

REASONS AND CAUSES OF BELIEFS

I do not speak about Belief but only of beliefs of the common variety. My talk takes me across a very wide and controversial field. It cannot, therefore, be more than a brief statement on the most important points involved.¹ My theses will sound rather apodictical, since I leave out most of the arguments. I shall discuss the following questions: Do beliefs have reasons? Do they have causes? Are rational explanations of beliefs compatible with causal ones? I shall close with some remarks on the hypothesis of a causal determination of mental events.

1. DO BELIEFS HAVE REASONS?

For an answer we first have to agree on an understanding of beliefs and reasons.

1.1 What are beliefs?

Two preliminary remarks: We first have to distinguish between the state of affairs that somebody (at a certain time) believes that a certain proposition holds and this proposition believed by him. In what follows we are concerned with beliefs in the first sense, with beliefs as states of believing, not with what is believed. Secondly, "belief" is a common label for convictions, surmises, suppositions, expectations, etc. We say that a person X believes that a state of affairs, p, obtains only if p has a higher (subjective) probability for X than non-p, but different concepts of believing demand different differences between these two probabilities. For the sake of simplicity I shall always think of probability one for p, i.e. I shall only speak of convictions. Some people presuppose that probability one is almost never conferred to non-tautological propositions, and that certainly has its advantages in many contexts. But almost nothing I shall say depends on convictions having exactly probability one. Only at one point I shall use standard epistemic logic for beliefs which results from probability theory by restriction to probability one. Otherwise taking beliefs as convictions serves only to avoid cumbersome distinctions.

Now, for our topic the essential question is this: Is assuming an activity, are we free to assume one thing or another, or is it a process, something that just

happens to us? In other words: Do beliefs arise from choices or are they just passively conceived? Impressions are passive. By an impression I do not mean a sensation, but what I have when it appears to me that something is the case. I cannot determine, whether I shall have or go on having a certain impression. My impressions are something given for me. I can influence them only indirectly by closing my eyes, for instance, or by looking somewhere else. Judgments, on the other hand, are acts. Not only uttering a judgment is an act, but judgments are something we accept or reject or refrain from making, that we form, arrive at, suspend or revise. Beliefs seem to be located somewhere between impressions and judgments. On the one hand I also form or modify my beliefs, on the other hand many of them just obtrude themselves upon me; I cannot believe anything I want to. Often our beliefs follow our impressions: If it seems to me, as if my tobacco pouch is lying on the table, that's what I believe, normally. The Stoics said that the step from an impression, that something is the case, to the judgment, that it is indeed the case, is an act of assent which they termed *synkatathesis* (*adsensio*), a decision to accept the impression as correct. Now in judgments we express our beliefs. Therefore we cannot say that in our judgments we are free, but not in our beliefs. Beliefs, then, are neither impressions nor determined by them, but are also formed by an act of assent, of *synkatathesis*. We often accept that things are as they appear to us, but not always. The oar seems to bend where it dips into the water, but we still believe it to be straight. Knowledge, furthermore, is true and well-founded belief. Coming to know, doubtlessly, is an activity – we have to observe, argue or acquire informations. This activity does not concern truth, but only arriving at the belief. Of course the activity in forming beliefs often is not very pronounced, as for instance in the case of simple observations. But it becomes apparent when we have to weigh the evidences or have to sort out a lot of informations. The belief, for instance, that there are only four basic forces in physics certainly does not just obtrude itself upon us.

There are some objections against understanding beliefs as products of an activity. I shall try to respond to some of them briefly. We certainly cannot believe what we want to believe. I cannot, for instance, just convince myself that I am Chancellor Kohl. But I cannot run as quickly as I want to, either, or along the ceiling, and yet running is clearly an activity. That our capacity to do something is restricted is no argument that it is not an activity, that in proceeding with it we are not free. In our judgments we doubtlessly have a certain latitude, and therefore also in our beliefs. What we have to believe is generally what we have to believe if we want to observe criteria of rationality or hold on to fundamental convictions.

For a piece of behavior to be a free action of the agent it is necessary that he could have done otherwise, but it is not necessary that it be premeditated. Assuming an act of assent for beliefs does not then imply that coming to believe something always is preceded by considerations. Sometimes it is, but often not.

It might be said, furthermore, that the assumption of acts of synkatathesis is superfluous, at least if we do not talk about convictions, but about probabilities. Just as convictions probability assignments have to be coherent, however, and coherence is not something which results from the impressions themselves; it has to be construed and there are mostly different ways to do that.

