

An Outline of Historical Explanation

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Abstract: Scientific explanation is one of the main purposes of scientific enterprise. The classic contribution of Hempel and Oppenheim in 1948 gave rise to a critical discussion regarding explanation and, since then, several models of explanation have appeared in literature. However, historical explanation seems to be excluded from the contemporary discussion in philosophy of science. The aim of current essay is to sketch the way the causal/mechanistic model of explanation can be applied in history by highlighting the mechanisms that lie beyond verified matters of fact.

Μια Επισκόπηση της Ιστορικής Εξήγησης

Παναγιώτης Καραδήμας

Τμήμα Ιστορίας και Φιλοσοφίας της Επιστήμης, Εθνικό και Καποδιστριακό Πανεπιστήμιο Αθηνών

Σύντομη Περίληψη: Η παροχή επιστημονικών εξηγήσεων είναι ένας από τους βασικούς σκοπούς της επιστήμης. Η κλασική συνεισφορά των Hempel και Oppenheim το 1948, πυροδότησε έναν κριτικό διάλογο γύρω από το ζήτημα της επιστημονικής εξήγησης, και μέσα από αυτόν αναδύθηκαν ποικίλες προσεγγίσεις. Ωστόσο, η ιστορική εξήγηση φαίνεται να έχει απασχολήσει λιγότερο τη σύγχρονη φιλοσοφία της επιστήμης. Στόχος της παρούσας εργασίας είναι να προσπαθήσει να σκιαγραφήσει τον τρόπο με τον οποίο το αιτιακό/μηχανιστικό μοντέλο μπορεί να εφαρμοστεί στην ιστορία αποκαλύπτοντάς μας τους μηχανισμούς που λαμβάνουν χώρα πίσω από επιβεβαιωμένα γεγονότα.

Introduction: General principles for Historical Explanation

One of the basic aims of Historical Explanation is to manage the way we are going to perceive *certain aspects* of the past in order to reach useful and valid explanations. It is important here to clarify, that it is impossible to write and thus to explain the entirety of human history. Inevitably, we have to choose some aspects of our history. Undoubtedly, we have to choose those aspects, or those events, in which we are interested more. So the deal here is to illustrate under which preconditions the choice should be made; what kind of criteria are going to be used

The solution to that kind of problem is to adopt *a preconceived selective point of view*.¹ For better or worse, no inter-subjective criteria can be found. As a result, each one who is interested in historical explanation ought to state clearly which aspect of human history is going to be tested. This method does not broaden horizons to relativism. It is true that this «preconceived selective point of view» is not an objective one; since it is not a testable statement. However, subjectivism, if any, comes to an end exactly at that point. The results that will come out of the research, the conclusions of the historical explanatory enterprise, for sure would not be structured in a way to satisfy individual's beliefs. The need for a non-objective criterion does not lead to subjective conclusions.²

Before we go forward and give a presentation of the most suitable model of explanation, there should be a reference to the main problem which a philosophical approach of historical explanation should have to deal with.

Eliminating skepticism

A philosophical account of historical explanation ought to avoid one main danger. It has to do with skepticism which might arise regarding historical phenomena. Since history deals with facts that occurred in the past, it is quite possible that there will appear skepticism which will question whether facts actually occurred. Skepticism in historical explanation is similar with the one that appears in scientific explanation: the belief that there is no truth. In history, skepticism, by refusing that both important and less important facts occurred, denies also that an explanation can take place. It is clear that skepticism presents no philosophical interest since it has nothing alternative to propose apart from a blind negativism.

Let us make a short digression here and suggest a way to avoid the danger in

1 See Πόππερ (2005): pgs. 222-223.

2 Ibid.

question. It is clear that science is strongly linked with hypothesis and observation.³ No scientific progress would have taken place without hypotheses. The most influential scientific method which includes assumptions is the Hypothetico-Deductive method.⁴ Hypothetico-Deductive method, which was suggested by Popper and Hempel, is still applicable in many domains of science. In almost every aspect of natural and social sciences people make some assumptions, they lead (or: *are led*) to some conclusions and then they examine the conclusions in question; they start critical discussion with the help of the empirical world. In a nutshell, science evolves because of assumptions, observation and critical discussion. Hypothetico-Deductive method is a method also applicable in historical research; it can be used in order to identify matters of fact without at the same time operating as a model of explanation.⁵ Historical explanation ought to be based on events that actually occurred and the best way to verify this is to apply the Hypothetico-Deductive method in historical research. In such a manner, thus, we can avoid relativism.

