

Concepts of Causation in Historiography¹

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Abstract

The aim of this paper is to apply contemporary theories of causation to historiography. The main purpose is to show that historians can use the concept of causation in a variety of ways, and that each of them is associated with different historiographical claims and different kinds of argumentation. Through this application, it will also become clear, contrary to what is often stated, that historical narratives are causal in a specific way, and that micro-history can be seen as a response to a very specific (causal) problem of Braudelian macro-history.

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1) Introduction

In an article in *Rethinking History* from 2005, Frank Ankersmit complained that many debates in the philosophy of history are obscured by the fact that contemporary philosophers of history have, generally spoken, no real command of the technical details of central concepts in contemporary philosophy of science and philosophy of language. (Ankersmit 2005) This is not only the case for philosophers of history, but also (even a fortiori) for practicing historians. It is true that we cannot reasonably expect practicing historians to become philosophers of science and language. Still, there are many concepts, theories and insights to be found which could benefit historians in their research just as well as they could benefit philosophers of history. I believe that this is particularly the case with respect to the concept of causation.

It is often taken for granted (and certainly not just by historians) that causation is a clear concept which can be easily defined or intuitively grasped in a univocal way. This is a mistake. Many metaphysicians and philosophers of science have struggled for several decades now to find a clear and univocal definition or description of what causation is and what it means to say that something causes something else, and I believe it is fair to say that none of them has succeeded in doing so. Actually, it might even be plausible to say that none of them has even come close. Because of this, philosophers have in recent years developed a new approach, namely causal pluralism. (see Hall 2004, Cartwright 2007, De Vreese 2006, Hitchcock 2003) Causal pluralists argue that causation as a concept cannot be defined univocally. According to causal pluralism, the monistic theories that have been developed over the years all stress different aspects of causation, but none of them can succeed in capturing the concept completely. The research program of causal pluralism consists of determining which aspects are caught by which theory, and which of these aspects is used in which context. The aim of this paper is to do so with respect to historiography. I will suggest that different “kinds” of causation are used in different kinds of historical research. By identifying these different types of causation, it will be possible to shed new light on historiographical discussions, such as those on the distinctions between the use of narratives and causal statements, and between micro and macro-history.

In the first part of this paper, I will present the most important theories on causation as they currently stand in Anglo-Saxon philosophy of science and metaphysics. In the second part, I will show how these can illuminate historiography by applying them to a number of examples. Because the number of examples is limited, I cannot claim to make any definite statements about the use of the different concepts of causation in history. To do so would require a much more extensive and systematic study. The current paper is more meant to be the starting point of such an enquiry than as its fulfillment. Nevertheless, there is one thing that should become very clear: that historians and philosophers of history cannot take the concept of causation for granted.

2) Theories of causation

2.1 Counterfactual and Regularity theories of Causation

Counterfactual and regularity theories try to characterize causation in terms of properties of causes and effects. They can be described as extrinsic definitions, since they are not really concerned with the process of causation which connects causes with their effects, but only with the beginning (the cause) and the end (the effect) of this process. What happens in between is regarded as a black box. In this sense, one might say that these theories are actually more about causes and effects than on causation as such. The starting point of any such theory is David Hume, who defines causes in the following ways:

We may define a CAUSE to be 'an object precedent and contiguous to another, and where all the objects resembling the former are plac'd in like relations of precedency and contiguity to those objects that resemble the latter. (Hume 2006a, 114)

Suitably to this experience, therefore, 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 2006b, 60)

Actually, the second quote consists of two different theories or definitions. In the first quote and the first part of the second quote, Hume defines causation as constant conjunction (every A is followed by B) combined with temporal priority and (in the first quote, but not in the

second) contiguity. In the second part of the second quote, he defines causation as counterfactual dependence: A is said to cause B iff A and B occur and, if A had not occurred, B would not have occurred as well. These definitions have led to two different philosophical traditions. On the one hand, some philosophers have focused on the definition of constant conjunction and modified this to probability raising. Intuitively said, A is said to cause B if the fact that A occurs raises the possibility that B will occur. If A and B are quantitative variables (such as, for example, bread price and mortality rates), it can be said that A causes B if a positive trend of A is in a constant conjunction with a positive trend on B. Classical formulations of these definitions can be found, among others, in (Suppes 1970) and (Pearl 2000). On the other hand, some philosophers have elaborated Hume's counterfactual statement, the most influential of which is (Lewis 1983-1986), who developed a counterfactual theory based on possible worlds.

One of the most central problems in the philosophy of causation, and probably the most important one for historiography, is the problem of multiple causes, which was first thematized by John Stuart Mill.

“It is seldom, if ever, between a consequent and a single antecedent, that this invariable sequence subsists. It is usually between a consequent and the sum of several antecedents; the occurrence of all of them being requisite to produce, that is, to be certain of being followed by, the consequent. (Mill 1973, 327)”.

Despite that fact that we normally select one specific antecedent as *the* cause, Mill insists that we should call the complete set of antecedents the cause:

In such cases it is very common to single out one only of the antecedents under the denomination of Cause, calling the others merely Conditions. (Mill 1973, 327).

The real Cause, is the whole of these antecedents; and we have philosophically speaking, no right to give the name of cause to one of them, exclusively of the others (Mill 1973, 328).

In Mill's view, singling out one of the antecedents as *the* cause (and thus distinguishing the cause from mere conditions) may be useful in everyday life, but we should not do this in philosophy, nor in scientific investigation. Mill's theory has been elaborated by John Mackie.

