The Analysis of the Borders of the Social World: A Challenge for Sociological Theory

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Sociologists usually treat the borders of the social world as self-evident. In order to delimit the realm of social phenomena, sociologists refer implicitly or explicitly to a distinction between living human beings and other entities, that is, sociologists equate the social world with the world of living humans. Thus the field of sociological research is restricted, for example, to the social systems constituted by social actions of living human beings (Parsons), to the symbols developed in human interactions (Mead), or to the actions within human social relationships, which constitute social forms (Weber). This short list of prominent authors who equate the circle of social actors with that of human beings could easily be expanded.[1] In spite of this consensus some authors have questioned the idea that the circle of actors who constitute a societal order can be restricted to humans. As early as 1970 Luckmann rejected the notion that the category of social actors is identical to that of living humans (Luckmann 1970). On the contrary, the borders of the social world are changeable.[2] Luckmann develops the idea that it is open to question as to which entities can be social actors with reference to the transcendental approach of Husserl. Additionally, he supports his thesis extensively through anthropological fieldwork data. According to Luckmann it would be ethnocentric to treat as self-evident the premise that only living human beings can be social actors. Anthropological research has revealed that plants, animals, or the deceased can also occupy the position of a social actor.[3] During the 1970s, the anthropologically founded concept of the actor was questioned also from a very different perspective. Starting with the work of Latour and Woolgar (1979), empirical science studies posed the question whether it was possible to fully understand scientific research in a laboratory if one takes into account only human actors (Callon 1986; Knorr Cetina 1981, Latour 1988). The data presented by these studies suggest that the process of scientific research implies an interaction not only between human actors but also between human actors and technical artifacts, which can occupy the position of actors as well. There is no "great divide" (Fuchs, Marshall 1998) between actors and things, but a multiplicity of situational divides.

Luckmann as well as scholars of science studies insist that only a historically changeable interpretation process can determine who can act as a social actor. Hence, social science research must ask how the borders of the social world are drawn in concrete historical situations. Such a line of research leads to severe methodological problems. For clarification, I shall define two levels in the distinction between living humans and other entities: On the one hand are the assumptions of the sociologist, which steer the observation, and on the other hand is the social world as an object of analysis. On both levels the difference between living humans and other entities is or can be significant. For example, in modern democratic societies[4] only living humans can be social persons in a generally valid way. Though some pets—dogs for example—are treated as persons by their masters, in western democratic societies they generally cannot cross into the realm of the social. These animals are not persons in their own right, as human beings are; personhood is attributed to them by their masters. The personhood of these animals is not generally valid, but it is dependent upon entities who are persons in their own right. In a modern society there is a border which the animal cannot cross; such a border is beyond the reach of sociological research as long as sociologists do not question the assumption that only living humans can be social actors. Only if sociologists cease to presuppose that only living humans can be social actors will they be able to notice that while in some societies only humans are social actors in their own right, in other societies animals, gods, the deceased, plants, or other things can occupy the status of an actor as well. In other words: in order to make such borders visible, sociologists must begin to question their anthropological bias.

If the concepts guiding sociological observation are radically deanthropologized, the field of sociological research can no longer be restricted by the unquestioned distinction between living humans and other entities. In this case a serious methodological problem results: How should the field of sociological research be determined generally? Every phenomenon can in principle become a subject of a sociological analysis if the key concepts are deanthropologized. As long as sociology is a science not of everything, but only of social phenomena, it is necessary to develop a new criterion in order to demarcate the realm of the social. Luckmann and authors of science studies made fundamentally different suggestions in regard to this problem. Luckmann (1970) orients himself toward Husserl in referring to a sphere of transcendental consciousness from which the status of a social actor is determined. In contrast to this, science studies start with actors, whom they treat self-evidently as such. These unquestioned actors are the humans observed in the field—scientists and technicians—and they have the power to attribute the status of an actor to other entities.

These propositions are methodologically problematic in a number of ways. Since sociology is an empirical science, even the most basic concepts steering the observation must be open to question by empirical research. It is therefore impossible to adopt a transcendental conception, as Luckmann has done.[5] For other reasons methodological decisions by authors in the field of science studies are not

appropriate either. They presuppose a naive empiricism and end up reestablishing the methodological relevance of the distinction between humans and other beings. Latour and Callon do not reveal anything about how they decide what constitutes a social phenomenon. They simply assume that human beings (scientists and engineers) are the powerful actors to be observed. The actions of these actors decide whether in certain situations this or that artifact can occupy the status of an actor.[6] For Latour and Callon, "humans" are the crucial factor in determining the stable object of sociology. Their approach is not as radical as Luckmann's suggestions have been.

In terms of methodology a twofold problem must be resolved: The conception of the social has to be formulated in such a way that interactions of or with nonhuman actors can be interpreted as a social interaction. Nonhumans have to be treated in the same way as humans, that is, as actors or potential actors. Furthermore this conception of sociality has to be open to empirical questioning. In the following sections I will first argue that there is an implicit consensus concerning the formal properties of the social and that this formal theory can be used as an observation-steering assumption to analyze empirically the borders of the social world (1). Second, I will present the results of an empirical study conducted upon this methodological basis (2). Within the framework of the approach proposed here, the basic assumptions steering the observation are not conceived as a priori transcendental definitions; they can be challenged by empirical research. Such a research design makes it highly probable that even the foundational formal assumptions must be modified in the course of empirical research. Since this was in fact the case, finally I suggest how the initially explicated formal theory of the social needs to be modified (3), and discuss the general results (4). Since the formal theory of the social is a theory of the process of understanding within the relationship between Ego and the alter Ego, it seems reasonable to relate this sociological theory (and the discussion of the empirical results) to the broader debate on understanding the other.

1. THE FORMAL THEORY OF THE SOCIAL

The relevant contemporary sociological theories refer to a dyadic constellation as the systematic starting point of their concept of the social. The complex relationship between at least two entities is understood as the basis of the development of a novel order that functions as a mediating structure between the involved parties. The decisive property of this order is such that it cannot be reduced to the actions of a single entity. Simmel (1983) was the first to formulate this: He understood the interaction ("*Wechselwirkung*") within the relationship between an I and a You as the necessary precondition for the development of something qualitatively new—the sociating process with its structuring social forms. Weber (1980) viewed social formations in a similar way; the legitimate order, for example, was seen as

something, which for the I and the You secures the chance to act within social relationships. Comparable patterns of thought can be found in the works of George H. Mead: Symbols and the generalized other are mediating structures within the relationship between Ego and Alter (Mead 1964, 1967). A key concept in Parsons's theory is that of "double contingency" between two actors Ego and Alter (Parsons 1968). Although Luhmann (1984: chap. 3) interprets the theory of double contingency differently from Parsons, he further develops the tradition of using a dyadic key concept in order to gain an understanding of the emergence of a novel type of order, that is, social systems.[7]

The consensual dyadic concept of the social can be characterized by formal properties and used as a criterion in order to distinguish social phenomena. With reference to the aforementioned problems the criterion should meet the following conditions:

1. It has to be formal, since no concrete entity should be excluded from the outset.
2. The criterion must allow observation of the interaction with questionable entities, since it will thus be possible to observe how the borders of the social world are drawn in the field.
3. It cannot have the status of an a priori assumption, that is, it can be challenged by empirical research.

The formal theory of the social is dyadic; it presupposes at least two entities: Ego and Alter. These relate to each other in such a manner as to be mutually inter-dependent in their experiences and actions.

Ego is a Self that perceives its environment and relates to its environment according to its perceptions. In doing so, Ego must on the one hand be able to distinguish between what it perceives and its own actions and on the other hand it must itself mediate between perceiving and acting.

Ego observes Alter as a Self that distinguishes itself from its environment and accords its actions with its perceptions.

Furthermore, Ego experiences itself as a Self that exists as a perceiving and acting Self in the environment of Alter. As such Ego is a Self which is observed by Alter as a Self that observes Alter. In this way Ego and Alter are each a self:

– that perceives its environment
– that perceives that another Self exists in its environment
– that experiences that it is perceived by its counterpart as a Self that perceives its counterpart as a perceiving Self

In such a highly complex relationship Ego and Alter experience each other mutu-ally as real, other subjects; this phenomenon, which is constitutive for sociological analysis, was highlighted especially by Simmel (1983:23).

