Meaning, selection & narrative: the information we see and the information we don't †

Magnus Ramage [1]

[1] School of Computing & Communications, The Open University, Milton Keynes, MK7 6AA, UK; magnus.ramage@open.ac.uk

† Presented at the IS4SI 2017 Summit DIGITALISATION FOR A SUSTAINABLE SOCIETY, Gothenburg, Sweden, 12-16 June 2017 (within the workshop The Difference That Makes a Difference 2017, 12 June).

Abstract: In a world that is highly saturated by data, sifting it and making sense of it has become increasingly important. A key mechanism for this process is narrative – the stories we tell about the world, whether in terms of politics or technology, which enable us to select information that we see as important. Yet narratives are highly contested and multiple. This article discusses the dynamics of narrative creation, via a process of selective information, arguing that this leads some people to see particular data as crucial information, while leading others to ignore it completely.

Keywords: information, selection, meaning, narrative, multiplicity

1. Introduction: contested information and multiple narratives

We exist in a cultural period where information has become increasingly contested. Something that constitutes a reliably and unquestioned fact to one person looks to another to be highly questionable or plain wrong. Indeed, what seems to be an uncontested fact to one person might not even be noticed as a piece of information by another.

Moreover, we exist in a period of huge numbers of sources of data and information. Concepts of big data and numbers describing its magnitude are commonplace, but it is undeniable that there is a huge amount of data around (whether this translates in a huge amount of information is a different question). Paul Krugman observed (quoted by [1], p.7) that the 1970s, the first period of widescale computer modelling, were the high point for "vast amounts of theory applied to extremely small amounts of data". The opposite is very much the case today. Data sources are everywhere, and the average individual is bombarded with ideas, opinions and (apparent) facts. As Silver [1] observes, "numbers have no way of speaking for themselves. We speak for them. We imbue them with meaning [yet] we may construe them in self-serving ways that are detached from their objective reality" (p.9).

In this context, the idea of **narrative** has become very important. A narrative is a story that we use to manage and make sense of multiple sources of information. Narratives are a crucial part of human cognition; they can be individual but often have a social dimension, being shared with others. However, they can hide information just as much as reveal it.

2. Motivating examples: climate change and politics

Consider, for example, the question of climate change. For large numbers of people, there is no doubt that the global climate is changing in negative ways, in particular the concentration of carbon dioxide in the atmosphere, and the related rise in mean global temperature; and that this change is predominantly anthropogenic (caused by humanity) rather than natural. Indeed, the term 'anthropocene' is increasingly widely used in describing the current geological period. The scale and likely impact of climate change are widely debated, and even more so the appropriate reaction, but not the basic facts.

By contrast, a different group (numerically smaller but loud and influential) do not regard climate change as a real event at all. They reject the arguments made, viewing the 'information' in the scientific observations as invalid, arguing that climate goes through natural cycles of change and we are currently experiencing such a cycle. Even some of those who would allow some of the findings of climate scientists dispute their importance, arguing that to take action in response would be disproportionate and economically or politically damaging.

These two groups sometimes take on political identities, so that they are equated with particular forms of politics (the Left being more concerned about climate change than the Right); but this is too simplistic. However, the same behaviour can be seen in a range of areas of public discourse: the acceptance of a body of information by one group and its wholesale rejection by another. The two big Western political shocks of 2016 (the Brexit vote in the UK, and the election of Donald Trump in the US) exhibit many of the same dynamics of selective information. Phrases such as 'fake news' have moved rapidly from being a descriptor of recognisable forms of disinformation to being a political tool.

Ultimately, political narratives can become toxic. As Hannah Arendt argued [2, p.107], they can lead to the rise of 'strong men' – leaders who create totalitarian states around themselves because they are able to manipulate 'the mob' through their construction of narratives. And as Gayatri Chakravorty Spivak [3, p.115], drawing on the work of Simon Gikandi, observes, even genocide is ultimately based on a corrupted form of narrative based on the historical self-understanding of nation-states, which may ultimately draw on millennia-old religious texts. Spivak thus argues that "one can indeed think of history as mythopoesis in terms of practical politics and not just philosophical speculation" (ibid., p.115).

