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The Meaning of the Body

AESTHETICS OF HUMAN UNDERSTANDING

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to the importance of emotions as one of our primary ways to monitor the nature and adequacy of our ongoing interactions with our environments. Emotions are not second-rate cognitions; rather, they are affective patterns of our encounter with our world, by which we take the meaning of things at a primordial level. In chapter 4 I argue, following John Dewey, that every situation we dwell in is characterized by a pervasive felt quality that is the starting point for all our perceptual discrimination and conceptual definition. This argument leads, in chapter 5, to evidence for the central role of feeling and emotion in human reasoning, along lines first laid out by William James.

Part 1 thus attempts to describe important dimensions of meaning that are typically overlooked by and excluded from views of meaning available in most Anglo-American analytic philosophy. Our first task is to unearth and describe these primary embodied sources of meaning that have been overlooked. Our second task is to begin formulating the larger philosophical picture of mind, thought, and meaning that goes along with this enriched and expanded conception of meaning. In particular, an embodied view of meaning requires an embodied, nondualistic, naturalistic view of mind and body as one process.

CHAPTER 1

The Movement of Life

Life and movement are inextricably connected. The movement of the fetus within the mother's womb gives her the joyful news of new life. The word "*still*born" strikes horror in a parent's breast. Eternal stillness—absolute absence of motion—is death. Movement is life. We are born into the world as screaming, squirming creatures, and through our movements we get "in touch" with our world, taking its human measure.

Attention to bodily movement is thus one of the keys to understanding how things and experiences become meaningful to organisms like us, via our sensorimotor capacities. It is not the whole story (temporality, for example, is equally primordial), but it is a good place to start our account of meaning-making. Movement is one of the conditions for our sense of what our world is like and who we are. A great deal of our perceptual knowledge comes from movement, both our bodily motions and our interactions with moving objects.

MOVEMENT AND MEANING

In *The Primacy of Movement,* Maxine Sheets-Johnstone (1999, chap. 3) provides a phenomenological analysis of movement that can serve as a starting place for our account of embodied human meaning-making. Her account is phenomenological in the sense that it describes the origins, structures, and experienced qualities of human movement. It focuses on the felt qualities and patterns of our body movements and interactions with objects.

As animate creatures, we are born moving. It is originally through movement that we come to inhabit a world that makes sense to us—that is, a world that has meaning for us. Movement thus gives us knowledge of our world and, at the same time, reveals important insights about our own nature, capacities, and limitations.

> In the beginning, we are simply infused with movement—not merely with a *propensity* to move, but with the real thing. This primal animateness, this original kinetic spontaneity that infuses our being and defines our aliveness, is our point of departure for living in the world and making sense of it. . . . *We literally discover ourselves in movement.* We grow kinetically into our bodies. In particular, we grow into those distinctive ways of moving that come with our being the bodies we are. In our spontaneity of movement, we discover arms that extend, spines that bend, knees that flex, mouths that shut, and so on. We make sense of ourselves in the course of moving. (Sheets-Johnstone 1999, 136)

Movement occurs within an environment and necessarily involves ongoing, intimate connection and interaction with aspects of some particular environment. This is a fact of monumental importance that should always be kept in mind in everything we say about the relation of self and world. *From the very beginning of our life, and evermore until we die, movement keeps us in touch with our world in the most intimate and profound way. In our experience of movement, there is no radical separation of self from world.* We move in space through constant contact with the contours of our environment. We are in touch with our world at a visceral level, and it is the quality of our "being in touch" that importantly defines what our world is like and who we are. What philosophers call "subjects" and "objects" (persons and things) are abstractions from the interactive process of our experience of a meaningful self-in-a-world. It is one of the primary facts of our existence that we are not now and never were, either as infants or throughout human history, alienated from things, as subjects over against objects. There is no movement without the space we move in, the things we move, and the qualities of movement, which are at the same time both the qualities of the world we experience and the qualities of ourselves as doers and experiencers.[1]

1. Immanuel Kant, in his *Critique of Pure Reason* (1781), is famous for his observation that "subject" and "object" are counterparts inseparable in experience, two sides of the same coin that cannot exist without each other. But Kant was also notorious for positing a transcendental ego that must lie behind, and play a role in constituting, the correlation of subject and object in experience. It is Maurice Merleau-Ponty, in his *Phenomenology of Perception* (English trans. 1962), and John Dewey, in *Experience and Nature* (1925), who showed us that subjects and objects are abstractions from the interactive process of experience out of which emerge what we call people and things. There is no split of self and other in the primacy of our experience, and so we are never utterly separated from things.

