Chapter 9
Causal Explanation and Historical Meaning: How to Solve the Problem of the Specific Historical Relation Between Events

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Abstract History is no mere chronicle of events. This insight of Arthur C. Danto's (often misunderstood) discussion of the concept of history implies that the historical meaning of a past event can change in the course of time – simply because of what happens afterwards. If we hold, however, that history has a real structure and that the historical meaning of past events is determined by the causal and temporal structure of these events, then we have to be able to show how the historical meaning of past events can be causally explained. And how can this be shown without presupposing the highly controversial thesis of backward causation? After discussing Danto's thesis at some length, I argue first very generally in favour of a counterfactual analysis of causality and, second, that an expansion or revision of this analysis can solve the problem of this specific historical relation between events.

Keywords Historical explanation • Historical meaning • Counterfactual causality

9.1 Introduction

Histories are not mere chronicles of events, or so emphasizes Arthur Danto in his book *Analytical Philosophy of History*. Even the so-called Ideal Chronicler who knows whatever happens the moment it happens, and has the gift of instantaneous transcription, would be unable to tell a history because he would be unable to construe the historically relevant relations between the events. Nevertheless, he can describe the course of each event's occurrence in full detail. The issue Danto is pointing out through his fictional Ideal Chronic and his concept of narrative sentences – this means sentences in which one event is described from the

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M.I. Kaiser et al. (eds.), *Explanation in the Special Sciences: The Case of Biology and History*, Synthese Library 367, DOI 10.1007/978-94-007-7563-3_9,

perspective of another temporally later event – is obviously relevant to the problem of explanation in history in that past events have a property, which we can call their historical meaning, and this historical meaning can change over the course of events, simply because of what happens afterwards. And this fact, the fact that the historical meaning of past events can change over the course of time, challenges the thesis that historical events can have a causal explanation because if an event's historical meaning can change in virtue of what happens afterwards, then it seems to be that we have to accept the possibility of backward causation if we want to insist that this historical meaning is a real property, which is causally determined and therefore can be causally explained. Now, some philosophers are convinced that some kind of backward causation cannot be conceptually excluded; I think, however, that the relevance of causal explanations in history could not and should not depend on the controversial possibility of backward causation.

Therefore, my goal is to show that the historical meaning of past events can be causally explained without supposing backward causation, but instead by revising or expanding the concept of counterfactual causality. First, I will discuss Danto's well-known example of two scientists who supposedly formulated the same scientific theory independent of each other and with great temporal distance between their respective actions. Second, I attempt to clarify the concept of a historical meaning by stressing the underlying problem in Danto's discussion which, in my opinion, is the distinction between the historical meaning of events on the one hand and the semantic meaning of linguistic expressions and sentences on the other hand. In the third section of the discussion (Sect. 9.4), I argue for a counterfactual theory of causality assuming that these arguments are free of the particular problem of a specific historical connection between events that I am concerned with. Lastly, I will end by coming back to this problem and propose how it can be solved by revising in two respects the traditional counterfactual analysis of causality proposed and developed by David Lewis.

9.2 Danto's Scientists

Arthur Danto's example of the two scientists is set within the context of his discussion about the characteristics of an Ideal Chronic. An Ideal Chronic entails every possible piece of truth with regard to every event and all the information which can be transcribed in the moment it happens. This means that the Ideal Chronic describes every event in full detail but without reference to earlier or later events. It represents, as you may put it, the happenings one by one over the course of time, including only the information that is true for the events in the moment that they occur. Such a Chronic is both very rich and very poor, and it seems to be clear why a Chronicler's transcription of happenings cannot tell a history: Histories essentially represent the relations between events, describing events not one by one, but within their relations. It is exactly this essential property of histories that Danto's fictional Ideal Chronic cannot possess.

