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MAREK POKROPSKI
UNIVERSITY OF WARSAW

MENTAL CONCEPTS: THEORETICAL, OBSERVATIONAL OR DISPOSITIONAL APPROACH?

1. Problems of other minds - introduction

It is not necessary to articulate the problem of other minds in detail since it is one of the classical problems in philosophy of mind (for an overview, see Avramides 2001). The problem has three formulations: ontological, epistemological, and, the most recent one, conceptual. In a nutshell, the ontological problem of other minds concerns the existence of other minds: do other minds exist? Epistemological problem raises the question of the possibility of knowledge of other minds' content: how can I know what others think or feel? The key question of the epistemological problem is whether mental states are private in nature and thus unobservable or, on the contrary, they can be perceived directly. According to the former, I can directly access only my mental states but not others'. The others' mental states cannot be observed directly, therefore they must be cognized in some indirect way. The latter claim gives possibility to ground knowing other minds on perceptual basis.

Since René Descartes, several different solutions of the epistemological problem of other minds have been proposed, including such influential positions as inference from analogy (e.g. J.S. Mill, A.J. Ayer). Development of cognitive sciences in the last few decades and research in the field of social and developmental psychology renewed the debate (the

so called Theory of Mind debate) introducing a body of empirical research, which resulted in new positions. However, in this article I will not discuss all positions in the debate. There are simply too many of them to consider in this short paper. Moreover, recently in the debate there has been an attempt to reconcile indirect approaches (such as theory-theory or Simulation Theory) with the direct perception account and thus propose a hybrid theory (e.g. Fiebich & Coltheart 2015, Carruthers 2014, Stich & Nicols 2003). In general, hybrid theories acknowledge that we have more than one cognitive strategy of "mindreading", for instance, perceptual and inferential, which we use depending on different factors. For example, the default strategy would be perceptual, and inference would be used second in case of insufficient perceptual information (Carruthers 2014).

The third formulation of the problem of other minds is the conceptual problem, the origin of which can be found in Wittgenstein's late philosophy (Wittgenstein 1968, Avramides 2001). This problem concerns the possibility of acquiring mental concepts, such as pain or sadness, that are universal, i.e., mental concepts which could be equally ascribed to myself and others. If we grasp the nature of pain on the basis of our "inner" experience, then how can we ascribe this concept of pain to others? To put it differently, how can mental concepts, which we understand on the basis of our experiences, be used both in the first as well as in the third person cases? A negative solution to the problem is to acknowledge that we have two different mental dictionaries, one first-personal and the other third-personal. This idea is not only counterintuitive but also generates the problem of similarity criteria between concepts from different dictionaries. The challenge, then, is to develop a plausible positive account of mental concepts—one that accommodates the application of concepts in both the first and third person cases.

Not all proposals in the contemporary theory of mind debate address the conceptual problem. Thus, in the article I will focus only on these approaches which either consider the origin and nature of mental concepts explicitly, such as theory-theory (TT), or implicitly, like Direct Perception (DP), dispositional or phenomenological approach of Merleau-Ponty.

2. Theory-theory and Direct Perception

According to theory-theory (TT) we can know what others think or feel on the basis of inference (e.g. Baron-Cohen 1995, Carruthers 1996, Stich 1983). We infer mental state of the other when we perceive his or her behavior by employing a theory (folk psychology) about other people's mental lives and behavior (Stich & Nicols 2003). Folk psychology can be understood here in two ways: (1) as a set of skills of mindreading, that is, skills of attributing mental states and predicting the others' behavior, or (2) as a collection of platitudes or a set of generalizations regarding the mental life of others and causal relations between mental states and external stimuli; e.g., if someone receives a painful stimulus, then he/she feels pain, which results in screaming, crying, etc. (behaving in a specific "painful" way). One can argue that it is impossible to give a list of all folk-psychological platitudes. Although that is surely true, it is not necessary. Folk-psychology platitudes are rather putative, tacit, commonsensical knowledge, which is used implicitly in the process of mindreading. One can also raise the question: how do we acquire these platitudes? Some theory theorists (e.g. Carruthers 1996) claim that at least some of them are innate. Others argue that we gain them during development and through the acquisition of cultural practices.

