

Chemotheology and Spirituality

Introducing Chemotheology

Four centuries ago Francis Bacon gave valuable advice about inventing neologisms. Since they were unfamiliar, and thus potentially an obstacle to communication, he said that they should only be used when they were necessary to communicate a genuinely new concept or principle. On that basis the addition of *chemotheology* to the vocabulary of science and religion is debatable, but justifiable on two grounds. Firstly, although it may in some instances seem to express the obvious in an unnecessary technical way, it may equally draw attention to matters whose obviousness has obscured their significance. To take one quick example, is the pleasure that the worshipper, or meditator, obtains from the smell of incense spiritual in any meaningful sense? What makes a smell spiritual or otherwise? Chemotheology approaches these as important and open questions. The second justification for introducing a new and unfamiliar term is related to the first, but more fundamental. Dealing as it does with the physiological origins of all kinds of feelings, it offers help in identifying genuine spirituality in a post-modern, New Age society with so many offerings that it resembles a spiritual bazaar, with no shortage of money-making hucksters.

It would be of value to begin by giving a working definition of the terms “spirituality” and “religion”, which are always in danger of being confused. What follows assumes that spirituality is essentially a state of consciousness marked by awareness of a higher reality with which the individual feels, or desires to feel, a relationship, and may be independent of any creed. Not all, by any means, would accept this theistic definition, which is at odds with Buddhism and Taoism, but it offers a clear starting point and focuses on the radical importance of definition. Religion, by contrast, is a corporate phenomenon, essentially a group composed of those who accept certain fundamental assumptions about the nature of spirituality and a whole lot of other things, such as a theology of creation and structures of authority, and agree not to question them. From a scientific perspective, therefore, a religion becomes a closed system of taboo, unable to survive free enquiry about its fundamental beliefs from within its membership. It is worth noting, however, that science itself can become a taboo system, when questioning of fundamentals is forbidden. There is, in fact, a strong psychological connection between religious fundamentalism and scientism, both depreciating individual freedom to seek in favour of group-think. Spirituality is a more general concept than religion, and it is often argued that there is a common factor of spirituality across the spectrum of so-called faith groups. This cannot be taken for granted, however, and the question remains open as to whether or not genuine spirituality can be faith-bound. Though the question is of vital importance in a world that seems to be entering into a “clash of civilizations,” it will not be pursued here.

Chemotheology may be considered a branch of neurotheology, especially where it deals with neurotransmitters, but has its own independence insofar as it focuses attention on the glandular system of the body, especially the endocrine system, where most of the chemicals that influence consciousness originate. Whether viewed as a free-standing discipline or not, it takes its place within a new systematic theology that is now emerging in our scientific culture. Cosmotheology, neurotheology and historical theology are together reshaping the theological landscape, and redefining religion. Cosmotheology is providing a new creation story that will transcend the

conflicting myths which keep the world in religious compartments and generate religious wars, Neurotheology is on the way to dissolving the barrier between a God “out there” and “God within”, and historical theology is laying bare the pious fictions that have been taken for centuries as religious facts. Chemotheology offers a potential bridge between science and religion in an age where the need for such a bridge is increasingly felt and at the same time is a corrective to those who would argue that spirituality is only a higher kind of superstition. However, one must be realistic and recognize that since chemotheology spans both religion and science, it is more likely to be attacked from both sides than welcomed from either.

Spiritual Highs and Lows

From the perspective of chemotheology, the honest seeker after truth must ask if the search for God – to put it oversimply – is not at base the search for a kind of chemical pleasure, like the jogger’s adrenaline high. The case against religion is even more damning if one accepts that the God hypothesis is a fantasy. This is essentially the case argued by Richard Dawkins and other secularists, and must be isolated as a black box here in order to focus on the aspect of chemical pleasure. It may be said, however, that the reality of a creating power is strongly supported by cosmology, for, at the very least, it is as plausible a hypothesis as “it all just happened.” The fact that one gains pleasure from religious activities does not automatically make them self-serving. The principle at issue is far more complex than that, for in general nature organizes things so that we obtain pleasure from doing what is needed for survival of the species and the individual. A nursing mother, for instance, may obtain pleasurable feelings of hormonal origins but this does not make breast-feeding her baby a selfish activity in a bad sense. So while it would be true to say that religious practices are designed to produce pleasurable feelings at various levels, from smells to bells, as colloquially expressed, the critical issue is whether the pleasure stops at that level or is in some way a preparation for, and inducement to seek, a higher level of emotional satisfaction. It is, in fact, arguable that this higher satisfaction goes beyond emotion, but the word may be used as an initial marker in this unknown territory.