QUALITATIVE DIMENSIONS OF MOVEMENT

What is it that we experience through our movement? Even though we are seldom consciously aware of the nature of our movement, what we are always experiencing are the qualities of things, spaces, and forceful exertions. We put things into and take things out of containers, and so we learn about containment. We experience linear versus nonlinear paths of motion, whereby we develop our understanding of trajectories. We feel various degrees of exertion and force, and we thus learn what level of exertion is appropriate for moving ourselves from one place to another and for moving objects of various weights. Feeling what it takes to cause an object to move from one place to another is a core part of our basic understanding of physical causation.

Movement is thus one of the principal ways by which we learn the meaning of things and acquire our ever-growing sense of what our world is like. This learning about the possibilities for different types of experience and action that comes from moving within various environments occurs mostly beneath the level of consciousness. It starts in the womb and continues over our life span. We learn an important part of the immanent meaning of things through our bodily motions. We learn what we *can do* in the same motions by which we learn how things *can be* for us.

Movements manifest a broad range of recurring structures and patterns that George Lakoff and I have named *image schemas* (Lakoff 1987; Johnson 1987; Lakoff and Johnson 1999). Typical image schemas of bodily movements include SOURCE-PATH-GOAL, UP-DOWN (verticality), INTO–OUT OF, TOWARD–AWAY FROM, and STRAIGHT-CURVED. Image schemas are discussed more fully in chapter 7. For now, my point is only that movements are not defined merely by the internal structure of image schemas, but also by their distinctive *qualities*. For example, my movement along a forest path is not defined only by the SOURCE-PATH-GOAL structure of my walking. In addition, my movement manifests dynamic qualities—it can be, for example, *explosive, graceful, halting, weak,* or *jerky*. Sheets-Johnstone (1999, 140–51) leads us through a phenomenological experiment designed to reveal the primary qualitative structures or parameters of all movement. For example, perform any simple movement, such

as sitting down comfortably in a chair and then standing up. Next, vary the performance of this motion in every way you can imagine: do it first fast, then slowly; now with an explosive effort, next with carefully controlled, gradual exertion; first jerkily, then smoothly; with body held taut and stiff, or with flowing grace. What this experiment reveals are four recurring qualitative dimensions of all bodily movements: tension, linearity, amplitude, and projection.

1. *Tension.* Every movement a person makes involves effortful action, and effort requires some level of tension in the musculature. Different movements thus demand different degrees of exertion and energy. We learn to anticipate, usually unconsciously, the amount of tension required to perform various activities. If you go to pick up a medium-sized suitcase, you anticipate the amount of effort needed to lift it. If it is empty when you thought it was full, you will be surprised, and your effort will be inappropriate for the task. If the suitcase is full of heavy books, you will be equally surprised when your exertion is inadequate to the task, and so your planned motor program will be disrupted. When your initial effort to lift the suitcase fails (with that telltale jerk on your whole body as you encounter the unexpected resistance of the heavy books), you automatically recalibrate the exertion required, unconsciously make adjustments in the placement of your feet, lower your center of gravity, and lift again. Knowing your world thus requires exquisitely fine adjustments of muscular tension and exertion, calibrated via the tensive qualities that you feel in your body.

2. *Linearity.* Every move you make creates a path of motion. Those paths, actual and projected, are linear or curved, jagged or smooth, up or down. As we will see in the next chapter, infants learn to imagine possible trajectories of the motion of objects, based on speed, direction of motion, and previous location. They come to understand how a certain trajectory reaches forward into space and engages physical objects, and this understanding allows a person to be gracefully at home in their environment. People who are less successful in learning such projections are less skillful at negotiating space and tracking objects. Along with the tensive quality of motion, then, linear trajectories are an important part of an infant's nascent understanding of causation. We learn the *feeling,* the different *qualities,* of these various types of trajectory.

