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Empathy, Simulation, and Narrative

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Argument

A number of theorists have proposed simulation theories of empathy. A review of these theories shows that, despite the fact that one version of the simulation theory can avoid a number of problems associated with such approaches, there are further reasons to doubt whether simulation actually explains empathy. A high-level simulation account of empathy, distinguished from the simulation theory of mindreading, can avoid problems associated with low-level (neural) simulationist accounts; but it fails to adequately address two other problems: the diversity problem and the starting problem. It is argued that a narrative approach to empathy obviates all these problems and offers a more parsimonious account.

In the past several years a number of theorists have proposed simulation theories of empathy. These theories fall into two types: those that argue for a concept of empathy which makes it equivalent or closely tied to what is considered the default form of everyday social cognition (Decety 2005; Gallese 2001 and 2009; Goldman 2006; Stueber 2006), and those that argue that empathy has a special status which makes it distinct from everyday social cognition (de Vignemont and Singer 2006; de Vignemont and Jacob 2012; Jacob 2011). In this paper I show that both types of simulationist theories encounter insurmountable difficulties. I then propose, as an alternative, an account of empathy informed by narrative practice.

Empathy by default

Much of the contemporary debate about empathy is driven by the neuroscience of mirror neurons (MNs). Some theorists associate empathy with mirroring or motor resonance processes themselves. According to Vittorio Gallese, for example, understanding another person's action relies on a neural mechanism that matches the observed behavior with a behavior that the observer could execute. This lived bodily motor equivalence between what we observe others doing, and the capabilities of our own motor system allows us to use our own system as a model for understanding the other's action. Gallese's argument is based on the neuroscience of MNs. "I submit that the neural matching mechanism constituted by mirror neurons ... is crucial to establish an empathic link between different individuals" (Gallese 2001, 44). He appeals to simulation theory to extend this model to include expressive aspects of movement that give us access to the emotional states of others (e.g., Gallese and Goldman 1998). I will return to the concept of simulation theory shortly. First, however, let me note that one aspect of Gallese's account is that he seemingly equates empathy with what we might call standard social cognition, or what some theorists call mindreading (the attribution of mental states to others). That is, Gallese doesn't differentiate empathy from our everyday encounters with others. He refers to his general model as the "shared manifold hypothesis" and distinguishes three levels:

- The *phenomenological level* is the one responsible for the sense of similarity ... that we experience anytime we confront ourselves with other human beings. It could be defined also as the *empathic* level.
- The *functional level* can be characterized in terms of simulation routines, *as if* processes enabling models of others to be created.
- The *subpersonal level* is instantiated as the result of the activity of a series of mirror matching neural circuits. (Gallese 2001, 45; see also Gallese 2003)

In this case, since the mirror system apparently is activated whenever we observe another person engage in intentional action, empathy is a basic, common, and everyday occurrence.

Jean Decety (2002, 2003, 2004, 2005), in contrast to Gallese, contends that empathy does not imply simply action- or emotion-resonance initiated by the action or emotion state of the other. It also requires a minimal and more explicit comprehension of the *mental states* of this person. He does not deny the importance of resonance systems, especially in early infancy, and he accepts that we have an innate capacity to feel that other people are "*like us*," and that this is related to the possibility of experiencing empathy. But we also quickly develop the capacity to put ourselves *mentally* in the place of others, which can also be a form of simulation (Decety and Grèzes 2006). Decety emphasizes that in this process difference is just as important as similarity. Empathy is founded on our capacity to recognize that others are similar to us, but to do so without confusing ourselves with the other. According to Decety, then, three fundamental components interact to create empathy:

- 1. A component of motor resonance *(resonance motrice)* the activation of which is generally automatic and nonintentional;
- 2. Insight into the subjective mental perspective of the other which may be controlled and intentional;
- 3. The ability to differentiate between self and other. (Decety 2005; also Decety and Jackson 2004)

Gallese and Decety agree that basic resonance systems are in place, not only in early infancy, but also in non-human primates. The major difference between their positions concerns the second component. For Gallese, this component is not something *more* than what the resonance systems already deliver, automatically; for Decety, this is the "something extra" that is needed for empathic understanding. Once again, however, for Decety, as for Gallese, empathy is equated with everyday mindreading. The difference between Decety and Gallese is simply how they view the basic social cognitive process. But it seems that for both theorists the explanation of basic social cognition is just an explanation of empathy.

One possibility is that the "something extra" that Decety requires can be provided by a higher-level simulation, most clearly described by a more traditional simulation theory (ST). ST claims that in our attempt to understand others we employ our own mind as a model on which we simulate the other's mind by creating "as if" or pretend beliefs, desires, intentional states (e.g., Goldman 2006; Gordon 1996; Heal 1996). We then project such beliefs or desires to the other person, and this constitutes our mindreading process. Traditional ST suggests that simulation is explicit (conscious or introspective, involving imaginary enactments). Goldman, for example, describes it this way: "When a mindreader tries to predict or retrodict someone else's mental state by simulation, she uses pretense or imagination to put herself in the target's 'shoes' and generate the target state" (Goldman 2005a; see Goldman 1989). In his most recent work, he continues to specify that high-level simulation involves self-reflective, explicit processes (Goldman 2006, 147–48). Goldman explains high-level simulation as a form of pretense enactment or "E-imagination." E(nactive)-imagination just is that type of process that generates pretend states which, in simulation, resemble the mental states of the other person.

If, however, as Goldman proposes, simulation describes a standard strategy for our everyday social cognition, is this also the same as empathy? Goldman often equates simulation and empathy, calling ST "empathy theory" (ibid., 17); "interpersonal mental simulation [is] also called empathizing" (ibid., 205; see also ibid., 291). Goldman (2011) claims that "the term 'empathize' [is] roughly equivalent to 'simulate' (in an inter-subjective fashion)" and that "empathy is a key to mindreading ..., the most common form of mindreading." In other places he recognizes that empathy may be distinguished from mindreading. Thus, he poses the question: "What is the relationship between mentalizing and other forms of social cognition? For example, how is it related to empathy?" (ibid., 21). One possible answer, which Goldman seems to favor, is that mentalizing or mindreading is equivalent to empathy, but to make this equation he subtracts certain things that other theorists might want to include in a definition of empathy: "mindreading is an extended form of empathy (where this term's emotive and caring connotation is bracketed)" (ibid., 4). Thus he can qualify other forms of empathy.

Karsten Stueber also equates empathy with simulation and claims that empathy is central and "epistemically essential" to our understanding of other agents (Stueber 2006, 131; also idem 2012). Like Goldman's distinction between low-level and

high-level simulation, Stueber distinguishes between basic and re-enactive empathy. Basic empathy is a perceptual phenomenon that "allows us to directly recognize what another person is doing or feeling" when observing her facial expressions or behavior (Stueber 2006, 147). Like Gallese, he argues that basic empathy is linked to the activity of the MN system. Basic empathy, however, is not sufficient to "explain and predict a person's behavior in complex social situations" or to provide "a full grasp of all mental concepts that we attribute to the typical adult" (ibid.). Accordingly, in a similar way to Decety, Stueber contends that we require something more; namely, reenactive empathy. The "something extra" that comes along with reenactive empathy is identified as more sophisticated mindreading abilities. This requires a higher-order simulation of thoughts or mental states taken as reasons for action.

For all of these theorists, whether they distinguish between low-level, neural simulation, and high-level simulation of the explicit mindreading sort, or not, there seems to be no good distinction between our ordinary everyday processes of social cognition and empathy. MN activation seems to be involved in providing a basic, automatic, simulative understanding of the immediate bodily expressions of the other person, and some kind of more explicit simulation routine apparently allows us to grasp the mental states that motivate the other person's actions. In all cases, this is meant to be a description of our everyday understanding of others, and this is equated with empathy at one level or the other, or both levels. Social cognition is, by default, a form of empathy. That is, empathy is our basic and default way of understanding others, and over and above this it has no special status. Yet, saying that I empathize with you, seems to suggest more than just understanding your mental state; it seems to mean more than simply perceiving that you are in pain, even if this perception is informed by an embodied resonance.

Empathy with a special status

In contrast to the thinkers already mentioned, Frédérique de Vignemont, Tania Singer, and Pierre Jacob (de Vignemont and Singer 2006; de Vignemont and Jacob 2012; Jacob 2011) have clearly distinguished empathy from everyday mindreading. De Vignemont and Singer offer the following definition in terms of a set of collectively *sufficient* conditions for empathy.