Lastly it is not a consequence of the Stoic thesis that we can always clearly distinguish between impressions and beliefs. Since impressions are not just sensations but appearances about what is the case, they are not independent of our beliefs, but theory-laden and interpreted in the light of preceding assumptions. Some optical illusions, for instance, vanish as soon as we recognize them as such. The immediately given as the raw material of our observations, still free from hypothetical elements and interpretations, does not exist. The difference between impressions and assumptions is often only gradual, but nevertheless relevant, just as the judge's request that the witness restrict himself to facts and leave aside his interpretations of them.

In what follows, I shall thus proceed from the view that arriving at beliefs is an activity.

1.2 Reasons for beliefs

Reasons are what we normally refer to when we explain actions. A rational explanation of an action of Joe gives an answer to the question why he acted the way he did. It states aims, interests or, generally, preferences of Joe and beliefs or expectations he had, and shows that, in the light of these beliefs, the action was indicated for attaining these ends, or, put more abstractly, that it was rational in the sense of decision theory. The presupposition is that Joe, in the situation referred to, had alternatives, so that he could have done otherwise. Why he didn't get up from a chair he was chained to, is not a question that admits of an answer by rational explanation.

A rational explanation of a belief held by Joe is an answer to the question, why he holds it. Why does he believe that it will rain soon? Because he has seen dark clouds approaching. Why does he believe that it was Mr. Smith that killed Mrs. Brown? Because he saw him entering her flat with a knife, or

because someone told him that the fingerprints on the weapon were Mr. Smith's. As reasons for beliefs we thus give observations, informations or other beliefs. In general we might say: Reasons for beliefs are other beliefs, that support them. Impressions are grounds for beliefs only if we take them to be reliable, i.e. only mediately.

If the adoption of beliefs is to be amenable to rational explanation, there have to be relevant interests and preferences, too. So what constitutes the utility of a belief for somebody? Karl Popper has discussed this question for theories and has pointed out that we are interested in true, informative and testable theories – testability is a prerequisite for ascertaining empirical truth –, as well as in simple, comprehensive and unified descriptions of the phenomena. We might simply say that we are interested in true beliefs, that belief is truth-oriented. Since truth is not something we can grasp directly, independently of our assumptions, the only way to reliable beliefs is to proportion them to the evidence. The bias for grounded convictions is common to us all, and therefore preferences for beliefs have to be mentioned only if they are not just rational ones. If I trust somebody, for instance, this may explain why I do not believe him guilty although there are good reasons to do so, reasons that others accept as conclusive. I may still believe in his innocence, not because I have assigned a higher a priori probability to it than they did, but because of personal commitments or emotional ties.

For beliefs to have reasons and be amenable to rational explanation they have to arise from decisions, then. Reasons, after all, are something the agent has for doing as he did, something that guides his decision. Inversely, if beliefs are adopted by acts of assent, they are in principle amenable to rational explanations; there is such an explanation if the agent had good reasons to do as he did.

Finally I want to emphasize, that a rational explanation of an act only shows it to be rational in the subjective sense, in the light of the preferences and expectations of the agent himself, but not in an objective sense. What he does may be subjectively rational but in fact not suited to his interests, or his aims may be devoid of any real value. In the same way a person's belief may be subjectively rational as seen against the background of his previous assumptions, but quite irrational according to scientific standards.

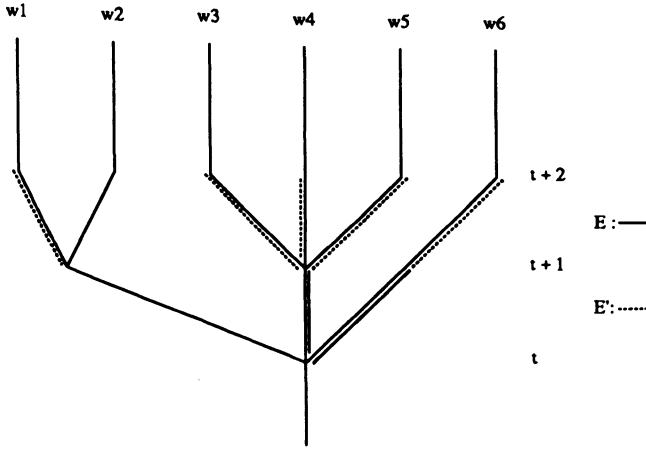
2. DO BELIEFS HAVE CAUSES?

2.1 What are causes?

The answer to the question whether beliefs have causes depends on the concept of causation employed. There are essentially three theories of causation that all take their departure from Hume: Regularity theory, probability theory of causation (P. Suppes) and counterfactual analyses (D. Lewis), and of the latter two there are objective and subjective versions – in the former case objective and subjective probabilities can be employed, and in the last one objective or epistemic interpretations of conditionals. These theories may confer different truth values upon singular causal statements. They all have their shortcomings. This may be taken as an indication that our talk of causes and effects in everyday life and in science does not follow one general criterion, that there is not just one concept of causation but several ones exhibiting only a certain family resemblance.

