ARTICLES

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Human methodology¹

1. Method or methodology

I want to make a claim at the beginning: Human methodology should be "methodology" and it should be "human". Therefore let me develop what I mean by "methodology" and what it means to make it "human".

The notion of "methodology" may be explained by comparing it with the notion of "method". Method, as often taught to undergraduate students, usually presents cookbook recipies how to conduct scientific investigations in an "orderly" way, without necessarily taking into account three aspects. First of all, one does not ask what kind of problem one is going to investigate, and, in consequence, one does not know whether the proposed methods are relevant or not for the research in question. Second, one disregards the fact that any method suggested can pose deeperlying problems regarding the philosophy of the social sciences. Third and finally, related to the second problem, one does not take into account problems of epistemology, i.e. how knowledge in general and scientific knowledge specifically, is brought about. As a first conclusion I want to stress that "methodology" as differentiated from "methods", is concerned with problems of the philosphy of the (social) sciences and of epistemology. "Method", however, refers to techniques only. Therefore the distinction between "methodology" and "method" is clear cut.

In traditional positivistically oriented science, the interest in epistemological problems is low or absent. Positivism is neglect of reflexion about one's own activites, as Jürgen Habermas (1967) once formulated it.

Let me briefly discuss the first of the three mentioned problems. I suggest that one of the reasons for not asking questions concerning the relationship between what is thought to be "THE scientific method", and the problem under investigation, is the following: one has a notion, implicitly or explicitly, that the correct "scientific" method is applicable to any kind of problem or at least to most of them and that its use guarantees scientificality. Therefore one does not think that it is the scientific problem that must determine the methods to be used and not the other way round. That, to repeat it, depends on the fact that one believes that there exist indisputable criteria for what can be counted as science and what cannot. These criteria in turn are often defined in terms of "The correct method". The result is circular reasoning, based on the belief that knowledge becomes scientific knowledge if and only if one follows the correct rules of "The scientific method". For the same reason an interest in epistemological problems is low or absent. Knowledge, one believes, becomes scientific knowledge if rules are followed, and therefore the matter does not appear as problematic.

Perhaps one may argue that I am trying to force open doors or simplifying the matter, because this kind of positivistic reasoning has become obsolete. If that is the case, matters are better than my own experience has taught me. In any case let me in the continued presentation take up what I consider to be some of the problems of methodology, as distinguished from methods, namely some epistemological points of view. I will take up two different, though related problems concerned with methodology, which as mentioned deals with problems of an epistemological kind.

2. Two epistemological problems

The first problem is concerned with the question regarding the source of knowledge. The second discusses the question whether we receive knowledge or construct it. I will start with the first problem.

There are at least two positions concerning the problem of obtaining scientific knowledge. One maintains that the most important source of knowledge is mediated through our senses. Therefore we ought, first of all, to study and analyze our perception and find out how sense impressions or experiences are transferred to our consciousness, if we want to grasp epistemological problems. We may use the ambiguous term "sense data", denoting that which is immediately given to our perception or makes up objects for our consciousness. I do not want to discuss these problems, which I leave to fullfledged empiricists and defenders of phenomenalism. I want, however, to dispute the

empiricist allegation that all knowledge is empirical, i.e. based on our sense experience. One important argument against this kind of reasoning is the existence of theoretical knowledge, which is not based on sense experience, e.g. mathematical or logical knowledge. Furthermore, when discussing problems of knowledge, we must make a distinction between "appearence" or "phenomenon" and "essence". A phenomenon is that which appears in our perception of things. Essence refers to that which is essential for grasping the matter theoretically and therefore for obtaining knowledge.

Let me exemplify with a well known case. We can observe empirically how the sun sets beyond the horizon. This is the phenomenon. But we know that the sun neither sets nor rises, but that the earth turns away from the sun or towards it, in the case of the so-called sunrise. That which is essential for correct knowledge, hence, is to disregard sense experiences and to turn to explanations provided by astronomy.

The other position, which represents my own point of view, is the following: If we want to analyze basic problems of epistemology. we ought to start with investigating our usage of everyday language and do it for the following reason. In order to speak about "sense impressions", or "experience" or "consciousness" or whatever we choose to speak about, we must possess language and be able to use it in a correct way, i.e. in an intersubjectively understandable way (see about this problem, J. Israel, 1990 & 1992). Thus the analysis of the language we use is, logically viewed, more basic than the analysis of perception. I do not deny that certain knowledge is empirical and that we can make controlled observations. My proposition only holds that the analysis of language, and the analysis of how we act when we use language, is logically basic in matters of epistemology, due to the simple and elementary fact that we cannot say anything without possessing a language and being capable to use it correctly. This fact is so elementary, that it often has been overlooked or not sufficiently well problematized.

