

EMBODIED MIND, MEANING, AND REASON

**HOW OUR BODIES
GIVE RISE TO UNDERSTANDING**

MARK JOHNSON

Mark Johnson is one of the great thinkers of our time on how the body shapes the mind. This book brings together a selection of essays from the past two decades to argue for the central importance of our bodies in everything we experience, mean, think, say, value, and do. This embodied conception of mind shows how meaning and thought are profoundly shaped and constituted by the nature of our bodily perception, action, and feeling. In short, Johnson convincingly argues that it is impossible to understand any of the issues that are so dear to philosophy without a deep and detailed understanding of how our embodiment gives rise to experience, meaning, and thought.

Johnson begins with ideas that were anticipated, in part, in the writings of American pragmatist John Dewey, and supplies crucial details from important scientific and philosophical developments that take us beyond what Dewey could provide in his time. By constructing a positive account of human meaning-making that draws on the cognitive science of the embodied mind, Johnson's account runs directly counter to some of the fundamental assumptions in analytic philosophy and early cognitive science of the last seventy-five years. Concluding with a rich exploration of the implications of our embodiment for our understanding of knowledge, reason, and truth, *Embodied Mind, Meaning, and Reason* is indispensable to all philosophers dealing with mind, thought, and language.

"Mark Johnson's early books, especially *Metaphors We Live By* and *The Body in the Mind*, were absolutely critical in the founding of embodied cognitive science. Somehow his work has gotten even better—deeper, more subtle, more historically informed—over the years. The essays collected here are essential reading for anyone interested in philosophical issues related to embodiment."

ANTHONY CHERO, University of Cincinnati

"Mark Johnson shows us what pragmatism can do, and especially its relevance to questions about the embodied mind. Building on his own groundbreaking work in the philosophy of language, he provides an insightful answer to the question of meaning: meaning emerges in the interactions of our bodies with our structured environments, and this meaning includes not only everyday pragmatic meaning, but philosophical and scientific reasoning as well."

SHAUN GALLAGHER, University of Memphis

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Embodied Mind, Meaning, and Reason

FOR MY GRANDDAUGHTER,
Sophia Marie Reyes Johnson, who is the most exuberant
and joyful embodiment of life I have ever known

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Bringing the Body to Mind

This book develops an argument for the central importance of our bodies in everything we experience, mean, think, say, value, and do. It proposes an embodied conception of mind and then shows how meaning and thought are profoundly shaped and constituted by the nature of our bodily perception, action, and feeling. In short, it argues that we will not understand any of the issues that are so dear to philosophy until we have a deep and detailed understanding of how our embodiment gives rise to experience, meaning, and thought.

The view of mind, meaning, thought, and language that I elaborate here was anticipated, in part, in the writings of the American pragmatist philosopher John Dewey, and to a lesser extent in the works of William James and C. S. Peirce. However, I am not just serving up a heaping portion of warmed-over Dewey. Since Dewey's day we have had the privilege of important scientific and philosophical developments that supply crucial details about the processes of meaning and understanding that take us beyond what Dewey could provide. This research from the sciences of mind helps give flesh and blood to some of Dewey's more skeletal remarks about how organism-environment interactions generate meaningful experience. I do, nonetheless, remain a fan of Dewey's insistence on the key role of experience as the starting and ending point of any useful philosophical inquiry. Consequently, I take issue along the way with the orientation known as "linguistic" or "analytic" pragmatism, which grew mostly under the inspiration and influence of Richard Rorty, who saw philosophy as focused on language and what he called

“vocabularies,” while rejecting any appeal to experience in the sense that Dewey understood that term.

My other important targets of criticism are traditional Anglo-American analytic philosophy of mind and language, along with what George Lakoff and I (1999) have called first-generation (disembodied) cognitive science. However, my focus is not primarily on the criticism of existing views, but rather on constructing a positive account of human meaning-making and understanding that draws on the cognitive science of the embodied mind. As I work up the details of that positive account, it will become clear how the cognitive science research on which I rely calls into question many key tenets of the analytic tradition in philosophy. The account of embodied mind, meaning, thought, and language developed in these essays runs directly counter to some of the fundamental assumptions in analytic philosophy and early cognitive science of the last seventy-five years. It behooves us, therefore, to begin with an explanation of why the body has mostly been ignored in mainstream analytic philosophy and its correlative conception of cognitive science.

