A philosophical theory of explanation should provide solutions to a series of problems, both descriptive and normative. The aim of this essay is to establish the claim that this can be best done if one theorizes in terms of explanatory games rather than focusing on the explication of the concept of explanation. Since the classic contribution of Hempel and Oppenheim,\(^1\) the modern theory of explanation has largely come to reflect the virtues and vices of the analytic tradition: precise formulations and carefully exposed arguments on the one hand, but also a passionate insistence on logical aspects at the cost of more substantial aspects on the other. The primary question that the philosophical theory of explanation has tried to answer has been “what an explanation consists in.” As an answer to this question Hempel has famously maintained that to explain a singular event is to show how this event can be expected to happen if one takes into account the laws that govern its occurrence together with its initial conditions.

Hempel’s covering-law model of explanation was ultimately designed as a unitary model that was supposed to account for all and every kind of explanation provided in the different domains of science. The more constructive critics of Hempel offered alternative models of explanation showing how they could better account for the cases in which Hempel’s model failed. Just to name the most influential ones: the causal mechanistic model, which claims that an explanation consists in the identification of mechanisms understood as entities and

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activities organized such that they are productive of regular changes from start to termination conditions; the unification model, which claims that explanations are deductive arguments that provide understanding by fitting the particular facts and events within a general theoretical framework; the pragmatic account of explanation, which claims that explanation is not a relationship like that of description, i.e. a relationship between theory and fact but rather a three-term relationship, i.e. between theory, fact, and context; the manipulationist account of explanation, which claims, relying on invariant generalizations rather than covering laws, that an explanation primarily answers a “what-if-things-had-been-different-question”, i.e. that an explanation primarily enables us to see what sort of difference it would have made for the explanandum if the factors cited in the explanans had been different in various possible ways; and the kairetic model, which claims that explanation is a matter of finding, by way of using a kairetic criterion, which of the causal influences on a phenomenon are relevant to its occurrence, demanding more specifically that the explanation is not missing parts and that every aspect of the causal story represented by the explanatory model makes a difference to the causal production of the explanandum.

All these models of explanation – even though their designers intended them to be alternatives to Hempel’s model – still remain in the same research tradition of producing unitary models in order to capture what is supposedly the main aim of (theoretical) science, explanation. If not explicitly, then at least implicitly, the main philosophical project of the philosophers working in this tradition consists in offering an explication of the concept of explanation, or stated more neutrally in answering the “What is an explanation?”-question. The development of the precise meaning of the concept of scientific explanation occupies centre-stage in all those approaches.

Even if one disagrees about the nature of the philosophical enterprise that a philosophical theory of explanation should launch and follow, a cursory glance at the prevailing scientific practices shows that the unitary models of explanation on offer have only a limited range of application. It is simply a matter of fact that their resources cannot capture anything but the explanatory activities of some areas of science. The claim that each of them raises, i.e. that it is supposed to accommodate all and every scientific activity, is not tenable. The paper deals with three examples from the social sciences - neoclassical economic theory, the theory of civil wars and econometrics - which show that the unitary models of explanation have at best

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limited application. The lesson that is drawn from this brief overview is that each of the three main models currently on offer, the unificationist, the mechanistic, and the manipulationist, can accommodate only some of the existing scientific practices in different social scientific domains. The alternative position that seems obvious and which is adopted is that of an explanatory pluralism.

Explanatory activity is part of the scientific activity undertaken by imperfect biological organisms with a limited cognitive capacity in interaction with artefacts in a specific social context. The explanatory enterprise is a social process, and it consists of the attempt of the participants to this process to provide answers to puzzles and solutions to theoretical problems. The explanatory enterprise is embedded in certain practices employed by the participants and unfolds according to normative standards that have emerged in a long evolutionary process of trial and error. There is a history to the explanatory enterprise, a history that includes the more and less successful attempts of answering specific “Why?”-questions, the development of more and less accurate means of representation devised to answer such questions, and the permanent change of institutional constraints under which the participants engage in their activities. The explanatory enterprise has a prehistory rooted in the attempt of our remote ancestors to understand what was going on in their immediate physical and social environment and a history reflected in the progressive exposure of explanations to a critical attitude and testing. Mythical explanations of rain caused by a frustrated Zeus sitting on the top of Olympus throwing thunder to the mortal have given place to scientific explanations of natural phenomena tested in different experimental settings with the aid of highly sophisticated techniques. The explanatory enterprise emerges as a human phenomenon – therefore permanently unfinished, and it should be understood as a project in which humanity has been engaged for most of its history.7

At every moment of time there is a stock of explanations available in a society proposed by ordinary people “in the wild” or by specialists organized formally or semi-formally within specific organizational structures such as churches, universities, etc. The terms of provision, control, and dissemination of explanations in this collective explanatory enterprise are regulated by the different rules that the participants have come to adopt over time. These rules incorporate the normative standards that guide the processes of discovery and justification of explanations as well as the modes of their communication, dissemination, and adoption. They constitute the rules of the explanatory game that the participants are playing.

