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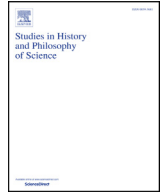
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Essentially narrative explanations<sup>☆</sup>

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## ABSTRACT

This essay argues that narrative explanations prove *uniquely* suited to answering certain explanatory questions, and offers reasons why recognizing a type of statement that *requires* narrative explanations crucially informs on their assessment. My explication of narrative explanation begins by identifying two interrelated sources of philosophical unhappiness with them. The first I term the problem of logical formlessness and the second the problem of evaluative intractability. With regard to the first, narratives simply do not appear to instantiate any logical form recognized as inference licensing. But absent a means of identifying inferential links, what justifies connecting explanans and explanandum? Evaluative intractability, the second problem, thus seems a direct consequence. This essay shows exactly why these complaints prove unfounded by explicating narrative explanations in the process of answering three interrelated questions. *First*, what determines that an explanation has in some critical or essential respect a narrative form? *Second*, how does a narrative in such cases come to constitute a plausible explanation? *Third*, how do the first two considerations yield a basis for evaluating an explanation offered as a narrative? Answers to each of these questions include illustrations of actual narrative explanations and also function to underline attendant dimensions of evaluation.

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## 1. Narrative explanations: some supposed problems

Although historians and others unapologetically use narratives to explain, as a category narrative explanations exist in philosophical limbo. On the one hand, absent any received explication of 'explanation,' this practice cannot be dismissed out of hand. But on the other hand, without any account of how putative explanations in narrative form accord with what passes as explanation in disciplines that do not (at least overtly) utilize narrative, it remains quite unclear just what normative standards should apply when assessing claims that narratives explain. This essay shows why narrative explanations prove to be *uniquely* suited to answer certain explanatory questions, and offers reasons why recognizing a type of statement that *requires* narrative explanations crucially informs on efforts at their assessment.

Philosophical unhappiness with narrative explanation can be summarized in terms of two interrelated problems. The first I term the problem of logical formlessness and the second the problem of evaluative intractability. C. G. Hempel's (1942) proposal regarding

historical explanation nicely illustrates the logical quandary at the core of both problems.<sup>1</sup> Hempel's model of explanation represents a textbook instance of explication inasmuch as it assimilates explanatory form to a type of argument form. The problem of evaluating explanation here becomes one with that of assessing the inference from explanans to explanandum. Formal and semantic considerations—validity and soundness—suffice on this model for purposes of evaluating the move from explanans to explanandum. And while Hempel's specific explication may be regarded as philosophically passé, the view that evaluating any candidate for explanation requires identifying its inference license remains entrenched in philosophical consciousness.

But narratives simply do not appear to instantiate any logical form recognized as inference licensing. And indeed many erstwhile defenders (myself included) of narrative explanations maintain that narratives come as a unit—the explanandum will be non-detachable from the supporting narrative. These considerations would seem to clinch allegations of logical formlessness. But absent any usual formal features for identifying inferential links, what could justify connecting explanans and explanandum? Logical formlessness thus appears to preclude identifying and so assessing

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<sup>1</sup> The roots of this debate extend back to at least to the late 19th century and center on questions of how contextual information provided by narratives answer demands for causal connections.

what links explanans and explanandum. Evaluative intractability would seem to be a direct consequence.<sup>2</sup>

Understood from this perspective, philosophically situating narrative as a species of the genus explanation requires satisfactorily replacing the work done by validity and soundness in more traditional philosophical accounts.<sup>3</sup> In this regard, those features identified as serving replacement functions should be linked to one another at least insofar as whatever logic connects explanans and explanandum also helps underwrite claims to explanatory significance. Methodological naturalism<sup>4</sup> requires no more for scientific standing, i.e., establishing a “family resemblance” in these key respects between narrative explanations and other accepted forms of explanation. Thus, one goal will be to establish that evaluating narrative explanations turns out to be no more difficult or problematic than that of assessing other accepted explanatory practices.<sup>5</sup>

Reasons for rejecting charges of formlessness and intractability emerge in the process of answering three interrelated questions. *First*, what determines that an explanation has in some critical or essential respect a narrative form? *Second*, how does a narrative in such cases come to constitute a plausible explanation? *Third*, how do the first two considerations yield a basis for evaluating an explanation offered as a narrative? Answers to each of these questions include illustrations of actual narrative explanations and also function to underline attendant dimensions of evaluation. Together these answers and examples will locate those features that mark narrative explanations and correlatively identify the evaluative considerations that attach to them.

The view defended here will be that *narrative explanations* explain *narrative sentences* (i.e., an explanandum expressible as a narrative sentence). In particular, I show why *only* a narrative can explain some events formulated as narrative sentences. As a consequence, evaluating explanations that have narrative form essentially (in a sense to be clarified below) will primarily be a function of assessing *competing* explanations, and so draw on evaluative criteria more akin to theory appraisal than to hypothesis confirmation. But my case for identifying those dimensions of rational appraisal relevant to *narrative explanations* builds on features unique to having *narrative sentences* as explananda.<sup>6</sup>

## 2. Narrative sentences and essentially narrative explanations

What marks an explanation as having narrative form essentially? For purposes of identifying narrative explanations, a minimalist notion of what counts as a narrative will do. Daniel Little nicely formulates a core notion of narrative for purposes of how it applies to historical explanation as follows: “it is an account of the

unfolding of a series of events, along with an effort to explain how and why these processes and events came to be. A narrative is intended to provide an account of how a complex historical event unfolded and why .... So a narrative seeks to provide hermeneutic understanding of the outcome ... and causal explanation .... ” (Little, 2010, p. 29) The notion of an “unfolding of a series of events” underscores the use of narratives to portray a temporal series. This indicates why many theorists hold that there exists a deep conceptual tie between narrative form generally and histories in particular. Psycho-analytic theorist Humphrey Morris provides a succinct expression of this view: “A ‘narrative’ ... is a particular language form that is organised according to a fundamentally temporal principle, that is, according to some variation on a ‘beginning-middle-end’ structure. Narrative, in this structural sense, is self-evidently ‘historical.’” (Morris, 1993, p. 36). Related remarks offering a minimalist characterization can readily be found in writings of literary theorists (e.g., Miller, 1990).