Let me quote Ludwig Wittgenstein(1953) for this point: "The aspects of things that are most important for us are hidden because of their simplicity or familiarity. (One is unable to notice something — because it is always before one's eyes.) The real foundations of enquiry do not strike man at all. Unless that fact has at some time struck him. — And this means: we fail to be struck by what, once seen, is most striking and most powerful" (1968, § 129).

One consequence of the fact that the possession of language is, logically viewed, primary in epistemological analysis, is the following: the capability of using language obviously is a necessary condition for speaking about consciousness. The possession of consciousness, however, is from an epistemological point of view, not a necessary condition for being able to use language. I want to emphasize the phrase "from an epistemological point of view", because from a physiological and even from a psychological point of view, we are in a state of consciousness, when we use language. But this is a trivial statement without epistemological implications and I am here discussing epistemological problems.

The most basic epistemological question, according to the view to which I subscribe, then is: what does it mean to have a language? My answer is that having a language implies that we are capable of making some correct statements concerning ourselves and our immediate environment. The phrase "correct" means in this context "that our statements must be non-contradictory and not arbitrary" and therefore intersubjectively understandable. Statements must be formulated in a non-contradictory way and usage of language cannot be arbitrary in the sense that I could say one thing or its contradiction and it would not matter.

We cannot deny the fact that we can make certain correct statements, because any denial or negation has itself to be formulated as a correct statement. The denial, therefore, is an example of what C. O. Apel(1986) has called a "performative contradiction", i.e. we deny that which we just are doing.²

The fact that we cannot deny, without contradicting ourselves, that we as users of language are able to formulate certain correct statements, has at least two consequences. First, if we are capable of formulating certain correct statements, then we also possess knwoledge and in fact knowledge of which we can be certain. Furthermore if we possess certain knowledge, this knowledge has to be presupposed when we start analyzing what it means to have knowledge.

The second consequence of the fact that we can formulate certain correct statements does not imply that we cannot make incorrect or false statements. Obviously we can. But in order to distinguish between correct and false statements correctly, we must be able to use the word "correct" in a correct way. This means that we must be able to formulate the distinction between correct and false statements as a correct statement. This we can do when we have learned to use language. To possess language implies that we can use it in an intersubjectively understandable way. In addition we must possess criteria enabling us to decide whether a statement is correct or not. One such criterion is expressed in the notion of non-contradiction.

Let me add another consequence. The analysis of language and of language or speech acts has itself to be done with the help of language. In other words: we cannot get outside language and look at it as neutral observers. We are always within language. This is a fundamental fact.

Let me summarize my argument so far. The first problem we have discussed is concerned with the basic source of knowledge or the starting point for epistemological analysis. Against the claim that the basis of epistemological analysis is sense perception and/or consciousness, we pose the analysis of everyday language and do it because language from a *logical* point of view is prior to sense experience or consciousness: we are not able to speak about sense experience or consciousness without having a language and being able to use it correctly and that we are able to do. It is a human condition.

Let me now discuss the second problem.

It is concerned with the question whether we receive knowledge or whether we construct it, whether we are passive recipients of knowledge or if we actively create it. In traditional empiricism the human being is understood as a passive receiver of sense experiences. To this thesis sometimes is added another, claiming that sense impressions reflect or mirror the world in consicousness and do it in a correct way. Mirroring or reflexion theories have been defended by such different thinkers as Lenin and the early Wittgenstein of the Tractatus. There Wittgenstein claims that how we describe the world does not depend on the language and its use, but on the very character of the world itself. This is the reason why with the help of language one can give a picture of the world. I do not need to remind you that the later Wittgenstein, the Wittgenstein of "Philosophical investigations" completely reversed his position.