The Invasion of the Body-Snatchers: Philosophy without the Body

When I was a graduate student in philosophy back in the mid-1970s, people did not have bodies. Well, perhaps I exaggerate a bit. What I mean is that a good deal of mainstream philosophy, both in Anglo-American and European traditions, acted as if our bodies aren't really that important for the structure of mind, and that our bodies don't play any significant role in anything that mattered to philosophers. What mattered to them, especially in so-called analytic philosophy that dominated the last three-quarters of the twentieth century in the Anglophone philosophical world, was language, concepts, logic, reason, knowledge, and truth. In all the massive literature that was generated on these topics from this analytic perspective, there is hardly any mention of the body, beyond the fact that one needs a body to secure perceptual inputs into our conceptual systems and knowledge structures, plus occasional recognition that we have feelings and emotions.

In this tradition, philosophy was defined by what Richard Rorty, borrowing a term from Gustav Bergmann, called the “linguistic turn.” Bergmann described this turn as “the shared belief that the relation between language and philosophy is closer than, as well as essentially different from, that between language and any other discipline” (1967, 64–65).

He went on to emphasize the exclusively linguistic focus of philosophy when he said, "Generally, no philosophical question is ever settled by experimental or, for that matter, experiential evidence. Things are what they are. In some sense philosophy is, therefore, verbal or linguistic" (ibid., 65). In three short sentences, Bergmann has drastically restricted philosophy to linguistic analysis, and he denies any significant role for either experimental scientific research or experiential evidence! Here we have a vision of philosophy as an autonomous armchair discipline, entirely independent from science, and consisting of rational analysis of linguistic structures, terms, speech act conditions, and knowledge claims.

Rorty appropriately titles his highly influential anthology *The Linguistic Turn: Recent Essays in Philosophical Method* (1967), in which he collects many of the defining documents of what came to be known as "analytic" philosophy. In the introduction to that book, Rorty explains that "the purpose of the present volume is to provide materials for reflection on the most recent philosophical revolution, that of linguistic philosophy. I shall mean by 'linguistic philosophy' the view that philosophical problems are problems which may be solved (or dissolved) either by reforming language, or by understanding more about the language we presently use" (1967, 3).

The two methodological orientations that Rorty is describing came to be known as the "ideal language" and "ordinary language" perspectives. Those who lament the messiness, ambiguity, and incompleteness of everyday language argue that we need a clarified, precise "ideal language," if we ever hope to see how words have meanings and how genuine knowledge and truth are possible. Those who, like J. L. Austin (1970), see everyday speech as manifesting the accumulated insights and values of speech communities, argue that philosophical analysis should always start from distinctions embedded in ordinary language, even if it turns out that some of those distinctions are misleading and ought to be abandoned. In Austin's words, "Certainly, then, ordinary language is *not* the last word: in principle it can everywhere be supplemented and improved upon and superseded. Only remember, it is the *first* word" (1970, 185).

Consequently, linguistic philosophy went off in two different directions, one in search of a reconstructed ideal language of thought capable of expressing knowledge claims, and the other in search of an expansive mining of the conceptual resources embedded in ordinary language. Both movements, however, thought that linguistic analysis would eventually help us either to solve certain perennial questions about mind,

meaning, thought, and knowledge, or else to show them up as pseudo-problems that have needlessly perplexed us and ought to be jettisoned.

Now, the question I want to address concerning linguistic philosophy in either its “ideal language” or “ordinary language” versions is this: What is it about the character of this language-oriented philosophy that led it to almost completely ignore the body? The answer, I shall argue, is that (1) its exclusive focus on language as the object of philosophical analysis turned attention away from anything that was not *linguaform*, and (2) it operated with a remarkably impoverished, and scientifically unsound, view of language as entirely conceptual and propositional.

This seriously inadequate view of language resulted in large measure from the influence—on both the ideal language and ordinary language schools—of Gottlob Frege’s celebrated conception of meaning and thought developed in a number of essays collected by Peter Geach and Max Black as *Translations from the Philosophical Writings of Gottlob Frege* (1966). In his classic 1892 essay, “*Über Sinn und Bedeutung*” (“On Sense and Reference”), Frege hoped to validate the universal and objective stature of mathematical, logical, and scientific claims. In order to explain the alleged objectivity possible within these disciplines, Frege distinguished sharply between (1) the sign (the word or expression), (2) its reference (the object or state of affairs referred to), (3) its sense (the objective understanding, or the mode of presentation, of the reference), and (4) any subjective “associated ideas” that might be triggered in an individual’s mind by a given sign. The *sense* was supposedly the public, shared meaning or understanding of the referred-to object or state of affairs, whereas the *associated idea* was merely an image or idea called up by a sign in the subjective mind of a particular individual. Frege claimed that it was the objective sense of a thought or proposition, not any associated ideas, that made shared understanding and knowledge possible. He summarized the relations between sign, sense, reference, and associated idea as follows:

