THE PERFECT MIRROR IS INVISIBLE

by Richard de Mille

Introspective persons sometimes try to find in themselves a center point of personality that may be called I. This I, they imagine, is an irreducible core of personality that is aware of the contents of the mind over which it exerts considerable control. This enduring focal entity is distinct from the psychological self, an accretive cluster of personal attributes that is but one object of awareness among many—albeit an important object. I is what is aware of objects in the mind, including the self. I is unique in its capacity to observe and control mental events and is what some philosophers have called the subject.

DICHOTOMY OF SUBJECT AND OBJECT

The intracranial dichotomy of subject and object can be internally experienced by anyone and may be externally inferred by an observer. Our conventional language imposes the dichotomy on common cognitions. We do not say, "An image of Mama is formed in this brain." We say, "I remember Mama."

Nevertheless, no amount of searching can discover the form or place of I in the mind. However tight he draws the mental boundary, the introspector fails to find the source of self.² Essentially, he is neither his earache, nor his notion that $i^4 = 1$, nor his dream of being buried alive, nor his memory of tumbling downstairs, nor his intention to be more careful in future. As soon as he fastens upon any mental content, he feels that he is other than that content: He experiences it. Inevitably, awareness separates subject from object, and subject never perceives itself as object.³ Like the perfect mirror, it reflects all else but cannot itself be seen.⁴

Human experience involves a diffuse field of events occurring in and around the human organism;⁵ but most of us can agree that what we call awareness occurs mainly in the brain, and B. Gert has even suggested that a disembodied brain could have thoughts.⁶ The inter-

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nal objects of consciousness comprise numberless elements transmitted into the brain from the extracerebral environment through sensory terminals such as eyes, ears, taste buds, heat and cold receptors in the skin, tension detectors in the muscles, pain receptors in the gut, and so on. The brain routinely organizes sensory inputs into percepts such as a chair or a dog. Of course, there is no real shrunken chair or dog in the brain or even any obvious sellary or canine isomorph but, rather, some unrecognizably distributed electrochemical tracery that lawfully represents a chair or a dog. This representation, reflection, or idea is the internal object (or constituent) of consciousness. By manipulating internal objects, the brain can produce new entities for which no referents exist in the real world—the "pushmi-pullyu," for example.

But for all these objects what is the subject? What and where is the *I* that seems to experience chair and dog or create and control the pushmi-pullyu? Before trying to answer this question, let us inquire why it should be asked. Could we not say merely that the experience happens? Why do we insist that every mental object needs a mental subject to experience it?

The reason could be that we are applying a single model to describe objective perception and subjective reflection. This simple model consists of a person (the observer) and an object (the observed): Boy sees dog. Applied outside the brain, the model works very well. The behavioral scientist can use it to summarize the behavior of the boy, who turns his head toward the dog, smiles, speaks to it, and throws a stick for the dog to run after. Obviously, there is a transaction between two distinct entities, boy and dog.⁷

But now let us see how the model works when boy remembers dog. Boy is sitting at his desk in school, staring at the paper in front of him. He is remembering dog. Can the behavioral scientist tell that boy is remembering dog? No—he has no evidence that this is true. But if we ask boy what he is thinking about, boy may say, "I [subject] am thinking about [experience a mental object that I call] dog." Though no one has ever looked into anyone's head and seen any boy, homunculus, subject, or I watching or remembering a dog, the model requires a subject (boy or I) as well as an object (dog or analogue of dog), whether we apply it objectively or subjectively.

Having once postulated an entity that is the internal observer, I take but a short step in trying to find that entity through introspection. After all, if I can locate and describe my own hand, why should I not be able to locate and describe the part of me that is the internal observer, which I assume to be somewhere in my brain or in the

activity of my brain that I call my mind? The analogy is simple and appealing, but an important item of information has been omitted.

When I look for my hand, I find it by virtue of neural signals that are coming (or have come in the past) from my hand and arm and from my eyes. Arriving in my brain, these signals are organized and interpreted against a background of other information that I have about the location of things; and soon I have a clear idea of where my hand is, what it looks like, how it feels, and what it is doing.

When I look for I, my experience is very different. I do not find I because I am not getting (and have never gotten) any object-defining messages from an objective I. In fact, if I look for my brain, I shall not find that either, because my brain is perceptually nothing. Though it handles countless object-defining messages about the environment and about other parts of the body, the brain sends no such messages about itself to itself. Why should this be so?