There is empathy if: (i) one is in an affective state; (ii) this state is isomorphic to another person's state; (iii) this state is elicited by the observation or imagination of another person's affective state; (iv) one knows that the other person is the source of one's own affective state. (de Vignemont and Singer 2006, 435)

The second condition seemingly distinguishes empathy from sympathy: the former involves being in the same or similar affective state as the other; the latter involves

being in a different affective state (e.g., I feel sorry that you are in pain). Jacob specifies it further as the interpersonal similarity condition, "arguably the major assumption of the simulation-based approach to empathy" (Jacob 2011, 521). The third condition, specifies the affective state as a vicarious experience - e.g., I feel vicarious pain or "as if' pain, rather than real, physiological pain caused by bodily injury. De Vignemont and Jacob contend that the capacity for creating vicarious experiences is based on what Goldman calls e-imagination, which, as we've seen, involves the running of off-line, high-level (i.e., explicit, conscious) simulations (de Vignemont and Jacob 2012; Jacob 2011). The fourth condition, which Jacob calls the ascription condition, distinguishes empathy from emotional contagion, which typically happens unbeknownst to the subject. Taken together, the second, third, and fourth conditions make empathy a form of simulation. The first condition, however, which Jacob calls the affectivity condition, distinguishes empathy from standard mindreading, the more theoretical or detached ways of understanding others, whether based on theoretical inference or simulation routines: "in a standard process of mindreading [e.g.,] another's pain, one forms the belief that another is in pain. Believing that another is in pain is different from experiencing empathetic pain" (Jacob 2011, 523-24).

De Vignemont and Jacob also add a fifth condition: the *caring condition*: in empathy one must care about the target's affective life. As Jacob explains this, empathy depends on a consideration of context; it is not the *default* response to my simple awareness of your affective state. Rather, empathy depends on a top-down modulation and requires that the empathizing subject cares or is concerned about the other. Empathy is *other-directed* in this regard.

For clarity, let me summarize these five conditions.

- 1. *The affectivity condition:* there is no empathy unless both target and empathizer experience some affective state. The affectivity condition distinguishes both empathetic and sympathetic experiences from standard mindreading.
- 2. *The inter-personal similarity condition:* there is no empathy unless the target's and the empathizer's affective states stand in a similarity relation to each other (i.e., both experience pain or both experience fear).
- 3. *The vicarious state condition:* the empathic state involves an "as if" or vicarious affective state, generated by the empathizer's imaginative portrayal of another person's affective state.
- 4. *The ascription condition:* there is no empathetic understanding unless the empathizer knowingly ascribes the affective state to the target.
- 5. *The caring condition:* the empathizer must be led to care about the target's affective life because of context.

Zahavi and Overgaard (2011) have pointed to some perplexities involved in some of these conditions. They argue that condition (2) does not distinguish empathy from sympathy, as claimed by de Vignemont et al. If A feels sad for his friend B because

B is *angry* about some injustice done to her, on condition (2) this would be a case of sympathy but not empathy since A and B are in different affective states. If, however, A feels sad for B because B is *sad* about the injustice, then this would count as empathy. Zahavi and Overgaard suggest that this is wrongheaded since A is in exactly the same affective state whether B is angry or sad, and they reason that it would be odd to say that A is empathizing in one case but not in the other, since the only change is in B. I think there are several interesting problems tied up with this objection.

First, it seems correct to say that if A feels sad for B in either case, A is sympathizing. There is, however, a distinction that needs to be made between feeling sad for the other, and feeling (vicariously) the sadness of the other, which is a feeling with the other. Proponents of condition (2) might consider the latter (feeling sad with B, or more generally, feeling whatever emotion B is feeling) empathy, and the former (feeling sad for B) sympathy. One way that we could read condition (2) is as specifying similarity not with respect to the purely phenomenal aspect of the experience (sadness as a phenomenal state may, or may not be similar in A and B), but with respect to its intentionality. That is, for empathy, A's sadness should have a similar intentional structure as B's sadness. In the case of empathy, the sadness is, in part, about injustice done to B – and this is a similar intentional structure for both B's sadness and A's sadness. Importantly, the intentional structure is similar but not identical, since A and B are in different situations, B having actually suffered the injustice B is sad about, while A has not.

Let me add that according to a phenomenological view the phenomenality of a state may be intricately tied with its intentionality, so in this example the sadness in both A and B may be phenomenally characterized by a certain tinge of outrage because it is about injustice rather than about some accident that has befallen B. In the case of sympathy, however, A's sadness may be just sadness for B, without the outrage that B is feeling about the injustice. A might think that in fact there was no injustice, but still be sympathetic about B's emotional upset. The important difference between empathy and sympathy is in the intentional structure of the affective state.

Empathy: A feels sad [and/or outrage] *about the injustice done to B*, knowing that B also feels sad [and perhaps outrage] about the injustice done to her (A's feeling has a similar intentional structure as B's affective state).

Sympathy: A feels sad *for B*, who is sad [and perhaps outraged] about an injustice done to B (dissimilar intentional structure).

This also raises an issue that strongly qualifies condition (2), namely, whether the respective affective states have to be strictly isomorphic or even similar in regard to their phenomenality. Isn't similarity with respect to intentionality sufficient? For example, if A is outraged (but not sad) about the injustice that B has suffered, knowing that B is

simply sad (but does not feel outrage) about the injustice, it would seem odd to claim that A is not empathizing with B.

Finally, it is important to recognize that both empathy and sympathy are intersubjective phenomena and that as such the particular state of the other person will make a difference. Although Zahavi and Overgaard suggest that it is odd or wrongheaded to think that the only difference between whether A is empathizing or sympathizing is determined by the affective state of B, I would suggest that this is not so odd or wrongheaded if we take seriously the idea that empathy is not simply defined as an individual's internal mental or affective state, but is an intersubjective phenomenon. Empathy depends on the intersubjective relation between A and B, which is different if B is experiencing one affective state rather than another. If A feels sad about an injustice done to B, because A thinks that B is sad because an injustice has been done to her, but in fact no injustice has been done, and B is in fact not sad, should we call this a case of empathy or misunderstanding? In this case there simply is no similarity between A's affective state and B's affective state, and on condition (2), no empathy. If A did this sort of thing habitually, would we say that A is a very empathic person rather than someone who habitually misunderstands others?

These considerations also put pressure on condition (3), the vicarious state condition. Perhaps the idea that the empathic state involves only an "as if" or simulated affective state is motivated by the example on which de Vignemont and Jacob focus – the example of pain. It's not clear that this condition applies to all forms of empathy, however. Indeed, on this point, condition (3) comes into direct contradiction with condition (1). In terms of the continuing example, it seems likely that A's sadness and outrage about the injustice done to B is not a vicarious state but a very real one. If it were not a real sadness and outrage, seemingly required by condition (1), but a vicarious affective state, required by condition (3), someone might be tempted to call it a simulation of empathy, not the real thing at all. Are the following statements of empathy, or simply statements of understanding?

- (a) "I understand your outrage because if I were in your position I would be outraged too."
- (b) "I understand your outrage because I've imagined being in your situation and am experiencing vicarious outrage as a result."
- (c) "Really, it's as if I'm outraged at what they have done to you."

To experience vicarious, or "as if," or pretend outrage doesn't seem to require being in an affective state of outrage at all. If there is any difference between these statements, it doesn't seem as great as the difference between them and the following:

(d) "Really, like you, I'm outraged at what they have done to you."

(a), (b), and (c) seem to be on a par in regard to the vicarious status of the affective state. (d) is different; the affective state is a real one. To exclude (d) as a case of empathy,

following condition (3), seems too restrictive and indeed seems to cheapen empathy. It doesn't cost me much to empathize with you since I only have to simulate the affect rather than really feel it. To call (d) a case of contagion rather than empathy also seems incorrect since the affective state is other-directed – it's not about me, but about you and what they have done to you.

What I've identified as problems with Zahavi and Overgaard's objection to (2) are also related to their objections to condition (5). They rightly suggest that by phrasing the condition in terms of "care" de Vignemont and Jacob seem to signify something closer to sympathy and at the same time seem to require that empathy always be a positive phenomenon. The example of the expert torturer empathizing with the victim's pain in order to perfect the torture seems to be ruled out. These objections are easily responded to by substituting words like "concern," or "interest," which may be either positive or negative (I may be concerned for/interested in your welfare, or interested in seeing you suffer even more). In that case we could call this the *concern condition:* the empathizer must be concerned with the target's affective life because of context.