The direct perception (DP) account claims that at least in some situations we can directly perceive others' mental states such as intentions and emotions (e.g. Cassam 2007, Gallagher 2008, Smith 2010a). The question of how perceptual knowledge of other minds is possible remains. Different versions of the DP account provide different answers. For example, Joel Smith (2010a) argues for a perceptual account using the Husserlian concept of perceptual co-presentation and a functionalist approach to mental properties. Seeing others' mental states would be similar to perceiving three-dimensional objects: only the front side is sensually "present", but the back side is perceptually "co-present". Smith admits, however, that it is plausible that in different situations we have different strategies of gaining knowledge about others, including perceptual and inferential strategies. Quassim Cassam argues differently for the perceptual model. He claims "that one can sometimes know what

others are thinking or feeling by visual means" (2007, p. 170). This solution is supported by Dretske's (1969) theory of epistemic perception which is non-inferential.

Now, how these approaches address the conceptual problem of other minds? According to theory-theory, mental concepts such as pain, sadness, or belief are theoretical terms, which at some point were introduced into our folk psychology. We use these theoretical entities to explain and predict behavior of others as well as our own. It may seem that TT omits the conceptual problem by postulating a common dictionary of mental terms and a common folk psychology. But how do we introduce and define these theoretical mental terms? Theory theorists usually refer here to functional definition. The idea of functional definition of theoretical mental terms was proposed by David Lewis (Lewis 1970, 1972; Stich 1983).

> "Call these *theoretical terms* (*T-terms* for short) because they are introduced by a theory. Call the rest of the terms in the story *O-terms*. They are all the *other* terms except the T-terms; they are all the *old*, *original* terms we understood before the theory was proposed. We could call them pre-theoretical terms." (Lewis 1972, p. 88-89)

To illustrate his idea, Lewis tells a detective story (1972). In the story, the detective investigates the death of Mr. Body. The detective observes the crime scene and notices various phenomena such as the victim's body, blood on the wall, a broken window, etc. Then he proposes an explanation of the mystery, introducing the story of three individuals called X, Y, and Z who conspired to kill Mr. Body. The detective describes what role X, Y, and Z played in the conspiracy and the act of killing. When the detective is introducing his story, he does not know the real names and nature of X, Y, and Z, they are theoretical terms defined by their functional role. Their real names can be discovered in further investigation, if the theoretical hypothesis is true.

By analogy, mental concepts are theoretical terms introduced in order to explain human behavior. We use them to explain and predict others' behavior as well as our own. Mental concepts as theoretical terms

are defined functionally, that is, by their functional role they play in the cognitive system. They are not observational terms, but observational terms (such as stimuli or bodily responses) can be used in their definitions. Lewis agrees that folk psychology was never introduced in a specific moment in the history of science, which makes it difficult to differentiate pre-theoretical terms from theoretical ones. Thus, he acknowledges that folk psychology is a myth, however, as he argues, it is a good myth because it gives us plausible explanation of social cognition.

Besides the mythical origin of theory-theory, there are other problems with the functional definition of mental concepts, such as "narrow causal individuation" (Stich 1983, pp. 22-23). In short, causal individuation means that mental states are determined only by their causal interactions. theory-theory holds the narrow version of causal individuation, which means that causal links which determine mental states, are only those between mental states and other mental states, between mental states and stimuli, and between mental states and bodily responses or behavior. This means that functional definitions of mental terms are narrow and explanations produced by theory-theory cannot include links that go far beyond the organism, for example, past events or sociocultural facts. This obviously constrains explanatory power of TT, especially in highly contextual cases of human behavior.

The next objection raised by Stich (1983) concerns causal links between mental states and behavior. Theory-theory claims that particular mental states, say, the experience of a headache, typically cause particular behavior, say, taking painkillers. However, this is only a statistical law dependent on one's age, knowledge, social status, and, say, susceptibility to the pharmacological industry. Thus, "typically causes" is highly variable and dependent to various factors, which TT cannot address due to narrow constrains.

Finally, it seems that TT omits the conceptual problem by postulating the same set of mental terms introduced in folk psychology and used to explain others' as well as our own behavior. It is claimed that the grounds of self- and other-ascription are basically the same, namely, inference to the best explanation. It is not clear, however, if in both cases we deal with the same *explanandum*. In the case of other-ascription, data

are clearly behavioral, we explain what we actually see from a third person perspective, whereas in self-ascription cases, it is highly plausible that we deal with a sort of inner first-personal experience or introspective data. If so, then we use the same set of mental terms, defined using third-person terms (e.g. observational) to explain different phenomena, both first-personal and third-personal. Another solution is that the grounds of self- and other-attribution do not have to be the same. For instance, according to Carruthers, it is plausible that other-attribution is based on "inference to the best explanation of (behavioral) data", whereas "self-knowledge should be thought of analogous to the theory-laden perception of theoretical entities in science" (Carruthers 1996, p. 26). Accordingly, self-attribution is a kind of non-inferential (at least at a personal level) recognition of one's mental state, which is characterized in mental (theoretical) terms.

