Getting over “the problem of other minds”:
Communication in context

Alan Costall a, *, Ivan Leudar b

a Department of Psychology, University of Portsmouth, Portsmouth, Hampshire PO1 2DY, UK
b Department of Psychology, University of Manchester, Manchester M13 9PL, UK

Received 19 February 2007; accepted 20 February 2007

Abstract

Theories of communication often assume that communication has a single, essential form or telos, the culmination of a one-track developmental process where precursors eventually give rise to the real thing. At one time, this essence of communication was identified with linguistic competence, whereas now it is largely defined in terms of “Theory of Mind.” But the fundamental problem with “Theory of Mind” is the very problem it pretends to solve: “the problem of other minds.” That problem, as formulated, is insoluble, even with the aid of theory or innate modules. In this article, we reject the superficial depth psychology of “Theory of Mind” in favour of a breadth psychology based on context.

© 2007 Elsevier Inc. All rights reserved.

Keywords: Communication; Context; Theory of mind; Grice; Vygotsky

What is missing, then, . . . is reality and the child’s relationship to that reality. What is missing is the child’s practical activity. This is fundamental. Even the socialization of the child’s thinking is analysed . . . outside the context of practice. It is isolated from reality and treated as the pure interaction or communication of minds. (Vygotsky, 1987, p. 87).1

Philosophers often say that context is very important. Let us take this remark seriously. Surely, if we do, we shall want to consider this remark not merely in relation to this or that problem, i.e. in context, but also in itself, i.e. out of context. (Paul Grice, unpublished lecture, cited in Chapman, 2005, p. 97).

1. Introduction

The research literature on the development of communication often takes for granted that human communication must have a singular core, and, indeed, a single, developmental telos. The task of the research then is to define the essence of communication, identifying its developmental preconditions and “subcomponents,” and eventually locating its neurobiological underpinnings (e.g. Marshall & Fox, 2006).

* Corresponding author. Tel.: +44 23 92 846316.
E-mail addresses: alan.costall@port.ac.uk (A. Costall), ivan.leudar@manchester.ac.uk (I. Leudar).

1 Vygotsky was complaining specifically about Piaget’s approach, but we think his point is more general, and, as we will explain, might even apply to the Vygotskyan position itself.

0163-6383/$ – see front matter © 2007 Elsevier Inc. All rights reserved.
doi:10.1016/j.infbeh.2007.02.001
A standard definition of communication is based on the metaphor of ‘telementation’: the transmission of experiences, thoughts or information located in one person’s mind into that of another. Peter Hobson has long been challenging this rather ‘cold’ view of communication, in favour of engagement, and this important emphasis upon engagement runs through many of the papers in this Special Issue:

“Quintessentially, [uniquely human forms of communication] involve interpersonal engagement, and only secondarily are they concerned with the transmission of ‘information’ from one person to another.” (Hobson, 2007)

We share Hobson’s objections to an overly intellectualized, representationalist, perspective on communication. It is not clear whether he is offering us an alternative definition of communication, but that does not matter. We are not looking for any definitions. Our basic point is that communication may not have an essence, either as a unitary entity, a core function, or a telos, the culmination of a single developmental process, where the “precursors” of true communication eventually give way to the “real thing.” An all-embracing definition of ‘communication’ would be as futile as defining the nature of a particular person. The pre-theoretical richness of communication keeps getting lost in definitions of communication based on information-theoretic, mentalistic or linguistic models, which place their core, respectively, in ‘exchanges of information’, in ‘inferences of mental states’ or in ‘language mediation’. Each excludes what the other insists is essential, and none captures either the consequentiality or the intimacy that can be gained in human engagements.

The mistake, then, is to assume that real communication must take a single, essential form, and that all other apparent instances of communication are either transient developmental precursors or else cheap imitations. At one time, the supposed unique essence of human communication was taken to be linguistic competence. Over the last couple of decades, however, it has come to be identified with some version or other of “Theory of Mind.” (see Reddy, in press) Camaioni, for example, has claimed that the onset of true communication requires the infant to be able to represent the representational capacities of other people. As she put it, “real communicative intentions” appear relatively late in development (after 12 months) with the emergence of proto-declarative pointing. In such pointing, the child is indicating the object to another person not because he or she wants that object, but, rather, as to indicate that it is of common interest. Proper communication, according to Camaioni, requires the emergence of “a concept of the human being as a subject who not only perceives/acts but also selectively attends and in general possesses independent psychological states such as interest in object/events” (Camaioni, 1993, p. 93; emphasis added). Tomasello has made a similar point: “The understanding of communicative intentions involves a partially recursive understanding in which I understand your intentions toward my intentional states” (Tomasello, 1999, p. 70).