Against the notion of the passive recipient of knowledge stands the notion of the active creator of his world. "Creation" refers to material creation and the creation or construction of knowledge as well. What does the phrase "to construct knowledge" mean? First of all, it means taking distance to the notion that words are representations of objects in the world. Words, expressions, sentences and language at large do not represent anything that already exists in advance and does it in a well-defined way. The notion that the world and its objects exist in advance in a well-defined way is related to a vague and curious notion of "objectivity". Objectivity means in this context "independent of our description or actions". Such an assertion presupposes the contradictory idea, that the world exists independently of ourselves, which it does. But also that it exists in a well defined and exactly described way, independently of our descriptions. Our scientific task then, according to this view, should consist in comparing our own assertions or hypotheses with the "objective" descriptions existing in advance. Quite a lot of our hypothesis-testing activities in traditional empirical research are based on such an

implicit assumption. The question, however, is: who has accomplished in advance these exact descriptions which make comparisons with our own descriptions possible?

The world itself, obviously, cannot talk or make descriptions. Only we can. The world may affect and change the language we use in order to describe the world, due to the resistance we meet against our actions based on erroneous descriptions. But the world cannot suggest which language we should use in order to describe it correctly. Only we can do that. The world is "out there", but our descriptions are not — they are "in here" and expressed through the language we use (R. Rorty, 1986).

Any assertion concerning an "objectively" existing world, i.e. a world presenting itself in such a way that we should obtain correct knowledge of it and obtain it independently of the fact of how we observe it or act on it. is a contradictory assumption. One of the leading representatives of a constructive approach, H. von Foerster (1987), has said that the notion of man constructing his world cognitively or through his use of language is in "direct conflict with a tenet of the traditional scientific doama, namely the belief that scientific descriptions and explanations should. and indeed can approximate the structure of an 'objective' reality, a reality supposed to exist as such, irrespective of any observer... Objectivity is a subject's delusion that observing can be done without him. Invoking objectivity is abrogating responsibility".

Our observations, when formulated by means of our language, construct the world, and it is this construction which, when applied to our scientific activites, will create knowledge. The constructivist attitude can be traced back to the epistemological positions of Kant and Hegel and has found its expression in modern psychology in the work of Piaget (e.g. 1971), to mention only one example. Piaget emphasized over and over again the fact that knowledge of an object demands acting upon it. In order to obtain, or rather to create knowledge, it is not enough to observe the world. But acting on the world means changing it. Change is an

ongoing process. Our primary concern, therefore, should be with processes and not with structures.

3. Interaction between the researcher and the object of research

The constructivist view and the emphasis on language, however, was already stated by Niels Bohr (1967) in the development of quantum physics. He maintained that it was not the task of physics to explain how the world is *structured*, but to explain what we can and what we must say about it (see e.g. the discussion in J. Israel 1990 & 1992).

Within quantum physics there exists a situation which is also characteristic for the social sciences. The situation in quantum physics is distinguished by interaction between the experimental apparatus, including the experimenter's actions, and the object, e.g. electrones or other particles, one wants to study. Bohr stated as a quantum postulate that any observation of atomic phenomena gives rise to a finite interaction between the means of observation and the observed and that this represents a physical reality. Observer, means of observation and object together form a unity within which interaction occurs. One example of this interaction is the fact that if one tries to observe experimentally an electrone, the very act of observation adds more energy to the particle than its original own energy potential. For that reason one cannot, as Heisenberg has shown, determine a particle's location in space and its impulse, i.e. its time dimension at the same occasion. One can do either one, but not both at the same time. As a consequence one has to sacrifice deterministic explanations. Now, I think that the basic situation in quantum physics, where there is an ongoing interaction between experimenter, the experimental set-up and the object of experimentation, also to an extreme degree is relevant in the social and human sciences. There are fundamental differences between quantum physics and the social and human sciences, since the human being we study can use language, which electrones obviously cannot. But any experimental or other type of research implies an interaction between the researcher, his instruments and the subjects to be studied.

This holds for quantum physics as well as for the human sciences. In these sciences subjects are human beings and human beings interact by means of language. The belief in "objective" research excluding "subjective" influence on the subject to be studied is an illusion. Whatever we do as researchers will influence the results we obtain. Therefore our actions are a part of the results we may obtain.

Quantum physics is faced with the same situation. Let me give an example. In its early development the phenomenon of light was explained by two contradicting theories. One maintained that light has to be explained by an electro-magnetic wave theory. The other maintained that light consisted of particles, which Einstein named "photons". The guestion became what light really is, waves or particles. Bohr solved the problem by stating that we cannot speak about what "light really is". If we do certain experiments, the results have to be explained in terms of the wave theory. If one conducts other experiments, the results have to be explained in terms of particles - photons. Hence the experimental action is a part of the result and its explanation.