3. Selective information: a model of narrative creation

In this paper, I shall argue that this dynamic relates closely to the question of narrative, a concept which has come to prominence in recent years and is at the heart of this current workshop. One of the key aspects of narrative comes from what we select to view as information, and then weave together into a narrative. This is an iterative process: when something that might be considered information arises into our consciousness, but doesn't fit the narrative, we often completely fail to notice it. It's not just that we see these items and decide (however explicitly) that the item doesn't fit our narrative and must be rejected; it's that we don't even register these items in the first place.

The concept is not a new one. It relates closely to the idea of capta, presented by Checkland and Holwell [4] as an intermediate stage between data and information, referring to those data which we consciously select as part of our attention. Indeed, the concept, going further back, relates to the initial selection of differences that Gregory Bateson attributes to Kant in his example of a piece of chalk: "in a piece of chalk there are an infinite number of potential facts. ... The sensory receptors cannot accept it; they filter it out. What they do is to select certain facts out of the piece of chalk" [5], p.453. In Bateson's argument, it is the identification of particular differences that makes a difference which constitutes information; but the initial differences arise from just as much a process of conscious selection.

The background to that selection, I shall argue, are the narratives by which events or 'facts' are constructed into information. Such narratives are partial and competing. In a strong form, this is one of the central claims of postmodernism, with its rejection of what Lyotard terms the grand narrative (the 'big story'). But in a more consensual manner, it is possible to argue, as Mary Catherine Bateson has done, for the positive role of multiple narratives: "we need to devise ways of voicing and interweaving multiple narratives that stitch lives together in many different ways, without trying to settle on a single version of what happened" [6].

The concept of narrative and selective information fits with Malik's definition of information as "a situated event, an event that generates meaning in a system or for an organization" [7] (p.34). Information exists in a particular context of time and place. The selection of information based on multiple narratives means that, as Chapman [8] has argued, information will always be provisional.

In this paper, I shall examine the iterative relationship between narrative and selective information in matters of public policy, in particular the recent (and highly contested) phenomenon of 'fake news' (as well as the examples given above).

4. Selective information in the technosphere

The concept is not limited to politics however – it is also highly relevant to sociotechnical concerns around the digitalised society. In particular, competing narratives exist around the interpretation and understanding of a wide range of contemporary phenomena. I shall examine this dynamic in the contexts of automation, smart cities, and the surveillance society; as well as the so-called 'gig economy' which is technologically enabled. The same concepts work for our narrative constructions of identity as well, which is both enabled by social media and yet threatened by a technological drive to fixed identities [9].

In the final impact, as Grubagh [10] (p.959) warns us: "The most important aspect of narrative in historical societies is that he who controls the narrative controls the society. The winners write the history". Narratives matter, whether they are political, social or technological; and their relationship to information is crucially important. It deserves to be interrogated in depth.

Conflicts of Interest: The author declares no conflict of interest.

References

1. Silver, N. *The Signal and the Noise: The Art and Science of Prediction*, Allen Lane: London, 2012.
2. Arendt, H. *The Origins of Totalitarianism*, new edition, Harcourt Brace: Orlando, 1979.
3. Butler, J.; Spivak, G.C. *Who Sings the Nation State? Language, politics and belonging*, Seagull Books: Oxford, 2007.
4. Checkland, P.B.; Holwell, S.E. *Information, systems and information systems – making sense of the field*; John Wiley: Chichester, UK, 1998.
5. Bateson, G. *Steps to an ecology of mind*; Chandler: Toronto, 1972.
6. Bateson, M.C. Narrative, Adaptation, and Change. *Interchange* **2007**, *38*, pp.213–222.
7. Malik, S. Information and knowledge. *Theory, Culture and Society* **2005**, *22*, pp. 29-49.
8. Chapman. D. Information is provisional. *Kybernetes* **2014**, *43*, pp. 895-910.
9. Van Zoonen, L.; Turner, G. Exercising identity: agency and narrative in identity management. *Kybernetes* **2014**, 43, pp. 935-946.
10. Grubaugh, C. The ethical obligations of a banal, content apocalypse. *Kybernetes* **2014**, *43*, pp. 947-964.