Our purpose here is not to take issue with these specific claims. Our concern is with the way in which these and other communication theorists have come to take the “Theory of Mind” approach for granted despite its curious combination of intellectualism and theoretical vacuity.

2. Not so much a theory, more a way of life

“Theory of Mind” started out as a relatively definite (if incoherent) theory about how “the folk,” “ordinary people,” or even “naïve people,” can possibly make sense of themselves and other equally naïve people (we have taken these rather strange terms from Goldman, 2006, pp. 4, 230, 258). According to the original “theory theory” approach, “other people” (i.e. non-psychologists) make sense of other “other people” in much the same way that psychologists engage in cognitive theory: by making theoretical inferences about mental states from observable behaviour.

“Theory of Mind” is now, however, not so much a theory, more a way of life. There has been a proliferation of different theoretical approaches within “Theory of Mind,” few of which imply any explicit theorizing on the part of “other people.” In fact, “Theory of Mind” is now presented in the textbooks as if it entailed no theoretical commitments at all. It is routinely presented as an established fact, as an inevitable issue both for research and theory, or else simply as a field of psychological inquiry on a par, say, with the study of perception or memory:

... it has become clear that young children in principle have a naïve psychological theory, with which they can understand fellow people’s behaviour and which makes them accessible, full partners in communication. (Koops, 2003, p. 15).

---

2 Which is not to say that these other fields are not, themselves, highly artefactual (see Danziger, 1990, 1997)!
[‘Theory of mind’ is] the ‘everyday’ ability to understand other people’s beliefs, thoughts and desires in order to explain and predict their behaviour. With the ability to infer mental states, like the true and false beliefs of oneself and others, children become more capable of participating in a wide range of conversational and social interactions. (Pring, 2005, p. 2).

Theory of mind as a field of study encompasses research that examines how people make sense of their worlds, of themselves, of others, of interpersonal relations – social and cognitive processes that are apparent in everyday life. (Garton, 2004, p. 80).

Curiously, the theorists of “Theory of Mind” have been remarkably lax not only in justifying their claim that inferences are inevitable if we are to understand one another, but also in setting out how these inferences could possibly bridge the deep gulf they insist exists between behaviour and mind. They admit that they themselves do not quite see how all this theorizing actually works (Gopnik, 2003, p. 245; Nichols & Stich, 2003, p. 35; cf. Hutto, in press). Instead, they leave it to the rest of us to sort that out (or else, as in “Theory of Mind Mechanism,” to natural selection). Solving the problem becomes the concern of everyone except the psychological theorists themselves (c.f. Guthrie, 1935, p. 172).3 In a subtle act of theoretical subterfuge, ordinary people have become the decisive “existence proof.” The ‘proof’ runs as follows. Ordinary people, as a matter of fact, do manage to make reasonable sense of one another, ergo they, at least, must have the necessary ingenuity, even as naïve theorists, to crack “the problem of other minds” on the basis of inference.

Despite this brazen outsourcing by the “Theory of Mind” theorists of their essential theoretical work, there remains a core schema of distinctive theoretical assumptions:

1. Somehow or other we all have to engage in an inferential leap beyond and behind what we can actually ‘observe’ about other people in order to relate to them truly as persons.
2. The child’s development towards a proper understanding of other people, and engagement with them, consists of a single, all-or-nothing transition (or, as in the more Ptolemaic versions of Theory of Mind, constellations of such transitions).
3. Thanks either to ‘context’ or else ‘conditioning’, young babies and those diagnosed as autistic can, in the absence of “Theory of Mind,” fake the capacity to make sense of, and engage with, other people. Here, for example, are Carpendale and Lewis (2006) attempting to deal with the fact that young children “appear to engage in various acts of deception” long before they are able to pass the standard test of “Theory of Mind,” the False Belief Task:

   What may underlie this apparent paradox is that in carefully designed laboratory experiments children cannot get away without some understanding of false beliefs. However, in their everyday home life things are different. That is there is far more support from the context that may enable a young child to engage in deception with as yet only a partial understanding of what is going on. (Carpendale & Lewis, p. 221; emphasis added).
4. Autism can be understood as an impairment, or, indeed, the complete absence of the very “mechanism” or “capacity” for inference that allows the rest of us to make sense of other people. It is this assumption that has helped give the rather scholastic experiments conducted within the field of “Theory of Mind” a sense of serious, practical significance.
5. People inevitably have to engage in making inferences in making sense of one another since (according to the Theory of Mind approach) there is an insurmountable chasm between understanding behaviour and understanding minds. Although this is seldom spelt out in the recent literature, we are all in effect faced with the traditional “problem of other minds”:

3 “Signs, in Tolman’s theory, occasion in the rat realization, or cognition, or judgment, or hypotheses, or abstraction, but they do not occasion action. In his concern with what goes on in the rat’s mind, Tolman has neglected to predict what the rat will do. So far as the theory is concerned the rat is left buried in thought; if he gets to the food-box at the end that is his concern, not the concern of the theory.” (Guthrie, 1935, p. 172)
4 Despite challenging the standard discontinuous, “all-or-none” approaches to social development, that invoke what they themselves call miracles, Carpendale and Lewis later go on to assert that such early forms of social understanding are quite different: “we view this as an early form of practical, lived, or sensorimotor knowledge, which is not the same thing as later-developing forms of more explicit social knowledge” (Carpendale & Lewis, 2006, p. 238; emphasis added).
Given the Cartesian assumption of an individual mind that possesses special knowledge of its own consciousness, but no such access to the contents of any other mind, a radical scepticism ensues regarding what we can know of these other minds (and, in its most extreme form, regarding the very existence of other minds). (Kirschner, 2003, p. 278.)

Now there were plenty of important developments in the twentieth century both in philosophy and also psychology (most notably the more radically social approaches to psychological development) that should have put this traditional problem to rest. Furthermore, most mainstream psychologists themselves would protest that they are not Cartesian, mind-body dualists, but thoroughgoing materialists instead. Nevertheless, as we have argued elsewhere, in terms of its epistemology and methodology modern psychology remains deeply committed to a dualism of bodily behaviour and mind (Leudar & Costall, 2004a). Modern psychology has taken over from neo-behaviourism an official conception of behaviour which disenchanters behaviour and equates it, instead, with “colourless movement,” ultimately separable from any wider ‘context’ and devoid of inherent meaning and value (Hull, 1943, p. 25).5 Given this dualistic conception of behaviour, the mental could only be relegated to a hidden realm, concealed behind behaviour, and related to it in an arbitrary, rather than constitutive, way.

As formulated in “Theory of Mind,” the problem of engaging with other people and making sense of them, demands nothing short of divine intervention (an option open, at least, to Descartes), or else the truly magical act of “mind reading” or “telementation.” For once a logical disjunction is assumed between behaviour and mind, then behaviour can no longer constitute evidence or the basis of premises for inferences about mind, be they based on naïve theory, innate mechanisms, or simulations.

Our way out of this dead end is to abandon the epistemic behaviour-cognition dualism and, instead, come to accept, along with Anscombe (1959), Ryle (1949) and White (1979), that an action is always identified ‘under a description’, and that any action can be identified in an ‘open-ended plurality of ways’ (not just as ‘a behaviour’ or ‘an action’) with descriptions incorporating more and more contextual information as one moves from ‘behaviours’ to complex actions (cf. Sharrock & Leudar, 2002). Now Grice, in the quotation at the beginning of this paper, argued that we should consider context out of context. But, on the contrary, context has to be understood as the context of a particular action, with that action being what it is in that particular context. Action and context are mutually constitutive. Conversations both fit into contexts and also invoke them.

3. Theory of mind as a model of communication

“Theory of mind” is not a theory of mind at all in the sense that it would describe and explain our mental life, and how it develops. It is better thought of as an aspect of a theory of communication. Now, one obvious thing about people is that they engage each other not as physical objects, but as experiencing individuals who do things for reasons, and communicate with each other assuming such intentionality in each other. This is made explicit in Grice’s conception of ‘non-natural meaning’ where understanding is mediated through making communicative intentions public and ‘picking them up’ (Grice, 1957), as well as in Searle’s definition of speech acts in terms of interlocking mental states of speakers and hearers (Searle, 1969). This intentionally mediated engagement is supposedly unique to humans (or perhaps shared with higher primates). The problem is to provide an account of this mediation. The trouble with “Theory of Mind” is that it construes the problem of mediation in a way that allows no solution. It assumes that we are radically separated from each other, so that we could do nothing but theorise that others have minds, and only infer what they are thinking and feeling and what they are trying to say to us. In fact, Alan Leslie has rightly been insisting that theorizing is hardly up to the difficult task of accessing such “invisible, intangible, abstract states” (Leslie, Friedman, & German, 2004, p. 531). However, as formulated, the problem is essentially insoluble, and hence presents similar difficulties for simulation or even natural selection (the basis of Leslie’s preferred version of “Theory of Mind”). The whole mentality of the “Theory of Mind” approach is terminally bewildered. Starting from the neo-Cartesian premise that the only thing we can experience directly of other people is their physically individuated behaviour, it has become stuck in the

