

1 The Stream of Consciousness and the Concreteness of Experience

As we live it, waking life is a stream of experiences—feelings, thoughts, perceptions, and actions. The particular experiences making up each stream are unique and embodied. They vary in countless ways: in intensity, focus, and operative interest, in felt detail of environs, in specifics and richness of association, in mood and emotional tone, in urgency and relevance to action, in freshness and ordinariness, in degrees and types of physicality and mentation and involvement of media and tools, in temporal orientation and scope, in complexity, in self-consciousness and self-restraint, and so on. Through all these momentary experiences, the hundreds and hundreds of millions of them in an extended life, we are unthinkingly certain of these things: that our experience is ours and within a surround and is what it is from moment to moment, and that the ebb and flow of waking experience is seamless, unbroken, and unresting.

Yet much of philosophy proceeds with disregard for, and barely checked abstraction from, the stream of experience and the relatively accessible portion of it that is often characterized as the stream of consciousness. William James introduced his influential, metaphorical phrase “the stream of consciousness” in print in 1884, and his seminal account of the stream remains perspicacious. In 1904, after concern with the stream had indelibly influenced and informed much of his subsequent work in psychology and philosophy, James formulated a philosophy of radical empiricism founded on the importance of recognizing not just the discernible highlights but the continuities within the stream—continuities too concrete, embodied, protean, ephemeral, dynamic, and vital to yield their secrets to the oversimplifying, language-constrained techniques of British empiricists or to others who treat the content of thought in abstraction from the process of thinking (cf. J1 195–196).¹

Radical empiricism starts and ends with experience. Experience is embodied but not merely physical. It involves awareness but is not merely mental. Experience is what it is: it doesn't even properly include the physical and the mental; rather, they may be said to be aspects together within it, and abstracted from it. Nonetheless, we can say much about experience without such abstraction, about how it is on "the inside," in the living of it. In this book I deal concretely, in radically empirical fashion, with questions concerning consciousness and experience. In doing so, I contend that any philosophically adequate account of consciousness must be able to deal with the continuities in the stream of consciousness as well as the particularities of each experience. This means that such an account must show how experiences are constituted. Many influential accounts are sorely inadequate on this score: holding to methodological and ontological biases that concentrate overmuch on the objective and intersubjectively observable, they lose or eschew contact with the stream. The resulting over-rationalized renditions treat experience as variously, and unrealistically, depersonalized, disembodied, and detached from action and valuation. My account does not suffer from these deficiencies.

Starting from James's insights concerning the characters of thought and the stream of consciousness, this book represents a concerted attempt to give a comprehensive, process-based account of the stream of experience and of any moments arising in such a stream—an account that is coherent, that plausibly situates the stream of consciousness in the onflow of experience, and that treats the process of formation of moments of experience and relations among them, showing how moments of experience are connected in the stream, as each now opens into a next. The account developed herein addresses relevant concerns in phenomenology, epistemology, action theory, theory of intentionality, and neurobiology and identifies and assails linguistic and methodological impediments to efforts at making conceptual contact with the notoriously elusive stream of experience. In drawing close to the stream, it provides a basis for identifying unwarranted abstractions in the sciences and philosophy, and it transforms or dissolves several traditional philosophical problems. It clears a way for a Jamesian monism of pure experience, for appreciating the depth of actuality and intensity attainable in the moment, and for increasing one's capacity for unsentimental empathy and compassion.

1.1 The Stream of Consciousness and “Transitive Parts”

After covering many physiological preliminaries and issues concerning the nature of the science of psychology in the several opening chapters of *The Principles of Psychology*, William James, in a chapter titled “The Stream of Thought,” explicitly turns to his primary concern, the phenomena and conditions of mental life.² He opens the chapter with the announcement “We now begin our study of the mind from within” (J1 224), and in the chapter he attempts to deal with the experienced continuities of consciousness. Why be concerned with the continuities? Because the stream is real, and without the continuities there cannot be a stream, or anything more than an assemblage of disconnected elements. James’s characterization of the stream directly challenges the view of traditional empiricists, who maintained that the stream was ultimately composed of disjointed elements.

On the first page of “The Stream of Thought,” James, sometimes directly, sometimes implicitly, cites three interrelated and mutually supportive factors that serve to impede understanding of, or even an approach to, the relevant phenomena:

- the focus on sensation, characteristic of traditional empiricism
- the assumption that what is disclosed to discriminative attention is fundamental to an understanding of experience
- limitations inherent in the English language (and in other languages).