The brain monitors and controls a complex system of receptors (sensory terminals) and effectors (muscles and glands). The safety and activity of the whole organism depend on constant inflow from the receptors, central coordination and executive decision in the brain, and outflow to the effectors. By this arrangement, the brain finds out where the other organs are, what condition they are in, and what they are doing; and it tells them what to do next. However, the brain goes nowhere except as a passenger in the skull; and it can do its work wherever the skull goes. Armored by the skull, the brain need not worry about protecting itself—only about protecting the skull or protecting the body in general. Therefore, though the brain quickly learns to keep track of the skull, oddly enough, the brain does not need to know—and for a long time does not know—where the brain is.

Aware of its thoughts, the brain is not aware of itself. Within its bony shell, it has no need to feel pain, heat, cold, or any other sensation; and it feels none. Vicariously suffering and enjoying the sensibilities of the other organs, it needs none of its own. Thus constructed, the brain cannot learn to perceive itself as an object.⁸

At first the brain does not even suspect its own existence; but, as time passes, it acquires a compelling collection of circumstantial evidence. One day a mysterious, convoluted grey substance is accidentally discovered in a neighbor's head. Another day a blow on the skull suddenly interrupts thinking. Eventually the brain infers its own existence. But inferring is not perceiving.

The imperceptibility of the brain explains why the poet, though he may feel a divine discontent, does not report that his brain is itching;

why the fevered patient, though he tosses restlessly and is bothered by light or noise, does not complain that his brain is hot; why the victim of a stroke does not call out, "Help! My brain is suffocating"; why a patient who sees flashes of light when there are none does not report the tumor pressing on his occipital lobe; why the scholar bemused by scintillating fortification-plan displays, annoyed by the progressive winking out of words upon the page and fearful of his imminent migraine, does not (unless, of course, he is Hubert Airy) mumble about brain photographs.¹⁰

Generally, the activities of the brain are experienced as occurring elsewhere in the body or outside it. An injury to the foot activates the brain, but the pain seems to be in the foot. Even after the foot has been cut off, the pain may seem to occupy a phantom foot; and (if that is not enough) some persons have felt fingers, hands, or arms that were missing at birth.¹¹

Fantasies and dreams, though they depend less on sensory inflow, are also experienced as occurring (if anywhere) outside the brain. Our fairy godmother stands at the foot of our bed; it would take a special effort to imagine her inside our head. When we wake and see her no longer, we believe that she has withdrawn. Only by reasoning do we discover that she was never really there at all, except as an analogue generated in our brain.

In our present state of knowledge, a person wishing to localize and describe the irreducible subject of experience can hardly do better than accept his brain as the organ that is conscious. "My brain remembers Mama," he can say. "My brain doesn't like my personality very much." "My brain is proud of my accomplishments." He may sound a little silly, but at least he is no longer searching for what cannot be found.

All the events constituting human experience can be called real—that is, they actually occur. Dogs really chase sticks, and boys really have daydreams about them. Some of these real events (like barking dogs) are objective: Different persons can observe them simultaneously and express agreement about them afterwards. Other real events (like daydreams) are only subjective: They can be experienced directly by only one person. All experienced objective events are also, for each individual experiencer, subjective; but not all subjective events are objective.

Philosophers have argued about whether the percept verbally reported as "I see the bird" is the same thing as the electrophysiologic trace of the perceived bird in the brain. Some declare that the phrase "the same as" places such rigorous technical requirements on philosophers that this "identity hypothesis" cannot be proved.¹²

Nevertheless, let us imagine that we are privileged to visit the advanced neuropsychological laboratory of the noted Professor Mimnesko, where we find an experimental subject named Phylax gazing into a tunnel at a stuffed bird that alternately appears and disappears, as it passes before and behind a baffle.¹³ When the bird appears, Phylax says, "Bird." When it disappears, he says, "Gone."

Mimnesko has cleverly fitted Phylax's occipital cortex with an electroresonator, a sort of metal beanie that picks up both surface and deep patterns corresponding to visual percepts. Lines lead from the beanie to a computer programmed to transform cortical patterns into television impulses crudely but recognizably reproducing the stimulus as seen by anyone sitting in Phylax's chair. (How Mimnesko discovered the rules for building the beanie and for programming the computer is a topic for a later apocryphon.)

