

Humanistic Thought, Understanding, and the Nature of Grasp

Michael Strevens

Guggenheim Research Proposal

Wilhelm Dilthey and other nineteenth-century German thinkers envisaged a deep methodological division between natural science (*Naturwissenschaft*) and the systematic study of humankind (*Geisteswissenschaft*), whether anthropological, psychological, or literary. The one would achieve its goals by explaining phenomena (*erklären*); the other by interpreting and understanding minds (*verstehen*).

In the twenty-first century, the techniques of the natural sciences—controlled experiment, statistical analysis, causal and other formal mathematical models—have largely taken over the *Geisteswissenschaften*. The university humanities departments are the last refuge of scholars claiming to apply methods quite foreign to the natural sciences, and their existence is often defended for their supposed ability to improve the moral fiber of liberal arts students or to inspire creativity rather than because of any special insight they impart into the things humans do.

In the 1950s and 1960s, this drama of conquest and capitulation was played out in a venue of particular significance to philosophers of science like me, in a debate over the nature of historical explanation. The estimable logical empiricist philosopher Carl Hempel argued that the explanations proffered by historians work, or at least should work, in exactly the same way as explanations in physics, by deducing the phenomenon or state of affairs to be explained from laws of nature and background conditions. The implication,

it seemed, was that history was a kind of immature social science, a worthy enterprise but much in need of systematization and a firm scientific hand.

Philosophers of history fought back by claiming a distinctive role for first-person perspective, for seeing decisions “from the inside”, for grasping the networks of language, meaning, and affect in which the things they hoped to explain were embedded. In the end, however, they ceded the philosophical ground. While their ideas continue to live a vigorous life in some parts of the humanities—as demonstrated, for example, by the continued influence of Hayden White’s *Metahistory*—in epistemology and the philosophy of science the notion that explanation and understanding take the same form in physics, psychology, and historical studies is well entrenched. I would like to change that.

The philosophy of science has not stood still since Hempel. Whereas Hempel emphasized deduction from laws of nature, contemporary philosophers, including me, see explanation as a matter of finding a thing’s place in the causal order. To explain an event, then, is to describe its causes; to explain an ongoing state of affairs is to describe the causal structure that sustains it. This hardly reduces the scientific pressure on historical scholarship, however. The great majority of historical studies concern the nature and effects of one sort of causal structure or another. This is most obvious in historical narratives that attempt to understand singular events, such as the outbreak of the First World War, by understanding their causes. But it is equally true of much social, economic, and cultural history. Emmanuel Le Roy Ladurie, seeking to understand the lives of the Cathars in medieval southern France, or Alan Bray, seeking to understand the implications and accommodations of homosexuality in Renaissance England, can be seen as investigating the causal consequences of particular historically embedded social structures. (I realize that this is a controversial claim. Let me emphasize that it is not reductive, as causation need not work at the level of the individual: customs, morals, and theological doctrines all have causal power to shape society.) As

in Hempel's time, it is hard to resist the temptation to move the departments of history to the social sciences. (Some are already there.)

Now I must admit that I am a perpetrator of the unifying trend in the philosophy of explanation. My 2009 book *Depth* (Harvard University Press) advances a view on which all explanation of occurrences, states of affairs, and patterns of behavior in the material world—including the world of human bodies and minds—is causal. It follows that all (or at least much) historical explanation is in a broad sense causal.

Yet I find myself with an unabating sympathy for Hempel's opponents. Something about historical understanding is decidedly humanistic, I feel, and to some extent historians pursue goals that are foreign to the social sciences. How can that be, if explanation in particle physics and explanation in social history are governed by the same methodological norms?

The answer, I believe, lies in the old distinction between explanation and understanding. I do not, however, have in mind the dichotomy envisaged by Droysen, in which one branch of knowledge pursues explanation and the other understanding. All knowers, across the sciences and the humanities, strive for both explanation and understanding. Explanation is the same thing for everyone. But understanding is not.

The last decade has seen an explosion of work in (Anglo) epistemology and philosophy of science on the nature of understanding. I have been a part of it, espousing a view on which there is a close relation between explanation and understanding: to understand why a phenomenon obtains is *to grasp a correct explanation for the phenomenon*. (The phenomenon might be a singular event, an "effect" such as the Northern Lights, a law of nature such as the second law of thermodynamics, or a pattern of obedience or friendship seen in a certain social group.)

Correct explanations in both physics and history conform to the same causal requirements. But—and this is the idea I hope to explore with Guggenheim support—"grasping", and therefore understanding, answer to different

requirements in the sciences than in the humanities. The sciences, because of their concern for objectivity, admit only “third-person” forms of grasping; the humanities by contrast allow every possible kind of grasp. Humanistic historians take advantage of this latitude, and so in their writing explore varieties of grasp, hence varieties of understanding, that are off limits to scientists.

This idea hinges, of course, on the notion of grasp, a kind of relation by which the mind latches on to something in the world, such as an explanatory causal structure. To give you a sense of the relation in question, let me start with a very simple scientific example.