It's important to highlight the significance of context here, and de Vignemont and Jacob rightly do so. With respect to the notion of context it should be clear that an adequate understanding of the other's situation (e.g., that B did in fact suffer an injustice) actually specifies the intentional structure of the empathizer's (A's) affective experience. If A doesn't get the context right, then A's affective experience may be entirely off target. If this could still be considered a concern on A's part for B, it is nonetheless motivated by a misunderstanding of the situation. Moreover, it means that there is no similarity between A's affective state and B's affective state, and no empathy on condition (2).

Evidence against simulation

I want to set aside these issues temporarily in order to focus on some more general problems involving simulation models of mindreading. It would seem that if, as in Gallese, Decety, Goldman, and Stueber, empathy is equivalent to mindreading, and mindreading is based on simulation, then any problems with a simulation theory (ST) of mindreading will be problems for a simulationist view of empathy as well. That's the first issue, and to address that I will quickly summarize in this section what I have said elsewhere about ST and mindreading (Gallagher 2007 and 2008). Alternatively, if we follow de Vignemont, Singer, and Jacob and make a clear distinction between everyday mindreading skills, as they are portrayed in the ST literature, and empathy, as having a special status – that is, if we reject the view that empathy is a kind of default mindreading – and yet still retain the idea that empathy is a form of simulation, then the question is whether the critique of ST extends to this view of empathy. I'll discuss this in the following section.

According to the traditional version of ST, as we've mentioned, one understands another person by employing one's own mind as a model on which to run simulation routines. This may be a conscious, introspective process, or it may be so habitual that we do it without being aware of it. Goldman identifies three steps in this simulation process.

First, the attributor creates in herself pretend states intended to match those of the target. In other words, the attributor attempts to put herself in the target's "mental shoes." The second step is to feed these initial pretend states [e.g., beliefs] into some mechanism of the attributor's own psychology . . . and allow that mechanism to operate on the pretend states so as to generate one or more new states [e.g., decisions]. Third, the attributor assigns the output state to the target . . . [e.g., we infer or project the decision to the other's mind]. (Goldman 2005b, 80–81; see Shanton and Goldman 2010 for a similar formulation)

In this kind of high-level simulation, the creation of pretend beliefs is accomplished by the use of E-imagination (Goldman 2006). He further distinguishes high-level simulation from low-level simulation which he associates with neural processes in the mirror system that are activated in two conditions: (1) when we engage in intentional action; (2) when we observe others engage in such action. As we've seen, Gallese, Goldman, and others identify MN activation as a form of neural simulation which puts our own motor system into a similar action state as the state that we observe in the actions of the other person, facilitating our understanding of their intentions and/or mental states.

My criticisms of the simulation theory of social cognition involve both high-level and low-level simulation. Here is a brief summary of four objections to ST.

(1) The diversity problem

This is a problem that pertains to both high- and low-level simulations. Simulation depends specifically on one's own first-person experience as the basis for what goes into the simulation. We depend on our own prior experience to have a sense of what the other person may be thinking in a particular situation. We start with our own experience and project some tentative empathic conception of what must be going on in the other's mind. The question is, when we project ourselves imaginatively into the perspective of the other, when we put ourselves in his or her shoes, do we really attain an understanding of the other or are we merely reiterating ourselves? Simulation is often described in the following way: "In all cases, observing what other people do or feel is transformed into an inner representation of what we would do or feel in a similar, endogenously produced, situation" (Keysers and Gazzola 2006, 394). But how does knowing what we would do help us know what someone else would do? Indeed, many times we are in a situation where we see what someone is doing, and

know that we would do it differently, or perhaps, not do it at all. Given the vast variety of actions, beliefs, experiences, and feelings that people experience, it seems presumptuous to suggest that one's own limited first-person experience is capable of capturing that diversity. There are thus two points to be made: (a) Consistent simulation would introduce a consistent first-person bias into our understandings of others, i.e., we would be led to think that they must do what we would do, or experience what we would experience. (b) Our own experiences, no matter how extensive, can never meet the diversity of experiences had by the many others that we encounter, even in our own culture.

(2) The developmental problem

The simulation processes found in explicit, high-level versions of ST are too cognitively complex to account for the infant's ability to understand the intentions of others. At this point one should cite recent experiments on 15-month-old infants' attribution of false-beliefs (see, e.g., Baillargeon, Scott, and He 2010). In a series of experiments, developmental psychologists have shown that young infants are able to differentiate correct and incorrect answers in false-belief scenarios. The experimenters use average looking time rather than verbal reports. Here the debate on how to interpret such results raises the developmental problem. Is it possible for the infant to run a high-level simulation routine? There is not much support for this idea, and on this score, perhaps a neural ST would have the advantage. The neural simulation account, however, indicates nothing about the concept of false belief; that is, there is nothing in MNs that code for false belief.¹ A more basic issue, however, is whether we should take MN activation to be a form of simulation, and this involves the following problems.

(3) The problem of pretense and instrumental control

This problem pertains to the low-level neural ST interpretation of mirror neurons. If we accept the traditional definition of simulation proposed by ST, then two aspects are important: (1) pretense, and (2) instrumental control. Both the instrumental and the pretense aspects are essential to most definitions of simulation and are clearly reflected in Goldman's explanation (Goldman 2002, 7): Simulation involves "pretend states" where, "by pretend state I mean some sort of surrogate state, which is *deliberately adopted* for the sake of the attributor's task ... In simulating practical reasoning, the attributor *feeds* pretend desires and beliefs into her own practical reasoning

¹ For a more detailed discussion of metarepresentational solutions (e.g., Carruthers 2009), simulationist approaches (e.g., Herschbach 2007), the behavioral rules view (Ruffman and Perner 2005), and an alternative enactive approach to the false-belief experiments with young infants, see Gallagher 2011b.

system." Simulation is thus characterized in terms of a mechanism or model that we manipulate or control in order to understand something to which we do not have instrumental access. The aspect of pretense seems essential for simulation if it is to be distinguished from a theoretical model or a simple practice of reasoning (see Fisher 2006).

It is clear, however, that neither of these conditions is met by MNs. First, in regard to the instrumental aspect, if simulation is characterized as a process that I (or my brain) instrumentally use(s), manipulate(s), or control(s), then whatever is happening in the automatic implicit processes of motor resonance is not simulation. We, at the personal level, do not manipulate or control the activated brain areas – in fact, we have no instrumental access to neuronal activation, and we can't use it as a model. Nor would it be more than an analogy to say that the brain itself is *using* a model or methodology, or that one set of neurons makes use of another set of neurons. Indeed, in precisely the intersubjective circumstances that we are considering, these neuronal systems do not activate themselves; rather, they are activated by the other person's action. The other person *has an effect on us* and *elicits* this activation. It is not us (or our brain) *initiating* a simulation; it's the other who does this to us via a perceptual elicitation.

Second, in sub-personal mirror processes there is no pretense. What these neurons register cannot involve pretense in the way required by ST because MNs are said to be neutral in regard to agency. That is, MNs are activated both when I engage in intentional action and when I see you engage in intentional action; no first- or third-person specification is involved (Gallese 2005; Hurley 2005; Jeannerod and Pacherie 2004). In that case, it is not possible for them to register *my* intentions as pretending to be *your* intentions; there is no "as if" of the sort required by ST because there is no 'I' or 'you' represented.

(4) The matching problem

In response to just these kinds of worries one could argue that the instrumental and pretense conditions are not necessary conditions for simulation, and that a necessary condition for simulation is something more minimal. Goldman (2006), for example, with respect to the concept of neural simulation, acknowledges a discrepancy between the ST definition of simulation and the working of subpersonal mirror processes. To address this discrepancy Goldman and Sripida propose a minimal and generic definition of simulation.

The general idea of simulation is that the simulating process should be similar, in relevant respects, to the simulated process. Applied to mindreading, a minimally necessary condition 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. (Goldman and Sripida 2005, 208)

This "direct matching hypothesis" involves an automatic neural resonance of the MN system when observing the actions of others. Matching means "mapping the visual representation of the observed action onto the motor representation of the same action" (Rizzolatti et al., 661).

