

# CAN REPRESENTATIONS EXPLAIN SOCIAL BEHAVIOUR? A DISCUSSION OF SOCIAL REPRESENTATIONS AS RATIONAL SYSTEMS\*

**Wolfgang Wagner**

Universität Linz, Austria

*Abstract.* Two propositions are presented in order to show that social representations cannot be regarded as explanations of behaviour: First it is argued that rational beliefs, decisions, and acting necessarily involve socially constructed knowledge which gains its evidence by collective consensus. Social Representations are considered as one form of collectively validated rational knowledge. Second it is shown that social psychological theories containing common-sense or everyday-rational knowledge cannot be interpreted as explanatory theories in the strict sense of the term. Additionally, experiments aimed at empirically proving hypotheses deduced from such theories are not a proof, but an "illustration" or "example" of the rational context. Taken together the two propositions lead to the conclusion that rational beliefs and rational behaviour are inseparable from each other, such that a specific belief cannot be used as an explanation of subsequent related behaviour. Equally, social representations do not explain, but describe related behaviour.

One of the logical and methodological problems inherent in social representation theory is the relationship between representation and social behaviour. Usually social representations have been considered as being closely linked to behaviour (e.g. Jodelet, 1984, 1989). This link must be qualified in at least two ways. First, social representations do not account for the behaviour of individuals per se, but only for the behaviour of individuals qua members of social groups (Moscovici, 1982, p. 129). This characteristic is a consequence of their genesis in social discourse. Their socio-genesis of being collectively elaborated implies that social representations be valid systems of knowledge for groups as a whole and the respective group members. Second, social representations are not conceived as cognitions simply intervening between stimulus and behavioural response, but as symbolic structures comprising stimulus and behaviour in a simultaneous circular movement. As such, Moscovici (1984, p. 60f) holds, representations do not mediate stimuli but they are stimuli themselves and therefore independent variables in empirical investigations, be they laboratory or field studies.

The status of representations as independent variables makes them a prime candidate to explain collective behaviour on a group level or the behaviour of individuals qua representatives of social groups in research (e.g. Echebarria & Gonzales, 1992; Thommen et al., 1988; von Cranach, 1992, etc.). The use of representations as explanatory devices for subsequent behaviour, however, raises crucial epistemological questions. This understanding essentially implies a kind of "causal" link between representation and behaviour. This causal link then is explored in experimental or field studies showing that representation *R* precedes (the weak version) or causes (the strong version) subsequent behaviour *B*.

---

\* Part of this paper has been presented at the First International Conference on Social Representations, Ravello, Italy, October 1992.

The present paper addresses some epistemological problems of the use of representations – if they are considered as essentially rational systems of knowledge – for explaining subsequent behaviour. It will be argued that social representations logically cannot serve as explanations of subsequent behaviour of social individuals. Such a proposition may sound unduly radical, since one of the prime interests of social psychology is to explain causally and predict individual behaviour. I will try to show, however, that the concept of representations does not lose its scientific value, if it is stripped of its status as *explanans* in representation–behaviour relationships.

In order to develop my argument, I first need to present a conception of rational knowledge which allows integration of social representations as a sub-category. Then it is necessary to talk about models of causal and dispositional explanations, showing that by their prerequisites they do not lend themselves to rational knowledge structures as *explanantia*. From this it follows, as some European social psychologists have argued, that psychological theories and hypotheses involving rational knowledge do not represent cause-effect relationships and therefore are not experimentally provable. Subsequently I shall investigate the consequences for the explanatory status of social representations. It will be shown that social representations cannot be considered as causal explanations of behaviour. Moreover, behaviour related to some social representation appears as a specific description or as an illustration of the respective representation, which – logically speaking – negates an explanatory relationship between the two.

### Knowledge, Rationality, and Evidence

The notion of rationality has received long and widespread interest and discussion in philosophy, economics and many other disciplines. It is not intended to elaborate on the question of rationality here, but only to point to some aspects which will enable us to categorize different levels of rationality.

At the *formal level*, a system of propositions is considered as rational if it is consistent according to some criterion (Elster, 1983). In the majority of cases the criterion will be logical consistency. If there is a possible world where a set of propositions is true and the system does not contain contradictory propositions, this set will be called rational:

$$\text{non } \exists p: (p \ \& \ \text{non } p), \quad (1)$$

that is, there does not exist any true proposition  $p$ , whose complement also is true. These formal criteria are more or less what Elster (1983) calls the thin theory of rationality at the individual level.

