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Hands

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Madelaine J. was admitted to St. Benedict's Hospital near New York City in 1980, her sixtieth year, a congenitally blind woman with cerebral palsy, who had been "looked after" by her family at home throughout her life. Given this history, and her pathetic condition—with spasticity and athetosis, i.e., involuntary movements of both hands, to which was added a failure of the eyes to develop—I expected to find her both retarded and regressed.

She was neither. Quite the contrary: she spoke freely, indeed eloquently (her speech, mercifully, was scarcely affected by spasticity), revealing herself to be a high-spirited woman of exceptional intelligence and literacy.

"You've read a tremendous amount," I said. "You must be really at home with Braille."

"No, I'm not," she said. "All my reading has been done for me—by talking books or other people. I can't read Braille, not a single word. I can't do *anything* with my hands—they are completely useless."

She held them up, derisively. "Useless Godforsaken lumps of dough—they don't even feel part of me."

I found this very startling. The hands are not usually affected by cerebral palsy, at least, not *essentially* affected: they may be somewhat spastic, or weak, or deformed, but are generally of considerable use (unlike the legs, which may be completely paralyzed—in that variant called Little's disease, or cerebral diplegia).

Miss J.'s hands were *mildly* spastic and athetotic, but her sensory capacities—as I now rapidly determined—were completely intact: she immediately and correctly identified light touch, pain, temperature, passive movement of the fingers. There was no impairment of elementary sensation, as such, but in dramatic contrast, there was the profoundest impairment of perception. She could not recognize or identify anything whatever—I placed all sorts of objects in her hands, including one of my own hands. She could not identify—and she did not explore; there were no active "interrogatory"

movements of her hands—they were, indeed, as inactive, as inert, as useless, as “lumps of dough.”

This is very strange, I said to myself. How can one make sense of all this? There is no gross sensory “deficit.” Her hands would seem to have the potential of being perfectly good hands—and yet they are not. Can it be that they are functionless—“useless”—because she had never used them? Had being “protected,” “looked after,” “babied” since birth *prevented* her from the normal exploratory use of the hands which all infants learn in the first months of life? Had she been carried about, had everything done for her, in a manner that had prevented her from developing a normal pair of hands? And if this were the case—it seemed far-fetched, but was the only hypothesis I could think of—could she now, in her sixtieth year, acquire what she should have acquired in the first weeks and months of life?

Was there any precedent? Had anything like this ever been described—or tried? I did not know, but I immediately thought of a possible parallel—what was described by Leont’ev and Zaporozhets in their book, *The Rehabilitation of the Hand* (Pergamon Press, 1948). The condition they were describing was quite different in origin: they described a similar “alienation” of the hands in some two hundred soldiers following massive injury and surgery—the injured hands felt “foreign,” “lifeless,” “useless,” “stuck on,” despite elementary neurological and sensory intactness. Leont’ev and Zaporozhets spoke of how the “gnostic systems” that allow “gnosis,” or perceptive use of the hands, to take place; could be “dissociated” in such cases as a consequence of injury, surgery, and the weeks- or months-long hiatus in the use of the hands that followed. In Madelaine’s case, although the phenomenon was identical—“uselessness,” “lifelessness,” “alienation”—it was lifelong. She did not need just to recover her hands, but to discover them—to acquire them, to achieve them—for the first time: not just to regain a dissociated gnostic system, but to construct a gnostic system she had never had in the first place. Was this possible?

The injured soldiers described by Leont’ev and Zaporozhets had normal hands before injury. All they had to do was to “remember” what had been “forgotten,” or “dissociated,” or “inactivated,” through severe injury. Madelaine, in contrast, had no repertoire of memory for she had never used her hands—and she felt she *had* no hands—or arms either. She had never fed herself, used the toilet by herself, or reached out to help herself, always leaving it for others to help her. She had behaved, for sixty years, as if she were a being without hands.

This then was the challenge that faced us: a patient with perfect elementary sensations in

the hands, but, apparently, no power to integrate these sensations to the level of perceptions that were related to the world and to herself; no power to say, “I perceive, I recognize, I will, I act,” so far as her “useless” hands went. But somehow or other (as Leont’ev and Zaporozhets found with their patients), we had to get her to act and to use her hands actively, and, we hoped, in so doing, to achieve integration: “The integration is in the action,” Roy Campbell wrote.

Miss J. was agreeable to all this, indeed fascinated, but puzzled and not hopeful. “How *can* I do anything with my hands,” she asked, “when they are just lumps of putty?”

“In the beginning is the deed,” Goethe wrote. This may be so when we face moral or existential dilemmas, but not where movement and perception have their origin. Yet here too there is always something sudden: a first step (or a first word, as when Helen Keller said “water”), a first movement, a first perception, a first impulse—total, “out of the blue,” where there was nothing, or nothing with sense before. “In the beginning is the impulse.” Not a deed, not a reflex, but an “impulse,” which is both more obvious and more mysterious than either.... We could not say to Madelaine “Do it!” but we might hope for an impulse; we might hope, we might solicit, we might even provoke one....

