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MORE THAN TWO FACES OF COMMON SENSE

1. Introduction

K ARL POPPER (1902-1994) is a well-known philosopher, especially in two major areas: political thought and the philosophy of science. Expressions such as open society, the myth of the framework, conjectures and refutations, provisional truth, evolutionary epistemology, falsification of theories, etc., are a legacy of Popper's ideas in both areas. His published works witness to this duality of interests. As a matter of fact, many of his books are compilations of different papers and conferences, and these are organised in two parts, one for each of those topics. With this, one is tempted to think that these two areas are separate and independent in Popper's mind, as if his philosophy consisted of two disconnected trains of thought; but Popper would claim that his works had a very strong underlying unity. The source of this unity is, however, something on which scholars tend to disagree. Even Popper changed his mind on different occasions when trying to elucidate what the corner-stone of his philosophy was. At times, criticism seemed to be the idea that united all his work; later on, he also proposed indeterminism and evolutionism. In this paper, I want to argue that the question of realism can also be seen as a link between the different ideas in Popper's philosophy. I want to argue that Popper saw himself as a realist philosopher and that his realism was present all along his career. To do this, it is necessary to understand exactly what Popper meant when he said that he was a realist, a statement he made in many of his writings.

To analyse Popper's realism and its foundational role in all his philosophy I will divide his ideas into three areas, forming the three sections of the paper: metaphysical realism, that is, the idea that there is a 'world out there', completely independent of our knowledge about it; epistemological realism, that is, the idea that our knowledge is real in the sense that it has to do with the world out there, it is not mere idealism; and 'human realism', which stands for his insistence on a humanitarian attitude towards mankind. For the third sense of realism I will partly draw on the work of H. Kiesewetter and M. Artigas who, in the last few years, have developed a new approach to Karl Popper's philosophy. Their point of view is neither analytical nor political,

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¹ M. Artigas, The Ethical Nature of Karl Popper's Theory of Knowledge. Including Popper's un-

but ethical: they claim that Popper's philosophy as a whole had deep ethical roots.

2. METAPHYSICAL REALISM

When pressed on the issue, Popper would insist that: «I was always a realist».² But looking at his first book, *The Logic of Scientific Discovery*, published in German in 1934, it is difficult to find any clear statement on the subject. Nevertheless, it can be argued that realism is latent in, at least, two senses: first, in the well-known metaphor of theories as a net that we cast out to try and trap the thing that we call the world. This metaphor assumes that such a world exists, independently of the way that we make our net. Otherwise there would be nowhere for us to use those nets. Second, later in the book he claims having a metaphysical faith in the existence of order in the world. So the 'world out there' is not chaotic but has a defined structure, a particular configuration. This makes science meaningful. Without a world to know, science would be a senseless game of theories about nothing. Without regularities in the world, we would have no valid falsification. Science is an activity with a clear aim: to try to know in the best possible way the regularities, the laws, that exist in the world.

At the time however, because he considered realism to be a metaphysical attitude, he did not dare argue in favour of it. One might think that in the positivistic atmosphere prevailing at that time, Popper thought it more prudent not to talk about these metaphysical topics, although he might have been sure of them. It looks as if, in the 30's, Popper had 'faith' in realism but, as a consequence of his theory of knowledge, he held that "the contrast idealism-realism is an example of unsolvable antinomies". With time Popper found no way out of this antinomy, but he felt that he could discuss realism on different grounds, even through reasons based on common sense. In the 1960's, he would be less afraid of discussing realism. His arguments reveal an increasingly deep and 'dogmatic' (to use his words) faith in realism.

In his intellectual autobiography, Popper explained why he did not defend realism in the 30's. «At that time I did not dare to say much about realism. The reason was that I had not then realised that a metaphysical position, though not testable, might be rationally criticisable or arguable. I had confessed to being a realist, but I had thought this was no more than a confession of faith».4

published comments on Bartley and critical rationalism, Peter Lang, Berne 1999; H. Kiesewetter, "Ethical Foundations of Popper's Philosophy", in A. O'Hear (editor), Karl Popper: Philosophy and Problems, Cambridge Univ. Press, New York 1995, pp. 275-288.

² K. R. Popper, "Replies to my Critics", in P. A. Schlipp, *The Philosophy of Karl Popper*, Open Court, La Salle 1974, p. 943.