This minimalist approach to characterizing narrative results, unsurprisingly, in a liberal standard regarding what to count as a narrative. Yet for the purpose of getting clearer about narrative *explanations*, it matters not that by this criterion many works may qualify as narratives. Rather, what proves critical to clarifying narrative as a form of explanation involves whether or not an explanation in this form can also be non-narratively structured. That is, does it allow for paraphrase into some other, non-narrative explanatory form? For if so, then whatever explanatory import such a narrative seemingly possesses—revealing how things at the beginning of a time series came to be what they later were—turns out to be *inessential* for purposes of explanation. Hempel’s well-known example of a radiator bursting provides a case in point. A story explaining why it burst—e.g., one’s failure to put in anti-freeze—can be recast and given instead classic D-N form. In short, the core issue concerns whether or not some explanations must have narrative form *essentially*.<sup>7</sup>

### 2.1. Structural features of narrative explanations

I have in other works (e.g., Roth, 2017a) sought to establish that narrative explanations possess three key characteristics. These include: 1) the non-detachability of the explanandum from the supporting narrative; 2) the non-standardized character of event(s) explained; and, 3) the non-aggregativity of narrative histories. (1) follows from the fact that a narrative constitutes both the explanandum and its relations to the explanans—statements of the event to be explained and those that explain it. Jouni-Matti Kuukkanen rightly emphasizes this feature as the hallmark of the “narrativist turn” in historiography. “Narrativism sees historians as constructors of literary products—narratives—in the production of which they employ various rhetorical and literary techniques. Sometimes ‘narrative’ is understood as a story or story structure, but it may be better to understand it as any cognitive structure that connects individual statements and creates some general coherent plot, meaning, or interpretation of the past.” (Kuukkanen, 2012, p. 342; see also p. 355). A focus on the study of narrative construction as a defining feature of historiography reflects the ongoing influence of Hayden White’s work. For what White emphasizes and what has guided discussion within historical theory for over four decades has been the historian’s fundamental role as a creator of historical narratives. But where White typically focuses on narrative as a

<sup>2</sup> See discussion of these issues in Kuukkanen (2015) and my review (2016).

<sup>3</sup> See, e.g., Velleman (2003) my discussion of Velleman in (2017b).

<sup>4</sup> At least of the form that I defend (2006).

<sup>5</sup> In this regard, the attention that literary theorists devote to the analysis of narrative form typically focuses on those structural elements or rhetorical features that can be deployed to variously emplot narratives. However, while modes of emplotment impact explanatory accounts, their specific characteristics do not provide an explication of or connection to a logic of explanation or otherwise contribute to making explicit norms that might bear on logically evaluating claims to explain. These considerations indicate why those insights that literary theory offers regarding narratives invariably prove orthogonal to philosophical concerns about explanation. See Roth (1992).

<sup>6</sup> This account, if correct, turns out to have interesting implications for understanding what science is, and thus provides an additional rationale for embracing narrative explanations. See my “Kuhn’s Narrative Construction of Normal Science: Narrative Naturalized and Science Narrativized,” unpublished. Understanding Kuhn’s work as a narrative naturalizes narrative explanation through a form of mutual containment—since narrative helps constitute what counts as normal science, narrative cannot be separated from an understanding of what science is.

<sup>7</sup> I trust it clear from context that my uses of ‘essential’ and ‘inessential’ do not come metaphysically freighted. Rather, the terms mark off explanations that cannot be stripped of their narrative form and still provide an explanation from those that can.

literary resource, the basic point at issue in this paper is epistemological—what passes as historical knowledge. Historians sometimes write as if occupying a “view from nowhere,” but my account follows White’s by insisting that this represents only a rhetorical conceit and not a possible epistemic position.<sup>8</sup>

The non-standardized feature mentioned in (2) relates to (1) inasmuch as the sort of events to be explained—wars, revolutions, famines, and other typical foci of human histories—do not exist as “standardised” in some conventional theoretical sense, as the periodic table and related laws of compounding standardize elements and formulas in a natural science such as chemistry. There exists no settled theoretical “recipe” in historiography regarding how facts should or could be put together to make an event and which events they make. Insofar then as a history both claims to provide causal knowledge and yet has no scientific laws to cite, its theoretical underpinnings require special excavation and scrutiny. In this respect, (2) also underwrites (3), inasmuch as different narratives identify different events and so different causal sequences. These cannot be expected to aggregate, to yield some integrated account about what happens and why. Non-aggregativity denies the possibility of a Universal History—some single account that links all possible events under one explanatory rubric.

## 2.2. Narrative sentences as explananda

Further, close consideration of what Danto terms “narrative sentences” makes it possible to expose an underlying rationale for all three characteristics.<sup>9</sup> Narrative sentences possess an epistemically crucial feature for purposes of *narrative explanation* since narrative sentences express a truth about some past time *t* neither knowable in principle at *t* nor predictable given what could be known at *t*. “Their most general characteristic is that they refer to at least two time-separated events though they only *describe* (are only *about*) the earliest event to which they refer.” (Danto, 1962, p. 146). Narrative sentences demonstrate that statements true of a time *t* continue to accrue *after t*, e.g., The 40<sup>th</sup> President of the United States starred in *Bedtime for Bonzo*. Put another way, in 1981 something happens that adds to the list of statements true in 1951. In this important respect, a list of truths about each moment in time does not close as that moment ceases to be present. Past times do not exist like frozen tableaux. Rather, some events can be said to be true of earlier times at those time because what happens later makes them true. *Retrospection reveals truths about past times that can be known only retrospectively even though true at an earlier time.*<sup>10</sup>

Narrative *explanations* I claim prove uniquely suited to account for those retrospectively knowable truths that narrative sentences express. So, in addition to possessing the features of non-detachability, non-standardization, and non-aggregativity, an essentially narrative explanation will also have a narrative sentence as a statement of its explanandum. A narrative explanation will be a presentation of a temporal series that answers why the explanandum turns out to be as it is. For without reference to this retrospective stance, there would exist nothing to explain. And since what must be explained has no standardized format that explains it, a temporal sequence that cannot utilize laws or law-like generalizations will be required. *If a narrative explaining a narrative sentence has narrative form essentially, then there exists no non-narrative*