For *individual beliefs, decisions, and actions* the formal criterion of consistency clearly is not enough. To call a belief or an action rational, it must not only be consistent in itself, but it must establish a relationship between the preconditions and the aim of the respective aspirations and intentions. If a person gives reasons for his or her actions, these reasons must be good reasons relative to the situation as perceived by and accessible to the person (Dray, 1985). "Even if agents' beliefs are based on prejudice or ignorance, or if their desires are peculiar or hard to comprehend, their behavior can be rational. Moreover, ... to be rational in this sense, agents need not assign explicit probabilities to beliefs or quantify values, or even make rough or precise calculations of expected desirability. It is enough for agents to act as if they were maximizing desirability, given their beliefs and desires." (Salmon, 1989, p. 396)

The beliefs and reasons need not correspond to some external reality. "The (substantive) rationality of beliefs concerns the relation between the belief and the available evidence, not the relation between the belief and the world." (Elster, 1983, p. 16) The criterion of consistency is thereby extended from internal logical consistency to consistency between evidence and beliefs.

In *social life* the individuals rarely believe and act without implicitly or explicitly consulting the available social and cultural wisdom, that is, the shared knowledge and belief systems of the group or groups they belong to. It is this background knowledge they have been socialized in, and which they have learned to accept during their life, which forms the pool of evidence to which an individual can and will refer. This pool of knowledge – be it called "cultural models or schemata" (Keesing, 1987; Quinn & Holland, 1987; Rice, 1980), "folk-models" (D'Andrade, 1986), "cosmologies" (Douglas, 1982), or "social representations" – delimits a kind of rationality which is defined by the consensus of a respective group. This content embraces all collective everyday knowledge of all real or imaginary things, which can be the object of normal social discourse in a given social unit. The many form this knowledge takes may be symbolic, iconic, cognitive, affective or metaphorical, but it must be potentially communicable in order to fulfill its communicative function. Hence, the basic contents of such epi-rational knowledge will also be cognitively accessible. This is also a prerequisite for social representations.

In order to distinguish this kind of rational basis of social discourse from other kinds of rationality, I want to call it "epi-rational". By the term "epi-rational" I intend to stress the importance of this kind of knowledge for the social individuals' beliefs and decisions. For beliefs and decisions to be called rational in social life it is necessary but not sufficient to be consistent in themselves, it is necessary but not sufficient to be in accord with individual evident experience; they also must be in accord with the system of collective beliefs, that is with the epi-rational system of collectively shared knowledge. As Hintikka (1961) put it, propositions need not only to be consistent in order to be rational, they must also be believed.

The source of social evidence which makes a corpus of knowledge epi-rational is the social consensus, that is the beliefs of the relevant others (e.g. Postman, 1951). The consensus about some beliefs may refer explicitly to some specific contents which are accepted as (socially) true in a given group (cf. e.g. Abrams et al., 1990), or there may be collective agreement about the admissible means of establishing some other kind of evidence: These may be, e.g. in the Western industrialized world, scientific experiments or reference to physical tests – as suggested by Festinger in his second postulate (1954), which therefore seems to be Western-world ethno- or science-centric –, or questioning an oracle (Evans Pritchard, 1976), reading the stars or a newspaper, or asking some priest or elder.

Let us refer to the Central-European epi-rational "standard knowledge". In this context the proposition (a) "South Tyrol will join Austria again or it will not" is a formally correct epi-rational proposition of the form

$$(p \vee \text{non } p) \qquad (2)$$

The proposition (a) is rational, acceptable, and comprehensible, independently of whether the first or the second half of it turns out to be true. Knowing that Austria and South Tyrol are geographical regions of Central Europe and that they once indeed have been politically united is certainly part of European historical knowledge. If it was not so, the proposition would not be straightforwardly comprehensible, if either  $p$  or  $\text{non } p$  appears as a headline in a

newspaper.<sup>1</sup> The situation would be different, if, for example, the following proposition (b) "Margareth is the seventh reincarnation of the Holy Dog or she is not" was printed in a magazine. Despite their equal formal structure – both, (a) and (b) are logically correct propositions –, (b) appears to be unacceptable, hardly comprehensible, and irrational. Proposition (b) is not part of Central-European epi-rational knowledge and therefore not part of European social discourse. Formally this fact can be characterized as external negation:

$$\text{non } (p \vee \text{non } p). \quad (3)$$

Neither  $p$  nor its complement is true.

If we asked a European if she believed  $p$  or  $\text{non } p$ , that is, whether Margareth is ( $p$ ) or is not ( $\text{non } p$ ) the seventh reincarnation of the Holy Dog, she would have a hard time. Finally she may say that she cannot decide because she lacks the necessary knowledge. If she did not realize that she has been asked by an experimenter but thought that it was some other "normal" European, she very probably would think he was crazy. Hence, the sum of formally correct propositions which nevertheless cannot be accepted as true or rejected as false by members of a group will be called "irrational". This is the set of propositions which are negated externally.<sup>2</sup>

The social level of epi-rationality fixes the content of the admissible beliefs in a social group. This is the social prerequisite for an individual to decide on what it is rational to believe or do in his world. His co-members of the group would consider any action or belief as irrational in their common understanding if it deviated from the system of socially evident beliefs; that is, if a person, in order to make her actions intelligible for other people of the same group, fails in her appeal to the collectively shared epi-rational system, she most probably will be considered irrational or dumb. If she fails, she very likely will have referred to arguments which were not part of the locally valid epi-rational system.