Let me suggest, however, against any version of ST that makes matching the primary requirement, that the minimal condition of matching, or any simulation that one can build on this, cannot be the pervasive or default way of attaining an understanding of others. There are many cases of encountering others in which we simply do not adopt, or find ourselves in, a motoric or emotional matching state. Furthermore, with respect to neural ST, if simulation/matching were as automatic as MNs firing, then we would not be able to attribute a state different from our own to someone else. But we do this all the time. Also consider the difficulties involved if we were interacting with more than one other person, or trying to understand others who are interacting with each other. Is it possible to enter into the same, or what are likely different states, and thereby simulate the neural/motor/mental/emotional states of more than one person at the same time? Or can we alternate quickly enough, going back and forth from one person to the other, if in fact our simulations must be such that we instantiate, undergo, or experience, the states in question? How complicated does it get if there is a small crowd in the room?

In addition to behavioral/phenomenological examples, we can point to recent experiments that show that MN areas activated for producing a particular hand action are not activated for observing that hand action in another - that is, MN activations in such cases do not involve matching (Dinstein et al. 2008). Another experiment demonstrated that learning works against matching. The experimenters trained subjects to move their fingers in a manner incongruent with an observed hand; for example, moving the little finger when they observed movement of the index finger. After training, motor evoked potentials (MEPs) were greater in the little finger when index finger movement was observed (Catmur, Walsh and Heyes 2007). Yet the subjects with different MEP responses were not perceptually mistaken about which finger moved. That is, the lack of matching in the motor system did not pre-empt recognition of what the other person was doing. Csibra (2005) points out that conservatively, only about one-third of mirror neurons show a one-to-one congruence. Newman-Norlund et al. (2007, 55) suggest that activation of the broadly congruent mirror neurons may represent a complementary action rather than a similar action. In that case they could not be simulations defined on the matching hypothesis.

Can a simulation account of empathy avoid these problems?

The matching problem is one that Jacob (2008 and 2011) recognizes. His critique of the MN version of low-level simulation parallels the one outlined in the previous section (Jacob 2008). He further notes that simulation-based approaches to

mindreading over-emphasize inter-personal similarity, at the expense of dissimilarities between e.g., standard pain and empathetic pain. He argues that interpersonal similarity is neither necessary nor sufficient for mindreading. However, he rightly insists, "acceptance of a S-B (simulation based) model of *empathy* does not amount to acceptance of a S-B model of *mindreading*" (ibid., 10); in other words, it is one thing to reject the simulation-based approach to mindreading and another to reject the simulation-based approach to empathy. While matching or inter-personal similarity may not be necessary for mindreading, it does play an important role in empathy.

De Vignemont, Singer, and Jacob can thus accept some of the criticisms of ST's conception of mindreading, but since they distinguish mindreading from empathy, they can argue that these criticisms don't go all the way through to the ST account of empathy. For example, it's clear that the phenomenological/behavioral objections to conceiving of simulation as a kind of matching are worked out in terms of what we think our everyday interactions with others are like. We normally respond to others with complementary actions; we don't typically respond by matching their actions, even in a vicarious or covert way. The idea that we somehow match their behavior doesn't make sense in such contexts. But this doesn't rule out the possibility that we *can* match their behavior, for example, in the case of imitation or empathy. ST overemphasizes intersubjective similarity when it comes to everyday mindreading, but the idea that similarity or matching is not the case in those contexts does not mean that a simulative matching state cannot characterize cases that involve imitation or empathy. Hence, de Vignemont et al. can still maintain the *inter-personal similarity condition*.

In our comments on the five conditions for empathy specified by de Vignemont and Jacob, however, we noted that the similarity has more to do with the intentional structures of the affective states than with their phenomenality. Similarity or matching of intentional structure, then, may characterize empathy even if it doesn't characterize mindreading. Moreover, the worry about matching at the neural level is simply not an issue since, for de Vignemont et al., empathy involves a high-level simulation. Accordingly the matching problem is no problem for this simulationist view of empathy. What about the other problems?

For a similar reason, the problem of pretense and instrumental control is not a worry for this model, since again this problem only pertains to neural ST. To the extent that empathy involves high-level simulation, then pretense, and instrumental control - top-down modulation, as Jacob puts it - seem clearly to be part of the possible processes involved. This leaves the developmental and diversity problems. In regard to these problems, however, we can start to see the limits of simulation, in the sense that simulation by itself may not be enough to achieve empathy.

With respect to development, there is evidence that around the age of two years, a number of things happen that lead to a capacity for empathic understanding. Decety and Jackson note: It is around the 2nd year that empathy may be manifested in prosocial behaviors (e.g., helping, sharing, or comforting) indicative of concern for others. Studies of children in the 2nd year of life indicate that they have the requisite cognitive, affective, and behavioral capacities to display integrated patterns of concern for others in distress (Bretherton, Fritz, Zahn-Waxler, & Ridgeway 1986). During this period of development, children increasingly experience emotional concern "on behalf of the victim," comprehend others' difficulties, and act constructively by providing comfort and help (Zahn-Waxler, Radke-Yarrow, Wagner, and Chapman 1992). (Decety and Jackson 2004)

What does it take for this kind of empathy to emerge? Can we say that at around two years of age children start to gain an ability to employ simulation in the form of E-imagination?

Goldman suggests that we should consider this early manifestation of empathy a case of emotional contagion rather than E-imagination. He points to evidence that caring behavior emerges even earlier than two years. A child of this age will appropriately comfort his mother if she has a sore foot by showing concern, rubbing the foot, and saying 'hurt foot' (Zahn-Wexlar and Radke-Yarrow 1982). Goldman concludes that children of this age must engage in the right kind of mindreading for this empathic behavior, but the right kind of mindreading is low-level, involving mirror neurons (Goldman 2006, 291).

De Vignemont et al. argue that empathy is not equivalent to contagion or to everyday mindreading. Nonetheless, behaviors described in the one- and two-year olds may satisfy their criteria for empathy. The affectivity condition: both child and the target experience an affective state (which distinguishes this phenomenon from ordinary mindreading); the inter-personal similarity condition: we have this whether it is a case of contagion or empathy; the caring condition: the child clearly cares that its mother is in pain. It's critical to ask whether this behavior meets the ascription condition, since this is the condition, according to de Vignemont et al., that distinguishes empathy from contagion. It seems clear that the child ascribes pain to his mother and does not simply, unaware, wince and tense up in his own simulated pain, as one might find in contagion. Accordingly it seems that de Vignemont et al. would have to call this behavior empathy rather than contagion. Zahavi and Overgaard (2011), however, suggest that contagion and conscious ascription are not incompatible. One might very well wince and tense up as the result of seeing someone else in pain, but at the same time consciously ascribe this same affective state to the other, and realize that one's own reaction is an effect of what one has just seen. The ascription does not make this any less a case of contagion. It does seem unlikely that, as per the vicarious state condition, we have a high-level simulation of the E-imagination sort involved; and Goldman certainly doesn't think so. One might ask, however, whether this condition can be met without involving E-imagination, since the child's pain on seeing his mother in pain is certainly vicarious; it is not caused by a bodily injury to himself. As a result, even on the criteria for empathy provided by de Vignemont et al., it's not clear whether the behavior of the two-year-old should be called empathy, contagion, or both, unless one insists on E-imagination as the necessary mechanism for empathy and shows that E-imagination is not involved.

One question, then, for this account, is what allows for the development of Eimagination capabilities, which, on more standard views start at around four years of age? Is it simply some improvement in neural resonance. After all, studies show that the same brain areas are activated not only when we act and when we observe action by another, but when we imagine ourselves or the other acting (Ruby and Decety 2001; Grezes and Decety 2001). The development of neural resonance processes, or mirroring, perhaps, leads to the ability to E-imagine the situation of others.

I think we need to look elsewhere, however. The realization that the similarity condition concerns the *intentionality* of the affective state points us in a specific direction. It focuses attention on the *situation* of the other rather than on the phenomenal character of their affective states. Understanding the other's situation is, I will argue, facilitated more by narrative than by simulation abilities.²

In this regard, we can point to a number of important developments in the child before the age of two years, all of which contribute to the beginnings and the growth of *narrative competency* in the child. At 12–18 months we see the development of secondary intersubjectivity in which children start to see things in pragmatic contexts: objects start to get their meaning from the way people interact with them. Children begin to make sense of the world through their interaction with others. Around this time the ability for mirror self-recognition emerges, and this provides the child with a more objective sense of self, an important development in providing a more conceptual self-other distinction, which, as Decety correctly insists, is important for empathy. In addition, sometime between 15–24 months, children acquire language, or as Merleau-Ponty (1962) puts it, language starts to acquire them, and this is accompanied by advances in their communicative capacities. Finally, between 18–24 months, children start to manifest ability for episodic and autobiographical memory (Howe 2000).