3. *Amplitude.* Any motion can be performed with various amplitudes, depending on whether our bodies fill and use the space available to us in a tight, contractive fashion or in an expansive way. In her provocative essay "Throwing Like a Girl," Iris Marion Young (1980) provides a phenomenological and sociological analysis of the socialization of girls and young

women with regard to how their bodies should occupy and move within space. Young begins with Erwin Strauss's report on an earlier study of the marked differences in the manner of throwing that is typical of boys on the one hand and girls on the other:

> The girl of five does not make any use of lateral space. She does not stretch her arm sideward; she does not twist her trunk; she does not move her legs, which remain side by side. All she does in preparation for throwing is to lift her right arm forward to the horizontal and to bend the forearm backward in a pronate position. . . . The ball is released without force, speed, or accurate aim. (Strauss 1966, 157)

By contrast, according to Strauss, boys tend to throw a ball with sweeping, forceful motions that occupy more of the full space available to them, both vertically and laterally, and that involve more of their whole body and its potential force. Boys are taught to bring the ball back in a sweeping lateral motion, moving their "throwing" foot back as they twist their entire body in preparation for the throw. They utilize their trunk, legs, and arms in a forward thrust and follow-through. Young describes this striking difference in the amplitude of motion as applying not just to throwing, but to all sorts of forceful motions:

> Not only is there a typical style of throwing like a girl, but there is a more or less typical style of running like a girl, climbing like a girl, swinging like a girl, hitting like a girl. They have in common first that the whole body is not put into fluid and directed motion, but rather, in swinging and hitting, for example, the motion is concentrated in one body part; and second that the woman's motion tends not to reach, extend, lean, stretch, and follow through in the direction of her intention. (Young 1980, 146)

What Young is describing is how culture has often taught girls to confine their movements and their occupancy of space to a certain characteristic, highly restricted amplitude. Girls traditionally were not supposed to take up space, nor were they supposed to inject their entire bodily presence into a situation. That was considered unladylike. Culturally, such self-assertion and exertion of force have been reserved for males.

In the forty years since Strauss described these two gendered styles of throwing, certainly much has changed in the socialization of girls. Especially because of the emergence of training for girls in many sports at all levels, from preschool up through professional sports, and because of

gradual changes in how girls are taught to stand, hold their bodies, and move, these amplitudinal differences are beginning to change in significant ways.[2] It is conceivable that the earlier observed socially and culturally imposed differences might someday cease to exist. I cite this analysis only to illustrate the notion of amplitude of bodily motions. Whether based on anatomical differences or on gender, class, or other forms of socialization, these variations in amplitude are very real and significant. They are experienced as *qualitative* differences in motion and bodily comportment. They define some of the ways that a person's world is open to them for specific kinds of forceful actions.

4. *Projection.* In exerting force to stand up from a sitting position, I can vary the projective quality of motion. I can thrust myself upward with a violent initial propulsion, or I can raise myself with carefully monitored, deliberate speed. I can switch from smooth to explosive motion and back again. These different patterns entail quite different qualities of their corresponding bodily experiences; violent propulsion feels markedly different from gradual, continuous exertion of force.

MOVEMENT AS A BASIS FOR MEANING

The point I want to emphasize with Sheets-Johnstone's phenomenological description of the four basic qualitative parameters of movement is that dimensions like these will play a crucial role in how things can be meaningful to creatures who have bodies like ours and move in environments like ours. They are part of what we mean by, and what we experience as, force, effort, manner of motion, and direction of action.

As a phenomenologist, Sheets-Johnstone focuses on how these qualities of movements are *felt* and *experienced* by us. However, even prior to conscious experience, our bodies are inhabiting, and interacting meaningfully with, their environments beneath the level of conscious awareness. I want to suggest that even at this nonconscious level, these characteristics of movement are forming the basis for both the meaning of our movements and, at the same time, the meaning of the world that we move within.

