HUMOURAL PASSIONS AND SEASONED CARES

Medicine Across Cultures: Medicine and the Mind, 600-1600

Barnard, 4 December 2004

We constantly make theories about the world, about its workings, the causes and events that operate within it; that is how it makes sense, or fails to make sense to us. We also make theories about our lives - about the causes and reasons of our actions, about our decisions, about our failures to make decisions or to reason about our actions. And we make theories about ourselves, too - about our body and its biology, and about our mind, about its visible and invisible processes, about the strange ways in which we are at once intending, thinking, theorizing, acting beings and animal bodies in the natural and cultural world about which we make theories. It is when we are the objects of our own investigations that we are most complicatedly human - not really explainable in terms of theories we apply to the world, but somehow larger than theory, the heroes or antiheroes, as it were, of the history of ideas.

I shall not talk about the humors as those four fluids - black bile, choler, blood, phlegm - that circulated with the organism from early Greek antiquity to early modernity and, arguably, even beyond, accounting for our temperaments, moods, character, states of health and illness, underlying pharmacopeia, diagnosis, treatment, and nosology. Instead I shall examine humors as a linguistic construct within the broader history of ideas, whose perdurance testifies to the success of a particular kind of theory, a specific way of representing our physical selves to our thinking, theorizing selves. I shall not trace here the history of these constructs, either - I am writing a book that does that - but I would like to show today that this very history helps us understand our ordinary selves as theorists of the mind-body relation, shedding light on the psychology of the psychologist, so to speak.

The starting-point here is the child, for our self-perception as dual, that is, as constituted of a mind and of a body, arguably begins as soon as the mind is aware of its own existence. Once speech is developed, allowing us to project ourselves into the world, to communicate with other minds and to name and thus conceive of abstract

matters, it also breeds, and perhaps develops along with the illusion that our minds are primarily immaterial. Materiality seems indeed, at first blush, to have little to do with ideas, language, and meaning, however enmattered might be all our mental functions. The very use of the possessive pronoun that accompanies our references to names of parts of our bodies - my hand, his back - seems to testify to the notion that our tendency to split our conscious, speaking selves away from our bodies originates to some extent in our very capacity for language, and may explain the ease with which, once we leave infancy and become self-aware, we live our lives by forgetting over and over again that we are, in fact, embodied, mortal creatures, through and through.

Theories of consciousness today generally pursue and relie on this notion that the mind, to be understood scientifically, objectively, must be conceived as embodied. Because of this, the remit of the cognitive and mind sciences has expanded in the past decades to include emotions. Emotions, it is increasingly clear, are fundamental to thinking processes and to experience, even to rationality, but, partly because of Descartes's attribution, over 350 years ago, of all thought and all meaningful emotion to the functions of the immaterial rational soul, they were throughout modernity conceived in opposition to reason, as a set of physiological events whose power, benign or dangerous, was in any case not to be trusted without the protective mantle of the reason that uncovered its workings.

Descartes, and this is quite well known, put an end to the reign in the West of scholastic psychology and to the Aristotelian continuum of three interrelated souls - one vegetative (reproduction, nutrition, desire, repulsion), that all living things including plants possessed, one sensitive (perceptions, motor, sensations) shared by humans and animals, one rational (highest, thinking, contemplation), aspects of which animals possessed but whose highest, contemplative features belonged to humans only. With Descartes, the human became a dual creature, its body extended in space (*res extensa*), its soul a disembodied, thinking thing (*res cogitans*).

The old model, established via the influence of Galen's own critical synthesis of Hippocrates, Plato, Aristotle and the 3rd-century BC Alexandrians, had bequeathed to the medieval and Renaissance West a rather complex but usable picture of the mind. As a model of fitness, it earned its reputation because its advocates knew how to

persuade their patients that health could be achieved through the perfect balance between the humors. The humoural model was, historically speaking, a construct whose success, like any medical success, required persuasion; and the Hippocratic tradition developed thanks to a rhetorical tradition that would be taught within the medical schools in which Hippocrates and Galen reigned for so long. It supported a psychology that allowed for the integration into an organic whole of bodily functions, passions, sensations, cognition, reason and volition: the three souls of the scholastics were interdependent, and that was why we were aware of our emotions, and, inversely, affected by them - why the body's motions affected the soul, and the soul's motions affected the body. It also accounted for knowledge, ratiociation, imagination, memory, matching each one of these functions of the sensitive soul with a location in the brain - cogitation was in the middle ventricle, memory in the posterior ventricle, common sense and imagination in the two anterior lateral ventricles. The Spanish philosopher and humanist Juan Luis Vives, for instance, an associate of Erasmus (born in Valencia in 1492, lived and died in Bruges), wrote a treatise on the passions called *De anima et vita beata* (f.p. 1538), in which he described how:

> a mere commotion of our fantasy bearing some resemblance to an opinion or judgement that a given object is good or bad, is enough to disturb our soul with all emotions: we fear, rejoice, cry, feel sad. This is also why our emotions seem to converge toward that part of the body where the fantasy prevails, and also why we will actually attribute bodily qualities to emotions and call them warm, cold, dry, or a mixture of those. Internal and external causes tend sometimes to exacerbate and sometimes to repress the influence of our bodily temperament. Among the internal causes we find the emotions themselves: sadness makes us cold and dry, joy makes us warm and wet. Emotions both reflect and contribute to the temperament of the body.

