



Narrative ordering and explanation[☆]

Mary S. Morgan*

Department of Economic History, London School of Economics, Houghton Street, London, WC2A 2AE, United Kingdom



ARTICLE INFO

Article history:
Available online 25 April 2017

Keywords:
Narrative explanation
Configuring
Colligation and juxtaposition
Case studies
Resituating knowledge
Exemplars

ABSTRACT

This paper investigates the important role of narrative in social science case-based research. The focus is on the use of narrative in creating a productive ordering of the materials within such cases, and on how such ordering functions in relation to 'narrative explanation'. It argues that narrative ordering based on juxtaposition - using an analogy to certain genres of visual representation - is associated with creating and resolving puzzles in the research field. Analysis of several examples shows how the use of conceptual or theoretical resources within the narrative ordering of ingredients enables the narrative explanation of the case to be resituated at other sites, demonstrating how such explanations can attain scope without implying full generality.

© 2017 The Author. Published by Elsevier Ltd. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

1. Introduction: the conjunctions of narrative and explanation

Historians take it for granted that their narratives explain the events and phenomena in their fields, and hold an unstated intuition that such narratives focus on events in time. Scholars of narrative too, provide definitions of narrative that are determinedly sparse, even reductive, yet all depend fundamentally on a notion of passing time.¹ And while narrative scholars are not interested (apparently) in explanation, some hints of explanation are present by default, for the one thing they seem to agree on is that a 'chronicle' is not a 'narrative'. Chronicles order events through time, but imply nothing more about the relations between them. In contrast, narratives, not only order through time, but imply, delicately or directly, relationships between such events. For example, the chronicle of the female monarchs of England/Britain: Mary I, Elizabeth I, Mary II, Anne, Victoria, Elizabeth II, can be contrasted with the implicit assumption of connection that marks a narrative: The Queen died, the King came to the throne, and the Princess ran away. Such relations might rely on dependency notions, might implicate influences or causes, or might involve contingencies: those three elements which often appear in historians' use of narrative.

For historians, narratives explain how things happen and why things happen, not apparently so far from the tasks set out for science, and indeed, in some sites of science, scientists use the narrative form of explanation in their scientific work. This immediately raises the question: do narratives in science work in the same kind of ways as narratives in history, or as narratives generally? There are certainly those who doubt that narratives can be explanatory in science. In the mid-20th century, philosophers of science (Hempel, 1965) took it for granted that history was not a science (in their terms): there were no laws in history, and historical narratives could only be, and were only, about particulars - so could not offer scientific (law-based) explanations. More recently, philosophers of science have taken a different line: explanations are given as answers to 'why-questions' (van Fraassen, 1980), opening the door to mechanistic and causal kinds of explanations in the sciences (see Crasnow, 2017, and Beatty, 2017), but not from thence to history. Just as chronicles remain an outcast for narrative scholars, so history, and its explanatory narrative mode of argument, remains an outcast in the broader kinship of the sciences.

Yet scientists, for some kinds of phenomena, and with some ways of working, regularly use narratives and the task in this paper is to explore, and to characterise, the ways in which narratives work in such scientific locations as a form of explanation. The argument begins here with the claim that what narratives do above all else is create a productive order amongst materials with the purpose to answer why and how questions. Novelists pick out particular events, particular relations, and order them to create a gripping story; their question-answering or problem-solving nature is of course most evident in detective stories. Similarly, historians pick out particular facts, particular events, particular relations, and

[☆] This paper appears in a special issue of SHPS on 'Narrative in Science'.

* Corresponding author.

E-mail address: m.morgan@lse.ac.uk.

¹ Definitions abound within the immense literature on narrative that stretches beyond the fields of literature into law and philosophy: recent surveys from the narrative field are found in Abbott (2008) and Herman (2009).

order them to create a narrative account in answer to historical questions or problems. And while both narrative scholars and historians have seen time as the dominant line upon which these elements are woven together, the important umbrella notion here is not time but ordering, for which time offers a very convenient metric, a metric which may disguise other ordering principles. It is the ability and facility to order materials and weave them together to form explanations - regardless of whether the warp is a time thread, or a space thread, or a theoretical or conceptual thread - that characterises narrative.

Consider again the 'Queen, King, Princess' narrative example given above. The sequence of events is typically read as happening through time, though it could have happened more or less simultaneously. Less ambiguous is our tendency to read into the order that these events are related to each other in which the Queen's death seems to be the critical factor for the actions of the King and the Princess. Re-ordering events creates a different story: the King came to the throne, the Princess ran away and the Queen died makes the King the focal prompt for the events. The ordering is critical to the narrative's interpretation, and whether it is genuinely a time ordering or not is less critical. Scientific examples of this ordering issue abound: It might be that the important points in explaining the behaviour of someone in a psychiatric case study is the behaviour of their parents; time itself is not the dominant ordering line but a hook for narrating those other reasons. Similarly, the extinction of dinosaurs found in the fossil record happened in time, but the dominant evolutionary factors that explain that extinction are not fitted to strict units of time: that extinction could have taken a longer or shorter time. Some narratives do dance to units of time: circadian rhythms, or developmental processes from egg to caterpillar to chrysalis to moth (see Terrall, 2017). But time is more often a marker of events than a driver of events, and oftentimes it is not even so important as a marker, but rather the material in which we see the dependency of relations or the unfolding of events. That being so, the basis of narrative in the sciences is not time per se, but the possibility of being able to order events—to pick out a set of relevant elements and put them into order, that is, into relation with each other.