*way of explaining just that event.* That is, in those cases where the available antecedents provide no basis for rationally accounting for the outcome (e.g., assuming that in 1951 it could not be predicted that Ronald Reagan, who starred in *Bedtime for Bonzo*, would be elected the 40<sup>th</sup> President in 1980), then a *sequencing* of events that has the later event emerge as a consequence of the earlier (i.e., a narrative) provides the only sort of explanatory account one could have for such cases.<sup>11</sup>

The issue here does *not* concern, e.g., ignorance at some moment or a lack of access to some relevant facts. That is, what makes narrative sentences possible turns out to be quite *unlike* cases where mere ignorance precludes knowledge—e.g., those who experienced the plagues that Europe suffered in the 14th century could not know exactly what beset them.<sup>12</sup> By contrast, in the case of an event such as the Black Death, the fact that *it* began sometime in the 14th century simply could not be known then because the event so named emerges only later than when it first started. In other words, a narrative sentence *adds* a truth to an earlier time because it relates it to some subsequent occurrence. By contrast, a statement to the effect that people at time *t* were sick with a particular disease at *t* does *not* expand a list of what could be said to be true of a moment at just that moment.

In this key respect, i.e., by creating a means to explain narrative sentences, narrativizing enables a historian’s enterprise and constitutes no obstacle to it. Wallace Martin nicely summarizes this fundamental sense in which those conventions that constitute a possibility space for *narrative form* in turn make history possible.

The conventions of narrative, as identified by Danto and [Hayden] White, are not constraints on the historian and novelist; *rather they create the possibility of narration.* Without them, and confronted with a sheer mass of facts, the historian would have nowhere to begin. Knowing what is of human significance, the historian has a subject; knowing something of human thoughts, feelings, desires, and the incredible variety of their manifestations, and the social structures that mediate them he or she can form a hypothesis concerning why something happened as it did. This hypothesis determines which facts will be examined and how they will be put together. (Martin, 1986, p. 73; emphasis mine)

More generally, any charge that narrative form (as determined by those conventions discussed by narrative theorists) imposes a fictionalized structure on history misses that fundamental epistemic insight narrative sentences reveal, viz., that human histories exist only as a product of a very special sort of retrospective description. This is why to say that events such as the beginning of the Holocaust or the onset of the Black Death emerge only from that sort of perspective in no way implies some lack of “reality.” Rather, it acknowledges the unavoidable fact that such events exist only by virtue of humans who carve time in certain ways for certain purposes.

At their points of origin, historical and fictional narratives appear to be entirely different. ... Despite these differences, the two narrators face the same problem: that of showing how a situation at the beginning of a temporal series leads to a different situation at its end. The very possibility of identifying such a series depends upon the following presuppositions, as Arthur Danto and Hayden White have shown: (1) the events

<sup>8</sup> I elaborate on this further in Roth (2014).

<sup>9</sup> I have discussed this notion extensively elsewhere, but especially (Roth, 2012), (Roth, 2016), and (Roth, 2017b).

<sup>10</sup> The *locus classicus* for the notion of a narrative sentence is of course Danto (1962).

<sup>11</sup> I assume for the sake of argument that Reagan’s acting career in part helps explain his later success in politics. All explanations of course will be defeasible.

<sup>12</sup> For a thoughtful discussion of such cases, see Hawthorn (1991).

involved must all be relevant to one subject, such as a person, a region, or a notion; (2) they must also be unified in relation to some issue of human interest, which will explain why (3) the temporal series must begin and end where it does. (Martin, 1986, pp. 72–3)

The point made in (2) above—the human interest in play—determines as well the subject (1) and the series to be studied and explained, i.e., (3).

Interestingly, Martin identifies narrative sentences (without naming them as such) as that which structures a narrative. “*It is the end of the temporal series—how things eventually turned out—that determines which event began it; we know it was a beginning because of the end.*” (Martin, 1986, p. 74, emphasis mine) Thus does Martin neatly connect what defines a history as narrative—a beginning, middle, end structure unified by showing the development of a subject over time, and what a historical narrative contains that no other non-fiction inventory includes—an occurrence at an earlier time knowable only through and as constituted by a retrospectively available description.<sup>13</sup>

### 3. How narratives explain

But having suggested an answer to the first of my original questions, i.e., what determines that an explanation has narrative form, two further theoretical considerations remain to be elaborated. Grant if you will that those features rehearsed so far—non-detachability, non-standardization, non-aggregativity, and a narrative sentence as explanandum statement, characterize in some philosophically relevant sense a narrative explanation. Yet the other two initial questions remain: how do these factors ease worries tied to logical formlessness and evaluative intractability? That is, what makes narratives explanatory and how do their structural features inform on standards of evaluation?

#### 3.1. Description as justification in narrative explanation (Megill and Braudel)

In particular, a serious obstacle to answering either of the aforementioned questions arises from a belief that narratives typically seem to be descriptive—i.e., context-providing. And insofar as narratives develop context, what they offer seems to fall on the philosophically unhelpful side of any imagined descriptive/normative divide. How then could *narrative form* reflect or connect to any evaluative norms? As Allan Megill (Megill, 1989) nicely put this issue, narratives seem to offer primarily recountings, i.e., detailed descriptions of a chosen subject over time. Descriptions to be sure can be judged according to standard canons to be correct or incorrect, justified or not, but such judgments would be informed by norms extrinsic to a narrative, and so not by features specific to narrative structure. Considerations of narrative form would thus remain extraneous to evaluation.

Megill develops an analysis of Fernand Braudel’s *The Mediterranean and the Mediterranean World in the Age of Philip II* that provides a helpful initial approach to answering my remaining questions. Megill qualifies as a “narrative liberal” regarding how to interpret a text. For he maintains with reference to his chosen example that although Braudel does not position or understand *The Mediterranean and the Mediterranean World* as a narrative history, it nonetheless is. A primary reason for *not* classifying Braudel’s classic

as a narrative would be that it seems to lack a defining feature of a narrative—a focus on how a single subject develops over time in a way that accounts for why that subject is as it is at the end of the sequence.