If I stress the importance of rationality respectively epi-rationality in social behaviour, I do not imply that each and every behaviour an individual shows will be rational. The adjective "rational" applies to all thinking/believing/behaviour as long as it conforms to a group's collectively established interpretation of reality. Neither do I imply that rational intentions of collective beliefs/actions always or even in the majority of cases will result in the desired rational outcomes as they can be observed and evaluated by an outsider or investigator. History is full of examples refuting such claims. However, if seen and evaluated by insiders, that is by the group members themselves, the claim may be different. They may indeed perceive unintended results as being perfectly in order, that is, they may be likely to find perfect epi-rationally valid a-posteriori explanations and justifications for such happenings. Such examples also are abundant in history.

## Epi-Rational Representations and Explanation of Behaviour

### Explanation

Explanation is, of course, one of the prime objectives of science. The value of theories is, besides other criteria, defined by their explanatory power. The classical deductive-nomological (DN) model of explanation was suggested by Hempel and Oppenheim. It is defined as a

---

<sup>1</sup> Such a suggestion was indeed uttered recently by a proponent of a North-Italian political party.

<sup>2</sup> For a more extensive justification of epi-rational systems see Wagner (in press b).

set of theoretical law-like propositions, a set of premises referring to the conditions under which the phenomenon has to be explained, and thence a derived conclusion (Table 1):

**Table 1**

Hempel's model of deductive-nomological explanation.

<p>theoretical (covering) laws</p> <p>+ premises, related to terms within the laws</p> <p>conclusion</p>
--

This model of explanation presupposes that the law-like propositions

- (a) do not refer to specific places, times, or individual objects,
- (b) are empirically confirmable propositions, and
- (c) are true.

Such laws, hence, must be formulated as synthetical and general "if-then" propositions. However, neither of the two prerequisites (a) and (b) can be assumed for social psychological theories. Neither are they historically (e.g. Gergen, 1973; Gergen & Gergen 1984), nor culturally (e.g. Shweder & Bourne, 1984) invariant. But, above all, in the majority of cases they are not synthetical in a strict sense.

A simpler model of "modal explanation" was suggested by von Kutschera (1982). Modal explanation is supposed to model the structure of everyday causal explanations. It consists of giving a condition  $q$  and an implication  $q \rightarrow_s p$ , such that

$$q \rightarrow_s p = (q \rightarrow p) \ \& \ non \ (non \ q \rightarrow p). \quad (4)$$

Here the implication relationship " $\rightarrow_s$ " must be synthetical and  $q$  must be an event happening before the event  $p$ . Also the complement of  $q$ ,  $non \ q$ , must not produce the same event  $p$  which is supposed to be explained. This model does neither presuppose a set of covering laws nor, as a consequence of this, universality. It requires, however, a synthetical implication.

### The Quasi-Analytical Status of Psychological Theories

A series of authors (Brandtstädter, 1982; Holzkamp, 1986; Smedslund, 1978 etc.) have argued convincingly that the vast majority of psychological and social psychological theories do not depict contingent relationships between phenomena, that is, between situation conditions and psychological consequences, like mental conditions and behaviour. Hard science, and as such psychology traditionally considers itself, relies on nomological theories, which state contingent relationships or implications between the phenomena, to which their concepts and measuring rules refer. This contingency is a necessary prerequisite for theories to be empirically validated. An experiment, understood as an hypothesis-testing device makes sense only if the relationship between *explanans* and *explanandum* described in an hypothesis is a synthetic one, that is, a relationship which cannot be inferred from the premises by purely logical reasoning.

Probably not the first author arguing in this direction, but one receiving more widespread recognition, was Smedslund (e.g. 1978). He argued that psychological theories formulating

relationships between phenomena which exist already in the form of everyday knowledge, must be considered analytical. If such an hypothesized relationship can be inferred or anticipated by the subjects themselves by pure everyday reasoning, it cannot be considered contingent. A classical example of such a theory would be Bandura's (1977) "*theory of self-efficacy*". Formulated in a non-technical language, the core statement of this "theory" reads: "*It is thought that your beliefs in what you can do determine whether you will try to do it, how hard you will try, and how long you will keep trying, even though encountering obstacles and unpleasant experiences.*" (Smedslund, 1978, p. 2)

Although this "theory" has never gained wide reputation, it is an especially revealing example of what Smedslund considers an everyday analytical, or "common-sense theorem". Nobody would doubt the "truth" of the above statement. It states only conceptual relationships already embedded in ordinary language and epi-rational knowledge. Hence, the basic framework for this statement exists already anterior to both theorizing and observation. The author draws the conclusion that such "psychological research is pointless since it attempts to verify logically necessary statements by empirical methods" (p. 1).

Whereas Smedslund talks about common-sense theorems, Holzkamp (1986) takes a somewhat different approach. He shows that the vast majority of psychological theories – even some theories which are formulated in a neuro-physiological vocabulary – involve more or less hidden "*Annahmen über 'Handlungsgründe'*", which means in translation: "*assumptions about 'good reasons for action'*".