2. It may be that these observed differences between the bodily comportment of boys and girls are almost entirely social and cultural constructions. I have run experiments in my introductory philosophy class in which female and male students throw a tennis ball, and the differences Strauss observed are far less pronounced today than they were forty years ago. I attribute this primarily to the fact that girls are now introduced at an early age to sports in which they learn to make maximal use of their bodily potential for motion.

I am thus using the term *meaning* in a broader sense than is common in most philosophy and linguistics.

In subsequent chapters, I will present a view of embodied meaning that recognizes conscious inquiry and conscious grasping of meaning, but also processes of organism-environment interaction that operate beneath our felt awareness and that make that felt awareness possible. *The key to my entire argument is that meaning is not just what is consciously entertained in acts of feeling and thought; instead, meaning reaches deep down into our corporeal encounter with our environment.* This expanded sense of *meaning* is the only way to preserve continuity between so-called higher and lower cognitive processes. The nonconscious interactive processes make possible and are continuous with our conscious grasp of meaning. At some point, these meanings-in-the-making ("proto-meanings" or "immanent meanings," if you will) can be consciously appropriated, and it is only then that we typically think of something as "meaningful to us." But notice that these meanings cannot just pop into existence (arise in our consciousness) out of nothing and from nowhere. Instead, they must be grounded in our bodily connections with things, and they must be continuously "in the making" via our sensorimotor engagements. There is a continuity of process between these immanent meanings and our reflective understanding and employment of them. For example, *tension* has a meaning grounded in bodily exertion and felt muscular tension. *Linearity* derives its meaning from the spatial, directional qualities of bodily motion. *Amplitude* is meaningful to us first and foremost as a bodily phenomenon of expansion and contraction in the range of a motion. *Projection* is learned first as a vectoral quality of certain forceful bodily actions.

The meaning of these differences is known by the quality of our differing experiences, but that meaning is prepared and developed in our nonconscious bodily perceptions and movements. Subjectively, we would say that we *feel* these qualitative dimensions. However, they are not just subjective qualities. It would be a mistake to subjectivize these experiences of qualities of motion, as if they were locked up within some private inner world of feelings. On the contrary, they are *qualities of organism-environment interactions.* As such, they are not merely "subjective-feeling" responses (not just "inner" experiences). They are qualities in the world as much as they are in us. They are the qualities of different experiences that involve both the structure of the organism and the structure of its environments inextricably woven together, and even attuned to one another. Moreover, they are qualities experienced and shared by other people, who have bodies like ours and who inhabit the same kinds of physical environments that we do.

We must guard against the fallacy of assuming that our knowledge or understanding of specific meanings exhausts those meanings. I will later appropriate Eugene Gendlin's account of the "felt sense" to show that meanings are working and developing for us even prior to our conscious awareness of them. Without this experiential rootedness, meanings would be miracles born ex nihilo as disembodied cogitations.

In another chapter, we will examine how qualitative bodily experiences are part of our abstract conceptualization and reasoning and are also present in logical inference. But even with the minimal phenomenological analysis we have done so far, the importance of movement for our capacity to experience the meaning of things is evident. Consider, for example, how our self-movement creates our sense of spaces with their differing designs and patterns. Sheets-Johnstone observes that

> the predominant shifting linear designs of our moving bodies may be now curved (as when we bend over), now twisted (as when we turn our heads), now diagonal (as when we lean forward), now vertical (as when we walk), and so on; the predominant linear patterns we create in moving may be now zig-zag (as in a game of tag), now straight (as in marching), now circular (as when we walk around an object or literally 'go in circles'), and so on. (Sheets-Johnstone 1999, 144)

Such concepts as *curved, twisted, diagonal, vertical, zig-zag, straight,* and *circular* get their meaning primordially from our bodily postures, our bodily movements, and the logic of those movements. You understand what *twisted* means through your bodily experience of the forceful exertions and kinesthetic sensations accompanying the act of twisting yourself or twisting objects. Furthermore, all of this bodily meaning is appropriated even when *twisted* comes to be used in a psychological or moral sense (as in a "twisted" or "warped" personality that leads to "twisted" misdeeds). To give another example, you know the bodily meaning of *standing straight and tall,* and you appropriate this meaning in your conception of *moral* "uprightness." You learn the corporeal logic of circular motions with your eyes, feet, and hands, and this body knowledge carries over into your understanding of circular arguments, circular processes, and temporal circularity. As we will see in detail later, many of our most fundamental concepts, including those lying at the heart of ethics, politics, and philosophy, have their roots in movement and other bodily experiences at a pre-reflective level.

