users to “check in” and log where they are, displaying this information as a time-line or organised on a map. On a larger scale, there are visualisations of blog posts or Facebook activity shown on maps of the world, generating representations of our activities similar to pictures of lit up cities taken from space.
**Cultural Templates**

Although I never thought of doing so, I could have created a visualisation of my travel like the one Dopplr generated on my own. There are many ways in which people do regularly document their lives, from compiling photo albums, creating elaborate scrapbooks and writing diaries for personal or family use to the annual Christmas letters written as a summary of the year, photocopied and sent to a hundred friends. These forms of media creation have been little studied by media and communications scholars, who have largely focused on the dominant mass media of the twentieth century. Recently, Marika Lüders coined the term “personal media” in opposition to mass media (2007). This term includes not only analogue media as mentioned above but also online media, including much social media.

Personal media can be created freely for instance on blank paper or a blank journal, or it can use pre-determined templates. For instance, many parents buy pre-formatted baby journals and simply fill in the blanks: baby’s first smiled on this date, first walked on that, here’s a photo of baby on the day she was born and here’s a lock of her hair obediently placed in a thoughtfully provided little plastic envelope. Social media sites similarly provide templates for users to fill in, structures in which users can upload their photos, videos, texts, data or simply type a quick response to Facebook’s prompt: “What’s on your mind?”

While pre-formatted baby journals are already normative, the automatically generated digital “reports” of our lives – or of our babies’ sleep patterns - are even more controlled. If you don’t like the prompts given on a page in your baby journal, you can tear the page out or glue a large photograph over the text. I can’t change anything about the layout of my Dopplr.com or
Trixietracker report (although I can download the data from Trixietracker.com and format it myself in Excel). I can choose not to fill out all the information they ask for, but the generated report will simply report the gaps as well, and the lack of information is itself showcased: Doesn’t she have more friends than that? Why did she choose not to allow Dopplr to calculate the carbon footprint of her flights?

In her book Mediated Memories (2007), José van Dijck calls pre-formatted baby journals an example of “normative discursive strategies” that “either implicitly or explicitly structure our agencies” (page 7). In an article on art and user-generated content, Lev Manovich (2009) compares the corporate structures of social media and user-generated content to Adorno and Horkheimer’s critique of the cultural industry:

Given that a significant percentage of user-generated content either follows the templates and conventions set up by the professional entertainment industry or directly reuses professionally produced content, does this mean that people’s identities and imaginations are now even more firmly colonized by commercial media than they were in the twentieth century? In other words, is the replacement of mass consumption of commercial culture in the twentieth century by mass production of cultural objects by users in the early twenty-first century a progressive development? or does it constitute a further stage in the development of the culture industry as analyzed by Adorno and Horkheimer in The Culture Industry: Enlightenment as Mass Deception (1944)? (321)

These are clearly important perspectives to be aware of, but perhaps they are too generalised and abstract. Later in his article Manovich admits that for all the mediocre copies, there are also works
of great artistic quality created by amateurs online. And of course, most people who use social media or who create personal media are not trying to create great art. Indeed, José van Dijck goes on to note “it is quite remarkable how many people gain creative energy out of shaping their own histories and subjectivities in response to existing cultural frameworks” (8).

In this paper, I’m not so much interested in the quality of what we create as in the ways we connect our contributions (baby sleep patterns, travel data or knitting projects) to larger cultural templates, templates that are certainly often exploited by commercial media but that are not the sole product of them. Even without a pre-formatted baby journal there are cultural templates we will tend to follow. In Western culture, we all see a baby’s first smile, first teeth and first steps as important milestones, and we are likely to document them in some way. Parents who don’t own a pre-formatted journal or a mass-produced memory box with instructions are still likely to save a lock of hair from a child’s first haircut and to keep the first milk tooth a child loses. Documenting these events help us structure our lives and our memories. They also help ground us in our cultures. The relationship between these cultural templates and commercial forces is symbiotic, not one-way.