In present-day dress, each of these factors continues to impede accounts of consciousness, but, following James, each of them can be superseded, leading to an accurate, general characterization of experience and a closely articulated apprehension of experience from within. The characterization is aptly applicable to my experience, your experience, anyone’s experience, in any walk of life, in any times, whether stable, fast-changing, or chaotic, in any cultural tradition, in any physical condition, in every moment, in the face of any novelty, all day long. This may seem a grandiose claim, but it is a naked indication of precisely what must be achieved by a philosophical account of consciousness and experience.

In the two sentences following his chapter-opening declaration, James castigates as having abandoned the empirical method of investigation those who start with sensations as “the simplest mental facts, and proceed synthetically, constructing each higher mental stage from those below it” (J1

224). He soon states (230) that he counts John Locke and his successors among these latter, including philosophers who adopt a doctrine of “simple ideas,” invariant mental atoms which in combination form complex mental states. In this building-block approach to perception and thought, the active function of the body in the process of perception is minimized, as is the importance of valuation—purpose, desire, and interest. For James, what traditional empiricists “call simple sensations” are “results of discriminative attention, pushed often to a very high degree” and are treated in abstraction from the “teeming multiplicity of objects and relations” (224).

Although he will and must situate sensation in the stream of consciousness, James will not start his study of the mind from within by examining sensation. Instead, he will start with the “only thing which psychology has a right to postulate at the outset . . . the fact of thinking itself.” Here, James uses the word “thinking” to apply to “every form of consciousness” (J1 224), so that all manner of subjective experiences—beliefs, desires, intentions, imaginings, pains, perceptions, sensations, and the formation of each and every thought—may be included. James adds, in further contrast with British empiricists, that this experience is perforce fluid, continuous. Consciousness “does not appear to itself as chopped up in bits” or “jointed” but rather as flowing, and is most naturally described as “the stream of thought, of consciousness, or of subjective life” (239). With this, the immediate target is David Hume, for whom the mind is composed of distinct and disconnected “perceptions, which succeed each other with an inconceivable rapidity” (1739: 252–253, 635): “The chain of distinct existences into which Hume thus chopped up our ‘stream’ was adopted by all his successors as a complete inventory of the facts” (J1 353).

For James, the chief limitation and underlying failure of traditional empiricism is that it neglects the continuities (or what James calls the “transitive parts”) in the stream of consciousness. To introduce that crucial phrase, I rely on James’s best-known characterization of the stream (J1 243):

As we take, in fact, a general view of the wonderful stream of our consciousness, what strikes us first is [the] different pace of its parts. Like a bird’s life, it seems to be made of an alternation of flights and perchings. . . . The resting-places are usually occupied by sensorial imaginings of some sort, whose peculiarity is that they can be held before the mind for an indefinite time, and contemplated without changing; the places of flight are filled with thoughts of relations, static or dynamic, that for the most part obtain between the matters contemplated in the periods of comparative rest.

Let us call the resting-places the “substantive parts,” and the places of flight the “transitive parts,” of the stream of thought.³

Here, before discussing James’s thought closely in chapter 2, I construe ‘transitive parts’ broadly to begin with the transition beyond the attainment of a substantive part, with the readying for takeoff from a perch. James later named this transition the “co-conscious transition . . . by which one experience passes into another when both belong to the same self” (ERE 47).

In varying forms throughout the *Principles*, James stresses the difference between those who would study the mind from within, sensitive to the transitive parts and other realities of onflowing experience, and those who adopt various withdrawn and analytic stances toward it, reviewing experience with an introspective or analytic detachment that separates mental states—substantive parts—from one another, from flows of awareness, activity, and action, and from the experience of the present as an experience of process (in a sense to be closely specified).

One can trace the philosophical breakup of the stream to the technique of Cartesian doubt and to the Cartesian recipe for discriminating the substantive parts clearly and distinctly. For Descartes, securing a clear and distinct perception of ideas requires a withdrawal of the mind from the senses, along with the control of desire and volition so as to keep them from disturbing the effort (1641, Fourth Meditation). With this withdrawal, the content of perception is cut off from preceding and future states, as it is in Descartes’ radical skepticism. For Descartes, the experiencing of content also serves as the basis for the *cogito*: I cannot doubt that I am having this content, therefore, because there is this having, I exist. Our existence is therewith shrunk down to the experiencing of what is focused on in consciousness, to the mere having of content. The experiencing is considered in abstraction from other mental states, from the past, and from society, and it appears as an independent part. Such abstraction led Descartes to view “the whole duration of life” as “divisible into countless parts all mutually independent” (1641, Third Meditation).

For Descartes, God preserves the “illusion” of connectivity between the independent parts of the stream of experience—the very parts that Cartesian doubt and the criteria of clarity and distinctness have rendered discrete (e.g. 1641, Third Meditation; 1644, I.XXI). For Hume, perceptions are the units of experience, and life and time are made up of mutually independent parts

too, but Hume did not adopt any such divine option, although he was uneasy with his account (1739: 635–636). For James, the experiential flux cannot be approximated adequately by combining discrete, independent moments.

