# **Understanding others through Primary Interaction and Narrative Practice**

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Abstract: We argue that theory-of-mind (TOM) approaches, such as "theory theory" and "simulation theory", are both problematic and not needed. They account for neither our primary and pervasive way of engaging with others nor the true basis of our folk psychological understanding, even when narrowly construed. Developmental evidence shows that young infants are capable of grasping the purposeful intentions of others through the perception of bodily movements, gestures, facial expressions, etc. Trevarthen's notion of primary intersubjectivity can provide a theoretical framework for understanding these capabilities. His notion of secondary intersubjectivity shows the importance of pragmatic contexts for infants starting around one year of age. The recent neuroscience of resonance systems (mirror neurons, shared representations) also supports this view. These ideas are worked out in the context of an embodied "Interaction Theory" of social cognition. Still, for more sophisticated intersubjective interactions in older children and adults, one might argue that some form of TOM is required. This thought is defused by appeal to narrative competency and the Narrative Practice Hypothesis (or NPH). We propose that repeated encounters with narratives of a distinctive kind is the normal route through which children acquire an understanding of the forms and norms that enable them to make sense of actions in terms of reasons. A potential objection to this hypothesis is that it presupposes TOM abilities. Interaction Theory is deployed once again to answer this by providing an alternative approach to understanding basic narrative competency and its development.

# Introduction

Our intention in this chapter is to explicate an account of how we come to understand others, without appealing to the dominant theory-of-mind (TOM) approaches of "theory theory" (e.g. Leslie 1987; Gopnik 1993) or "simulation theory" (e.g. Gordon 1986; Goldman 2002). We have elsewhere provided good reasons to doubt that either of these theories can give an accurate or adequate account of our everyday intersubjective abilities for understanding the intentions and the behaviors of other persons (see Gallagher 2001; 2004, 2007a&b; Hutto 2004, 2005, 2006a, 2007a-b, 2008). We will briefly summarize that critique here, but our main purpose is to set out a more positive account of just these everyday intersubjective abilities and show that they are not reducible (or inflatable) to the mind-reading or mentalizing described by approaches to social cognition which presume a "theory of mind".

This positive account involves three kinds of processes which together are sufficient to deliver the nuanced adult capacity for understanding (as well as for mis-understanding) others. These processes include (1) intersubjective perceptual processes, (2) pragmatically

contextualized comprehension, and (3) narrative competence. We argue on the basis of evidence from developmental psychology that the capacity for understanding others is, on average, well established by the time the child reaches four or five years of age, and that it continues to be enriched on the basis of further experience as we become mature adults.

#### A brief critique of the dominant approaches to social cognition

Theory theory (TT) and simulation theory (ST), the standard and dominant approaches to social cognition, share the important supposition that when we attempt to understand the actions of others, we do so by making sense of them in terms of their mental processes to which we have no direct access. That is, we attempt to "mind read" their beliefs, desires, and intentions, and such mind reading or mentalizing is our primary and pervasive way of understanding their behavior. Furthermore, both TT and ST characterize social cognition as a process of explaining or predicting what another person has done or will do. TT claims that we explain another person's behavior by appealing to an either innate or acquired "theory" of how people behave in general; a theory that is framed in terms of mental states (e.g., beliefs and desires) causing or motivating behavior. ST claims that we have no need for a theory like this, because we have a model, namely, our own mind, that we can use to simulate the other person's mental states. We model others' beliefs and desires as if we were in their situation.

Claims that such theory or simulation processes are explicit (conscious) are dubious from a phenomenological point of view. That is, if in fact such processes are primary, pervasive, and explicit, they should show up in our experience – in the way that we experience others – and they rarely do.<sup>1</sup> The phenomenological critique also rejects the idea, clearly found in TT, that our everyday dealings with others involve an observational, third-person stance toward them – observing them and trying to come up with explanations of their behavior. Rather, our everyday encounters with others tend to be second-person and interactive.

Claims that the processes described by TT or ST are implicit (or not explicitly conscious) run into a different set of objections. In the case of TT, there is no evidence that such processes are implicit, or even clarity about what precisely that means. Moreover, although TT appeals to false-belief experiments, such experiments are set up to test for explicit rather than implicit theory-of-mind processes (Gallagher 2001) – subjects are asked to explicitly consider the meanings of an observed third-party's behavior. Implicit approaches to ST appeal to the neuroscience of mirror neurons and shared representations (cf. Barresi and Moore, this volume), but there is no justification for calling these subpersonal processes "simulation," since according to ST, simulation involves the instrumental use of a firstperson model to form third-person "as if" or "pretend" mental states. In subpersonal processes, (1) there is no first- or third-person (activation of mirror neurons, for example, are considered to be "neutral" in regard to who the agent is (see, e.g., deVignemont 2004; Gallese 2005; Hurley 2005; Jeannerod and Pacherie 2004); (2) nothing (or no one) is using a model; and (3) neuronal processes cannot pretend. As vehicles neurons cannot pretend they either fire or they don't. More importantly, in terms of relevant content, if they are neutral with respect to first- and third-person, pretence in just these terms (I pretend to be