Standing behind Phylax, watching both bird and television screen, we readily observe a perfect correlation among three variables: (1) the emergence of the stuffed bird from behind the baffle, (2) the display of a crude bird pattern on the television screen, and (3) Phylax's confident announcement, "Bird!"

The philosopher asks the question, "Is the process the electroresonator detects 'the same as' the experience Phylax reports?" Even after discounting the crudity of Mimnesko's experiment, we have to answer, "Not necessarily." Perfect correlation may prove perfect correspondence between two things, but it does not prove them identical. The philosophic proof seems to require a subjective experience of identity, which in turn requires us to take both Phylax's point of view and our own. We cannot do that without being Phylax.

"Wait a minute!"—you say—"What if we put the television screen into the tunnel, where Phylax can see it?"

I should have known you would think of that—but it will make no difference in the end. The proof will still fail—if not because of some dualistic disjunction, then perhaps because of some functional hierarchy of the mind that we have not yet grasped, 14 or at least because stuffed bird and television screen occupy different spaces, or because the television image is very crude.

As stuffed bird comes out from behind the baffle and television bird appears upon the screen, Phylax says, "Two birds!"

"Are they the same?" we inquire expectantly.

"The same bird?" Phylax asks.

"The same to you," we explain. "The same experience."

"Oh no," says Phylax. "One is real, the other is on TV."

Though Phylax believes, as we do, that both the direct, normal percept and its artificial echo inform him about a single, solid stuffed

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bird, he does not find his two percepts the same. Prosthetic feedback of a perceptual process does not duplicate or intensify the original percept; it adds a new percept correlated with the old.

TWO ASPECTS OF SELF

Common sense tells us that the difference in point of view (internal vs. external) is what makes the difference and that the difference is important. For one thing, it prevents philosophers from proving the identity hypothesis. For another, it means that you and I cannot know each other as we know ourselves. For a third, it contributes to the perennial perplexity about the essential *I* and the nature of mind and soul.

Though not synonymous, *soul, mind,* and *self* share the same ambiguity. Does immortality of the soul mean the survival of personal memories or the persistence of an impersonal essence? Is the mind a thinker or a collection of thoughts? When I say that I do not understand myself, how do I distinguish the understander from the understood?

To escape this confusion, let us posit two aspects of self: an attribute self and an executive self. These two aspects have been distinguished by some writers as mind and soul—the mind accessible but transient, the soul elusive but enduring. Both selves contribute to the sense of personal identity—the attribute self by changing its details slowly and never completely, the executive self by performing the same executive functions throughout life.

We could simplify matters by saying that the executive self is the brain while the attribute self comprises some of the brain's activities, but let us try to refine our conception without falling back into ambiguity. Suppose we classify the activities or processes of the brain as either analogues or (other) work. In computer metaphor, analogues¹⁷ are on-line results, displayed for their own sake in an unattended computer room; work is what the program does to process data and produce results. Psychologically, analogues are the products of the mind; work is the operation. (My conception of my brain's operation is, of course, only a set of analogues, not the operation itself.)

Analogues are experienced as percepts, concepts, thoughts (perhaps including imageless thoughts as well as inner speech), memories, feelings, intentions, reflections, and intuitions. Work, on the other hand, has to be inferred from various, effortless functions such as the filtering of sensations and percepts, automatically changing relations among concepts, ¹⁸ self-directing trains of thought, spontaneous recall, modulation of feelings, generation and execution of

intentions "without thinking," incubatory problem solving, or instant valuation of intuitions. Analogues are the constituents (or objects) of consciousness; work is unconscious. Analogues are just as important in thinking as work is; if work is causative, then analogues are causative, too. ²⁰

When a meditator shifts from the cerebral beta to the alpha rhythm (a change in work pattern), he is aware only of changes in his analogues—he feels more pleasant and tranquil; he realizes a satisfying truth; or he hears an approving beep from his biofeedback device.²¹ Before the electroencephalogram was invented, the meditator's purpose was usually to attain metaphysical insights or mystical illuminations, which revealed to him not the workings of his brain but the filial relation of man to God or the identity of self and soul.