Can the Mediterranean be said to change or develop, such that some germane features of it can be expressed in terms of a narrative sentence? Megill maintains that Braudel does just this. “*The Mediterranean* tells us what ‘the Mediterranean’ was and, to some extent, still is.” (Megill, 1989, p. 646). Or, as Megill notes quoting Braudel: “[t]he Mediterranean speaks with many voices; it is a sum of individual histories.”<sup>14</sup> Indeed, in the sentence immediately following the one that Megill quotes from Braudel, Braudel goes on to state, “If these histories assume in the course of research different values, different meanings, their sum must perforce change too.” (Braudel, 1976, p. 13) This sentence suggests a narrative sentence, a retrospective view of things past that adds a truth—“their sum must perforce change”—about that past not knowable at the earlier time.

Braudel’s book repeatedly realizes this suggestion. Consider the following example. “To claim that there is a *global* Mediterranean which in the sixteenth century, reached as far as the Azores and the New World, the Red Sea and the Persian Gulf, the Baltic and the loop of the Niger, may appear an unwarranted exaggeration of its boundaries. ... To meet the historian’s demands, however, the Mediterranean must be accepted as a wide zone, extending well beyond the shores of the sea in all directions.” (Braudel, 1976, p. 168). The “demands” to which Braudel refers here are explanatory ones. Braudel indicates this when he writes that “Politics merely followed the outline of an underlying reality.” (Braudel, 1976, p. 137). In short, statements such as the one regarding the “global Mediterranean” express a narrative sentence, a statement knowable as true only in retrospect, and yet true of the Mediterranean at that earlier time.<sup>15</sup> The apparently descriptive statements—Megill’s “recountings”—serve as Braudel’s justification for his narrative sentence.

Megill notes that in Braudel’s epic work “explanations seem embedded in something much larger than is not explanation.” (Megill, 1989, p. 642). He terms the “something much larger” the descriptive element. However what Megill characterizes as the descriptive part dovetails with the claim just made that Braudel’s narrative simultaneously constitutes and constructs both explanans and explanandum. Put another way, as previously noted narrativists in historiography rightly emphasize that facts do *not* “speak for themselves.” Accordingly, they have long insisted that both what gets described and how it gets described are products of normative considerations on the part of the historian. Consideration of essentially narrative explanations demonstrates exactly why, for these cases at least, there simply exists no separating descriptions of what happens and justifications of how a sequence

<sup>14</sup> (Megill, 1989, p. 646). Words quoted from Braudel’s 1972 preface to the English edition. (Braudel, 1976).

<sup>15</sup> Megill argues in this piece that *The Mediterranean and the Mediterranean World* should be viewed as a narrative history. “It is simply tradition, when it is not uniformed prejudice, that insists on identifying narrative history with actions and happenings, for characters and setting can also in principle serve as foci. Accordingly, the crucial question to ask, in deciding whether a given work is best seen as an instance of narrative history, is not, ‘Is this text organized in a chronologically sequential order?’ It is rather, ‘How prominent in the text are the elements of narrative?’ [action by an agent and happenings to that agent plus character and setting] ... Succinctly put, *The Mediterranean and the Mediterranean World* is a work of narrative history that (except in Part Three) focuses not on events but on existents. Braudel turned the historical setting and the division and subdivisions of that setting into a vast collection of characters. These characters make up the single, all-embracing character that is ‘the Mediterranean and the Mediterranean world’ itself.” (Megill, 1989, p. 645).

<sup>13</sup> For further reflections on this point, see especially Hacking (1995, Ch. 17) and Roth (2002).

accounts for an event. *For if there could, that explanation would not have narrative form essentially.* The descriptive and the normative, the contextual and the explanatory, must become of a piece in cases where *only* a narrative can shoulder the explanatory load. Narrative sentences in particular typically express truths that only narratives can explain.

*The Mediterranean and the Mediterranean World in the Age of Philip II* provides an explanation of narrative sentences such as “A global Mediterranean Sea reaching as far as the Azores and the New World, the Red Sea and the Persian Gulf, the Baltic and the loop of the Niger existed in the 16th century.” This in turn demonstrates how apparent agents (people of various times and regions) actually respond to an “underlying reality,” i.e., the Mediterranean. But then all the elements needed for a conventional narrative turn out to be present, just as Megill claims, with its chief “actor” being a protean geographic entity.

*The Mediterranean and the Mediterranean World* is best seen, then, as a vast character analysis, in which Braudel broke down ‘the Mediterranean,’ which begins as an undifferentiated entity, into its constituent parts, with growing attention over the course of the book to the human processes that are carried out within this geohistorical space. ... *The Mediterranean* tells us what ‘the Mediterranean’ was and, to some extent, what it still is. Braudel’s explanations are contributions to this end. The work is a vast recounting, into which explanations are stuck like pins into a pin cushion. It is likewise a vast narrative, though more an anatomizing narrative of character than a sequential narrative of action. (Megill, 1989, p. 646, p. 646)

For purposes of better understanding narrative explanations Megill’s analysis importantly illustrates how a narrative explanation can have a diffuse and dynamic subject as its focal element. As narrative liberals, we take an expansive view regarding what counts as a historical narrative. This liberality helps identify texts that expose, in turn, instances where *only by describing a situation in a particular way can certain claims be justified.* This does not confuse description and justification. Rather, such cases exemplify why when a narrative sentence requires explanation, that distinction ceases to be relevant. Unlike Megill, I focus on narrative sentences and their special role in narrative explanations. Put in my terms, by identifying the fact that narrative sentences express that which Braudel seeks to explain, only a narrative can be marshaled to do the work of explanation. This forced use of narrative form for purposes of explanation collapses in that context any descriptive/evaluative distinction.