Descartes's reasons for cutting this old, integrated creature in two had to do with his ambition to replace the Aristotelian physics - that already Bacon had declared untenable - with his own, new system; but these reasons are irrelevant here. What matters to us is that, in fact, he also, quite incoherently with regard to his own system, acknowledged fully the role of emotions in a conscious, ethical life - and one should not forget his statement in the *Principles of Philosophy* (1644 Latin, 1647 French) that ethics were, along with medicine and mechanics, the topmost branch of the tree of philosophy, whose roots were metaphysics, and whose trunk was physics. Indeed he made room within his *Treatise on the Passions*, as well as in his correspondence with

Princess Elizabeth, for an intense interaction between emotion and reason, between bodily processes and consciousness. He recycled the physiology that had sustained theories of psychology until then, abolishing the use of the term humor but holding on to the 'spirits' that accompanied them - amphibian particles that travelled throughout the body, ensuring the communication of sensation between nerves, the transmission of sense-perceptions to the *sensus communis* (common sense) in the brain, all emotions and all passions, conceived as an 'agitation' of the spirits in response to perceptions apt to trigger such an agitation.

Animal spirits incarnated, literally, the materiality of emotion and sensation, their reducibility to mobile particles. Descartes wanted to show that all of this activity, which remained intact within his system, was 'just' mechanical, that consciousness was a function of the immaterial soul. Without the *res cogitans*, we were just well designed organisms, unaware, incapable of experiencing, conceiving, remembering, emoting meaningfully; without it there was only brute sensation and crude perception, of the sort that animals had, creatures now deprived of a soul by the Cartesian blow to the great chain of being between all living things. His - again, mainly tactical - denial of a soul to animals is a crucial chapter in the history of materialism: the debates and controversies it ignited posed with urgency the problems begotten by the abolishment of scholastic physics. Pierre Bayle would argue later (in the *Dictionnaire historique et critique*, 1697, art. Dicaearchus) that to posit that materialism was true for humans was to reduce man "to the condition of a machine, whence it follows that the human race is not distinct from the body, but is only a reconstruction, a mechanical disposition of several parts of matter". Clearly, our capacity for self-perception - our consciousness - precludes the reality of mechanism as anything but a thought-experiment; the notion of a man-machine, refined in the 18th century by La Mettrie, can only be abhorrent.

The revolution in physics that took place during the 17th century was not, in fact, matched by a revolution in biology, medicine and psychology. The end-date in the title of this conference is 1600, which makes sense if one dates the birth of a new physics at around that time. But, perhaps because of the abhorrence inherent in a vision of a mechanical human being, because of the need to hold onto a divine creator, a first cause, and even a final cause - the Aristotelian teleology that Galen integrated

within his analyses of anatomy and physiology - theories accounting for the functions of the human organism changed very little. Ethics continued beyond 1600 and, to an extent, beyond 1700, to be a form of moral psychology, taking the form of guides to behaviour that were themselves dependent on the tripartite organism. The perturbations of passions took place in the sensitive soul; the rational soul was able to take cognizance of the events next door, so to speak, to modulate passions, to know, describe, control them. This psychology accounted for the very possibility of moral responsibility. Our self-description as moral creatures, in other words, rested on the acknowledgement that reason and physiologically mediated emotion were intimately, humorally connected. Descartes did not modify this picture at all; although he wanted to turn emotional cognition into a disembodied activity, he actually threw it back, complete with its animal spirits, into the old fold bequeathed by Galen whenever he broached ethical discourse. In spite of himself, he was unable to divorce medicine from ethics. Dualism, in the end, was a philosophical mistake; but it was also the manifestation of ordinary psychology, of the need to reify thought, and represent to ourselves the body as a machine - an 'it'.

It is a psychological fact, too, that resistance to empirical evidence is more common than the practice of acquiescing to it. Self-deception might even be a survival tactic, however nefarious its consequences at times. Harvey's theory of blood circulation, which emerged in the 1620s, was based on empirical evidence and here, resistance to it would prove nearly impossible - Harvey had his supporters among the group of Oxford natural philosophers who would eventually form the core of the Royal Society, and whose job it was to combat self-deception in the face of evidence. His momentous achievement was a culmination of the process begun with the reestablishment of human dissections, by Vesalius among others, in the mid-1500s - the displacement of the model passed on by Galen and repeated in all medical treatises in the Arabic and then Latin West, according to which food turned into chyle in the liver, from where, thanks to the heat produced by these digestive concoctions, the vital spirits in the blood were expedited to the heart and from there, to the brain. The cerebellum supposedly refined some of these spirits into smaller, animal spirits that were more nimble still. Heat and cold, dryness and moistness, crucially affected the course of these spirits; and the effects of the humors themselves on mood, thought, health changed according to the degree of heat, agitation, moisture present in the

organism. And so, of course, once Harvey had shown that blood actually circulated through a heart that functioned as a pump, it was difficult to hold on to this picture.