Since Ego and Alter are subjects, their behaviors can become mutually conditional upon each other in a highly complex fashion. Ego and Alter must expect from each other that the other's mediation of perceiving and acting is dependent upon the way in which their respective counterpart presents itself. From the perspective of Ego: Ego incorporates the behavior of Alter into its own behavior by expecting that Alter expects Ego to make its own behavior dependent upon Alter. A double uncertainty emerges. Since Ego and Alter are both subjects, they cannot know definitively from each other how the other will behave. It follows that if Ego tries to accord its actions with the expected expectations of Alter, Ego will definitively know the future behavior of neither Alter nor Ego. This uncertainty exists for Ego as a practically relevant phenomenon. Correspondingly, the same holds true for Alter. In order to mark out the highly insecure and complex relationship Parsons has coined the term "double contingency" (Parsons 1968). Within the framework of Luhmann's theory (Luhmann 1984) the assumption of double contingency is similarly treated as being important. He interprets it as the starting point of communication and the constitution of social systems. Again the main problem to be solved is the establishment of trust and security in a highly insecure situation.[8]

The relationship characterized by expectation-expectations includes a double interpretation. The decision, whether the encountered body is a counterpart with any expectations, is based on a foundational interpretation. Only then can Ego and Alter begin to determine the concrete, situationally relevant expectations of the other through a second interpretation, that is, deciding which expectations apply for Alter's perception of Ego and vice versa. Only the second of these interpretations has been widely observed and theorized in sociology, the first has remained implicit.

Let me outline the second step more precisely. Alter is only indirectly accessible to the perceiving Ego. Ego cannot directly observe the intentions and expectations of Alter, nor can it directly observe Alter's perceptions of Ego. For this reason, Ego depends on interpreting the way in which Alter appears as an indication of how Alter relates to its environment. In order to know something about Alter, Ego must interpret the latter's gestures and speech. This is the known part of the interpretive process. It is based upon an implicit interpretation that distinguishes those entities whose physical appearance can be seen as an indication of the existence of an entity with which Ego can exist in a relationship characterized by expectation-expectations. It is an interpretation when Ego perceives Alter as an entity that not only perceives its environment, but also perceives that it is perceived by another, that expects the expectations of the other, and that therefore makes its own actions dependent upon the other. In other words: The act of interpreting the expectations and intentions of a person rests upon another interpretation: His or her perceived physical appearance has to be interpreted in order to decide if he or she is a social person in the first place. Only if both participants interpret one another's physical appearance as indicating a social person can they

communicate (Luhmann) or participate in a social interaction (Parsons) or symbolic interaction (Mead).

This formal theory meets the three conditions formulated above:

1. It does not presuppose which entities can coexist in a relationship structured by expectation-expectations, that is, it is sufficiently formal.
2. It requires that social actors distinguish between those entities who are social actors (social persons) and other entities, so the theory predicts border phenomena and allows for observing them.
3. It is open to empirical questioning.

The formal theory of the social can be read as a contribution to the debate on the problem of "How do minds understand other minds?" (Kögler; Stueber 2000: 1). Therefore it seems useful to relate it to the discussions within philosophy of mind and respectively cognitive science. One of the central questions within these debates are: Does a mind adopt a theory of mind in order to understand other minds?[9] Or: is it more appropriate to assume that a mind will simulate the feelings or intentions of the other, in order to understand her.[10] The two positions are marked out as theory theory and the simulation theory of understanding the other (Kögler; Stueber 2000). In order to situate the formal theory of the social within this debate, I shall refer to Bohman's (2000) critique of theory theory and simulation theory. Drawing on Gadamer and Habermas, Bohman argues that neither theory theory nor simulation theory are able to grasp fully the phenomenon of understanding the other. The theory theory approach would adopt a third person perspective, while the simulation theory would refer to a first person perspective (Bohman 2000:228ff). These approaches would neglect that understanding is a practical process, i.e., interpreting the other takes place in a relationship between an I and a You. Those involved would not only interpret the other, but acknowledge the other as someone who will interpret me, that is, my interpretation of the You. The mutual critique of each other is the decisive means for elaborating an interpretation that is valid for both actors. The validity of an interpretation is neither developed by reference to a theory (third person approach) nor to a simulation (first person approach), but by reference to the practice of mutual interpretation and reinterpretation of Ego and Alter (Bohman 2000: 229ff).

The second person approach highlights the fact that understanding the other can only be described with reference to the practical relationship of the I and the You. This concept resembles the formal theory of the social proposed in this paper. Both approaches treat the practical processes of mutual interpretations and reinterpretations of Ego and Alter as the crucial feature of social phenomena.[11] This does not exclude that simulation or theories play a role within the practical processes of mutual interpretation. But the process of understanding as a whole can only be grasped if the relationship and its inherent mutuality are taken into

account. In spite of the similarity between the second person approach and the formal theory of the social, one problem has to be discussed in more detail. As I have argued, it is necessary within the framework of the formal theory of the social to logically distinguish two steps of interpretation. The first step consists of making the distinction between those who must be treated as a You and those entities who do not have to be treated in such a manner. This problem is not addressed within the framework of theory theory, or simulation theory, or the second person approach.

It is a well-stated fact in ethnographical and historical research that in other societies not only living human beings are treated as beings that can be understood. I will give an historical example: Between the end of 13th and the beginning of the 18th century, animals were treated in European criminal law as responsible actors. They were sued in official trials, which did not differ from trials against human beings (Berkenhoff 1937). Some official documents even stated that the sued animal had confessed its deed.[12] I.e., a judge accepted, for example, the confession of a dog, that "he" (the dog) had murdered a child. Thus a well-educated adult man experienced himself as being interpreted by the sued animal as a mindful actor. Otherwise the judge could not have interpreted a gesture or any other sign from the animal as a confession of the truth.

Such interpretation processes display very strange features that can hardly be understood within the framework of the second person approach, or theory theory or simulation theory. But this does not mean that those cultures which are so different from ours are necessarily incomprehensible. Concerning the criminal prosecution of animals, obviously several very similar concepts exist that make the culture of the 16th century compatible with ours: the concept of individual responsibility and the standard of truth telling. Without assuming these concepts, the whole juridical procedure would make no sense. I would thus subscribe to the ideas of Kögler and Stueber (2000:21f), who have argued against an absolute relativism with their statement that a minimum of conceptual overlap is required in order to understand the processes of understanding structured by other cultures.[13]

To sum up my arguments: The formal theory of the social addresses from a sociological perspective the general problem of understanding the other. Since it accentuates the Ego-Alter relationship, the formal theory of the social shows significant similarities with the second person approach. Additionally, the formal theory of the social focuses on a dimension that is neglected not only within the second person approach but also in theory theory and in simulation theory. I have marked this dimension as the first step of interpretation, which is necessarily presupposed in every concrete understanding of the other. The first step consists of an interpretive procedure, which determines who is an alter Ego/a You and which entity is not. A theory delineating the understanding of the other that includes this dimension as a central property of the interpretation process, offers a new perspective for a rational understanding of other cultures. It assumes that

it is possible to understand rationally the interpretation process by which the circle of those beings is delimited, who are to be treated as understandable social actors. For example: Concerning the official trials against animals, it seems that these trials can be understood as an integral part of the process of rationalisation of law in Europe (Lindemann 2001).

To focus on the first step of the interpretation process offers not only a broader perspective concerning the understanding of other cultures, but also enriches the analysis of our own culture. To treat as not self-evident the question of which entities belong to those who are understandable beings directly confronts a sociological analysis with the pressing anthropological border questions produced by modern medicine. I will now turn to a sociological analysis of this field—an analysis that is based on the formal theory of the social as developed above.[14]

2. THE BORDERS OF THE SOCIAL WORLD IN INTENSIVE CARE AND NEUROLOGICAL REHABILITATION

The above-outlined theory of the social has been used as a conceptual tool in order to identify social phenomena in the empirical field (Lindemann 2001, 2002a, 2003). Every phenomenon that can be interpreted as indicating a relationship characterized by expectation-expectations between at least two entities is identified as a social phenomenon. Since the foundational first step of the interpretation process is taken into account explicitly, the formal theory of the social had the function of a "sensitizing concept" (Blumer), drawing the attention of the observer to border phenomena of the social world. Accordingly, I chose a field in which border phenomena are likely to occur, such as intensive care medicine and neurological rehabilitation, in which decisions must be made whether patients are living persons or dead, whether patients are conscious or not, and whether or not patients are able to use symbols. The data were collected over a period of about two years, from 1997 to 1999. It included participant observation in four settings: neurological intensive care (observation period: two months, minimum of 5 days per week, 4 to 12 hours per day with an average of 8 hours); neurosurgical intensive care (observation period: two months, minimum of 5 days per week, 4 to 12 hours per day with an average of 8 hours); neurological rehabilitation (5 days with an average of 8 hours of observation); and two organ explantations (time of observation: 8 hours and 16 hours). Additionally, I visited several conferences and interviewed 30 medical experts on the problems of diagnosis and treatment of patients in a persistent vegetative state and brain death diagnosis.