Along with and because of these developments comes a capacity for narrative practices. It may be that two-year-olds work more from scripts than from full-fledged narratives; their narratives have to be elicited by questions and prompts (Nelson 2003 and 2009). But from two to four years, children fine-tune their narrative abilities by means of a further development of language ability and memory skills. Through narratives we also learn from others and engage more fully in intersubjective

² Some definitions of narrative are strict and exclusive, and others are so loose so as to include almost anything. For our purposes it is important to distinguish narrative from folk psychological theory, where theory consists of a collection of relatively timeless and general statements or rules thought to apply to the majority of cases, and are applied only by inference to any particular case. Narrative, in contrast, has a temporal structure (some, but not all, may involve a beginning, middle, and end) and is already tied to particular contexts. A narrative is about some particular person or group, in some particular situation, acting and interacting in particular ways, across some segment of time.

sense-making. Children at two to four years "often 'appropriate' someone else's story as their own" (Nelson 2003, 31). Around four years of age children start to represent the views of other people in their narratives, contrasting what they know about some events, and what others know about the events (Nelson 1992; Perner 1992). As Dan Hutto has pointed out, the fact that in most cultures children grow up surrounded by stories that transmit cultural meanings and values initiates them into practices of understanding reasons for action (Hutto 2008).

One possibility, then, is that the development of narrative competency contributes to the capacity for E-imagination, and more generally for understanding situations. E-imagination depends not simply on a resonance-simulation mechanism, but requires a way to narratively frame the other person's experience. We can see this more clearly with respect to the diversity problem.

The diversity problem concerns the fact that, when faced with the variety of ways people respond to situations, simulation depends narrowly on one's own first-person experience as its basis. If we depend on our own prior experience in order to sense what the other person may be thinking in a particular situation, the question is whether we really attain an understanding of the other or are merely projecting ourselves. Faced with the diversity of people, how can our own relatively narrow experience be the basis for understanding them?

On the one hand, the answer to the diversity problem may simply be "yes." Our comprehension of diversity is in fact a real problem. Various studies show that we are more inclined to empathize with people who are closer and more like ourselves than with those who are more distant and more unlike ourselves (see Boltanski 1999; Chouliaraki 2006; Gutsell and Inzlich 2010). On the one hand, the idea that empathy is a form of simulation may actually explain why this is a problem. And it may be an unsolvable problem simply because it is part of our human nature. It's more a human problem than a problem for the ST approach to empathy. On the other hand, it seems that it is possible in some cases to empathize with those who are not like us. We can empathize with monsters or aliens from other planets, as portrayed in film, and we can empathize with humans who live in far away lands and who are very different. This is possible, however, only when we know their stories – only when we can frame their behavior in a narrative that informs us about their history or their situation. This shows us, also, why we can more readily empathize with those who are close and similar to us. We already know the general lines of their stories. We have an easier time placing them in a narrative framework. In this respect, and specifically with respect to getting the intentionality right, narrative seems necessary for empathy. Narratives provide understanding of diverse contexts; they give us access to contexts that are broader than our own contexts and that allow us to understand a broad variety of situations. If we characterize empathy as a form of simulative E-imagination, then at the very least we need to realize that E-imagination does not float in thin air like a balloon on a thin string of first-person experience - it is tied to the ground by the particular contextualized details that are provided by narratives.

Narratives

I want to move this argument one step further, however, to show that understanding the nature of narrative competency gives us good reason to give up the simulationist account of empathy altogether.

Cultural narratives, made available to the child, or narratives that are generated in interactive contexts by others, and eventually by the child, are, in the first place, stories about actions and interactions. They often include reasons for acting. That is, they tell us about people in specific situations, what they do, how they interact with others, and they sometimes indicate the motives people have for doing what they do (see Hutto 2008). Through such narratives we gain interpretive insights into the actions of others. Narratives, however, give us more than their contents. They give us a form or structure that we can use in understanding others. That is, we learn from narrative how to frame an understanding of others. We start to see others engaged in their actions, not simply in terms of the immediate and occurrent context. We start to see them as engaged in longer-term projects (plots) that add meaning to what they are doing.

When children listen to stories, or see them enacted (in various media), or when they themselves play-act³ (and the same applies to adults who are exposed to parables, plays, myths, novels, films, television, 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 those situations. All of this helps to shape their sense of possibilities and their expectations. An education in narratives of many sorts 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. In other words, narratives instill norms and shape our understanding of what we, and others, are doing.⁴

Narratives provide us with what can be called, following terminology suggested by Bruner and Kalmar (1998), a *massive hermeneutical background* (Gallagher 2011a). This background consists of a learned set of skills and practical knowledge concerning what to expect from people, and how to deal with them.⁵ This background helps to resolve

⁵ Narrative is one important source for this knowledge. Our ongoing interaction (including communicative practices) with others is another important source. In this paper I have not emphasized the role of *strong*

³ "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; also see Richner and Nicolopoulou 2001).

⁴ One reviewer asked what happens if the extant narratives are unhelpful; might we fall back on simulation as a way to begin to construct a new narrative? This is an important question. It's clear that we sometimes fail to understand the other person, and this may be due to a failure of narrative to provide the proper resources in particular cases. I would argue that breaking out of extant narratives in these contexts involves communicative competency, and narrative competency once again. A retreat to simulation, if we take that to mean reliance on one's first-person experience, will not necessarily work (although in some cases it may). It seems clear, however, in many intersubjective contexts one can ask questions and seek responses from those concerned, and out of this communicative practice one can start to reframe a narrative that will allow for understanding.

what I call the "starting problem" in social cognition (a version of the frame problem), which one can see, for example, in Goldman's description of the first step involved in running a simulation routine. "First, the attributor creates in herself pretend states intended to match those of the target. In other words, the attributor attempts to put herself in the target's 'mental shoes'" (Goldman 2005b, 80–81).⁶

The first step seems tricky. How do I know which pretend state (belief or desire) matches what the other person has in mind. Indeed, isn't this what simulation is supposed to explain? If I already know what state matches the target, then the problem of understanding others, as defined by ST, would already be solved. One solution to the starting problem is that I know what simulation to run for any particular situation because I draw on a rich store of narratives, and on the massive hermeneutical background that informs my understanding. Simulationist versions of mindreading or of empathy don't say much about this; they don't explain how we get this background, what sort of thing it is, or how precisely it comes into play when we attempt to use E-imagination or simulation. Indeed, ST doesn't *want* to say much about it because our reliance on narrative competency actually reduces the need for simulation and displaces it as the primary explanation of everyday social cognition and empathy.

Simulation is strongly set on our first-person experiences; it draws on resources that belong exclusively to the simulator. I, in a process of simulation, put myself in the other's situation and ask what I would do if I were in that situation. I reduce the other person to something close to who I am and what my experiences mean: I start with a version of what I would do if I were in the other's situation (Keysers and Gazzola 2008). But, again, one should ask why knowing what I would do gives me insight into what anyone else might do. Moreover, as de Vignemont and Jacob suggest, empathy, in contrast to contagion, and I would suggest, in contrast to simulation itself, is *other-directed*. If we take this other-directedness in a strong sense, then it is not just that empathy is oriented to the other in a way that allows me to reduce the other to my own experience; rather, it means that I am open to the experience and the life of the other, in their context, as I can understand it, not in terms of my own narrow experience, but in terms that can be drawn from a diversity of narratives that inform my understanding.⁷

interaction in our everyday encounters with people, primarily because I've been focusing on the simulation account of empathy. As my criticism of the ST account of mindreading suggests, I think that ST fails as a general account of social cognition, and more generally I argue against the idea that mindreading of any sort is our basic form of social cognition. A more parsimonious account, in my view, is interaction theory (see De Jaegher, Di Paulo, and Gallagher 2010; Gallagher 2001; idem 2004; idem 2005).

⁶ Stueber indicates a similar first step: "*A matching phase* in which I imaginatively adopt your perspective of the world by entertaining your beliefs and desires and by quarantining my beliefs and desires that we do not share" (Stueber 2012, 57).