What does this mean? A theory as usually understood in nomological psychology is a general proposition about relationships between antecedent conditions and subsequent behaviour effects, assumed to be caused by the conditions. The kind of relationship in most cases is specified by assuming some mediating entity, intervening variable or hypothetical construct, which connects prior conditions and subsequent behaviour effects. Mediating entities may be some physiological mechanism or mental process. Although such entities are not thought to be directly observable, they need to be specified in order to explain the concrete form of the hypothesized relationship. The empirical content of such theories consists in the possibility of showing that exactly this hypothesized relationship can be reproduced as a "*contingent relationship within reality, which does not depend on the theory itself*" (p. 220).

However, and this is the relevant point for us here, it can be shown that this meta-theoretical understanding of psychological theorizing and research loses its validity, if the results of any experiment or empirical investigation can also be explained by finding *good reasons* which have led to the hypothesized behaviour under the given conditions. If this is the case, the hypothesized, operationalized and "empirically established" relationship cannot be considered to be a contingent empirical relationship. Instead, such an empirically established relationship between antecedent conditions and subsequent behaviour can be interpreted as an *example* or *illustration* of the implied reasons, but not as an experimental proof of the hypothesis.

Holzkamp (1986) cites many social psychological theories and shows that by introducing the adverb "*rationally*" into the theoretical clause, such that *behaviour Y can rationally be expected, given the conditions X*, those theories lose their nomological character. Here is not the place to cite examples. The interested reader can consult Holzkamp's article.

One nice illustration of Holzkamp's point is the often invoked "explanation" by "reactance", in the case when an experiment did not yield the expected results. This justification by "reactance", presupposes implicitly that the subjects would have an idea of the "right" experimental reaction, in order to be able to intentionally falsify their behaviour; and since in a usual psychological experiment neither the subjects' personal well-being, nor anything else depends on their "right" reaction – except, of course, the experimenter's results – they are free to choose their behaviour and thereby free to "cheat" the experimenter.

### Explanations of Epi-Rational Behaviour

The question now is, how shall we deal with theories and events which involve common-sense knowledge, or more strictly, rational knowledge and behaviour? Can we use rational knowledge or beliefs as explanations of behaviour? Hempel (1962) has suggested a dispositional re-formulation of his model of explanation in order to be able to account for rational behaviour. It goes as follows (Table 2):

**Table 2**

Hempel's model of dispositional explanation.

Covering law:	Each person, if she is rationally disposed, will very probably do X in situation C.
+ Premise 1:	Actor A was in situation C.
+ Premise 2:	Actor A was rationally disposed.
Conclusion:	A did X.

There are several fallacies in this modified model of explanation, which need not concern us here (see e.g. Harré, 1989, 1990; Salmon, 1989). For us it is relevant to compare the contents of the covering law and the conclusion.

Let's presuppose a rational predisposition of the actor; then the formulation "A will very probably do X in situation C" is equivalent to being rationally disposed, given the population, the time and the place. Being "rationally disposed", then does not mean anything else than that A thinks or believes that "one ought to do X in C". Being rationally disposed here and now and as a member of the given population is exactly thinking this and nothing else.

What, on the other hand, implies the conclusion "A did X"? It describes an event, where a person A obviously does X in situation C. This event is different from the rational presupposition insofar as it represents a fact in the world out there, whereas the rational belief seems to reside within a space of discourse, or within the head of the actor. But is it really that way? Can we dissociate overt rational behaviour from the covert rational belief, as it is suggested in Hempel's formula?

Can we conceive of a person, who is rationally disposed, but acts irrationally?<sup>3</sup> Obviously we cannot. What appears as an irrational action for an observer may always be reevaluated as rational in the light of better data on the underlying beliefs (Salmon, 1989). This implies that

<sup>3</sup> Neither can we conceive of the opposite situation, where an irrationally disposed person seems to act rationally according to our evidence. If this was the case we would very likely consider the rationality of the person's acting as a coincidence, but not as a rational behaviour.

in the current understanding of rationality, rational belief, disposition, and rational acting, we cannot discriminate conceptually between rational action and rational belief/disposition.

If "being rationally disposed" means "acting rationally", then the covering law becomes the caricature of a law, and can be read as follows (Table 3):

**Table 3**

Definitional elements of rationality.

Definitional premise 1:	Being rationally disposed means acting rationally.
+ Definitional premise 2:	Members of group G consider it rational to do X in situation C.
Definitional conclusion 1:	Members of group G will usually (= epi-rationally) do X in situation C.

Re-formulation of dispositional deductive-nomological explanation.

Covering law:	Each person, if she is rationally disposed according to the epi-rational system of group G, will very probably do X in situation C.
+ Premise 1:	Actor A, being a member of group G, was in situation C.
+ Premise 2:	Actor A was epi-rationally disposed according to the rules of her group (= knows and identifies with the epi-rational system of her group G).
Conclusion 2:	A did X. (Read as: A acted according to the epi-rational rules of her group) = definitional conclusion 1.