Even in treating the nature of mind, mystics have characteristically resorted to metaphor. Maharishi Mahesh Yogi, for example, directs our attention to a nascent thought impulse that rises like a bubble from the bottom of the sea, growing larger as it rises, until it can be appreciated as a thought.²² When Sri Ramana Maharshi expounded the difficulty of realizing the essential self, he did not discuss the brain but repeated the ancient parable of the ten foolish forders. (It seems ten men forded a river together, then took stock on the other side to see whether all had crossed safely. Each man counted the company in turn, and each reported one man missing because each saw only nine men to count—having overlooked himself.)²³

The attribute self comprises all the analogues I recognize, acknowledge, or react to as parts of my self; it is heavy with extracerebral references; I can lay hold of it as easily as I can hug my torso.²⁴ The executive self flees as I pursue it, like the Phantom of the Opera or the Ghost in the Machine. Stealthily it flits across the corpus callosum, silently it sinks to the mesencephalic cellar, nimbly it skitters up the reticule, lightly it gambols among the gyri, smoothly it rolls along the fissure, inaudibly humming to itself, now in one rhythm, now in another. However eagerly I track it, I seem always just to miss it—like Pu and Porcellus following the footprints of the *vusillus*.²⁵

As the linguistic philosophers point out, the pronouns of self ("I," "me," "my," "myself") unambiguously denote the speaker who utters them.²⁶ My complaint that I do not understand myself clearly refers to me, not to you or to anyone else. However, these same pronouns ambiguously—but, contrary to Gilbert Ryle, validly—connote three aspects of the speaker: (1) his body and its behaviors, generally observable by all; (2) a set of analogues—the "internal theater" that Ryle

deprecates—experienced by the speaker and inferable by others; and (3) executive brain work ordinarily observed by no one but to some extent inferable by all.

The linguistic philosophers have shown a strong preference for clear denotation by the pronouns of self and have refused to take some of the ambiguous connotations seriously. Nevertheless, one indispensable pronoun referent, the executive self, is not denotable at all. When I say that I do not understand myself, I mean that I-executive find incompatible two subsets of analogues belonging to my (the speaker's) attribute self. When I say that I have made up my mind, I mean that I-executive experience a subset of predictive, valuative, and feeling analogues that point to or commit me (the speaker) to certain future acts or analogues. When I mention my immortal soul, I may be alluding to my (the speaker's) executive self 's experiential detachment from all analogues, including those of living, aging, sickening, dying, or being absent from the universe. If we stick to denotables (e.g., the speaker), we shall have to work very hard to explicate all these senses of the pronouns of self; and the result still may not satisfy us.

Some scientists and philosophers consider the problem of consciousness a pseudoproblem. B. A. Farrell, for instance, would have us believe that the idea of subjective consciousness will disappear from informed discussion just as soon as we can build a machine whose functioning we cannot distinguish from that of a human being.²⁷ Viewing Farrell's marvelous machine in action, however, some of us might conclude it was conscious like a human being. In contrast, R. W. Sperry puts consciousness to work as a causal mental force operating at the upper levels of neural organization and transcending the details of nervous impulse as the cell transcends its molecules or the organism its cells.²⁸

These radically different theories of consciousness imply quite different conceptions of the person and of the self as an aspect, part, or subsystem of the person—but disputes among theorists may have little effect on common experience. From the common point of view, the perceptual nothingness of the brain leaves a hole in our personal cognitions right where we expect to find the chief organ of experience.

For billions of years, organisms have been evolving as spontaneous information processors, getting and ordering information, generating and executing intentions. The mosquito, the dog, the ape, and man all seek information, process it, and take related action. Only man has a brain reflective enough, curious enough, and inferentially powerful enough to try to find *itself* after evolutionary ages of not

needing to know where it was. This paradoxical searching has decisively shaped many of the mystical, metaphysical, and theological notions that have preoccupied human beings for perhaps a million years.