(Mackie 1974) According to Mackie, A is a cause of B in the ordinary sense of the word if and only if A and B both occur, A is temporally prior to B and A is a so-called INUS condition of B. By the term “INUS condition”, Mackie means an **I**nsufficient but **N**on-redundant part of a **C**ondition, which is itself **U**nnecessary but exclusively **S**ufficient for E in the circumstances. Suppose, for example, that a forest is hit by a lightning flash which causes a forest fire. Actually, the lightning flash is not in itself the cause of the fire, but only as a part of a complex condition, which might also include the fact that the grass was dehydrated and that there was no fire truck in the vicinity. This specific complex condition does not need to be necessary. It is perfectly possible that the forest might have caught fire without a lightning flash (for example if someone had dropped a match). The different INUS conditions of the forest fire can be seen as possible causes in the ordinary sense of the word, as opposed to the full cause, which is a disjunction of complex conditions (both positive and negative). Just as Mill, Mackie only considers this full cause to be the genuine cause. INUS conditions can only be said to be causes in a practical sense in common speech, not in philosophy or science. (for a more detailed summary of Mackie’s theory and some specific applications, see Horsten & Weber 2005).

Herbert Hart and Tony Honoré do not agree with Mill and Mackie. They state, more or less, that our identification of causes depends on contextual factors, in the sense that only phenomena which are considered to be at odds with the normal course of events can be considered to be causes. (Hart & Honoré 1985, 33) They give two examples in which they illustrate this.

In most cases where a fire has broken out the lawyer, the historian and the plain man would refuse to say that the cause of the fire was the presence of oxygen, though no fire would have occurred without it: they would reserve the title of cause for something of the order of a short-circuit, the dropping of a lighted cigarette, or lightning. Yet there are contexts where it would be natural to say that the presence of the oxygen was the cause of the fire. We have only to consider a factory where delicate manufacturing processes are carried on, requiring the exclusion of oxygen, to make it perfectly sensible to identify as the cause of a fire the presence of oxygen introduced by someone’s mistake. (Hart & Honoré 1985, 11)

The cause of a great famine in India may be identified by the Indian peasant as the drought, but the World Food Authority may identify the Indian government’s failure to build up

reserves as the cause and the drought as a mere condition. (Hart & Honoré 1985, 35 & 1966, 219)

According to Hart & Honoré, the condition we select as cause is usually regarded as such because it stands out with respect to a certain “default status of the world”. This default status can vary according to the circumstances. Depending on whether one is an Indian farmer or a member of the World Food Authority, the cause of the famine is different. This does not mean that one of the two is right and the other wrong. Both statements are right with respect to the perspective of the one who states it. In this sense, every causal statement involves a perspective. This position with regard to causation has been called “causal perspectivalism”. (see Price 2007 & Menzies 2007). In the example of the Indian famine, the famine depends counterfactually on both the drought and the failure to stockpile food. So far, this statement is quite neutral, there is no real perspective involved. If, however, we ask ourselves what the cause of the famine is, we are forced to take a perspective. Either we regard the drought as normal, which makes the failure to stockpile food the cause, or either we consider the failure to stockpile food as normal, in which case the drought is the cause. (Menzies 2007, p 209-211) Partly because of the problem of the selection of causes, in which such a neutral point of view often seems impossible and because of the necessity of a “default view”, it is plausible that causation is a perspectivalist notion. Of course, in many cases, this does not show itself because most of time people share intuitions and opinions about what these “default states of the world” are.

Hart & Honoré regard this process of selection as a negative procedure: only what is *not* regarded as normal can be selected as a cause. Recently some philosophers have formulated it in a positive way. They state that the conditions we select out of a background are typically conditions which we are (or could be) able to change or manipulate. (see especially Woodward 2003) According to this approach, the value of a variable A causes the value of variable B if an intervention on the value of A would also entail (or would have entailed) a change in the value of B. It is not important whether these interventions are practically possible. Causal interventionists and manipulationists typically define causation in terms of *possible* interventions. They state that we speak of relations as causal only when we *imagine* that we could intervene or could have intervened (as is the case in historiography).

Defining causation is one thing, offering methods for finding causes and effects in concrete cases is something else. The basic methods for the identification of causes according to the theories mentioned above have been formulated by John Stuart Mill in his two canons of induction. It is important to note that, according to Mill, only the second one (the Method of Difference) is capable of providing reliable knowledge on causes and effects.

"If two or more instances of the phenomenon under investigation have only one circumstance in common, the circumstance in which alone all the instances agree, is the cause (or effect) of the given phenomenon." (Mill 1973, 390)

"If an instance in which the phenomenon under investigation occurs, and an instance in which it does not occur, have every circumstance in common save one, that one occurring only in the former; the circumstance in which alone the two instances differ, is the effect, or the cause, or an indispensable part of the cause, of the phenomenon." (Mill 1973, 391)

Mill's method of difference forms the basis of the modern experimental methods that are used to discover causes in most of the social sciences and large parts of the medical sciences. (for examples see Horsten & Weber 2005)

2.2 Process theories & Mechanisms

The second kind of theories try to describe causation not by referring to properties of causes and effects, but by focusing on the process of causation itself, which runs from an effect to a cause. Therefore, they do not explicitly identify causes and effects, although they can be used to do this by stating that causes and effects are those things that stand at the end and the beginning of (some kind of) causal process. The two most important groups of theories are the process theories by Wesley Salmon and Phil Dowe (Salmon 1984 & 1998, Dowe 2000), and the theories about mechanisms by Stuart Glenann (1996), Peter Machamer, Lindley Darden & Carl Craver (2000) and Judea Pearl (2000).

The idea of a theory of causation as a process has been around in philosophy of science was introduced by Wesley Salmon in 1984. The basic concept of Salmon's theory is the notion of

a *causal process*. This concept can be intuitively grasped as the movement of a persistent object through time and space, such as a billiard ball rolling over a flat surface or a space station flying in orbit around the earth. The idea is that this process is causal because the fact that the flying space station is at a certain point at a certain time is caused by the fact that it was at a slightly different point at a slightly earlier time. This is the case again and again for every point of time and space in the trajectory of the space station. The concept of causation is therefore present throughout the whole process, which is why it is called a *causal process*. It is not possible to single out specific causes and effects, because all there is, is an infinite number of positions in time and space. Therefore, a causal process cannot be described by a limited number of specific causal statements of the form “A causes B”.