Danto's puzzling example of two scientists formulating the same theory independent of each other articulates these conceptual correlations: 'Suppose, for example, that a scientist S discovers a theory T at t-1. S perhaps does not publish T. At some later time t-2, a different scientist S* independently discovers T, which is now published and included into the body of accepted scientific theories. Historians of science subsequently find out that S really hit on T before S*. This need take away no credit from S*, but it allows us to say, not merely that S discovers T at t-1, but that S *anticipated* at t-1 the discovery by S* of T at t-2. This will indeed be a description of what S did at t-1, but it will be a description under which S's behaviour could not have been witnessed and it will be an important fact about the event which accordingly fails to get mentioned by the Ideal Chronic' (Danto 1965, pp. 155–156).

What is going on here? What is the problem and what has this problem to do with causality? The puzzling issue is the fact that the first event, the formulation of T by the first scientist, S, seems to acquire a new property, the property of being the anticipation of T, in virtue and only in virtue of the occurrence of a later event, namely, the formulation of T by the second scientist, S*, at t-2. At t-1, when S discovers T, this act of discovering *is* no anticipation *yet*. It only *becomes* an anticipation when S* rediscovers T. It is not an anticipation at t-1 because it also would not have been an anticipation at t-2 if S* had not rediscovered T at t-2. Because and only because S* rediscovered T at t-2, the first event becomes an anticipation, and therefore, it cannot be an anticipation at t-1.

Does all this mean, however, that the past can actually change? And does all this mean that the second temporally later event is a cause or a kind of cause of the former event? Danto confesses that there is a sense in which we could say that the past is changing. However, what Danto explicitly wants to exclude is backward causation: '... there is a sense in which we may speak of the past as changing; that sense in which an event at t-1 acquires new properties not because we (or anything) causally operate on that event, nor because something goes on happening at t-1 after t-1 ceases, but because the event at t-1 comes to stand in different relationships to events that occur later' (Danto 1965, p. 155).

Now, Danto's discussion, as far as I understand it, starts getting rather complicated and very unclear. Danto formulates that there is no sense in which anything can in any way causally operate on past events. Yet he also says that it is possible that these past events form different relationships with events that occur later. How shall we understand this last assertion? What could these 'different relationships' be unless causal relationships if the past could change in virtue of these different relationships? Although Danto rejects the possibility of backward causation, he nevertheless introduces the distinction between necessary and sufficient conditions for events and contends that if a former event, E-1, at t-1 is a necessary condition for a later event, E-2, at t-2, then it follows that E-2 at t-2 is a sufficient condition for E-1 at t-1. However, in so far as these so-called conditions are really conditions *for events*, we have to understand them as factual conditions and that means we have to accept them as causal conditions. But this seems to suppose that we have two different concepts of causality in the discussion, namely, causal conditions and

proper causes. Now, the question would surely be: What is the criterion to make this distinction? Danto does not formulate and therefore does not answer this question. Instead, he emphasizes the connection between such conditions and the level of description. And it is exactly this shift in Danto's discussion, the shift from the factual level and the question of whether the past itself can change, to the level of description which is, in my opinion, not coherent. To illustrate the relevant quotation again in full detail: 'A sufficient condition for an event may thus occur later in time than the event. We cannot readily assimilate the concept of cause to the concept of necessary and sufficient conditions unless we are prepared to say that causes may succeed effects. So it is difficult to suppose that E-2 *makes* E-1 happen. But at the very least it permits a *description* of E-1 under which E-1 could not have been witnessed and which, accordingly, could not have appeared in the Ideal Chronic' (ibid).

Danto is surely right to say that our descriptions of past events are becoming richer and richer over the course of time simply because of what happened afterwards. But the crucial question in his puzzling example of the two scientists is whether the earlier event, E-1, can really acquire new properties in virtue of the occurrence of E-2 at t-2. It is unquestionable and therefore not very interesting that the truth of our description of E-1 as an anticipation of T depends on the occurrence of E-2 at t-2. It would simply be false to describe E-1 as an anticipation of T if E-2 never happens. However, the interesting question is whether E-1 really gets into, as Danto himself puts it, different relations to later events, that is, whether E-1 really acquires new relational properties at the time of the occurrence of E-2.