³ IDEM, Die beiden Grundprobleme der Erkenntnistheorie, J. C. B. Mohr, Tübingen 1994, p. 73.

⁴ IDEM, Unended Quest. An Intellectual Biography, Fontana, Glasgow 1976, p. 150.

This is in agreement with D. Miller's statement that «Popper's enthusiasm for realism and objectivism was already there in *The Logic of Scientific Discovery* (...) but such doctrines were not deeply argued until the mid-60's».⁵

Popper's metaphysical realism is quite consistent with his particular theory of scientific knowledge, which holds that theories can never be proved to be definitive truths about the world. The condition for a scientific theory to be held provisionally true is to contrast it with reality again and again; it is precisely the possibility of conflicting with reality which gives a theory the status of being scientific. This reasoning appeared for the first time after his exile in New Zealand. In 1948 Popper wrote: «It is through the falsification of our suppositions that we actually get in touch with 'reality'. It is the discovery and elimination of our errors which alone constitutes that 'positive' experience which we gain from reality». So, reality is that which makes our conjectural theories in science falsifiable. Science is possible, according to Popper, only if there is a world in which I can falsify my theoretical predictions.

However, it was in *Realism and the Aim of Science*, the first of the three-volume *Postscript* to the *Logic of Scientific Discovery*, that Popper developed further his reasons for realism. The central argument in this book is, again, both the explicative and fallible character of science. He said that "the interest of getting nearer to the truth would be pointless without an objective reality, without a world we make it our task to discover». Perhaps the most interesting novelty of the book is the way in which he defended realism, using more dogmatic and irrefutable statements than ever before. On one occasion, he wrote, in rather 'un-Popperian' terms: "there is an all-important difference [between idealism and realism]. Metaphysical idealism is false, and metaphysical realism is true». It is important to stress that Popper classified all the alternatives to realism as idealist philosophies. This makes it quite easy for Popper to claim victory over any non-realist approach. Idealism, in Popper's terms, is too wide a concept in which many possibilities (such as conventionalism, instrumentalism...) fit.

Realism and the Aim of Science includes some new arguments, one of which is, I would argue, very surprising. Popper tried to apply one of his scientific criteria to realism, as if it were a scientific theory. Both realism and idealism are non-falsifiable theories, and thus, according to Popper, they are to be considered as 'metaphysical'. However, when we have two or more theories in conflict, Popper proposed a series of criteria to decide which one was better. Among these criteria was the risk associated with a theory. That is, between

⁵ D. Miller, Introduction to *Popper Selections*, Princeton Univ. Press, Princeton 1985, p. 13.

⁶ K. R. Popper, *Objective Knowledge. An Evolutionary Approach*, Clarendon Press, Oxford 1979, p. 360.

⁷ IDEM, Realism and the Aim of Science, Routledge, London 1985, p. 81.

⁸ Ibidem, pp. 82-83.

two theories, the one that made the most risky predictions would be the best; for, in a case where such predictions were verified, the theory would be reinforced as a solid conjecture. On the contrary, if a theory makes vague predictions, their verification would do little for the credibility of that theory. With this criterion, Popper made it clear that realism was much better than idealism: «If (...) some form of idealism is true, then *anything* may happen – and therefore, *possibly*, also that which does happen. Thus, realism is the logically stronger of the two metaphysical theories. It is preferable for logical reasons: metaphysical idealism turns out to be void of *any* explanatory power». 9

Realism is present in Popper's philosophy of nature: propensities are real and not merely subjective; the arrow of time has to be real, and not a consequence of our knowledge; many features of his criticisms of the standard interpretation of quantum mechanics are based on his realism. These and other themes would be interesting to study from this point of view. It is worth mentioning here the 3-worlds theory. According to Popper, physical things form World 1; subjective experiences belong to World 2; and World 3 consists of the products of thought and culture, such as theories, the contents of books, etc. All these three worlds are real, not only World 1, although at times he said that World 1 is the one which helps us to understand what reality is. The world of material things is «the standard example of reality or of existence». The extension of realism to all these realms proves Popper's strong belief in the existence of different levels of reality and their independence from our knowledge of them. Any other possibility would fall under the label of idealism, and must be therefore dismissed.