<sup>&</sup>lt;sup>1</sup> This is not to deny that in some circumstances, for example, in observing puzzling cases of another person's behavior, we may in fact explicitly appeal to theory or employ simulation. The claim here is simply that most of our everyday interactions are not of this sort. Puzzling cases are the exception.

you) is not possible. In effect, simulation, as defined by ST, is a personal-level concept that cannot be legitimately applied to subpersonal processes.<sup>2</sup>

In addition to these phenomenological and logical objections to TT and ST, there is good evidence from developmental psychology that our ability to understand others emerges much earlier than TT or ST would predict. An objection can also be raised against the idea that a general theory (folk psychology) would have the sufficient explanatory power to explain the particularities of a large diversity of behaviors found in everyday life, or that it could be very reliable in the face of multiple possibilities for motivation. Similarly it has been objected that running a first-person simulation routine, that is, a process that is based on one's own mental states, seems inadequate to explain the diversity of behaviors found in the world.

These objections throw doubt on TT and ST approaches. The question, however, is whether there is a positive account that can avoid these objections. We turn now to the construction of that alternative account, in three parts: intersubjective perception, pragmatically contextualized comprehension, and narrative competency.

### Intersubjective perception and interaction

Long before the child reaches the age of four, the capacities for human interaction and intersubjective understanding are already accomplished in certain embodied practices -- practices that are emotional, sensory-motor, perceptual, and nonconceptual. These practices include proto-mimesis (Zlatev, this volume), imitation, the parsing of perceived intentions (Baldwin et al. 2001), emotional interchange (Hobson 2004), and generally the processes that fall under the heading of primary intersubjectivity (Trevarthen 1979). These embodied practices constitute our primary access for understanding others, and they continue to do so even after we attain our more sophisticated abilities in this regard (Gallagher 2001).

In most intersubjective situations, that is, in situations of social interaction, we have a direct perceptual understanding of another person's intentions because their intentions are explicitly expressed in their embodied actions and their expressive behaviors. This understanding does not require us to postulate or infer a belief or a desire hidden away in the other person's mind. What we might reflectively or abstractly call their belief or desire is expressed directly in their actions and behaviors. This phenomenologially direct understanding is likely made possible by the above mentioned complex neuronal processes described as the mirror neuron system(s) and shared representations. In contrast to

<sup>&</sup>lt;sup>2</sup> Goldman and Sripada (2005: 208), acknowledging the discrepancy between the ST definition of simulation and the working of subpersonal mirror processes, propose a minimal definition of simulation: "Applied to mindreading, a minimally necessary condition [for simulation] is that the state ascribed to the target is ascribed as a result of the attributor's instantiating, undergoing, or experiencing, that very state. In the case of successful simulation, the experienced state matches that of the target". If this is a necessary condition, it cannot be a sufficient one, because on this minimal definition and without something further, it's not clear what would motivate me to ascribe the state that I was undergoing to someone else. Furthermore, if this were as automatic as mirror neurons firing, then it would seem that we would not be able to attribute a state different from our own to someone else. But we do this all the time. Practically speaking, this proposal also raises puzzles about interacting with more than one other person. Is it possible to simulate the neural/mental/emotional states of two other people at the same time if in fact our simulations must be such that we instantiate, undergo, or experience, those two (possibly very different) states? (see Gallagher 2007b). We suggest that these issues would also have to be addressed by Barresi and Moore (this volume) in order to clarify their proposal for a matching system.

interpreting these neuronal resonance processes as implicit simulations, which on the functional level would involve cognitive processes over and above the perception of action, Gallagher (2005, in press) has argued that they in fact instantiate a form of *enactive social perception*.

A primary, perceptual sense of others is already implicit in the behavior of the newborn. In neonate imitation, which depends not only on a contrast, in some sense, between self and non-self, and a proprioceptive sense of one's own body, but also a responsiveness to the fact that the other is of the same sort as oneself (Bermúdez 1995; Gallagher 1996; Gallagher and Meltzoff 1996), infants are able to distinguish between inanimate objects and people. The fact that they imitate only *human* faces (see Legerstee 1991; Johnson 2000; Johnson et al. 1998) suggests that infants are able to parse the surrounding environment into those entities that perform human actions (people) and those that do not (things) (Meltzoff and Brooks 2001). An intermodal tie between a proprioceptive sense of one's body and the face that one sees is already functioning at birth. For the infant, the other person's body presents opportunities for action and expressive behavior – opportunities that it can pursue through imitation. There is, in this case, a common bodily intentionality that is shared by the perceiving subject and the perceived other. From early infancy humans, and perhaps some animals (see e.g., the studies by Myowa-Yamakoshi 2001, 2004, also cited by Zlatev, this volume) have capabilities for primary-intersubjective interaction with others.