Now this also holds for research in the social sciences. Assume we study relations between workers and management in a factory, to give one example. If we study them from the point of view of the workers we will construct one type of social reality. If we study the same relations from the point of view of management we will construct another type of social reality and neither one of them can be said to be the "real social reality". Another example is feminist research. To look at society from the point of view of women leads to different results, than looking at it from the point of view of men, which most social science does. In fact one of the most profound changes in social science is the consequence of the feminist movement and the results of feminist scholarship and their insistence on the role of gender relations in the analysis of social systems, social roles, social actions and ideologies.

Depending on our point of departure we will get different descriptions and will be able to say different and even incompatible things about social reality. But here again it is necessary to underline that "The real social world" does not exist. We can give many relevant and correct descriptions of the social world. But one thing we cannot do: give the only true and final description. This raises the question of relativistic thinking, e.g. as expressed in the question: is all knowledge relative? I will answer this question in section 4.

If we construct our world by means of what we are saving about it, and if what we say about it is formulated as theories, hypotheses or models, how can we test them and find out whether they correspond to a part of social reality or not? Now this question is erroneously formulated, because we cannot test any correspondence, since correspondence presupposes the earlier mentioned contradictory notion of one in advance well described world, where the description was done without our own participation. Therefore let us forget correspondence in this sense (there are other problems of correspondence, which I cannot discuss here). Let us also forget the intricate problem of validity when formulated as a problem of correspondence. Instead of correspondence, we have to look for other criteria.

The viability of a theory or a model is dependent on several criteria. One of them states the extent to which it allows us to act in a successful way. That means that actions derived from our theories do not meet resistance, which would indicate that they were not a good solution, where we in advance have constructed criteria for what we can call a "good solution": that we obtain the predicted goal, that the phenomenon which should turn up also does so, etc. Furthermore, theories can be judged according to logical consistency and according to their results be-

ing consistent with other earlier achieved solutions, even if consistency in this regard may mean the falsification of earlier solutions. But this presupposes quite a different approach regarding research than the traditional one.

One additional point is important: we as scientists and hence as theory-constructors are a part of the same universe and influenced by the same processes as those indviduals, who make up the subjects of our research. We cannot stand outside, and as neutral observers, disinterestedly look at our research objects in order to create what mistakenly has been labeled "objectivity". In the opposite, this very fact should be taken into account when we present the results of our research. This means that we in our research activities are not only observers. Niels Bohr once said that our situation is similar to an audience watching a play in which the spectators also are actors: we are both observers and actors in the scientific game. We conduct the game, influence its outcome and observe what we are doing and the action of those with whom we interact.

One of Bohr's colleagues, the atomic physicist J. A. Wheeler once said that it was for a long time considered to be natural that the observer was separated from his universe like a man looking through a microscope with a slab of glass, functioning as a wall. Quantum mechanics, he added, teaches us the opposite. The observer becomes a participant. In a remarkable sense we find ourselves in a participating universe. This is in contradiction to the canons of Newtonian mechanics, which believed in the objective description of the world. Objective in the sense that it was not mixed up with our own actions.

One could maintain that our observations of the planet system do not influence a planet's orbit, which obviously is correct. Our observations, however, contribute to the results we obtain, e.g. any measurement errors. New and more powerful instruments, constructed by ourselves, give rise not to a new universe, but to new and different knowledge about it.

In the positivistically oriented social sciences there has always been an ambition to take over the canons of the natural sciences. But the term "natural sciences" referred to classical physics, i.e. Newtonian mechanics. One forgets that even quantum physics is a natural science, but that its canons are quite different and even opposite to the ones of classical physics. It is a remarkable fact that positivists usually do not refer to the canons of quantum physics, which have much to teach us about the interaction between the scientist and his field of study.

Not only the social scientist is a part of the social world he studies, social scientific theories themselves are also a part of the social world they try to explain. Here we get another consequence of the constructivist point of view. Social scientific theories do not only describe and explain the social world. They even may contribute and change this very world. Take e.g. economic theories about the market and market behavior. These theories can change the very functioning of the market. Anthony Giddens (1990) has indicated that the concept of sovereignity once helped to create the practical application of this concept. Social scientific theories hence function in a self-reflective way. They produce and change to a certain degree that which they pretend to describe in an "objective" way. They therefore can function in a self-fullfilling as well as in a selfnegating way. It is undoubtedly so that all the mentioned problems cannot be solved by reference to watertight methods. They have to be analyzed within the frame of the methodology of the social and human sciences. It is the philosophy of the social sciences and epistemology which deal with methodology.