Finding the Balance

From a neurochemical point of view, mental health is related to maintaining an optimum level of serotonin in the brain, sometimes called “the happiness chemical”, which is constantly changing under the influence of a wide variety of factors. The part played by serotonin in determining our conscious state is complex, and involved with synaptic efficiency, but it would not be misleading to say that a low level of serotonin leaves us in varying degrees depressed and ill at ease with the world or with ourselves, and the need to find the right balance governs our behaviour at every level. Intellectually, it can come from unfulfilled curiosity, or from a clash between belief and perception. Emotionally, it comes mainly from the need for love – i.e., union with another person. Spiritually, it has been called by the poets “the divine discontent,” and summed up by St. Augustine sixteen centuries ago in addressing God, “Thou hast made us for Thyself, and we shall find no rest until we rest in Thee.”

Serotonin balance depends partly upon the concentration of other chemicals in the blood, as, for example, sugar, but also on relationships - from individual to global. We do not exist like pebbles on a beach, but are organic parts of greater wholes, from the family, through the nation, to the human species. Their welfare is our welfare. To the extent that we are empathic, we suffer as they

suffer and rejoice as they rejoice. In the 21st century, the communications revolution has widened our empathic scope enormously, and as a consequence the normally sensitive individual will experience emotional stress not only from suffering within the family but from a famine in Darfur or an earthquake in China. This new development, hardly realised as yet, adds a whole new dimension to the traditional imperative to love one's neighbour.

Temporary distress can find short-term remedies. Physicians and psychiatrists alleviate it with Prozac, Valium or Ritalin, but because the serotonin level is related to blood sugar level, the individual will often seek a quick fix by taking sugar. Britain, it has been said, has become a nation of sugar junkies. Chocolate is the great comforter, particularly among women, for some reason which must surely be related to the female hormonal balance, and, in the context of spiritual needs, it is instructive that John's Gospel refers continually to the Holy Spirit as the comforter. The action of chocolate in raising serotonin levels comes, not primarily from sugar, but from the fact that it contains several chemicals which generate subtle alterations in mood. Indeed, the range of these mood-altering substances and the complexity of their effects has given rise to what is sometimes called "the science of chocolate." The two best known of them are probably tryptophan and phenylethylamine, which, in stimulating the production of serotonin, appear to mimic the effects of human love. In this connection, a friend once described to me the effect of a successful group meditation, which she said was like having warm chocolate poured over her. This startling image highlights the question raised earlier about the goal of religious practice: in a nutshell, is meditation – solitary or in a group – in danger of becoming a search for selfish pleasure rather than for unity with a higher reality? The risk can be easily recognized in the sensory experience of religious liturgy, and *par excellence* in Russian Orthodox Christianity, where sweet-smelling incense, candles, rich vestments, icons replete with gold leaf and powerful choirs can give quite overwhelming pleasure, even to atheists. In the light of the remark above, however, one might ask whether or not it is possible for meditation itself to be indulged in as a kind of spiritual chocolate? Could one even become addicted to false spirituality?

First Conclusions

A knowledge of mood-altering chemicals will not make us more spiritual, but it can make us reflect on the meaning of the word "spirituality," which seems to be taken in general simply as an all-purpose good, vaguely opposed to materialism, but often co-existing with deep selfishness. It can also draw attention to the developmental and evolutionary role of religion, and this is of particular importance today, when religion is often written off as a no more than blind loyalty to a set of outworn and hand-me-down beliefs, more often than not, the "faith of our fathers." Chemotheology helps turn our minds towards an almost forgotten question – what is the point of religion? What use is it if it does not enable the individual and the species to unlock and develop their latent potential to become more human? The original message of Christianity was that we can become more than human by "taking on the mind that was in Christ," and something very similar is found in Buddhism and Hinduism, whose adherents seek "the Buddha mind" or "Krishna consciousness." Whatever differences there may be – and they may prove to be very significant – there is a common belief that a higher than human species is possible. It looks as though science, having shown us our evolutionary past, must now pass the ball to religion, to design and create our evolutionary future but, if so, a new kind of religion must emerge to meet the challenge.