The early capabilities that contribute to primary intersubjectivity constitute an immediate, non-mentalizing mode of interaction. Infants, notably without the intervention of theory or simulation, are able to see bodily movement as goal-directed intentional movement, and to perceive other persons as agents. This does not require advanced cognitive abilities; rather, it is a perceptual capacity that is "fast, automatic, irresistible and highly stimulus-driven" (Scholl and Tremoulet 2000: 299). Evidence for this early, non-mentalizing interpretation of the intentional actions of others can be found in numerous studies. Baldwin and colleagues, for example, have shown that infants at 10-11 months are able to parse some kinds of continuous action according to intentional boundaries (Baldwin and Baird 2001; Baldwin et al. 2001). The infant follows the other person's eyes, and perceives various movements of the head, the mouth, the hands, and more general body movements as meaningful, goal-directed movements. Such perceptions give the infant, by the end of the first year of life, a non-conceptual, action-based understanding of the intentions and dispositions of other persons which does not involve inferences about beliefs or desires understood as mental states (Allison, Puce, and McCarthy 2000; Baldwin, 1993; Johnson 2000; Johnson et al. 1998).

Primary intersubjectivity also includes affective coordination between the gestures and expressions of the infant and those of caregivers with whom they interact. Infants "vocalize and gesture in a way that seems 'tuned' [affectively and temporally] to the vocalizations and gestures of the other person" (Gopnik and Meltzoff 1997: 131). Infants at 5 to 7 months detect correspondences between visual and auditory information that specify the expression of emotions (Walker 1982). The perception of emotion in the movement of others, however, does not involve taking a theoretical stance or creating a simulation of some inner state. It is a perceptual experience of embodied comportment (Bertenthal, Proffitt, and Cutting 1984; Moore, Hobson, and Lee 1997). This kind of perception-based understanding, therefore, is not a form of mind-reading. In seeing the actions and expressive movements of the other person one already sees their meaning; no inference to a hidden set of mental states (beliefs, desires, etc.) is necessary.

The capabilities involved in primary intersubjectivity suggest that before we are in a position to wonder what the other person believes or desires, we already have specific perceptual understanding about what they feel, whether they are attending to us or not, whether their intentions are friendly or not, and so forth. There is, in primary intersubjectivity, a common bodily intentionality that is shared across the perceiving subject and the perceived other. As Gopnik and Meltzoff indicate, "we innately map the visually perceived motions of others onto our own kinesthetic sensations" (1997: 129), and the evidence from recent research on mirror neurons and resonance systems in social neuroscience supports this.<sup>3</sup> Thus, before we are in a position to theorize, simulate, explain or predict mental states in others, we are already in a position to interact with and to understand others in terms of their expressions, gestures, intentions, and emotions, and how they act toward ourselves and others. Furthermore, primary intersubjectivity is not primary simply in developmental terms. Rather it remains primary across all face-to-face intersubjective experiences, and it underpins those developmentally later, and occasional, practices that may involve explaining or predicting mental states in others (see e.g., Stern's (1985) idea of a "layered model" in which developmentally primary understandings are not "superseded" but remain and operate in parallel to more advanced ones).

# Pragmatic intersubjectivity

If human faces are especially salient, even for the youngest infants, or if we continue to be capable of perceptually grasping the meaning of the other's expressions and intentional movements, such face-to-face interaction does not exhaust the possibilities of intersubjective understanding. Expressions, intonations, gestures, and movements, along with the bodies that manifest them, do not float freely in the air; we find them in the world, and infants soon start to notice how others interact with the world. When infants begin to tie actions to pragmatic contexts, they enter into what Trevarthen calls 'secondary intersubjectivity'. Around the age of 1 year, infants go beyond the person-to-person immediacy of primary intersubjectivity, and enter into *contexts* of shared attention – shared situations – in which they learn what things mean and what they are for (see Trevarthen and Hubley 1978). Behavior representative of joint attention begins to develop around 9-14 months (Phillips, Baron-Cohen, and Rutter 1992). In such interactions the child looks to the body and the expressive movement of the other to discern the intention of the person or to find the meaning of some object. The child can understand that the other person wants food or *intends* to open the door; that the other can *see* him (the child) or is *looking at* the door. This is not taking an intentional stance, i.e., treating the other *as if* they had desires or beliefs hidden away in their minds; rather, the intentionality is perceived in the embodied actions of others.<sup>4</sup> They begin to see that another's movements and expressions often depend on

<sup>&</sup>lt;sup>3</sup> In citing Gopnik and Meltzoff's claim about the necessity for innate mappings we are not thereby endorsing their theory-theoretic construal of what this involves. Indeed, much of the evidence developed by Meltzoff and cited by Gopnik and Meltzoff supports the idea of a strong intersubjective perceptual capacity in the infant.