Explanations emerge in the process of playing the game. How the game is played depends on the rules of the game. Obviously, different people play different explanatory games which give rise to different outcomes. The players of a respective game, be they ordinary people, scientists, or religious preachers, are constrained at any moment of time by a series of rules concerning their explanatory activities. The rules of the game divide the, in principle, innumerable possibilities of providing explanations into those that can be undertaken and those that cannot. The rules of the game define the means that the players can use to represent the phenomena that they want to explain as well as the class of explanatory strategies that the players are allowed to undertake. They structure the interaction between the players and shape the way that the explanatory game is played over time. In the games that scientists are playing, call them scientific explanatory games, one set of rules defines, for example, the requirements of logical consistency that explanations must respect. Such rules are not constitutive of other kinds of games; for example, they do not apply to the explanatory games that participants of diverse religious confessions are playing, call them religious explanatory

games, where miracles and paradoxes are acceptable explanatory strategies. The respect for the rules of logical consistency gives rise to another type of explanatory process than were these kinds of rules are not respected; and it leads, of course, to different outcomes.

This view conceptualizes the explanatory enterprise as a set of explanatory games and highlights explanatory activity as fundamentally social. In the case of science, for example, there is a cognitive division of labour: some provide the big intuitions; others build the bridges to existing theoretical structures, providing the unification of phenomena; others elaborate on the means of representation; and still others work out the empirical testing and applications to different range of phenomena. Explanations are the outcome of the complex processes of social interaction between individuals pursuing different aims and undertaking different tasks. Even in those cases where explanations deemed to be very successful seem to be prima facie due to the labours of single scientists, it is never the case that she masters all the practices and has invented all means of representation and has designed all techniques necessary for the provision of them.

From a normative point of view, the focus on rules is equally important. The normative discourse about explanations has been centred around the goodness of the outcomes rather than the goodness of the rules. The traditional philosophical account of explanation adopts a static stance when trying to develop normative standards to judge the outcomes of explanatory activity. Philosophers of science engage in the business of developing unitary models of what “the successful explanation” is supposed to accomplish. The development of the notion of an “ideal explanatory text,” for example, is a characteristic attempt to offer an eternal standard for judging the quality of explanations. The provision of a general model able to serve as a reference which applies to all times and conditions suggests itself if one focuses on explanations as outcomes.

However, the opposing procedural conception is based squarely in the rejection of any claim that the explanations that are good are “out there” waiting to be discovered by scientists or anybody else. The rules of the explanatory game are quite literally made up or created in some participatory process of discussion, criticism, and persuasion. Good explanations are those that have emerged because good rules have been followed, and working out the criteria of their goodness is not a once-for-all matter, but rather a continuous enterprise taking place with the participation of different kinds of experts or other participants in the explanatory game. The expert in the philosophy of science quite simply occupies no specific metier that allows the privilege of making claims to define what is best for others. On the contrary, the process of the development of the norms to be applied in judgments about the quality of explanations is based on an ongoing dialogue among the participants as they clarify, articulate, and accept or reject arguments. The elucidation of this participatory process is the fundamentally naturalistic element of the approach.

This poses the question whether there is some kind of external criterion or justification process which can be used in order to judge the goodness of the different sets of normative rules that govern the activities of different explanatory games. Such principles of high generality and application can and do in fact emerge in a critical discussion that takes place at a meta-level. The virtues and vices of the rules of an explanatory game can be themselves analyzed, debated, and criticized. The outcomes of such discussions are, however, always of a provisional character, results of human endeavour themselves, amenable to further debate and criticism.
Concluding, one way to defend explanatory pluralism is, thus, to view the myriads of explanatory activities undertaken by scientists and ordinary people in terms of explanatory games. The philosophical project consists in describing and normatively appraising the rules that constitute these games. This project is fundamentally liberal, in the sense that participants and non-participants to the game alike engage in the critical discussion and revision of the rules or to put it in other terms, the project is fundamentally naturalistic - philosophers and scientists equally take part in it.