This means that, considering the definitions, the logical conclusion drawn therefrom reflects the content of the "covering law" entering into the model. Furthermore, drawing the conclusion from the covering law and premises 1 and 2 results in exactly the same proposition as the conclusion drawn from the definitional prerequisites. There is no logical difference between the premises and the supposed explanation, which fundamentally states "Every person, who is rational, acts rationally". Hence, in this case Hempel's model is tautological. The concept of rationality establishes – at least implicitly – a connexion between thinking and acting. Rational thinking and rational acting do not represent two distinguishable levels of analysis.

### Social Representations as Descriptions of Behaviour

Let us summarize the gist of the foregoing discussion:

(a) A conception of rationality, if it is supposed to refer to believing, thinking, and acting of social individuals, must take into account the collectively shared system of knowledge within a group. This is the evident basis of the individuals' understanding of the world and hence the source of good reasons to think, believe, and act as they do in normal contexts.



(b) Rational thinking and acting in social contexts cannot be distinguished on logical grounds. If this is the case, then epi-rational beliefs do not possess causal explanatory power for subsequent behaviour, in the same way as empirical demonstrations of belief-behaviour relationships do not represent experiments in the strict sense of confirming an hypothesis. Such empirical data only illustrate the fact of believing and behaving being intricately interwoven and mutually determined on logical grounds. The rational person must always be both a rational thinker/believer and a rational actor. If either of the two conditions is not satisfied, the person can no longer be regarded as rational.

Social representations, in the present context, form part of the epi-rational system. Their evidence also is based on the weight of social consensus and additionally, perhaps on the weight of science's social status, if we consider social representations qua popularized science (Moscovici & Hewstone, 1983).

To put it more formally, let's define an action-related epi-rational opinion  $R$  as

$$R = (S \rightarrow_{\text{epi-rational}} B), \quad (5)$$

where  $S$  is a situation and  $B$  an action, which can be regarded as rational in  $S$ . The implication " $\rightarrow_{\text{epi-rational}}$ " signifies an analytical relationship, since it is anchored within the socially valid epi-rational context.

Relating this representation to behaviour takes the following form:

$$P(S \rightarrow_{\text{epi-rational}} B): S \rightarrow B. \quad (6)$$

This means that all persons  $P$ , who share the representation  $\{R = (S \rightarrow_{\text{epi-rational}} B)\}$ , linking situation/stimulus  $S$  with behaviour  $B$ , will show action  $B$  in situation  $S$ . The part " $S \rightarrow B$ " actually must be read as

$$S \rightarrow_{(S \rightarrow_{\text{epi-rational}} B)} B, \quad (7)$$

where it becomes obvious that the implication between the observable phenomena  $S$  and  $B$  is necessarily also an analytical relationship. Although signifying the fact that a subject will very probably do  $B$  in situation  $S$ , it is neither a causal, nor a contingent implication. The implication  $\rightarrow_{(S \rightarrow_{\text{epi-rational}} B)}$  linking  $S$  and  $B$  in formula (7), although it relates to an empirically observable phenomenon, does represent a non-causal relationship. The whole event is anticipated by  $R$ . Additionally it is neither a-historical, because the epi-rational representations  $R$  are variable in diachronic perspective, nor is it synchronically universal, because  $R$  is valid only relative to specific social groups and cultures.

In order to save our concept of causal explanation, which has been held dearly by psychologists over decades, we may be tempted to resort to the class of "modal explanations" (see formula 4). But even if we strip this model of its syntheticity requirement by citing Quine's (1961) position that analytical and synthetical propositions, strictly speaking, cannot be distinguished, we still need to consider the requirement of excluding the possibility of the complement of  $q$  also causing  $p$ . Without this requirement the whole concept of modal explanation and explanation in general would lose its sense.

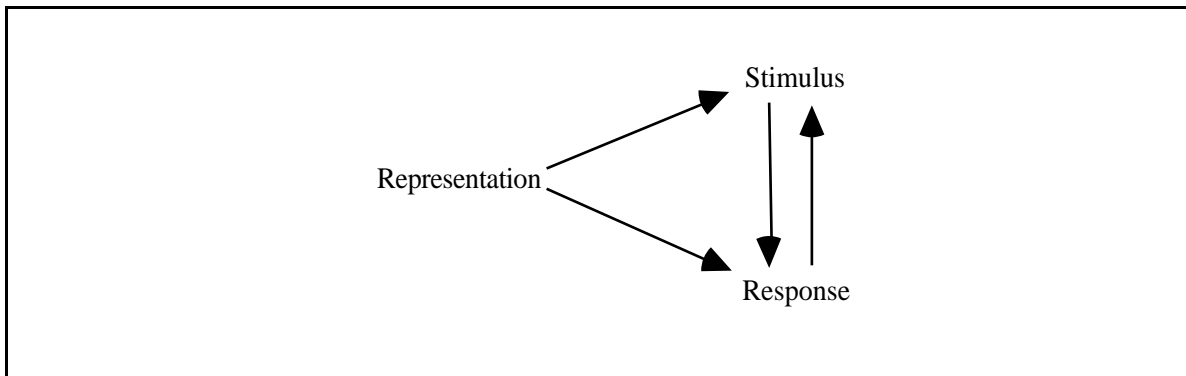
However, it is immediately evident that, in the case of epi-rational beliefs and behaviours, this strong assumption does not hold. It is highly probable that a given action  $B$  cannot be expected to occur only as a consequence of one and only one specific situation  $S$ , but also in other contexts, being an element of  $\{non\ S\}$ . This possibility at least can never be excluded.