Initially, I identified a core class of social actors. I then observed whether these actors need to deal with questionable entities. I chose language in order to empirically operationalize the formal theory of the social. Those entities who communicate with each other using language were interpreted as social actors, that is, they were interpreted as existing in a relationship structured by mutual

expectation-expectations.[15] Subsequently, I observed whether the identified social actors (doctors, nurses, and therapists) constitute a border between entities who are actually social actors and other entities. Thus my focus was on the relationship between social actors and their counterparts. The latter were patients; it was uncertain whether or not they actually existed as social actors. In resolving these uncertainties two distinctions proved relevant: First, the distinction between those entities who use simple linguistic symbols such as a sign for expressing negation or affirmation and those who do not, and second, the distinction between those who are alive and those who are dead. In other contexts, especially euthanasia, it is also crucial to distinguish between those entities who are aware of their environment and themselves and those who are not, yet that problem was not a focus of my research. Within the framework of this paper I will restrict myself to the first distinction mentioned. The question is: Does the questionable entity actually exist as a competent user of elementary linguistic symbols?

2.1. The Yes/No Code

The establishment of a yes/no code plays a crucial role in the treatment of patients with severe neurological damage, for both intensive care and neurological rehabilitation. The unit specializing in neurological rehabilitation treats the problems concerning the establishment of a yes/no code much more systematically, so I will refer generally to data collected there. Patients with severe neurological damage are transferred to a rehabilitation unit after their stay in intensive care, in order to assist their further convalescence. The medical diagnosis of most of the patients inhabiting the observed unit was "vegetative state in an early (or later) phase of remission". The unit specialized in the treatment of children and teenagers. In one respect, patients in a vegetative state differ very much from other forms of deviant behavior known to sociologists: It is a single event (like a stroke or an accident) that turns a normal and well-adapted person into a patient in a vegetative state. Therefore, such a patient does not have a history of deviant behavior. For example: If a healthy and normal person is nearly drowned, and his brain suffered from extended oxygen deprivation, a vegetative state can be the result.

   To give an impression of the patients' condition, I will first describe some of the problems to be solved. The more patients are in a very early phase of remission of the vegetative state, the less clear it is whether these patients are aware of their environment and themselves.[16] In such cases it must be determined whether the patients manifest evidence that they perceive their environment consciously, or if they are merely reacting by reflex to an external stimulus, such as music or clapping hands. A conscious reaction consists of moving the whole body, the head, or the eyes towards the stimulus. From the point of view of the medical staff, such a reaction indicates that the patient expects something to happen at the source of

the stimulus. Furthermore, patients have to relearn coordination of perception and action. This is necessary, for example, in order for them to swallow without external assistance. After prolonged artificial nutrition (parenteral and enteral) the patient must first learn that it is not a catastrophe to feel something in the mouth, such as a spoonful of mashed banana. It is a difficult task demanding all a patient's concentration to transport the mush through the mouth and swallow it. Every detail of the action has to be assisted carefully by a therapist, who must be attentive and avoid making excessive demands, since such a patient acts very slowly. It can take more than half an hour to feed a patient 5 small spoonfuls of banana mush.

Once patients have demonstrated that they can perceive their environment and can coordinate perception and action, it must be determined whether or not they understand a question and can respond to it. The most simple response to a question is "yes" or "no." Initially, the patients are not able to use words; instead they use gestures. Expressing an affirmative or negative response by means of a gesture is characterized by the doctors and therapists[17] as using a "yes/no code" (Lindemann 2002a:299ff). A yes/no code is an elementary form of symbolic expressivity, which requires the actual active engagement of each involved party. Establishing a yes/no code is a truly creative accomplishment by the actors within the dyad, since it is not clear beforehand which gestures will be used—the raising of an eyebrow, an eye movement, etc.

The relationship within which a behavior is assessed as a yes/no code exhibits the structural complexity assumed in sociological theory to be crucial for a social relationship.[18] Its essential properties are expectation-expectations within the relationship between Ego and Alter. Ego expects Alter to expect Ego to behave in a certain way. In such a situation Ego does not react to the perceptible behavior of Alter but to the expectation of Alter expressed in Alter's behavior. Along the lines of Mead, a yes/no code would have to be marked as a significant symbol. Concerning the comprehension of yes-gestures or no-gestures, Ego and Alter respond in the same way to the symbol, thus making it a significant symbol (Mead 1964:287f). The terminology proposed here allows a description of the structure of the relationship, which is the precondition for establishing a yes/no code. Someone who uses a symbol to answer a question in the affirmative or negative must have realized that a question had been posed. This includes anticipating an expectation by the questioning person to receive an answer to the question. The person receiving the answer has to understand the behavior of the counterpart with reference to such a complex relationship. Thus the person perceives its counterpart not only as a body responding to a stimulus, but as an embodied consciousness that experiences itself as part of a relationship, the behavior of which is guided by the concrete Ego-Alter constellation. A patient has to demonstrate precisely this phenomenon when responding to a question. It must be possible to interpret the patient's behavior as a reaction to the expectation of the questioning person to receive an answer. Only in such cases is the patient's

behavior respected as a behavior that confirms use of a yes/no code, that is, a symbol of affirmation or negation.

Several exacting conditions have to be satisfied for a behavior to be interpreted in this manner.

- – Patients whose use of symbols is questionable must be able to master their body. As long as a patient's body is so cramped that it is impossible to move at all or at least not consistently enough, this patient cannot be a user of symbols. More precisely, a patient uses symbols only if it is possible thereby to show affirmation or negation consistently through similar reactions.
- – Moreover, the reaction must be temporarily coordinated in an appropriate manner. Above all, a reaction that is too slow will not be regarded as an answer to a question. Although the permissible length of the interval is not predetermined, it is measured in seconds, not hours.
- – Finally the reaction may not be too odd; it must be comprehensible in some way.

The three conditions (similarity of the used gestures, delimited interval of reaction, at least vague comprehensibility) can be referred to as practical rules that are to be respected by bodies in order to make their appearance interpretable as using symbols.

I will explain these conditions with reference to a specific, a 13-year-old female patient.[19] Vera stayed in the unit for 6 months. I observed her final days in the ward before being discharged. This included the observation of a "case consultation." Case consultations took place roughly every six weeks, when the condition of a patient was discussed by the doctors, nurses, and therapists involved in the treatment. Each case consultation was recorded in a standardized manner. Vera's case was discussed four times by the team. I will excerpt the relevant passages concerning the yes/no code:

Record 1: In calm phases Vera answers simple questions almost adequately by closing her eye to mean yes; this is not the case in phases of agitation.

Record 2: Partly adequate yes/no code by eye-closing, with a tendency for improvement/stabilization. Using control questions, further stabilization shall be reached.

Record 3: During the last weeks Vera has become increasingly calm. She shouts less, and increasingly she smiles appropriately. According to her mother the yes/no code is about 80% comprehensible.

Record 4: Up to now no adequate yes/no code could be confirmed. Eye-closing for "yes" was sometimes observed.