It might be a bit unfair to accuse Danto of having confused the factual level with the level of description because it seems that all Danto wants to show with his puzzling example is that the Ideal Chronicler cannot use words that express causal relations. Causes, as he emphasizes, 'cannot be witnessed *as* causes' (Danto 1965, p. 157). Danto mentioned that David Hume pointed this out long ago. However, Hume's argument for this contention is very different from the reason why the Ideal Chronicler is unable to use the word 'cause' or other synonymous expressions. Hume insisted that all we can really observe are mere regularities; but the Ideal Chronicler who transcribes the occurring events instantaneously is even unable to describe regularities, whatever sorts of regularities there may be. And my crucial point is that all this leaves the question open as to how we can conceptualize the fact that past events can change their relational properties over the course of time and in virtue of the occurrence of later events.

9.3 Historical and Semantic Meaning

Concerning histories, the aforementioned distinction between the factual level and the level of description refers to the difference between historical and semantic meaning. In its broadest sense, the concept of historical meaning expresses a property that every event that is part of a distinctive history possesses. That means

that every historical event possesses any historical meaning, simply by virtue of being a historical event. Historiography, however, is interested especially in such events that are endowed with a historical meaning which is outstanding in some respect. 'Being the anticipation of a later famous theory' is, in my opinion, a typical example of the historical meaning of an event. Other examples are 'being the final trigger of the war', 'being the first democratic election in this country', 'being the beginning of political disturbances' or 'being a great discovery'. I accept and want to defend the thesis that such historical meanings are real properties of events or are real properties of, more or less, complex connections of events. I also want to argue for the thesis that the historical meaning of an event is determined by the causal role that this event occupies. The causal role in turn is determined by the totality of the causal relations this event holds to other events, that is, by the totality of causes and effects concerning this event. Every event stands in at least some causal relation to other events. Thus, one can roughly say that the event's historical meaning is especially ample and important if this event is causally related to many other events and if these or some of these connections are temporally and spatially rather far-reaching. For example, the shooting of Archduke Franz Ferdinand in Sarajevo, considered as one trigger of the beginning of the First World War, surely has an important and decisive historical meaning exactly because its causal scope was so varied and far-reaching. If these shots can indeed be justified as a necessary but not solely sufficient cause of the First World War, then this single event is causally responsible for a war that lasted four years and was characterized by a hitherto unknown extent of cruelty in warfare. Whether this particular event, the shooting of Archduke Franz Ferdinand, was actually a cause of the First World War is no easy question. It is, however, surely right that the answer to this question does not depend on our descriptions but on the real properties of this event. And in this context, the crucial properties are the causal properties. That is, the event's historical meaning simply consists in the event's causal relations.

This realistic thesis concerning the historical meaning of past events stands in sharp opposition to narrative constructions of the concept of history. Arthur Danto is sometimes considered to be a kind of mentor of such narrative constructions which Hayden White and Frank Ankersmit prominently hold. In my opinion, however, the metaphysical consequences of Danto's discussions about the concept of history and the problems of explanation in the science of history are far from being clearly antirealistic. The realistic picture I want to defend is at least compatible with Danto's view of a history.

