Mind as socially constituted Andreas van Cranenburgh

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Abstract

Mind is commonly seen as an entity, and as belonging to an individual. This paper argues against both, from a developmental perspective. Mind is fundamentally embodied, and inherently social. The former because the body is the mind's sole way of expressing itself; the latter because the community provides the normative basis from which such expressions can be understood.

1. Introduction

[Descartes] erroneously thought human beings to be self-enclosed and self-sufficient entities (Bax 2009)

It is with this Cartesian conception of mind that I want to take issue in this essay. Although of course cognitive scientists do not hold on to the more spiritual views of Descartes, they do hold on to the view of studying individuals as self-enclosed and self-sufficient entities, namely in the form of information processing apparatuses whose reaction times are taken to reveal the inner machinery.

My contention will be that only through continuous interaction with others can there arise something worthy to be called mind. The initial condition from which humans come into this world is one of helplessness, which is slowly and gradually overcome through socialization. One becomes attuned to dealing with others, being able to read fine shades of behavior. This social nature of coping with the world is not something confined to development which is later overcome. Anything an individual undertakes or conceives of is bound up in the social practices like the fiber in the fabric.

My aim will be an epistemological one, not ontological. This is because I want to focus on how the concept of mind should be formulated in scientific theories, rather than to reflect on the ultimate metaphysical nature of mind.

I want to argue that the findings of shared intentionality call for a different philosophy of mind. One that is not individualistic and recognizes how social interactions are constitutive of the mind. The mind is not just what the brain does, it is what emerges from being immersed in interactions with others.

Most contemporary philosophy of mind claims that brains cause or are minds. This position is too narrow, because it only connects mind to the subpersonal level. I will posit that the brain, as the subpersonal level, together with the social environment, as the supra-personal level, jointly form mind. Mind is thus derivative from culture and organism, rather than an independent substance, place or realm.

2. Tomasello: Shared intentionality

What makes humans unique among animals? Common answers include language, reasoning or the pursuit of knowledge and art. But upon reflection these phenomena are only displayed after humans acquire these skills from their caretakers and other conspecifics. The more fundamental ability underlying these phenomena is shared intentionality, according to Tomasello (2005). Shared intentionality makes it possible to participate in collaborative activities with shared goals and intentions.

First infants start to follow gaze directions and recognize animate actions (6 months). Later infants recognize the goals that underlie these actions (9 months). Lastly they come to understand intentional action and selectively attend to aspects relevant for the goal in a situation (14 months). These three steps allow for imitative learning, which is a crucial mechanism for cultural transmission. As long as previous achievements are passed on reliably to new generations, then culture gets the chance to grow.

Shared intentionality arises when these skills are applied to solving problems together or in groups. In dyadic interaction infants notice each other's emotions and behavior, which allows for turn taking. In triadic interaction two or more individuals work towards a common goal and recognize each other's behavior as directed towards this goal. The final step is collaborative engagement, in which actions are coordinated toward a shared goal using joint attention. To reach this stage agents must represent the situation from a neutral point of view, in order to allow for role reversal or helping out the other. This results in the development of dialogic cognitive

¹Recent research (Kovács 2010) indicates that even as early as 7 months of age children are susceptible to the beliefs of others. The mere presence of another agent triggers a process of keeping track of their beliefs; moreover these beliefs affect the agent just as its own beliefs do. These results exemplify how fundamental social cognition is.

representations, which not only include the shared goal but also the roles of the participants. Aside from these capabilities, these processes also rely on a motivation to share one's psychological state with others — this explains why children make disinterested comments such as "doggie gone." — this is in contrast with animal communication, even chimps who have been taught some sign language mostly utter imperatives, e.g., to procure food.

Dialogic cognitive representations form the basis for linguistic understanding and social institutions such as money, marriage and government. In order for a person to successfully master these concepts one must undergo a process of acculturation in which these concepts, which are embedded in the social practices of one's conspecifics, are internalized. This notion of internalization goes back to Vygotsky, who we shall turn to in the next section.

3. Vygotsky: internalization

Vygotsky (1978, 1986) presents a cultural-historical psychology, with three important features:

- 1. a reliance on a developmental (genetic) method
- 2. higher mental processes are said to have their origin in social processes through internalization
- 3. mental processes can be understood only by understanding the tools and sign that mediate them

The first feature may seem obvious, but in contrast to cognitivist theories it is not. These silently assume an adult mind and implicitly project its representations and structures on the infant mind, as if development is not actual growth but merely an unlocking of innate faculties.

