

The Idealist Paradigm in Knowledge Representation*

Lydia Sánchez Gómez¹, Manuel Campos Havidich²

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¹Comunicació Audiovisual, UB, Barcelona, España. lsanchezg@ub.edu

²Departament de Lògica, UB, Barcelona, España. mcamposh@ub.edu

Abstract

One of the most surprising characteristics of human and social sciences (and, particularly, of the theories of representation of knowledge) is the acceptance, by a considerable part of their practitioners, of theoretical assumptions of an idealist character. This trait is absent in the rest of scientific disciplines: empirical scientists act assuming the existence of a subject-independent, structured and cognoscible reality, and try to offer us a description of the mentioned structure. There doesn't seem to exist, in principle, any reason to think that the same should not happen, for instance, in that parcel of reality which concerns knowledge. The objective of this paper is to contribute to the exposure of this sort of idealist attitudes. In order to do this we will explore their antecedents and we will evaluate the quality of the arguments in their favor. We will, particularly, emphasize their origin in the demand for certainty of classical epistemology, and will evaluate the variety of idealism more relevant for theories of knowledge representation: the so-called 'linguistic turn'. We will examine, as well, thesis concerning reality, facts, the concept of truth and different forms of use of language. Finally, we will contrast this idealist tradition with other ways of facing the study of knowledge representation that do not commit with such implausible assumptions.

Key words: Constructivism, Idealism, Knowledge representation.

Resumen

Una de las características más sorprendentes de las llamadas ciencias humanas y sociales (y, en particular, de las teorías de la representación del conocimiento) es la defensa, por una parte considerable de los practicantes de las mismas, de presupuestos teóricos de carácter idealista. Se trata de un rasgo que no se da en el resto de disciplinas científicas: los científicos empíricos actúan presuponiendo la existencia de una realidad independiente del sujeto, estructurada y cognoscible, y pretenden ofrecernos una descripción de esa estructura. No parece, en principio, existir ningún motivo que nos lleve a pensar que lo mismo no deba suceder, por ejemplo, en esa parcela de la realidad que concierne al conocimiento. El objetivo de este trabajo es contribuir al desenmascaramiento de este tipo de actitudes

idealistas tan frecuentes. Para ello exploraremos los antecedentes de las mismas y evaluaremos la calidad de los argumentos a su favor. En particular, enfatizaremos su origen en la exigencia de certeza de la epistemología clásica, y evaluaremos la variedad del idealismo que más trascendencia tiene en las teorías de la representación del conocimiento: el llamado ‘giro lingüístico’. Examinaremos, asimismo, tesis acerca del concepto de realidad, los hechos, el concepto de verdad y diferentes formas de uso del lenguaje. Finalmente, contrastaremos esta tradición de raíz idealista con otras formas de acercamiento al estudio de la representación del conocimiento que no se comprometen con presupuestos tan inverosímiles.

Palabras clave: Constructivismo, Idealismo, Representación del conocimiento.

1 Introduction

From a naïve realist perspective communicative acts consist in the exchange of information on the world by participants through the use of a certain means of representation: a language. This realist perspective is not only the one presupposed by most our daily behavior, but also by most scientific forms of activity. Empirical scientists act assuming they are trying to describe a structured reality, and when they fail to do so, do not talk about reality having changed (or a new reality having been constructed), but about their having been wrong in their descriptions of it.

However, from much of the predominant epistemological views in the human and social sciences, the mentioned realist perspective on communication is questioned as naïve. Sometimes grouped under the label “the critical perspective”, these currents of thought strive to offer a supposedly more rigorous and sound alternative on what knowledge consists in than what realist common sense seems to be able to offer. According to this “critical” view, communicative agents cannot account for an independent objective reality as the realist perspective pretends. They do not simply represent it, but, rather, *interpret* it and, beyond that, *create* it. The belief on a previously existing reality that could be described in an objective fashion constitutes a myth, *the myth of objectivity*.

In this work we will criticize the theses which serve as foundation for the critical perspective, arguing that either they have a trivial lecture, perfectly compatible with a realist model, or are implausible claims based on idealism. We will defend that a realist view on the issue, related to the naïve perspective of the phenomenon of communication, offers a much better explanation of this phenomenon.