However, this should not lead us to the conclusion that we should invent a doctrine and follow it uncritically. Historical explanation aims for well worked arguments and valid conclusions. But since all of our knowledge is fallible, so are the results of historical explanation.

Traditional model of Explanation

In the 20th century a systematic account of philosophical explanation took place. The most famous model of scientific explanation was the one that Hempel and Oppenheim suggested in 1948.

Explanation now is divided into two basic constituents: The *explanandum* which is the phenomenon to be explained, and the *explanans* that are the sentences that lead to the explanandum; the explanandum has to be logically deductive from the explanans. Furthermore, the explanans are classified into two subclasses; the one, C_1, C_2, \dots, C_k , refers to antecedent conditions, and the other one L_1, L_2, \dots, L_k , represents general laws.⁶

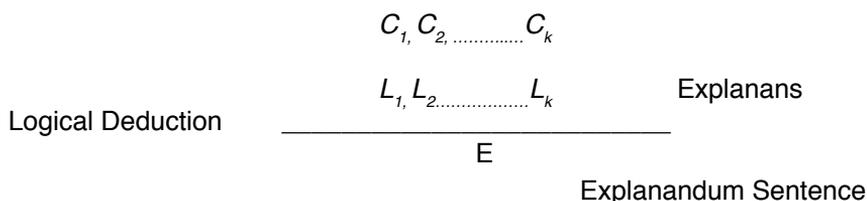
The following schema represents the explanation model that Hempel and Oppenheim had in mind:

3 See Popper (1972): pgs. 346-347. Popper claims that hypothesis ought to come before observation, so that we will be able to set under critical review our assumptions.

4 See Popper (1959): pgs. 37-40.

5 On how the Hypothetico-Deductive method is applicable in many domains of science and its role in history, see Mantzavinos (2005): pg. 72.

6 See Hempel and Oppenheim (1948): pg. 136-137.



The type of explanation which has been put forward from the above schema is a deductively produced argument. “E” describes a particular event which is to be explained; the sentences C_1, C_2, \dots, C_k describe the antecedent circumstances which cause the event in the sense that they are the empirical regularities expressed by the laws L_1, L_2, \dots, L_k . These laws are general and unexceptional laws and imply that whenever conditions of the kind C_1, C_2, \dots, C_k take place then an event described in “E” will take place.⁷

Hempel's and Oppenheim's model was criticized and so a discussion regarding scientific explanation took place for decades. The more constructive critics revealed some new models of explanation.

Causal/Mechanistic model of Explanation

Several models of explanation take place in contemporary philosophy of science. Their main purpose is to give an alternative to the aspects where the covering law model failed. After many decades of discussion there have appear three main influential models of explanation: The *causal/mechanistic*, the *unification* and the *manipulationist* model. I will briefly sketch the causal/mechanistic one since this is the model that best fits historical explanation and subsequently an attempt will take place to show in some detail how this model functions in history.⁸

The causal/mechanistic approach to scientific explanation was born mainly to repair some problems of the received view; the problem of causal asymmetries and the problem of relevance.⁹

7 Ibid.

8 The other two well worked models are the «Unification» model which has been put forward by Michael Friedman and Philip Kitcher and the «Manipulationist» model that has been proposed by James Woodward. The unification model claims that scientific understanding increases as we decrease the number of independent assumptions required. We ought to be looking for laws and principles of high generality and fitting particular facts in it. The central argument for the unification thesis is the following: «[...] science increases our understanding of the world by reducing the total number of independent phenomena that we have to accept as ultimate or given. A world with fewer independent phenomena, is other things equal, more comprehensible than with more». See Friedman (1974):pg. 15. See also Kitcher (1981):pgs. 515-519. The manipulationist account scrutinizes the relationships among variables. The aim is to find out what kind of changes will affect the explanandum if the explanans change in several ways. See Woodward (2000):pgs. 197-254.

9 For a more comprehensive discussion see Mantzavinos (2016): pg. 4.

This model does not aim only for derivations of low level laws and generalizations from high level theories. It also elucidates mechanisms at work. It changes the explanatory method. To explain is «*to expose the internal workings, to lay bare the hidden mechanisms, to open the black boxes that nature presents to us*»¹⁰. It is clear that explanation now is an enterprise that gives us knowledge of the hidden mechanisms by which nature works.