The implications that narrative ordering and practices have for explanation requires further argument. This account is prompted by considering the reasons for the Cinderella status both of history in the sciences and of chronicles amongst the narratives, and by wondering if those exclusions provide productive materials for understanding the role of narratives in the sciences.

* *Narrative is not chronicle*, because its principle of ordering involves not just time sequencing, but connecting, and this connectedness is required for claims about narrative's explanatory function in science. It may depend for this dominant ordering device on time or some other thread, but it must also involve some elements of relationship: causes, processes of change, puzzle solving, etc. And the resulting narrative may represent evolutionary paths, the unfolding of development processes, identity formation, the integration and synthesizing of elements, or creation of a mosaic/jigsaw - but not just a listing of order.

* *Narrative science is not history*, because it deals in various ways with more than particulars.² It develops or invokes categories, concepts, theories and other generic kinds of materials which are germane in giving an account of phenomena in any specific scientific site and context. This combination of generic and particular is evident even in the briefest scientific examples given above, and will become better attested in the case materials discussed later.

Scientific narratives focus on the reasons how and why things happen, whether these are ordered through time, or along some other perspective. Thus, it is the ability of the narrative scientist (as for the novelist or historian) not merely to order their materials, but to do so in answering how or why questions that lies at the heart of narrative, and thus the possibilities of narrative explanation in various sites of science.

Narrative forms of explanation have ontological implications, and perhaps involve novel epistemological principles. These are not necessarily evident a priori, nor necessarily shared across those sites of science where narratives are used, for neither narrative nor science should be considered standardized categories. Rather, narratives occur as a form in which things become known, and as a means of explanation, in various different sites of science. The fertile territories are not only the obvious ones: natural historical sciences (evolutionary biology, palaeontology, geology), but also the case studies of medicine and the human sciences, along with accounts in the complex natural and social sciences such as ecology and sociology. More surprisingly they find ready space in making sense out of mathematical simulations in the natural sciences and economics, in giving accounts of chemical reactions, and in counterfactual approaches in political science.³ These are sites in which scientists get to know things via narrative, not because the narrative provides an illustrative example for theories or models or something else, nor because it is 'merely' rhetoric (though rhetoric is never 'mere'), but because narrative is how the relationships amongst their materials become known to them. That in turn suggests that the narrative form of explanation reveals or evidences ontological commitments about the nature of the scientific materials at hand - that they are evolving materials, or complex materials, or synthesized materials, and so forth.

Questions of epistemology offer a more evident terrain: how do scientists construct their narratives, and so what kind of ordering principles do we find at work in scientists' narratives? Is there a methodology and epistemology of narrative science, or are there perhaps several? In order to consider these questions about epistemology in a more specific way, I discuss the narratives of social science case studies, rather than more obvious candidates from the natural historical sciences. This means starting with the most difficult sites because these case studies do not have any of the obvious features that are assumed to characterise narratives and that are found in narrative definitions. That is, they don't have obvious beginnings, middles and ends; they don't necessarily have time as the main dimension; nor do they have obvious causes, contingencies or changes of state. Rather, they offer documentary reports from the field as narratives which meld multiple small stories and commentaries, and multiple perspectives within the narrative, and they usually involve generic or conceptual elements in order to tell particular narratives. Analysis of four examples of such case studies will figure in the course of this paper (other cases appear by way of further illustration). The first two cases are sociologists' community studies from the 1920s and 1930s, the third case is a late twentieth-century study from industrial economics and the final one is a post-WWII classic of anthropology. Different community norms mean that these scientists differ in the ways they deal with and analyse their materials, and in the ways that they tell their narratives. Nevertheless, we can define the same characteristic ways in which those scholars create order in their

² Historians will argue this too in so far as they deal in generic categories such as war, revolution, class, and so forth, but see Roth (2017) who disputes this.

³ See Wise (2011, and 2017) for examples of narratives and simulations from physics; Morgan, 2001 and 2007 for examples from economics; Crasnow (2012 and 2017) for narratives in political science; Rosales (2017), Terrall (2017), and Currie and Sterelny (2017) for natural historical sciences; and Hurwitz (2017) for medicine.

Download English Version:

<https://daneshyari.com/en/article/5130397>

Download Persian Version:

<https://daneshyari.com/article/5130397>

[Daneshyari.com](https://daneshyari.com)