5 “In the vernacular, “to behave” is usually qualified without reference to definite forms of behavior. The answer to “How does he behave?” is not “He is running” or “He is testing hypotheses,” but the provision of adverbial qualifications like “admirably,” “badly.” To report on behavior and separate it from any evaluation is itself to behave rather strangely.” (Naess, 1965, p. 56)
unshakable conviction that making sense of one another must rely upon theory-like inferences about mental states not directly available to communicators (see Leudar & Costall, 2004b).

4. Reclaiming engagement

Over the last three decades, developmental psychologists studying children’s sociality have taken the “the problem of other minds” as their starting point, and then gone on to assume that children, confronted with inherently meaningless behaviour, somehow endow it with life and meaning through a process of theoretical inference. We would not start from there.

First of all, “understanding other minds” is not a single problem. There is a diversity of ways we understand other people and engage them in communication. The study of communication also requires two complementary points of view, involving both individuals and groups. From the individual point of view, communication involves coordination of individuals in a group, whereas from the point of view of a group, communication involves individuation. These two aspects are linked in time as dialectical complements and so both perspectives are necessary to understand communication. Furthermore, the kind of representational knowledge that, according to Theory of Mind, is supposed to underpin coordinated social activity and communication actually presupposes that such coordination is already in place (Leudar, 1991). This means that the ‘sharing of minds’ is grounded in practical social activities that both bond and define individuals, and would simply not be possible in the absence of such primary engagement.

Furthermore communication does not take place in a vacuum. It is situated in a world that it, in turn, transforms. This situated nature of communication is the second source of complexity. Communications do represent the world, and like intentionality have an element of ‘aboutness’. But, as John Austin insisted, communications are also actions and, as such, inevitably aspects of broader activities and projects extended over time and across different settings. In the first sense, regarded as representations, communications can be true or false about the world. In the latter sense, communications are made possible by settings that they preserve and transform and thus they are apt or inappropriate (in addition to being true or false). Moreover, communications-as-activities vary in their intentionality; they can be (among other things) instinctual, impulsive, habitual, intentional, or deliberate, and so in some cases their intentionality may be immediately grasped whereas in others they may have to be inferred.

Communication is not just a cold intellectual matter. It involves the maintenance and transformation of relationships. A relationship with another person involves knowing her or him as an individual in that relationship. This kind of knowing involves a bond that goes well beyond an intellectual kind of understanding, and extends beyond the here and now. The bond is alive in feelings, emotions and, sometimes, even in obsessions (Leudar et al., 2007).

Lastly, communication takes place in a variety of modalities that depend on the senses that organisms have at their disposal and the environments in which they live. Focusing communication upon spoken language to the exclusion of these other modalities readily encourages the intellectualising of communication and its development.

5. Cognitivism with a hat on

In the 1970s, developmental psychology seemed to be heading in radically new directions. Neo-Vygotskyan theory was challenging the (allegedly) decontextualised, individualistic emphasis within Piagetian theory. Furthermore, the discovery of the competent neonate, actively conversing with others, was undermining the standard behaviouristic and associationist conceptions of the infant as a reflex machine, simply accumulating ‘experience’. Yet, these early developments in developmental psychology may themselves have set the conditions for the subsequent rise of “Theory of Mind.” They also seem to have frozen developmental psychology into a distinctly “seventies” time warp. One of the things we all, perhaps, missed at the time was the extent to which Vygotsky shared the Piagetian developmental ideal - the telos - of abstraction, that is, the increasing isolation of the child from other people and from the specific situation. After all, the neo-Vygotskyan metaphor of “scaffolding” while invoking the interventions of others as social support, also anticipates their eventual removal. Worse still, the very idea of “internalisation” entails the privatization of the social (see Leudar, 1991). Thus, at least implicitly, within its metaphors, the neo-Vygotskyan approach has retained an ideal of development in which the child’s understanding is ultimately abstracted from any ‘context’.

Many of the main paradigms still deployed in the study of infant communication originate from the 1970s, as do the core concepts, such as “primary” and “secondary inter-subjectivity,” and the theoretical focus upon the mother–infant
“dyad.” The relevance of these paradigms to communication and engagement seems now to go without saying. Furthermore, the core concepts, despite emphasizing relationship and context, have seldom been subject to critical re-examination, and are sometimes handled in a distinctly one-sided or self-enclosed way.

