

to previous ones, the account would still be necessary because it allows us to explore five areas of urgently needed research, one of which would be a detailed analysis of infants' interaction. Ironically, C&L are the first to recognize that some contemporary research of this sort already exists.

In summary, C&L's critique of traditional accounts of "theory of mind" is correct. However, in its present state their new theory is clearly premature – unless, that is, one favors the proliferation of weak psychological theories and the perpetuation of what Meehl (1978) has called the slow progress of soft psychology.

ACKNOWLEDGMENTS

I thank Armando Machado and Olga Pombo for their comments on an earlier version of this commentary.

Constructing agents: Rethinking the how and what in developmental theories of social understanding

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Abstract: Although I am broadly in sympathy with Carpendale & Lewis's (C&L's) version of social constructivism, I raise two issues they might address. One bears on the question of how social understanding develops: Is their resistance to individualism inappropriately combined with a resistance to internalism? A second question concerns a more radical implication of their view for what social understanding is.

Three cheers for Carpendale & Lewis's (C&L's) "constructivist" approach to the development of social understanding, with its insistence on the *gradualistic*, *action-oriented*, and *socially embedded* nature of this process. In C&L's view, developing children become, not theoretically competent in a body of folk-psychological (FP) knowledge, but skilled social beings, able to demonstrate in myriad ways their capacity-in-action to negotiate the complex, normatively structured social world in which they and their fellows are embedded. I am broadly in sympathy with this account but raise two issues C&L might address. One bears on the question of how social understanding develops, the other on what social understanding is.

Let me first address the question of how social understanding develops. By taking the skills approach, C&L are able to chart a constructivist middle way between the extremes of "individualism," which credits the child with having or doing too much in development, and collectivism, which credits the child with having or doing too little. Yet despite C&L's focus on how development occurs – in particular, given their resistance to a passive and wholly mysterious view of social enculturation – their own account of this process, especially in early infancy, is mechanistically vague. How do self-other differentiation and coordination gradually emerge within the context of parentally supported dyadic and triadic interactions? It has something to do with the infant's developing and combining sensorimotor schemes, we are told, but the "riddle" of this emergence has yet to be solved.

Where do we look for the answer? C&L suggest it will be found in more detailed longitudinal analysis of behaviours that emerge in the context of such interactions. Although no doubt helpful, this leaves the mechanistic side of this puzzle quite untouched. I worry that C&L's justifiable anti-individualism may seem to blend into less-justified anti-*internalism*, a resistance to investigating what cognitive/perceptual mechanisms *within* the infant could support the gradual emergence of progressively more skilled social behaviours.

Such mechanisms need not be so richly specified as to amount to a prewired capacity for social understanding, nor need they be such as to presuppose sophisticated (theory-like) processing of

others' intentional behaviour as such. They may be quite low-level mechanisms: for example, the mechanisms underlying early imitation, allowing infants to cross-modally map their own proprioceptively experienced bodily movements onto like movements that they see performed by others (Meltzoff 1990; Meltzoff & Gopnik 1993; Meltzoff & Moore 1992). The progressive development and combination of sensorimotor schemes would then be explained, in the first instance, by the infant's primordial perceptual urge to map what others do onto what they do themselves. Of course, this perceptual urge may soon be reinforced by the other benefits that infants gain through such interactions – for example, epistemic benefits that derive from adults' intentional scaffolding, but also, perhaps at first more importantly, the sensory/affective regulative benefits suggested by C&L in connection with a lean interpretation of early joint attention behaviour (Baldwin & Moses 1996; Gergely & Watson 1996; McGeer 2001).

However, my point here is not to push any particular view, but to query C&L about their general attitude towards internalism (versus individualism). In connection with this, it is interesting to note a parallel "neuroconstructivist" movement focused on internal structures and mechanisms that attempts to chart a middle way between the extremes of nativism (too much prespecified structure) and empiricism (too little structure) to explain the development of higher-order capacities through the child's interaction with a progressively structured, even necessarily social environment (Elman et al. 1996; Karmiloff-Smith 1998; Quartz & Sejnowsky 1997). Given the similarity of constructivist ambitions, there may be fruitful connections to exploit between these two programs.

Now to the question of what social understanding is. I begin by noting that once the resistance to individualism is clearly separated from a needless resistance to internalism, C&L may well avail themselves of a better way to characterize the infant's starting state than one of relative nondifferentiation between self, other, and world. However true this characterization may be, it suggests a lack of structure and/or activity on the infant's part that seems to fit better with the enculturation model C&L rightly reject. The infant is not a passive receptacle but active in constructing skills in and through social relationships that eventually constitute the skills of a genuine folk-psychological agent, that is, of a person who manifests his or her social understanding in myriad skillful ways of interpreting others and acting in the normative terms of folk-psychology.

The developmental challenge is therefore not so much one of "differentiation" as it is of transforming/having transformed early meaningless activities into the progressively more meaningful activities of a well-behaved folk-psychological agent. This characterization may constitute a subtle shift of emphasis, but its point is to bring out an important implication of C&L's approach not fully highlighted in their target article – namely, that "social understanding" is not just a body of knowledge, even in the sense of know-how, allowing individuals to understand one another as intentional agents. It is, more significantly, a *regulative practice* – that is, a complex set of skills by means of which individuals regulate themselves in accord with the norms of folk-psychology, thereby themselves becoming well-formed agents from the folk-psychological point of view (McGeer & Pettit 2002). The development of "social understanding" is therefore, in actuality, the development of social *agency*: a progressive enablement of individuals' agential skills by means of which they are also progressively empowered to act and react in self-standing ways within a community of others. All this is quite compatible with C&L's program: It merely raises the question of whether their substitution of the phrase "social understanding" for "theory of mind" goes far enough in capturing their sense of what children are constructing within social interaction.

ACKNOWLEDGMENT

This commentary was supported by the McDonnell Foundation through a grant received from the McDonnell Project in Philosophy and the Neurosciences.