The second feature is about Vygotsky's concept of internalization, which is clarified in this passage:

Every function in the child's cultural development appears twice: first, on the social level, and later, on the individual level; first, between people (interpsychological), and then inside the child (intrapsychological). This applies equally to voluntary attention, to logical memory, and to the formation of conceptions. All the higher functions originate as actual relations between human individuals. — Vygotsky (1976, p. 57, emphasis in the original)

The last feature is what leads Vygotsky to consider word meaning as a crucial pivot of developmental transitions. These transitions hinge on linguistic development and are as follows:

- 1. expressive & communicative: meaning is indicative and referential
- 2. egocentric speech (later inner speech)
- 3. symbolic speech

Each of these stages points to further abstraction and decontextualization. The goal of development is increased autonomy and self-control. Thus, in egocentric speech the child can use words not only to refer to things in the immediate situation, but also to regulate its own behavior, i.e., as a metacognitive tool. In effect, control moves from the environment to the child. For this to happen words must be detached from their objects. An example of this detachment is play, e.g. taking a stick and pretending it is a horse (Vygotsky 1978). We also notice a difference with Tomasello's account, who holds that language emerges only when shared intentionality and dialogic cognitive representations are in place, whereas for Vygotsky language mediates development from much earlier on. Vygotsky's more gradual account seems to be more plausible.

Later, at around 7 years of age, egocentric speech disappears and becomes inner speech, a compact, associative form of language use, in other words verbal thought. Vygotsky stresses that it is not suppressed speech but a qualitatively different form of speech. Clearly, in this account public language is prior to private thought, and thought is parasitic on social interaction. This is in stark contrast to cognitivist theories which stress the priority of thought, rules, and representations over language. The significant cognitive benefits of language for cognition are recognized and discussed extensively by Clark (1998, 2006).

The final stage, symbolic speech, is when formal education allows the child to contemplate completely abstract and theoretical matters such as mathematics and science.

All is very well until now. We have a theory that grants the proper amount of weight to the social environment in shaping the mind, which is a much neglected fact. The two most important insights are that language plays a crucial role in the formation of cognition and that private thought derives from public speech. However, as Williams (1999, ch. 10) remarks, a proper account of meaning is missing. For Vygotsky, meaning consists of reference, as in expressive speech, established indexically, and sense, as in scientific discourse, established by appealing to other sign. Both are treated as basic. This, however, amounts to a static account

of meaning, which is clearly at odds with the otherwise completely dynamic and social character of development. So how to account for meaning in such a dynamic and social manner? The obvious solution, as suggested by Williams (1999), is to turn to Wittgenstein.

4. Wittgenstein

The later Wittgenstein is famous for proclaiming that meaning is use (PI 43). However, as Stein (1997) argues, this should be taken as a descriptive rather than a normative claim. Usage describes, not prescribes, meaning. The point of Wittgenstein's famous remark is to show how the word 'meaning' is used in everyday life, not to reveal the nature and constitution of meaning. This is, incidentally, just the problem raised in the previous section. Namely, a child may be exposed to language in various situations, i.e., usage, but this is not enough to explain how meaning comes to be grasped. For example, a child needs to be able to know whether a novel usage would make sense.

Two common explanations are the intellectualist and the Platonist positions. The former claims that definitions are grasped through certain innate intellectual powers such as discrimination and generalization. The latter argues that meanings are out there in some other plane of reality, and can be accessed by individual minds. Both are at odds with the story developed so far.

More importantly, these explanations fail to do justice to the fact that the use of language occurs in a community stretched out in space and time. Wittgenstein's view on meaning, according to Williams (1999), is that meaning is constituted by agreement in judgment in a community. Meanings are thus out there, albeit in a wholly concrete way, in contrast to the Platonic account. Mastering meanings is a matter of training, which occurs in an asymmetric learning situation (novice and expert, child and adult). The end result is mastery of a technique, a skill rather than a set of facts. This illuminates why "meaning is use" is incomplete: only when usage is understood in the structured context of a social practice does it have its normative bite. Linguistic change notwithstanding, repeating a mistake does not make it less wrong, which is what a purely usage-based theory of meaning would predict.

Now let us turn to the more general problem of the conception of mind. We have established thus far that shared intentionality appears early in development to enable social interaction and acculturation. Then we saw how as part of this acculturation language could play a crucial role in the genesis of private thought. The following quotation demonstrates the sweeping consequences of Wittgenstein's conception of language for philosophy of mind in general:

[...] Wittgenstein argues extensively for a view of language users (and thus of human beings in general) that gives priority to action over thought and insight, to the social over the individual and to temporally extended phenomena over momentary phenomena. Human beings are not primarily individual thinking subjects whose intellectual capacities lay the foundation for all their endeavors, but, on the contrary, humans are in the first place social beings who are primarily defined by their actions.