Take the concept of “intersubjectivity.” This is clearly central to the developmental psychology of communication. The main paradigms presuppose a fundamentally harmonious relation between infant and “other.” Yet, infancy is also a turbulent time, involving deep conflict as well as cozy conversation and engagement (see Kirschner, 2003; Marková, 2003). Anyone, even an “ordinary person,” within earshot of a “mother–infant dyad” soon appreciates that there is plenty of disagreement as well as agreement going on.

Admittedly, the emphasis upon primary and secondary intersubjectivity (upon the mother–infant dyad and then the triad of mother–child-object) clearly takes us beyond the individualism of mainstream psychology, where the person has been treated as isolated from any wider world. But a similar ‘encapsulated’ view of these alternative social units of analysis can still prevail. It is true that adults and younger children spend a good deal of time beaming at babies, or putting out their tongues at them, and sometimes may even go “still-faced.” But they are also feeding them, comforting them, cleaning them, and in so many other ways engaging with them in a wider context. Similarly, for the “triad,” the inclusion of a third “object” entails a whole set of yet wider connections: a toy designed for certain forms of play, societal expectations about how the mother and father should deal with the particular situation, and so on. Eventually, the child will come to recognize that toys, along with many other things, are themselves ‘social’ in many different ways. As artefacts, for example, they embody intentions, and, as possessions, they constrain who should and who should not be using them. The study of communication and engagement needs to connect with this wider world. Yet, the “dyad” and the “triad,” as embodied in the current paradigms, often presents us with a limited view of the social, and closes off any serious appreciation of the interpenetration of the social and the material (Costall, 1995; Costall & Dreier, 2006).

Finally, back to Hobson’s choice, his emphasis upon pre-representational involvement with others:

... if one supposes that the correct way to characterize what it means to understand ‘beliefs’ is to engage in certain forms of computation over representations, it remains unclear how one ascribes beliefs to embodied people who are conceptualized as holders of belief, or how one understands that beliefs involve commitment, or even how one arrives at the intersubjectively established concept of belief in the first place. To have and to understand beliefs involves so much more to do with relational and motivational life than talk of ‘representations’ would allow – and so does the development of such understanding. (Hobson, 2007).

Looking back, it is remarkable how even the starker versions of “Theory of Mind” have managed to persist, largely unperturbed, alongside the mounting evidence (including that presented in this Special Issue) that even very young infants seem to be engaging with other people despite their lack of a “Theory of Mind”! There are, of course, three ways to deal with such anomalous data. The first is to deny that infants are really making sense of other people, and insist, instead, that they must, in effect, be ‘cheating’, engaging in mere conditioned reactions, or deviously resorting to context. The second option is to concede that infants are actually engaging with other people, and hence must already have access to representational knowledge that allows them, at such a young age, to solve the “the problem of other minds.” The third, more radical, option is for psychological theorists to stare “the problem of other minds” squarely in the face, and try get over it. The real problem with “Theory of Mind” is the very problem it is pretending to solve. Making sense of other people, and engaging with them, is not, to repeat, a single problem. We relate to other people, and communicate with them, in a host of different ways. Sometimes this may indeed pose serious problems, and we may then have to resort to inferences. Sometimes, the problems that arise hardly demand the resources of theory. And, sometimes, engaging with other people, as the babies themselves seem to be showing us, can be ‘child’s play’.

Modern psychological theory keeps setting up “the problem of other minds” in the way the old theories of vision managed to create a mystery out of “space perception.” How can we possibly see “depth” when it is missing from the retinal image? But we simply do not – and could not – perceive space in the sense assumed by those old theories: an abstracted void in which isolated objects just happen to appear (Gibson, 1979; Merleau-Ponty, 1962). “Theory of Mind” creates a similar dilemma: how can we penetrate the ‘depth’ of other people’s minds when those depths are concealed behind the ‘surface’ of their bodies and their colourless movements. Missing depth, in the one case: hidden depth in the other. This perplexity about hidden depth is reflected in all the coy and silly talk in the Theory of Mind literature.

6 See Wootton (2006) for a wonderful example of something along these lines, from a conversation between a 4-year-old child and her mother.
about “mind-reading” (Costall, Leudar, & Reddy, 2006). It is time to stop peering, hopelessly, into supposedly hidden depths. In place of our current, highly superficial, depth psychology, we need a breadth psychology – a psychology based on context.

Acknowledgements

We very much appreciate the help, encouragement, and patience of Vasu Reddy and Maria Legerstee.

References