

English Summary of:

"Versuche, die Welt zurückzugewinnen. Die Kontroverse über die 'Handlungsfähigkeit der Dinge' in den Science and Technology Studies",

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In Science Wars, the scientist case against Science and Technology Studies is guided by the charge of an idealism bound to frustrate any endeavour to say something that matters about the real world, thereby rendering any social account of scientific practice irrelevant, too. The STS field's defence, however, is far from unanimous, as can be told from the controversy on how to bring the real world back into the STS practice (assuming that it ever was in danger of being lost) which developed between Bruno Latour and David Bloor. The aim of this paper is to critically examine this controversy, to see where the charge of idealism against STS goes.

The main concern of this controversy within were the implications of Actor-Network Theory (ANT), as advocated by Latour, whose criticism of classical Sociology of Scientific Knowledge (SSK), represented by Bloor, shall be critically assessed along three main arguments of ANT:

1. ANT's criticism of social constructivism, namely the enterprise to explain scientific practice and knowledge in social terms;
2. its rejection of idealism, said to be committed to reductionism of any non-human and non-social constituent parts of science;
3. abandoning SSK's scientism, ANT thereby refusing to employ scientific methods when examining science;

ad 1. Society and Nature: One of the main tenets of SSK is the principle of symmetry: that *all* knowledge, including the most successful and productive scientific claims, is a product of social processes. SSK makes the resource of knowledge - namely the very set of implicitly shared beliefs that in practice cannot be questioned -- the topic of its investigation. Now, ANT suspects SSK to be entangled in a dualism between natural and social facts which is so typically modern that no new light is to be shed on scientific practice by just approaching it from the other side -- namely by explaining natural sciences in social terms. SSK shares the subject-object dichotomy which is science's very principle. ANT claims that the difference between nature and society, between object and subject has to be established and perpetuated in the first place, thereby extending SSK's principle of symmetry. However, firstly, it is unclear whether ANT

supposes that distinction to be continuously produced and reproduced in practice, or whether it imagines there to have been a mystical state of unity between speaking subject and denoted object, between society and nature to be severed in the modern scientific world-view. The former would imply that we still are talking about *social* practice, hence ANT to be caught in a vicious circle of explanation; the latter would imply utter obscurantism. Secondly ANT remains indifferent regarding the question whether the nature of its enterprise is epistemical or ontological. This indifference is epitomised by Latour's peculiar refusal to distinguish between facts and statements about facts, where there is no way of saying where the world begins and representation ends. What at first sight looks like an odd blunder in his argumentation, in fact is due to ANT's systematic blending of two quite different dichotomies: between subjects and objects of knowledge on one hand, and between nature and society on the other. While one could say that the latter distinction may be subject to an analysis of the practices in which it is produced, the former distinction is something completely different, being the very pre-condition of having representations of the world, and thereby knowledge at all.

ad 2. Idealism: SSK subscribes to an idealism of the epistemic kind - namely the anti-realist theory of science which implies that (i) theories underdetermine facts, that (ii) theories are accepted and refuted in wholesale and non-cumulative fashion, that (iii) all knowledge is conventional, and (iv) that truth is not a matter of correspondence. At the same time, SSK is committed to an ontological realism - consisting in the assumption that whatever style of reasoning one might engage in, it still relates to a world of things making an impact on this very reasoning. On this matter, SSK is thoroughly scientific, rather than in any way idealist. Yet SK discerns between physical reality and a realm of realities which are of social nature: language, rules, institutions, to be assessed in their own right. ANT's criticism is that this kind of realism still keeps the "things themselves" in check, subduing them to the knowing subject's will. ANT's alternative proposal is to ascribe agency to all things involved in scientific practice. They behave strategically, they co-operate or refuse to co-operate, and they have the power to support or topple entire scientific networks. However, in performing that ascription, ANT employs a rather strange notion of agency, equating it not with behaviour based on conscious decisions, but rather with any behaviour affecting a practice. Since it is concerned rather with the question of how things affect the theories and practices which refer to them than with what they actually *do*, ANT's notion of agency has more to do with relations of meaning than with relations of intending. A theoretical account matching this purpose is carried out systematically in naturalised semantics, which employs a concept of meaning and intention not based on mental states of intending, but on a functional analysis of different kinds of biological and technical systems. These systems establish patterns of indication in the course of evolutionary development, conscious purposes and conventions of meaning being a secondary phenomenon, not a necessary condition of intentionality. Even if this model withstands the criticism of not delivering a satisfactory explanation of how *rules* of meaning are established, ANT, when subscribing to a model of this kind and saving a peculiar kind of realism, will find itself firmly rooted in the naturalist camp. This movement will make ANT contradict one of its main premises -- namely not to accept the distinction between the natural and the social world. One should ask what drives ANT to adopting such contradictory, even self-refuting positions.

ad 3. Method: While SSK is a scientific enterprise critical towards science itself, yet depending on scientific methods in order to come terms with its subject and emphasising the necessity of sound theoretical foundations, ANT's strategy is utterly anti-scientific in content and style. Hence one should not easily dismiss Latour's very rhetorical and imaginative style as part of a failed attempt at doing scientific theory, but as part of a genuinely aesthetic approach to science. Methodologically, this means that ANT engages in a knowledge practice -- emphasis on "practice" -- which opens up science to an account that is common for arts, literature etc., thus putting science on the same epistemic level as the latter, denying it any privileged status. But there's another, more subtle aspect of ANT's strategy: ANT's style of reasoning might exemplify the very way in which meaning change is acquired in a language community, namely not by way of inference, definition, and rational understanding, but by changing language uses in metaphorical, sometimes partisan ways. These partisan usages -- if they manage to stick to people's minds and to match their life-world's conditions --, by virtue of appearing uncommon or even odd, stir attention among participants of a discourse taking up that provocation, reproducing them by arguing about them, eventually getting accustomed to them, thereby finally establishing them as new literal meanings. The ascriptions of agency in question in ANT -- however unscientific they are -- very well may be part of such a strategy, delivering means to cope with a changing life-world where a variety of non-human actors produced by modern science and technology may appear to seek participation.