Although Danto speaks of necessary and sufficient conditions for events itself on the one hand and at the same time of necessary conditions for events being correctly describable as causes on the other hand, he is, as I understand him, very conscious of the fact that descriptions depend on the occurrence of the events they are describing and not vice versa. He explicitly emphasizes that only the occurrence of E-2 from our example permits a description of E-1 as an anticipation of T. But what does this 'permission' of the description imply? Is it also adequate to say that the occurrence of E-2 itself makes the description of E-1 as an anticipation of T *true*? Nothing that can be observed or witnessed during the occurrence of E-2 would

show that this event is a *rediscovery* of T. However, to describe E-2 as a rediscovery of T seems to be a precondition for describing E-1 as an anticipation of T. E-1 is an anticipation of T only in relation to E-2 and vice versa: E-2 a rediscovery of T only in relation to E-1. This is the case because 'being an anticipation' and 'being a rediscovery' are relational properties that imply causal relations, even if, as it is supposed in Danto's fictional example, the respective scientists do not know anything about each other and their respective theories.[1] This means that the truth of the description of E-1 as an anticipation of T depends not only on the occurrence of E-2 but also on the relation held between E-1 and E-2. 'Being an anticipation' is a property that is determined by the relational, i.e. by the causal properties of the event possessing such a property. For 'being an anticipation' necessarily implies that there is a connection to a different event. And how can we conceptualize this connection as anything other than a causal relation?

At this point, one may object that I am simply stipulating that there is a real relation between E-1 and E-2 at all which is established by the occurrence of E-2. Was not this exactly the questionable issue in Danto's example? Narrativists would certainly contend that there is no *real* connection but that we, as historians, are only construing such a relation by describing the first event as an anticipation and the temporally later event as a rediscovery. I would contradict this. Suppose, for example, that no one ever observed or witnessed the first scientist formulating a theory at t-1, which some hundred years later, after E-2 at t-2, becomes a published and famous theory. The first scientist's detailed notes lay for years undiscovered in a shed which, unfortunately, burns down many years before the second scientist formulated his theory. Nobody knows and nobody could ever come to know anything about the first scientist's pioneering work. It would nevertheless be perfectly true that he achieved this pioneering work. It is true that the theory's first formulation was an anticipation and that the second formulation of the same theory was a rediscovery, independent of what we or anyone else know or could know about the two events. This means that the historical meaning of past events is independent of our descriptions or interpretations. Our descriptions do not construe any historical relations, but they refer to such relations, which are determined by the causal relations of the respective events and exist independently of what we know or assert about these events or their relations. To reject this thesis is, in my opinion, tantamount to confusing the property of historical meaning, which is a property of events, with the property of semantic meaning, which is, of course, a property of linguistic expressions.

Until now, I have said nothing at all about the concept of causality that I hold and want to defend. But this question certainly needs some clarification, although it cannot be discussed in any detail. Therefore, I will now address this issue before I return to the special problem of the connection between causal and historical relations.

[1]For the sake of historical truth, it may be adequate to mention that concerning the real protagonists of Danto's example, namely, Aristarchus and Kopernikus, this condition is not met. Kopernikus was acquainted with Aristarchus' work.

9.4 The Concept of Causality

The question of whether and in which sense causal explanations are relevant in the human and social sciences has evoked controversial debates since the first theories in these sciences were developed. I have the impression that in the last years, the significance of causal explanations has been gaining ground. Much of the former or still existing scepticism against the importance of causality in the human and social sciences is justified by the characteristic that these sciences are mostly concerned with the explanation of human actions and that actions have special features, which leads to the consequence that they cannot be causally explained. Of course, the events in Danto's example of the two scientists also consist in actions, namely, the respective intentional formulation of a theory by two rational persons. I would contend that all historical events are action events because the concept of history is essentially connected with real possibilities, and this in turn presupposes that historical events are essentially connected to the phenomenon of intentionality. That is, because histories essentially imply possibilities, only events which have intentional properties and likewise the capacity to be causally efficacious can be historical events. And only action events can fulfil both conditions, or so this line of argumentation contends.[2] Before turning to the general problems concerning the concept of causality, it is therefore worthwhile to briefly discuss some of the main suspicions against the importance of causal action explanations, which are provoked by the supposed characteristics of intentional actions. The first of these suspicions refers to the problem of regularity, the second refers to the question of whether causality consists in a kind of causal mechanism, the third is represented by the so-called logical connection argument, and the fourth concerns the problem of mental causation.

