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Daniel D. HUTTO: *Folk Psychological Narratives. The Sociocultural Basis of Understanding Reasons*. MIT Press 2008, xxi, 343 pp. ISBN 978-0-262-08367-6.

In the last decade or so, interdisciplinary research on the nature of social cognition has made enormous progress. New developments in developmental psychology and cognitive neuroscience and ethology have had (and still have) a huge impact on philosophical work done in this area. The debates on how we understand other minds are no longer dominated by the choice between theory-theory (TT) and simulation theory (ST). Practically no one still defends either of these theories in its pure form; instead, more complex hybrid accounts have been put forward. But in addition, new alternatives have been developed (by Shaun Gallagher for example) in the course of a larger paradigm shift in the cognitive sciences. The computation-based cognitivist and representationalist framework is currently being replaced (or at least complemented) by an embodied, embedded and enactive cognitive science emphasizing that a full understanding of the workings of our mind needs to go beyond the investigation of computational brain processes and take into account the body and environment of the cognizing organism, in particular its interaction with other organisms/people.

Hutto belongs to this recent movement and emphasizes that "our primary modes of interpersonal engagement … are characterized by the possession of embodied expectations" (3). In line with the enactive approach to cognition, he holds that in most ordinary encounters we can rely on a "wealth of telltale cues, expressions, and responses of a more embodied variety" (12). Therefore, folk-psychology, understood as "the practice of predicting, explaining, and explicating intentional actions by appeal to reasons" (2), covers only a (small) part of our social cognitive capacities. The most basic intersubjective engagements depend on a biologically based perceptual sensitivity to certain informational cues. On top of that a more sophisticated folk-psychological understanding may (but need not) be acquired by "linguistically competent creatures" (4). According to this developmental and evolutionary theory of social cognition, the basis of folk-psychology is socio-cultural, but folk psychology does not exhaust the repertoire of social cognitive skills.

The core claim of his contribution to the family of theories about understanding other minds—the so-called Narrative Practice Hypothesis (NPH)—is that "direct encounters with stories about persons who act for reasons—those supplied in interactive contexts by responsive caregivers—is the normal route through which children become familiar with both (1) the basic structure of folk psychology and (2) the norm-governed possibilities for wielding it in practice, thus learning both how and when to use it" (p. x). This claim has some major consequences for a variety of (quite general) issues in the Philosophy of Mind, e.g. the nature and scope of animal cognition, the development of social understanding in infancy, the characterization of pre-linguistic mental capacities and the acquisition and mastery of mental concepts and so on. It also means that Hutto, who himself regards his approach to cognition as an "attempted fusion" of the approaches by Davidson and Millikan (p. xx), needs to discuss (and often refute) a large number of alternative accounts in these various areas. In this review, we can only mention some of these debates.

Outline

Hutto first motivates an investigation of folk-psychological understanding from a second-person perspective (ch. 1–2). That is, in everyday face-to-face encounters, reasons for acting are typically delivered in "online interactive dialogue" (20), i.e. they are embedded in stories (*narratives*) of some kind. Typically, we need not engage in inferential reasoning from the *third-person* perspective as defenders of TT would have it; nor need we often rely

on our *first-person* experiences to create pretend states that we project into others after putting ourselves in their mental shoes, as suggested by simulationists. Hutto holds that in most of our social interactions we take a more engaged *second-person* stance towards other people, whose expressive behavior is a much more reliable and more immediate guide to what they feel, believe, desire and intend (20). This general approach makes complete sense since we would expect that social cognition is fundamentally different when we are actively engaged with others, embedded in 'online' interaction, than when we merely observe others 'offline'. 'Online' interaction draws heavily on implicit modes of processing and mechanisms of interpersonal coordination – constituting a form of procedural knowledge that may be our 'default' mode and pervasive way of understanding others, which appears to be prior to theory and simulation, not only systematically but also ontogenetically. Hutto shares this view with a number of philosophers and psychologists (e.g. S. Gallagher, D. Zahavi, V. Reddy, P. Hobson) who have recently criticized TT and ST accounts for presupposing a detached and disengaged "spectatorial stance" towards others (12).