It was Wesley Salmon who first introduced the causal/mechanistic approach in scientific explanation.¹¹ In the first decade of the new millennium great work has been recorded towards this direction. Professors Machamer, Darden and Craver, presented the paper «*Thinking about Mechanisms*» giving a new impetus in the discussion regarding causality and mechanisms. They state: «*Mechanisms are entities and activities organized such that they are productive of regular changes from start or set up to finish or terminal condition*».¹²

Mechanisms are constituted both by activities and entities. Activities are the producers of change while entities are the things that engage the activities. The target is to show how the terminal conditions are produced by the set up conditions and intermediate stages; thus, to give a description of a mechanism for a phenomenon is to explain how it was produced.

It is also important to state, that «*mechanisms are regular*».¹³ They work always under the same conditions and the regularity is exhibited in the typical way that the mechanism runs from the starting point to the end. What makes it regular is the *productive continuity* between the explanatory stages. Productive continuities are what make the connections between the explaining parts intelligible. If a mechanism is represented schematically like this: **A**→**B**→**C**, where the set up point is the condition **A** and the terminal is **C**, then the continuity lies in the arrows. A missing arrow leaves an explanatory gap in the productive continuity of the mechanism.¹⁴

To summarize, the causal/mechanistic model seeks for giving causal explanations from a set up to a terminal condition, by trying to expose the internal workings.

Causal/Mechanistic approach in Historical Explanation

A philosophical account of historical explanation ought to make historical phenomena clear. One of its basic tasks is to clarify, as possible, the landscape regarding

10 See Mantzavinos (2015): pg.5.

11 Ibid.

12 See Machamer, Darden, Craver (2000): pg. 3.

13 Ibid.

14 Ibid.

historical phenomena both by giving causes between specific events and by trying, at the same time, to highlight the processes that take place. The aim here is to argue that these targets can be better achieved if we apply the causal/mechanistic model in historical explanation.

Mechanisms in historical explanation are also constituted by entities and activities, as the causal/mechanistic model in the scientific explanation. Activities are only possible when entities act in certain ways. There are no activities without entities and vice versa. Entities and activities indeed play an important role.¹⁵

The search for mechanisms in historical explanation seeks for the same claims as the mechanistic explanation in social and life sciences.¹⁶ An outline of the aims of the causal/mechanistic model in historical explanation might be the following one:

- [1] Explanations should provide causes.
- [2] Explanations should make phenomena intelligible.
- [3] Explanations should exhibit the continuity among the explaining parts.

The causal mechanistic model does not wish to establish a global theoretical framework, neither to explain the whole history of humanity. Its purpose is to give explanations about certain aspects of the historical world.

Let me now examine closer these formulations. To begin with, it should be emphasized, that the claim for a causal explanation in history does not mean that overall history of humanity can be explained as a sequence of events. Rather, the target of the causal/mechanistic model in history is to explain certain aspects of the historical world by providing causes and searching for mechanisms; for those causes and those mechanisms that led these phenomena occur. The term «cause» in the historical explanation is being accompanied with the entities and the activities; an historical event had been «caused» because of certain activities that have taken place by certain entities.

Another clarification should be stated here. The use of the word «mechanism» in historical explanation indicates that scholars seek for certain mechanisms that lie beyond the matters of fact that are under scrutiny. The purpose thus from adopting a mechanistic approach in history is to highlight which procedures are recording in a specific historical period.

It is also clear, that no explanatory vacuum should exist. Since the historical explanation is presented as an enterprise where the target is to give valid and well

15 Ibid. pg. 6.

16 On how the causal/mechanistic model can be applied to explain social phenomena, see Mantzavinos (2013): pg. 7-9.

worked outcomes, then from the starting point up to the terminal condition there should be no explanatory gap. In the historical explanation, an explanatory gap can appear in the following manner: when an explaining part arises in an explanation but no statement has taken place about it before; no mechanism or a causal relationship explains its occurrence. We perceive it as an explanatory gap when we use it in order to explain the conception of the next explanatory stage. In other words, explanatory gap is a *missing arrow*, in the explanatory sketch and it might let the explanation incomplete.

A sample of model's utility in historical explanation

In order to make these thoughts less abstract, I will seek to show how the causal/mechanistic model can be applied to explain an important historical event, the end of the Second World War. Especially, I will attempt to explain why Japan was forced to unconditional surrender, a decision which was signaled the end of the war.