<sup>&</sup>lt;sup>4</sup> Of course, the fact that another's feelings can be hidden is completely consistent with expressivism of this sort. As Wittgenstein says "One can say He is hiding his feelings. But that means that it is not *a priori* they are always hidden" (Wittgenstein 1992, 35e). The point is that our initial, basic engagements with others are not estranged, even if sophisticated creatures like us are capable of hiding or faking their emotions.

meaningful and pragmatic contexts and are mediated by the surrounding world. Others are not given (and never were given) primarily as objects that we encounter cognitively, or in need of explanation. We perceive them as agents whose actions are framed in pragmatic contexts. It follows that there is not one uniform way in which we relate to others, but that our relations are mediated through the various pragmatic circumstances of our encounters. Indeed, we are caught up in such pragmatic circumstances, and are already existing in reference to others, from the very beginning (consider for example the infant's dependency on others for nourishment), even if it takes some time to sort out which agents provide sustenance, and which ones are engaged in other kinds of activities.

As we noted, children do not simply observe others; they are not passive observers. Rather they interact with others and in doing so they develop further capabilities in the contexts of those interactions. If the capacities of primary intersubjectivity, like the detection of intentions in expressive movement and eye direction, are sufficient to enable the child to recognize dyadic relations between the other and the self, or between the other and the world, something more is added to this in secondary intersubjectivity. As noted, in joint attention, beginning around 9-14 months, the child alternates between monitoring the gaze of the other and what the other is gazing at, checking to verify that they are continuing to look at the same thing. Indeed, the child also learns to point at approximately this same time. Eighteen-month-old children comprehend what another person intends to do with an instrument in a specific context. They are able to re-enact to completion the goal-directed behavior that someone else fails to complete. Thus, the child, on seeing an adult who tries to manipulate a toy and who appears frustrated about being unable to do so, quite readily picks up the toy and shows the adult how to do it (Meltzoff 1995; Meltzoff and Brooks 2001).

Our understanding of the actions of others occurs on the highest, most appropriate pragmatic level possible. That is, we understand actions at the most relevant pragmatic (intentional, goal-oriented) level, ignoring possible subpersonal or lower-level descriptions, and also ignoring interpretations in terms of beliefs, desires, or hidden mental states. Rather than making an inference to what the other person is intending by starting with bodily movements, and moving thence to the level of mental events, we see actions as meaningful in the context of the physical and intersubjective environment. If, in the vicinity of a loose board, I see you reach for a hammer and nail. I know what your intentions are as much from the hammer, nail, and loose board as from anything that I observe about your bodily expression or postulate in your mind. We interpret the actions of others in terms of their goals and intentions set in contextualized situations, rather than abstractly in terms of either their muscular performance or their beliefs.<sup>5</sup> The environment, the situation, or the pragmatic context is never perceived neutrally (without meaning), either in regard to our own possible actions, or in regard to the actions and possibilities of others. As Gibson's theory of affordances (e.g. Gibson 1979) suggests, we see things in relation to their possible uses, and therefore never as a disembodied observer. Likewise, our perception of the other person, as another agent, is never of an entity existing outside of a situation, but rather of an agent in a pragmatic context that throws light on the intentions (or possible intentions) of that agent.

<sup>&</sup>lt;sup>5</sup> Our understanding of the performance of mimes who work without props depends on their excellent ability to express intentions in their movements, but also on our familiarity with contexts. The mime's talent for expressive movements is clearly demonstrated in contrast to what we often experience in the game of charades or pantomime when we haven't a clue about what the player is trying to represent.

Theory-of-mind approaches, which involve theory (as an application of folk psychology) or simulation, and which focus on the acquisition of the concept of mental states (like belief) around age 3 or 4 years, miss some basic and important capacities for social cognition. Yet, the acknowledgement of capabilities for understanding others that define primary and secondary intersubjectivity – the embodied, sensory-motor (emotion informed) capabilities that enable us to perceive the intentions of others (from birth onward), and the perceptual and action capabilities that enable us to understand others in the pragmatically contextualized situations of everyday life (from 12-18 months onward) – is not sufficient to address what are clearly new developments around the ages of 2, 3 and 4 years. The "elephant in the room" around the age of 2 years is, of course, language. But if language development itself is something that depends on some of the capabilities of primary and secondary intersubjectivity, language also carries these capabilities forward and puts them into service in much more sophisticated social contexts (on this point, from a different perspective, also see Zlatev, this volume).

Do children, upon passing explicit false-belief tests, acquire the final conceptual component needed for their mature understanding of reasons, as is the pervasive claim in the theory-of-mind literature? Or does their newfound understanding of false belief simply equate to a capacity to recognize that the other (whether Maxie, or Sally-Ann, or Snoopy, etc.) has a divergent point of view from their own, and no more? And, what lies at the root of this sort of understanding? Is this sort of mastery of the concept of belief a natural consequence of the maturation of theory-of-mind modules, grounded in introspective acts of ostensive denotation or the product of extensive, evidence-based theorizing on their part? We propose that none of these proposals hold up well under close scrutiny (see Hutto 2008: chs. 9 and 10). If so it is more plausible to think that an understanding of divergent cognitive perspectives is the result of children beginning to participate in conversations of the kind that require recognition of conflicting points of view. This sort of activity can be seen as a natural extension of those forms of imaginative pretend play that require children to occupy different character roles and adopt personas that are different to their own (Hutto 2008: ch. 7).