Consequently we have to abandon our hope of being able to save the concept of explanation in the context of rational or epi-rational belief systems and related behaviours.

How may we describe such a relationship between thinking and behaviour, if not explanatory? To make things short, I want to suggest a view of the relationship between social representations and the related behaviour of individuals as a relationship of description. Knowing that an individual holds a specific representation  $R$  simply describes the fact that the individual also will do  $B$  as implied by  $R$ . Holding  $R$  and acting accordingly is an inseparable complex called socially rational thinking/behaviour:

$$\{P(R: S \rightarrow B)\}, \quad (8)$$

which reads as: the group of people  $P$  holding  $R$  is strongly inclined to do  $B$  in situation  $S$ . Hence, knowing an individual's social representation relevant to a given situation tells me a lot about the behaviour which can be expected; in fact it is a mutually descriptive relationship between representation and behaviour, it is a kind of – homomorphic – *mapping* between mental content and behaviour; the representation *anticipates* the socially relevant behaviour. This may be an interpretation of Moscovici's (1984) – in my opinion – somewhat contradictory paragraphs (p. 60f) and his diagram (Figure 1).



**Figure 1.** Relationship between representation, stimulus and response (Moscovici, 1984, p. 62).

The relationship between stimulus, response and representation depicted in Figure 1 indicates the definitely intricate and mutual interdependence between stimulus and response. The representation comprises the stimulus itself as well as the response/behaviour. This is what the present suggestion that  $(R: S \rightarrow B)$  expresses on grounds of an epistemological analysis of representations as rational systems. Such a view, however, prohibits to interpret representations  $R$  as explanatory devices for behaviour, i.e. as independent variables with behaviour as a dependent variable in empirical investigations. Knowing an individual's social representation relevant to a given situation, does not *explain* the related behaviour. Therefore, any experiment or empirical observation showing that mental content and behaviour are in fact correlated, *is not a proof*, but simply an *illustration* or a more or less typical *example*, a "*Beispielfall*" of this relationship between mental content and behaviour. Behaviour is part and parcel of the representation and cannot be separated conceptually.<sup>4,5</sup>

<sup>4</sup> In the social psychological theory of attitudes a similar view was suggested for the attitude-behaviour relationship (Kelman, 1974). "Attitude ... is not an index of action, but a determinant, component, and consequent of it. Furthermore, it is not an entity that can be separated – functionally or temporally – from the flow of action, but is an integral part of action." (p. 316) Kelman suggests to view an individual's present attitude structure as a dynamic structure in constant flux, driven by "discrepant action and attitude

## Discussion and Outlook

Talking here about behaviour and action, I referred to classes of social behaviour and action and not to what one may call individual and subjective behaviour. As I argued elsewhere (Wagner, in press a; in press b), social behaviour must be considered a class of behaviour on its own and the knowledge structure describing it has certain characteristics which cannot be found with idiosyncratic and private knowledge.

There is no doubt that people will deviate and can vary in their expression of socially rational behaviour. In fact, intra-cultural variation of behaviour received growing attention in anthropology. This may be due, for example, to different intensities of the directive force of cultural and social symbols and norms as discussed by Spiro (1982), to the intervention of personality related behaviour inclinations, or to the social and cultural expertise of subjects (Dreyfus, 1984). But the fact remains that as long as we can rationally assume some good reasons underlying the subjects' behaviour, we can neither use the conventional model of explanation in order to relate mental contents and overt behaviour, nor can we use experiments or causal modeling of questionnaire data as *proofs* of such hypotheses.

But there is not only simple variation in people's behavioural expression of their representations. There is also individual behaviour which clearly negates conventional norms and prescriptions. Such behaviour needs to be explored with special attention. If it is not the strange behaviour caused by a mental illness, it may well be determined by some new form of practice which a single individual – be it a politician, a philosopher, or a woman from the neighborhood – is on the way to transform into a representation by recruiting proselytes. A minority position may be quickly adopted by a certain number of people, thereby transforming itself into a social representation for a new sub-group in society. It is the structural condition of society or the functional parameters of a changing practice which lend themselves as *explanantia* in an explanation of this genetic process.