3. Epistemological realism

One characteristic of Popper's philosophy was his constant refusal to define words. Trying to escape from what he called essentialism, he refused to give a precise meaning to the terms he used. This was not only a way of avoiding fixed definitions which could, in the long run, prove incorrect, but a consequence of his theory of knowledge which implied that any definition or any theory was constantly open to criticism. To give a precise definition would mean to have something fixed and permanent and, consequently, closed to possible criticism. Even the words and expressions that are used in ordinary conversation should be loose enough to allow a change of meaning if new knowledge forced us to do so. As we shall see, Popper was not always consistent with this attitude, making his epistemological realism problematic.

The main thesis of his essay «The two faces of common sense» is that, as

⁹ Ibidem, p. 102.

¹⁰ K. R. Popper, *The Open Universe. An Argument for Indeterminism*, Hutchinson, London 1982, p. 116.

Ackermann put it, common sense «is both hero and villain». ¹¹ It is hero, because common sense is the starting point of all our knowledge; and it is villain because our common sense knowledge has to be constantly criticised, and never uncritically accepted. Popper thought it was «commonsensical to hold that the common sense was often wrong – perhaps more often than right; but that it was plain that in philosophy we had to start from common sense, if only to find out, by criticism, where it was wrong. I was interested in the real world, in the cosmos, and I was thoroughly opposed to every idealism, positivism, or even neutralism in philosophy. If there was not a real world, as rich as and even much richer than the world we know superficially from our daily life (...) I would not be interested in philosophy». ¹²

Popper distinguished between common sense realism and common sense knowledge with the following words: «While I am prepared to uphold to the last the essential truth of *common sense realism*, I regard the *common sense theory of knowledge* as a subjectivist blunder». ¹³ The difference between them is relatively clear. Common sense realism states that there is a world out there, that is independent of our knowing it, and with which we try to compare our theories. On the other hand, common sense knowledge would identify our knowledge, our theories, with the way the world is; there would be a direct correspondence between our theories and the world in itself.

According to Popper, philosophers have always mistakenly thought of both meanings of common sense as the two faces of one coin; as if the one would necessarily imply the other. He emphasised this saying that any «attempt to keep the common sense theory as an integral whole – realism plus common sense epistemology – is bound to collapse. Thus, by the method of being sceptical about one's starting point, the commonsense theory is broken into at least two parts - realism and epistemology - and the latter can be rejected and replaced by an objective theory which utilizes the former». 14 This separation is very important since it gives common sense knowledge a relevant place in the process of scientific knowledge. The first theories obtained by common sense, by immediate knowledge, become the starting point of the whole process; they become the first elements to be critically discussed. "According to my approach – he said–, it is reasonable to accept the views of common sense as long as they stand up to criticism: science arises from criticism and common sense and imagination". But there is a second reason why common sense is important: metaphysical realism is a necessary presupposition to do science, but can only be claimed as a common sense attitude: «I believe, with common sense, in the reality of material things, and thus of matter». 15

¹¹ R. J. Ackermann, *The Philosophy of Karl Popper*, The University of Massachusetts Press, Amherst 1976, p. 43.

¹² K. R. Popper, *Objective Knowledge*, cit., p. 323.

 ¹³ Ibidem, preface.
 ¹⁴ Ibidem, p. 105.
 ¹⁵ K. R. POPPER, Realism and the Aim of Science, cit., p. 129.

So far, it looks as if Popper is emphasizing metaphysical realism by denying epistemological realism. But this is not exactly so. Our scientific knowledge can be said to be realistic because it is about the world and not only an intellectual idealistic exercise. His idea of epistemological realism and the link with common sense can be made clear with the following passage: «Every time we proceed to explain some conjectural law or theory by a new conjectural theory of a higher degree of universality, we are discovering more about the world: we are penetrating deeper into its secrets. And every time we succeed in falsifying a theory of this kind, we make an important new discovery. For these falsifications are most important. They teach us the unexpected. And they reassure us that, although our theories are made by ourselves, although they are our own inventions, they are nonetheless genuine assertions about the world; for they can clash with something we never made». 16 However, he went on by saying: «The task of science, which, I have suggested, is to find satisfactory explanations, can hardly be understood if we are not realists. For a satisfactory explanation is one which is not ad hoc; and this idea – the idea of independent evidence - can hardly be understood without the idea of discovery, of progressing to deeper levels of explanation; without the idea, therefore, that there is something for us to discover; and something to discuss critically».17