2 The Realist View

On most occasions the critical perspective takes on a caricature of realism: the sometimes called “objectivist model”, which nowadays is scarcely defended at all, and that should be better qualified as a Platonist model. Basically, according to this view there is a world aside from the sensible one, populated by immutable, universal, and objective entities knowable by some special faculty of reason in an infallible way.

Contemporary realism has, however, a much more Aristotelian and empirical orientation than Platonist or rationalist, conceiving reality as unique (monism), structured in terms of natural

laws which link universals through relations of necessity and propensity. This structure is subject-independent and cognoscible on the basis of observation through the conjecturing of hypotheses, which in no case reach the status of irrevocable. These are, moreover, the presuppositions of most scientific activity.

3 The Critical perspective

Let's now list some of the main thesis maintained within the critical perspective classifying them in different groups.¹ On the one hand, we will see what the critical perspective has to tell us on epistemology and ontology; on the other hand, which are the critical theses concerned with the notion of meaning, the notion of truth and, finally, the relevancy of context. All of these theses are intimately related and can be traced back to idealist presuppositions.

3.1 Reality and the Possibility of Knowledge

The critical perspective centers its invectives on the objectivist model understood in Platonist terms, which, as we said, is nowadays scarcely defended at all. There are two main features of this Platonist model that seem to concern especially its critics: on the one hand, an ontological claim: the acceptance of the existence of a structured cognoscible subject-independent reality. On the other hand, an epistemological claim: that we have access to definitive truth through some form of human reasoning. Thus, Lakoff and Johnson (1980) reflect on this second claim, telling us that the myth of objectivism has dominated Western culture, and specially philosophy in both the empiricist and rationalist traditions. Its central tenet would be the idea that we have access to absolute and unconditional truths about the world.

The ontological claim has an Aristotelian counterpart that we exposed in the previous section, which differs from the Platonist one in the fact that it doesn't commit to the existence of two different realities (material and ideal). On the other hand, and also as we have already emphasized, the existence of a structured cognoscible subject-independent reality is an assumption of most empirical science and, in fact, of most common knowledge on the world. To review such commonsensical idea we would require substantial arguments. We will see later that the idealist paradigm has not been able to provide such sort of arguments.

As for the epistemological claim, though the quest for certainty has undoubtedly been the holy grail of philosophy for such a long time, we nowadays know that certainty is out of the picture. Mainly because our first and foremost (and, possibly, unique) source of real knowledge, i.e., empirical science, is, by its method, only able to produce empirically well-supported conjectures, but never definitive truths. The acceptance of certainty as a condition for knowledge leads straight to the denial of the possibility of knowledge, a claim too uncanny to be taken seriously nowadays (even if it has been taken seriously for so many centuries of modern epistemology).

¹ We take some of what follows from the description Albert Chillón provides (Chillón, 1998).

3.2 Facts as a Social Construction

Another group of theses maintained by critics of the realist model concern the nature of language and, more concretely, the concept of interpretation. It is our agreement as speakers on the interpretation of speech that allows us to understand, and beyond that, create reality.

According to this view there is no communication without interpretation. The speaker *interprets* reality and presents it through statements. To interpret it, he resorts to his theory or worldview on it, a worldview he shares, in a substantial way, with his neighbors. He organizes his flux of subjective impressions under concepts he has learned from them. This allows us the development of a discourse about facts: the community agrees that there is a reality that we can be known. But the mentioned concepts should not be supposed to refer to entities in the world, and these facts do not have an existence beyond the agreement on which they are built. Reality is then rather the result of an intersubjective agreement, a *construction*. Communication, then, consists in the act of putting together particular experiences through statements with the objective of establishing intersubjective agreements and conventions on a construction we call *reality*. This constructional aspect of reality shows itself as somebody questions the agreement on which it is based: facts are established and then may be questioned and revoked. Facticity is equivalent to lack of controversy, unquestioned agreement.

Thus, in a text quoted by Sokal and Brickmont (1999), Gérard Fourez describes this idea and illustrates it explaining that for a time it was considered a fact that the Sun orbited the Earth. This fact was then substituted by another: the daily rotation of the Earth.