To get an answer to our question we have to commit ourselves to one concept, however, and I shall choose the one I have developed in my paper “Causation” (1993a). There I explicate the following notion of causation: An event E causes another event E', if the occurrence of E' was not guaranteed until E occurred. Before E actually happened it was, then, still possible that E' would not occur, but from E's beginning it was necessary that E' would occur if E would. The necessity referred to is neither a logical nor a nomological necessity but a time-dependent one. In a world it is necessary at a time t, that the event E' occurs, if E' occurs, no matter what turn the history of the world will take after t.

The frame of the analysis of this causal relation are branching worlds that form treelike universes. A typical case of causation is shown by the following section of such a tree:



E occurs in the interval $[t, t+1]$ in w3 to w6, E' occurs in these worlds as well as in w1 in the interval $[t+1, t+2]$. In w4 E causes E', since in t it is still possible that E' will not occur (see w2), but in t it is necessary that E' will occur if E does.

I think that this concept of causation corresponds to an important and frequently employed notion of cause, but it should be emphasized that there are some points in which it radically departs from other conceptions. In deterministic, unbranching worlds there are no causes, for instance, effects are never causes, since causes are only events that are not determined (i.e. necessary) from their beginning, while effects are always determined from the start. Hence there are no causal chains. This concept is related to that proposed by Georg Henrik v. Wright in "Causality and Determinism" (1974). Since I employ this notion of causation in what follows, it should be kept in mind, that my assertions depend on its specific properties. Causes, according to this notion, are typically chance events or actions, or events that contain them.

2.2 Do beliefs have causes?

A positive answer would have to come from the brain sciences, first of all, but as far as I see – I certainly don't see very far in these matters – they have little to offer in this line yet. So we have to look for everyday examples and argue on the phenomenological level. What we are interested in, are, first of all, beliefs that cannot be rationally explained; the compatibility of rational and causal explanations will be our next topic.

Now I already said that a rational explanation of beliefs does not imply that they be rational in an objective sense. Unreasoned or unreasonable beliefs are non-starters in the present context, therefore. What remains are cases like these:

1) A child is afraid of dogs. Its fear will be bound up with the belief that dogs are snappish and unpredictable. This conviction may have no reasons: The child has never been bitten by a dog, nor has it seen a dog bite someone else. Its parents assure it that dogs are quite harmless. There is a psychological explanation of this phenomenon as a projection of the child's fear of its father on animals. That sounds rather absurd, but still one would say in this case that the conviction cannot be explained rationally, but must have psychological causes.

2) A schizophrenic believes himself to be persecuted by dark powers. He can give no specific reasons for his conviction, and we should therefore say that it is an effect of his disease.

These are clearly border-line cases of beliefs. We are inclined not to call them beliefs but delusions. I don't want to deny that there are beliefs which can only be explained causally – the distinction between beliefs and delusions is terminologically not very well defined – but at least they seem to be atypical cases.

3. ARE RATIONAL EXPLANATIONS OF BELIEFS COMPATIBLE WITH CAUSAL ONES?

But cannot the same belief be explained rationally as well as causally? According to my notion of causation the answer must be in the negative: A rational explanation of a piece of behavior is only possible if the agent could have done otherwise. Only if he had alternatives we can attribute reasons to him for doing what he did. Whatever his interests or beliefs are, they would have been ineffective had he had no choice. If the action arose from a decision, however, it was not determined from its beginning and therefore it cannot be an effect of a precedent cause. So what can be explained rationally cannot also be explained causally. Inversely, effects are no possible explananda of rational explanations because they are not actions. What can be explained causally, then, cannot be explained rationally.

But cannot reasons themselves be causes? Can we not say: The fact that somebody has certain interests and convictions is the cause of his doing this or that? According to the concept of causation I am using here that is impossible

even if we ignore the fact that interests and beliefs are not events. Even from the point of regularity theory we cannot accept reasons as causes. For causes are events at the beginning of which we can say: If they occur the effect will also occur. We cannot maintain, however, that if somebody has certain interests and expectations he will act in a certain way. We just don't always act rationally. If a sudden squall blows John's hat off we can explain his running after it by his desire not to lose it. But at the moment the hat is blown off his head we cannot say that John, since he does not want to lose it, will run after his hat he may well refrain from doing so since he does not want to make himself conspicuous. Causal explanations can be turned into predictions, rational ones not. Neither are causes reasons. A reason for adopting a belief is something that speaks for its truth. A cause for a belief, on the other hand, is neutral to its truth. In fact, if we recognize a belief as an effect of psychological or neurological causes that would not only be no reason to think it correct, but rather make us doubt it. Moreover, I myself can recognize a cause of a belief I presently hold only if I see it also as a reason for that belief: If I believe that an event E causes me to believe that A, I believe that E implies my belief that A. Now it is a theorem of epistemic logic that I believe my present beliefs to be true. Therefore I believe that E implies A, and hence my belief in E, which I must have if I take E to be a cause, is a reason for me to believe A.