Since the NPH ties the mastery of propositional attitudes to the mastery of language, Hutto needs to tell a story about the social understanding of nonverbals and their mental capacities more generally. To this end, he introduces an important distinction between (merely) *intentional attitudes* and *propositional attitudes* in Ch. 3. Nonverbal responding (in human infants and nonhuman animals) only involves mastery of the former, not the latter. The bold claim is that all interaction with worldly objects and other people before the acquisition of language is explained and succeeds without invoking the notion of content, not even nonconceptual content. In this context, Hutto argues both against Bermudéz' claim that there is thinking without words (ch. 4) and against Fodor's claim that mentality is based on computations in a Language of Thought (ch. 5). Ch. 6 and 7 are devoted to the ontogenesis of folk-psychological understanding in infancy. In these central chapters, Hutto describes our primary nonverbal interactions in more detail and explains how they enable children to participate in the social discourse where they 'become familiar with the forms and norms of folk psychology" (xii) by way of being exposed to the appropriate narratives. Ch. 8 and 9 contain the main arguments against rival positions on social cognition, while the final chapters are devoted to some speculations regarding the origin and evolutionary development of our folk psychological skills (ch. 10–12). This review will focus on the viability of the NPH as an account of social cognition and on Hutto's industrial-strength anti-representationalist approach to the mind with its implications.

Narratives and social cognition

Any story that provides an explanation of someone's action in terms of (the ascription of) reasons (belief/desire-pairs) is called a *folk-psychological narrative*. There are all kinds of narratives, but in order to acquire folk-psychological skills through them, the 'right kind of narrative' must feature people acting for reasons. Then such narratives provide "snapshots of the adventures of situated persons, presented in the kinds of settings in which all of the important factors needed for understanding reasons are described – that is, those that are relevant to making sense of what is done and why" (34). And even narratives of this kind come in different guises. They might be spontaneously produced, have an autobiographical background, be mere gossip or established cultural facts. They may not only be provided through face-to-face communication, but also through television and comics. Interestingly, Hutto takes the paradigm narrative, which presents people acting for reasons, to be *fairytales* with which children are confronted from early on in their cognitive career. Fairytales like *Little Red Riding Hood* provide the right kind of training (30), Hutto claims, because by listening to them children learn that what people do is determined not only by what they believe and feel, but also by their character, past choices and existing commitments, and so on.

Now, one might object that in order for the children to make sense of the agent's

behavior in fairytales in the first place, they already need to be provided with what exposure to a fairytale is supposed to explain. Does the capacity to participate in narrative practices presuppose the possession of a 'theory of mind'? According to Hutto, the imaginative abilities and the "practical grasp of the attitudes" (xv) needed for such participation fall short of a theoretical understanding such that circularity can be avoided. Even if we grant the relevance of narratives, it is not clear that the merely implicit reference to reasons displayed in them can be made out and understood by infants without any prior grasp of what a belief and desire is and how they interact. After all, there are different ways of formulating something like the NPH. In a weak sense, it may only be claimed that engagement with narratives plays a major role for social understanding among other, equally important factors, which would then be specified by TT, ST, or some other account. This is not Hutto's claim. Instead, he argues for the NPH in a stronger sense, claiming that being exposed to narratives is "the normal route" (x) and that this "socio-cultural grounding" is all we need: "Folk psychology is, by my lights, in essence, a distinctive kind of narrative practice" (xi). Whether this is true seems to be a straightforward empirical issue and calls for more experiments. If only the weaker claim can be substantiated, then Hutto has not succeeded in providing an alternative account but can merely supplement TT and ST. If the stronger claim is to be true then it should be possible to provide empirical support for it that rules out the necessity of a further capacity X needed to acquiring folk-psychological forms and norms. After all, less engagement with texts in infancy should be correlated with a diminished folk-psychological understanding.

That is, it seems that (at least so far) the (strong) NPH is not supported by empirical evidence. Hutto claims that "children are repeatedly exposed to stories detailing the reasons why characters act, as related by caregivers and others who support them …" (28). But is this true? Does it hold for all children? What about those children who are not exposed to the "right kind" of stories often enough or not at all? Hutto's view seems to imply that they should have enormous problems acquiring folk-psychological skills. To be sure, the confrontation with narratives (in the general sense that Hutto allows) is a major factor fostering the development of social understanding that may have been neglected so far; and Hutto is to be applauded for providing such a strong case and reminding us of their impact. But no defender of one of the rival theories need deny that.

However that empirical issue turns out, given Hutto's embodied-enactive account of cognition, it is not clear why he puts so much emphasis on narratives at all. While he generally downplays the role of folk-psychology for social cognition, saying that we only need it in exceptional cases, nevertheless he refers to it as a "core mentalistic framework" that contains "rules for the interaction of the various attitudes" (xii). Here, one might ask why we should not call such a 'framework of rules' a "theory"? Much more interesting is what Hutto has to say about the work that is done by less sophisticated cognitive mechanisms during the development of the infant *prior* to the exposure to narratives, not by the narratives themselves. That takes us to Hutto's embodied-enactive account of cognition.