Let us take stock of the argument so far. Life (animation) is intimately tied to movement. We are born into the world moving, in a way that gives us a great deal of grounded understanding of what our world is like. By moving, we are in continual touch with aspects of our surroundings. Through movement, we learn not only the contours and qualities of our world, but also the sense of ourselves as inhabiting a world with which we can interact to achieve some of our ends and goals. Above all, it is not just the *structures* of movements that matter; it is, even more, the *qualities* of movement that constitute our bodily understanding of motion.

Sheets-Johnstone regards movement as a paradigmatic example of the ways that our capacity to make any sense of our world is rooted in our bodily acts of sense-making: "We make sense of our bodies first and foremost. We make sense of them in and through movement, in and through *animation*. Moreover, we do so without words. This primordial sense-making is the standard upon which our sense-making of the world unfolds" (Sheets-Johnstone 1999, 148).

This statement of the primacy of bodily movement is not meant to exclude other bodily acts that give rise to meaning, such as seeing, touching, and hearing, but it does emphasize the importance of movement for our learning about our own bodies and our world. The bodily basis of meaning and thought is a profound truth about human beings. It cannot, however, be demonstrated solely on the basis of phenomenological analysis of experience, because, as I have said, meaning cannot be reduced only to felt qualities or conscious processes. It must also include nonconscious bodily interactions with the world. Therefore, at this point, we cannot yet explore all the ramifications of this fundamental claim that meaning is embodied. That will have to wait for subsequent chapters, where we will survey some of the empirical evidence for the embodiment of concepts and reason. Sheets-Johnstone is correct, however, in saying that "a phenomenology of the qualitative dynamics of originary self-movement leads us to the origin of concepts foundational to our lives as animate organisms and to our knowledge of ourselves as animate—*moving*—organisms to begin with" (1999, 155). Phenomenology *leads* us to the primacy of movement, but it alone is not enough to prove the case. What is required additionally is empirical research from the cognitive sciences of the embodied mind.

THE MOVEMENT OF TIME

A phenomenological analysis of bodily movement and the perceived motion of objects gives us insight into how we experience and conceptualize time. Sheets-Johnstone suggests that prior even to our experience of *befores*, *nows*, and *afters*, which turn out to be products of reflection,

we encounter the qualitative flow of events that makes up the contours of our lived experience. Take any bodily motion, such as opening and closing your mouth, raising and lowering your right arm, standing up and sitting down. As we have seen, any movements like these manifest distinctive qualities, depending on how the act is performed, and those qualities involve tension, linearity, amplitude, and projection, at the very least. There is also a temporal quality to the way any particular action is performed. Marching has a temporal quality very different from that of skipping along or walking on tiptoes. Marching, skipping, and tiptoeing give us three qualitatively different experiences of the passage of time. Time can move resolutely along in measured beats; it can skip along with exaggerated rhythms; or it can pass us with the caution and high tension associated with tiptoeing. Sheets-Johnstone concludes that

> for any particular temporality to be the temporality it is . . . a certain temporal quality is essential to it: an ongoing evenness as when we walk normally or an ongoing unevenness as when we walk with a limp; a jaggedness as when we move in fits and starts, a swiftness as when we punch an oncoming ball; a suddenness as when we duck, a hesitant slowness as when we move warily with apprehension and stealth. (Sheets-Johnstone 1999, 157)