The Jamesian shift, marking and honoring the distinction between experience as felt in the living of it and as thought about in subsequent acts of reflection, is profound and amounts to taking the stream of consciousness seriously. Once the shift is made and the importance of transitive parts is recognized, one may find all manner of considerations transformed. In views developed by James, by Alfred North Whitehead, the Anglo-American mathematician and philosopher of organism, and by others, it leads to a process-based or event-based ontology.

1.2 Transitive Parts and Radical Empiricism

Whereas James sought to study the mind from within and found the stream of thought “sensibly continuous,” Hume, who tried to “enter most intimately into what I call myself,” actually attempted to look at the stream from outside by means of introspection or self-observation and found the mind to be “a kind of theatre, where several perceptions successively make their appearance” (1739: 252, 253). In view of Hume’s uncritical reliance on the practice of self-observation, the stream thus consists of distinct and disconnected states, “loose and separate,” one following another with “inconceivable rapidity” (1748: 85; 1739: 252). Hume held that no “real connections” could be found between any two of these states or perceptions. James contrasts his radical empiricism with “the Humean type” (ERE 42). For James’s philosophy, ordinary empiricism has always shown a tendency to do away with the connections between experiences (43), but “the relations that connect experiences must themselves be [and are] experienced relations, and any kind of relation experienced must be accounted as ‘real’ as anything else in the system” (42; cf. MoT xxxvii).

When Hume (1739: 635) takes up his stance toward experience—by applying what Berkeley (I.25) called “bare observation”—“no connections among distinct existences [perceptions] are ever discoverable.” Throughout, Hume remains unaware of any distinction between experiences as lived through and experiences as objects of reflection or self-observation. He thus falls prey to what James refers to as the “psychologist’s fallacy,” namely “the

inveterate habit, whenever we try introspectively to describe one of our thoughts, of dropping the thought as it is in itself and talking of something else . . . [namely] the things that appear to the thought" (J1 278). Such describing provides a prime instance of not taking our experience of transition "just as we feel it" and of "confus[ing] ourselves with abstract talk *about* it" (ERE 48). By emphasizing the more substantive parts of the stream in this way, one may blithely treat experiences as states independent of person and context, so that the content of a state is in effect the same for anyone considering it (J1 196). But this approach sacrifices reality for seeming clarity: it mistakenly assumes that what is rendered clear and discriminable is fundamental to the understanding of experience. That is why James characterized it as a fallacy. For James's radical empiricism, which aims to neither admit "into its constructions any element that is not directly experienced, nor exclude from them any element that is directly experienced" (ERE 42), transitive parts must not be unduly abstracted from or neglected in any theory attempting to be adequate to our experience.

To this day, one can attempt to sustain a Humean posture, complete with withdrawal from the phenomenological (the lived immediacy of actual experience, before any reflection on it) and consequent neglect of the transitive parts and of the transitions between individual experiences and their successors (so that the continuity of experience is held to be illusory, apparent only). This could be called an inveterate habit of many writers with behaviorist and functionalist inclinations, including Daniel Dennett (e.g. 1991: 356) and Marvin Minsky (e.g. 257). In *Consciousness Explained*, Dennett gives an account of consciousness that, as David Chalmers (190) notes, replaces the phenomenal seeming of things as the experiencing of them in a certain way with "a psychological sense of 'seem' in which for things to seem a certain way is for us to be disposed to judge that they are that way." Consequently, Chalmers continues, Dennett's theory deals with judgments concerning phenomena rather than with the experiences themselves. In effect, Dennett is turning what he calls his "intentional stance" on his own stream of experience, repeating the withdrawal made by Hume and by Berkeley and others. Adopters of Dennett's stance believe they can most efficiently explain and predict the behavior of apparent agents, including humans, by treating them as if they were rational agents who harbored beliefs, desires, and other mental states and acted on the basis of the contents of such states (e.g. Dennett 1991: 76). In their attempt to put

assertions to the test of intersubjective observables only, and their disregard for whether agents indeed have such mental states, or any correlate experiences, proponents of the intentional stance reveal their functionalist and possibly behaviorist orientations (Dennett 1978: 238). In keeping with his functionalist orientation, Dennett (1991: 364) espouses a position in which mental states are, in effect, physical or brain states that have causal relations to behavior but have no experiential component: “You seem to think there’s a difference between thinking (judging, deciding, being of the heartfelt opinion) that something seems pink to you and something *really seeming* pink to you. But there is no difference. There is no such phenomenon as really seeming over and above the phenomenon of judging in one way or another that something is the case.”