Trilobites are arthropods—that is a fact that is easy to come to know. You can verify it, if you don’t believe me and don’t already know it, in a few seconds on Wikipedia. Far more difficult than attaining knowledge about trilobites is attaining understanding. Understanding requires grasp, and to grasp what it means for something to be an arthropod is a real intellectual achievement, distinguishing the biological sophisticate from the trivia champion.

Likewise, grasping a correct explanation for a phenomenon—the essence of understanding why the phenomenon obtains—is far more difficult than simply knowing a correct explanation. It is possible to have knowledge of a complete explanation that is quite as shallow as the dilettante’s knowledge about trilobites, far too shallow to qualify as understanding. You can imagine someone—a kind of gravitational idiot savant—who has complete knowledge of the explanation why the earth orbits the sun, in the following sense. They can recite the equations according to which the mass of the sun imparts a curvature to space-time and the earth travels the most direct route along this curvature, resulting in its elliptical orbit. They can perform the mathematical derivation. They can tell you why the derivation constitutes a valid scientific explanation. They have knowledge of all of these things, in the Wikipedia sense, and yet they do not really grasp what it is for space and time to form a single four-dimensional manifold with variable curvature, or for a certain trajectory to be the straightest line through such a space. They are a model

answerer of exam questions on the topic—they can calculate degrees of curvature and straight paths to the n^{th} digit—but so tenuous is their understanding of the subject matter that from their point of view, they might as well be answering questions about traffic patterns in Manila or the syntactic structure of Old Church Slavonic.

What is needed to transform mere knowledge of an explanation into grasp? There are, I think, three answers to be found in the history of philosophy, from Plato on. First, grasp might involve a special kind of representation, an idea that motivates dichotomies such as William James' distinction between "acquaintance with" and mere "knowledge about" or Husserl's distinction between "proper" and "improper" presenting. This approach is, however, better suited to accounting for grasp of everyday facts and events than for grasp of abstract states of affairs such as space-time's curvature, of which we can have no direct acquaintance.

Second, grasp might involve extensive knowledge of a certain sort: grasp of the fact that trilobites are arthropods might be constituted by further knowledge about trilobites and arthropods, and grasp of the fact that space-time is curved might be enabled by further knowledge of non-Euclidean geometry. But this cannot be the complete story: if the further knowledge is itself of the shallow Wikipedia variety, then the knower seems to fall short of true grasp and genuine understanding.

Third, grasp might involve abilities of a certain sort, such as the ability to classify organisms as arthropods or to prove geometrical theorems. Again there is a worry that it is possible to exhibit such abilities while having a shallow grip on the subject matter, along with the objection that the proposal gets the cognitive order of things wrong: I have these abilities because of my grasp of the subject matter, not vice versa.

In my Guggenheim project, I will develop a different approach that draws on aspects of all three answers above: to grasp that a state of affairs obtains is to have command of certain strategies for recognizing that it obtains. Grasp

involves an ability, then, but a special sort of ability—one that the “gravitational idiot savant”, I hope to show, does not possess. A good part of the project will be devoted to distinguishing recognitional capacities that are sufficiently rich and comprehensive to bestow grasp and thus understanding from those that are, intuitively, too parasitic on other agents (or other devices) to enable more than mere representation and knowledge. Central is the idea that the capacity must “go all the way” from raw input such as sensory experience to recognition itself.

Going all the way may not be easy, but there are many ways to do it—many ways, that is, to implement the sort of recognitional capacity that constitutes grasp. There are, in particular, many ways to implement a capacity to recognize explanatorily relevant causal structures, thereby achieving understanding. In short, there are many routes to understanding.

The canons of scientific writing—the rules that tacitly govern the prose that goes into scientific journals and conference papers and other official organs of scientific reporting—allow only simple, direct, literal forms of communication; thus, they encourage formal or at least formulaic representations of causal structure, such as mathematical causal models and the tools of game theory. The reader, as a consequence, gains a grasp of causal structure that is in some sense objective and third personal, the kind of grasp that a wholly alien or artificial intelligence might equally easily achieve.

Historical writing, by contrast, ranges far more widely in the means that it uses to put its readers in touch with causal-explanatory facts. The scientific route is permissible, but so are others that depend to a great extent on the humanness of the reader: a first-person perspective, emotional engagement, moralizing discourse, wordplay, genre, narrative structure and other literary tropes. I will argue that these devices are not merely routes to grasping causal-explanatory structure, but are themselves partially constitutive of that grasp—because they are essential parts of the recognitional capacities that make up grasp.

The project will take the form of three long essays (about 20,000 words

each), the whole of which could be published as a short book. The first essay draws on my previous work on explanation to argue that historical explanation is largely causal. (More generally, it investigates the nature of explanation across the humanities, mathematics, and philosophy.) The second essay explores the nature of grasp, developing the “recognitional capacity” theory. The third essay applies these conclusions to historical understanding, finding a place in history, and indeed in inquiry generally, for forms of understanding that are not scientific but intrinsically humanistic.