The last quotation introduces us to one of the key problems of Popper's realism. On the one hand, our scientific theories are bound by the reality of the world, the reality of things in themselves, which the scientist is trying to understand. On the other hand, any explanation is always provisional, conjectural, and can never be said to account for the way reality really is. In other words, the problem of truth is embedded in the question of realism, and Popper seems unable to find a satisfactory integration of both. From his early works, Popper claimed that «scientific theories are never fully justifiable or verifiable, but that they are nevertheless testable»; ¹⁸ that is, scientific theories give us some information about the reality they are trying to describe. A. Musgrave made this point clearer when he introduced a distinction between real and ultimate explanations. ¹⁹ Popper seems to agree with the first, but scientific theories are never ultimate, never definitive explanations of reality.

Theories must always be submitted to criticism, and never accepted as absolute truths. However Popper seems to acknowledge the validity – I would say the truth – of the basic concepts we use in theories. He speaks of his common sense realism in the following terms: «commonsense realism; this is the view that there is a real world, with real people, animals and plants, cars and stars in it. I think that this view is true and immensely important, and I be-

¹⁸ K. R. POPPER, Logic of Scientific Discovery, Harper Torchbooks, New York 1968, p. 44.

¹⁹ A. Musgrave, Essays on Realism and Rationalism, Rodopi, Amsterdam 1999, p. 14.

lieve that no valid criticism of it has ever been proposed».20 Since Popper is normally talking about scientific 'theories' and not about scientific 'concepts' there is a tension between abstraction and induction of which he doesn't seem to be aware. This is especially clear when he criticises Hume and Aristotle using similar arguments. The first is accused of maintaining induction despite its invalidation by pure logic. Aristotle is accused of being a dogmatist and a psychologist, with his theory of the mind being, in the beginning, a 'tabula rasa'. However, I think that this last criticism is not completely justified. Aristotle's philosophy admits that we are able to know the essence of things, although this knowledge is of a particular type. Our judgements may be wrong, because truth appears in judgements, not in abstraction. In fact, Popper also seems to be a psychologist (to use his words) when he hardly allows any doubt about the concepts that we use in our theories. For instance, in his criticism of the interpretation of quantum mechanics, there seem to be some things which cannot be falsified, because they are not theories but concepts. As an example, Popper challenged De Broglie's theory on the basis that the concepts of wave and particle were essential to scientific practice: «It is misleading (...) to talk of a 'duality' between [particles and waves]: the particles are important objects of the experimentation». 21 This last example is very illustrative of the point I am trying to make: Popper would be open to any scientific explanation of the behaviour of elementary particles and waves; but since he considers both concepts prior to any scientific explanation, and since he considers both concepts as common sense realistic existing entities, he despises de Broglie's principle. Waves and particles are real and they cannot be superseded by other concepts.

It is as if in the primary levels of human knowledge a certain pragmatism without falsification could be accepted. In a meeting with Russell in London, in 1936, Popper would say that «I suggested that the whole trouble was due to the mistaken assumption that *scientific knowledge* was a species of *knowledge* – knowledge in the ordinary sense in which if I know that it is raining it must be *true* that it is raining, so that knowledge implies truth. But, I said, what we call 'scientific knowledge' was hypothetical, and often not true, let alone certainly or probably true». ²² It appears that ordinary concepts, together with existential judgements, can be true; something that scientific theories cannot be. This distinction was not explicitly made by Popper, since he would never accept the notion of absolute truth. But it looks as if Popper gives absolute validity to the common sense knowledge of singular events (let's take, for instance, his example of the rain), while it would not be valid for theoretical explanations of such facts, which have a universal character. That is, when

²⁰ K. R. Popper, «Replies to my Critics», cit., p. 1016.

²¹ IDEM, Quantum Theory and the Schism of Physics, Hutchinson, London 1982, p. 81.

²² IDEM, Unended Quest, cit., p. 110.

common sense gives us specific information of singular events, it can be trusted; but we should be suspicious when it gives us universal theories, and the whole process of falsification should be put into action.

