

Dr. Pettigot's Face

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Exactly symmetrical, with a crease in the center of the chin, it was a face that nobody would notice in a crowd except perhaps for its extraordinary blankness: it was as calm and unreadable as the visage of an antique god. One had the impression that its pale pinkish surface was capable of expression but remained for the moment immobile, perhaps through some failure of the nervous system that connected it to the mind. There was no failure of the nervous system. In fact his facial muscles were extraordinarily agile. A fly that happened to light on his brow was banished with a single twitch, and should a crumb cling to his cheek while eating it was unnecessary for him to go to the trouble of raising his napkin: a brief contraction of the Orbicular muscle, and presto! the offending morsel had fallen from sight. It was Pettigot's will that directed all these details, as it accurately did everything else in his life.

In spite of this physical reserve his outward life was normal. His digestion was excellent and he drove a four-year-old car in perfect adjustment. His clothes were conservative to the point of the bizarre: knitted ties, suits with pleats in the trousers, wide-brimmed fedoras, and overshoes if there was any danger of rain. His wife Gilda, who was a good deal younger than he was (in his days as a professor of medicine he had married a student), had learned to organize the routine of the household perfectly; otherwise she was subject to his disapproval. She was an excellent cook—they both preferred health food and lived largely on cereals and vegetables—and was able to type his manuscripts, a duty that was not onerous since on the average he produced a small article only once every three or four years. Her chronic frigidity had been treated by specialists but to very little avail. For the rest she had her own life. Having given up her medical career to marry, she was free to do exactly as she pleased. Or so it seemed to Pettigot. Whose given name, known only to his wife, was Ambro, although she herself called him Kink, and so he signed the memos he left for her on the bulletin board in the kitchen. How this nickname had originated they had both forgotten.

At the Institute for Physioanalytic Study he was not very much respected by his colleagues. Working in isolation and with limited means, ignored by the scientific world at large, he was content to be regarded as a harmless eccentric. His perennial quarrels with the Director Dr. Felix Mandel over matters of budget were legendary. He himself would have been hard put to explain what his research consisted of. Although he was trained as an anatomist, his interest had turned gradually over the years to the study of behavior. But by no means did he confine himself to the physical. His real subject was the enigma that had baffled the greatest of intellects from the dawn of thought to the present: the relation between body and soul. Somewhere deep inside him man thought and felt. Outwardly he moved, his muscles twitched. What was the mechanism that connected the two? How could thought move matter; how could matter produce thought? For spirit existed in one realm, flesh entirely in another. For twenty years Pettigot cut apart cadavers, and learned: nothing. He didn't find the soul. He hadn't expected to.

He was objective, he did not prejudge the facts, and he did not allow free rein, or any rein at all, to his emotions. One of the conclusions of his twenty years of work was the fairly obvious one that the face is the chief window of the soul, and this led him to concentrate thereafter on this limited portion of the human exterior. He became an expert on the anatomy of facial expression. Assiduously he reviewed the literature, beginning with the *Physiognomy* of that odd Swiss parson Lavater (1781) and continuing through Corman and Rousseau (1882), Einbilder (1924; 1928), and Kawamoto (1940) to Bagration's definitive study *Jeux Musculaires et Expressions du Visage* (Paris, 1949). At first he was afraid that Bagration had anticipated him and the work he planned had already been done. But Bagration confined himself to the surface of the body and showed no talent, or inclination, for more profound investigations. Pettigot went on from where Bagration left off. Man, he reflected, was the only animal capable of facial expression (he rejected the claims of dog-lovers, persons who believed their canaries could show grief, and so on), and therefore the only animal whose soul could be investigated through examining his external musculature. It was well known that when a person smiled he was happy, and when he frowned, or his mouth turned down, he was sad. But this rough-cut empiricism was lacking in quantified taxonomic parameters; that is, it was too crude. There were on the human face twenty-nine separate muscles, and since they were symmetric the total was double this figure. Each could be contracted separately, or they could join together in various combinations. The total number of permutations was formidable; it ran into the hundreds of billions. But if all possible expressions could be classified—if a table or chart could be devised showing the exact equivalence in the soul of every combination of contractions—the psychologist would possess an exact instrument on which he might read the state of the organ he dealt with, just as the cardiac specialist reads the ailments of the heart in the contortions of a pen-line on paper.