**Implicit and Explicit Data**

Many of the sites discussed in this article are examples of Web 2.0 services, a term Tim O’Reilly first coined in 2005, and that he later summarized as “design of systems that harness network effects to get better the more people use them, or more colloquially, as ‘harnessing collective intelligence’” (2008). Web 2.0 is a much-maligned term, but one that has proved to have staying power, and it broadly encompasses the sites and services that we tend to think of as social media. Thinking of social media through the lens of technologist Tim O’Reilly rather than from the point of
view of media and communications studies is valuable because it emphasises different things. One of the points O’Reilly has made the most frequently about web 2.0 is that it’s about data. It’s about our data – both the data we contribute explicitly and the data that’s implicit; that we’re not aware of contributing. Likewise, social media aren’t just about the contributions that people make deliberately or explicitly, such as when you upload a video to YouTube, update your status on Facebook, write a new blog post or contribute to a discussion on an online newspaper. Social media are just as much about our implicit contributions. Google knows what I search for and which search results I choose to click on. Twitter knows how often I log on and how often I post. Amazon knows which books I view, which books I purchase and which I don’t. Facebook logs how long I spend on their site at a time and which kinds of ads I click. 99% of YouTube’s users may be lurkers, never posting a single video, but YouTube still knows how they rate videos, which videos are liked or at least visited by the same people, and which videos are the most popular.

Companies harvest this data because they can use it to sell better ads, but also in order to create better services for us. Previously this data has often been somewhat hidden to users. Companies use it internally, of course, and show us some results – Amazon tells us which books it thinks we will like based on our purchases, for instance. When I tell dopplr.com where I’m travelling, they can use this data to customise their service to me, to tell advertisers where their users travel, and to build further services.
When dopplr.com sent me the visualisation of my travels in 2008, they made the explicit and implicit data I contributed to their service visible to me in a new way. They showed me my own story. They showed me the patterns of my travels over the course of a year. Obviously I already knew the information they were showing me – I was the traveller. But I hadn’t seen it all put together in that way. Google’s Web History is perhaps even more striking in its display of our implicit data. When I search for something on Google I don’t think about how that data is being collected by Google. But when I signed up for Google’s Web History Google started showing me monthly calendars, colour-coded to show how often I searched on each day of that particular month (see Figure 4). Before the internet, most representations of me would have been completely made by myself or by my friends and family – home videos, diaries, photo albums and so on. Today, commercial websites generate representations of me based on my data. They are perhaps doing little more than a mirror. But they are also normalising the idea that surveillance is constant and even to my benefit.
Figure 4 If you sign up for Google Web History you can see calendars showing how frequently you use Google search on different days. This is an example of temporal organisation; you can also see what search terms you use most often (semantic organisation) which sites you visit most often or simply all the sites you’ve visited.

A common early reaction to bloggers was that they were narcissistic. In Greek myth, poor Narcissus was so infatuated with the image of his own face, reflected in a pool of water, that he finally fell into the pool and drowned. Online, an often-discussed risk of gazing at your own reflection is that the information you put online may be seen by and abused by stalkers, paedophiles and online bullies. In these cases, malicious individuals generally put information together manually. A more systemic concern about our increasingly prolific sharing of our own personal data is that our data is automatically aggregated by the sites we frequent, often in ways we’re not aware of. Facebook’s
executives probably don’t read our individual status updates (although they certainly could) but their systems know a great deal about us: data we’ve explicitly entered (name, sex, age, residence, education, friends) as well as data they gather implicitly (when are we most active on Facebook? Which friends do we communicate most with? Which ads and applications are we most likely to click on? How popular are we? How many photos do we appear in?). Likewise, Google, Yahoo and other large companies have vast quantities of data about our use of their services, and through advertising networks, often about our behaviour on external sites as well.