At first glance, these records seem to indicate that intimacy is a significant variable. Vera's mother interpreted her daughter's gesture as a comprehensible yes/no code, whereas even at the end the members of the therapeutic staff did not. However, a closer look reveals that intimacy cannot be marked as decisive. If

intimacy were a significant variable one would expect that over the course of her stay in the unit Vera's gestures would be interpreted more and more as an indication of a yes/no code. The opposite is the case. In the beginning most therapists were likely to interpret the gesture of eye-closing as an adequate yes/no code—at least sometimes. But the longer she stayed in the unit, and the more the therapists were able to establish a personal and emotional relationship, the more they found it unlikely that Vera had ever used a consistent yes/no code. In an interview one therapist gave a more detailed account of the difficulty acknowledging Vera's gestures as a yes/no code.

> Interviewed Person (IP): At first it looked like she was closing her eyes to say yes, but over time I noticed that she did that rather often and that her eyes closed and reopened very slowly. So it might also be a delayed blinking or something like that. It keeps on happening. This reaction, it happens even if you don't ask her anything at all. So I decided for myself, no, it isn't clear enough. And then when I test it by asking the opposite—no, it just doesn't fit together.

At first the therapist was willing to interpret a certain gesture as a yes/no code. But the longer she knew the patient the more she felt Vera's eye-closing could not be interpreted as a gesture indicating "yes." The eye-closing rather seemed to be a simple body movement without any symbolic meaning. While the therapists were establishing an emotional relationship with Vera, they learned how she expresses emotions, what is painful for her, and so on. But the more they knew and the more stable the relationship became, the more it seemed impossible to assess certain body movements as a symbolic expression. Vera's behavior did not allow a certain gesture to be assigned exclusively enough within the framework of a yes/no code. Therefore, it was impossible for the therapist to identify a repeated gesture as indicating a symbol of affirmation. Furthermore, the interviewed therapist described a test to find out whether a reaction is considered too odd. She might ask the question: Do you like the music? (or any other action/event occurring in the therapeutic setting). The question is followed by the opposite as a test: Do you dislike the music? (or any other action/event occurring in the therapeutic setting). If the patient reacts to both questions with a similar movement, this movement will unlikely be a successful candidate for symbolizing affirmation or negation. The reaction is too irregular.[20] According to the therapist Vera could not fulfill the first and the third conditions mentioned above. The same holds true for the second condition: Vera did not react within a delimited interval; her reactions were too slow.

> Interviewer (I): Concerning Vera, would you say that she uses a yes/no code?
> IP: No. It is difficult to put into words. . . . If it was a Yes, then . . . you must take into account that it also came delayed. You had to wait really three, four, up to five seconds. . . . It was very very rare, and that was around two months ago, when she was in very good shape, and, with respect to vigilance, awakeAnd [her muscles were] very relaxed; [if she was] in a very calm state then . . . she closed her eyes [for yes]. But recently I could not get her to use a a yes/no code.

I: Because it was too vague or it was delayed?

IP: First, it came too delayed, and sometimes nothing came from her, or it was not
              an adequate response to the question.

In order to judge a gesture as an indication of yes or no, the gesture must follow the question very closely. The interval may not exceed three seconds. According to my observations, none of the therapists counted the seconds while waiting for an answer. Therefore I doubt that the interval was measured as exactly as described in the interview. The important thing is that there is a limited interval and that its magnitude is a few seconds, not minutes or hours. Again, Vera's reactions were described as being incomprehensible.

In order to interpret a certain gesture as a reliable indication of a yes/no code, the three conditions (controlled use of similar gestures, defined interval of reaction, at least vague comprehensibility) must be fulfilled over a considerable length of time.

IP: Before you can say it is a real, adequate yes/no code, . . . you have to observe it for several
    days and weeks.

Patients have to prove their ability to use a gesture consistently as an integral part of a yes/no code. Therefore it is impossible to use a yes/no code accidentally or occasionally.

Another crucial point is that the interpretation of the patient as a competent user of a yes/no code is developed under very strict social constraints. A patient must display a yes/no code in the presence of at least several members of the therapeutic and medical staff (including nurses). A gesture for yes or no is generally considered valid:

IP: only if several persons really say the yes/no code is adequate.

This remark describes what for the unit was a common sense interpretation. In the interviews every therapist treated it as self-evident that a yes/no code must be displayed in the presence of several members of the staff. A symbolic gesture must be observable as a symbolic gesture by more than one counterpart of the questionable entity. Thereby a *folie a deux* is ruled out. A gesture is only a symbol (of affirmation or negation), if it is judged as a symbol not only within one dyadic relationship (patient/one therapist or patient/one close relative).

IP: A yes/no code is quickly shared among all the therapists. Then there is the question, which
    yes/no code becomes established. It's all very different, because a nurse might say he does
    it like this, or she does it like that, and then one of the therapists says, no, I think it's like this.
    So it could happen that at first we all use different codes. That is usually straightened out
    during a team consultation. That's where it is introduced and then the discussion starts—
    no, I saw it differently and then it becomes clear, ok, we have to agree on something, we
    can't offer the patient three different things. No one could coordinate that. And then it all

goes rather quickly. Once someone notices that there is a possibility that they can deliberately provoke a reaction. Then maybe it'll go like that for, I don't know, a week or so and by then it is clear for everyone. Or else we hang a note above the bed: Such and such means Yes and such and such means No.

This therapist describes vividly how a yes/no code is established successfully. At first a close relative, therapist, nurse, or doctor can introduce some isolated experiences of the patient as a competent user of a yes/no code. It does not matter who starts the process, but it is significant that in the end it will only be successful if such reports initiate a cascade of corroboration. In the case of Vera it was not possible to set such a process going. Even those therapists who were originally convinced of her use of a yes/no code finally agreed with their more skeptical colleagues. The members of the therapeutic staff report only one exception: Her mother continued to interpret Vera's gestures as indicating a yes/no code. Because of this, the mother was no longer treated as a credible observer. Those who interpret the questionable entities have to keep a complex balance. On the one hand they have to look for subtle signs of competent use of a yes/no code, but on the other hand they cannot allow themselves to follow only their own impressions. If therapists or any other interpreters of a patient's behavior persist too long in their own, individual interpretation without any support of others, they are risking their reputation as a credible observer of a patient's reactions. The collegial control imposes a significant constraint upon the interpretation of the questionable entity: Observers must take into account at the onset that every phenomenon they report must also be observable by someone else. The same is true for every interpretation of the state of the patient. It is constitutive for every relevant medical diagnosis, not only in neurological rehabilitation but also in intensive care. Such procedures are used to decide whether or not patients are alive, whether or not patients are aware of themselves and their environment, and whether patients are competent users of a symbol of affirmation or negation.

It is a popular sociological practice to criticize the hierarchical gap between the decisions of experts, which have high prestige, and those of lay people. My point is a different one. I am concerned with the structure of the different interpretations of Vera's behavior. On the basis of my data, I cannot say anything about the relationship between Vera and her mother. Neither have I observed their interactions, nor have I interviewed Vera's mother. When I refer to her interpretation of Vera, I refer to Vera's mother as she is described by doctors, nurses, and therapists. In these descriptions, Vera's mother appears as someone who does not interpret Vera's gestures properly: In spite of the opinion expressed by Vera's therapists, her mother stands by the interpretation that Vera's gestures are a strong indication of her using a yes/no code. The crucial difference in the interpretations of Vera by her mother and those interpretations given by the therapeutic staff is a structural one. The mother's interpretation is described as being restricted to a dyadic interaction with her daughter. This is a precise description of how one should not do it. From this I derive the rule of a proper interpretation

of a patients' gestures as a yes/no code. Therapists should interpret the behavior of the entity in question according to what they expect another one to be able to observe as well.[21]

Such an analysis highlights the fact that the borders of the social world are not self evident, but constituted through a process of interpretation. Within the context of the interviews, I offered space for reflection to those who have to act under the pressure of everyday routines. During the course of the interview, one therapist admitted after a while that the conditions for interpreting a patient's gestures might be too rigid, that perhaps patients are required to answer too quickly. The therapist describes two main constraints, which render it impossible to detect excessively slow answers: the temporal rhythm of a healthy therapist and the organization of work.