The abstraction from subjectivity that goes with the intentional stance involves, as does Hume’s self-observation, abstraction from transitive parts and the continuities in the stream. Thus, in keeping with his denial of the phenomenal seeming of things, Dennett (1991: 356) attempts to give the lie to the notion that continuity is a feature, let alone “one of the most striking features,” of consciousness. To be sure, consciousness may involve discontinuous aspects, but in normal waking life the stream of consciousness never seems broken or to be composed of discrete perceptions occurring with inconceivable rapidity. Thus, even if the “illusion” of continuity in perceived motion arises from the fusing of separate images, the perceiving of motion as continuous need not involve glossing over a break in experience, for the fusing may turn on the experiential functioning of aftereffects of stimuli as perceptual moments influence their successors (Sacks 2004: 44; J1 242): successive moments of experience really are conjoined. Furthermore, even apparent discontinuities in the visual field, associated with such abnormal phenomena as the experience of “flickering series of ‘stills’” during migraine attacks, or “motion blindness” (the lack of visual awareness of motion around one) (Sacks 2004: 41, 42), need not involve breaks in the stream of experience. In fact, while these abnormalities transpire, “the flow of thought and perception” may remain “otherwise normal” (42): one is, for example, aware of and disturbed by the flickering.

Radical empiricism does not exclude from its concern any element or relation that is experienced (ERE 42), and these pointedly include the felt continuities in the stream of embodied experience. In the *Principles*, James explored those continuities, and I will attend to his insights concerning

them in later chapters. Suffice to add here that any analytical withdrawal from the onflowing stream of experience is itself the analysis of some portion of the stream other than the immediate present, yet each particular process of analysis itself unfolds within the ongoing stream—the continuities remain inescapable.

1.3 Radical Empiricism and the “Fallacy of Misplaced Concreteness”

If Hume neglects the transitive parts, and makes “perceptions” stand in for what would otherwise remain of the stream (the substantive parts), what does James make of the experience of those perceptions or substantive parts? For James, the perception or thought as it is in itself is a single pulse of indecomposable subjective unity, arising from and continuous with its predecessors in the stream, including the thoughts that went before, appropriating them and all that they contain (J1 278, 371, 339):

The unity into which the Thought—as I shall for a time proceed to call, with a capital T, the present mental state—binds the individual past facts with each other and with itself, does not exist until the Thought is there. (J1 338)

The pulse is thus the formation of the Thought—the recognizing of the object, the recalling of the name, the arriving at the decision, for example—and the mental state qua substantive part or “stable psychic fact” (J1 253) appears in “a single pulse of subjectivity” (278), “one undivided state of consciousness” (276) not properly to be isolated from its forebears, including the transitive parts contributing to its formation, or from subsequent thoughts, which in turn appropriate them. So understood, “the present Thought, or section of the Stream of Consciousness [is] the ultimate fact for psychology” (360) and the stream of consciousness is a stream of pulses (PU 283–284).

In *Some Problems of Philosophy* (his attempt, terminated by fatal illness, to formulate a coherent, systematic metaphysics), James introduced the notion of “buds of perception.” In a passage that encapsulates his descriptions of the process of thought-formation within the stream of experience and of the distortions introduced by traditional empiricists and by unwitting practitioners of the psychologist’s fallacy, he asserted:

Either your experience is of no content, of no change, or it is of a perceptible amount of content or change. Your acquaintance with reality grows literally by buds or drops of perception. Intellectually and on reflection you can divide these into components, but as immediately given, they come totally or not at all. (SPP 155)

The notion of a bud can be extended to include any occurrent thought, and it will in that fashion be carefully extended and applied in following chapters; in fact, the notion of buds, as acts of experience, will figure prominently throughout this book.

The formation of a drop or bud is the formation of a substantive part, in the terminology of the *Principles*, and the flight to a new perching becomes the formation of the bud: if the philosopher, psychologist, or cognitive scientist reduces the stream to a series of substantive parts, perceptions (in Hume's sense) or intentional states (in, say, Dennett's sense), he does so by neglecting the formation of buds, the transitive parts, and the co-conscious transitions from one experience to the next. The failure to register these parts, to "give them their due," and the laying of "a far too great emphasis . . . on the more substantive parts of the stream," is the "great blunder to which all schools are liable" (James 1884: 3; J1 244). Nonetheless, although James highlights and in a sense discovers the transitive parts, he leaves to the side the question "as to the genesis and constitution of these . . . integral pulses of consciousness" (James, quoted in Perry 1935 II 102). Whitehead does not.