Salmon makes a distinction between causal processes (such as a billiard ball running on a flat surface) and pseudo-processes (such as a spot of light which moves across a wall) by introducing the idea of *mark transmittance*. Intuitively, this criterion is introduced to ensure that the object involved in the process is a “real” object (which was important to Salmon, because other similar theories were criticized because they could not make the difference between “real” and “imaginative” objects). A process can only be a causal process when it could be (or could have been) capable of transmitting a so-called *mark*, a certain (minor) change in the properties of the object which forms the basis of this causal process. If this cannot or could not be done, the object in question cannot be the basis of a causal process. In a pseudo-process such as the movement of a spot of light on a wall, making such a mark is impossible. A typical example of marking is making a cut in a baseball before throwing it. Salmon defines the idea in the following way:

Let P be a process that, in the absence of interactions with other processes, would remain uniform with respect to characteristic Q, which it would manifest consistently over an interval that includes both of the space-time points A and B ($A \neq B$). Then a *mark* (consisting of a modification of Q into Q'), which has been introduced into process P by means of a single local interaction at point A, is *transmitted* to point B if P manifests the modification Q' at B and at all stages of the process between A and B without additional interventions. (Salmon 1984, 148)

Next to causal processes on their own, Salmon also talks about interactions between causal processes, which form the innovative aspect of causation. The idea of a causal interaction is based on the root metaphor of two colliding objects such as billiard balls. Basically, a causal interaction occurs when there is an intersection of two causal processes (e.g. when two billiard balls collide) which results in a change in the properties of both causal processes (for example speed and direction).

Let P1 and P2 be two processes that intersect with one another at the space-time point S, which belongs to the histories of both. Let Q be a characteristic that process P1 would exhibit throughout an interval (which includes subintervals on both sides of S in the history of P1) if the intersection with P2 did not occur; let R be a characteristic that process P2 would exhibit throughout an interval (which includes subintervals on both sides of S in the history of P2) if the intersection with P1 did not occur. Then, the intersection of P1 and P2 at S constitutes a causal interaction if:

- (1) P1 exhibits the characteristic Q before S, but it exhibits a modified characteristic Q' throughout an interval immediately following S; and
- (2) P2 exhibits R before S but it exhibits a modified characteristic R' throughout an interval immediately following S. (Salmon 1984, 171).

Phil Dowe has taken over the idea of a causal process and a causal interaction from Wesley Salmon, but he has also suggested some changes. The most important of these changes is the replacement of the mark transmittance criterion by a different criterion: that of a conserved quantity. A process is a causal process, according to Dowe, when the object involved in it possesses a certain kind of conserved quantity, most typically a physical quantity such as momentum or energy. Next to this, Dowe defines a causal interaction not as an intersection which involves a change in properties, but which involves an exchange of a conserved quantity. Wesley Salmon largely agreed with Dowe, and abandoned his original position. (Salmon 1994)

Although Salmon and Dowe's theories are developed in the first place as theories of causation in the physical world (the world as described by physics), it has been suggested that, if they are interpreted loosely, their theories can give us important insights in the social sciences as well. (Weber 2007) We will see that this is also the case for historiography.

A more recent attempt to define the process of causation itself are the different theories on mechanisms, the most important of which are those of Stuart Glennan and Peter Machamer, Lindley Darden and Carl Craver. The basic idea of a causal mechanisms is that the process of causation consists of a number of entities exerting different kinds of influences on each other. Mechanisms come in two different kinds, which can be labeled “complex-system mechanisms” and “mediating mechanisms”.² (Weber & Leuridan 2008) The idea of a complex-system mechanism was developed in the first place to account for processes of explanation in biology. (see, Glennan 1996, Machamer, Darden & Craver 2000). The central intuition is that a certain phenomenon (for example the behaviour of an organ) can be explained by referring to the activities of the parts out of which this organ is composed. Daniel Steel has reformulated this idea with respect to the social sciences in the following way:

Social mechanisms in particular are usually thought of as complexes of interactions among individuals that underlie and account for aggregate social regularities. (Steel 2004, pp 57-58)

Judea Pearl (2000), on the other hand, has characterized mechanisms as groups of intervening variables between a cause and its effect. Because of the intervening function, this kind of mechanisms are called “mediating mechanisms”. Stephen Morgan and Christopher Winship have adapted this to the social sciences in the following way:

As we noted earlier, social scientists have generally considered the explication of mechanisms through the introduction of mediating and intervening variables to be essential to sound explanatory practice in causal analysis. (Morgan & Winship 2007, 224)

Intuitively, the difference between complex-system mechanisms and mediating mechanisms can be set in terms of levels. In a complex-system mechanisms, there is an interaction between different levels, for example at the individual and the population level. A cause can be situated at the individual level and the effect at the population level. Another possibility is that there is a cause at the population level, which has influence at the population level, which has again has an influence on the population level. Mediating mechanisms on the other hand

² Note that the authors to which I refer do not use these terms themselves, but just talk about “mechanisms” as such.

regard cause and effect as located at the same level. A mechanism in this sense can run, for example, from an action by one individual to another individual.

As we have said, I will use these theories in a pluralistic way. This means that I am convinced that none of these theories presents a complete account or theory of what causation is in itself or how it should be understood, but that all of them point at specific ways common people and scientists use to find causes and effects and to interpret causal relationships. In the following part, I will show that this approach fits very well with historiography. In the first place, it should become clear that historians do indeed use different concepts or intuitions about causation in different kinds of research. Second, by applying these criteria, it will also become clear that, contrary to what is often stated, the macro-history of the second generation of the *Annales* is (partly) narrative instead of causal, and that micro-history is causal instead of narrative.

3) Causation in Historiography

3.1 What, How and Why

Historiography consists of giving answers to three different types of questions: what-, how- and why-questions. (Stanford 1998, 128-129, Stone 1979, 5) The first are concerned with what we make of events in the past. They consider the question whether a certain predicate is applicable to a certain historical event, person or situation. Historians have wondered, for example, whether the French Revolution was or wasn't a radical break with the ancient régime, or whether François Rabelais could or could not be considered to have been an atheist. This type of enquiry, however, does not (directly) involve any kind of causal statements, so I will not treat it any further here.