A child's initial understanding of the concept of belief is likely to depend on many things but it is notable that many false-belief tests are presented in the form of a narrative and could be interpreted as tests for a certain level of narrative competency. It also worth observing that the strongest data concerning successful false-belief performance stems from experiments conducted almost entirely on European and American subjects, whose early lives are awash with folk psychological narratives encountered in fairy tales, children books, comic books, television and films (Richner and Nicolopoulou 2001: 408; Nelson 2003: 22). The form, content and focus of the stories and storytelling practices are much the same in these cultures. Indeed, they even share many of the same canonical 'texts'.

Even more important, we must ask, what role does this mature understanding of falsebelief play in the lives of children? And, what drives its development and facilitates its incorporation into larger explanatory schemas of explicitly making sense of actions in terms of reasons (in which attributions of belief plays an important but nevertheless limited part)? In addressing these questions it is vital to be aware, as Carpendale and Lewis (2004: 91) stress, that:

Proponents of the dominant theories have been notably quiet about what happens in development after the child's fifth birthday. However research that explores

whether 5-year-olds can use simple false belief knowledge to make inferences about their own and other's perspectives finds that they singularly fail to do so.

#### Making Sense of Reasons

The ability and motivation to use one's knowledge of false belief in wider explanatory contexts, it seems, is late-developing. It comes into play only after children gain an explicit, practical mastery of the concept of belief. This suggests that false belief understanding is not the crowning moment in their early understanding other minds; children must develop further still if they are to make sense of actions in terms of reasons. What does this involve?

Let's focus on an example. Someone might ask: Why is Laura going to India? If I don't really know Laura, and if I've never heard her say why she is going to India, then I may attempt to get at her reasons in the third-person. This is surely something we do occasionally. This sort of speculative attempt at folk-psychological explanation might run as follows. Laura is a young, American college student. Why do young, American college students travel to India? Laura, like many young, American college students, may believe that India is a romantic place and that she can learn about Eastern meditation practices there and have an adventure. So Laura might desire to go to India for such reasons. One reaches this conclusion by calling on background knowledge – general knowledge or beliefs about what American college students tend to think and value as well as one's knowledge and beliefs about widely held beliefs about India. The attributed reason may be correct or incorrect in Laura's case, but lacking detailed information about Laura, one is forced to appeal to generalizations informed by knowledge of an impersonal sort.

Two things are worthy of note. First, this kind of speculation is not likely to be very reliable in most interesting cases. Second, there is no obvious reason to think that the background knowledge (or beliefs) in question is (are) theoretical. To say that one is operating with theories about India and theories about the belief-forming tendencies of American students in such cases is surely to stretch the notion of theory beyond reasonable limits.

Let's modify the example slightly. If I know Laura, but do not know precisely why she is going to India, I will be able to make a more informed guess about her reasons. Laura is the kind of person who really wants to help children in the third world, so that is *probably* why *she* is going to India. I will have learnt this about her from my previous exchanges with her or on the basis of what others have told me about her. In this case too, my attribution is knowledge-based but the knowledge in question is this time particular and personal. Although, again, hardly theoretical my attribution remains speculative and suppositional.

Here's a third case. Knowing Laura I may already know her reason for going to India or I might get at it by much more reliable means. I may know why she is going because she may have already told me so. If not, I could always ask her. Of course, she may be lying or self-deceived, but even acknowledging those possibilities direct conversation is undeniably the most secure route to her reasons.

It is important to stress that in each of these cases the capacity to understand why Laura acted (or might have acted), our ability to digest these answers, is framed by the activity of checking to see if *her reason*, as it were, makes sense. Guessing at or learning of a person's reason is only a small part of the story of our everyday understanding of why others act. It is also necessary to situate and evaluate reasons in wider contexts and against certain

normative assumptions. Would it make sense for anyone go to India for that sort of reason? In particular, does it make sense for Laura to go? Is doing so in line with her character, her larger ambitions, her existing projects, or her history? What does it say about her? Does it make her a generous person, an idealist or merely naïve? Understanding reasons for action demands more than simply knowing which beliefs and desires have moved a person to act. To understand intentional action requires contextualizing these, both in terms of cultural norms and the peculiarities of a particular person's history or values.

In this light, reasons for acting are best thought of as "the *elements* of a possible storyline" (Velleman 2000: 28). As such, making explicit a person's narrative is the medium for understanding and evaluating reasons and making sense of actions. Such narratives allow us to understand a person's 'rationale' when this is not immediately obvious.

Sometimes there is a need to frame and justify our reasons but more often than not, when all proceeds normally there is simply no need. This does not imply that in such cases we quietly grasp and deploy a set of explicit generalizations about how others will act. Rather, it is through shared training about roles and rules of our common world that I learn how I ought to behave in various circumstances, and at the same time I learn how you ought to behave as well, *ceteris paribus*. Knowledge of what I ought to do in certain circumstances supplies a handy guide to the likely behaviour of others, in so far as they do not step out of line. Such learning does not take the form of internalizing explicit rules (at least not as a set of theoretical propositions), nor does it depend on our applying ones that are somehow already built-in subpersonally. Rather our expectations of others is the result of our becoming accustomed to local norms, coming to embody them, as it were, through habit and practice. This, we suggest, and not the wielding of theoretical generalizations, is the crucial backdrop against which we make sense of reason for action *via* narratives of the folk psychological variety.