⁷ Stueber (2008) suggests that the importance of narrative is simply to provide "hints and clues" to enhance the simulation (empathetic reenactment) process. My suggestion here is that reliance on narrative resources actually opens up the process to a more enriched and non-simulationist narrative practice.

Jacob (2011), in defending his simulationist view of empathy raises some objections to the narrative view. In response to the claim that we gain ability in understanding others through narrative practice, he points to the developmental literature, discussed above, which shows that young infants (at 15 months, and even younger),⁸ and therefore without narrative competency, pass false-belief tests, where violation of expectation (VOE) is measured by average looking times or where the expected correct answer is measured by anticipatory looking (AL) in that direction (Southgate et al., 2010). The question posed by Jacob is this: How could narrative competency explain capacity to pass AL and VOE false-belief tasks in young infants? There are three points to be made in response to this question. First, no one claims that narrative competency is required for this kind of early performance on false-belief tasks. Narrative may be involved in many of the false-belief tests given to three-to-five year olds, and narrative competency may be required to pass those tests, at least in the sense that the child has to be able to follow the narrative to understand the question (Gallagher and Hutto 2008). But this does not apply to the kind of tasks at stake in the experiments with young infants. Second, with respect to the question of what capacity does explain the ability of young infants, there is ongoing debate. Some propose a form of low-level simulation; Carruthers (2009) suggests that infants at this age already are capable of metarepresentation and inference; Ruffman and Perner (2005) appeal to the infant's use of behavior rules (e.g. "people look for objects where they last saw them") gained via statistical learning abilities. Alternatively, it's possible to develop an enactivist account of the infant's behavior on these tests (see Gallagher 2011b for further discussion). Third, to be clear, whatever the correct answer is, we can set aside this issue about young infants and false beliefs, since, according to de Vignemont, Jacob, and Singer, it has nothing to do with empathy. They claim that empathy is not a matter of low-level processes (of whatever kind), which are surely the processes involved in early false-belief tests.⁹ Thus, these experiments have nothing to do with the claims made here about empathy or narrative. Within the framework of the de Vignemont et al. theory of empathy, the question about false-belief paradigms in infants falls into the category of mindreading or contagion, and is therefore beside the point.

⁸ Jacob cites Surian et al. 2007, who report that 13-month-olds looked longer when a caterpillar approached the true location of its preferred food, after the food was hidden there in the absence of the caterpillar; and He and Baillargeon (2011), who report that infants looked reliably longer when an agent, who had *not* seen the shortening of the length of a toy, retrieved the toy from the shorter of a pair of boxes.

⁹ Unless one wants to claim that high-level mindreading might be possible for the infant, as hinted by Goldman who suggests that the early false-belief data may motivate some revision in defining high-level mindreading as "late" developing (Goldman 2006, 146, n. 20). Even in this case, one would have to decide whether we should call this empathy rather than mindreading.

Conclusion: Narrative and empathy

Understanding persons in the context of their situation – having a sense of what their story is – is essential to forming an empathic attitude toward them. Recent studies of altruistic behavior, motivated by empathy, bear this out. Empathic reactions are stronger when we understand the personal situation of an individual than if we have abstract, detached, or merely statistical information about the plight of others (Slovic 2007; Small et al. 2007). To make clear precisely how narrative contributes to empathy, let's briefly reconsider the five conditions for empathy specified by de Vignemont et al.

1. *The affectivity condition:* there is no empathy unless both target and empathizer experience some affective state.

This condition may not be as clear or as certain as it first seems. Consider, for example, seeing someone sitting pensively on a rock next to the river, watching the water flow by. Our perception of the other person sitting there is not, by itself, sufficient for empathy. We don't know if he is enjoying nature, thinking about whether to ask his friend to marry him, solving a math problem, or contemplating suicide. What should we feel? It's only when we know some details about his story that we can start to empathize. That may lead us into a certain affective state, or not. Suppose we learn that he is trying to decide whether to propose to his girlfriend. We can know what that's like in general, since we may be familiar with these kinds of deliberations – perhaps we've read enough literature, perhaps we've talked with friends in similar situations, perhaps we've even engaged in this kind of deliberation ourselves. One might consider our understanding of the difficulty involved in this kind of deliberation to be a kind of empathy - perhaps an intellectual empathy in which we appreciate the difficulty of the deliberation, since it seems to be a major life decision and there are all kinds of factors involved. These factors may include, perhaps, the question of whether the guy loves the girl, or loves someone else but has a different reason for proposing. What is the affective state here that we have to feel in order to empathize? Is there a specific feeling of trying to work through a difficult decision? Or of being uncertain? Or of trying to solve a difficult math problem? At the very least it's not clear that in every case of empathy we have to be in an affective state in any strong sense, or that we cannot empathize with another's non-affective state of making a difficult decision, or with their non-affective attitude, or even with the intellectual difficulty they might be having in solving a difficult mathematical problem. Yet it also seems right to say that empathy involves more than what Hogan calls "the intellectual or imaginative apprehension of another's condition or state of mind" (Hogan 1969, 308).

One could easily trivialize condition (1) by maintaining that in any case a person is always in some affective state or other. Assuming that condition (1) involves more than this trivial claim, one could strengthen it by dropping the requirement that

the other person must be in some affective state, and focusing on the empathizer's affective state, namely, the affective state of empathy itself. Isn't empathy, regardless of whatever other affective state it may involve, itself an affective state? That is, one can understand empathy not as necessarily taking up a secondary affective state -e.g., the sadness or outrage I feel along with you - but as being its own primary and irreducible affective state - the state of feeling empathy.¹⁰ In this regard empathy is a kind of intersubjective affect similar to the feeling of solidarity. Whereas the feeling of solidarity may involve my feeling of being with you in the spirit of a certain project, the feeling of empathy involves my feeling of being with you with respect to your situated experience. Solidarity, however, unlike empathy, may involve the expectation of reciprocity; if I feel solidarity with you, then I would expect you to feel solidarity with me. Also, solidarity may be transitive - if I feel solidarity with you, and you feel solidarity with a third person, then, as long as the solidarity is about the same type of project, I should feel solidarity with the third person also. Empathy involves neither reciprocity nor transitivity. That empathy involves its own primary and irreducible affective state of feeling with another frees it from the requirement that it also must involve some secondary affective state - e.g., the real or simulated copy of the other person's affective state of sadness, outrage, etc. One could experience empathy for the other person's intellectual difficulty in solving a mathematical problem, and this empathy would itself still be a feeling.

2. *The inter-personal similarity condition:* there is no empathy unless the target's and the empathizer's affective states stand in a similarity relation to each other (i.e. both experience pain or both experience fear).

This is a necessary condition for a simulationist view of empathy, but not, as stated, for a narrative view. Understanding the situation of the other person, being able to frame it in a proper narrative, may lead A to be, for example, outraged at an injustice done to B. B herself, however, may only be sad about the situation and not outraged. The affective states involved may be different, or may have different phenomenal properties (and necessarily do if empathy is itself its own affective state, since A is feeling empathy and B is not). What needs to be similar, to some degree, is our understanding of the situation. If B is sad because an accident totaled her car, but A feels outrage because he thinks she has suffered some injustice, then we would have a misunderstanding rather than a case of empathy. This means that empathy depends on A having the right story about B's situation.

¹⁰ Accordingly the idea of empathy as an affect is different from what Stueber (2008) calls "affective empathy"

⁻ the vicarious sharing of an affect consistent with de Vignemont and Jacob's affectivity condition.

3. *The vicarious state condition:* the empathic state involves an "as if" or vicarious affective states, generated by the empathizer's imaginative portrayal of another person's affective state.

As indicated above, in some cases the empathic state may in fact be a real rather than a pretend or vicarious state. My sadness and outrage about the injustice done to you may be a heartfelt sadness and outrage. What is vicarious, if the empathic state is based on simulation, is the situation that I pretend to place myself in (or the experience I pretend to have) when I put myself in your shoes. But it seems possible for me to forego simulation and E-imagination, and to simply imagine (or see) *you* in a particular situation and to feel genuine sadness and outrage at the injustice done to you. In some cases, however, e.g., with respect to pain, it may indeed involve a vicarious affective state.

4. *The ascription condition:* there is no empathetic understanding unless the empathizer knowingly ascribes the affective state to the target.

That there has to be some kind of ascription seems right, although it does not have to be an ascription of an affective state (it could be an ascription of a cognitive state, as in the case of empathizing with the intellectual difficulty someone is having). Furthermore, as Zahavi and Overgaard point out, this condition does not distinguish empathy from contagion since one can wince and tense up as the result of seeing someone else in pain, but at the same time consciously ascribe this same affective state to the other.