After Germany was defeated by the Soviet Union, the interest was focused exclusively in Asia and moreover in Japan. It was common place that the war could come to an end if only the, really brave, Japanese surrender. According to the mainstream point of view, it is the atomic bombs which exhausted Japanese and forced Japan's government to accept unconditional surrender. Despite the fact that there are strong indications that lead to such a conclusion, a big issue arises here; this widespread view, seems to ignore the really complex diplomatic games that took place throughout the Second World War, and which became more intense while the war was close to an end. Furthermore, the classical point of view does not account properly some crucial facts that occurred and played an extremely important role.

Historian Hasegawa, in his excellent book «*Racing the Enemy- Stalin, Truman and the surrender of Japan*», gives a more incisive perspective to the reasons that caused the surrender of Japan. He opposes the prevailing view by highlighting the tactical games and the tough diplomacy that took place before the surrender of Japan. He, indeed, explains how the unconditional surrender of Japan came out of a complex mechanism of diplomatic maneuvers.

While the war was close to the end, the deal for each country was to ensure better conditions in the post-war period in Asia. Both USA and the Soviet Union were seeking to cause the surrender of Japan; they believed that the country which would achieve to bring the war to an end would have geopolitical benefits in Asia. It was, thus, a race between these countries. Hasegawa claims that between Truman and Stalin, despite their apparent cooperation, there existed mutual controversy; each one was afraid that the other might break the Yalta agreement in order to gain advantage in

Asia.¹⁷ The competition between them was becoming more and more fierce. Truman had no kind of doubts regarding whether it should be useful for his country to throw the atomic bombs. He deeply believed that by throwing the atomic bombs, the Japanese would be forced to unconditional surrender. Thus he wanted to be the one who would cause the surrender of Japan. That is the reason, according to Hasegawa, that he was delighted after the first bomb was dropped in Hiroshima.

In complete contrast, Stalin became anxious after the first atomic bomb was dropped. The Soviet Union worried that Japan might surrender before they entered to the war. So, Stalin almost immediately ordered an attack against Japan; his armies invaded Manchuria breaking the Neutrality Pact to which he had agreed and according to which the Soviet Union would have no involvement in the war against Japan.¹⁸ This is an extremely crucial point as it will be seen.

It is clear that Stalin attacked Manchuria because he wanted to secure benefits for Soviet Union in the post-war period in Asia and not in order to help the USA against Japan.¹⁹ He wanted to be the one who would cause the surrender of Japan so that Soviet Union would gain benefits in Asia. Hasegawa describes a not so usual fact: when the soviets attacked in Japan, Stalin had a meeting with USA's envoy. He looked blissful that he entered the war before the Japanese surrender and, surprisingly enough, he described in great detail almost every aspect of the military operations. Obviously, a person like Stalin was not ingénues. It is clear that he wanted to send a message to the USA; he sought to denote that the Soviet Union was not going to leave Asia in the post war period.²⁰

Now it is Truman the one who got worried. After the Soviet Union attack, he was threatened that Japan might surrender but because of Stalin's attack. It was Truman's basic target to be USA the country that will cause the surrender. We can therefore assume that this was the reason for dropping the second atomic bomb in Nagasaki.

From such an analysis, it is becoming now clearer that a race took place between USA and Soviet Union. Both of them wanted to **cause** the surrender of Japan because both of them were aiming to gain advantage in Asia. Both USA and Soviet Union were acting geopolitically.

So far, various mechanisms have been highlighted. It has emerged that there existed a race between USA and the Soviet Union; the starting point was the defeat

17 See Hasegawa (2005): pgs. 177-215.

18 Ibid.

19 Compare this statement with the entire Miscamble (2011). Miscamble describes honest cooperation between Truman and Stalin and claims that it was the atomic bombs that caused the surrender of Japan. In sort, he supports the widespread view which does not take into account the complex procedures that took place.

20 See Hasegawa (2005): pg. 191-192.

of Germany and the termination point was the unconditional surrender of Japan. At the same time, it has been exposed how the two protagonists of the war tried to achieve better conditions for themselves in the specific spatiotemporal point; how to cause the surrender of Japan and ensure their attendance in Asia after the war ends. However, despite the fact that several mechanisms have been exposed, the question has not been answered yet; or, to put it in a similar vein, the outcome, which is the unconditional surrender of Japan, has not been explained in a clear manner. The deal now is to mention the reason that forced Japan to surrender.