### **The Narrative Practice Hypothesis**

How do we get this sort of complex and nuanced understanding of why people do what they do? People do not wear their reasons for action on their sleeves and they cannot be readily or fully discerned or understood by deploying the kinds of embodied heuristics described earlier in this paper. We suggest that the pervasive presence of narrative in our daily lives, and the development of specific kinds of narrative competency, can provide a more parsimonious alternative to theory or simulation approaches, and a better way to account for the more nuanced understandings (and mis-understandings) we have of others. Competency with different kinds of narrative encounters are what first allows us to develop our folk psychological competence. Hutto calls this "the narrative practice hypothesis". It claims that "children normally achieve [folk psychological] understanding by engaging in story-telling practices, with the support of others. The stories about those who act for reasons - i.e. folk psychological narratives - are the foci of this practice. Stories of this special kind provide the crucial training set needed for understanding reasons" (Hutto 2007b: 53).

Accordingly, children acquire their skilled competence in understanding reasons by being exposed to and by engaging with narratives when appropriately and actively supported by their care givers. For example in acts of storytelling such active support takes the form of children being prompted to answer certain questions and by having their attention directed at

particular events. In the case of folk psychological narratives this will normally involve jointly attending to mentalistic terms such as "wish", "believe" and "know" and discussing what the story characters know, feel and want. During this process children learn how these states of mind behave in relation to each other and other terms in the psychological family. Importantly, these attitudes exist in a wider context such that children learn how and why these attitudes matter to the protagonists of such stories. Time and time again reasons for acting, of different types and complexity, are put on show in this way.

By attending to enough of these exemplars, it is possible for children to develop an implicit practical understanding of *how* to make sense of persons as those who act for reasons. This is nothing like fashioning the concepts of the attitudes by means of theorizing or a having core theory about how they interrelate. Coming to understand what it is to act for a reason – to understand folk psychologically – requires being trained by means of a specific kind of narrative practice. They can achieve this because even simple folk psychological narratives, like their more sophisticated cousins "represent the moment by moment experiences of fictional minds, as well as the coloration that those experiences acquire from the characters' broader cognitive and emotional stances towards situations and events" (Herman 2007: 147).

This proposal is consistent with a number of recent empirical studies that have established that there are important links between narrative abilities and our capacity to understand others (Astington 1990; Dunn *et al*, 1991; Feldman *et al* 1990; Lewis 1994, Lewis *et al* 1994; Nelson 2007, Peterson and McCabe 1994). Exposure to stories is a critical determiner of folk-psychological abilities and it has been shown that this relation is stronger than mere correlation. Apparently narrative training causally influences what are considered to be basic 'theory of mind' skills for the better (Guajardo and Watson 2002). Controlled studies have shown that narrative training is responsible for improving performances on false belief tasks. Thus, it has been concluded that narrative is an effective tool for "at least modest improvements in children's theory of mind development" (Guajardo and Watson 2002: 320). Similarly, it has been observed that "frequent conversations about the mind can accelerate growth of a ToM" (Garfield *et al*. 2001: 513).

A complementary idea is that other kinds of narrative competencies enable a less mediated interpretation of the other's actions and intentions, that is, without the mediation of folk psychology. After all, folk psychological explanation is just one kind of narrative practice. We argue here that how we go about developing a nuanced understanding of others may involve one or both of these paths – employing a narrative-informed folk psychology, and/or a less mediated narrative practice – and which one is appropriate will depend on the context.

# Folk psychological and other kinds of narratives

What are narratives? This is a tricky question and providing a good answer to it is beyond the scope of this paper. A very minimal definition will suffice for our purposes. Larmarque tells us that for something to be a narrative "at least two events must be depicted in a narrative and there must be some more or less loose, albeit non-logical relation between the events. Crucially, there is a temporal dimension in narrative" (Lamarque 2004: 394, see also Lamarque and Olsen 1994: 225). This neutral characterisation easily lends itself to the idea that there are different types of narratives and that these can be classified by such common

features as their constituents and subject matter. Folk psychological narratives – as exemplified by *Little Red Riding Hood* – are distinguished by being about agents who act for reasons. Importantly, narratives of this kind can play their special role in development by being the objects of joint attention in early learning. That is the core claim of the NPH.