Related to the socio-genetic process of new representations, is the problem of investigating the relationships between social conditions and the belief-systems occurring under those conditions. A social representation itself, the whole rational system ( $R: S \rightarrow B$ ) consisting of epi-rational thinking, contents, and behaviour in a specific group is in need of explanation by an overarching theory. This is one consequence of social representation theory, which – borrowing from Bourdieu (1980) and Doise (1976) – we may call research on structural homologies. We need to investigate the relationships between social and mental conditions in modern societies, and point out the structural homology between the two. I think this field is not necessarily a reserved claim for sociological and anthropological approaches (e.g. Douglas, 1982; Bloor & Bloor, 1982). Social psychology may as well dig into this problem. This is one of the further reaching consequences the social representation paradigm has opened up.

---

change" (p. 317). Would he not talk about isolated individuals, the description would capture the socio-dynamics of social representations in groups.

<sup>5</sup> It is tempting to compare this present view to Wittgenstein's (1969) view of the meaning of words. He states basically that in many cases the meaning of a word is its use in language (§ 43). In this view he links meaning (i.e. what we think a word is, signifies or implies) with action (i.e. using a word correctly in verbal behaviour). He has not the meaning of a word *cause* its right use, but sets meaning and use in a kind of equivalence relationship. Similarly social representations – or better: what social representations mean – *reveal* themselves in, are *shown* and *illustrated* or defined by, its right use in situated action. The meaning of social representations – their semantic "content" – can be set equivalent to verbal and overt actions in given situations.

I am aware of the fact that the analysis forwarded here has some severe consequences for investigating representations and social behaviour. Neither am I sure if it lends itself easily to application in research, although there exist a few outstanding investigations which do not rely on an implicit representation-behaviour equals independent-dependent variable research design (see, e.g., Jodelet, 1991, for an excellent example of research not relying on representation-behaviour causality). But I am sure that rational belief systems need an explanatory model beyond causality implied by the research design, independent of whether causality is called by its name. This, of course, is not a new view. I wondered, however, why in social representation theory and research this necessity has not yet received explicit attention by its students and more consideration in research.

## References

- Abrams, D., Wetherell, M., Cochrane, S., Hogg, M.A., & Turner, J.C. (1990). Knowing what to think by knowing who you are: self-categorization and the nature of norm formation, conformity and group polarization. *British Journal of Social Psychology*, 29, 97-119.
- Bandura, A. (1977). Self-efficacy: Towards a unifying theory of behavioral change. *Psychological Review*, 84, 191-215.
- Bloor, C. & Bloor, D. (1982). Twenty industrial scientists: A preliminary exercise. In: M. Douglas (Ed.), *Essays in the Sociology of Perception*. London: Routledge & Kegan.
- Bourdieu, P. (1980). *Le sens pratique* (Practical Sense, French). Paris: Les Editions de Minuit.
- Brandtstädter, J. (1982). Apriorische Elemente in psychologischen Forschungsprogrammen (Apriori Elements in Psychological Research Programs, German). *Zeitschrift für Sozialpsychologie*, 13, 267-277.
- D'Andrade, R.G. (1986). Three scientific world views and the covering law model. In: D.W. Fiske & R.A. Shweder (Eds.), *Metatheory in Social Science*. Chicago: Chicago University Press.
- Doise, W. (1976). Structural homologies, sociology and experimental social psychology. *Social Science Information*, 15, 929-942.
- Douglas, M. (1982). Cultural bias. In: *the same*, *In the Active Voice*. London: Routledge & Kegan.
- Dray, W. (1985). *Der Sinn von Handlungen* (The Reason for Actions, German). In A. Beckermann (Hsg.), *Analytische Handlungstheorie*, Bd. 2. Frankfurt: Suhrkamp.
- Dreyfus, H.L. (1984). What expert systems can't do. *Raritan*, 3, 22-36.
- Echebarría, A. & Gonzalez, L. (1992). Social representations of power and democracy, attitudes towards elections and voting behaviour. Unpublished Manuscript, University of Basque Country, San Sebastian, Spain.
- Elster, J. (1983). *Sour Grapes*. Studies in the Subversion of Rationality. Cambridge: Cambridge University Press.
- Evans-Pritchard, E.E. (1976). *Witchcraft, Oracles, and Magic among the Azande*. Oxford: Clarendon Press.
- Festinger, L. (1954). A theory of social comparison processes. *Human Relations*, 40, 427-448.
- Flament, C. (1992). *Structure et dynamique des représentations sociales*. (Structure and Dynamics of Social Representations, French) Unpublished Manuscript, Université de Provence: Aix-en-Provence.
- Gergen, K.J. (1973). Social psychology as history. *Journal of Personality and Social Psychology*, 26, 309-320.
- Gergen, K.J. & Gergen, M.M. (Eds.) (1984). *Historical Social Psychology*. Hillsdale, N.J.: Erlbaum.
- Harré, R. (1989). Metaphysics and methodology: some prescriptions for social psychology. *European Journal of Social Psychology*, 19, 439-453.