I thought of the infant as it reached for the breast. “Leave Madelaine her food, as if by accident, slightly out of reach on occasion,” I suggested to her nurses. “Don’t starve her, don’t tease her, but show less than your usual alacrity in feeding her.” And one day it happened—what had never happened before: Miss J., impatient, hungry, instead of waiting passively and patiently, reached out an arm, groped, found a bagel, and took it to her mouth. This was the first use of her hands, her first manual act, in sixty years, and it marked her birth as a “motor individual” (Sherrington’s term for the person who emerges through acts). It also marked her first manual perception, and thus her birth as a complete “perceptual individual.” Her first perception, her first recognition, was of a bagel, or “bagelhood”—as Helen Keller’s first recognition, first utterance, was of water (“waterhood”).

After this first act, this first perception, progress was extremely rapid. As she had reached out to explore or touch a bagel, Miss J., in her new hunger, now reached out to explore or touch the whole world. Eating led the way—the feeling, the exploring, of different foods, containers, implements, etc. “Recognition” had somehow to be achieved by a curiously roundabout sort of inference or guess-work, for having been both blind and “handless” since birth, she was lacking in the simplest internal images (whereas Helen Keller at least had tactile images). Had she not been of exceptional intelligence and

literacy, with an imagination filled and sustained, so to speak, by the images of others, images conveyed by language, by the *word*, she might have remained almost as helpless as a baby.

A bagel was recognized as round bread, with a hole in it; a fork as an elongated flat object with several sharp tines. But then this preliminary analysis gave way to an immediate intuition, and objects were instantly recognized as themselves, as immediately familiar in character and “physiognomy,” were immediately recognized as unique, as “old friends.” And this sort of recognition, not analytic, but synthetic and immediate, went with a vivid delight, and a sense that she was discovering a world full of enchantment, mystery, and beauty.

The commonest objects delighted her—delighted her, and stimulated a desire to reproduce them. She asked for clay and started to make models: her first model, her first “sculpture,” was of a shoehorn, and even this, somehow, was imbued with a peculiar power and humor, with flowing, powerful, chunky curves reminiscent of an early Henry Moore.

And then—and this was within a month of her first recognitions—her attention, her appreciation, moved from objects to people. There were limits, after all, to the interest and expressive possibilities of things, even when transfigured by a sort of innocent, ingenuous, and often comical genius. Now she needed to explore the human face and figure, at rest and in motion. To be “felt” by Miss J. was a remarkable experience. Her hands, only such a little while ago inert, doughy, now seemed charged with a preternatural animation and sensibility. One was not merely being recognized, being scrutinized, in a way more intense and searching than any visual scrutiny, but being “tasted” and appreciated meditatively, imaginatively, and aesthetically, by a born (a newborn) artist. They were, I felt, not just the hands of a blind woman exploring, but of a blind artist, a meditative and creative mind, just opened to the full sensuous and spiritual reality of the world. These explorations too pressed for representation and reproduction as an external reality.

Miss J. started to model heads and figures, and within a year was locally famous as the Blind Sculptress of Saint Benedict’s. Her sculptures tended to be half or three-quarters life size, with simple but recognizable features, and with a remarkably expressive energy. For me, for her, for all of us, this was a deeply moving, an amazing, almost a miraculous, experience. Who would have dreamed that basic powers of perception, normally acquired in the first months of life, but failing to be acquired at this time, could be acquired in one’s sixtieth year? * What wonderful possibilities of late learning, and

learning for the handicapped, this opened up. And who could have dreamed that in this blind, palsied woman, hidden away, inactivated, over-protected all her life, there lay the germ of an astonishing artistic sensibility (unsuspected by her, as by others) that would germinate and blossom into a rare and beautiful reality, after remaining dormant, blighted, for sixty years?

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But the case of Madelaine J., as I was to find, was by no means unique. Within a year I had encountered another patient (Simon K.) who also had cerebral palsy combined with profound impairment of vision. While Mr. K. had normal strength and sensation in his hands, he scarcely ever used them—and was extraordinarily inept in handling, exploring, or recognizing anything. Now we had been alerted by Madelaine J., we wondered whether he too might not have a similar "developmental agnosia"—and, as such, be "treatable" in the same way. And, indeed, we soon found that what had been achieved with Madelaine could be achieved with Simon as well. Within a year he had become very "handy" in all ways, and particularly enjoyed simple carpentry, shaping plywood and wooden blocks, and assembling them into simple wooden toys. He had no impulse to sculpt, to make reproductions—he was not a natural artist like Madelaine. But still, after a half-century spent virtually without hands, he enjoyed their use in all sorts of ways.

This is the more remarkable, perhaps, because he is mildly retarded, an amiable simpleton, in contrast to the passionate and highly gifted Madelaine J. It might be said that she is extraordinary, a Helen Keller, a woman in a million—but nothing like this could possibly be said of simple Simon. And yet the essential achievement—the achievement of hands—proved wholly as possible for him as for her. It seems clear that intelligence, as such, plays no part in the matter—that the sole and essential thing is *use*.