Whitehead adopts the metaphorical notion of the bud, claiming James's authority for treating it as an act of experience (PR 68). For Whitehead, the growth of a bud is the process of formation of a concrete experience. The process is a becoming concrete, a *concrecence* (derived from a Latin verb meaning "growing together"). As for James, although these acts come totally—as if in a moment of self-organization that brings many feelings into a unity of feeling—the acts are not separated from the stream; rather, they emerge from their immediate pasts, and they anticipate, carry forward into, and affect their immediate futures.

The stream of experience is a stream of buds. Although consciousness and experience may seem intangible in the sense that they are ungraspable, invisible, silent, odorless, and, in fact, not sensually apprehendable, the actuality and onflow of experience is nonetheless concrete. I will propose that the standard for concreteness be the formation of a moment of conscious experience—the concrecence, for instance, of a perception or decision. It is conceptual withdrawal from the actuality of concrecence that makes us think of the material world (including, say, kicked stones), rather than experience (say, of pain felt fresh upon toe-stubbing), as paradigmatically concrete.

In sympathy with James, Whitehead ventures into areas little studied by James, including the formation of buds and the transitions from bud to bud. In so doing, Whitehead extends the scope of radical empiricism and, in effect, points to a way to overcome the limitations inherent in the spatiotemporal and sensory (visual, aural, tactile) metaphor of the stream. Instead of merely taking a “general view of the wonderful stream of our consciousness” (J1 243), Whitehead goes “into” the moment. He refuses to abstract from the moment, any moment, understood as an act of experience issuing from and into other experiences, as an act occurring within the constraints of inheritance from all that is encompassed in the experient’s past and within the onflow of concrescences. By bringing philosophical analysis into the bud, Whitehead secures access to a post-Cartesian/Humean basis for ontology, and can characterize momentary consciousness as it arises from pre-conscious phases of synthesis and so as typical only of experiences involving sufficiently complex concrescences. Further, he can situate buds and each stream of consciousness within a broader stream (or, to use a term that is less spatial and less linked to sensory modalities, onflow) of activity.

Whitehead applies the notion of buds not only to human moments of experience but also, more broadly, to actual entities or occasions—“the final real things of which the world is made up.” He elaborates the notions of actual entities and concrescence with rigor and thoroughness, “with the purpose of obtaining a one-substance cosmology” (PR 18, 19). Throughout the articulation of his philosophy of organism, Whitehead’s ontology and methodology, indeed his phenomenology, remain consistent with the monistic radical empiricist program initiated by James—the philosophy of pure experience, which incorporates a pluralism of pure experiences and streams of thought (ERE 4, 110; PU 321; J1 226). Our experience is ever-changing, and upon suitable withdrawal one can regard each change as involving modification of mind and body. Mind-body dualism then appears as an artifact of (attempted) withdrawal from onflow and is typically associated with correlate misplaced attributions of concreteness, e.g. to physical objects, brain states, and to static contents of mental states. The radical empiricist recognizes the Cartesian withdrawal as an entryway to a mode of experience, an attitude one can adopt, a science-enabling game one can play. Moreover, experience in that mode in no way gives the lie to the Jamesian account of the stream: Cartesians in their withdrawals are nonetheless in their streams, experiencing, although such experience

remains inaccessible to those in the grips of such withdrawal. The Jamesian thought “never is an object in its own hands” (J1 340): the thought as an object is not the thought from within, and the thinking about the thought as an object is the thinking and formation of a different thought with its own interiority and constitution.

From a Whiteheadian vantage, James’s “psychologist’s fallacy”—the imposing of an intellectualized, after-the-fact account of how we feel things on “the primitive way of feeling them” (J1 522)—is an instance of Whitehead’s more general “fallacy of misplaced concreteness.” For Whitehead,

This fallacy consists in neglecting the degree of abstraction involved when an actual entity is considered merely so far as it exemplifies certain categories of thought. There are aspects of actualities which are simply ignored so long as we restrict thought to these categories. Thus the success of a philosophy is to be measured by its comparative avoidance of this fallacy, when thought is restricted within its categories. (PR 7–8)

The fallacy of misplaced concreteness is not in the abstracting, which may after all generate new ideas or concepts that can serve practical ends and facilitate the new apprehension of connections and dynamics, but in the neglect of the degree of abstraction and of the substitution of the conceptual form for the actual (PU 272). Recognition of the fallacy is thus not meant to forestall abstraction. Abstraction is necessary for any theoretical activity, for any reasoning, that involves the treatment of an entire datum in terms of an extracted character (J2 340), and even for conception, perception, and consciousness. Recognition of the fallacy should provoke or foster inclinations to contrast the simplified and abstract with the concrete, to explore and characterize the limits of any idealization or systematization, to discover the limitations of the methodologies and assumptions on which any theoretical account relies, to appreciate senses in which the success of an account is merely approximate (cf. AI 221), and to “redescend . . . to the purer or more concrete level again” (ERE 97).