- Harré, R. (1990). Explanation in psychology. *Annals of Theoretical Psychology*, 6, 105-124.
- Hempel, C.G. (1962). Explanation in science and history. In: R. Colodny (Ed.), *Frontiers of Science and Philosophy*. Pittsburgh: University of Pittsburgh Press.
- Hintikka, J. (1961). *Knowledge and Belief*. Ithaca, N.Y.: Cornell University Press.
- Holzkamp, K. (1986). Wie weit können sozialpsychologische Theorien experimentell geprüft werden? (Can Social Psychological Theories be Tested Experimentally? German). *Zeitschrift für Sozialpsychologie*, 17, 216-238.
- Jodelet, D. (1984). Réflexions sur le traitement de la notion de représentation sociale en psychologie sociale. *Communication - Information*, 6 (2-3), 15-42.
- Jodelet, D. (1989). Représentations sociales: un domaine en expansion. In: D. Jodelet (Ed.), *Les représentations sociales*. Paris: Presses Universitaires de France.
- Jodelet, D. (1991). *Madness and Social Representation*. New York: Harvester Wheatsheaf.
- Keesing, R.M. (1987). Models, "folk" and "cultural": Paradigms regained. In: D. Holland & N. Quinn (Eds.), *Cultural Models in Language and Thought*. Cambridge: Cambridge University Press.
- Kelman, H.C. (1974). Attitudes are alive and well and gainfully employed in the sphere of action. *American Psychologist*, 29, 310-324.
- Moscovici, S. (1961). *La psychoanalyse son image et son publique*. Paris: Presses Universitaires de France.
- Moscovici, S. (1982). The coming era of social representations. In: J.P. Codol & J.P. Leyens (Eds.), *Cognitive Approaches to Social Behaviour*. The Hague: Nijhoff.
- Moscovici, S. (1984). The phenomenon of social representations. In: R. Farr & S. Moscovici (Eds.), *Social Representations*. Cambridge: Cambridge University Press.
- Moscovici, S. & Hewstone, M. (1983). Social representations and social explanations: From the "naïve" to the "amateur" scientist. In M. Hewstone (Ed.), *Attribution Theory – Social and Functional Extensions*. Oxford: Blackwell.
- Postman, L. (1951). Toward a general theory of cognition. In: J.H. Rohrer & M. Sheriff (Eds.), *Social Psychology at the Crossroads*. New York: Harper.
- Quine, W.V. (1961). *From a Logical Point of View*. Cambridge: Harvard University Press.
- Quinn, N. & Holland, D. (1987). Culture and cognition. In: D. Holland & N. Quinn (Eds.), *Cultural Models in Language and Thought*. Cambridge: Cambridge University Press.
- Rice, G.E. (1980). On cultural schemata. *American Ethnologist*, 7, 152-171.
- Salmon, M.H. (1989). Explanation in the social sciences. In: P. Kitcher & W.C. Salmon (Eds.), *Scientific Explanation*. Minnesota Studies in the Philosophy of Science. Minneapolis: University of Minnesota Press.
- Shweder, R.A. & Bourne, E.J. (1984). Does the concept of the person vary cross-culturally? In: R.A. Shweder & R.A. Levine (Eds.), *Culture Theory*. Cambridge: Cambridge University Press.
- Smedslund, J. (1978). Bandura's theory of self-efficacy: A set of common-sense theorems. *Scandinavian Journal of Psychology*, 19, 1-14.
- Spiro, M.E. (1982). Collective representations in religious symbol systems. In J. Maquet (Ed.), *On Symbols in Anthropology*. Malibu: Udena.
- Thommen, B., Ammann, R. & von Cranach, M. (1988). Handlungsorganisation durch soziale Repräsentationen - Welchen Einfluß haben therapeutische Schulen auf das Handeln ihrer Mitglieder (Organisation of Action by Social Representations, German). Bern: Huber.
- von Cranach, M. (1992). The multi-level organisation of knowledge and action - an integration of complexity. In: M. von Cranach, W. Doise & G. Mugny (Eds.), *Social Representations and the Social Bases of Knowledge*. Lewiston, NY: Hogrefe & Huber.
- von Kutschera, F. (1982). *Grundfragen der Erkenntnistheorie* (Basic Problems of Epistemology, German). Berlin: de Gruyter.
- Wagner, W. (in press a). Social representations, group affiliation, and projection: knowing the limits of validity. *European Journal of Social Psychology*.
- Wagner, W. (in press b). Alltagsdiskurs – Die Theorie sozialer Repräsentationen (Everyday Discourse – The Theory of Social Representations, German). Göttingen: Hogrefe.

Wittgenstein, L. (1969). *Philosophische Untersuchungen* (Philosophical Investigations, German). In L. Wittgenstein, *Werke*, Vol. 1. Frankfurt: Suhrkamp.

Wolfgang Wagner, Institut für Psychologie, Universität, 4040 Linz, Austria.