Let me summarize: I first discussed the problem concerning the basic source of knowledge — sense experiences or language and that I argued for language analysis. The second problem was concerned with the question whether we more or less passively receive our knowledge or whether we actively construct it. I have argued for the construction of the world through our re-

search activities and tried to show that the traditional notion of "objectivity" is obsolete. We do not find one in advance well described world, which in one way or another impinges upon ourselves and mediates knowledge without our participation. The world is not very sharply separated from us and our own activities. In the opposite, we are within the social world and our activities, as well as our theories make up a part of this very world. We are not only neutral, disengaged observers, but actors as well as observers in the scientific game. This fact has to be taken into account in the presentation of our results since it influences them.

I have several times emphasized the fact that the traditional notion of objectivity is obsolete. One additional reason for this is the fact that we cannot even draw a sharp line between subject and object as completely separated, since we have to take into account a continuously ongoing interaction between subject and object, forming together a field or a unity. Niels Bohr once gave an interesting example of the loose borders between subject and object. If you place a person in a totally dark room and give him a stick in order to explore the room, the border between subject and object is marked by the end of the stick when it meets an object. The subject then is the person and the stick used as an instrument. If the stick, however, hangs loosely in the hand, the border is the palm of the hand, receiving vibrations from the stick when touching an object. Again what is subject and what is object depends on our actions.

4. About relativity

Let me now discuss the problem of relativity. Since we can accomplish many and different descriptions of the social world, the question becomes whether all our knowledge of it is relative to the conditions which we impose on the social world. Is there no absolute true knowledge, no knowledge of which we can be certain? My answer is that we must distinguish between methodolog-

ical and epistemological relativism. Methodological relativity is well established in the social and human sciences and rarely disputed. It can be described in the following way. Human actions vary for different reason. One of them is historical. We do not act as we did a hundred years ago, due to the great changes which have occured, not least in technology. Also scientific knowledge to a certain extent is relative, due to the fact that science develops all the time and that yesterday's true statements turn out to be false today. So much about historically created relativity.

Within the same historical period we find differences and variations in both actions and beliefs between different cultures. Cultural relativity is well established and has counteracted ethnocentrism and prejudices. Also within the same culture, e.g. in our own, we find variations and differences with regard to class-belongingness, life-styles and gender differences. This is so well known that we rarely need to discuss it.

The problem of epistemological relativity is quite different. To maintain e.g., that all knowledge is relative knowledge, is a contradictory statement. Let us ask whether this very statement, that all knowledge is relative, represents knowledge and if it is true. Now in order to be true it cannot be relative knowledge, but must hold in any circumstances. Therefore it cannot be relatively true. In order to speak meaningfully about relativity we must have a frame which is not relatively true.

The English philosopher Ernest Gellner has pointed out one of the problems of relativity, which he calls the paradox of liberalism. According to liberal ideology one should be tolerant with regard to ideologies different from the one we support. But should we also be tolerant against those who preach intolerance?

Let me take another example. We have two different cultures. Let us call them culture A and culture B. In culture A a certain statement S is considered to be true, whereas in culture B it is understood as false. This is a typical example of cultural relativity.

But if we want to analyze the different truth-values which have been ascribed to the same statement in the two cultures, we must at least have one common criterion according to which we can judge truth and falseness. This criterion cannot be culturally relative. If it were, we could not compare the two cultures. Hence to repeat it again, in order to speak meaningfully about cultural relativity, we must have some criteria which are not relative. But does that imply that there exist certain absolutely or objectively true criteria which ought to be universal in the sense that they apply to all cultures and languages and that they are not a product of historical change? This is an old issue and the discussion about relativism can be traced back at least to Plato.

