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Action and Motivation: Rational vs. Concerned Actors

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1. Introduction

The usage of assistance technologies today is often strongly influenced by the application of computer simulations (Grimm et al. 2015; Hillmann 2018). However, experiments with subjects in usability research continue to play an important role. It is still crucial to highlight everyday aspects of human behavior (Janda 2018). In the case of hearing aids in particular, it is necessary to investigate whether the benefit measured in the laboratory also corresponds to the subjects' day-to-day experiences (Wong & Hickson 2012). For example, laboratories with audiovisual environments are used to represent a real-world environment (Paluch et al. 2019). A question that should be considered is whether and how the participants influence the experiments and scientific results. Motivation is a key concept in this question and it is relevant to social science studies (Lizardo et al. 2016; Vaisey 2009) as well as to medical research (Hallowell et al. 2010; Mfutso-Bengo et al. 2015; Soule et al. 2016). An ethnographic approach makes it possible to understand what motivates the participants to take part in lab experiments. This approach takes into account the everyday life of the participants and their commitment (Abbott 2004; Glaser & Strauss 1965). This contribution will therefore focus on the question of why subjects take part in experiments.

However, the question of which sociological theory allows us to precisely determine what motivates subjects to act remains open. Theories that address both action and motivation should be central here. In what follows, I compare the theoretical concepts of the well-established rational choice (RC) theory with the new phenomenological-sociological “concern theory” (Lindemann 2016).

Both theories address the sociological problem of action selection and both focus on motivation. The underlying assumption is that there are rules for selection that can be identified by ethnographic data. They focus on the motivation for selecting an action in a given situation, e.g. utility maximization or satisfaction (Coleman 1990; Esser 1993; Kroneberg 2006). These theories will be theoretically (Sect. 2.) and empirically (Sect. 3.) compared in order to reveal the differences and similarities between them (Lindemann 2009: Chap. 4).

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The empirical material is based on medical experiments carried out in 2017 (Paluch et al. 2019) and which are qualitatively analyzed with reference to the Grounded Theory (Corbin & Strauss 1990). The data suggests that the time dimension is important for action selection. Concern theory can examine this aspect more closely than the established RC approaches. *Concern* emphasizes the interrelation of present and future. An actor is currently concerned because of an uncertain future. The statement of a test subject shows a special type of concern mediates her motivation: the concern about whether she still lives in a world shared with others (Sect. 4.).

2. The Relevance of Time

Action-oriented RC theory is a sociological and theoretical approach that shows the formal rules by which actions are selected. Selection rules are formulated that state why individual actors make decisions. For example, it is assumed that actions are carried out in order to maximize one's own benefit (Coleman 1990).

In many RC approaches, it is crucial to assume that social actors can choose different actions for different reasons. Action selection is often divided into impulsive or reasoned decisions. For example, the dual-process theory assumes that actors can choose actions both at an intuitive level (System 1) and at a conscious level (System 2). It is possible to trust one's own intuition in a given situation or to rethink the situation and draw rational conclusions from it (Kahneman 2003). Similarly and previously, Max Weber (2007: 28ff.) has pointed out that there can be various types of social action. An actor can act emotionally or traditionally (System 1) or based on value-rational or instrumental considerations (System 2). Thus, this approach is an elaborate way to investigate social actions (Esser 1993; Kroneberg 2006; Tutić 2015).

Gesa Lindemann (2016) also refers to an action selection theory in an article, but does not assume an atomistic approach to individual actors. Following Helmuth Plessner (1975) and using a phenomenological-sociological analysis, she conceptualizes an alternative rule which reveals why actors choose specific actions. Lindemann (2016) proposes taking motivation by the possibility of future failure into account and focusing on concern. Thus, there may be references to the uncertain future that an actor refers to when she or he realizes that in a given situation she or he is concerned (Lindemann 2016: 85f.).

The main difference between RC theory and concern theory exists with respect to time. RC theorists assume a future that is seen as independent of the present and that it justifies actions directed towards utility maximization. Regardless of whether the RC theorists understand action analytically as an intuitive action (System 1) or a reflective action (System 2), in both

cases it is assumed that an actor decides between the options A or B without the future having any immediate influence on the current selection. The actor does not decide on an action because an expected future compels her or him to act. Instead, a situation-dependent calculation motivates their action.