> IP: the other thing is to look closely and hm to try to retreat from yourself and first simply observe whatever happens. It has a lot to do with observing, simply sitting there for once and not doing a thing and simply observing the patient. You're running back and forth and often the stress of daily life, the hectic, comes into the room. You do something or other very quickly because you don't have much time left and you're constantly looking at your watch, and then I think I've just forced something. Or I haven't given the patient a chance to react, . . . Because you go by your own sense of time and that is quite rapid. Our sense of time is quite rapid and you react very quickly and rushed. And that doesn't work at all for the patients. They sometimes need ten times longer for a reaction than we do. And it may be that a reaction to the music comes five minutes later, but I don't have the patience to wait five minutes or the leisure or you can hardly stand doing nothing for once. Maybe someone will take a peek in from outside and see, aha: they're just sitting there. The patients' sense of time is very, very different. I think everything moves much, much slower for them.

These remarks indicate limits of understanding which are caused by the limitations of simulation as well as by the practical processes of understanding. It seems to be nearly impossible to simulate what goes on in a patient, if the temporal structure of the patient's reactions is too different. But these differences are less personal limitations, they are instead limitations of simulation enforced by the organization of work and the expected expectations of colleagues. To wait for too long a time would conflict, on the one hand, with the individual rhythm of the therapist and, on the other hand, with the expectations the therapist expects from the other staff members. There might be numerous entities in an intensive care unit or neurological rehabilitation who could exist in a relationship characterized by expectation-expectations, but they remain undetected for the initially identified core class of social actors. If I treat these actors as relevant for determining the borders of the social in the observed field, even for the observing sociologist the excessively slow entities remain undetected. All I can do is pose the questions of border constitution anew by offering an analysis of the border regime. But I doubt that this will have any practical consequences, because such disruptive ideas collide heavily with the organization of work. A therapeutic session usually lasts 30–60 minutes. Such a schedule makes it impossible to detect excessively slow answers.

The analysis of Vera's interactions with the members of the therapeutic staff rendered possible an understanding of the conditions a patient has to satisfy in order to be interpreted as a social actor. With reference to the formal theory of the social, this is an analysis of the logical first step of interpretation. Now I shall turn to the second step of interpretation, i.e. to the ongoing process of mutual interpretation and reinterpretation.

2.2. The practical process of understanding

Understanding the symbols of another does not simply lead to an understanding of the other; it involves a practical process controlled mutually by both parties. Such a process implies a highly complex structure of the relationship. As I have argued before: A patient who answers a question experiences herself as a self in the presence of another self (the therapist), who asks a question and expects an answer. I will demonstrate this with reference to another patient. Marcus is 13 years old. His vegetative state was caused by an accident: he was struck by lightning. After the accident he was reanimated, but his brain suffered severe hypoxic damage. Marcus was interpreted by the staff as a reliable user of symbols before I started my observation. The following observation describes Marcus' interaction with a music therapist (T-Schlosser). I quote from my field notes.

> The patient is given two possibilities to choose from: he can listen to a CD and also hear a fantasy trip relayed from a book, or he can work with bass sticks.
> Both options are shown and described to the patient. The patient reacts to both options by blinking his eyes (closing the eyes means "yes"). The therapist gives him both options once more, this time more insistently. He reacts again in about the same manner. She has the impression, however, that he is tending toward the CD. She shows him the CD and the book again and asks if this is what he would like. Marcus blinks.

This interaction demonstrates that understanding consists of a process of mutual interpretations structured by mutual expectation expectations. The therapist acknowledges the patient as someone who has expectations and wishes concerning the therapy session. The patient acknowledges the therapist as someone who expects an answer. I.e., the patient does not treat the words of the therapist as mere sounds, but as a question, to which he is expected to answer. On this basis, the participants develop an interpretation that is valid for both of them. The decisive feature of this process is that the patient is able to reinterpret the therapist's interpretation of him. She communicates her interpretation, and it is up to Marcus to contradict or affirm the interpretation of his wishes. Only after such a confirmation by the patient is the interpretation treated as valid.[22]

If the focus is on the patient's physical or emotional state, the yes/no code (a symbolic expressivity) can be substituted by other means of confirmation. I interviewed the therapist after the above-mentioned session. In the interview, she described

her understanding of Marcus. She thought that her interpretation of Marcus' wishes was correct, because he displayed no sign that her interpretation was not valid:

> IP: then I thought that for me the more clear reaction was to the fantasy trip. But this may have been wrong. That's just it. You always think it was the more clear reaction, but I've also had the experience of having imagined it was a "yes" but it wasn't a "yes" at all and then I get a reaction promptly. So when it's wrong, you get some kind of reaction from the patient. Usually it is vegetative or bodily it is very easy to see, when he tenses up or something.

The therapist's description of her understanding of Marcus accentuates the relevance of the interpretation of interpretations. Even if Marcus' symbolic expressions would have been too vague, it would be possible to get a comment on her interpretation—a direct physical expression of the patient's emotional state. Within the interaction, it is the reaction of the You that is treated as a comment on the validity of the therapist's interpretation. It is not a theory of Marcus' mind or a simulation of his mental state that is ultimately crucial for validating the interpretation of Marcus. Instead the validity of the interpretation is accomplished in a process of interpretation and reinterpretation. Direct physical expressions can be integrated within such a process, but their relevance should not be overestimated. A direct physical expression can be unclear itself. In such situations, symbolic expressivity is adopted in order to elaborate an understanding of the patient's physical state. This can be demonstrated with reference to another interaction sequence. I quote from my field notes:

> Marcus. Physical therapy.
> . . . Marcus is lying on the swing. He winces his eyes.
> Therapist: (approximately) "Is that blinding?"
> The therapist switches on a less bright lamp.
> Therapist: (approximately) "Is that better?"
> Marcus raises his eyebrows. She interprets this as a "yes."

This interaction demonstrates that a direct bodily expression can be unclear. In this case the yes/no code is used, in order to validate the interpretation of the immediate physical expression.

The reference to immediate bodily expressions as a means of validating an interpretation seems to be limited to the interpretation of simple physical or emotional states. Where perceptions of the external world are concerned, it becomes more or less inappropriate to refer only to immediate physical expressions. A therapist describes the relevance of a yes/no code with respect to external perception.

> IP: The problem is, though, that so much of it is a question of interpretation. In the end you can't say what the patients is seeing or hearing. Certain things allow you to measure whether or not a specific stimulus is perceived, for example, an EEG. If you create a stimulus with a light or an acoustic stimulus, then you can see in the EEG if they have been

procesed by the brain. But ultimately this says nothing about the quality of how the stimulus has been proccessed.

GL: So you don't know how it has been processed by the patient.

IP: Exactly. You don't know that. So you can only later say—when a patient gives an adequate response using a yes/no code, then you can assume that the patient now perceives a stimulus. Before then, it is simply a question of interpretation. I think when a patient is fixated and he has no possibilities for giving a response, then you know in any case that he can, (hesitates) to put it carefully, recognize an object, if I may put it so, or see, let's say, see, yes, and looks for it or fixates on it, but whether or not he ultimately recognizes the object as the object or the image, for example, that is wholly another activity of the brain, recognizing.

The therapist distinguishes between effective neural stimulation (which can be measured), and mere seeing, on the one hand, and recognising something as a certain distinct object, on the other hand. Without the use of symbols on the part of the patient, the therapist finds it impossible to determine whether a patient recognises a distinct object. The use of symbols is required, because it enables the patient to affirm or negate an interpretation of his perception. Without this engagement of the patient, the interpretation of the patient by the therapist remains rather vague. If a patient is not acknowledged as a reliable symbol user, it is rendered impossible to elaborate valid interpretations. This seems to be the precondition of establishing a consensual interpretation of the perceived external world. To sum it up: Once the patient is interpreted as a reliable user of symbols, she is able to affirm or to negate the interpretation of her interpretation. Now she can be fully integrated into the process of mutual interpretations structured by expectation-expectations.

3. THE YES/NO CODE AND THE FORMAL THEORY OF THE SOCIAL

A yes/no code is the most simple event within the observed field that must be interpreted within the framework of a relationship structured by expectation-expectations. As such a yes/no code is the most simple symbol I could observe. The theoretical framework leads to two questions:

1. Is it possible to interpret the constitution of the border between those who actually act[23] as a social person, and those who do not act actually as a social person, with reference to the dyadic Ego-Alter constellation?
2. Is it possible to offer a comprehensive interpretation of the phenomenon of the yes/no code with reference to the dyadic Ego-Alter constellation?