The problem of regularity has an overwhelming significance in the debate about the possibility of causal action explanations. Here, the objection which is often emphasized is that human actions may show some kind of regularities, but certainly not strict and lawlike regularities. It is said that the behaviour of rational persons can be prognosed at least with some probability, but there is no possibility of a definite prediction. This objection, however, presupposes a specific concept of causality, namely, David Hume's view of causality as strict regularity. Hume has argued that causality is nothing more than regularity because if we are trying to observe causal relations, all that we can really observe are mere regularities between types of events. And these regularities must be strict or lawlike regularities because the criterion to distinguish between causal and, for example, temporal regularities in Hume's opinion is necessity. However, even in the contemporary natural sciences, it is widely admitted that, as regards natural events, strict regularity also is a requirement which cannot be met by all types of events. In the philosophy of natural sciences, this admission does not imply rejecting the concept of causality altogether.

[2]For a more detailed version of the argument, see Gerber (2012), Chap. VII.

Instead, it provides a platform from which to develop new approaches that lay beyond Hume's contentions. This means that the discussions in the philosophy of natural sciences show that the problem of regularities is a general problem, which does not impose any *special conceptual* problems on the explanation of actions.

The second objection is rooted in the intuition that causality is or represents a kind of blind mechanism being located on the presumably deepest level of reality, namely, merely on the physical level. The causal course of events is understood to be a mere course of unconscious happenings, whereas actions have reasons and are performed by persons who have desires, wishes, and intentions. A. I. Melden, for example, has expressed this intuition by saying: 'The agent confronting the causal nexus in which such happenings occur is a helpless victim of all that occurs in and to him' (Melden 1961, p. 129). Donald Davidson responded to this claim somehow desperately: 'Why on earth should a cause turn an action into a mere happening and a person into a helpless victim?' (Davidson 1980, p. 19). Davidson suspects that Melden's view implies a kind of doubling of the agent. He argues that although agency surely requires an agent, there are agentless causes and that the states and changes of states in persons are exactly such causes. Melden, however, would not have been convinced by this critique. He would have insisted that precisely these states and changes in persons, which are causes, transform the agent into a helpless victim. I think that the only way that Melden's concern can be rejected is by arguing that causality is no blind mechanism because it is no mechanism at all. What should a *general causal mechanism* consist of? To suppose the existence of such a mechanism is identical to the senseless attempt to search a cause for a cause. Of course, there are various kinds of 'mechanisms', i.e. causally efficacious properties which operate or function in various types of events at various levels of natural and mental phenomena. However, to describe such mechanisms in more or less full detail is nothing more than to redescribe the event itself and to describe it as a cause.

The third objection is also connected particularly with A. I. Melden's name, but others have also supported it, for example, Georg Henrik von Wright.[3] The so-called logical connection argument asserts that there cannot be a causal relation between actions and their reasons because there is a logical connection between them and the existence of a causal relation presupposes that the relata of such a relation are logically independent from each other. It was often emphasized in the discussions about this argument that it is far from clear how we should understand the respective claims of necessary logical connectedness or independence. I think the underlying fault in this argument concerns the distinction between logical relations of concepts and essential relations of events. If there is a logical connection or interdependence between concepts, then it is nevertheless not the case, as the argument tacitly implies, that the essential connections between the respective events or states covered by these concepts cannot be distinct from each other. I confess that actions are essentially connected with their reasons; moreover, I would say that actions are essentially connected with their intentions, which means that every action is caused

[3]See von Wright (1971), 93ff.

by a proper intention which has to be conceptualized as a distinct mental state. Essentially connected states or events, however, can nevertheless be temporally and spatially distinct and can therefore occupy the roles of causes and effects very well. That the concept of action implies that every action has a reason is only meant to say that there can be no action without any reason. From this it does not follow at all that the reasons of actions cannot be causes.