The two other types of enquiries, the how- and what-questions, do require "causal" statements as their answers. I have put the term "causal" between inverted commas, because there is an essential difference in how causation and causal statements are used in the answers to both kind of question. The answer to a why-question is typically a causal statement. If we ask

“why did something happen?” or “why does a certain event, situation or person have a specific property?”, we expect the answer to begin with “because...”. It is possible in principle to summarize any historiographical work which presents such an argument in one sentence of the form “A was caused by B”. Henri Pirenne’s *Mahomet et Charlemagne*, for example, can (disrespectfully) be summarized into the statement “The rise of (the specific nature of) Medieval Europe as we know it was caused by the closing off of the Mediterranean by the Arab world”. We cannot give such a one-sentence summary of historical narratives, which form answers to historiographical how-questions, such as “how did the French revolution develop”, or “how did the price of wheat in the ancient régime evolve?”. Nevertheless the concept of causation also plays a part in the construction of narratives.

3.2 What are historical narratives?

A narrative is sometimes mistaken for a simple description of a series of events. Despite the fact that every narrative is certainly descriptive, it is also something more. A narrative describes its facts in a coherent way, with a certain direction and meaning. Morton White has given the following example. The sentence “The King of England died, which led the Queen to grieve, which led the princess to worry.” could be an example of a (historical) narrative, while the sentence “The King of England died, and then the queen grieved, after which the princess began to worry.” could not. (Dray 1971, 162) In the second sentence, the events are simply put alongside each other, while in the first one, there is a causal relation between the different events, by which they are combined to form a coherent whole.

Furthermore, in order to be a narrative, a text should also have a clear and meaningful ending and beginning. If not, it is not a narrative, but what Hayden White and Michael Stanford call a “chronicle”. (White 1987, 16-19, Stanford 1998, 219) One of the main arguments for the difference is that the ending or the further course of a narrative can have a definite influence on the characterization of every part of it. H. White gives the following example.

The king went to Westminster on June 3, 1321. There the fateful meeting occurred between the king and the man who was ultimately to challenge him for his throne, though at the time the two men appeared to be destined to become the best of friends. (White 1973, 5)

So a historical narrative is not just a coherent (causal) ordering of a number of events. The narrative itself, as a whole, also influences the nature of the parts of which it consists.

Next to these two features (causal coherence and a definite ending/beginning), a narrative should also have another two properties, which are strongly interrelated with each other. First, every narrative should have a plot (it should be, for example, a tragedy, a comedy, a satire,...), which Hayden White defines as “*a structure of relationships by which the events contained in the account are endowed with a meaning by being identified as parts of an integrated whole*”. (White 1973, 9) Because it has a plot, a narrative constitutes a story, and because every story is a story *about* something, a narrative should also have a central subject. (Dray 1971, 157) Such a subject does not necessarily have to be physically stable over time. Ranke’s *History of the popes* is a narrative about a purely institutional and conceptual entity (“the pope”), not about a physical thing. (Ranke 1847) Augustin Thierry’s essay “*Histoire Véroitable de Jacques Bonhomme*” (Thierry 1835) has as its central subject an ideal-type form of the French Farmer, whose experiences take many centuries, and who leads a purely conceptual existence. (Ginzburg 1991, 85-86) It is therefore up to the historian to define his research subject in a way he or she believes is suitable for (narrative) historical enquiry.

To summarize, I have summed up four interrelated criteria which a text should fulfill in order to be a narrative:

- (Causal) coherence
- A clear beginning and ending
- A plot
- A central subject

These traits are structural, they do not refer in any way to the content of narratives. If we are in search of general statements about, for example, the scientific validity of narratives or the use of causation, this is the kind of definition we need. Scientific validity, for example, cannot be decided on the basis of what it is that is being researched, but only on how it is researched, which is a structural notion. The same goes for causation. Whether the statement “A causes B” is true or false cannot be decided on the basis of what kind of things A and B are, but only

on the basis of the relation between the two, which is, again, a structural notion. This is clear, because in none of the theories of causation we have discussed above, substantial statements about what A and B should be are made, only general (structural) statements such as “event”, “object”, “complex”, “entity”,...

It is important to mention this, because a large part of the critique which is often given on the use of narratives in historiography is aimed mainly at specific substantial traits, which, as we have seen, cannot be part of a general critique on the validity of the use of narratives. Fernand Braudel, for example, claimed that narratives were always about particular individuals, most often kings or heroes, who were masters of their own fate and whose lives were dominated by dramatic coincidental events, (Braudel, quoted in White 1987, 32) whereas his own historiographical approach was concerned with the life of the common man, whose life was dominated by all sorts of impersonal overarching structures. This critique is not justified, because even fictional narratives are certainly not necessarily concerned with free heroes who live by their own rules, and this is a fortiori true for historical narratives. It is perfectly possible for a historical narrative to be about the common man and the impersonal structures by which his life is determined (for example Augustin Thierry’s essay, cf. infra), or even to be not about individual people but about institutions, nations, practices etc. It might be true that, generally spoken, narratives have the tendency to focus on individuals, but this is not necessarily the case and does not form an argument in principle against the use of narratives in historiography.

A second objection Braudel and a lot of other historians hold against narratives, is that a historian who uses historical narratives as a mode of explanation is thought to give a true and indubitable account of history *wie es eigentlich gewesen ist*. This again is not a necessary consequence of the use of narratives. The combination between narratives and the “positivist”³ historiography is a consequence of the coexistence of both concepts in Germany in the first half of the nineteenth century. The use of narratives was the dominant way by

³ One should watch out for a confusing use of the term “positivism”. In philosophy, “positivism” refers most of the time to the logical positivism of the Wiener Kreis, which has very little to do with the positivism which is often ascribed to Ranke. I want to make it clear that in this paper, “positivism” refers to the Rankean ideal, not to that of the Wiener Kreis.

which the writing of history was done in a period in which historians still believed that a decisive, monotonic and objectively true historiography was possible. However, the fact that most modern champions of the narratives, such as Paul Ricoeur, Hayden White and Frank Ankersmit, are among the fiercest opponents of this objectivist ideal, shows that narratives and historiographical positivism do not have a necessary connection.