Concerning the interpretation of Vera, it seems impossible to give an account of the therapists' interpretation procedures with reference only to a dyadic constellation. The therapists' interpretations display the feature of a triangulation of the dyad. The relationship involved is not "Vera–therapist," but "Vera–therapist–other

therapists." This constellation can only be interpreted within a dyadic framework if it is treated as a multiplicity of dyads. According to such an understanding the therapists maintain two dyadic relationships (Vera–therapist and therapist–therapist) independent of one another. But such an interpretation does not concur with the data presented above: The events occurring in one dyadic relationship are crucial for the events in the other dyadic relationship in a very peculiar way. Whether Vera is interpreted as a competent user of symbols, that is, whether Vera actually exists as a social person at all, is dependent upon a third party. Within a dyadic relationship the relevant point is the expectation of expectations. If a third party (another therapist, whether present or not) is taken into account by the interpreter of the patient, the structure is changed fundamentally. The therapeutic interpreter perceives the patient on the basis of what another observer would expect her to perceive and interpret. The interpretation of the patient as an entity having expectations is guided by the expectation of the (absent) third party to expect the patient to have expectations. When a patient finally is acknowledged as a competent user of a yes/no code, the therapist expects expectations on the part of the patient insofar as the therapist herself feels expected (by a third party) to expect expectations. The dyadic ego-alter constellation is fundamentally triangulated. The result of this interpretation process is the acknowledgement of the patient as a reliable user of symbols who can participate in the process of mutual interpretation and reinterpretation. Therefore the following conclusion seems to be appropriate: The basic first step of the interpretation, by which it is determined whether an entity is an alter Ego, has a triadic structure. The crucial problem solved by this interpretation consists in establishing a minimum of trust in a given entity that she will be a reliable participant in the process of mutual interpretation.

The triangulated process of interpreting the patient as a reliable alter Ego is also an answer to the question of whether the patient's observable gestures are oriented toward the rules of performing a yes/no code. The relationship between the rule and the gesture interpreted as a case of following the rule is a rather complicated one. Outside of the practice of a yes/no code, the gesture does not exist as a gesture indicating "yes" or "no". The eye movement that means "no" is outside of the context of questioning and answering, something totally different—a mere eye movement, but not a gesture meaning something.[24] Before the concrete practice of a certain yes/no code is established, it is even unknown as to which behavior will be interpreted as a case of following the rule—an eye movement, a movement of the hand or whatever else. In establishing the practice, the concrete rules and the gestures that follow from the rules are established at the same time. It thereby becomes clear which gesture will indicate affirmation, and which negation, and whether there are a plurality of gestures or only one gesture. Ego will know how long he has to wait for an answering gesture by a particular patient. Furthermore, Ego will know that she can expect the gesture to be performed in front of other staff members, and that she can expect other staff members to

interpret it equally as a symbolic gesture meaning "yes" or "no". This practical knowledge can be summarized as follows: Ego knows that such a gesture can be treated as a consistent and reliable part of the practical process of mutual interpretation.

As an acknowledged symbol user, alter Ego gains a minimum of symbolic power, which enables her to show that she can understand and critique the interpretation of herself by Ego. The newly acknowledged alter Ego is trusted enough that she will use the symbolic power appropriately, in order to participate reliably in the process of mutual interpretations and reinterpretations. The triangulated interpretation practice of the therapeutic staff displays a practical doubt that the required trust and the minimum of symbolic power can be granted to Alter (the patient) only by the interpreting Ego (therapist, relatives etc.). The therapists distinguish strictly between a valid, i.e. triangulated, interpretation and an idiosyncratic interpretation of the patient as a reliable symbol user. According to the practice of the therapists, holding the status of an alter Ego in practice is constitutively dependent on the third actor. I will call this the "constitutive function of the third actor." Therewith I claim to have described an institutionalized practice that reproduces the precondition of the dyadic process of interpretation and reinterpretation.[25]

In order to emphasize the normative constraints that stem from the triangulation of the dyad, I will use the term "legitimate."[26] Those entities which must be acknowledged by Ego as an alter Ego because of the triangulation of the dyad shall be referred to as a legitimate actor (or person). If Ego feels expected by a third party to expect expectations on the side of the counterpart, Ego encounters a legitimate social person—an alter Ego. Such a meeting has a fundamentally different structure than a meeting with an entity that exists only because of Ego's own interpretation as a social actor. In such a relationship, Ego could principally grant the status of an alter Ego to an entity, or withdraw it. Without reference to a third actor, the entity in question will hardly be able to negate such an interpretation. Alter would be an alter Ego only at the acknowledgement of Ego. Only if the acknowledgement as an alter Ego is guaranteed by a third actor, is Ego prevented from granting or withdrawing her acknowledgement of the alter Ego arbitrarily. Once this basis is established, the dyad is set free. The empirical data show clearly that if the first step of interpretation is treated as unproblematic, the process of interpretation and reinterpretation can be grasped within a dyadic framework.

4. THE DYAD AND THE TRIAD

Within sociological theory, the question of who must be acknowledged as an alter Ego is treated as unproblematic. I suppose, therefore, that the dyadic conception of the social has become a pervasive consensus among sociological authors. In

spite of this, there are some theorists who still discuss the issue of whether or not the basic assumption of the constitution of sociality should include more than two actors. Among these authors the most prominent are Simmel and Berger and Luckmann, who picked up and further developed Simmel's ideas.[27] Nevertheless, these approaches refer to the dyad as being constitutive for sociality. The third actor is only important in adding new properties to the dyadic social relationship. According to my analysis the third actor has to be integrated into the basic assumptions of sociology in a more far-reaching way than Simmel or Berger and Luckmann have done. The third actor is not conceived as a third party who joins the preexisting dyad; instead, the third actor must be understood as the precondition for the very existence of dyadic social relationships between Ego and Alter. I have called this the constitutive function of the third actor. If one follows this conception, not the dyad, but the triad has to be conceived as the foundational constellation that is constitutive for sociality.[28]

With respect to the question of the third actor it is remarkable that Simmel does not mention it in the first chapter of his book *Soziologie* (Simmel 1983), which contains the basic definitions that constitute the research field "society" (Simmel 1983:21–30). For Simmel the dyad is clearly the basic sociological constellation.[29] Starting from this point he develops his three general definitions characterizing the process of sociating, and therefore are designated by him as a priori.[30]

Simmel does not introduce the third actor until the second chapter, in which he points out that the number of involved individuals is of general importance for the sociating process. Simmel views the third actor as an extension that allows for a fuller understanding of the field of the social. Nevertheless the third actor has no foundational relevance for the more general problems concerning the constitution of social order.

Berger and Luckmann develop Simmel's ideas and try to combine them with Durkheim's understanding of objectivity (Berger and Luckmann 1967:59, 197 nn. 23, 24). As a starting point Berger and Luckmann use also a dyadic constellation, which they view as being constitutive for the sociating process. However, adding a third actor leads in this approach to different consequences from those formulated by Simmel. Berger and Luckmann conceive the third actor as the condition of the objectivity of the social forms produced by the actors. If three or more actors are involved, social forms become—according to Berger and Luckmann— "opaque"; that means, social forms receive the reified character of social facts in the sense of Durkheim. As such, individuals have to accept the social forms as something that cannot be changed voluntarily (Berger and Luckmann 1967:58ff). It is only because of this that the process of institutionalization results in fixed institutions having their own weight and being independent of individual actors. The function of the third actor can thus be described as the emergence function, since—according to Berger and Luckmann—the third actor is necessary in order to understand the emergence of institutions.[31] In spite of some differences, Simmel

and Berger and Luckmann have an important point in common: In both approaches the dyad is conceived as being constitutive for sociality.

Based on this analysis, the relation of the dyad and the triad can be grasped as follows:

1. If the first step of interpretation is taken into account, the question of whether an entity has to be treated as an alter Ego becomes problematic. Such a process of interpretation has a triadic structure. Thereby it is clarified as to whether an entity can be trusted as a reliable participant in the process of mutual interpretation and reinterpretation, and whether this entity uses elementary, generally valid symbols. The dyadic Ego-Alter constellation is constituted within the framework of a triadic structure. The third actor has a constitutive function.
2. Once this basis is treated as a self evident precondition, the process of mutual interpretation and reinterpretation can be grasped within a dyadic conception of the social. With respect to the formal theory of the social, the dyad is sufficient, if the analysis is restricted to the second step of interpretation.
3. Simmel and Berger and Luckmann presuppose such a dyadic Ego-Alter relationship. They argue that a third actor is necessary in order to understand certain social phenomena, such as the mediator or the judge (Simmel), or such as the phenomenon of institutionalization (Berger and Luckmann). With reference to the latter, one could speak of the emergence function of the third actor.