When considering the stream of consciousness, critical awareness of the fallacy of misplaced concreteness and commitment to radical empiricism are functionally equivalent; a principal task for both the fallacy-sensitive analyst and the radical empiricist is to avoid being misled by abstraction and to stay close to experienced actualities, to buds, to transitive parts and other realities of conscious experience, when considering particular mental

states—buds—and more generally what goes on in the stream of experience. Now, if on reflection you can divide buds into components, as James says, what are the components? The analysis of actual entities or acts of experience into their component elements will certainly deal with what James termed the transitive parts; these turn out to be numbered among feelings, which Whitehead (PR 19) called “the most concrete elements in the nature of actual entities.” In approaching these feelings, the idea is to be alive to what is filtered out by various methods of analysis that rely on withdrawal from the stream, to be alive to the distortions such filtering introduces, to honor the felt continuities in the stream, and to be loose and gently attentive enough within the concrete to be able to freshly remember experiences as if from within the stream, rather than attempting to make contact with them by thinking about mental states, frozen substantive parts, or some language-mediated version of them.

1.4 A Survey of the Coming Chapters

Adhering to views associated with an outmoded and narrowly materialistic science, many philosophers deny or neglect the reality and efficacy of consciousness. Of those who pay attention to consciousness, too many deal with conscious states in abstraction from the onflow of concrete, embodied, practical experience. Understanding consciousness requires taking the stream of consciousness seriously and being able to situate each state of consciousness within the stream in ways that make genuine contact with the experiential realities of life as we live it through and that also afford an alignment of conscious states with relevant brain and bodily phenomena. Taking the stream of consciousness seriously means getting as close to it, and to the onflow of experience, as we can, conceptually, with a minimum of oversimplification and distortion and, as far as is possible, without submitting unwittingly to metaphysical presuppositions.

My principal argument and textual strategy herein involves a series of approximations designed to bring the reader as close as possible, conceptually, to the onflow of experience. In chapter 2, I adopt as a first approximation of experience and consciousness within the onflow James’s psychological account of streaming consciousness. In that chapter I establish terms of discourse for refinement in the following chapters. There I first present and analyze James’s account of subjective life, focusing on the

characteristics of the stream and of what he terms the characters of thought, namely that, most briefly, consciousness is personal, changing, continuous, intentional and selective. The James-based psychological approximation serves as a radically empirical baseline, imposing conditions of adequacy on any theory of consciousness. Thereafter, I use the notion of “approximating the stream of consciousness” to mean accepting James’s general description and then further characterizing the stream and the characters of thought: an effective approximation should enrich our understanding of the characters of thought and of major flow patterns in the stream of consciousness.

In *The Principles of Psychology*, James laid a detailed groundwork for understanding human activity as embodied and as experienced. In so doing he elaborated a thoroughgoing mind-brain parallelism that indicates the sort of body-mind correlations a coherent neuropsychology must provide, but he stopped short of discussing the ontological status of consciousness. Later, in his radical empiricism and his attempt at an experience-based metaphysics, he moved beyond dualistic approaches to treat consciousness as a function and a process within experience. James’s work directly influenced several of the major figures of twentieth-century Western philosophy, including Dewey and Husserl (Edie 21, 23; Wild vii, 126; Husserl 295), but it was Whitehead who actually ventured along the path of development opened by James, formulating a “philosophy of organism” that meets Jamesian conditions of adequacy. Whitehead and James will prove the primary intellectual heroes of this book. In fact, the views I present here pretend to be no more than an extension of Jamesian and Whiteheadian approaches. Two other figures play prominent roles: the philosopher John Searle and the neuroscientist Gerald Edelman. I focus on their views in chapters 3 and 7, respectively.

James provides a phenomenologically satisfying, appealing, and groundbreaking account of the stream, but it contains some important notions that remained underanalyzed and some claims that are expressed more vaguely than is now necessary. In chapter 3, to give James a more current reading, I employ terms and methods of analysis developed by Searle, who independently describes, in his theory of intentionality, important counterparts to the Jamesian characters of thought. Consequently, in developing an “intentional approximation,” I provide an intentionality-based interpretation of James that enriches several central Jamesian notions. In this sec-

ond approximation, I treat the stream of consciousness as a stream of intentional states, with the obvious proviso that those states are not regarded as merely substantive parts. (An intentional state consists of propositional content—roughly, what the state is about or directed at—experienced in a psychological mode associable with a psychological verb such as ‘believe’, ‘desire’, ‘hope’, ‘remember’, or ‘perceive’.)