The reference and sense of a sign are to be distinguished from the associated idea. If the reference of a sign is an object perceivable by the senses, my idea of it is an internal image, arising from memories of sense impressions which I have had and acts, both internal and external, which I have performed. . . . The same sense is not always connected, even in the same man, with the same idea. The idea is subjective: one man’s idea is not that of another. . . . This constitutes the essential distinction between the

idea and the sign's sense, which may be the common property of many and therefore is not part or a mode of the individual mind. (Frege [1892] 1966, 59)

Notice that, in this famous passage, there is no mention of the body in relation to the sense of a sign. As presumably objective, senses supposedly cannot depend on the peculiarities of particular minds, let alone of particular bodies. They are universal and objective, in sharp contrast to associated "ideas," which depend on the body and experiences of those who have the ideas. Thus, Frege said, "One need have no scruples in speaking simply of *the* sense, whereas in the case of an idea one must, strictly speaking, add to whom it belongs and at what time" ([1892] 1966, 60). For example, the sense of the English word *mother* would allegedly be an abstract meaning or understanding "grasped" (to use Frege's term) by all who understand English. In addition, each of those individuals would have their own associated (and highly subjective) ideas that come to mind when he or she thinks about mothers, but none of this is held to be part of the objective sense of the term. Consequently, Frege claimed that senses are not dependent on the particulars of the bodies and brains that grasp them, so they constitute universal meanings, whereas associated ideas and images lay no claim to universality, precisely because they depend on our embodiment and experiences: "The reference of a proper name is the object itself which we designate by its means; the idea, which we have in that case, is wholly subjective; in between lies the sense, which is indeed no longer subjective like the idea, but is yet not the object itself" ([1892] 1966, 60).

Frege went on to argue that the *proposition*, not the word or concept, was the basic unit of meaning. Propositions have a subject-predicate structure. When the subject is specified and a concept is predicated of it, only then does the whole expression (i.e., the proposition) have a truth value (i.e., true or false). As a mathematician and logician, Frege was especially concerned with explaining how there could be shared, public meaning that provides a basis for objective knowledge and truth. His answer was that to understand the thought (i.e., proposition) expressed in a sentence is to grasp its public, universal sense, which is "not the subjective performance of thinking but its objective content, which is capable of being the common property of several thinkers" (Frege [1892] 1966, 62n.).

In order to explain the objectivity of the senses of terms, Frege pro-

posed what many consider to be a somewhat odd ontology consisting of three independent realms: the physical, the mental, and a third realm (to which he gave no name) that consists of abstract quasi-entities including senses, concepts, propositions, numbers, functions, and the strange objects “the True” and “the False.” Because Frege believed that both physical (bodily) events and mental (psychological) processes are incapable of guaranteeing the objective and universal character of publicly shareable meaning and thought, he posited the third realm to house the objective contents of thought. Consequently, in this view, a theory of language need not pay any special attention to our embodiment, other than to notice how perception might be shaped by our bodily capacities.

With Frege, the dice were fatefully cast. Few philosophers could fully embrace Frege’s unusual ontological picture (especially his third realm), but the vast majority of so-called “analytic” philosophers agreed with his basic assumption that thought is propositional and relies on the objective senses of the component concepts of the proposition. They shared his view that thought is *linguaform*—that is, sentential, propositional, and conceptual in nature. Not surprisingly, one can find no serious account in Frege of the body’s contributions to meaning and thought. This neglect of the body carried over into most of the major figures in the analytic tradition, such as Bertrand Russell, Rudolf Carnap, Carl Hempel, Gustav Bergmann, J. L. Austin, W. V. O. Quine, Donald Davidson, and a host of other philosophers, *none of whom had anything deep or extensive to say about the body’s role in meaning and thought*. Even Hilary Putnam—who is much celebrated for his brain-in-a-vat thought experiments (1981), in which he emphasized that meaning requires a body interacting with a world—never supplied any detailed account of how the body shapes our thought and communicative practices. This is not to deny that there may be some insightful comments on embodiment scattered throughout their writings (especially in Wittgenstein and in Putnam); but their perspective remains mostly disembodied in its accounts of meaning, language, and thought. The overwhelming tendency in mainstream analytic philosophy of language is to begin with concepts more or less well formed, and then to analyze their relations to one another in propositions and to objects of reference in the world. This leads one to overlook the bodily origins of those concepts and patterns of thought that constitute our understanding of, and reasoning about, our world.

What is at stake here is not just analyses of the meaning of particular terms or sentences, but something much more important: the very nature of meaning and thought as grounded in and shaped by our human embodiment. Moreover, the na-