### 3.2. Description as justification in narrative explanation (Hilberg)

Consider in this regard the following remark by Raul Hilberg: “The destruction of the Jews was thus no accident. When in the early days of 1933 the first [German] civil servant wrote the first definition of ‘non-Aryan’ into a civil service ordinance, the fate of European Jewry was sealed.” (Hilberg, 1985, p. 1044). Somewhat more prosaically, Hilberg’s statement may be reworded as a narrative sentence: The Holocaust began in 1933. While one may of course dispute Hilberg’s statement, it clearly can be construed as a narrative sentence, one stating what his vastly influential work explains. Much of Hilberg’s “recounting” as Megill would have it in that massive work consists of facts arranged, as Hilberg himself so aptly puts it, so that “In retrospect, it may be possible to view the entire design as a mosaic of small pieces, each commonplace and lusterless by itself. Yet this progression of everyday activities, these file notes, memoranda, and telegrams, embedded in habit routine, and tradition, were fashioned into a massive destruction process.

Ordinary men were to perform extraordinary tasks.” (Hilberg, 1985, pp. 993–4). Although Hilberg does not credit himself as the one who deliberately and carefully crafts this mosaic, nonetheless he basically creates for scholarly study an event now known as the Holocaust.

The eminent Holocaust historian Christopher Browning offers the following appreciative assessments of the lasting impact of Hilberg’s book.

Hilberg’s major contribution was to portray the Nazi destruction of the European Jews not as a giant pogrom, orgy of sadism or descent from civilization into barbarism, but rather as ‘an administrative process carried out by bureaucrats in a network of offices spanning a continent.’ (Browning, 2007a, pp. 10–11)

In Hilberg’s portrayal, this event was a vast bureaucratic and administrative process employing a cross-section of German society, not the aberrational accomplishment of a few demented individuals. The Holocaust comes to be marked as an *independent event*, one whose workings have implications that extend beyond situating it as a historical aberration, a freak, pathological event on the margin of German and European history. (Browning, 2007b, p. 1, emphasis mine).<sup>16</sup>

A point I would emphasize here concerns the fact that Hilberg’s narrative makes the primary actors bureaucracies and institutions (the institutional context for his “habit, routine, and tradition”), and the event explained exists in a very temporally and spatially diffuse sense—the destruction of the European Jews.

This event becomes true of those sites and times where exterminations occur, although no one site and no one time constitutes the event in question. Retrospectively naming that event makes it possible to identify other true statements about that event that would not exist absent that understanding. Moreover, no causal sequence exists to be fashioned until such an event needs explanation. The causal sequence, in turn, can only consist in this case of seeing facts as ordered and so related in a particular way. *The description creates this event and the event named by ‘The Holocaust’ becomes true of a collectivity of occurrences after the fact.*<sup>17</sup>

In order to gain some appreciation of how Hilberg’s narrative came to constitute this event, consider the remarks of H.R. Trevor-Roper, a prominent British historian who published a highly influential early review of *The Destruction of the European Jews*. Trevor-Roper begins by noting a point crucial for our purposes—what he finds to be new about this book does *not* consist primarily in the information it provides. It resides, rather, in Hilberg’s structuring of that information.

This is a forbidding book. It is nearly 800 pages long. The pages are double-columned. It has nearly a hundred statistical tables. It is written in an austere style, without literary grace or emotion. And it deals with a subject of which, this year, we have already read a great deal. I hardly thought, on taking it up, that I should be unable to put it down ... [that] I should have read it through, almost without interruption, and quite without skipping, to the end. *For this is not merely a compilation or a recapitulation of the now documented facts. It is not yet another chronicle of horrors.* It is a careful, analytic, three-dimensional

<sup>16</sup> I thank Professor Browning for generously providing me with a copy of his remarks. Browning reiterates the “founding father” characterization in (Browning, 2007c, p. 102). See also Browning (2008). For a detailed account of the impact of Hilberg’s work as well as the trials and tribulations surrounding its publication, see Bush (2010).

<sup>17</sup> This exemplifies what I have elsewhere termed an irrealist view of historical events. For detailed development of this irrealism, see Roth (2012).

study of a social and political experience unique in history: an experience which no one could believe possible till it had happened and whose real significance still bewilders us. (Trevor-Roper, 1962, p. 351, emphasis mine).

As Trevor-Roper emphasizes in his review, by focusing not on the victims but on how the machinery of destruction came to be mobilized, Hilberg raises a question—the key question I am inclined to say—regarding how perpetrators come to be recruited in order for something like this to occur.

The great interest of Mr. Hilberg's book is that he has faced this total problem. ... While keeping to a narrative form, he has studied the social problem analytically: his narrative carries along with it a profound social content. That is why I call it 'three-dimensional.' It reveals, methodically, fully, and clearly, the development of both the technical and the psychological process; the machinery and the mentality whereby one whole society sought to isolate and destroy another which, for centuries, had lived in its midst. (Trevor-Roper, 1962, p. 352).

He clearly was not alone in experiencing a type of "gestalt-shift" upon reading Hilberg's work.<sup>18</sup> Browning observes that as late as 1969 his graduate student encounter with Hilberg's work induced "the equivalent of an academic 'conversion experience.'" (Browning, 2007b, p. 1). Trevor-Roper's remarks bring into sharper focus the point made above regarding the narrative sentence that states Hilberg's conclusion and how his detailed recounting also functions as justification—showing how an act of institutionalizing anti-Semitism starts a nation down "the twisted road to Auschwitz."

*The Destruction of the European Jews* fits the mold of a narrative explanation developed above. Its conclusion can be stated as a narrative sentence, one that the text explains by providing a beginning-middle-end structure that presents a story line detailing the causes of that event, but where "causes" can *only* be identified by offering specific steps in an extended developmental sequence. *No laws underwrite this sequencing.* And while other genocides happen both before and after, "genocide" does not name a scientifically standardized event type. The result will be explanatory, an answer to an important "Why?" question that depends essentially (in my sense of the term) on a temporal sequencing of certain statements of fact. Here again no functional distinction exists between describing that sequence and justifying causal links. The event explained—what "the mosaic of small pieces" depicts—moreover cannot be detached from the narrative that presents it.