As an illustration, I will give a very short example of what can be seen as a typical historical narrative, namely the *Staatsrecht*-hypothesis which was formulated by Wilhelm Arnold in 1854. (Arnold 1854) Arnold presented a theory about the origins and development of the typical medieval city as a continuous development out of the early medieval domain. According to Arnold, urban development started off in the eight century with a domain which was ruled by the bishop⁴ and populated by two groups of people, one non-free and one free. The first of these groups is subjected to the jurisdiction of the bishop, the second one only to that of the state. As time went by, both groups became intermingled and the difference between the two became quite vague. After a while, there was a conflict between church and state, and the bishop wanted to gain jurisdiction over the whole population. This population, which had become quite free at this time, refused to be subjected again, took the side of the state (the emperor, the count,...) and rebelled. Out of this rebellion, the first urban communal institutions arose. (Pirenne 1939, 5-7)

This is clearly a (historical) narrative. It has a central subject (“the medieval city”, or even “the city as such”), a clear beginning (the domain of the early Middle Ages, which is seen as the earliest form of the later medieval city, the germ out of which it grew) and a clear ending (the typical medieval city of the High and Late Middle Ages). It also has a certain kind of plot: the medieval city undergoes a number of characteristic changes which are taken together in a certain way, in this case, a kind of progressive development towards the typical medieval city. Also, the different stages of the development are not just put alongside each other in a chronological order, but are clearly interrelated.

⁴ Arnold treats only the episcopal cities, because these are supposed to give the clearest picture of urban development.

3.3 Causation and Historical Narratives

As has already been said, a historical narrative cannot be summarized into a single causal statement of the form “A has caused B”. In the case of Wilhelm Arnold’s thesis, for example, this is impossible. Arnold is not in search of the *cause* of the existence of the typical Medieval city, but of its *origins*. This is a consequence of the way he defines and regards his research subject. Because he presupposes a gradual development of a single central object of enquiry (“the city” in general) which remains present throughout the narrative, he cannot regard this object as a cause or effect of something else, because this implies the existence of two different central objects of enquiry (if one speaks of a cause, there is always an equally important effect, and vice versa). In the same way a seedling is not the cause of a tree or a caterpillar of a butterfly, the domain in the early Middle Ages is not the cause of the later Medieval city. It is just an earlier stage of the same thing.

Despite the fact that narratives offer no overall causal statements, causation and causal statements are still involved. As we have seen, it is because the different statements of a historical narrative are causally related that the narrative in question is coherent.⁵ Causation plays a central part in one of the four criteria listed above, namely coherence. A series of descriptive statements is coherent because every statement is the effect of the one it immediately follows. A narrative forms what can be described as a “causal chain”. (Dray 1971, 162) It is worth noting that the demands for such causal chains are usually more rigorous in historical narratives than in fictional ones. In fiction it is, for example, no problem to make a “jump” of twenty years through time, or to suddenly end up on another continent. In historical narratives on the other, such spatio-temporal jumps are usually not (or less) acceptable.

This notion of a narrative as a causal chain corresponds to the concept of a causal process. As we have already said, a causal process, such as the movement of a space station through space, is also constituted by (an infinite number of) instances of specific causation, but does not result in any definite causal statements. In both types, every member of the chain is the

⁵ It might be that there are still other ways than causation to create coherence. In this paper, however, I leave those aside.

effect of the member it immediately follows. It is precisely because of this causal link that narratives are coherent. Second, both causal processes and narratives need some kind of “central subject” or “object” which remains constant throughout the development of the process. Thirdly, causal processes also have something as a plot. The fact that we interpret the trajectory of a spaceship around the earth as an orbit, more specifically an ellipse, has the same characteristics as a plot. It is a structure of the process as a whole, which endows every part of this process with a meaning as a part of this whole. The only difference between (historical) narratives and causal processes seems to be that causal processes do not require a definite ending and a beginning. Because of this, narratives form a specific subset of causal processes.

To conclude this section, it has become clear that there is indeed a strict difference between narratives and historical statements, but that this difference does not simply consist of the absence or presence of causation, but rather of the way causation is used. A historical narrative is made coherent by causal statements, but cannot itself be seen as a causal claim. As we will see in the next section, answers to historiographical why-questions can indeed be seen as causal claims.

3.4 Counterfactuals in historiography: the Pirenne-thesis

In contrast to Wilhelm Arnold's *Staatsrecht*-hypothesis, the Pirenne thesis about the origin of Medieval feudal Europe is clearly an answer to a why-question. It was an attempt to explain the rise of Medieval Europe and its transition from the Classical era into the Medieval. Pirenne believed that this transition did not take place in the fifth century, as was generally thought, but at the end of the seventh century. He stated that the economical structure of the late Roman Empire continued to exist until the advance of the Arab world, which turned the Mediterranean Sea into a “lac Musulman” (a “Muslim lake”). Pirenne supposed that this event led to the formation of Medieval Europe. As I have already said, Pirenne's thesis can be summarized as a statement of the form “A caused B”, namely “The rise of (the specific nature of) Medieval Europe as we know it was caused by the closing off of the Mediterranean Sea by the Arab world”. Furthermore, Pirenne uses quite a lot of causal terminology in the formulation of his general thesis. (Weinryb 1975, 36)

We might wonder why there is a need for such a causal thesis in the first place. Why could the transition from Ancient to Medieval society not be described by a historical narrative with the Western Society in general as its central subject, similar to what Arnold does? The reason is this. Pirenne wanted an explanation for the existence of something he regarded to be an essentially new phenomenon: the typical (essentially feudal) character of Medieval Europe. While for Arnold the typical medieval city was not essentially new, but the consequence of a continuous development which started from the classical domain, for Pirenne there is an essential difference between medieval and pre-medieval Europe. The typical character of Medieval Europe was at a certain point *created*. Because Pirenne's thesis is about this creation, the typical Medieval Europe is not present throughout his story. Because of the fact that it is necessary for a narrative to have a central subject all through the narrative, a causal statement, such as Pirenne's cannot be described by a historical narrative as we have described it above.