Pettigot set to work with vigor and perseverance. The subject was a complex one, involving as it did anatomy, physiology, psychology, and for all one knew

even metaphysics (he was not sure what he might find if he ever succeeded in reading the human soul as the cardiologist did the heart). Assiduously he haunted mental hospitals and sketched the expressions of the inmates, some of them frozen by mania into permanent grimaces. The theater too he frequented in the hope that actors, whose business it is to express emotions through the face, had accidentally stumbled on the secret he was looking for. In the lovers' lane of the city where he lived, using infra-red equipment, he painstakingly photographed the visages of ecstasy. In the laboratory he gave chocolates to little children borrowed from a nearby progressive kindergarten, on the other hand subjected them to mild electric shocks, and recorded the results in a notebook. The results were predictable: they smiled when eating chocolates, wrinkled up and burst into tears when shocked.

The problem that still thwarted him was a methodological one: how could he verify the true condition of the souls involved? How could he be sure that the little children were really enjoying the chocolates, and disenjoying the shocks—how could he be sure, for example, that they didn't merely *understand that it was expected of them* to smile when given candy and cry when mistreated? He was confronted with the problem of solipsism that had baffled every other investigator from the time of the Greeks. How was it possible to know what was happening in the soul of another? And, this information lacking, how could one possibly discover the connection between body and soul? On this subject all the authorities, from Aristotle to Lavater and Bagnard, were as ludicrously incompetent as himself.

The thing is, it shouldn't be imagined that because Pettigot was a highly trained and highly specialized scientist he was insensitive to the values of the humanities. He had an interest in history and collected books on the Spanish Inquisition, and he knew a good deal about Bach. At the ballet he noted with interest the conventional displacements of the limbs intended as equivalents to the passions. In literature he preferred the romantics and symbolists of the nineteenth century. Not only were these things restoring to mind and body, but occasionally they stimulated his research in unexpected ways. It was while reading "The Purloined Letter," in fact, that he discovered the crucial text of his career, the words around which his subsequent life turned as about a well-oiled pivot.

"When I wish to find out how wise, or how stupid or good, or how wicked is any one, or what are his thoughts at the moment, I fashion the expression of my face, as accurately as possible, in accordance with the expression of his, and then wait to see what thoughts or sentiments arise in my mind or heart, as if to match or correspond with the expression."

Pettigot was electrified and put down the story without finishing it. Putting Poe's theory to the test, he found that it worked. The connection between emotion and facial expression could be reversed. To smile was to produce inwardly the feeling of having something to smile about; to grimace in terror was to know a kind of terror. From that day forth he abandoned all the expensive equipment in his laboratory—the scalpels and dissecting-tables, the infra-red cameras and

generators of electric shocks—in favor of a simple device obtainable in any hardware store: a mirror.

At this point he began making rapid and even dizzying progress in the research that had faltered for so many years. With the mirror installed in the center of the otherwise empty laboratory he pursued a methodology as simple as Columbus' egg, so simple it could only be a product of genius.

1. He employed only introspection; i.e., he did not have recourse to subjects other than himself.

2. In position before the mirror he contracted each of the twenty-nine facial muscles separately, and observed what mental state was thereby produced in him.

3. He deduced that inversely the existence of each of these mental states produced the contraction of the corresponding muscle or muscles.

In this early stage of his work he confined himself to simple states of mind produced by the contraction of a single pair of muscles. The Frontals, for example, drew the scalp back and produced an effect of surprise. The contraction of the Zygomatics, which drew the mouth upward, gave a pleasurable sensation, while wrinkling the brow with the Corrugator supercilii threw him into deep thought. The extrinsic oculars responsible for eyeball movement (superior Rectus, inferior Rectus) controlled the position of the mind in time: to look out horizontally was to think of the present, to deflect the iris downward was to recall the past, to look upward was to contemplate the future. He took copious notes. In only a few weeks he had charted the primary emotions corresponding to each of the twenty-nine symmetrical muscles of the face.