Indeed, as noted in the remarks by historians who first encounter it or who reflect on it even 50 years after its publication,

<sup>18</sup> As is now well known, Hilberg was discouraged from this research topic and had great difficulty finding a publisher. Over 50 years on from the initial publication of his book, it can be too easily overlooked that despite its appearance over a decade and a half after the official end of the Second World War, Hilberg created for all intents and purposes the Holocaust as a field of study. It would be difficult to dispute Browning's characterization of Hilberg as "the 'founding father' of Holocaust Studies in North American scholarship".

<sup>19</sup> For a detailed case study of the non-aggregativity of scholarship in this area, see Roth (2004). For a startling and important reframing of the debate, discussion of which would be beyond the scope of this paper, see Snyder (2010). The literature on the Holocaust has become overwhelming, and in fact has spawned its own sub-genre devoted just to historiographic issues relating to Holocaust studies. But precisely because this involves a time-frame that can still be viewed as relatively historically near and extremely well-documented and researched, a history of the emergence of the event and interpretive disputes connected to it prove to be philosophically of particular interest.

that "event" became visible only after Hilberg's work gave it a shape and a name. And as reactions to and subsequent scholarship reveals, the narratives concerning what happens over this time span do not aggregate.<sup>19</sup> Finally, what the narrative explains cannot be explained in any other way. For narratives "create" what they simultaneously set out to explain, not because they "make things up," but precisely for the reason that narrativists such as Hayden White have for so long insisted—only by this means does a historian provide meaning and structure to a morass of details that otherwise has neither.

With regard to justification, a key aspect of the irrealist position that I defend comes out most forcefully in my claim that essentially narrative explanations create the explanandum event. They do so by utilizing a narrative sentence. Historical events, on this view, exist only under a description. This description, in turn, makes it possible to formulate truths about that event. The analysis above focuses primarily on internal factors that bear on justifying narrative explanation, and particularly on why a bare sequencing of apparently descriptive statements unavoidably assumes the normative burden of justification in essentially narrative explanations. Elsewhere (particularly Roth, 2004 and Roth, 1998), I emphasize and explore the critically important *comparative* aspects regarding evaluating competing narrative explanations.<sup>20</sup> But although there will be factors both internal to a narrative explanation (assessing the sequencing) and external to it (comparison with competing narratives, if any), I suggest that evaluation in the end can only be on a case by case basis. The fact that narratives cannot be expected to aggregate will be a limiting factor; the extent that the events explained have been standardized, at least to some extent, will abet comparative evaluation.

#### 4. Science narrativized: an example from evolutionary biology

The focus so far has been on a proposed category of essentially narrative explanation and has been developed and illustrated by reference to certain well-known historical texts. But does this category relate to narratives in the historical natural sciences like evolutionary biology and historical social sciences like cultural anthropology, and if so how? Inter alia and so unlike those rehearsed above, these other cases may appear to be somewhat standardized in a theoretical sense. For example, what is the relation of essentially narrative explanation in evolutionary biology to the usual explanatory structure found there, e.g., general principles of variation and natural selection, standardized taxonomic language of organisms, and standardized events like mutations and extinctions? These theoretically specified aspects of evolutionary biology would appear to work right along with and even be integrated into essentially narrative explanation. Do these

<sup>20</sup> Although differing in some key respects from the analysis I develop, accounts that also emphasize the centrality of comparative evaluation of explanation can be found both in Martin (1989, especially Ch. 3) and Kuukkanen (2015, especially Ch. 9). As Martin puts the point, "The alternative that I favor is to ... look instead at actual historical interpretations, with an eye to uncovering the evidential conventions in terms of which we construct them. To be realistic ... this looking at historical interpretations must be done from a *comparative* perspective that takes seriously the limitations within which historians actually work; that is it must be done from the perspective of trying to determine how historians try to show that their favored interpretations are *better* than competing interpretations." (Martin, 1989, p. 6) I have in a number of articles developed arguments for why the notion of truth does not prove relevant to narratives, and how assessing narratives comparatively and as proto-theories or paradigms should proceed. See in particular (Roth, 1988), (Roth, 1989), and (Roth, 2004). Currie (2014) deploys this strategy, explicitly using of a comparative approach to assessing narrative explanations.

considerations require modifying how essentially narrative explanations have been characterized?<sup>21</sup>

I cannot here address all these questions. The cultural anthropology case can, I suggest, be readily assimilated to those already discussed, but demonstrating that would require an attention to the details of specific ethnographies. I focus instead on a case from evolutionary biology, since that *prima facie* appears the hard case for essentially narrative explanations as developed to this point. But the difficulties turn out to be more apparent than real. In particular, another route to grounding the features claimed herein for narrative explanation can be found by examining a closely related position urged by John Beatty and Isabel Carrera (Beatty and Carrera, 2011), who argue for narrative explanations from the perspective of evolutionary biology. After developing details of this case, I return to questions raised above regarding how it fits with essentially narrative explanations.

Beatty and Carrera (hereafter BC), attending to remarks made by Stephen J. Gould, note a distinction between two very different senses of historical contingency. On one, the notion can be parsed in terms of a standard counter-factual rendering—if certain facts about the past had been different, then there would be differences going forward. But on a second sense of historical contingency that they find in Gould's writings, one fraught with significance for evolutionary biology, differences going forward might emerge *even assuming an unaltered antecedent state*. Following Gould, they call this “replaying life's tape.” (Beatty and Carrera, 2011, p. 472–3). In this thought experiment, Gould maintains that if one could erase “life's tape” going back to some particular point, and then “replay” it from that point (start over with the state description of that time *t*, so to speak), Gould doubted that from a biological/evolutionary standpoint that the tape would “play out” exactly as before.

BC observe that Gould did not seem alert to these two very different senses of historical contingency that he invokes. They set out to explore whether the “replay” scenario can be made plausible, but with their own twist.

History matters ... when the past that had to happen (in order to realize the future) was not bound to happen, but did. By switching our focus from the unpredictability of the outcome to the unpredictability of antecedent events, we have moved from a situation where one and the same past event is consistent with alternative possible future events ... [i.e.,] to a situation where, of all the past events that might have been, the one that had to occur in order to bring about the future event of interest did in fact occur (Beatty and Carrera, 2011, p. 482).