It is my opinion that such universal criteria exist and I shall give an example to make it clear. It is a basic logical demand that we should talk in a non-contradictory way. Certainly, we now and then do use contradictory speech. But we cannot do it systematically, which means rule-following. We cannot even set up a rule saying that we from now on should use contradictory speech because such a rule has to be formulated in a non-contradictory way. If not, we would not know whether we should speak in a contradictory or non-contradictory way. Furthermore, in order to make the very distinction between contradictory and non-contradictory speech, it must be formulated in a noncontradictory way. Already Aristotle pointed out, that if somebody wants to argue against the principle of non-contradiction, don't arque against him. Let him arque for his point and observe whether he does in a non-contradictory way or not. Therefore it is my belief that the principle of non-contradiction, independently how it is formulated, is an universal, non-relative criterion. This implies that there exist no languages in which one can speak contradictorily in a rule-following way. Neither is this principle historically relative. This assertion does not need to be proved empirically, because any empirical proof, when formulated, presupposes its application. It is a basic locigally necessary

demand that we must speak in an non-contradictory fashion. Otherwise all communication would break down and with this human social life.³

5. What is human in methodology?

Speaking about "human social life" leads me to the last point in my presentation, the answer to the question how to make methodology human. In order to answer this guestion we must therefore take up the problem concerning the nature of man or, if you wish, his essence. A discourse about human nature, does not, according to my point of view, contain empirical propositions. In other words, it is not an empirical problem to ascertain the nature of man. It is, as I see it, a normative problem. That means that talking about human nature does not imply presenting descriptive statements. It is an attempt to analyze how human nature ought to be described in order to fit into our theoretical approach. Hence we have a certain degree of freedom to decide how we ought to formulate answers concerning the question of human nature. But when we have chosen we have committed ourselves conceptually.

But let me say something about what I do not consider to constitute human nature. Man is a biological entity, an organism, but to describe him as only an organism alone, is a basic misunderstanding. It fails to take into account other aspects than biological ones. The misunderstanding can be the consequence of an attempt to reduce all human aspects to biological ones. I therefore reject attempts to use exclusively organismic metaphors in describing human nature. I also reject a once quite popular notion which employs mechanistic metaphors.

Instead I want to emphasize that it is language and social communication which distinguish human beings. It is correct that even animals, e.g. primates, have a language. But the difference to human language is not only a question of quantity, but of quality. To say it briefly, human beings can e.g. discuss the language of monkeys, whereas monkeys

obviously are not capable of discussing the intricacies of human language. The reason for this difference cannot be discussed here.⁴

Now, if we take language and communication as distinguishing characteristics for human beings, the analysis of language, of speech acts, of language performance, of communication should be of central interest to a methodology which proposes to be human. One of the most interesting problems is constituted by the elementary fact that when we are speaking to each other, we presuppose that we will understand each other. Certainly we can misunderstand each other. But when I tell somebody that he misunderstands me, I presuppose that he at least understands what "misunderstanding" means. We must have a common and reciprocal understanding concerning our usage of language. Hence the very obvious fact that we usually do understand each other has to be problematized. We must assume that having a language and being able to use it correctly is not a private business, but presupposes the existence of intersubjectivity. Language by its very existence is intersubjective and therefore social. If we accept this and start our considerations with this fact our research will be human. But this is not enough. We must consider the other as a person. That means, we must establish a reciprocal relationship in which we accept him as equal to me and he accepts us as equal to him. Equality means here, having the same rights and duties.

We also can make a distinction between a "person" and an "individual", a distinction which appears to me as especially necessary when individualism is so much en vogue. Let me quote Martin Buber (1962), the philosopher who maintained that a person relates himself to others, wheras an individual isolates himself. A person says: I am. An individual says: I am such. A person values social relations. An individual values the objects he owns. But taking side for the person and against the individual means to introduce moral values. Let me therefore make a final statement. A human science must also be a moral science; not one which talks about

morals, but takes a stand on moral issues. A human science refusing to do so cannot claim to be human.

NOTES

- The article is based on a lecture given at the Tenth Conference of the International Human Science Research Association in Gothenburg, August 1991
- 2. Statements which cannot be negated without committing a performative contradiction are self-reflective. A self-reflective statement of this kind can be formulated as a "Nichthintergehbare" i.e. an indispensable condition. Indispensable conditions in turn make up the basis for an epistemology which takes its starting point in the analysis of everyday language.
- 3. In my book Sprache und Erkenntnis (Campus Verlag, Frankfurt 1990) I have discussed the problem of relativity more extensively and also presented an argument for the existence of an informal logic inherent in our every day language, which can be reconstructed. Also this logic is assumed to be nonrelative. See also my books "Språkets dialektik och dialektikens språk (Stockholm, 1980) "Om relationisk socialpsykologi" (Göteborg, 1981) och "Språk och kunskap" (1992)
- 4. One decisive difference is that human beings can use the same words in different situations and different words in the same situation. They can, in other words, take the context into consideration, which animals cannot (see J. Israel, 1990 & 1992)).

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