He then moved on to complex states of mind produced by the tension or equilibrium of two or more pairs of muscles in contraction. For example, skepticism or irony was indicated by the play of four different sets of muscles. The Zygomatics drew the mouth upward while simultaneously the Triangulares held it downward; the Buccinators and Risorius joined in a tension producing a light wrinkle in the cheek just beyond the mouth. The expression said, "Privately I am amused, but I control my amusement. Only the perceptive have noticed that what is being said, or what I am saying, has two meanings." Such combinations were intricate in their possibilities, infinite in fact. Yet, with the vast reservoir of his own emotions now available to him, the cataloguing of these relationships was only a matter of assiduous and patient effort.

It interested him greatly, so much so that his wife Gilda, coming to the laboratory one evening to find out why he had not come home to dinner, found him seated before the mirror with a notebook on his knee, making one complex expression after another.

"Ah, I'm glad you've come. What time is it anyhow? The interplay of the various platysmata surrounding the mouth is quite interesting. The Levator labii superioris, of course, is the chief elevator of the upper lip. The Levator labii superioris alaeque nasi—here—assists it and also dilates the nostrils, and together with the former and the Zygomaticus minor forms the nasolabial furrow which is deepened in expressions of sadness. When I contract all three together—as you see—I produce in myself an emotion of contempt or disdain."

She took him home; he went off willingly even though still somewhat abstracted. But the preoccupation was expanding to fill his whole life, even at the dinner table. When they had reached the stage of the salad she looked up to find him in an expression that might be described, perhaps, as Indignation Combined with Profound Moral Condemnation.

"Are you thinking of something?"

"No, I'm working."

"Without a mirror?"

Still holding the expression on his face, he suggested, "Perhaps you can serve instead. Is it true that the expression I am indicating is produced by the Frontals working in conjunction with the Corrugator supercilii to draw the skin of the brow to the center and at the same time upward? Because that corresponds to my subjective impression."

Instead of answering she posed another question. "Why is your expression indicating Indignation Combined with Profound Moral Condemnation, if you are not feeling this? Because you know, Kink, to go about making faces that have no meaning is to lose touch with reality."

"I am feeling it. What you asked me was what I am thinking of, and I am not thinking of anything. Instead the state of mind is evoked by the muscular configuration itself. Even you should be able to grasp this simple distinction." Satisfied with the results of his analysis, he abruptly relaxed his face. They proceeded to the tapioca pudding.

With the rapidity of bursting fireworks Pettigot made more discoveries, about the relation between facial expression and character, for example. For character might be defined as a state of mind prolonged to the point where it becomes permanent. A baby or young child asleep, as everyone knows, is without expression. But in older persons the years of domination by a single state of mind (avarice, timidity, disapproval) produce a permanent deformation of the face; the skin wrinkles and stretches to accommodate the soul beneath. After forty each human being wears his destiny stamped on his visage. And so Pettigot, looking at a person opposite on a bus, or a criminal between two detectives, or a face fixed momentarily in the glow of the footlights, knew for a certainty, "This is how it feels to be a prudish old maid, a child-murderer, an actress pretending to be Camille."

The actress, of course, was not a phthisic French demimondaine, only pretending to be. And this matter of simulation or mimicry injected another and unexpected complexity into his studies. The face of an actress was a trick of surfaces, a palimpsest of deception and reality. The Zygomatics and the Mentalis might indicate an expression of amorosity, for instance, while at the same time the Pretarsals and Risorius conveyed another expression that might be described as "look at me and admire, I am portraying amorosity." What under such circumstances did the actress truly feel? Pettigot, seated before his mirror, arranged his own face according to this complex state, and *knew*. Through muscular manipulation he had created in his soul an emotion previously impossible for it, that

of the actress playing Camille. He had *become* an actress playing Camille. Since states of being are simply states of consciousness, he could make himself into whatever he wanted to be. There in the silence of his laboratory, empty now except for the mirror, he felt almost within his grasp the secret of human happiness, of man's final triumph over his own imperfection and the imperfection of the world that surrounded him.

Not only his own happiness, of course, but the happiness of others as well. (He was not an altruist, only a rigorously objective logician.) Reflecting on his domestic environment, he turned his mind to his wife Gilda with a new and fertile surmise. That evening during a light supper of mushroom cutlets, he shared with her the subject that pressed in his mind.

"My dear, I have something to say to you."

Sensing the importance of the moment, she laid down her fork.

"Certain findings in the laboratory have suggested the possibility that your conjugal shortcomings . . ."

"My what?"