But what does it mean to focus on “the unpredictability of antecedent events”? Here BC, by way of illustrating the unpredictability of adaptive traits that emerge in orchids, cite an ingenious experiment that actually instantiates in some key respects Gould's “replay” of nature's tape *Gedankenexperiment*.

The basic (ongoing) experimental setup involves the investigation of twelve, initially identical (cloned) populations of the bacterium *E. coli*, as they evolve in identical (and identically altered) environments. The investigators have detected a number of differences in evolutionary outcomes among the twelve lines, differences that cannot be attributed to differential selection pressures (since the groups have faced identical selection pressures in their identical environments), but that seem instead to be causally dependent on chance differences in the

variations (and order of variations) that have arisen in the different lineages. (Beatty and Carrera, 2011, p. 488).

After 31,500 generations, one lineage exhibited an extremely rare but highly adaptive mutation. The question addressed by the researchers in line with the “replay” scenario concerned whether or not this mutation would occur in the other populations as well, or “whether the population in question had by that time, though a *series* of contingencies, evolved to become *uniquely* capable of taking the final evolutionary steps in the direction of citrate metabolism.” (Beatty and Carrera, 2011, p. 488). Because the researchers preserved samples of each of the dozen initially identical *E. coli* strains every 500 generations, they could “rerun” the tape so to speak and replay the evolutionary cycle by taking a preserved sample from some point antecedent to when the mutation emerges and see if it emerged again. “And what they found was that the ability to metabolize citrate arose over and over again, suggesting that, by this point, the lineage in question had become *uniquely* capable of making the evolutionary breakthrough.” (Beatty and Carrera, 2011, p. 489). So although “life's tape” begins identically for all twelve of the lineages under study, only one manifests the mutation of interest. Upon a “replay” of nature's tape, no such mutation occurs in the other strains.

This suggests the conclusion that starting from a genetically identical initial state and holding the environment constant, in some worlds (at least one, anyway) a specific mutation emerges and in some (indeed, most) it does not. There will be, moreover, no predicting that this mutation might ultimately emerge because “in the beginning” all these “possible worlds” share a point of origin.

From this consideration of contingency/unpredictability (since none of the other eleven strains made this leap, and since they start as biologically identical), BC suggest certain conclusions regarding the function of a narrative explanation. They follow W.B. Gallie in suggesting that (quoting here from Gallie) “the unpredictable developments of a story stand out, as worth making a story of, and as worth following.” (Beatty and Carrera, 2011, p. 490, quoting Gallie). As they gloss the moral here, “the outcome may seem improbable at the beginning of the story, but really should not seem improbable at the end.” (Beatty and Carrera, 2011, p. 490). But why ascribe, as Gallie does, primacy to unpredictability/contingency in structuring or identifying specifically historical? For surely a reader of, e.g., Hilberg's work or Braudel's opus does *not* begin in ignorance of how matters turn out. As Louis Mink noted in criticism of Gallie's view, “What he [Gallie] has provided is a description of the naïve reader, that is, the reader *who does not know how the story ends*,” and that what this reveals is that “to know an event by retrospection is categorically, not incidentally, different from knowing it by prediction or anticipation.” (Mink, 1987, pp. 47–8). Granted, BC do not insist that unpredictability represents a *necessary* feature of narrative explanation. But is unpredictability a feature that in fact creates a special place for narratives in the spectrum of scientific explanations?

In this regard, their own phrasing of the announced moral does not square with their chosen emphasis on unpredictability. “What narratives are especially good for—what makes them worth telling, and renders them non-superfluous—are situations where history matters: where a particular past had to happen in order to realize a particular future, and when the past that had to happen (in order to realize that future) was not bound to happen, but did.” (Beatty and Carrera, 2011, p. 491). But this characterization of why “history matters” emphasizes, I suggest, retrospective insight. Narratives certainly show their worth when history matters. But the mattering emerges, as they themselves put it, when one *now knows* what “was not bound to happen, but did.” One only knows it was not

<sup>21</sup> I owe an appreciation of a need to make explicit this connection, as well as the two sentences preceding this one, to comments by Mary Morgan and Norton Wise.



bound to happen because *retrospectively* something now known to matter emerges, and knowledge so gained through hindsight can be used to fashion a narrative that then charts a developmental course from a beginning to an end. This may also have been unpredictable, in the sense scouted earlier. But unpredictability just serves to emphasize that this insight could only be obtained retrospectively.

BC note that what narratives provide but that predictive accounts cannot involves explanations that offer, as they put it, a “stepwise” path from beginning to end. This point also underlines that they too have characterized what I term an essentially narrative explanation, i.e., one where there exists no explanation of how this came to be as we find them apart from a sequencing of events. Their quote cited immediately above continues as follows.

A representation or account of such a situation would need to proceed stepwise, because some stages—those marked by a fork in the road—require information not derivable from previous stages. We need to be told which paths were taken; the narrative supplies this information, as it is needed. The more forks in the road on the way to the actual outcome, the more points at which history matters. (Beatty and Carrera, 2011, p. 491).

As their own remarks here make clear, their actual emphasis falls on the importance of retrospective knowledge, on knowing where the noteworthy forks exist, and what did happen at those points. This new information about the past, in short, becomes available only upon assuming a retrospective view. This hindsight allows one to identify truths about an earlier time not then knowable as true. One marks the end of this narrative—the admittedly unpredictable mutation that marks the terminus of their laboratory tale (for the moment), *because once that mutation emerges, a story exists to tell*. As Wallace Martin noted, knowing the end allows a beginning to be identified. What makes for a narrative, what makes for a tale to tell consists in having a full story in hand.<sup>22</sup>

The value that BC find in narrative as a type of explanation thus can be transposed into an essentially narrative explanation, one emphasizing the role of narrative sentences. The experiment provides some insight or explanation into evolutionary possibilities because the explanandum event in such cases—e.g., a mutation that confers an adaptive advantage to an orchid, can be identified only in that way, as true of an earlier time but not knowable as such at that time. Retrospectively, one can know what proves adaptive and what not. At the moment, the emergence cannot be predicted, and its relative advantage, if any, must await a test of time. But then