NOTES

- 1. G. E. Myers, Self: An Introduction to Philosophical Psychology (New York: Pegasus, 1969).
- 2. W. T. Scott, "Tacit Knowing and The Concept of Mind," Philosophical Quarterly 21 (1971): 22-35.
- 3. L. W. Brandt, "The Phenomenology of the Self-Concept," Existential Psychiatry 6 (1967): 422–32; and Myers.
- 4. A. M. Valentine, "Zen and the Psychology of Education," Journal of Psychology 79 (1971): 103–10. Looking over our shoulder, Descartes nods his head, saying, "Yes, yes—the soul acts on the material world but has neither location nor extension in that world." A parallel Hindu conception attributes consciousness to the universal atman, which has neither physical place nor form and which attends to, ignores, or resorbs the mind as obstacles and illusions are progressively removed (R. Otto, Mysticism East and West [New York: Meridian Books, 1957]; and M. Ramana, Maharshi's Gospel [Tiruvannamalai, India: Ramanasramam, 1946]).
- 5. K. Gaarder, "Control of States of Consciousness. I. Attainment through Control of Psychophysiological Variables," Archives of General Psychiatry 25 (1971): 429-35.
- 6. B. Gert, "Can a Brain Have a Pain?" Philosophy and Phenomenological Research 27 (1966): 432–36. For an illuminating discussion touching on "brain death" as the criterion for the death of the person, see L. R. Kass, "Death as an Event: A Commentary on Robert Morison," Science 173 (1971): 698–702.
- 7. Cf. Gilbert Ryle, The Concept of Mind (London: Hutchinson Publishing Group, 1949), p. 198.
 - 8. One wag expressed this proposition as "Cogitat ergo non est."
- 9. H. E. Sigerist, A History of Medicine (New York: Oxford University Press, 1951), vol. 1, Primitive and Archaic Medicine.
- 10. W. Richards, "The Fortification Illusions of Migraines," Scientific American 224 (1971): 88-96.
- 11. R. J. Vetter and S. Weinstein, "The History of the Phantom in Congenitally Absent Limbs," Neuropsychologia 5 (1967): 335-38.
 - 12. Myers (n. 1 above).
- 13. Cf. the "autocerebroscope" of Herbert Feigl (H. Feigl, "The 'Mental' and the 'Physical,' "in *Minnesota Studies in the Philosophy of Science*, ed. Feigl, M. Scriven, and G. Maxwell [Minneapolis: University of Minnesota Press, 1958], 2:370–497).
- 14. R. W. Sperry, "An Objective Approach to Subjective Experience: Further Explanation of a Hypothesis," *Psychological Review* 77 (1970): 585–90.
 - 15. K. H. Pribram, "The Realization of Mind," Synthese 22 (1971): 313-22.
- 16. H. Morick, "Cartesian Privilege and the Strictly Mental," Philosophy and Phenomenological Research 31 (1971): 546-51.
- 17. Here "analogue" takes only the common English sense—not the sense by which it distinguishes analog computer from digital computer.
- 18. G. A. Kelly, The Psychology of Personal Constructs (New York: W. W. Norton & Co., 1955), vol. 1.
- 19. Michael Polanyi, Personal Knowledge: Towards a Post-critical Philosophy (Chicago: University of Chicago Press, 1958).
 - 20. Sperry (n. 14 above).
- 21. K. Gaarder, "Control of States of Consciousness. II. Attainment through External Feedback Augmenting Control of Psychophysiological Variables," *Archives of General Psychiatry* 25 (1971): 436–41.

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- 22. D. Goleman, "Meditation as Meta-Therapy: Hypotheses toward a Proposed Fifth State of Consciousness," *Journal of Transpersonal Psychology* 3 (1971): 1–25.
- 23. An authentic spokesman of the Vedic tradition, Ramana (n. 4 above) specifically cautioned his devotees against trying to locate "I-ness" in the head, saying that the region of the heart had more intuitive validity—though, strictly speaking, consciousness could have no particular place assigned to it in the physical world, since that world was no more than an illusion, while only consciousness was real.
- 24. Since analogues are conscious, the attribute self is conscious. Here "conscious" takes only the sense "present to awareness at some time." An analogue that was present to my awareness yesterday need not have been verbally reportable then and need not be recallable now; but, awake and in my right mind, I can always be aware of some large subset of attribute-self analogues.
- 25. A. A. Milne and A. Lenard, Winnie ille Pu (New York: E. P. Dutton & Co., 1960). Cf. Ryle (n. 7 above), pp. 195–98.
 - 26. Ryle.
 - 27. B. A. Farrell, "On the Design of a Conscious Device," Mind 79 (1970): 321-46.
 - 28. Sperry (n. 14 above).