The fourth objection represents the most serious challenge to causal action explanations: How can it be that mental events cause physical or biological events? The problem of mental causation emerges because of the thesis that the physical world is causally complete, i.e. that every physical effect has a sufficient physical cause. I cannot discuss this serious problem in any detail here. However, I only want to hint at a possible solution, which consists in a combination of two different but related theses, namely, the thesis of explanatory dualism and the thesis of property dualism. If we do not understand the assertion that the physical world is causally complete or closed as an ontological thesis, i.e. that every physical event has a physical cause, but as a more modest thesis, i.e. that every physical event has a physical explanation, it is possible that a physical event has a physical and a mental explanation at the same time. And if we confess that mental events, although they are necessarily physically realized, have mental properties that cannot be reduced onto their physical realizers, it is possible that mental events cause physical events. Both theses are expressing the contention that only the mental properties can really explain why we are doing what we are doing. However, from the fact that the world of causes is also a world of reasons, as Fred Dretske puts the relevant phenomenon, it does not follow that reasons cannot be causes.

I will now turn to the question which view or theory of causality should convince us. And I want to stress one aspect of this question which, as far as I can see, is often underestimated in the debate: What is our intuition concerning causality? What is the commonly supposed sense of the concept of causality? One may think that this approach to the problem is not very original or witty. However, I have the impression that the scientific discussions about the concept of causality are too much influenced by the special problems, efforts or requirements within the different sciences. The reason for my approach is not really that philosophy often starts with intuitions. The reason is that one can easily realize that our ordinary thinking as well as our ordinary language is overwhelmingly characterized by causal considerations and explicit or implicit causal expressions. The philosophy of science should take this fact earnestly. This does not mean that we should reanimate an old-fashioned ordinary language philosophy, but instead means that we first of all have to understand the general and common sense of our concept of causality. The discussions on special scientific problems should draw on such a common understanding instead of ignoring it. We have to understand each other, not only as ordinary people but also as philosophers and scientists. That means that we need a common concept that is broad enough in order to meet the different requirements in different sciences and that is specific enough in order to represent a scientific concept at all.

If the question is put in this way, there are two main competitors for an answer, namely, the regularity thesis and the counterfactual theory of causality. I think that other theoretical approaches, for example, probabilistic causality, the manipulation theory or the dispositional account, are all different forms of either the regularity or the counterfactual sense of causality. David Hume unintentionally pointed out these two possible senses in his famous definition of a cause: '. . . we may define a cause to be an object, followed by another, and where all the objects similar to the first are followed by objects similar to the second. Or in other words where, if the first object had not been, the second never had existed' (Hume 1902, p. 79). Nowadays, there is agreement on the point that Hume's 'other words' actually did not introduce any synonymous formulation to the first-mentioned regularity thesis but instead defined a very different concept, that is, the counterfactual concept of causality. I want to propose two arguments in favour of the counterfactual conception.

The first argument revolves around the question of whether the regularity thesis can provide any coherent sense of causality at all. This question seems to be surprising in view of the triumphal march of the regularity thesis, especially within the natural sciences. However, if we remind ourselves that in his deductive-nomological model of explanation Carl Hempel converted the causal explanation to be a case of a nomological explanation understood more broadly, then the relevance of this question is more obvious. The most urgent problem for the regularity theory of causality, which simply reduces the sense of causality to the sense of regularity, is to find a convincing criterion for drawing a distinction between causal regularities and other regularities, for example, mere temporal regularities. Hume himself was, of course, very conscious of this challenge for his approach. His proposal was to suppose that only causal regularities are necessary regularities. But is this proposal convincing? Can the modal category of necessity make a real difference? This would only be the case if necessity always consisted of nomological necessity. Hume's answer would only be satisfactory if it were correct to say that necessity necessarily implies regularity. But this is obviously false. It would conceptually exclude the possibility of singular relations, which are nevertheless necessary, and this corollary is untenable. I can see no other possible criterion to distinguish between causal and other regularities unless we turn to Hume's 'other words', i.e. to the counterfactual view of causality.