— Stein (1997, p. 228)

The importance of actions is also stressed in Schatzki's (1996, ch. 2–3) account of Wittgenstein. Schatzki posits that mind is how things stand and are going for someone. Aspects of this are such mental phenomena as hoping, desiring, et cetera. How and if these aspects are expressed is a matter of social practices, but they are necessarily expressed through the body. So in this conception, mind is a collection of ways things stand and are expressed bodily, be it overtly or in fine shades of behavior such as tone of voice.

This contradicts firstly the idea of unity of mind, and secondly the idea of mind as causal. Life conditions are expressed by bodily activities, but these conditions do not cause those activities. Instead, activities are expressive of life conditions in virtue of their role in practices, as with the normativity of language. It should be noted that the use of "conditions" rather than "mental states" is a better fit for the continuous nature of some psychological phenomena (e.g., moods or a growing apprehension). Moreover, it avoids the tendency to view mental states as theoretical, as if they are something which we infer in others, and hypothesize about. If there would be a theory to mental states then psychology could one day uncover exactly what is that we are thinking and feeling by reading a brain image or by plugging behavior into formulas. Instead, life conditions are rather a concrete and practical way of coping with others. Because there is no hidden 'real' mental state behind the appearance of it in someone, recognizing conditions of life in other people is a matter of aspect-seeing rather than theoretical inference. Although the basic emotions such as joy, fear, surprise, etc., have been shown to be universal and are thus likely hard-wired, matters such as the significance we attach to them and their appropriateness

in particular contexts are determined by the social practices one is in, and thus vary from culture to culture.

On the other hand, Williams (1999, p. 11) notes that Wittgenstein is nihilistic with respect to scientific psychology, in contrast to Vygotsky who intended and successfully employed his theories for empirical research. The difference is that Wittgenstein rejects the reality and causal efficacy of all inner mental processes, whereas Vygotsky does hold on to them. Resolving this issue goes beyond the scope of this essay, for in effect the status of psychology as a scientific discipline is at stake. It should be noted that Wittgenstein does not deny the privacy of inner thoughts, or the qualitative difference of first rather than third-person access to psychological phenomena. His arrows are pointed at the Cartesian idea of privileged, immediate and infallible access to the mental. Instead one's own thoughts and feelings are just as much appearances as the outward bodily activity we observe in others. In sum, Wittgenstein was neither a behaviorist nor a mentalist (much less cognitivist).

However, whether one does or does not reject inner mental processes, the necessity of placing mental phenomena in their proper social context in order to understand them remains. The meaning of these phenomena is not something within the purview of experimental methods.

5. Consequences

Now that we have this thoroughly social and embodied perspective on the mind we can consider what consequences obtain for philosophy of mind.

The notion of a mental state plays a fundamental but rarely questioned role in (analytic) philosophy of mind. However, as already noted, the tendency to construe mental states as theoretical and the presumption of discreteness is problematic in our account.

The most central problem of philosophy of mind is the mind-body problem. The problem is that the mental and the physical seem very dissimilar. Thus one might conclude that they are a different kind of substance or property (dualism). This raises the problem of how they interact, viz. the problem of mental causation. At first glance it may seem obvious that thoughts must cause someone's deliberate actions. However, this is one of those instances where the use of language leads to meaningless metaphysical puzzles. In Wittgenstein's view the mental is how we make sense of ourselves and each other. Thoughts and beliefs can be the *reason* for an action,

but not the cause. Causes are when marbles perturb each other, reasons are a way of explaining actions in a social practice. The difference is one of levels of explanation.

Another solution to the mind-body problem is to identify mind with or reduce mind to the brain. On this account the brain is the substrate for the mind. Given the steadfast advances of neuroscience, this is a seductive option to take. However, the brain and the mind are at odds with each other since the former is of a causal nature, whereas the latter is essentially a normative dimension imbued with meaning derivative of social practices. So despite the fact that language and the expression of feelings are matters that are internalized, their meaning still relies on an essentially social substrate.

To sum up, it seems that there is no mind-body problem at all. There is an account of how the body and the world together allow for minds to be constituted. Mind and body are intimately (inseparably) related, though not identical, much less distinct.

6. Conclusion

We have seen how crucial meaning is for understanding the concept of mind. As long as one does not insist that meanings are out there in a Platonic realm, or that intellectual capacities for dealing with concepts are available from birth with adult-level competence, there is a plausible developmental story to tell about how minds are constituted through participation in a social context.

Although man might still very well be the 'rational animal,' on this account one has to become a rational animal. Prior to any intellectual cogitation, there must be formative social interaction. Prior to a mind having thoughts there is the body performing actions — an instance of 'you have to crawl before you walk.'

"No man is an island, entire of itself" – John Donne

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