Searle’s analytic notions help us to secure a firm analytic grip on James’s transitive parts and give us greater descriptive access to the stream than James’s notions alone provide. However, for my purposes, Searle’s analyses are not attentive enough to the formation of intentional states and to continuities in the stream of experience, even though his tools of analysis are readily applicable to fluid intentional phenomena. In my “processual approximation,” presented in chapter 4, I wed Jamesian and Searlean notions, conceptually embedding intentional states in the stream of consciousness and treating the stream as a flow of intentionality. This approximation examines the momentary formation and function of intentional states by focusing on the intentional aspect of consciousness in perception and action, the biologically primary forms of intentionality. It aims to refine our understanding of consciousness, to methodically add precision to our account of the experiential onflow, and to help us grasp some of the most elusive features of everyday experience.

To move from the intentional approximation to the processual approximation, and thereby to improve our construal of intentional states by embedding them in the onflow of experience, I cast the experiential net more widely. One vehicle selected for accomplishing this is an account of perception in action and of action as lived. If during most if not all of our waking life we are doing things of one sort or another—scheduling a trip, mincing garlic, installing software, playing a sport, sowing seeds, participating in a job interview, you name it—and most of our waking life therefore involves action (and perception), then an “actional” condition of adequacy for a realistic account of the stream of subjective life is that it show how consciousness functions in the performance of the small tasks that consume so much of our daily lives and, more generally, in the course of action. In the processual approximation I pay attention to bodily and valuational activities associated with perception in action, draw nearer to the transitive parts conceptually, and move toward fulfilling the actional condition of adequacy on accounts of consciousness.

Although the processual approximation can make substantial conceptual contact with the bud-based reality of experience, it ultimately remains within the bounds of intentionality-based analysis, it is on occasion too influenced by linguistic characterizations of relevant phenomena, and it does not place one *within* actual events as they take shape, at least not in any way we can generate schematically in terms of the elements and principles of a system of ideas. Following Whitehead, the concrescual approximation brings one inside the moment and stream. The relevant notions and principles from Whitehead's philosophy are terminologically unique and can appear highly technical if not merely abstruse. Nonetheless, the processual approximation is elaborate enough to provide an effective context for introducing many essential ideas from Whitehead's processual, organic metaphysics. Presented in chapter 5, those notions and principles provide the basis for the concrescual approximation. In chapter 6, I elaborate this Whitehead-based approximation by bringing it to bear on perception, action, and thought (the gamut of experience), by re-characterizing each stream of experience as an onflow of concrescences, and by defining subject-formation and consciousness in concrescual terms. The concrescual approximation accounts for the genesis and structure of any moment of experience, and it anchors the interpretation of the other approximations, treating them as involving abstractions from concrescence and experiential monism.

Not only is the concrescual approximation realistic phenomenologically, it is neurobiologically feasible, and in a way that suggests how to correlate behavior and psychological phenomena with neurobiological phenomena. In chapter 7, I draw on the work of Edelman and other "brain scientists" to suggest neurobiological correlates for all leading distinctions invoked in the preceding chapters; the correlations link neurobiological processes with intentional and concrescual processes. I choose Edelman because he attempts to provide a detailed stream-sensitive analysis of consciousness based on brain structure—an analysis that deals with the evolution, ontogenesis, and momentary structure and function of consciousness—and because he draws extensively on James, starting from the properties of consciousness enumerated early in James's chapter on the stream of thought. Edelman demonstrates that the Jamesian characters of thought provide an effective framework for aligning neurobiology with psychology and experience and for formulating exhaustive neuropsychological accounts of consciousness.

Moreover, Edelman turns out to be an astute observer of behavior. Although he is not wholly free from dualistic and traditional empiricist impulses and biases, he goes a long way toward putting the mind back in nature through a conception of consciousness that treats perception and action as unified in embodied and coherently unfolding multi-dimensional scenes of action. I provide a concreteness-based reconstruction of Edelman that takes him from his neuroscientist's remove and puts him in vivid contact with the stream of experience. At the same time, Edelman, who is adept at associating complex neural phenomena with psychological phenomena, helps clarify the concreteness-based theory of action and perception, especially in drawing attention to the neural bases for the ordering of successive changes in movement and to the function of value in memory and action. Without embracing Edelman's particular account of the correlation between brain processes and consciousness, I use that account to show in detail how far a neurobiological approximation can go in corroborating Whitehead's account. I also use it to bring us close to the body as it is felt in action and to the stream, close enough to glimpse the working of consciousness and an experiential grounding for organism-environment, subject-object, agent-patient, and mind-body/brain polarities and distinctions emerging and functioning amidst the onflow of experiential events.