Concern theory does not employ the assumption that there are action alternatives A or B. What is central to the concept of concern is that social actors are concerned and they experience this concern in the light of an expected future failure. This future expectation has a motivational effect on the actors because they are presently worried about a potential future failure. An actor is prepared for a future possibility and acts accordingly. Thus, actors do not calculate different options based on a particular situation and ignore the compelling power of the future from within their present state. Instead, the pressure of the impending future, which is experienced in the present, urges them to act (Lindemann 2016: 85-88).²

It will now be shown how these theoretical assumptions function with regard to empirical material. Firstly, I will outline how the ethnographic material can be interpreted from an RC perspective. Secondly, I will focus on the circumstances, on how the future is of concern therein and how it pressures test participants to act, but without assuming that this is merely an emotional action Weber's (1978: 28).

3. An Ethnographic Approach to Audiology

The empirical part of my contribution draws upon fieldwork carried out in an audiological laboratory (see also Paluch 2019). In addition to comparing the two aforementioned theories, my research interest is in what motivates the subjects to participate in experiments. The analysis refers to a variation of Grounded Theory (Corbin & Strauss 1990). However, unlike the usual applications of Grounded Theory, it does not examine how actors strategically or tactically interact (Glaser & Strauss 1965). Instead, the focus here is either on maximizing utility or respectively on the concerns of test participants. I am particularly interested in how these assumptions allowing differing interpretations of motivations for participating in lab experiments. In this way, I want to show which theory reflects the motivation and actions of the participants in a precise and everyday manner.

The analysis focuses on an interview where a person with a hearing impairment reports why she is participating in the medical study. In the following, she is referred to with the pseudonym *Mechtilde*.

² In addition to the concept of concern, Gesa Lindemann (2016: 87f.) also proposes employing the concept of desire, where the focus is on an expected success of future events.

The goal is to show how the qualitative material can be interpreted with different theories and thus to compare theories with one another. We will also see how different motivational structures are brought out in the context of the different theories. In one interpretation, Mechtilde tries to maximize her utility and this motivates her participation in laboratory experiments (3.1). In the other interpretation, she is worried and this motivates her visit to an audiological laboratory (3.2).

3.1 The World is in Question – the Benefits of Lab Experiments

After the experiments, I talked to Mechtilde about how she perceived the laboratory experiment. The following excerpt from the interview clarifies why she participated:

Mechtilde: That's the question [does not say anything for five seconds]: Do I want to hear all this or do I not want to hear it all? On the other hand, I think, here [points to her head] I'm not fully there anymore. In the evening, when I, my husband died a few years ago, I live alone in the house, on the ground floor // mh // ground floor. So it's a flat roof bungalow // yes //. Then I lie, then I open all the doors, then I lie in bed, something bangs on the roof. Ui! Is there someone? Or there's something on the roller shutter outside // mh //. Is there someone? So it would be important to hear well. Because I actually hear a lot of noise. // mh // but if it is real or if it come from my guts or so // laughs briefly // I do not know. No?

Mechtilde describes a recurring situation in which she lies in bed at night, hears noises outside and does not know whether they are caused by criminals or not. There are sounds and she does not know if they come from outside or from her “guts”, whether it's a harmless squirrel or a violent burglar. She also mentions that she is not sure whether she is still “fully there” while pointing to her head.

On a simplified RC approach, implicit in this is an assessment of Mechtilde's situation at present where she can decide between options A or B. She envisions the options she has in this particular situation and then calculates which option maximizes her utility. It is important to establish how the situation is to be interpreted because her assessment of what constitutes a reasonable action is dependent upon her interpretation of the situation.

Similarly, we can interpret her state of mind and analyze this interpretation with a view to uncovering her motivation. Following an interpretation along the lines of RC theory, trusting her gut feeling (System 1) or her sanity (System 2) are both questionable options for Mechtilde. Nevertheless, she can decide whether (A) *she wants to hear all this* or (B) *does not want to hear it all*. This is not an intuitive, spontaneous act. Instead, she spends some time coming up with

these options and then trying to decide between them. It is a System 2 decision, even though she is still unsure about what she will decide during the interview.

Mechtilde does not want to interpret the situation herself, but wants to get expert help. The expert's help could be a reason why she is in the lab on this interpretation. That actors can mutually support each other making reasonable decisions may be a relevant point in RC theory. Experts can help in selecting useful actions. This can be helpful for actors as they save themselves the expense of long decision-making processes, regardless of whether or not they ultimately rely on the expert opinion. In this approach, this is still an individual decision directed towards the maximization of individual benefits.

