HOW DOES SCIENTIFIC REALISM MANAGE AS A METATHEORY OF MANAGEMENT RESEARCH ?

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This short note does not strive for an answer to the question above. Rather, my aim is to examine the question itself - its nature and aspects - and types of considerations that are relevant or necessary when trying to give an answer. In this fashion I wish to clear the way for a more ambitious discussion on this important and difficult problem of current interest. My strategy consists of making some - fruitful, I hope - dissections around the relationship between scientific realism (SR) and management research (MR) so as to arrive at a sort of classification of various types of potential arguments in the discussion.

First of all, the concept of scientific realism must be clarified a bit. Recent discussion has shown that there is not a single formulation of scientific realism, but many. These formulations usually have some overlapping elements, but even these can be - and are - interpreted in various ways. This is why the traditional frontiers of realism have become more or less obscure. It would not serve the purpose of my note - though at a later stage it might be relevant - to go to this entangled area of current philosophy of science. Instead, I will make use of a very general and simplified idea of scientific realism, characterized by the following views.

(1) The world is out there, independently of our (researchers') mind but knowable to our mind.

- (2) The essential nature of what there really is in the world is mostly inaccessible to our everyday experience and commonsensical thinking.
- (3) This is why we have to construct scientific theories to find out what there is and what is its essential nature.
- (4) The theoretical terms in our theories are to be understood as or to be made as putatively referring expressions and theories themselves as at least approximately true representations of the real world. Theories thus conceived cannot be reduced to some observational language nor be taken as mere tools of inference.

To these mostly epistemological and semantic theses it is possible to add - as is done by Richard Whitley - a specific metaphysics of causation, à la Rom Harré and Roy Bhaskar, for instance. According to it,

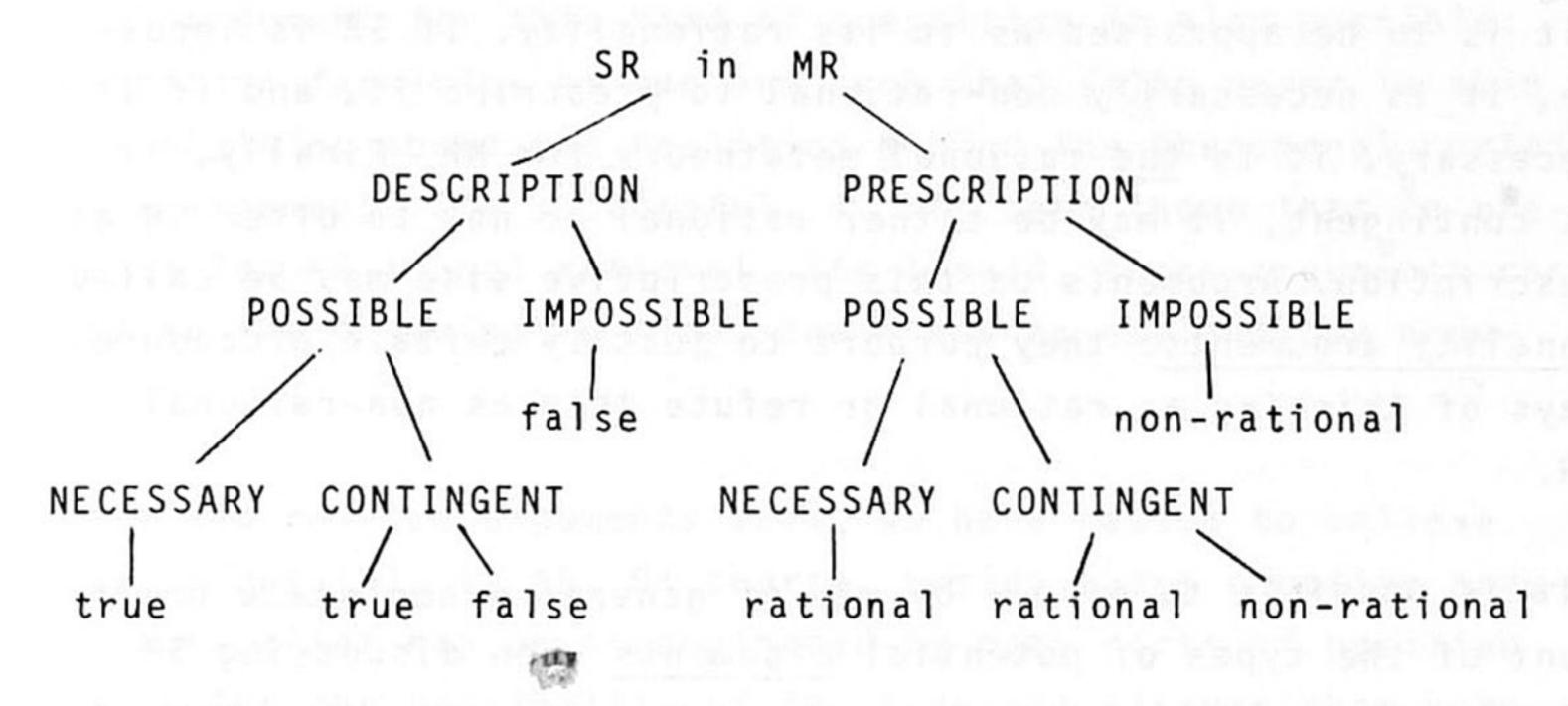
(5) observable phenomena should be explained as causal manifestations of some underlying generative powers or mechanisms, which are grounded on the essential nature of real things. It is the task of scientific theorizing to reveal this causal basis of the world.