5. *The caring condition:* the empathizer must be led to care about the target's affective life because of context.

Empathy is other-directed; it involves the comprehension of the other in the other's circumstances. Even if we do not care for the other person in a strong sense, empathy requires that we be at least concerned or take interest in the other's experience. In addition, however, one maintains a distance between oneself and the other. "In empathy, the experience you empathically understand remains that of the other. The focus is on the other, the distance between self and other is preserved and upheld" (Zahavi and Overgaard 2011, 6). This distance can be readily understood in terms of narrative distance, a concept that goes back to Aristotle's *Poetics*, and is much discussed in recent narrative theory (see, e.g., Gallagher and Cole 2010). Even if I feel with you the sadness and outrage about the injustice that you experience, I know that I am not the one who has suffered the injustice; the situation is your situation. In terms of narrative distance, I act as narrator (as I understand your context and situation), and you occupy a narrated position.

In summary, one can conceive of empathy as being (1) a primary, non-reducible, other-directed feeling of concern or interest that (2) is characterized by a clear distinction between empathizer and the other person, that (3) targets the other's

situated experience and (4) consciously ascribes that experience specifically to that other. Like de Vignemont et al., I take empathy to be something more than an automatic mirroring or contagion, and something more than mindreading.¹¹ For empathy, however, narrative offers more resources than the simulation model; in addition, it is more parsimonious in regard to the starting problem and the diversity problem, and it makes sense developmentally. That narrative competency is necessary for empathic understanding doesn't mean that empathic understanding requires an occurrent or explicit story telling: but it does require the ability to recognize others in their detailed pragmatic and social contexts that are other than my own, and to understand the other's actions and affective states in that context, in a narrative way. Our own actions, and the actions of others have intelligibility and begin to make sense when we can place them in a narrative framework (see McIntyre 1981). Our understanding of others and their situations, and hence the possibility of empathizing with them, is not based on attempts to get into their heads in a mentalizing fashion, since we already have access to their embodied actions and the rich worldly contexts within which they act - contexts that can be translated into narratives that operate to widen or make more specific the meaning/significance of actions and expressive movements.

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References

- Baillargeon, Renée, Rose M. Scott, and Zijing He. 2010. "False-belief understanding in infants." Trends in Cognitive Sciences 14(3):110–118.
- Boltanski, Luc. 1999. Distant Suffering: Politics, Morality and the Media. Cambridge: Cambridge University Press.

Bretherton, Inge, Janet Fritz, Carolyn Zahn-Waxler, and Doreen Ridgeway. 1986. "The acquisition and development of emotion language: A functionalist perspective." *Child Development* 57:529–548.

¹¹ It is also something more than a basic intersubjective perceptual experience as claimed in the phenomenological tradition (see Zahavi 2011; Zahavi and Overgaard 2011). I'm in close agreement with the notion that there is a basic intersubjective perceptual experience as they describe it, but I would not call this an empathic experience. Rather, I agree with the idea that empathy depends on understanding the context of the other, where context means more than perceptual context and includes historical and cultural aspects. To see someone, postured and in a particular place, crying or in pain, may be sufficient for a contagious effect, but unless I understand the broader context, I will not be in a position to empathize.

Bruner, Jerome and David A. Kalmar. 1998. "Narrative and metanarrative in the construction of self." In Self-Awareness: Its Nature and Development, edited by M. Ferrari and R. J. Sternberg, 308–331. New York: Guilford Press.

Carruthers, Peter. 2009. "Mindreading underlies metacognition." Behavioral and Brain Sciences 32:164–176.

Catmur Carolyn, Vincent Walsh, and Cecilia Heyes. 2007. "Sensorimotor Learning Configures the Human Mirror System." *Current Biology* 17(17):1527–1531.

- Chouliaraki, Lilie. 2006. The spectatorship of suffering. London: Sage Publications.
- Csibra, Gergely. 2005. "Mirror neurons and action observation. Is simulation involved?" ESF Interdisciplines. http://www.mendeley.com/research/mirror-neurons-action-observation-simulation-involved/ (last accessed 29 April 2012).
- Decety, Jean. 2005. "Une anatomie de l'empathie." *Psychiatrie, Sciences Humaines, Neurosciences* 3(11):16–24.
- Decety, Jean. 2004. "Empathie et mentalisation à la lumière des neurosciences sociales." *Neuropsychiatrie: Tendances et Débats* 23:25–35.
- Decety, Jean. 2003. "L'empathie ou l'émotion partagée" [Empathy: Sharing emotions]. Pour La Science 309:46-51.
- Decety, Jean. 2002. "Naturaliser l'empathie" [Empathy naturalized]. L'Encéphale 28:9-20.
- Decety, Jean and Julie Grèzes. 2006. "The power of simulation: Imagining one's own and other's behavior." *Brain Research* 1079:4–14.
- Decety, Jean and Philip L. Jackson. 2004. "The functional architecture of human empathy." *Behavioral and Cognitive Neuroscience Reviews* 3(2):71–100.
- De Jaegher, Hanne, Ezequiel Di Paolo, and Shaun Gallagher. 2010. "Does social interaction constitute social cognition?" *Trends in Cognitive Sciences* 14(10):441–447.
- de Vignemont, Frédérique and Pierre Jacob. (2012). "What is it like to feel another's pain?" *Philosophy of Science* 79(2):295–316
- de Vignemont, Frédérique and Tania Singer. 2006. "The empathic brain: How, when and why?" Trends in Cognitive Sciences 10:435-441.
- Dinstein, Illan, Cibu Thomas, Marlene Behrmann, and David J. Heege. 2008. "A mirror up to nature." *Current Biology* 8(1):R13-R18.
- Fisher, Justin C. 2006. "Does simulation theory really involve simulation?" *Philosophical Psychology* 19(4):417–432.
- Gallagher, Shaun. 2001. "The practice of mind: Theory, simulation, or interaction?" *Journal of Consciousness Studies* 8(5–7):83–107.
- Gallagher, Shaun. 2004. "Understanding interpersonal problems in autism: Interaction theory as an alternative to theory of mind." *Philosophy, Psychiatry, and Psychology* 11(3):199–217.
- Gallagher, Shaun. 2005. How the Body Shapes the Mind. Oxford: Oxford University Press.
- Gallagher, Shaun. 2007. "Simulation trouble." Social Neuroscience 2(3-4):353-65.
- Gallagher, Shaun. 2008. "Neural simulation and social cognition." In *Mirror Neuron Systems: The Role of Mirroring Processes in Social Cognition*, edited by Jaime A. Pineda, 355–71. Totowa NJ: Humana Press.
- Gallagher, Shaun. 2011a. "Narrative competency and the massive hermeneutical background." In *Hermeneutics in Education*, edited by Paul Fairfield, 21–38. New York: Continuum.
- Gallagher, Shaun. 2011b. "In defense of phenomenological approaches to social cognition: Interacting with the critics." *Review of Philosophy and Psychology*. Published online first: DOI 10.1007/s13164-011-0080-1.
- Gallagher, Shaun and Daniel Hutto. 2008. "Primary interaction and narrative practice." In *The Shared Mind: Perspectives on Intersubjectivity*, edited by Jordan Zlatev, Timothy P. Racine, Chris Sinha, and Esa Itkonen, 17–38. Amsterdam: John Benjamins.
- Gallagher, Shaun and Jonathan Cole. 2010. "Dissociation in self-narrative." Consciousness and Cognition 20:149–155.