Content, simple minds and superminds

Most of Hutto's claims in the book depend on his notion of *content*. Contents are "ways of grasping or apprehending complex states of affairs that enable organisms to represent and reason about them in truth-evaluable ways" (43). Content-involving mental states are essentially intensional, i.e. one represents something under a certain mode of presentation. Contents must be apt to potentially "enter into nondemonstrative inferential liaisons". In order to have a content-involving propositional attitude then, one must be a "supermind" that understands sentences since only they have the relevant syntactic and semantic properties. This is heavily influenced by Davidson's approach. Therefore, Hutto rejects the notion of nonconceptual content—a notion, which has been introduced by various philosophers to solve a number of philosophical problems of per-

ception: For example, it is invoked to explain the richness of our phenomenal content, i.e. why we can discriminate more colors perceptually than conceptually. It may also be apt to explain the difference between perception and judgment and the possibility of knowing *how* to do something without knowing *that* one is doing it, or *what* one is doing. Importantly, perceptions with nonconceptual content may be the normal grounds for the acquisition of the concepts that later enable conceptual perception. And finally, it is invoked to allow for perceptual experiences of creatures with "simple minds" who lack conceptual abilities altogether. The challenge in this regard has always been to offer a viable positive characterization of nonconceptual content in contrast to merely defining it negatively, saying that it is content *devoid* of concepts. But even though this might not have been achieved yet to full satisfaction, the notion as such is neither contradictory nor completely useless. And it is not clear whether it is "best avoided if at all possible" (110). Thus, the dispute concerns the question whether we can allow for *content* that is not straightforwardly truth-evaluable and cannot enter into logical reasoning.

Instead of discussing the multiple accounts of nonconceptual content on offer, Hutto's argument against it focuses on Bermúdez' (2003) attempt to describe nonverbal thoughts. From the fact that rats can navigate by using and reidentifying landmarks, we should not conclude, Hutto argues, that this involves contentful states. Similarly, the instrumental thinking and tool use of wild chimpanzees may display a certain stimulus- and perception-independence, but such 'protological thinking' need not be belief-based, i.e. involve the manipulation of propositional contents, as Bermúdez thinks. Hutto's main criticism of Bermúdez' approach is that he cannot provide a medium (or vehicles) by which such nonverbal thinking is supposed to be achieved, as a viable alternative to the linguaform mental representations suggested by Fodor's Language of Thought hypothesis (which Hutto rejects in ch. 5). Hutto rejects all views that postulate inferential reasoning mechanisms in infants and higher animals, views arguing that infantile interpersonal engagement must be grounded in rules and representations, and views that ascribe abilities to them that involve the having or manipulation of content. He challenges such theories to specify the precise contents of either such rules or any putative nonverbal beliefs. Moreover, Hutto questions the whole project of trying to specify such intensional contents, since there is apparently nothing on the level of nonverbal thoughts that can play the role played by Fregean 'modes of presentation' on the level of language (e.g. names). In his view, the "most important thing to note is that infant interactive responding is not content-involving" (124). Infants' basic ways of being intentionally directed towards objects can be captured in purely extensional terms (45), in terms of *intentional attitudes* instead of propositional attitudes. This is possibly the most central distinction of the book and it is an interesting one.

Intentional attitudes, joint attention and biosemiotics

For Hutto, basic intentionality is a behaviorally expressed feature of the *organism as a whole* being directed at and practically engaged with worldly features, objects, and other organisms; it is not first and foremost a feature of mental states (xiii, 57, 117). In this framework, the latter form of sophisticated cognitive intentionality turns out to be a special case grounded in more basic practical forms of engagement with the world and with others. This general approach to intentionality (also suggested by Evan Thompson recently) is welcome because if intentionality is at its base sensorimotor in nature, the perplexing problem of naturalizing it looses much of its bite.

This is where Millikan enters the story, since such unprincipled engagements are to be explained in biosemiotic terms. This is the result of taking away the semantics from Millikan's (1984) 'Biosemantics'. What she calls "pushmi-pullyu-representations"—icons carrying informational content—is replaced by Hutto with "local indexical guides" (LIGs). These are not representations but natural signs, which guide and coordinate actions in a very immediate way. In order for a bee

dance, say, to fulfill its proper function (the one it was selected for) other bees have to be "informationally sensitive and responsive" to certain relations in nature (between sun, hive, and nectar). But Hutto claims that this is possible without any informational content being either conveyed by or extracted from the dance. Appropriate responding does not involve any content. According to Hutto, all views, which postulate content on this level, are misled by the confused "idea that parts of world or parts of organisms might *be* content-involving" (57).