These three levels can be used in order to determine whether the third actor plays a role in a certain conception of the social. The work of Mead (1964; 1967) is a prominent example of a theoretical framework that analyses the emergence of institutions without reference to a concrete third actor. Mead develops his concept of the generalized other with reference to the dyadic interaction between Ego and Alter.[32] Such a theory of social processes could be used as an argument against the emergence function, but not necessarily against the constitutive function of the third actor. Mead presupposes a dyadic constellation between Ego and Alter. Taking on the attitude of the other is the crucial feature of those social processes wherein institutions and the generalized other are developed. The basic precondition of the ability to take on the attitude of the other is—according to Mead—the similarity of conspecific individuals. Especially concerning the production of significant symbols, such a biological similarity is necessary (Mead 1964:286).[33] The analysis of interactions with patients in an early phase of remission from a vegetative state makes it highly doubtful that biological similarity can be treated as an unproblematic precondition of understanding. The empirical data indicate that biological similarity is probably not the decisive point. Instead, more general features are of crucial relevance, for example the temporal structure of an organism's practical relationship to the environment and the consistency of reactions.[34]

At least some therapists feel that it would in principle be possible to treat such patients as a symbol user, if it would be respected that they react very slowly. That an excessively slow reacting patient is not interpreted as a competent symbol user is due to social constraints, i.e. triangulated processes of interpretation. Even if one does not grasp the temporal rhythm of reactions as a feature of the process of mutual interpretation, but instead as a feature of biological similarity or dissimilarity[35], it turns out to be an open question as to who is similar enough to be interpreted as a symbol user. This interpretation refers necessarily to the third actor and reveals his constitutive function. The analysis of the constitutive function of the third actor is concerned with a problem that is not addressed within Mead's theory.[36]

CONCLUSION

The empirical analysis of the borders of the social world has proved to be a challenge to social theory. Such an analysis requires as a first step a methodological deanthropologization of sociological concepts. As a consequence the realm of the social as it is observed by social scientists has to be delimited in a new way. In doing so I have referred to a formal dyadic theory of the social that can be treated as a consensual conception in sociological theory. The dyadic framework can be conceived of as second person approach. As such, it differs from other conceptions of understanding the other, such as the third person approach of theory theory and the first person approach of simulation theory.

Sociological theorizing and empirical research are treated for the most part as separate fields. This is especially true if transcendental theoretical approaches are used, such as those of Luckmann or Simmel. Within the framework of the design proposed here the relationship between theorizing and empirical research takes on a different form. Even the most foundational theoretical assumptions, such as that of expectation-expectations, gain their importance only in their relationship to empirical research. To put it more precisely, the relationship between foundational theoretical assumptions and empirical research is reciprocal. On the one hand theoretical assumptions focus the researcher's attention and on the other hand they have to prove their effectiveness systematically. If they fail, the assumptions guiding the observation must be modified. This methodology developed as a result of the above-outlined discussion on the empiricism of science studies and of Luckmann's apriorism.[37] The argument can be applied without any difficulty to the ideas of Simmel (Lindemann 2002b).

Such an approach changes the coordinates of the discussion of the theoretical foundations of sociology. Theoretical discussion of classical concepts is itself undoubtedly necessary, but the resulting concepts also have to be formulated such that their relevance can be proved in empirical research. If necessary, even foundational theoretical concepts must be modified. Based on empirical research, I

have argued that the constitutive concept of sociality has to be changed from a dyadic to a triadic concept.

The research was based on a new insight in the structure of the understanding of the other. It consists of a two-step procedure. The logical first step of interpretation is concerned with the question "Who has to be interpreted as an alter Ego at all?", while the second step consists of figuring out "How should Ego understand the alter Ego?" The constitutive function of the third actor is revealed only if the first step of interpretation is taken into account, i.e., if the question of who can be an alter Ego is treated as problematic. Such a constitutive function of the third actor has to distinguished from the emergence function of the third actor within social theory (Simmel, Berger and Luckmann), and from dyadic accounts, which grasp the emergence of social forms on the basis of a dyadic concept (Mead). In both cases, the first step of interpretation is treated as unproblematic, i.e., it is presupposed as self-evident that social actors must be living human beings.

The broadened concept of interpretation and the constitutive function of the third actor offer a conceptual framework which allows for a rational understanding of the borders of concrete social worlds. This holds true for an analysis of the border problems posed by modern biomedicine as well as for an analysis of other cultures that integrate very different entities (like animals, plants etc.) in the process of mutual understanding.

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NOTES

[1] Very recently Alan Wolfe has restricted sociology not only implicitly but explicitly to the analysis of human beings. He demanded "a distinct science for a distinct species" (Wolfe 1993:1).

[2] Luckmann uses the term "boundaries of the social world." I prefer the term "border," in order to stress the political dimensions of the distinction between social actors, that is, social persons, and those entities not acknowledged as such.

³ See Hallowell (1960), Fortune, Malinowski (1932).

⁴ Another characteristic feature of such societies is the existence of a state organization.

⁵ For a more detailed critique of the transcendental approach see Lindemann (2002a:64–69).

⁶ The discussion between Collins and Yearley (1992) and Callon and Latour (1992) reveals interesting insights to this problem. For a more detailed critique of the science studies approach see Lindemann (2002a:58–63).

⁷ A number of authors have formulated the thesis of convergence of different social theories with respect to their basic assumptions. For newly formulated contributions to this thesis see Greshoff (1999).

⁸ Simmel as well as Weber, Parsons or Luhmann do not treat the complex dyadic relationship as the result of ontogeny or evolution. Nevertheless, it seems possible to interpret the relationship characterized by the aforementioned double uncertainty as the evolutionary outcome of an escalation of deception. If one assumes that "communication should be molded by natural selection so as to manipulate other individuals" (Whiten, Byrne 1988:233), it is probable that the successful deceiver has an evolutionary advantage. This will lead to an "arms race" (Dennett 1988:253) between agents using increasingly clever and subtle ploys and counterploys. Such a development requires increased self-control of emotional expression and, instinctive behavior. Such evolutionary development will lead to agents who observe each other and expect the expectations and intentions of the other. From such a perspective the consensual assumptions of sociological theory can be conceived as an abstract and formal description of those aspects of the evolution of social relationships that lead to more and more uncertainty. Such increasingly uncertain social relationships are the precondition for inventing and stabilizing a qualitatively new order, an artificial order constituted by the actors themselves—not as a given in nature.

⁹ For an overview see Mitchell (1997).

¹⁰ For an overview see Kögler and Stueber (2000) and Vielmetter (1998).

¹¹ From this insight Bohman derives a methodological consequence: The researcher has to acknowledge that the research relation is itself a social relationship (Bohman 2000: 239). The same methodological consequence is unavoidable if the research is based on the formal theory of the social. For a detailed discussion of such a methodological approach see Lindemann (2002: Chap. II).

¹² For more details see Berkenhoff (1937) and Evans (1906).

¹³ Kögler and Stueber follow Hollis and Davidson, who have tried to fix a substantial minimum of cultural overlap, like "charity principle" (Davidson) or the adherence to modus ponens and the law of noncontradiction (Hollis). I would be reluctant to definitively fix such a minimum. Maybe the understanding of one culture is based on such a specific overlap. But I would not exclude beforehand that the understanding of another culture might be based on another conceptual overlap.

¹⁴ Turner (2000) has argued that the scope of empirical phenomena referred to within the discussions of theory theory and simulation theory of understanding is rather narrow. His suggestion of taking into account much more and various empirical data is met here.

¹⁵ This is supported by insights into the acquisition of language. According to Tomasello (1997:419) linguistic symbols are "bi-directional" phenomena, thus mediating between two communicating agents who expect each other to have intentions. Tomasello himself uses the terminology of the theory of mind. He does not refer to social theory or the concept of expectation-expectations.