In this light it should be emphasised that, as social cognizers, we do not use *folk psychological* narratives nearly as often as the tradition supposes. They are not, for example, the basis of all interpersonal interaction. On the contrary, they generally only come into play in those cases in which the actions of others deviate from what is normally expected in such a way that we encounter difficulty understanding them. In such cases the other's actions become noticeable, falling into the spotlight for special attention and explanation - and potentially, explanations of a specific sort that involve understanding the other's reasons for taking the particular action – where this is not in some way obvious or already known. Folk psychology is needed only in rare cases where we are not already familiar with the other person's story, or are perplexed by another's actions. For "When things 'are as they should be', the narratives of folk psychology are unnecessary" (Bruner 1990: 40). Appeal to folk psychology may come into play when culturally-based expectations are violated. For the most part, well-rehearsed patterns of behaviour and coordination dominate. By and large, we get by without having to make any folk psychological attributions at all and without seeking explications from others because most everyday social interaction takes place in normal (and normalized) environments.

Again, we can learn a great deal from developmental psychology. Around the age of two, children are in secure possession of "an early intentional understanding of persons having internal goals and wants that differ from person to person" (Wellman and Phillips 2001: 130, Bartsch and Wellman 1995). Young children are somewhat practiced in understanding things as other people understand them in pragmatic contexts, and when the capacities associated with primary and secondary intersubjectivity are combined with several other newly acquired capacities, young children are ready to understand things and people in emerging narrative structures. And in this context it must be acknowledged that many *other* kinds of narratives – those of the non-folk psychological variety – can take us a long way to the understanding we seek, without resorting to the folk psychological framework *per se* (or at least without always having to do so).

We learn to make sense of persons (others as well as ourselves) in dramatic and narrative ways as young children. When children listen to stories, or play-act<sup>6</sup> (and the same applies to adults who are exposed to parables, plays, myths, novels, etc.) they become familiarized with sets of characters and with a range of ordinary or extra-ordinary situations, and the sorts of actions appropriate to them, all of which helps to shape their expectations. An education in narratives of many sorts – even of the more general and less personal variety – provides knowledge of what actions are acceptable and in what circumstances, what sort of events are important and noteworthy, what accounts can account for action, and what kind of explanations constitute the giving of good reasons.

<sup>&</sup>lt;sup>6</sup> There are "two aspects of children's narrative activity which are too often treated in mutual isolation: the discursive exposition of narratives in storytelling and their enactments in pretend play" (see Richner & Nicolopoulou 2001: 408). "Children's first narrative productions occur in action, in episodes of symbolic play by groups of peers, accompanied by – rather than solely though – language. Play is an important developmental source of narrative" (Nelson 2003: 28).

Moreover, children are well supported in this process. Typically, they are provided with running commentaries on stories that teach them not only which actions are suited to particular situations but also which reasons for acting are acceptable and which are not. It is by absorbing such standards that we first learn how to judge an action's appropriateness (though, of course, in time such standards are sometimes questioned and overturned). Quite generally, stories – real or fictional – teach us what others can expect from us, but just as importantly, what we can expect from others in certain situations. This is not just coming to know what others ought to (and thus are likely to) do, but what they ought to (and thus are likely to) think and feel, as indexed to the sort of people they are. Narratives provide an important source of guidance for staking out the boundaries of what is acceptable and what is not. Through them we learn the *norms* associated with social roles that pervade our everyday environments – shops, restaurants, homes and theatres.

Engaging with narratives is not a passive affair: it presupposes a wide range of emotive and interactive abilities. To appreciate such stories children must be initially capable, at least to some degree, of imaginative identification and of responding emotively, just as they do in basic social engagements. In this respect "conversations about written and oral stories are natural extensions of children's earlier experiences with the sharing of event structures" (Guajardo and Watson 2002: 307). Through them children discover why characters act as they do in particular cases, becoming accustomed to standard scripts – scenarios, characters, plots, etc.

The kind of emotional resonance that one finds already in infancy, in primary intersubjectivity, seems to play an important role in gaining narrative competency. Decety and Chaminade (2003) have shown this connection as it plays out in the brain. In their fMRI study, subjects were presented with a series of video clips showing actors telling sad and neutral stories, as if they had personally experienced them. The stories were told with either congruent or incongruent motor expression of emotion. Subjects were then asked to rate the mood of the actor and how likable they found that person. Watching sad stories versus neutral stories was associated with increased processing activity in emotion related structures (including the amygdala and parieto-frontal areas, predominantly in the right hemisphere). These areas were not activated when the narrator showed incongruent facial expressions. The reasonable hypothesis is that conflict between what we sense as the emotional state of the other person, simply on the basis of seeing their faces and actions, and the narrative content they present, is disruptive to understanding. Whatever is going on in the brain correlates not simply to features of action and expression (and the subjectivity of the other person) but to the larger story, the scene, the circumstance of the other person, and how features of action and expression match or fail to match those circumstances. If the emotional character of the other person is not in character with the narrative framework with the story that I could tell about her and her circumstances – it is difficult to understand that person, the story, or both.

# Narrative competency and "landscape of consciousness"

We have argued that the abilities for intersubjective interaction and understanding that start with primary and secondary intersubjectivity, develop along a route that in most ordinary cases exploits narrative competency rather than the procedures, subpersonal or explicit, associated with traditional theory-of-mind accounts.