In summary, Pirenne can't use a historical narrative, because his thesis is a causal one. Pirenne wanted to know the answer to a why-question, which is always a causal statement of the form "A caused B". Now we can take a look at what Pirenne thought it meant to say that "the rise of (the specific nature of) Medieval Europe as we know it was caused by the closing off of the Mediterranean Sea by the Arab world." He does this by referring to counterfactual dependence. Pirenne summarized his thesis as follows, which even gave its name to the title of his book *Mahomet et Charlemagne*.

Without Islam, the Frankish Empire would probably never have existed, and Charlemagne, without Mahomet, would be inconceivable. (Pirenne, quoted in Weinryb 1975, 36)

So the rise of Islam caused the existence of the Frankish Empire, because, if Islam had not risen, the Frankish Empire would not have existed. This clearly implies the basic form of a counterfactual definition of causation, where it is said that A caused B iff if A had not been the case, B would not have also.

Nevertheless, there is more to the Pirenne thesis. Pirenne argues for his thesis by describing a link between the rise of Islam and the existence of the typical (feudal) character of medieval Europe. The beginning of this argument is the rise of Islam, the end is the rise of Medieval Europe, and the argument itself consists of a series of mediating factors which link the beginning of this argument to its end. Pirenne states that the Arabs closed the Mediterranean Sea to Christian commerce, which led to the disappearing of the merchants as a social class. Because of this, the society became almost purely agrarian, which led to the typical feudal structure of the Medieval Society in which all power belonged to the land owners.⁶ This corresponds to the notion of a “mediating mechanism”, which we have described above. Pirenne argues for the existing of a link between two variables (the rise of Islam and the existence of Medieval Europe as we know it) by positing additional variables which play a mediating role. In total, there are two quantitative variables, the amount of Western merchants (m) and the amount of long distance trade (t), which is measured by the number of gold coins found on archeological sites, and two qualitative variables, the existence of Western feudal society (f) and the blocking off of the Mediterranean by Moslems (b), which can only take the values 1 or 0. Pirenne states that there is a causal relationship between b and t, t and m, and m and f, and as a consequence also between b and f.

To summarize, the Pirenne-thesis is a causal statement, because it is answer to a why-question with respect the creation of something essentially new. Pirenne basically interprets this causal relation as counterfactual dependence, but he argues for it by means of a mediating mechanism.

3.5 Max Weber and the comparative method

One possible critique which one could give to Pirenne’s argumentation is that it is not clear on what grounds the statement that “without Islam, the Frankish Empire would probably never have existed, and Charlemagne, without Mahomet, would be inconceivable” is based. Why could there not have been an alternative cause which would have caused the existence

⁶ The most comprehensive account of the Pirenne-thesis can be found in *Mahomet et Charlemagne*, translated into English as *Mohammed and Charlemagne*. Our two-line description is, again, a very disrespectful summary of the argumentation structure of this book.

Medieval Europe if there was no rise of Islam? To be able to give an answer to this type of questions, we need Mill's *method of difference*.

“If an instance in which the phenomenon under investigation occurs, and an instance in which it does not occur, have every circumstance in common save one, that one occurring only in the former; the circumstance in which alone the two instances differ, is the effect, or the cause, or an indispensable part of the cause, of the phenomenon.” (cf. *infra*)

To be able to apply this method, we need at least two cases. Because there are no two cases of the development of Medieval Europe, Pirenne has to imagine what would have happened without the rise of Islam. This way of thinking is quite common in historiography. When these “what if” histories are explicitly developed, they are called thought-experiments. Robert Fogel, for example, has used this explicitly (contrary to Pirenne and many other historians, who do this implicitly). (Fogel 1964) Fogel wanted to know whether the existence of railroads was the cause of American economic growth, which he investigated by opposing two situations: one real, American economic history as it really happened, *with* railroads, and one imaginative, which contains exactly the same initial circumstances, except for the existence of railroads.

Of course, depending on imaginative “what-if”-histories in historiography is quite speculative and involves high risks. (for a closer look at thought experiments in historiography, see De Mey & Weber 2003) Therefore, it is usually better to make comparisons with existing situations. This is what Max Weber has done. Weber's historiographical problem was similar to Pirenne's. Just as Pirenne, Weber wanted to give an explanation for the existence of something new. In Pirenne's case, this was the feudal Medieval society of Western Europe. In Weber's case, it was our own modernist, rationalist and capitalist society. Because he suspected that the cause of the development of capitalism would have something to do with religion, he compared Western society with other comparable societies with different religions or ethics, among others the Roman Empire, Confucianist, Taoist and Buddhist China and Hindu India. He came to the conclusion that it must have been the very specific work ethic of Protestantism which was the decisive factor, since this was the only factor which was absent in the non-Western cultures Weber studied and present in the Western.

The method of difference, or the comparative method in general, is widely spread in the social sciences in general, but its use in historiography often involves problems. Because a historian does not generate his own evidence (such as is the case with, for example, statistical sociological or psychological research) but is dependent upon the sources, it is often much more difficult to find a large amount of comparable cases. A related problem concerns the comparability of different historical situations. Partly because of the low amount of comparable cases and partly because of the complicated nature of history and historiography, historical situations often have to be reformulated into very abstract models in order to make them comparable. Because of this high level of abstraction, the application of the historical method has often been seen more as “historical sociology” than as historiography. This necessarily entails a lack of accuracy and detail, and as a consequence, a lack of historical “feeling” for the uniqueness of a historical situation. Nevertheless, comparison is, as we have seen, often crucial as an argument for causal relations. In short, there is a trade-off between historical accuracy and the scope of historiographical questions and problems one can give an answer to.