Although LIGs can be misleading and misinterpreted, they cannot enter into any logical operations, and although the bee's dance only makes sense if it prompts certain actions in other bees, Hutto claims that the bees "are not using their dances to *say* anything at all". Nevertheless, "they give us everything we need in order to understand the determinate *intentional directedness* and *normativity* of basic forms of perceptual responding" (56). But animals can also go beyond the immediate here and now and respond in flexible ways to nonpresent objects. This is supposed to be possible through "recreative imaginings" (79ff.) as characterized by Currie and Ravenscroft (2003). The vehicles of such nonverbal thinking are not propositions but images and icons. But whether we can make sense of the idea that images or icons are connected in a quasi-logical fashion such that the cognitive operation is sufficiently similar to logical thinking to deserve the name, does not become clear in the brief discussion of ch. 4.

In contrast to approaches which argue that the intersubjective engagements of infants relevant for social cognition are conceptually grounded in rules and representations, Hutto argues for an unprincipled approach, according to which these engagements are not belief-based, but more immediate and direct. Infants' social cognitive capacities are "nontheoretical, unprincipled, downright nonconceptual, and embodied" (121). Infants don't read minds, they read the bodily expressions of others, and such expressions serve as "reliable enough guides" to what others are up to (116). At this level, mindreading is not necessary, since there is no gap to bridge between self and other. Such knowledge is not mediated by language or representations. In such basic intention understanding, Hutto sees the major function of mirror neurons. These sensorimotor neurons, found in macaque monkeys, are activated not only when the monkey *performs* a certain goal-directed action such as grasping food, but also when the monkey *observes* another subject performing this or a similar goal-directed movement. This process is immediate and automatic, not in need of inferential reasoning or projective simulation. Some hold that this firing gives rise to a "shared manifold" for acting and responding to the goal-directed actions of others (Gallese 2001, 2006). Hutto subscribes to Gallese's account while rejecting his interpretation of mirror neuron activation as simulation. Yet, he does not follow Gallagher (2001) and hold that we can *directly perceive* mental states in their bodily expressions. After all, what the monkey does is *observing* the others' behavior. Instead, Hutto says, somewhat vaguely, that we are "directly moved" (116) by the other, thus avoiding the challenging task of characterizing direct perception. But merely to be told that understanding others amounts to an involuntary "affect program" (117) is not really satisfactory.

Particularly dissatisfying is Hutto's attempt to explain the significant phenomenon of joint attention in terms of mirror neuron activation plus the "recreative imaginative perspective-shifting capacities" mentioned earlier (127). This is surprising since mirror neuron activation has primarily been found in macaque monkeys who, according to current wisdom, lack the capacity to engage in joint attention. It will not do to take such automatic responding and add some imaginative abilities to produce joint attention. Obviously, proponents of nonconceptual content can agree that participants in acts of joint attention do not make "full-fledged propositional attitude ascriptions", but they would insist that mere 'intentional attunement' is not enough to capture this sophisticated state of consciousness. It is not clear how to comprehend joint attention without invoking content, considering the complex perspective shifting and the understanding of the attentional focus of the other that is involved here (where the other is consciously experienced *as other*).

While joint attention may be exactly capable of bridging the gap between precognitive non-representational forms of responding and sophisticated propositional (and linguistically mediated) social understanding, Hutto cannot tell a persuasive story that leads us from intentional to propositional attitudes. Just like Davidson, he retains a strong dichotomy between precognitive, non-mental activities on the one hand and sophisticated linguistic communication and triangulation on the other, leaving no room for an intermediary link.

This book is enjoyable to read. The style is, well, narrative, witty and anything else but boring (apart from too many abbreviations used). It makes some important contributions to the debate and provides a variety of new insights. Most of all, it forces the opposition (on various fronts) back to the drawing board. But Hutto spends too much time arguing against rival positions, while neglecting the task to make a compelling case for his original alternative. Thus, at the end, too many open questions leave the reader unsatisfied. One would have desired to learn more about the constituents and dynamics of the second-person approach to other minds (which, apart from being emphasized in a methodological context at the beginning of the book, is not pursued any further) and about the facilitation of social understanding on the basis of embodied abilities.

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LITERATUR

Bermúdez, José-Luis (2003). *Thinking without Words*. New York: Oxford Univ. Press.

Currie, Gregory, Ian Ravenscroft (2003). *Recreative Minds*. Oxford: OUP.

Fodor, Jerry (1975). *The Language of Thought*. Cambridge, Mass.: Harvard Univ. Press.

Gallagher, Shaun (2001). "The Practice of Mind. Theory, Simulation or primary Interaction?" *Journal of Consciousness Studies* 8: 83–108.

Gallese, Vittorio (2001). "The Shared Manifold Hypothesis. From Mirror Neurons to Empathy". *Journal of Consciousness Studies* 8: 33–50.

Gallese, Vittorio (2006). "Intentional Attunement: A neurophysiological Perspective on Social Cognition and its Disruption in Autism". *Cognitive Brain Research* 1079: 15–24.

Millikan, Ruth G. (1984). *Language, Thought and other biological Categories*. Cambridge, Mass: MIT Press.