Experiential correlations like these, between motions and the felt passage of time, provide one primary basis for much of our conceptual understanding of time. This correlation of the motion of an object with the passing of time is present in infants and children as well as adults. The principal difference between children and adults regarding this experience is not the existence of the correlation, but rather that adults have acquired the ability to make use of this experiential correlation as a basis for abstract thought. We (adults) conceptualize time via deep, systematic *spatial-movement* metaphors in which the passage of time is understood as relative motion in space. I want to consider briefly two of our most basic metaphorical conceptualizations of time, in order to emphasize their grounding in experienced correlations of motion with the passage of time. This jump to the level of our metaphorical understanding of time may seem a bit premature, since the nature of metaphor and its indispensable role in human understanding are not discussed until a later chapter. However, by way of anticipation, I want to connect our phenomenological account of the qualities of temporal flow with our ability to conceptualize time and temporal relations. For, already in our perception and bodily movement, we experience this intimate correlation of movement and temporal change

that is the basis for some of the ways we think more abstractly about time, and it is precisely the various qualities of different movements that permit us to conceptualize different experiences of the passing of time.

Phenomenologically—at the level of felt experience—two of the most important ways in which time comes to be experienced are through the motion of objects and through movement of our bodies. This gives rise to two fundamental metaphorical spatializations in our concepts of temporal change. In *Philosophy in the Flesh*, George Lakoff and I (1999) analyzed in detail these and other metaphorical conceptualizations of time.[3] The first spatialization understands discrete times metaphorically as objects moving toward a stationary observer, first in front of the observer, then passing her, and finally moving further and further away behind her. The metaphor consists of a conceptual mapping of entities, structures, and relations from the domain of moving objects in space onto the conceptual domain of temporal change, as follows:

The MOVING TIME Metaphor

Source domain (spatial motion)		*Target domain (temporal change)*
Location Of Observer	→	The Present
Space In Front Of Observer	→	The Future
Space Behind Observer	→	The Past
Moving Objects	→	Times
Motion Of Objects Past Observer	→	The "Passage" Of Time

Notice that this MOVING TIME metaphor is grounded very naturally in our experience of correlations between objects moving in space and temporal change. Although many linguists and philosophers have argued that such a metaphor can only be based on a set of preexisting literal similarities between objects moving in space and the passing of time, this is clearly not the case. There are no such literal similarities between the source domain (moving objects) and the target domain (temporal change) that would be relevant to the meaning of the expressions based on the metaphor. Instead, it is these experiential correlations that ground the metaphor, because spatial motions are one of the principal ways in which time "moves" or "passes" for us.

Once this initial orientation of stationary observer and moving time is established, the conceptual mapping of structure from source domain

3. The following analysis is based on the more thorough treatment given in chapter 10 of Lakoff and Johnson 1999.

to target domain allows us to use our knowledge of moving objects to construct a metaphorical understanding of the "passage" of time. For example, human perceivers project fronts and backs onto moving objects. Fronts are projected in the canonical direction of motion of the object, so that the front of a bus passes a stationary point before the back of the bus does, given that the bus is moving "forward." Any object upon which we can imaginatively project a front and a back can thus be "in front of" or "behind" another object, depending on their relation to each other and their shared direction of motion. When this knowledge structure is applied to our understanding of time, we construct a corresponding knowledge structure for moving time. We speak of Tuesday *following* (or *coming after*) Monday, of Tuesday *preceding* (or *coming before*) Wednesday. We also experience objects moving past us at various speeds and with various types of motions (creeping, flying by, racing). Correspondingly, times move with various speeds, as in "Tuesday *went by in a flash*," "The hours *crept past*," "Our meeting *dragged along at a snail's pace*," "Time *flies* when you're having fun," and "The lazy days of summer *roll by*." Lastly, at the moment when a particular time "passes" you (the observer), it is conceptualized as located where you are. Thus, we talk about doing something *here and now*.

The second major metaphor system arising from the spatialization of time is based on the moving of our bodies through space. In this second orientation, the observer is not stationary but moves from one location to another over a spatial landscape. This source-domain structure gives rise to a mapping in which times are spatial locations and the motion and speed of the moving observer determine the character of temporal change.