Because of the problems of the comparative method in historical research, it often cannot be used at its own, but has to be accompanied with back-up evidence in the form of social mechanisms. Just as Pirenne, Weber also offers a mechanism as an argument for his causal statement that modern society was caused by the protestant ethic. He presents this mechanism in “*The Protestant Ethic and the Spirit of Capitalism*”. (Weber 2002) In normal circumstances, the pursuit of ever-renewing financial profit, which Weber regards as the essential feature of modern capitalism, is not possible, because individuals tend to try to minimize their efforts in seeking gain and avoid work whenever possible. As a consequence, they usually stop making profit when they think they’ve had enough, or they resort to the irrational pursuit of profit (for example with the use of violence). Only in the protestant ethic, where work was seen as a moral duty, success in business as a benevolent religious sign, but violence on the one hand and pleasure, leisure and luxury on the other hand as sins, could the continuous and rational pursuit for economic gain become commonly accepted. The mechanism Weber posits can best be seen as a complex-system mechanism, because Weber posits patterns of behaviour in individuals to account for a property (namely its rationalist and modernist character) of the society as a whole.

As a conclusion to the last two sections, we can say that, in the cases of both Pirenne and Weber, the basic causal claim is interpreted as counterfactual dependence, but this claim is supported by mechanisms. This seems to point out that historians interpret the concept of causation as a plurivocal concept, involving at least two essentially different characterizations. A more systematic study of the historiographical literature would be required to verify this hypothesis.

3.6 Macro-history, narratives and causation

The macro-history that originated in the 1950's and which was typical for the second generation of the *Annales*, the journal *Past and Present*, the Anglo-Saxon *New Economic History* and the German *Gesellschaftsgeschichte*, is often seen as aimed against traditional narrative history and proclaiming a new kind of history-writing, which was supposed to be strictly scientific and causal, instead of merely descriptive. Nevertheless, it will become clear that, if we apply the concepts of narrative and causation developed above to this kind of history, narratives still play an essential part.

The essence of the Braudelian perspective is the introduction of different levels of history. Braudel pretended to have unearthed a new, underlying history, which did not show up in the traditional sources. He distinguished three levels. The first consists of the almost stationary interaction between man and his natural environment, the second of the slowly changing social and economic structures, and the third of the quickly changing political events. (Braudel 1969) In the first volume of *Civilization & Capitalism*, he makes a very different distinction. There he distinguishes between three different levels of economic life. The best-known level is that of the traditional market economy. Yet underneath this level, there is a shadowy zone which often does not show up in the sources. Braudel calls this *material civilization*, and describes it as an infra-economy, the “*world of self-sufficiency and barter of goods and services within a very small radius*” Above the market level, Braudel characterizes another level, the complex social institutions and “anomalies” which have a decisive influence on the mechanisms of the market. (Braudel 2002, 24)

The essence of Braudelian historiography is (as becomes clear by the fact that Braudel uses two very different distinctions between the levels of history) not the specific nature of these different levels, but just the idea itself that history consists of different levels, that there are always different “histories”. It is in relation to this “leveledness” of history that the concept of causation comes in. Braudel does not posit any why-questions in his work. *The Mediterranean and the Mediterranean World in the age of Philip II*, for example, cannot be summarized into one statement of the form “A caused B”. (Megill 2007, 92-93) Does this mean then that Braudel still writes the traditional narrative history against which he reacted so strongly? The answer is no, because, as I have said, the essence of the way Braudel writes history is the use of different levels of history. Each of these levels is described with the help of traditional narratives (which can have things as bread price or birth rate as its central subjects). Nevertheless, it is important to unite these different levels. If this does not happen, there is nothing new about the Braudelian perspective. It would just consist of a collection of three different, traditional narrative histories, be it on a somewhat larger scale. It is in this unification of different levels that the concept of causation comes in. These three levels are interrelated, because they are supposed to have a causal influence on each other. This is the difference with the traditional narrative historiography, and the Braudelian perspective can only be innovative in as far it posits such a causal influence. Braudel himself seemed to think that the material civilization was fundamental to the other ones, but it is never fundamentally clear what this means. The main problem is that, because of the fact that the causal relations are relations between narratives as a whole, one either has to be a radical economical, political or cultural determinist, or one has to posit a very complex causal relationship between two or three complete areas of history. The first option has been proven to be mistaken, or at least unfruitful for historical research, while the latter seems to be too ambitious to fulfill, at least on the macro-scale. As a result, Braudel never quite succeeded in making a (causal) link between the different levels of history. (Megill 2007, 93)⁷

⁷ It must be noted that this does not mean that Braudel’s work is not valid historiography, or should be unscientific in any way whatsoever, on the contrary.

3.7 *Micro-history and levels of causation*

The micro-history of Ginzburg, Levi, Le Roy Ladurie, Davis, Darnton and others is often thought to have nothing in common with macro-history à la Braudel. I believe this is mistaken, and that micro-history can be seen as a direct response to the problem of linking the historical levels which I have described above. In a micro-historical situation, the levels are *a priori* linked, precisely because of the small scale. The influence of economic factors on cultural life, for example, does not need arguing, but can be read almost directly from the sources. What a micro-historian typically does, is describing the interaction between these levels at the smallest scale, and relating them to general tendencies at a larger scale.

Robert Darnton, for example, starts in *The Great Cat Massacre* from a typical small scale phenomenon: the (true) tale, told by Nicholas Contat, of a riotous massacre in Paris somewhere in the late 1730s of a large number of cats, which was apparently seen as extremely funny by contemporaries. (Darnton 1984) Because it isn't funny at all in our contemporary eyes (just cruel), Darnton wanted an explanation for the fact that it was thought to be so in the eighteenth century. He did this by referring to more general economical and cultural structures. He first noticed that there was an economic unbalance between employers and employees. The workers were generally mistreated by their patrons, which led to a sense of frustration of the workers towards their superiors. Then, Darnton gave a further account of different symbolic structures, sexually loaded jokes about cats, the identification of masters with their pets,... In the massacre of cats, all of these contexts came together to form a humorous cocktail, at least according to the contemporaries of Nicholas Contat. So Darnton links the different levels of history (cultural, economical, social,...) by stating they have a common causal influence on one specific small-scale event, in which the different levels appear as intuitively and *a priori* interrelated.