But blood circulation did not undermine the causal relation between emoted perception and physiology that, again, even Descartes could not do without. Harvey's contemporary Robert Burton, in his encyclopaedic *Anatomy of Melancholy* (1621), was recounting with the rhetoric and critical distance of a historian, or compiler of ideas, that:

> The distraction of the mind, amongst other outward causes and perturbations, alters the temperature of the body, so the distraction and distemper of the body will cause a distemperature of the soul, and 'tis hard to decide which of these two do more harm to the other. Plato, Cyprian, and some others […] lay the greatest fault upon the soul, excusing the body; others again, accusing the body, excuse the soul, as principal agent.

The organism was dual, but could only make sense as a whole. Not for Burton the brain in the vat or the mechanical body. His critical distance from his lavish accounts of the folk beliefs transmitted by elevated humanism belies the absence of an alternative story - of a story, in any case, that could match ordinary common-sense in explanatory power, that would be able to turn human self-perception into a theory, that would allow for the subject and the object of scientific enquiry to meet, to agree in temperature and distemperature. Of course, variations existed, even abounded, within this broad story, but without ever disturbing, really, the coherence of an account in which humors were perfectly correlated with emotions and rendered emotions visible - in which the synchrony of mind and body marked an explanatory harmony no empirical or metaphysical onslaught could displace. Burton talks about

> [a] most frequent and ordinary cause of melancholy, *fulmen perturbationum* (Piccolomineus calls it), this thunder and lightning of perturbation, which causeth such violent and speedy alterations in this our microcosm, and many times subverts the good estate and temperature of it. For as the body works upon the mind by his bad humors, troubling the spirits, sending gross fumes into the brain, and so per consequens disturbing the soul, and all the faculties of it […], with fear, sorry, etc., which are ordinary symptoms of this disease: so, on the other side, the mind most effectually works upon the body, producing by his passions and perturbations miraculous alterations, as melancholy, despair, cruel diseases, and sometimes death itself;

> insomuch that it is most true which Plato saith in his *Charmides*, *omnia corporis mala ab anima procedere*, all the mischiefs of the body proceed from the soul.

The postulation of humors eased diagnosis by holding the organism together *a priori*. Of course it also was the basis for the resort to bleedings, leechings and cataplasms as methods of treatment; but bleedings did not require the explicit adherence to humoural theory to be performed. The nineteenth century still abounds in them, in spite of Harvey. Humors in the body could be good or bad; illness of mind or body or both, caused by one or the other, and in any case correlated with the excess of bad 'humors', could be eradicated if only one got rid of these toxic substances. In the *Encyclopédie*, that great Enlightenment testament and paen to the faith in science, one finds that passions are defined as:

> such affections that impress such profound traces on the brain that its whole economy is subverted, and no longer knows the laws of reason. It is a violent state that pulls us toward its object. Passions include 1) the representation of the thing outside us; 2) the idea that results from it and accompanies it; 3) the movement of the spirits or their suspension registers its effects.

The mechanisms of embodied psychology could be described by reason in this way, partly because philosophical reason, after Descartes and Locke, turned for its practice to the examination of the conditions of knowledge, that is, to epistemology. But movements of spirits are inevitable self-representations that, as we see, survive these shifts. My attention to them, at least, is a product of the contemporary merging of the history of reason with the history of emotions, thanks to which it is possible to look at what I am calling humoural phenomena in the light of our own, empirically-based accounts of emotional life as integrated with rationality.

Historically, and before the breakdown of scholastic physics, the humoural organism was the Platonist's microcosm that corresponded to the macroscopic world, to climate, latitude, season, diet and astrology. This legendary correspondence evaporated in the late Renaissance, but even then, no one, I think, has ever stopped taking for granted the empirical truth of a constant correlation between organism and environment. The Hippocratics may have been the first to formulate it, but it is almost boringly common-sensical. Humoural care is seasoned, too, in that it is as old as our

capacity to take care of the ill; it is pre-theoretical, I think, and perhaps a universal feature of human cognition, indexed to everyday evidence, to the fact that we brood when it rains and are healthier in summertime. But as linguistic constructs, humors and their spirits are not only the postulated embodiments of emotions; they seem to represent the left-overs of our thought-processes, what remains of the need to fit our minds to our theories, to accommodate our verbal capacity to our incapacity to fully conceive of their place within the pathways of our humoural brains.