"You know very well of what I speak. It is possible, I say, that these conjugal difficulties or inadequacies might be surmounted if you could assume the proper facial expression at the appropriate time. The true feeling will come after."

She examined him, it seemed, in a new way, with a kind of curiosity. After a pause she said quietly, "The facial expression?"

"Yes."

"And what is it?"

But here Pettigot realized that he was the prisoner of his own introspective method. Having no first-hand knowledge as to what might be the facial expression accompanying female orgasm, he was unable to tell her what combination of muscles to contract so as to achieve this effect—an effect he was certain lay within her grasp if only this combination (and the term was fitting; it was a secret almost like the combination of a safe) could be determined. Assailed by a tweak of mild nostalgia, Pettigot remembered his courtship and marriage, the bright promise of those days when happiness seemed to lie like a shining garden of delights before him—before them, he corrected—the individual blossoms of which waited only to be plucked. Pettigot mused; his glance fell to the floor. (Depression of the iris below the horizontal plane; thoughts of the past.) Then it fixed on the wall opposite, and on the cornice where it joined the ceiling. (Iris in the horizontal plane, or above it; thoughts of the present and future.) Was it possible that all his years of work would fall victim to this paradox of solipsism—that he had discovered a universal system that was confined within himself and applicable only to himself? That would indeed be an irony. Then his glance, turning to the side (lateral deflection of the iris; transition from one idea to another), moved from object to object in this familiar parlor where his domestic drama had unrolled for twenty years.

And with the brightness of epiphany the final truth struck him: happiness came not outwardly from these petty objects, these souvenir bud-vases and embroidered pillows from Atlantic City, but *inwardly from within himself*. Quite

calm now, he got into his well-adjusted car and drove to the Institute. It was eleven o'clock at night, and a Sunday at that, but he had a key. Quickly admitting himself to his laboratory, he switched on the light and took up his place before the mirror. The expression he had to assume now was a complex one: "The eminent behavioral researcher taking satisfaction in the fact that, after years of misunderstanding and neglect, his ideas are accepted by the scientific community, so that at last he basks in a well-merited celebrity and acclaim." After a number of false starts he found the right combination of muscles to contract. The major and minor Zygomatics were drawn into especially powerful play, forming a smile which was modified by the Frontals raising the brow in mild and modest deprecation. The four Auricular muscles were in tension, while the Levators and Risorius held the mouth in a configuration of light contempt. The Buccinators were firm, flattening the cheeks in satisfaction. And with this last adjustment, as though a searching hand had unexpectedly found the combination of a safe, the sensation of happiness came. His faith in himself was justified. He had arrived at the goal of his years of patient work.

Behind him, entering the laboratory softly, came the others to share in his triumph: his beloved wife Gilda, the Director of the Institute, Dr. Mandel, who had so often been his enemy in the past, and a pair of young men in white scientific garb who had no doubt come to add their kudos to the general esteem.

Gilda seemed to be in a most considerate, even affectionate humor. Softly, with the air of revealing the details of a pleasant surprise, she informed him that there were to be some changes in the living arrangements. She, at least for the present, would go on living in the house. For him a spacious room had been reserved at the Greenbrook Academy for Persons of Exceptional Mentality. It was great good fortune and an honor that the Academy had agreed to accept him. Not everyone (and Dr. Mandel at her elbow agreed!) had the necessary qualifications for a Fellowship. And these young men (they were then, as he had surmised, minor representatives of the scientific community) had come to accompany him there and see to it that his every want and comfort was provided for.

Now, it shouldn't be imagined that Pettigot was taken in by his wife's suave words. He knew very well what kind of a place the Academy was. But he knew also something that they didn't know and nobody knew but himself, that none of it mattered. He would be happy there and happy anywhere, if he were allowed to take his mirror. He was allowed to take his mirror. One of the young men carried it for him. The other deferentially guided him at his elbow.

And behold Pettigot. It has come to pass exactly as he foresaw and planned. At the Academy, in a large clean room filled with sunlight, he grimaces incessantly, in a banquet, an orgy, of satisfaction. He knows esteem, praise, the warmth of long labor rewarded, the envy of lesser rivals. The greater and lesser Zygomatics, through constant smiling, have become noticeably larger in size. He spends his waking hours at the mirror and goes to bed content. Is he mad? No, you are, gazing at this page stonily.