In essence, micro-history gives up part of the scope of macro-history in order to preserve another part, the link between the different levels of history. In one sense, it is a total history, but in another it is not. It is a total history, because it describes all aspects of human life (social, economical, cultural) in an image of a particular event, and it uses the concept of causation to do this. The disadvantage is that this can only happen in a focus on a single

historical event, and that a decisive and total history with a large scope in time and space is given up.

The methodology of a historiography which aims at the explanation of a single small-scale events⁸ through different (causal) influences from different levels has been formalized by Lawrence Stone and Peter Gay. They both introduce three levels of historical causation. Gay calls these “Long Range Causes”, “Short Range Causes” and “Releasers”. Stone makes a distinction between “preconditions”, which make the event possible, “precipitants”, which make it probable, and “triggers”, which are supposed to make the event necessary. (Lorenz 2002, pp 146-147) If we interpret this in terms of concepts of causation we get a mix of concepts. The preconditions are defined in terms of counterfactuals. Without the preconditions, the event itself would have been impossible. The precipitants are defined in terms of (often non-quantifiable) probabilities. They are supposed to make the event a lot more probable, or to seriously raise the chance that it happens. The third kind, triggers, are defined in terms of sufficient conditions. A is a trigger if, given the circumstances, every time A occurs, it is necessary that B also occurs. (For an elaboration of the difference between triggers and causes, see Dretske 2004)

To conclude the last two sections, it has become clear that Fernand Braudel still uses historical narratives, despite his critique. The innovative aspect of Braudelian historiography consists of the introduction of different levels of history, as a result of which different narratives are placed alongside each other. Because of this, it is necessary to connect these different levels, and this is done by positing causal relations between them. On the macro-scale, however, this seems very difficult or even impossible. Micro-history can be seen as a solution to this problem. In a small-scale event, the different levels of history are linked in an a priori intuitive way. Their relation to processes on a larger scale is made clear by a three-layer scheme which consists of three kinds of causal relations. The disadvantage of micro-history is that these large-scale processes are only seen from a small-scale event, which implies that part of the universality of the Braudelian perspective is given up.

⁸ Although this model is most characteristic for micro-history, it is also used for events on a larger scale, for example the English Revolution or the First and Second World War.

3.8 *A few words on multiple causation*

One of the important consequences of the scheme we have sketched above, is that it involves multiple causes. This is something historians have to deal with regularly. Taylor, for example, lists ten possible causes of the Second World War. (Taylor 1978, quoted in 2002, 144)

- 1) The German grievances about the peace regulations after 1919
- 2) The inability of the Germans to change these regulations
- 3) The non-existence of a controlled system of general disarming
- 4) The inability to create an international collective system of security
- 5) The fear of communism by the capitalists and of capitalism by the communists
- 6) The excessive German military power
- 7) The grievances of the German generals after their defeat in the First World War
- 8) The American aloofness with respect to European politics
- 9) Hitler's ambition
- 10) The existence of mutual bluff

Furthermore, this list is far from exhaustive. The question now arises whether it is possible to select one of these factors as *the* cause, or to weigh the importance of different causes against each other.

As we have already seen, any selection of causes implies a perspectival notion of the concept of causation.⁹ It requires the notion of a “default world”, which can differ from person to person and from perspective to perspective. This default world consists of a mix of ethical, folk psychological and scientific convictions about how the world (and people, society,...) normally “behaves” or should behave. Only what “jumps out” of such a default world can be regarded as causation. As we have seen, there are two ways in which this can be done. One can either select the conditions which are regarded as abnormal, or one can select the cases which are regarded as open to possible intervention or manipulation (or, in the case of history, which would have been open to manipulation). In many cases, this will result in a combination of both. The specific arguments one has to give for the stating of a certain cause are a consequence of this selection.

Suppose, for example, that a historian would state that 9) is the most important cause of the second World War, and that this historian uses the abnormality criterion. She would then have to argue that Hitler had an extraordinary ambition, much more than any of his contemporaries, and that the social and political situation in Germany did not necessitate people to be more ambitious than other circumstances. The more she can argue for these two points, the more convincing her selection of 9) is as the main cause of the Second World War.

Or suppose that our historian uses the manipulability criterion and that she selects 4) as the most important cause. Then she would have to argue that creating an international system of security is not that difficult, and that the circumstances in the interbellum did not hamper this in a significant way. To do this, she could, for example, refer to the creation of international institutions such as the United Nations or the European Union, and state that the creation of these did not require much effort or coincidental circumstances. Again, the more she can argue for this, the more convincing her selection of 4) will be.

⁹ The same goes for weighing causes, because the weight of the causes partly depends of the degree of abnormality or degree of possible manipulation we ascribe to our putative causes.

4. Summary

The aim of this paper was to show that historians and philosophers of history should not take the concept of causation for granted. There is an array of often very different theories on causation in philosophy, most of which are also used in historiography. We have seen that, varying with the research problems and the definition of the subject of historiographical enquiry, different concepts of causation are used. Furthermore, these different concepts are often combined. Mechanisms, for example, can be used to give support to causal claims interpreted as counterfactuals, and different concepts of causation are used to connect different levels of history in micro-history. Next to this, it has also become clear that, although there is indeed a strict distinction between historical narratives and causal statements, this does not mean that causation is absent in narratives altogether. Also, since an analogy can be drawn between causal processes, which are mainly based on physics and the exact sciences, and historical narratives, it can be stated that the difference between narrative historiography and practices in other sciences is, although still important, not as radical as is often thought. Next to this, we have also suggested that the macro-history in the Braudelian fashion is still essentially narrative, while micro-history is essentially causal. Seen in this way, micro-history can be seen as a reaction on methodological problems which were present in macro-history.

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