These canons of realism may function in the role of explicit metatheory of existing and hoped-for theories in a scientific field. In this case they represent the conscious interpretations or claims by researchers of the nature of actually existing theories or research practices, or, alternatively, of good but possibly not yet existing theories or research practices. Given that these interpretations (or programmatic declarations) may be false (or non-rational), we need also the idea of another, real and possibly non-conscious role for the theses of realism: existing theories or research practices may (or may not) accord to the realist canons, whether this is known or not; or prescriptions for future research may (or may not) lead to theories fulfilling the requirements of realism, whether or not they were consciously meant to. Let us call this latter the role of implicit metatheory for (1)-(5).

As regards the concept of management research, the only specification I want to make is the following: we may consider MR either as a whole or each of its branches, schools or paradigms separately,

and establish our conception of the methodological situation - with respect to SR - in them.

Now I am ready to do some dissection work and construct a classificatory scheme out of some simple elements. The scheme can be presented as follows:



Some clarifications are in order. The first distinction is between description and prescription. SR can be understood as a descriptive thesis as to what kind of theories there are actually held in MR and how research is done in MR - on the level of implicit metatheory - or how these are interpreted by the researchers - on the level of explicit metatheory. Alternatively, SR may be a prescription as to how researchers in MR should proceed: they should try to construe theories that truly reveal the unobservable causal determinants of phenomena in their field of research (implicit metatheory) and they should declare this as their conscious aim (explicit metatheory). The second distinction is concerned with the possibility or impossibility of SR in MR. In the case SR is taken to be possible in MR, we can make the final distinction: SR may be either necessary or non-necessary, that is, contingent in MR.

If we take SR as a <u>description</u> of the actual situation in MR, it is to be appraised as to its <u>truth or falsity</u>. It should be clear that if SR is impossible, it is bound to be false as a description, and if it is necessary, it is bound to be true. To maintain the contrary is to misunderstand the situation. If SR in MR is contingent, it may be either true or false as a description. Some of

the most important arguments put forth on the descriptive side are <u>explanatory arguments</u>: they explain why SR is either true or false as a description of the actual situation of MR or some of its segments.

If, on the other hand, we take SR as a <u>prescription</u> or norm for MR, it is to be appraised as to its rationality. If SR is impossible, it is necessarily non-rational to prescribe it, and if it is necessary, it is <u>the</u> rational metatheory for MR. Finally, if it is contingent, it may be either rational or not to offer SR as a prescription. Arguments on this prescriptive side may be called <u>rationality arguments</u>: they purport to justify certain procedures or ways of thinking as rational or refute them as non-rational in MR.

Now it is possible to give - by way of general examples- a brief account of the types of potential <u>arguments</u> when discussing SR in MR.

Let us begin with arguments in favor of impossibility of SR in MR. First of all, it seems clear that it is futile to argue on the possibility or impossibility of SR as explicit metatheory: it is always possible to give realist interpretations of MR whether or not they correspond to the real situation, the implicit metatheory. So I will restrict myself to SR as an implicit metatheory. Secondly, it seems that the grounds on the prescriptive side must be more fundamental than at least some of those on the descriptive side. On the descriptive side the potential grounds are more numerous, including those of the prescriptive side as a subset. Of what kind are they?

Here is a potential - typically philosophical - argument on the descriptive side: SR does not exist in the school X of MR because it is impossible, and it is impossible because the epistemic aim in X consists of establishing observational correlations, and all the metaphysical and methodological presuppositions in X are accorded with that aim. But the epistemic aim and the related presuppositions are something that can be removed if the presciptions of SR are adopted.

This is why on the <u>prescriptive side</u> the argument for the impossibility of SR must be stronger. It might be something like this: the object of MR and/or the relation of MR to its object is such that it is not possible to construct theoretical representations of the object as such, as it really is. This is a factual argument that may be formulated by MR or some other social science. A philosophical argument for this kind of scepticism is also possible: the cognitive faculties of man are such that (s)he never is able to know anything about the realities behind the phenomenal curtain. If these arguments are successful, it has been shown that to prescribe SR for MR is not rational. (As I said, these arguments can be used on the descriptive side, too - now as explanatory arguments.)