This should provide the means of staving off a common worry about the NPH. Janet Astington (1990) has argued that acquiring narrative competency requires having a theory of mind. Citing Bruner's concept of the landscape of consciousness ("what those involved in the action know, think, or feel, or do not know, think, or feel" [Bruner 1986: 14]), she suggests that to understand narrative we need access to the characters' minds, and to have the latter requires us to have a theory of mind. But Bruner himself offers good experimental evidence against the necessity of the landscape of consciousness (LC) for understanding narratives. Feldman, Bruner et al. (1990), in a study of narrative comprehension in adults, presented two different versions of the same story to two groups, respectively. The first and original story mentioned the mental states of the characters as the story develops, and so was rich in LC. The second story was the very same story stripped of mental terms, leaving only the landscape of actions (LA). The results showed no significant differences (1) in subjects using reader-related mental verbs when they recount the LC narrative; (2) in recounting the facts of the stories – "the retellings were virtually indistinguishable"; (3) in recounting the order of events; and (4) when providing a meaning summary (gist) for the story: "there is no version difference in the kind of gist given." A likely explanation of these results is that the structure of these person-narratives, as revealed explicitly in *basic* plots, can be identified, responded to and described on several levels and ways. Often this happens all at once. But not everyone is equally proficient at this. It is possible to be alive to the major events in a drama without always being able to decipher, with full clarity or perhaps at all, the reasons why a protagonist will have acted. It is thus possible to have some sense of what is going on in an unfolding drama without understanding it in toto (this is apparently a common experience for those first encountering Shakespearean plays).

What is important is that seeking a narrative understanding of the other's reasons is not a matter of characterizing the other's 'inner' life – if this is understood as a series of causally efficacious mental states. What we are attempting to understand is much richer; it is the other's reasons as they figure against the larger history and set of projects, and that is best captured in a narrative form. Coming to understand another's reasons should not be understood as designating their discrete 'mental states' but their attitudes and responses as whole situated persons. I encounter the other person, not abstracted from their circumstances, but in the middle of something that has a beginning and that is going somewhere. I see them in the framework of a story in which either I have a part to play or I don't. The narrative is not primarily about what is 'going on inside their heads'; it's about their *lives* and the way they understand and respond to such events.<sup>8</sup> Crucially, coming to appreciate the other's story – to see why they are doing what they are doing – does not require a capacity for mentalizing inferences or simulations. Our understanding of others is ordinarily not based on attempts to get into their heads; typically we do not need to access a

<sup>&</sup>lt;sup>7</sup> For further discussion of the distinction between properly folk psychological narratives and those dramatic reenactments which only involve intentional attitudes, yet which share the same basic formats see Hutto 2006.

<sup>&</sup>lt;sup>8</sup> This is not to deny that some narratives are more psychological than others – those of James Joyce or Dostoyevsky, as Jordan Zlatev suggests (private correspondence). Luckily Joyce, Dostoyevsky and other novelists put us in the heads of their characters and we do not have to theorize or simulate our way in there. The NPH does not deny that human beings are complicated psychological creatures, or that the psychological lives of Stephen Dedalus or Raskolnikov are not fascinating in ways that outstrip an understanding in folk psychological terms. The issue is how we come to understand people in our everyday interactions with them.

"landscape of consciousness" since we already have access to a "landscape of action" which is constituted by their embodied actions and the rich worldly contexts within which they act – contexts that operate as scaffolds for the meaning and significance of actions and expressive movements.<sup>9</sup>

### Conclusions

In this chapter we have argued that there is no need to appeal to standard theory-of-mind and simulative explanations of how we understand others as the basis for making sense of them folk psychologically. What begins as perceptual and emotional resonance processes in early infancy, which allow us to pick up the feelings and intentions of others from their movements, gestures, and facial expressions, feeds into the development of a more nuanced understanding of how and why people act as they do, found in our ability to frame their actions, and our own, in narrative ways. Our everyday abilities for intersubjective engagement and interaction are, in the later stages of childhood, transformed by encounters with narratives. It is exposure to these complex objects of joint attention – and not facility with theoretical knowledge or simulative routines – that is responsible for the development of sophisticated folk psychological abilities and understanding; abilities which remain importantly in play in our adult life.

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<sup>&</sup>lt;sup>9</sup> The idea that narrative understanding does not rest on or presuppose TOM abilities *per se* (including simulation capacities that involve making belief/desire predictions and explanations) is in line with Greg Currie's (2007) recent claim that our skills in comprehending narratives involve the adoption of frameworks through which we identify with (and are effectively 'asked to' take on) certain *personas*, which can be understood as embodied 'stances' that particular narratives invite us to adopt. The activity of framework adoption is quite distinct from understanding a story's content – as detailed in its plot or *fabula*. As Currie characterizes it, adoption or attention to a narrative framework activates our subpersonal mechanisms for imitative and emotional responding – thus it is something that engages us viscerally. He contrasts this with the idea that attention to narrative; although he does not wholly reject the latter proposal since he acknowledges it may have a role when it comes to communicating about narratives.

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