Now let's consider how the Direct Perception account addresses these issues. DP states that we grasp others' mental states on a perceptual basis, i.e., in direct observation of someone's behavior. The cognitive process behind it is considered to be non-inferential but requiring a conceptual content for mental attribution. However, mental concepts are not theoretical terms, but they come from perception, and thus can be understood as either observational terms or ones that are reducible to them. In strong interpretation of DP, mental states are identical with behavioral states. This, however, generates the conceptual problem. How can we know that our mental concept of pain denotes identically the same behavioral state of the other? One way to answer this question is to reject introspection or any other kind of "inner" access and acknowledge that self- and other-ascriptions are grounded on the same basis, namely external observation (e.g. Cassam 2007). In some limited cases, it is plausible that we ascribe mental states by observing ourselves. But even if that is the case, the observational access from the first-person perspective and third-person perspective are radically different. According to Joel Smith (2010b), the direct perception account does not solve the conceptual problem of other minds. Moreover, it generates an analogous conceptual problem of other bodies, i.e., we end up with two separate sets of concepts

of behavioral/mental states, one from the first-person perspective the other from the third-person perspective.

A weaker version of DP holds that relation between "inner" mental states and "outer" behavior is more complex. For example, Overgaard and Krueger propose a different reading of direct perception which redefines the relation between bodily expressions and mental states (Overgaard & Krueger 2012). They defend Direct Perception account referring to phenomenologists such as Max Scheler and Maurice Merleau-Ponty and argue that bodily behavior is "constitutive" of mental states, which means that "certain bodily actions make up proper parts of some mental phenomena" (2012, p. 257). According to that, "we see others' emotions by seeing proper parts of their emotions" (p. 255), which are embodied and observable. To use Overgaard's and Krueger's example, the tip of an iceberg is in this sense a proper part of iceberg and it might be said that seeing the tip of an iceberg on the horizon is to notice that there is an iceberg. It is not clear, however, what "constitutive" means here and how it is different from just "being a part of". Tip of an iceberg is a visible part of the iceberg, similarly to the front side of a chair I see in front of me. If so, then maybe, following Smith (2010a), it is better to consider this relation in terms of co-presence and apperception instead of "constitution". Furthermore, even if we agree that we can grasp mental states via "proper parts", we do it either by external observation or by a sort of "inner" experience (e.g. proprioceptive experience of facial expressions, which are proper parts of an emotion). Thus, such interpretation of direct perception does not help to solve the conceptual problem. Still, the mental terminology is divided between the first-personal and the third-personal. In order to give plausible account of conceptual problem, this dichotomy has to be overcome.

3. Dispositional and phenomenological account
Choosing between theoretical and observational terms is not a satisfying solution for the conceptual problem of other minds. Both theory-theory and direct perception do not solve the problem but, moreover, they generate more problems. Is there a third option? There is at least one

interesting candidate, in favor of which I would like to argue. This account conceives mental concepts as dispositional terms.

Dispositional account is usually linked with behaviorism, for example with Gilbert Ryle (1949/2009) and thus is a sister of direct perception. According to Ryle, mental concepts have dispositional nature i.e. they refer to subject's dispositional properties. When we call someone intelligent or melancholic we express that he or she has tendency to behave in a particular way when specific conditions are realized. For example, we would call someone intelligent if he or she, when asked, answered questions concerning general knowledge. Importantly, dispositions concern not only what we actually observe but, first and foremost, what we would see when specific conditions were realized. Thanks to dispositional concepts we are able to foresee what will happen and explain what happened. Accordingly, mental concepts are dispositional terms which we use to predict and explain others' behavior.

Development of this approach was recently proposed by Eric Schwitzgebel (2013), who introduces dispositional account of attitudes. Schwitzgebel argues that:

> "to have an attitude is, (…) to have a dispositional profile that matches, to an appropriate degree and in appropriate respects, a stereotype for that attitude (…) To have an attitude (…) is mainly a matter of being apt to interact with the world in patterns that ordinary people would regard as characteristic of having that attitude." (Schwitzgebel 2013, p. 75)

To generalize this claim: to have an attitude, belief, or to have an emotion or feeling, such as pain, is to behave accordingly with a stereotype for that belief, emotion or feeling, or, as Schwitzgebel puts it, to "live a certain way" (2013, p. 76).