- Gallese, Vittorio. 2001. "The 'shared manifold' hypothesis: From mirror neurons to empathy." *Journal of Consciousness Studies* 8:33–50.
- Gallese, Vittorio. 2003. "The roots of empathy: The shared manifold hypothesis and the neural basis of intersubjectivity." *Psychopathology* 36:171–180.
- Gallese, Vittorio. 2005. "Being like me': Self-other identity, mirror neurons and empathy." In *Perspectives on Imitation*, edited by Susan Hurley and Nick Chater, 101–118. Cambridge MA: MIT Press.
- Gallese, Vittorio. 2009. "Motor abstraction: A neuroscientific account of how action goals and intentions are mapped and understood." *Psychological Research* 73(4):486–98.
- Gallese, Vittorio and Alvin Goldman. 1998. "Mirror neurons and the simulation theory of mind-reading." *Trends in Cognitive Sciences* 12:493–501.
- Goldman, Alvin I. 1989. "Interpretation psychologized." Mind and Language 4:161-185.
- Goldman, Alvin I. 2002. "Simulation theory and mental concepts." In *Simulation and Knowledge of Action*, edited by Jérôme Dokic and Joëlle Proust, 1–19. Amsterdam: John Benjamins.
- Goldman, Alvin. 2005a. "Mirror Systems, Social Understanding and Social Cognition." *Interdisciplines*. http://www.interdisciplines.org/mirror/papers/3/6/1 (last accessed 30 May 2005).
- Goldman, Alvin. 2005b. "Imitation, mind reading, and simulation." In *Perspectives on Imitation* II, edited by Susan Hurley and Nick Chater, 79–93. Cambridge MA: MIT Press.
- Goldman, Alvin. 2006. Simulating minds: The philosophy, psychology and neuroscience of mindreading. Oxford: Oxford University Press.
- Goldman, Alvin. 2011. "Two routes to empathy: Insights from cognitive neuroscience." In *Empathy: Philosophical and Psychological Perspectives*, edited by Amy Coplan and Peter Goldie. Oxford: Oxford University Press. DOI: 10.1093/ac prof: 050/9780199 5399 56.003.0004.
- Goldman, Alvin I. and Chandra S. Sripada. 2005. "Simulationist models of face-based emotion recognition." *Cognition* 94:193–213.
- Gordon, Robert M. 1996. "Radical' simulationism." In *Theories of Theories of Mind*, edited by Peter Carruthers and Peter K. Smith, 11–21. Cambridge: Cambridge University Press.
- Grezes, Julie and Jean Decety. 2001. "Functional anatomy of execution, mental simulation, observation, and verb generation of actions: A meta-analysis." *Human Brain Mapping* 12:1–19.
- Gutsell, Jennifer N. and Michael Inzlich. 2010. "Empathy constrained: Prejudice predicts reduced mental simulation of actions during observation of outgroups." *Journal of Experimental Social Psychology* 46(5):841–845
- He, Zijing and Renée Baillargeon. 2011. "False-belief understanding in 2.5-year-olds: Evidence from change-of-location and unexpected-contents violation-of-expectation tasks." *Developmental Science* 14:292–305.
- Heal, Jane. 1996. "Simulation, theory and content." In *Theories of Theories of Mind*, edited by Peter Carruthers and Peter K. Smith, 75–89. Cambridge: Cambridge University Press.
- Herschbach, Mitchell. 2007. "The phenomenological critics of folk psychology: The case of false belief." Paper presented at the Berkeley-Stanford-Davis Graduate Student Conference, 14 April 2007.
- Hogan, Robert. 1969. "Development of an empathy scale." Journal of Consulting and Clinical Psychology 33:307–316.
- Howe, Mark L. 2000. The Fate of Early Memories: Developmental Science and the Retention of Childhood Experiences. Washington: American Psychological Association.
- Hurley, Susan. L. 2005. "Active perception and perceiving action: The shared circuits model." In *Perceptual Experience*, edited by Tamar Gendler and John Hawthorne, 205–259. New York: Oxford University Press.
- Hurley, Susan L. 2008. "The shared circuits model. How control, mirroring, and simulation can enable imitation and mindreading." *Behavioral and Brain Sciences* 31(1):1–22
- Hutto, Daniel D. 2008: Folk Psychological Narratives: The Socio-Cultural Basis of Understanding Reasons. Cambridge MA: MIT Press.

- Jacob, Pierre. 2008. "What do mirror neurons contribute to human social cognition?" *Mind and Language* 23(2):190–223.
- Jacob, Pierre. 2011. "The direct perception model of empathy: A critique." Review of Philosophy and Psychology 2(3):519-540.
- Jeannerod, Marc and Elizabeth Pacherie. 2004. "Agency, simulation, and self-identification." Mind and Language 19(2):113-46.
- Keysers, Christian and Valeria Gazzola. 2006. "Towards a unifying neural theory of social cognition." *Progress in Brain Research* 156:383-406.
- McIntyre, Alestair. 1981. After Virtue. South Bend: University of Notre Dame Press.
- Merleau Ponty, Maurice. 1962. *Phenomenology of Perception*. Translated by Colin Smith. London: Routledge and Kegan Paul.
- Nelson, Katherine. 1992. "Emergence of autobiographical memory at age 4." *Human Development* 35:172–177.
- Nelson, Katherine. 2003. "Narrative and the emergence of a consciousness of self." In Narrative and Consciousness: Literature, Psychology, and the Brain, edited by Gary D. Fireman, Ted E., McVay, Jr. and Owen J. Flanagan, 17–36. Oxford: Oxford University Press.
- Nelson, Katherine. 2009. "Narrative Practices and Folk Psychology: A Perspective from Developmental Psychology." *Journal of Consciousness Studies* 16(6–8):69–93.
- Newman-Norlund, Roger D., Matthijs L. Noordzij, Rudd G.J. Meulenbroek, and Harold Bekkering. 2007. "Exploring the brain basis of joint attention: Co-ordination of actions, goals and intentions." *Social Neuroscience* 2(1):48–65.
- Perner, Josef. 1992. "Grasping the concept of representation: Its impact on 4-year-olds' theory of mind and beyond." *Human Development* 35:146–155.
- Richner Elizabeth, S. and Ageliki Nicolopoulou. 2001. "The narrative construction of differing conceptions of the person in the development of young children's social understanding." *Early Education and Development* 12:393–432.
- Rizzolatti, Giacomo, Leonardo Fogassi, and Vittorio Gallese. 2001. "Neurophysiological mechanisms underlying the understanding and imitation of action." *Nature Review Neuroscience* 2:661–670.
- Ruby, Perine and Jean Decety. 2001. "Effect of subjective perspective taking during simulation of action: a PET investigation of agency." *Nature Neuroscience* 4(5):546–50.
- Ruffman, Ted and Josef Perner. 2005. "Do infants really understand false belief? Response to Leslie." *Trends in Cognitive Sciences* 9(10):462–63.
- Shanton, Karen and Alvin Goldman. 2010. "Simulation theory." Wiley Interdisciplinary Reviews: Cognitive Science. http://fas-philosophy.rutgers.edu/goldman/Simulation%20Theory.pdf (last accessed 21 February 2010).
- Slovic, Paul. 2007. "If I look at the mass I will never act: Psychic numbing and genocide." Judgment and Decision Making 2:79–95.
- Small, Deborah A., George Loewenstein, and Paul Slovic. 2007. "Sympathy and callousness: Affect and deliberations in donation decisions." Organizational Behavior and Human Decision Processes 102:143– 153.
- Southgate, Victoria, Coralie Chevallier, and Gergely Csibra. 2010. "Seventeen-month-olds' appeal to false beliefs to interpret others' referential communication." *Developmental Science* 13(6):907–912.
- Stueber, Karsten R. 2006. Rediscovering Empathy: Agency, Folk-Psychology and the Human Sciences. Cambridge MA: MIT Press.
- Stueber, Karsten R. 2008. "Reasons, generalizations, empathy, and narratives: The epistemic structure of action explanation." *History and Theory* 47(February):31–43.
- Stueber, Karsten R. 2012. "Varieties of empathy: Neuroscience and the narrativist challenge to the contemporary theory of mind debate." *Emotion Review* 4(1):55–63.
- Surian Luca, Stefania Caldi, and Dan Sperber. 2007. "Attribution of beliefs by 13-month-old infants." Psychol Science 18(7):580–586.

- Zahavi, Dan. 2011. "Empathy and direct social perception: A Phenomenological Proposal." *Review of Philosophy and Psychology* 2(3):541–558.
- Zahavi, Dan and Søren Overgaard. 2011. "Empathy without isomorphism: A phenomenological account." In *Empathy: From Bench to Bedside*, edited by Jean Decety, 3–20. Cambridge MA: MIT Press.
- Zahn-Waxler, Carolyn and Marian Radke-Yarrow. 1982. "The development of altruism: Alternative research strategies." In *The Development of Prosocial Behavior*, edited by Nancy Eisenberg and Harry Berlin, 109–138. New York: Academic Press.
- Zahn-Waxler, Carolyn, Marian Radke-Yarrow, Elizabeth Wagner, and Michael Chapman. 1992. "Development of concern for others." *Developmental Psychology* 28:126–136.