Although the basic target of this essay is not historical, but rather philosophical, it is important to try and give, if not a definite answer, then at least an assessment, so that our explanatory sketch will be fulfilled. Actually, what has to be explained is whether the atomic bombs or the Soviet Union's invasion played the crucial role in the end of the war. It will be seen that the attack of the Soviets was a real shock for the Japanese and that, indeed, played a really important role in the surrender of Japan. The Japanese government and the citizens did not expect at all that Soviet Union could attack them. They were planning their moves by taking for granted that the Soviet Union, if not helping them against USA, then at least would stay neutral. Obviously, they misjudged the situation.

The huge effect that the soviet invasion in Manchuria caused in the Japanese can be found both in their military and in their diplomacy. Japanese military seemed absolutely surprised when they got informed about the attack. Apart from this, the army was already exhausted and is clear that it was impossible for them to battle both against the Americans and the Soviet Union. Moreover, their military lacked soldiers comparatively with Soviet Union's army. It is obvious that they could not stand a battle against soviets.²¹

Regarding their diplomacy, the diseases were maybe even harder; everybody in the Japanese government realized that they stayed without any alliances. Furthermore, the country from which they expected some kind of help attacked them. They seemed really isolated.²²

We can now realize that the decisive factor that led to the surrender of Japan was the attack of the Soviet Union. This is the basic argument of Historian Hasegawa. What differentiates his view from the widespread one is that he accounts in his explanation two issues that have not been mentioned before: First of all, the geopolitical competition between USA and Soviet Union. Secondly, the importance of the Soviet invasion in Manchuria and the effects that caused in Japan. It is clear that the well-known explanation underestimates both of these issues. Since one examines closer the facts that occurred and the both complicated and fragile diplomacies between USA,

21 Ibid. pgs. 177-252.

22 Ibid.

Soviet Union and Japan, will conclude that the unconditional surrender of Japan was a result of various procedures. Actually, it was the outcome of a mechanism which was on course. And this statement arises if one highlights the hidden mechanisms. Let me now present a simplified diagram that summarizes what have been mentioned so far and which seeks to show how the mechanism worked in the case of the Second World War:

A→B→C→D

In this scheme, the conditions «**A, B, C, D**» are matters of fact.²³ The mechanism lies in the arrows. Condition **A** is the defeat of Germany. The first arrow shows two things: firstly, that attention is directed exclusively in Asia. It also provides the basic characteristic which is common throughout the operation of the mechanism; the fact that the countries involved in the war were acting in order to ensure their geopolitical benefits. They have estimated that the country which would achieve to cause the surrender of Japan would gain profits in the post-war period in Asia. Thus, the race between USA and the Soviet Union starts: they are the entities that cause other occurrences. The first impact of this race is the drop of the first atomic bomb in Hiroshima which is the condition **B**. Truman wished to cause the surrender of Japan and he expected this to happen after the drop of the first bomb. At that point the diplomatic game becomes more intense. Stalin attacked to Manchuria in order to force Japan to surrender. Condition **C**, thus, was caused both by the fact that the first atomic bomb was dropped and by the aiming of Soviet Union to be the one who could cause first the surrender of Japan. After the soviet invasion, the Japanese government realized that there were no allies left; thus the decision to surrender seemed inevitable. Obviously, condition **D** is the surrender of Japan.

The target from the above analysis is not to give a definite answer to the reasons that caused the surrender of Japan. What I am suggesting here, is that a more comprehensive view of the historical phenomena is possible if one analyzes in terms of a causal/mechanistic approach. This model of explanation seems to fit in historical explanation; historical phenomena are becoming intelligible. It helps a scholar to shed light to the hidden mechanisms, to clarify the landscape about how a phenomenon occurred.

Conclusions

The core issue from a discussion regarding historical explanation is to emphasize that we should seek to explain certain aspects of our history viz. to apprehend the relationship among matters of fact.

23 As it has been stated, their occurrence has been ascertained by implementing the Hypothetico-Deductive method.

The target of this essay is not to put forward anything like a full theory of historical explanation. The aim is just to outline how a well worked out model of explanation can fit in history. I claim that the causal/mechanistic model is ideal as a model of historical explanation since it meets the basic targets an explanation ought to have. It gives an, as detailed as possible, view of how an event occurred by bringing to light the mechanisms which lie among the explaining parts. In the case of the Second World War, it seems to give a satisfactory explanation on how the war came to an end.

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