The key notion of this approach is stereotype. According to Schwitzgabel "a stereotype for a property X is a cluster of other properties that would be regarded as characteristic of something that possesses property X" (2013, p. 81). Not all properties are equally important for a stereotype, some are more, other are less. Thus, stereotype can be conceived as a space of properties from which some are more central,

other are peripheral. This approach specifies dispositional concepts as a piece of commonsensical knowledge which comes from folk psychology. For example, if someone believes that it is going to rain, he or she will wear a raincoat or take an umbrella. If someone has pain in his/her knee, he or she will limp, walk slowly, take painkillers etc. It seems, however, that dispositional terms cannot be reduced to observable data, because they concern all possible behavior matching the stereotype. Moreover, some behavior is highly contextual and depends on environmental and cultural conditions. This advantage lead at the same time to difficulties e.g. the acquiring problem (how do we know which properties constitute a stereotype?) and the selection problem (which properties form the stereotype cluster are central?). Simple answer states that we know all of this from folk psychology and present context. However, as I showed above, folk psychology has difficulties with narrow causal individuation, that is, in putting mental terms in socio-cultural context and long-time dependencies. Indeed, in some cases cultural background and personal history as well as bodily knowledge of skills can have strong influence on explaining behavior of others and ourselves. If so, then maybe it is worth trying to replace folk psychology with another approach.

3.1 Phenomenological account

Phenomenological account of other minds, especially the existential phenomenology of Merleau-Ponty, is often read as a version of direct perception (Gallagher 2008, Overgaard & Krueger 2012). Here I would like to argue for a slightly different reading, namely that Merleau-Ponty's explanation of intersubjective cognition is similar, to some extent, to the dispositional account.

First of all, Merleau-Ponty argues that the ontological and epistemological problem of other minds are results of false dualistic ontology, which existential phenomenology is going to overcome. Mental states are not "inner" and private in the sense that they are not accessible for others. They are private only in the sense that we have first-personal access to them. Others, however, can have a third-personal access to my mental states and vice versa. This third-personal access, however, is not mediated by a theory. For Merleau-Ponty, understanding others' mental

states is not a theoretical enterprise but a bodily practice. Thus Merleau-Ponty, even if he claims something similar to the dispositional approach, he would oppose explaining cognition of others using theoretical terms of folk psychology. This does not mean, however, that social cognition does not have conceptual content. Mental concepts shape our understanding of others but have experiential basis. In *Phenomenology of perception* Merleau-Ponty writes:

> I perceive the other as a piece of behaviour, for example, I perceive the grief or the anger of the other in his conduct, in his face or his hands, without recourse to any 'inner' experience of suffering or anger, and because grief and anger are variations of belonging to the world, undivided between the body and consciousness, and equally applicable to the other's conduct, visible in his phenomenal body, as in my own conduct as it is presented to me. (1945/2005, pp. 414-415)

Merleau-Ponty's solution to the epistemological problem goes like this: we do perceive mental states, such as anger or grief, in other's behavior but they can be grasped only as instantiations of structures of existence or "belonging to the world". These structures of existence are anonymous, yet experienced as living body, they are neither first-personal (self-consciousness) nor third-personal (material body). To understand one's intention, grief, or sadness is to apprehend a certain variation of existential structure, which we all share. These structure has many dimensions including: emotional attunement, intentional action, language. For Merleau-Ponty all of them are embodied and intertwined. A change in one dimension, say, a mood change, affects other aspects, say, temporality of action, or linguistic or gestural expressions.

Let's consider an example. We see someone holding his or her knee and limping towards a bench. The perceived movement, facial gestures etc. express not only the intention and objective of action (to find a place to sit), but also its affective mode. The hurting knee shapes the subject's sensorimotor pattern and thus reconfigures situatedness in the environment. We perceive someone's limping movement as expression of pain and intention – looking for relief. However, what we apprehend is not isolated "inner" feeling of pain, but a holistic bodily disposition. On this

basis, we expect a certain set of behaviors and thus we can predict what observed person is up to. The situation is similar in the case of emotional states. When we see someone is afraid, say, of a spider on the wall, we grasp not only a particular object of fear, but the disposition to act in a specific way, say, to scream, move in the opposite direction, ask for help etc.