<sup>22</sup> I take this point to be confirmed by a recent account of this material. “Historically contingent traits require particular non-guaranteed antecedent states, which is to say a particular history, to evolve. Their origins are therefore complex, and require multiple mutational steps. Some of these steps may be neutral, not uniquely beneficial, or possibly even mildly detrimental. Because the required steps are not uniquely favored, cumulative selection cannot predictably and rapidly facilitate their accumulation. Instead, the accumulation of the necessary mutations must be an accident of an organism’s history. As a consequence, historically contingent traits should typically display two characteristics. First, they will rarely evolve multiple time independently simply because the necessary historical sequences are unlikely to recur. Second, because natural selection cannot construct them directly, contingent traits will tend to arise long after the ecological opportunity or environmental challenge to which they provide adaptation appears.” (Blount, 2017, p. 5. See also remarks at p. 7). Or again: “Potentiation has so far proven to be very difficult to unravel even now that we know what mutations occurred during the population’s history. (This is akin to a historian knowing what events occurred, but not knowing their impact or relationships.)” (Blount, 2017, p. 8, emphasis mine). The parenthetical phrase clearly invokes the sort of retrospective knowledge that a narrative sentence expresses and only a narrative can explain. For related and supporting reflections, see also Sepkoski (2017, pp. 4–6). I thank Allan Megill for bringing these articles to my attention.

one can later say truly of the earlier time that an adaptive advantage emerges then. Since time reveals what proves adaptive, adaptive mutations will be invisible even to an Ideal Chronicler at a given moment in time. But the importance of narrative resides in the fact that only through it can one express and explain such truths.

In addition, an evolutionary explanation as sketched by BC manifests as well the other features that mark an explanation as having narrative form essentially. An explanation of the process that results in an adaptive mutation cannot be detached from the narrative of which it is a part. Only by contextualizing it—identifying retrospectively those steps “marked by a fork in the road”—does it get explained, and what explains must also be formed by contrast within that historical account.<sup>23</sup> The emphasis on unpredictability proves not to be fully misplaced, since it signals that the events of concern do not exist in some standardized form. An evolutionary narrative cannot be paraphrased into some other form and still capture what it aims to explain. Regarding connections between non-aggregativity as I discuss it and explanations in evolutionary biology, see the informative and illuminating discussion by Currie (2014).<sup>24</sup>

This leaves only the question of how this example fits with the final aspect of essentially narrative explanations, viz., that the event explained is non-standardized. As noted at the outset of this section, events studied by evolutionary biology *do* appear to be standardized by virtue of belonging to a theory that assumes standardization for such cases, and so in contrast to other sorts of historical events that I discuss.<sup>25</sup> But even granting this, what counts as an adaptation remains contextually defined and retrospectively identified. To the extent that context remains ineliminable and so an *adaptive* mutation proves only retrospectively specifiable, then the explanandum event will in turn also be non-standardized in the sense relevant to how essentially narrative explanations have been characterized. For under that description, the event has no non-narrative explanation. Those other, more standardized aspects will enter into the sequencing, but they can

<sup>23</sup> Beatty emphasizes precisely this point in recent work as well. “But turning points, or eventual events (or kernels) are what make narratives worth telling. Indeed, turning points make narratives essential.” (Beatty, 2017, p. 5). But of course what to count as a “kernel” in the relevant sense will only be revealed retrospectively.

<sup>24</sup> Currie’s far-ranging discussion intersects with many of the point raised here, although his way of drawing some of the distinctions that I rehearse utilize his own terminology, e.g., his distinction between “simple” and “complex” narratives. Also as he notes, “The distinction I will draw between narratives is in terms of explanatory texts. Historical scientists apply different explanatory strategies in their attempts to describe the causal processes they target. ... I am referring to the explanations historical scientists furnish, rather than the explanatory events in the world.” (Currie, 2014, p. 1168) On Currie’s account, complex narratives shoulder their “explanatory load” (Currie, 2014, p. 1169) by “drawing together a plethora of diffuse, contingent explanans and telling a well-supported, coherent story about sauropod lineage. There is no single unifying regularity which can be appealed to.” (Currie, 2014, p. 1169) Or, again, “A complex narrative requires specific details unique to the case at hand and is not subsumed under a particular model.” (Currie, 2014, p. 1170; see also 1171) For reasons why complex explanations in paleobiology need not aggregate, see his discussion of “explanatory monism” (Currie, 2014, pp. 1170–73 and 1180–1).

<sup>25</sup> Do I overstate this claim? No one denies that more and more information about particular periods sometimes becomes available. The opening (to some extent) of archives in former Soviet states illustrates this for my own running example of the Holocaust. But does this lead to standardization in some theoretically relevant sense? This is an empirical claim, and so far as I can determine the additional information does not lend support to any theoretically substantive notion of standardization. I continue to use the Holocaust as an example because, on the one hand, of the wealth of information and scholarly attention it attracts and, on the other hand, its simultaneous resistance to standardization (see fn. 19 above illustrates). Hayden White famously uses histories of the French Revolution to illustrate this point in his own way. For the case of the American Civil War, see Towers (2011).

neither displace nor replace a need to narrativize. Put another way, the relation of explanans and explanandum (whatever the content of statements in the explanans) remains essentially narrativized.

## 5. Conclusion: narrative naturalized

To reject essentially narrative explanations would thus be to deny that at least some events expressible only as narrative sentences properly qualify for explanation, i.e., to declare a narrative sentence *qua* explanandum to be nonsense, as an inappropriate candidate to be evaluated for its truth or falsity. But this move surely lacks any plausibility. Conversely, if essentially narrative explanations do function to explain narrative sentences, this suffices to establish their naturalistic *bona fides*.

As responses to Hilberg's or Braudel's work earlier illustrated, the merits of such narrative explanations characteristically consist in how they focus and shape subsequent inquiry and debate. That is, historical texts in particular function to explain by providing the *sole* means to formulate and answer certain types of explanatory problems. *And if an event can be explained only narratively, then (ceteris paribus) for that reason evaluating that explanation will have to be done comparatively, i.e., relative to a competing narrative.* It might thus be said: only in the context of a narrative do some narrative sentences have an explanation.

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