The second argument therefore stresses the point that the counterfactual view can represent our intuitions concerning causality well. David Lewis emphasized this in his argumentation in favour of the counterfactual analysis: 'We think of a cause as something that makes a difference, and the difference it makes must be a difference from what would have happened without it' (Lewis 1986, pp. 160–161). In fact, it is essential to our understanding of causality that causes are responsible for real differences and changes in the course of events and, moreover, that they are responsible for the fact that there is a course of different and distinct happenings at all. The concept of causality is essentially connected to the concept of change; change is its crucial point. And the concept of regularity misses this point entirely. That something happens regularly is no explanation for the fact that it happens at all, that is, that something occurs and makes a difference. Conversely, regularity

presupposes change and therefore cannot explain it. And if we want to know whether a certain event A is a cause of another event B, we are actually asking whether B would also have occurred if A had not existed. So, as Lewis says, 'We do know that causation has something or other to do with counterfactuals' (Lewis 1986, p. 160). However, if it is correct that causation has something to do with counterfactuals, why should not we take the bull by the horns and simply take the route to reduce causal relations between events to counterfactual relations between statements? To say that A is a cause of B simply means that the corresponding counterfactual 'If A had not occurred, then B would not have occurred' is true.

The reason for some theorists' reluctance towards this solution is well known: It is difficult to formulate a satisfactory and convincing semantics for counterfactuals and for subjunctive conditionals because this attempt implies a paradoxical task. We have to find a criterion for the truth conditions of counterfactuals although their antecedent assertion is or could be false. However, the truth conditions we are longing for should be, of course, truth conditions in our actual world. That means that we have to define actual truth conditions for non-actual situations. The solution for this, at first glance, impossible task is to take possibilities seriously. 'If A had not occurred, then B would not have occurred' is true if and only if a possible world where A has not occurred and B also has not been the case is more similar to our actual world than another possible world where A has not occurred but B nevertheless has. The assertion 'If Barack Obama had not been elected as president, there would be no Tea Party movement in the U.S. today' is true in our actual world if and only if a possible world where Barack Obama has not been elected and no Tea Party movement exists is more similar to our actual world than another possible world where such a movement does exist although Obama has not been elected.

Let us grant for the sake of argument that Lewis' semantics or some other version of a possible world semantics is convincing. We should grant this, in my opinion, not because of my uneasiness concerning possibilities and possible worlds perhaps not being as great as yours, but because we understand counterfactuals in our ordinary communication very well. We should have one semantics or other that provides a theory for this actual linguistic ability. Nobody would respond to the assertion 'If Barack Obama had not been elected, the Tea Party movement would not exist' with the words: 'What? I don't understand what you're saying!' On the contrary, everybody would understand what this assertion means, namely, that the election of Barack Obama as president was a cause for the formation of the Tea Party movement.

The counterfactual analysis for being a cause can be summarized as follows:

A is a cause of B iff:

1. A occurred and B occurred.
2. If A had not occurred, but everything else being equal, then B would not have occurred.

9.5 Danto's Scientists Revisited

The proposed analysis implies that the existence of regularities between types of A and types of B is, of course, not excluded, but not presupposed, either. Whether regularities can be observed or not depends on the kinds of events. We have to take into consideration the difference between causes and causal reasoning. Causal and therefore counterfactual reasoning imply generalizations of some sort or other. However, counterfactual causation does not presuppose that the causal relation is a relation that holds only between types of events. The proposed analysis also implies that singular causes are necessary but not necessarily sufficient causes. If a historian contends that the shots in Sarajevo were a cause of the First World War, then she is asserting that this event was counterfactually necessary for the First World War. This means that the shots were certainly not the only cause of the war, but if the Serbian assassin had not murdered the Austrian heir to the throne, then this war would not have occurred.