An important difference between Merleau-Ponty and dispositional approach is that he emphasizes interactive, practical, and embodied nature of social cognition. As he writes in *Phenomenology of Perception*:

> No sooner has my gaze fallen upon a living body in process of acting than the objects surrounding it immediately take on a fresh layer of significance: they are no longer simply what I myself could make of them, they are what this other pattern of behaviour is about to make of them. [...] now, it is precisely my body which perceives the body of another, and discovers in that other body a miraculous prolongation of my own intentions, a familiar way of dealing with the world. (1945/2005, pp. 411-412)

Merleau-Ponty argues that we not only understand what others do and could do in the environment, but also, and maybe most importantly, how we can interact as agents. The other is not a theoretical entity which I have to construct with theoretical terms but an embodied agent in whom I see a "familiar way of dealing with the world".

Accordingly: i) I understand the other's behavior because I share the same existential structures (such as attitudes, emotions, sensorimotor capacities) which shape bodily experience; ii) understanding the other is based on the primal recognition that the other is also an embodied subject; iii) apprehension what the other feels, thinks, does etc., is an apprehension of his/her existential disposition or, to put it differently, an actual way of living; iv) apprehension of other's disposition is immediately connected with my own dispositions, beliefs, and possible actions. I understand the other's behavior through myself and vice versa. I learn about myself thanks to others.

Now, having this background, how can we answer the conceptual problem? From Merleau-Ponty's perspective, mental concepts are not

mental in the sense of being first-personal, inner and private, but they concern certain modes of existence, or, to put it differently, shared dispositions of being in the world. Being in fear, is neither a peculiar "inner feeling" given in first-personal experience, nor a belief "in the head". Fear is a mode of emotional attunement with the world, and being in fear shifts different aspects of experience: it shapes bodily movements, gestures, thoughts, as well as practical engagement with surroundings. In short, being in fear changes our relation to the world on multiple levels.

Merleau-Ponty's account can be read as an extension of dispositional account, however, disposition is understood here in a wide existential sense. It concerns our bodily and affective situatedness in the environment. Mental concepts would be dispositional terms understood as a multimodal (e.g. visual, motoric) representations of behavior. There is a threat, however, of misinterpreting such representations in internalist way. For example, according to Vittorio Gallese, we can read Merleau-Ponty's phenomenology of intersubjectivity in terms of embodied simulation (Gallese 2005). Gallese argues that we use neuronal representations of behavior in an internal simulation process, which results in mental ascription to others. There are, however, serious doubts whether this interpretation of phenomenological account is valid (Zahavi 2012). Another reading, the so-called interaction theory, argues that social understanding is rooted in bodily practice of social interaction, which is understood as a dynamic and co-regulated process between autonomous embodied agents (e.g. Froese & Gallagher 2012). Accordingly, mental concepts would be minimal models of interaction which are deployed and specified in context of particular social interaction.

In sum, to be afraid, greedy, or hungry means to act, think, and feel accordingly with a specific behavioral profile (stereotype). Our understanding of such profile and applying relevant concept in everyday situations depends highly on the context, our previous experiences, as well as on sensorimotor capacities. This means that despite the fact that we share mental concepts as representations of social interaction and thus can understand each other, our experiences are not identical – to put it simply, your pain will never be my pain, although I understand what it is like to be

a subject of painful experience and I know possible profiles of behavior related with such experience.

4. Conclusion

The problem of other minds emerged from the Cartesian framework, where minds were considered as inner, isolated, and self-evident entities. The problem with mental concepts has the same origin. If we accept the view that mental states are "inner" and unobservable, like theory-theory, then we have to acknowledge that mental terms are theoretical constructs, although useful in explaining behavior. If we accept the possibility that we can, at least in some cases, see what others feel and think, then mental concepts have perceptual basis. Dispositional account, at least in the standard version above, argues for the dispositional nature of mental states, but it inherits some problems and constraints of theory-theory and folk psychology. Phenomenological reading of dispositional account argues for experiential and embodied basis of mental concepts used in social cognition, which primarily is social interaction. This approach not only gives justice to the complexity of social cognition and experience of others but also explains dispositions as situated in an environment and embodied.

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ABSTRACT

MENTAL CONCEPTS: THEORETICAL, OBSERVATIONAL OR DISPOSITIONAL APPROACH?

In the article I discuss the conceptual problem of other minds and different approaches to mental concepts. Firstly, I introduce the conceptual problem and argue that solutions proposed by theory-theory and direct perception approach are inadequate. I claim that mental concepts are neither theoretical terms nor observational terms. Then, I consider third option which states that mental concepts are dispositional terms, i.e. they concern particular patterns (stereotypes) of behavior. Finally, I argue that dispositional approach is to some extent coherent with phenomenological account and that phenomenological concept of embodiment can improve this position.

KEYWORDS: other minds; concepts; theory-theory; direct perception; dispositions; phenomenology