There seems to be, however, a contradiction with my previous analysis of Popper's realism and his rejection of empiricism and of the absolute value of sense data. When talking about observation, he always stressed the fact that every single observation is carried out in a particular theoretical framework. Perhaps his most famous example is a pedagogical experiment which he did by asking his students to observe. After a while he would feel that his students were getting nervous because they had not been told *what* to observe, which was proof that all observation was theory laden. ²³ This example was used by Popper to stress that even observations are conjectural and, thus, there is no definitive knowledge – positive or negative – about reality. The only thing we can achieve is the likeliness or the strength of a particular theory that has successfully undergone a number of falsification attempts. Popper tried to make this explicit introducing the concept of verisimilitude, but after the criticism of such a concept by Miller and others, he had to give it up and return to the difficult equilibrium between truth and falsificationism.

To try and find a way out of this tension, Popper embraced Tarski's definition of truth: 'the snow is white' is true if and only if the snow is white. According to Popper such correspondence theory of truth «is a realistic theory; that is to say, it makes the distinction, which is a realistic distinction, between a theory and the facts which the theory describes; and it makes it possible to say that a theory is true, or false, or that it corresponds to the facts, thus relating the theory to the facts. It allows us to speak of a reality different from the theory. This is the main thing; it is the main point for the realist. The realist wants to have both a theory and the reality of the facts (don't call it 'reality' if you don't like it, just call it 'the facts') which are different from his theory about these facts, and which he can somehow or other compare with the facts, in order to find out whether or not it corresponds to them. Of course, the comparison is always extremely difficult». 24 In other words, Popper acknowledges the existence of a truth, which is an adequacy between a statement and the reality, but there is no criterion of truth, no way to know if a particular statement is true.

The question in this section is whether Popper can be considered an epistemological realist. At times it looks that, in order to emphasise his falsificationist theory of knowledge, he would reject truth and, with it, epistemological realism. But looking at his defence of common sense and at some particular examples of what he considers to be acceptable ordinary knowledge, it looks as if Popper is taking for granted the truth of existential statements. The lack

²³ See K. R. Popper, *Conjectures and Refutations*, Routledge & Kegan Paul, London 1972, p. 46 and 128.

²⁴ Idem, *Objective Knowledge*, cit., p. 317.

of distinction between theories and concepts, between induction and abstraction, seems to undermine his epistemological realism.

4. Human realism

So far we have seen Popper arguing for realism in metaphysics, and a quite problematic or perhaps inconsistent realism in epistemology. But, as suggested above, it is interesting to look at Popper's ethics to see that realism is also present. It is usually said that a natural consequence of Popperian epistemology is what he calls the 'rational attitude', so graphically condensed in these lines of The Open Society: «I may be wrong and you may be right, and by an effort, we may get nearer to the truth». 25 However, one may think, following Popper's autobiography, that the rational 'attitude' may have come first, and constituted an ethical basis for his epistemological falsificationism. This thesis, which partly clashes with the one expressed by M. Hacohen in his very well documented biography,²⁶ can help us to understand the topic of realism. The ethical commitments may or may have not been chronologically earlier than his epistemology (although I think that ethical values are at the origin of many philosophical proposals); but there is certainly a link between ethics, metaphysics and epistemology, at least as far as realism is concerned, and this may help us to understand better what realism meant to Popper.

Popper thought that philosophy was as important as science, despite the many differences between them. The existence of urgent and serious philosophical problems and the need to discuss them critically is, in his opinion, the only defence of what may be called professional or academic philosophy. The philosopher has a great responsibility towards himself and towards society. The problems that he or she is dealing with are important because they are concerned with the most important questions that people ask about themselves and the world they live in.

It is because of these strong social implications that realism, in the new sense that I am talking about, is important. In 1969 Popper asked: «Why is the problem of knowledge important? Because it raises certain issues which I will here call the 'big issues'. It bears on the big issue of rationality, on such big issues as the growth of scientific knowledge and its role in our civilisation, on the big issues of the moral responsibility of the scientists…» .²⁷ The philosopher has to be seriously committed to the real problems of the real world, trying to give realist solutions, in the sense of sensible solutions to such problems, considering that some theories may have catastrophic consequences when they are applied. Trying to wrap up all his arguments for realism, Popper wrote

²⁵ IDEM, The Open Society and its Enemies, 11, Routledge, London 1962, p. 225.