If I use Whitehead to "concretize" Edelman, I also use Edelman to further "embody" Whitehead and the concreteness approximation. The strategy here is to show the merits of Whiteheadian phenomenology and action theory in bringing us close to experience, to map concreteness and neurobiological accounts onto each other in detail, and to treat them, in an analysis that is neuropsychologically sound, as affording "mental" and "physical" contours of experience. If I succeed in this, I may bring you as close to the raw un verbalized stream of experience (cf. PU 272; ERE 94) as one can get conceptually and put you in the mind of what it is like to be you as you live through your embodied moments.

The radical empiricist takes one's own un verbalized experience in the stream in the moment as a touchstone for one's philosophical claims. To understand consciousness and experience and resolve perennial philosophical problems concerning them, one must get "beneath" language, wake from the bewitchment of our intelligence by the subject-verb-object form of discourse, and make conceptual contact with onflowing un verbalized experience. The subjective mark is there, but the subject is not withdrawn

from the stream in the seizure of distancing Cartesian skepticism or Humean introspection⁴ or a functionalist's intentional stance-taking: rather, the subject is awash in it, is in and of the irresistible, unrelenting onflow. No philosophy can safely start elsewhere; but if one can start there, one's whole outlook, philosophical and practical, may change—a prospect that will lack appeal for some, and may seem utterly vital to some.

Together, as I will argue, James and Whitehead effect an “experiential *bouleversement*” of traditional dualisms: if embodied experience is where we start then we can elucidate the mental and physical poles of experience, and see mind and matter as artifacts of withdrawal from experience, and the dualistic questions concerning how mind could emerge from or interact with matter are seen to be misguided. Thus, the concrescence-based approach developed here appears to have substantial and novel ontological implications, perhaps largely because it attempts to take up some “old advice” cited by Whitehead: “. . . the doctrines which best repay critical examination are those which for the longest period have remained unquestioned” (AI 177).

In chapter 7, I attempt to engage in such critical examination by recurring to persistent Jamesian and Whiteheadian concerns with biases and limitations imposed by reliance on the subject-predicate and subject-verb-object forms of expression.⁵ These limitations and biases encourage neglect of the linguistic withdrawal from the onflux of experience, and the gaining thereby of an intentional capability, a power of mental representation which tends to preclude recognition that the withdrawn, language-using subject is typically at a remove from the relevantly experiential subject, the subject-in-formation. Each moment of consciousness involves the formation and projection forward of a (new) subject. Of course, newly formed subjects are of a piece with their inheritances: each new subject is consonant with characteristics of the person in whose life it arises, but the new subject does not predate and serve as the agent of the act of subject-forming experience. “I think,” as in “I think, therefore I am,” is too crude a formulation. No “I” does the thinking, even when the thinking is intentional, as when planning one's activities. As James had it, and Whitehead too, the formation of the thought is the formation of the I, and that formation changes the history and memory of the living person. Reliance on the subject-verb-object and subject-predicate forms of discourse promotes disregard of subject-formation, concrescence, and onflow and so is deeply misleading to

those trying to understand the nature of consciousness and experience. These syntactic forms, and the intentional capability and power of mental representation intertwined with them, can be traced to technology-amplified biases that took hold in classical Greek in the fifth century BCE and symptomatically made the active voice the predominant voice distinction. (Here 'voice' refers to the relationship of the subject of a sentence to the action described by the verb. In the active voice, the subject or agent is not specified as affected by the action.⁶) That predominance is with us today. For example, almost all Western philosophers blithely employ active-voice-dominated language as the tool for verbal discourse as if its syntax were innocent of bias. But reliance on this language constitutes a very formidable obstacle to the understanding of experience and consciousness and of other general forms of natural process. In fact, I maintain that the very adoption of the dualizing Cartesian withdrawal is facilitated by active-voice-encouraged habits of thought: mind-body and related dualisms can be regarded as outgrowths of the unwitting decision to let active-voice-based language games establish boundary conditions for rational discourse. That decision, coupled with the eventual disregard for the simplifications it involved, constitutes the linguistic enthronement of withdrawal from onflowing experience.

All of our waking lives are streams of experience, and all waking experiences—although they may each incorporate syntactical biases appropriate to and inherited from specific language-sharing societies—are assimilable to a single model of experience. Using the notions of onflow, concrescence, and related concepts, I attempt to give process-based accounts of subject-formation, consciousness, objects, and living bodies that render provincial the long-unquestioned active-voice-based outlook, and of course the philosophical dualisms it spawned. The result may provide a sound basis for conceiving the relation of language to experience and so for formulating an ontology relatively free from linguistic bias.