The MOVING OBSERVER Metaphor

Source domain (spatial motion)		*Target domain (temporal change)*
Location Of Observer	→	The Present
Space In Front Of Observer	→	The Future
Space Behind Observer	→	The Past
Locations On Observer's Path Of Motion	→	Times
Distance Moved By Observer	→	Amount Of Time "Passed"

Like the MOVING TIME metaphor, the MOVING OBSERVER metaphor uses our knowledge of the source domain to construct a corresponding knowledge of the target domain. Spatial locations can be of various sizes, and we can measure their length by established units. Correspondingly, times can be of differing lengths, and we can measure their lengths by established units (seconds, minutes, hours, days, etc.). We can visit our relatives for a *short* time or a *long* time. Our stay can *extend* over two weeks, and a conference can *stretch* over four days. One can travel *over* the holidays. As an observer moving along a path, one can approach various places and get nearer to and farther away from them. In the temporal realm, therefore, we speak of *getting closer* to Thanksgiving, *approaching* (or *coming up on*) the weekend, *passing* the deadline, *arriving* in a minute, *leaving* some unhappy event *far behind*, *reaching* Saturday, and being *halfway through* the month.

The crucial point for our purposes is that the metaphor is conceptual, and it is based on experiential correlations between the movement of a person over a landscape and the passing of time. The metaphor is not merely a linguistic entity—a collection of words only. The cross-domain mapping is based on experienced correlations of motion and temporal flow (and not on any supposed after-the-fact similarities between spatial motion and temporal change). The mapping constitutes our conceptual understanding and guides our reasoning about time. And the mapping is, in turn, the basis for the language we use to talk about time. Here is as clear a case as one can find of meaning and concepts being grounded in the qualities and structures of bodily experience.

NONCONSCIOUS BODILY MEANING

I give these two examples of embodied conceptual meaning and thought as an early reminder of where the argument of this book is headed. We need, first, to appreciate the pervasiveness of embodied meaning-making at the corporeal levels of our experience. We must see how our bodies, our brains, and our environments together generate a vastly meaningful milieu out of which all significance emerges for creatures with bodies like ours. We can call this nonconscious dimension *immanent meaning*. Second, we need to see how our "higher" abstract conceptualization and reasoning are grounded in this embodied meaning-making. This requires us to explore the continuity that exists between our mostly nonconscious experience of embodied meaning and our seemingly disembodied acts of thinking and reasoning. Finally, we need to see how recognizing the bodily grounding of meaning leads us to a new understanding of thought, knowledge, and symbolic interaction that challenges many of our most cherished assumptions about the mind.

In this chapter, we began where all life begins—with movement, and with the qualities that lie at the heart of our experience of movement. The next step in plumbing the bodily depths of meaning is to explore some key infant and early-childhood experiences that, even prior to language, provide us with meaningful contact with our world.

CHAPTER 2

Big Babies

Adults are big babies. Keeping this in mind will take us a long way toward understanding how things come to be meaningful to us. This bold claim is an exaggeration; of course there are dimensions of an adult's experience of meaning that are not available to infants, or even to young children. But we can discover a great deal about how people make meaning by studying the ways that infants and children eventually come to experience a world that they share with their adult caregivers. We can see in infant development the coming into existence of structures, qualities, and models that are the basis of adult meaning-making. The key idea of this chapter is that the many bodily ways by which infants and children find and make meaning are not transcended and left behind when children eventually grow into adulthood. On the contrary, these very same sources of meaning are carried forward into, and thus underlie and make possible, our mature acts of understanding, conceptualization, and reasoning. Consequently, if we want to discover how meaning is made, we will do well to begin with the blossoming world of babies.

Now, babies are not proposition-crunchers. They do not lie in their cribs combining subjects and predicates into propositions by which they understand the world. They do not look around thinking "Mom's lips are really red today," "My bottle weighs twelve ounces," or "Oh my! I've misplaced my pacifier." And yet, babies *are* learning how to grasp the meaning of things, people, and events. The world is becoming meaningful to them, even though they lack language and are not engaged in full-blown conceptual, not to mention propositional, thinking. There is meaning here,