¹⁶ Being unaware of one's environment and oneself is the diagnostic criterion of a vegetative state. If such a state is not likely to change, the medical diagnosis will be "persistent vegetative state" (Multi-Society Task Force 1994:1500).

[17] Several non-medical therapy forms are involved in the treatment of these neurological patients, for example, ergotherapy or music therapy.

[18] On the following see Lindemann (2002a:299–314).

[19] Vera nearly drowned, which caused severe hypoxic damage to her brain. She was at first treated in an intensive care unit, and then transferred to neurological rehabilitation. During the discussions of her case, the staff members of the rehabilitation unit did not refer to the results of neuro-imaging.

[20] Another way of determining whether the reaction of a patient is too irregular is to put oneself into the position of the patient. Such simulations seem to be more relevant in other therapeutic settings, such as ergo-therapy. Patients in a vegetative state are often cramped in bizarre postures which they cannot change by themselves. The therapeutic procedure consists of bending hands, arms, legs, and feet back into a more normal position. Since this is very painful for the patients, they are often asked whether it is too painful, and if the therapy should stop for the moment. In order to make sense of the answer, a yes- or no-gesture, the therapist puts himself into the position of the patient. He asks himself: If I were in the position of the patient, would I experience the therapeutic action as too painful or not (see Lindemann 2002:308f).

[21] To be more precise, I am not claiming anything concerning the meaning of Vera's gestures. My analysis of the yes/no code is concerned not with how an entity learns to use a symbol of affirmation or negation, but with the interpretation of the produced gestures. The focus of my research is not on Vera but on the interpretation of her behavior by others. How do they resolve the question whether Vera actually exists as a being displaying the behavior of a social person?

[22] I suppose that a patient will be able in such a process to contradict a theory that a therapist might have regarding the patient's mind, or a simulation of his state or his wishes. I.e., I suppose that holding a theory or simulation of the patient can be integrated into the process of mutual interpretation and reinterpretation.

[23] It is absolutely necessary to use the formulation "act actually as social persons." Unconscious humans exist in a mediated manner as social persons too, but they do not behave actually and directly in a way that must be interpreted as being involved in a social relationship, i.e., in a process of interpretation and reinterpretation. Unconscious patients are treated by a doctor *because* they are persons, but in most interactions the patient is not actually treated *as* a social person. On this distinction see Lindemann (2002a:329).

[24] Rawls (1955:25ff) has argued that there are rules which are logically prior to the particular cases. He calls this the practice concept of rules. One of its crucial features is that there cannot be a particular case falling under the rule, unless the practice structured by the rule does exist. This is similarly true for the practice of the yes/no code.

[25] Drawing on Luhmann's (1997) theory of observation Fuchs and Marshall (1998) seem to make a similar point. According to Fuchs and Marshall it depends on the observer whether an entity is a person or more like a thing. "Our basic premise is that 'action,' 'behavior,' 'persons,' and 'things' . . . and other dichotomies are indeed not opposite poles of Being, separated by an unbridgeable essentialist gap. Rather, they are social devices of description and explanation that co-vary with other sociological variables, such as the status of observers, the conditions of observing, and the degree to which an observed system has been rendered predictable through normal science." (Fuchs and Marshall 1998: 17). I share the intentions of Fuchs and Marshall, but the level of my analysis is different. An approach using the idea of social devices of observation presupposes necessarily symbols, communication and the existence of social systems. These elements, i.e., symbols, communication and social systems emerge–according to Luhmann–from the dyadic constellation between Ego and Alter structured by double contingency (Luhmann 1984:

Chaps. 3 and 4). My analysis is concerned with some of those elements which must be presupposed by Fuchs and Marshall, that is, the analysis of who is an alter Ego and what are the social conditions of elementary linguistic symbols.

[26] Here, I refer to Weber's concept of legitimacy. Weber (1980:16–20) speaks of legitimacy with reference to the mediating social order. Legitimacy refers especially to the normatively demanding character of the social order: its "exemplary and binding nature" (Weber 1980:16). If this is transferred to the question of an actor, it follows that Alter is not simply an actor; instead, it is decided through the relation of Ego and Alter to a third actor that Alter must be an actor. The word "must" is chosen deliberately, for Ego and Alter are not free to withdraw themselves from being actors. Mediated by the third actor, Ego and Alter are forced to acknowledge each other mutually as actors.

[27] For a general overview concerning the problem of the third see Fischer (2000).

[28] Within the framework of the theory of mind third-party relations are discussed with reference to empirical observation. For an overview of the studies of third-party relations among monkeys and apes see Tomasello (1997) and among young children see Mitchell (1997). From a sociological point of view these studies can be perceived as an empirical corroboration of Simmel's ideas. The involvement of third parties does add peculiar properties to social relationships, but the third party is not viewed as a precondition for stable dyadic social relationships.

[29] Elsewhere I have given a detailed description of how Simmel's conception of the social can be related to the above-outlined dyadic formal theory of the social (Lindemann 2002b).

[30] Simmel develops three a priori definitions characterizing sociation: 1. the mutual constructing and categorizing reference of the individuals to each other (Simmel 1971:9ff); 2. the dual position of the individual as an integrated part of society and as an individual beyond society and opposed to it (Simmel 1971:12ff); and finally 3. the integration of the individual into an ordered societal whole (Simmel 1971:18ff). Each of these three definitions includes basic social interactions (*Wechselwirkungen*), that is, Simmel's core concept is also derived from a dyadic constellation.

[31] The arguments of Berger and Luckmann question how far Simmel's general a priori definitions of the sociation process can be understood without referring to the third actor. The mutual categorization can indeed be understood from a dyadic constellation, but in order to conceive the second and the third Simmelian a priori, some modifications are necessary. If the emergence of the objectivity of social forms requires a triadic constellation, it becomes impossible to refer to a dyadic constellation in order to understand the dual position of the individual as a part of society as well as being beyond it (2. a priori). The same holds true for the third a priori, which formulates the integration of the individual in an embracing societal whole.

[32] Perhaps this interpretation is too one-sided. The structure of a Meadian game may have triadic elements, since a participant has to take into account not only different co-participants, but also how these co-participants would relate to the relation between participant Ego and co-participant Alter. But such a triangulated structure remains implicit within Mead's argumentation. With reference to the distinction between the emergence function and the constitutive function of the concrete third actor it is obvious that Mead considers implicitly only the emergence function, but he does not take into account the constitutive function of the third actor.

[33] Simulation theory constructs the basis of understanding in a similar way (Kögler and Stueber 2000:20).

[34] See the aforementioned conditions for interpreting the patient as a symbol-using alter Ego, i.e., similarity of the gestures used, delimited interval of reaction, at least vague comprehensibility.

³⁵ Mead (1964:285) refers explicitly to brain functions in order to describe the process of taking on the attitude of the other. Therefore one could treat damage to the brains of patients in a vegetative state as an alteration of the biological basis.

³⁶ Habermas (1995) has offered a subtle interpretation of Mead's theory of taking on the attitude of the other. He argues that a dyadic constellation is sufficient in order to grasp the emergence of social forms. But Habermas also argues that the constitution of validity claims (such as truth etc.) requires the position of a third actor, who is called "neuter" by Habermas (1995:59). But it seems to be an open question as to whether Habermas grasps the third one as a virtual or a real third actor. In a similar way, I would treat it as an open question as to whether the concept of the "impartial spectator" (Smith 1759) implies a concrete third actor or only a virtual one. In any case, Smith was concerned with problems and conflicts among social actors. In order to theorize these problems, he develops the concept of an impartial spectator. Smith presupposes, like Mead and Habermas, more or less unquestioned, the existence of social actors. He does not address those problems, the analysis of which requires reference to the constitutive function of the third actor. The same argument holds true for Wittgenstein's analysis of rule following. Wittgenstein (1984) presupposes a teacher and a student. Both of them can speak, i.e. both of them are acknowledged participants in the process of mutual interpretation and reinterpretation. As I have demonstrated with reference to empirical data, it is unproblematic to grasp such a process within a dyadic framework.

³⁷ Concerning the orientating function of theoretical concepts for empirical research, this design bears a resemblance to Blumer's "sensitizing concepts" (Blumer 1986). The difference follows from the fact that Blumer reacts to different problems. His point was that theories should not be related to empirical data only in the manner proposed by Popperian falsificationism.

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