Fourez way of putting things is typical of the ambiguity with which constructivists and relativists formulate their claims. Thus, he can be taken to be saying that for a time it was considered a fact that the Sun orbited the Earth, and then it came to be considered a fact that the Earth rotated daily, without commitment on Fourez's part on whether, aside from being considered to be facts, they actually were facts. Under this reading, what Fourez is saying (again, that for a time it was considered a fact that the Sun orbited the Earth, and then it came to be considered a fact that the Earth rotated daily) would be a triviality of no epistemological interest whatsoever.

The other reading, the strong one, would tell us that it is the 'real' facts (not our consideration of them) that have substituted one another. This reading would be trivially wrong. From the fact that for a while the belief was hold that the Sun orbited the Earth and then this belief was substituted by the idea that the Earth orbits the Sun one simply doesn't conclude that one fact substituted the other. What happened, of course, is that for a while people believed it to be a fact that the Sun orbited the Earth and that then they realized this was not, after all, a fact. What Fourez should really conclude is that people changed their minds, not that the world changed its constituents. To consider that the world is one way rather than another is an epistemological question that has to do with our beliefs on the world. But our beliefs do not generally determine how the world is. Again the ugly face of idealism shows itself behind the central tenets of the critical view.

3.3 The Concept of Truth

Closely related to the issue of facts and interpretation we have just commented on is the issue of truth. The ordinary conception of truth takes language as an instrument whose main function is that of *mapping* reality, which is constituted by facts, we could say following the

Tractatus (Wittgenstein, 1987). Truth is the correspondence to reality. As in the case of the main tenets of realism itself, this view on truth is presupposed by most our ordinary behavior as well as by empirical science. It is so central to such a substantial part of human activity that a proposal for its revision should be strongly motivated. This revision is, of course, what authors belonging to what we have been calling *the critical perspective* propose.

Of course, if ‘reality’ is composed by constructed facts, the idea of correspondence loses all of its bite. The consequences of this at a practical level can reach worrisome proportions. Thus Sokal and Bricmont (1999) narrate a situation in which an anthropologist is called to give his opinion on a controversy between a judge and a policeman who disagree on a certain issue. The anthropologist explains that from the point of view of his discipline, there are only ‘partial’ truths, shared by a number of people, a group, a family, a business. In this particular case, then, neither the judge nor the agent need to be thought to be hiding anything. They both are saying ‘their’ truth.

Sokal and Bricmont emphasize that this is obviously not a case in which communication becomes impossible because of a substantial difference in the worldviews of the participants, who speak the same language and live a few kilometers away from each other in contemporary Belgium. They understand perfectly what the issue is, and there is no matter of each of them presenting their truth, but their opinion, (or what they would like to be taken to be their opinion). Again we find ourselves with the idealist confusion we commented on a few paragraphs before between what people think and what is.

3.4 The Referential Use of Language

As Chillón explains (1998), the critical perspective emphasizes the role of sense in our use of language, over and above the referential function privileged by the common sense realist view. It couldn’t be any other way, given the idealist approach to reference predominant among the authors in the first group. We actually need to distinguish at least three levels of meaning for each speech act. On the one hand, we have what, under the realist perspective, would constitute the reference of what we are saying: the possible facts we are talking about. Aside from this one we find what we might call the dictionary (or ‘official’) meaning: conventional and fixed out of the context of the concrete speech act. Finally, there is the sense constructed by the participants in the act. According to the critical perspective, when the receptor decodes the message in a communicative act, he collaborates in the creation of the final sense, given that he applies his own knowledge (beliefs, habits, expectations, intentions). Thus, as it depends so heavily on the context, sense inevitably differs from the ‘official’ meaning. And it is this sense that is important, the one that comes to life in the act of communication itself.