Of course it is possible sometimes to show that the behavior of a person which can be causally explained, corresponds to his purposes, but that is no rational explanation of his behavior and does not show its purposiveness. If, for instance, somebody is thrown against a door in a train that suddenly slows down and it opens, just as he wanted it to do, that does not give us a rational explanation of an action.

4. MENTAL DETERMINISM

I have said: If the adoption of a belief is an act which on the phenomenological level at least is mostly the case it is amenable to rational, but not to causal explanation, and as far as beliefs have causes they are not results of decisions and therefore cannot be explained rationally. This still leaves open the question whether believing and thinking really are free activities or not. Do we, then, have to assume determinisms, the validity of the causal principle in the realm of the mental, or should we reject it?

As Kant has shown the question of universal determinism cannot be definitively decided. We cannot prove that every event has a cause, simply because we cannot produce an explanation for every event. If we produce such an explanation that is a new event for which we then have to find a cause, and so on. On the other hand, we cannot prove that a certain event has no cause, either, for we can never exclude that in the future we shall find a cause for it. We can only say that in view of the statistical character of the fundamental laws of physics universal determinism is probably wrong, or that a determinism of the mental should become probable, if the brain sciences should one day provide theories that allow for detailed explanations of mental phenomena of all kinds.

A complete determination of human behavior, especially of mental behavior is, then, at least logically possible, but I maintain that we cannot consistently believe that it holds. My arguments are not new and I cannot go into them here. One is the wellknown Gödel argument. It is agreed that it is not conclusive in the form it has been defended by J. R. Lucas. But it is correct in a version corresponding roughly to that of Paul Benacerraf in his paper "God, the devil, and Gödel" (1967), which does not attempt to show that man is not a machine, but that if he were a machine he could not recognize the fact. It may also be argued that we cannot possess a complete theory of human behavior. Such a theory would also have to describe how we understand and apply it, and that means that it would have to contain something like its own metatheory; the metatheory, however, is always richer than the theory itself. So there may be a theory describing and explaining human behavior down to its last details, but it is not a theory, which we can hold.

More important than such formal arguments, however, is to realize that our normal conceptions of, and with them our normal language about human behavior, are essentially bound up with the presupposition of freedom – freedom in the normal sense, not just in that of determinists like Hobbes and Spinoza, which Kant termed "die Freiheit des Bratenwenders", a "Bratenwender" being a grill operated by a clockwork. If we were to conceive of ourselves and others as automata, that would not only necessitate a far reaching revision of our conceptions of acting and thinking, but we would also have to develop a radically different language for expressing these notions. Presently at least, that is an utopian project in the sense of determinism even an absurd one, since according to it we just have to talk the way we do.

I want to illustrate this contention by two remarks: Communication by language presupposes freedom. According to Paul Grice a speech act is not only an intentional act but the speaker also performs it with the aim that his

audience will recognize certain of his intentions. And the audience, in turn, understand the speech act only if they recognize the speaker's intentions. If speaking were a causally determined behavior, it would not be determined by intentions and could not, then, be recognized as intentional, still less as an attempt of the speaker to indicate his intentions. That, essentially, is an objection John Searle has raised in his book "Minds, Brains, and Science" (1984) against Alan Turing's thesis, that computers can talk. Searle insists that their outputs of symbols, though meaningful in our language, cannot be taken as a communicative acts, i.e. as expressions of intentions.

Knowledge also presupposes freedom. It consists in judgments which, as we have seen, are free acts. The norms of rationality, furthermore, that we try to satisfy in our argumentations, make sense only if we can conform to them, but do not do so automatically. Finally, the confidence we have in our understanding rests on the conviction that we are able to test our assumptions and revise them, that we do not just think the way we have to, but can take account of evidences and reasons that speak for or against the truth of our assumptions.²

All this, as I have said, can only be short hints, of course, but a detailed discussion would require a separate talk for each of the arguments I mentioned.

NOTES

- ¹ For a more detailed discussion cf. Kutschera (1993), especially § 3.4.
- ² For an argument against the compatibility of a very weak form of materialism with what we must be able to believe about the physical world in order to understand it cf. Kutschera (1994).

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