3.2 Concern for the Shared World

From the perspective of concern theory, the uncertain future presently awakens a concern about not being able to know whether actions or interpretations of the nightly situations are meaningfully. In the past, Mechtild was able to interpret such nocturnal situations with her husband's help, whereas now, after his death, she is on her own.

Mechtilde's experience of the present situation is mediated by its relation to an uncertain future. She tries to find out whether only she can hear the noises or whether others can also perceive them. Her loneliness contributes to a sense of being almost enclosed in a vague and tormenting present whose content is difficult to determine. Her thoughts about the future and her choosing to visit a medical laboratory are motivated by a concern with contingent future prospects. This means this visit is neither a purely emotional nor a purely rational act. Rather, her urge to act is mediated by both factors, because the visit to a medical laboratory to determine the nature of her own perception mixes both an affective and a reflective approach to the world.³

Reckoning with time is, therefore, particularly important because it makes clear that actors do not merely calculate what they can or cannot do in a current situation. The situation is interpretable with respect to the future, which means that the interpretation of the present situation is structured by expectations. Mechtild's uncertainty is mediated by references to the present and the future. It is the experience of uncertainty; she no longer knows whether she experiences the world as others do. If she can no longer reflexively refer to the future, then she does not know what exactly she should do now in order to minimize her worries. Mechtild does not know if her concerns are warranted or not.

³ Analytically speaking, it is a matter of an interrelated state of the two aforementioned systems of the RC theory approach discussed here.

Strictly speaking, Mechtilde worries that she does not experience the world as others do. This worry presses upon her and motivates her visit to an audiological laboratory. This is understandable, because there are noises that she cannot assess correctly. She is worried about not living in a world that is shared with others now and in the future. She is uncertain about whether and how participation in social relationships with others can work if she is unable to correctly identify different sounds and to understand what situations are about. She visits the lab in order to deal with these worries. This is a special type of concern: the concern about whether she still lives in a shared world.

4. The Past is Present – the Future is Now

In this contribution, I have dealt with the research question concerning why social actors are motivated to participate in scientific experiments. Following Lindemann's suggestion, (2009: Chap. 4), I compared RC theory and concern theory based on empirical material. It became clear that RC theory shows that Mechtilde has different possibilities of reacting to her situation. The strength of the approach results from the fact that it gives explanations for the subject's non-everyday actions. In addition, on this approach it was possible to determine why the visit to the medical laboratory occurs by reference to emotional or reflective motives. It follows from this interpretation that Mechtilde implicitly weighs her options and does not act spontaneously. This is why her action can be described as rational System 2 decision. Visiting the medical laboratory maximizes her individual utility because she can receive support there. Thus, other actors can contribute to conscious decisions and support rational thinking. That means they should be included in the explanation of rational processes (see also Coleman 1990: 157-162, 504-507). This can be conceptualized, for instance, as a form of collective intelligence (Malone & Bernstein 2015).

Concern theory, however, offers a different perspective. This theory makes it possible to elucidate the connection between present and future. Mechtilde's motivation can be understood analytically as a present urge to act that is awakened by expecting the future. Thereby, it helps to show how Mechtilde's action takes place reflexively and it allows the experience of both affect and deliberation to be included in the analysis. The concern does not just suddenly appear in the present and allow Mechtilde to act. Rather, she experiences the concern as a circumstantial. She is not overwhelmed by concern, but the concern provides an occasion to think about what to do and how to understand the situation.

Thus, Mechtilde is concerned about whether she still lives in a world shared with others. It is not solely an individualistic motive, but one that is interrelated with social relationships. The

combination of the temporal distinction between present and future enables grasping the connection between both affectual and reflexive experience, which contributes to an action as a form of a specific (eccentric positional) reference to the world.

Further material can be used to investigate whether the knowledge about a shared world is central here. If knowledge is emphasized, this concern can also be called an epistemic concern. Additional studies could emphasize the relevance of this epistemic concern and how other actors respond to it when the knowledge of the shared world becomes questionable.

Finally, we can conclude that the RC approach focuses on the situation and thus overemphasizes the past (e.g., habitualized preferences), whereas the concern theory overemphasizes the future. A refinement of the concern theory would be possible, if the past and the experience of actors was taken more into consideration (see also Fröhlich & Paluch 2019).

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