Now, it is evident that communicators ‘interpret’ reality, in the sense that they cannot do without contextual elements such as culture, ideology, attitudes, feelings, etc. We all have a worldview: we possess a set of interconnected beliefs on reality, what Quine calls “the web of belief” (Quine and Ullian, 1970). When we acquire a new belief, the set becomes altered, our worldview changes, we interpret things in a new fashion. People with different cultural background have different views on reality. They interpret the facts in different ways. What explanation can we provide of this fact from a realist perspective? There is no mystery to the issue: people with different cultural background who have, thus, different views on reality generate different beliefs under the same situations. But this doesn’t mean that facts change in synchrony with these beliefs, or that facts are narrated constructions. And it doesn’t mean that

there is no referential use of language either, whose main function is that of *mapping* reality and describing *facts*. No matter how much somebody insists in *interpreting*, according to his worldview, that the attack on 11M in Madrid was caused by ETA, the fact is that either it was caused by it or not. A different issue is whether we will ever know. But we shouldn't confuse ontology with epistemology.

4 The Idealist Presuppositions of the Critical Perspective

We have seen several among the main tenets maintained by authors that situate themselves in the critical perspective. We have seen that these tenets are incorrect and that they seem to stem from a single source: idealism. In fact idealism has become the predominant paradigm for much of the work done in the human and social sciences. This doesn't mean that work isn't done from other presuppositions, especially realism. In fact we are convinced that a naturalist epistemology (Quine, 1969) offers a far better base to face human and social phenomena. The question that concerns us now, however, is: are there any reasons to take idealism seriously?

As we mentioned before, idealism originates as a consequence of an incorrect epistemology: the one that links knowledge to certainty. According to this view, moreover, a subject can only be certain of what presents itself directly to him, in a non-mediated form. Mediation leads inevitably to fallibility (as so many skeptical arguments have shown us) and fallibility, in turn, to uncertainty. Thus, only direct apprehension of the object of one's interest allows for the knowledge of this object. But we cannot directly apprehend external objects. Thus, if there is anything to be known it cannot be the external world. As a consequence of this, moreover, any discipline that pretends the contrary is a fraud (particularly, empirical science).

What is it then that can really be known? Instead of revising the principles of an epistemology that leads to such weird consequences, philosophers did throw themselves to the search of a sound object of knowledge and finally managed to invent it. There is one thing, they claimed, that presents itself directly to the subject, that is then inseparable of it, and is the only candidate to be object of knowledge. It has received different denominations through the history of modern epistemology, from Locke's *ideas* or Hume's *impressions* to the logical atomists and positivists' *sense data*, but the one with more projection has been that of *phenomenon*. Since its inception, philosophers have found the only real object of knowledge, and have created a whole new area of study. As for the external world, and lacking the possibility of knowledge of it, it has finally disappeared of the picture as redundant. It is this idea of the redundancy of the real world and of the inseparability of subject and cognoscible object of study that is behind all the variety of epistemological discourses that give foundation to the critical perspective.

We'd like to mention, for instance, the group of authors known under the label *German linguistic turn*, Hammann, Herder y Humboldt. For them 'reality' ceases to be the result of the action of a pure reason common to all subjects. On the contrary, reason is never pure, but socially, culturally and linguistically contaminated. Each culture will then contribute its own reality, incommensurable with the rest, and consequently, its own variety of truth. A claim we surely remember from paragraphs above.

Lacking any better reasons on its defense, we advocate for the definitive dismissal of idealism from the area of human and social sciences. We understand this can only favor the

development of disciplines so unjustifiably harmed by the consequences of a philosophical error.

We would like to conclude making reference to the realist alternative on these topics of knowledge, representation and communication. Realism had a revival after the demise of positivism during the second half of the XX century. With the abandonment of classical epistemology, the idea of the possibility of knowledge of an external world, of which we no longer need to doubt, returns, as well as a conception of language as an instrument of expression of thought and description of reality. It is emphasized that it is reasonable to think that language has different functions, and that it is possible to account for the theoretical relevance of each of them, beginning with the question of its referential origin.

The first authors within this realist paradigm that provide spectacular results are Hillary Putnam and Saul Kripke, who inaugurate the theories of direct reference. Later on we find proposals that try to explain the ideas of meaning and content in naturalist terms, that is, accounting for them in terms of natural phenomena. Among them we would like to mention Fred Dretske, Jerry Fodor and Ruth Millikan. Let's hope their example is followed and a more commonsensical approach to philosophy finally becomes predominant.

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