If these and related arguments fail, we have reason to believe that SR is <u>possible</u> in MR. Of course, beside these negative arguments, our belief may be strengthened by many sorts of positive arguments for the possibility of SR. I do not discuss them here.

The case of <u>necessity</u> is most interesting. Again, it seems that at least on the descriptive side it cannot be necessary to adopt the jargon of realism on the level of explicit metatheory; on the prescriptive side the requirements of rationality might make it necessary to have a realist interpretation of what should be going on in MR on the level of implicit metatheory if the latter by necessity accords with SR.

But what is it that might necessitate SR as an implicit metatheory of MR? On the descriptive side, I cannot imagine any plausible arguments. On the prescriptive side, let me formulate the following two as not so convincing candidates. First, given that certain practical objectives have been set forth to be attained with the aid of MR, MR cannot but follow the canons of SR. (I think this is the type of argument we find in Whitley's paper.)

Second, if MR wants to fulfill the standards of scientificity, it must bow to the requirements of SR. (There is a flavour of this, too, in Whitley.) Neither of these arguments seem to state an absolute factual necessity. The first is an expression of conditional factual necessity, the second of conceptual necessity

(it is implied in the argument that the standards of scientificity are those of SR). There may be other candidates for arguments in favor of necessity, but they haven't occurred to me. If any of them succeed, the adoption of SR is rational simply because necessary.

If these and other related arguments fail, it is justified to believe in the contingency of SR in MR. In this case SR is neither impossible nor necessary. It seems that in the arguments on the prescriptive side the levels of explicit and implicit metatheory are intertwined: to recommend SR as an interpretation is to recommend it as a foundation of real research practice and vice versa. The arguments may be of various kinds, socio-pragmatic, for instance: "knowledge gainable by doing research according to the norms of realism is useless for the purposes of practical life", or, more moderately, "that kind of knowledge is likely to be too costly compared with its benefits". Arguments favoring realism may move on the same level but in the opposite direction. Arguments can be purely epistemological, too. Those defending SR might claim that application of SR will advance our knowledge in the sense of getting more explanatory power or deeper understanding, and this is what is needed in MR. Their opponents might put forth the suspicion that the kind of allegedly "deeper" knowledge groped for by the realist is bound to be so uncertain as not being reasonable to try to attain.

On the <u>descriptive side</u>, on the other hand, we have the task of explaining why SR, while being neither impossible nor necessary, is or is not, in fact, followed as an implicit metatheory or accepted as an explicit metatheory. As to the former, we might argue that (at present or so far) MR is so finalized (by way of financing, organizing etc.) that researchers have no chances to pose such fundamental questions that are presupposed by the realist program. As to the explicit metatheory, we might tell a story how there was a struggle over the philosophical hegemony in MR and how positivists won the leading souls on their side. Of course, various other hypothetical arguments are easy to construct.

Now that I have gone through the strategic points where arguments

must be posited and some of the types of arguments with the aid of general examples, I can turn to Whitley's paper. What is his position? What status does he give to realism and what are his arguments and where in my scheme do they appear? He treats SR both as a description and as a prescription. As a description he regards it as false, in both of its roles as an explicit and an implicit metatheory. The relationship between these two roles remains obscure, and so does the correct address of the sociological reasons he provides. These two vaguenesses seem to have something to do with the problem of a proper relationship between the descriptive and prescriptive sides. I think that when Whitley tries to show that there are no epistemological barriers to SR in MR, the arguments go on both sides. His conclusion is that SR is epistemologically possible in MR. He also argues that it is epistemologically mandatory if certain kind of managerial relevance is to be achieved. So to Whitley SR in MR is epistemologically and practically rational because of being conditionally and factually necessary. But what role do his sociological reasons have? Do they count as arguments for a kind of social impossibility of SR in MR - and is SR here to be understood as a description of the actual past of MR or as a prescription for its open future? And, finally, what is the relationship between implicit and explicit metatheory on the prescriptive side? Is it sufficient to do some enlightenment work to win the souls of researchers away from the empiricist camp? What else is needed to push MR onto the rails of SR as an implicit metatheory?

Those were my major points with respect to Whitley's paper. Finally, I would like to make a few critical comments on details. On pages 247-8 Whitley makes a strong and questionable presupposition that SR is in fact generally accepted as a prescription: "As long as it is agreed that underlying causal mechanisms exist which led to the present state of affairs..." It seems that his line of argumentation needs this implausible presupposition.

In the next paragraph he talks about "common criteria of theory assessment". Where do they come from in the midst of all other kinds of disagreements? Does Whitley need them for his conclusions?

I myself regard it possible to have some kind of methodological

relativity and incommensurability without compromizing the program of realism in any serious way.

Finally, here and there Whitley seems to replace the terminology of closed and open systems for the distinction between, say, inherent nature and appearance. But I am afraid it is possible to combine that kind of systems talk with empiricist epistemology. I suppose this is something that Whitley wants to avoid.

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