This data is primarily used for advertising. Facebook apparently doesn’t sell the data itself, but they sell ads and promise advertisers that ads will be shown to the users who are most likely to be interested in the product. However there are more nefarious uses of personal data. In China, Google and Yahoo have given the government access to information about dissidents that has led to their conviction for political crimes. The EU’s data retention directive (Directive 2006/24/EC) requires member countries to store data about all Internet and telephone traffic for at least six and up to 24 months. This information is only supposed to be accessed in the case of suspicion of a “major crime”, but protesters have objected that this total surveillance or dataveillance (defined by Roger Clarke (1988) as “the systematic monitoring of people’s actions or communications through the application of information technology”) is a serious breach of privacy. Reports about our travel patterns and graphs of our babies sleep patterns remind us that the technologies that please us and help us document and understand our lives also can be used against us, for commercial or ideological purposes. And yet we continue to feed our information into the system.
Filtered Self-Portraits

In previous research (Walker 2005) I have argued that our fascination with creating digital self-portraits is indicative of our collective coming of age where we as a culture are discovering that we have voices online and can express ourselves rather than simply accepting the mass media’s views of the world. Like an infant discovering her own image in a mirror or a teenager trying out different styles of clothes, handwriting or makeup, in the early twenty-first-century we are becoming accustomed to the Internet and finding out who we are in this context.

The generated portraits of ourselves that I have discussed in this paper are similar in many ways, but are to a greater extent controlled by commercial interests and limited by the strict templates applied to our data. Beyond entering my data, I have no control over the way Dopplr.com portrays me in their personal annual reports. In a sense, this is a partial return to mass media. In this mass customisation, each individual is fed into the same template. Perhaps this is exactly what we want. For by seeing my data displayed in exactly the same way as Barack Obama’s or a friend or celebrity, I see aspects of my own life from outside. And as I do so, my place in the larger stories and cultural templates of the world is confirmed.

Acknowledgements

First, I would like to thank the European Journal of Communication for inviting me to think about these issues in more detail, and for the excellent feedback I received in Padua from the editors and the other contributors to this special issue. Finally, contributions from my colleagues and friends at the University of Bergen and in social media in general have been very valuable. I posted drafts of this article online and asked for feedback on my blog and on Twitter, and am grateful for wonderful comments from scholars, students and professionals including Scott Rettberg, Hilde Corneliussen,

References


http://jcmc.indiana.edu/vol13/issue1/boyd.ellison.html


<http://www.documentedlife.com/autodocumentary.htm>


---

1 I follow danah boyd and Nicole Ellison’s definition of social network site (2007): “We define social network sites as web-based services that allow individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the system.” While the sites discussed in this article are social network sites, I am here more concerned with the way the individual interacts with the site than how the social network is articulated and functions.

2 This report is a story or narrative in a very minimal narratological sense: it presents events in order, but causality, which is required in some definitions of narrative, is not shown. However, as the intended reader is primarily the person who has experienced the events that are represented, one might argue that causality is implicit.

3 New York designer Nicholas Felton’s annual reports on his personal activities, all beautiful examples of personal information graphics, are excellent examples of how people can craft such reports themselves. But Felton is an exception rather than the rule. See http://feltron.com for examples.
Prior to March 2009, Facebook asked “What are you doing right now?”

Van Dijck notes that “Western European and American practices of remembering and recording significantly diverge from Asian or African mores in this area” (6). It is worth considering how this affects a more globalised online society. We often assume that simply translating the language of a web service is sufficient, but this may not be the case. An example is the meaning of the built-in way of RSVPing to events in Facebook, where users can choose between “Yes”, “No” and “Maybe”. These words are faithfully translated into many different languages, but work differently in different cultures. In a study conducted by Lucie Sejrup (2009), Norwegian users tend to answer “Maybe” when they mean no, because to give an outright no would be considered rude. However, users from other countries have indicated no qualms about answering “No”. Similarly, the ways in which social media summarise our contributions and digital memories to us may be culturally specific. Thank you to Daniel Jung and the Study Group for Social Media at the University of Bergen for these cultural comparisons.