Nevertheless, this would be a rather strong historical assertion. Additionally, this rather simple analysis does not help us at all with regard to Danto's puzzling example and the problem of the specific historical relation between past events. To repeat, this problem consists in the fact that the historical meaning of an event is a relational property, which is essentially influenced by events happening afterwards. At the time of Obama's election as president, no one could foresee that his election and, of course, his subsequent policy would provoke something like the Tea Party movement. One day, maybe, historiography will come to the conclusion that the election of the first black president had the consequence of dividing the American people rather than bringing them together. History is related to its respective future; moreover, one can say that history depends on its respective future. The German historian Reinhart Koselleck expressed this connection by calling history a 'Past Future'.

Danto's example, however, is more puzzling than the consequences of Obama's election. On the day the president was elected, it was at least possible to speculate about the question of whether this event could really reconcile the American people or would, on the contrary, deepen the rift between the political camps. This means that it is very natural to suppose that there must exist a causal connection between Obama's election and the subsequent events, although the historical meaning of his election is not determined on the day he was elected. But if we accept the supposition in Danto's fictional example that the two scientists do not know anything about each other and have formulated the very same theory independent of each other, then the case seems to be that there cannot be a causal relation. However, how can we understand and explain that the occurrence of the second, temporally later event is responsible for the fact that the earlier event has the property of being an anticipation?

I have already argued that rejecting the realistic thesis that the historical meaning is a real property of events is not a possible way out nor would it be a possible solution to suppose that causes can temporally follow their effects. Instead, I suggest revising the counterfactual analysis of causality in two respects. First, the time of the

occurrence of the respective events should be/is to be mentioned in the formulation of the conditions. This revision shall exclude backward causation and make the entire proposal more subtle and more adequate in regard to historical explanations because in history the time of an event's occurrence can be a very important fact. Second, an event can be referred to as a cause if its efficacious force only concerns particular properties of the effected event and not the occurrence of the other event itself. The consequence of this second revision is that the temporally first event in Danto's example is a cause of the temporally later event and not vice versa. The conditions are formulated as follows:

A is a cause of B iff:

1. A occurred and B occurred.
2. A occurred at time t-1 and B occurred at time t-2, i.e. A and B are temporally related to each other and A occurred earlier than B.
3. If A had not occurred at time t-1, but everything else being equal, then the following holds: either (a) B would not have occurred at time t-2 or (b) there is at least one essential property of B, which B would not have possessed, that is, C would have occurred.
4. If (b) in condition (3) is the case, then it also holds that A and C would be temporally related to each other in the same way as A and B.

According to this analysis, the earlier event in Danto's example can be seen as a cause of the later event because condition (b) in (3) is met. The later event would not be a rediscovery of a theory if the earlier event had not happened. The earlier event is causally responsible for the later event having a particular essential property. In this sense, and only in this sense, the earlier event actually changes its causal properties at time t-2. This means that the later event is causally dependent on the earlier event because the following counterfactual conditional is true: If E-1 at time t-1 had not occurred, then E-2 at time t-2 would not have had the property of being a rediscovery. In this sense, and only in this sense, E-1 is a cause of E-2.

This analysis, which manifests a version of the well-known counterfactual account of causality, means to solve a special problem emerging in the science of history, namely, the problem of the specific historical relation. To take this problem seriously is tantamount to taking Danto's original insight into the structure of history seriously. History as a science is no mere chronic, and the real histories are no mere temporal successions of events. The temporally related events are also causally structured. However, as historical events, they have a peculiar property, namely, a historical meaning that can change in the course of time, simply by virtue of what happens afterwards. I have tried to reconcile this original insight into the structure of history with a realistic picture of history. In my opinion, this means that we have to show how it can be conceptually possible that the historical meaning of a past event is nevertheless determined by the causal role which this event occupies.

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