²⁶ M. HACOHEN, Karl Popper – The formative years, 1902-1945. Politics and Philosophy in Interwar Vienna, Cambridge University Press, Cambridge 2000.

²⁷ K. R. Popper, Knowledge and the Body-Mind Problem, Routledge, London 1994, p. 4.

in 1982: «I have argued in favour of realism in various places. My arguments are partly rational, partly *ad hominem*, and partly even ethical. It seems to me that the attack on realism, although intellectually interesting and important, is quite unacceptable, especially after two World Wars and the real suffering (...) that was wantonly produced by them; and that any argument against realism (...) ought to be silenced in memory by the reality of the events of Hiroshima and Nagasaki». ²⁸

He talked in a more radical way in 1972, about the relationships between philosophy and realism. «It is very necessary these days to apologise for being concerned with philosophy in any form whatever (...) [for] most professional philosophers seem to have lost touch with reality (...). In my opinion, the greatest scandal of philosophy is that, while all around us the world of nature perishes – and not the world of nature alone – philosophers continue to talk, sometimes cleverly and sometimes not, about the question of whether this world exists. They get involved in scholasticism, in linguistic puzzles (...). Under these circumstances there is a need to apologise for being a philosopher, and more particularly for restating (as I intend to do) (...) what should be a triviality, such as *realism*, the thesis of the reality of the world. What is my excuse? (...) The impact of our philosophies upon our actions and our lives is often devastating. This makes it necessary to try to improve our philosophies by criticism». ²⁹

So, the role of realism in philosophy is twofold: on the one hand, the philosopher has to be seriously committed to addressing the real problems affecting mankind; on the other hand, the possible solutions have to be realistic, their possible implications must be sensible. For Popper, the critical method of conjectures and refutations is extended out of science to all philosophy. Rational discussion may be regarded as the best way that men have to adapt to their environment. In this evolutionary metaphor, there is one main difference between the adaptation of animals and the adaptation of our theories. In the first, the animals die in their attempts to adapt to their environment. In human knowledge, «we can let our objective theories die in our stead. (...) A thousand theories may be killed any day without anybody being worse off». ³⁰

To finish with this last sense of realism, I think it is important to recall what Popper called the 'myth of the framework'; that is, the idea that when there is not a common conceptual context, rational discussion is impossible. Popper was here arguing directly against the psychological and sociological notion of paradigm. In the *Structure of Scientific Revolutions*, ³¹ Thomas Kuhn argued that practitioners of two different paradigms cannot communicate with

²⁸ IDEM, Quantum Theory, cit., p. 2. ²⁹ IDEM, Objective Knowledge, cit., pp. 32-33.

³⁰ IDEM, Knowledge and the Body-Mind Problem, cit., р. 12.

³¹ T. Kuhn, The Structure of Scientific Revolutions, University of Chicago Press, Chicago 1962.

each other, since they share neither a common conceptual framework nor a common set of epistemic or practical values. Obviously, if such an idea were correct and transported to the political arena, critical rationalism would be completely invalid. The very possibility of discussion between people holding opposite ideas would be radically undermined, since there would be an absolute absence of common ground on which to build dialogue. Such relativistic position would justify dictatorial attitudes and governments, since the only solution when facing opposed postures would be the contempt or the eradication of other ideas and, in extreme cases, the elimination of those who hold them. Realism is here especially important in Popper's philosophy, because reality will constitute the shared 'framework'. Theories and ideas may conflict, and may even be wrong, but reality is always there, as the ultimate thing that we are interested in knowing, as the cornerstone to enable dialogue and respect for others.

5. CONCLUSION

In this paper, I have tried to follow Popper's arguments on realism, dividing the issue into three different areas: metaphysics, epistemology and ethics. With many quotations from his works, I have shown that there can be no doubt that Popper wanted to be a realist. He was both a metaphysical realist and an ethical realist. There is no problem with these two meanings of realism for they are prior to his epistemology. But it is doubtful whether his theory of knowledge allows him to be an epistemological realist. We have seen that Popper tried to reject a hard epistemological realism, avoiding the notion of truth, while at the same time acknowledging the value of common sense direct knowledge of entities. If he had been totally consistent with his epistemology Popper should have also dismissed ordinary knowledge; but in that case he could not have defended any sort of realism. One could say that Popper is certainly a convinced realist, not as a consequence of his philosophy of knowledge but in spite of it.