

World eBook Library

The World eBook Library, www.worldLibrary.net is an effort to preserve and disseminate classic works of literature, educational material, serials, bibliographies, dictionaries, encyclopedias, and other reference works in a number of languages and countries around the world. Our mission is to serve the public, aid students and educators by providing public access to the world's most complete collection of electronic books on-line as well as offer a variety of services and resources that support and strengthen the instructional programs of education, elementary through post baccalaureate studies.

This file was produced as part of the "eBook Campaign" to promote literacy, accessibility, and enhanced reading. Authors, publishers, libraries and technologists unite to expand reading with eBooks.

This eBook has certain copyright implications you should read.

This book is copyrighted by the World eBook Library.

With permission copies may be distributed so long as such copies (1) are for your or others personal use only, and (2) are not distributed or used commercially.

Prohibited distribution includes any service that offers this file for download or commercial distribution in any form, (See complete disclaimer <http://worldlibrary.net/Copyrights.html>).

John S. Guagliardo, Ph.D., Executive Director
World eBook Library Consortia
P.O. Box 22687
Honolulu, Hawaii 96823
(808) 292-2068
Guagliardo@netlibrary.net

THE HEART AND THE BRAIN IN BUDDHISM
by Victor Gunasekara

When translating the Pali word Citta there is an increasing tendency amongst some exponents of the Dhamma in the West to use the term "heart" instead of the more conventional "mind". This cannot be dismissed as a pure idiomatic usage, for it can lead to a more or less

serious distortion of the Dhamma. This usage is partly due to a misunderstanding of the Dhamma, partly due to ignorance of the usage of the term "heart" in the West, and partly due to an urge to imitate Christian concepts. Whatever be the reason it is a fallacy. Proponents of this fallacy often link "heart" with the Christian notions of "love" and "faith".

A particularly dogmatic assertion of this fallacy was made recently by a Theravada Bhikkhu who said: "There is no place for the brain in Buddhism; absolutely no place. There is only the heart; it must go from heart to heart". This was complemented by the statement: "Buddhism should be based on faith; faith is the essential prerequisite for practice". Both these propositions, viz. (1) that the Buddha considered the heart as the principal locus of human dispositions, and (2) that faith is the essential ingredient of Buddhist practice, are incorrect and constitute a serious misrepresentation of the teaching of the Buddha.

In ancient times, both in East and West, little was known of human physiology. The principal human organs were known, but not how they functioned. Quite early organs such as the liver, spleen or heart came to be identified as the physical base of the mind. When literary records begin the choice fell on the heart. This is first seen in Ancient Egypt where the heart was seen as the centre of physical, emotional, and spiritual life and the locus of personality. As we shall see this is also the case in ancient India and the Middle East. The Buddha departed from this view. As Ven Nyanatiloka puts it: "In the canonical texts ... no [physical] base is ever localised" (Budd. Dict.). However in some places in the later Abhidhamma and in the Commentaries there was some reversion to earlier views. To understand this we have to consider first the place of the heart in the various religious traditions.

The heart was given a central place in the ancient Indian religious tradition by the Upanisadic seers. In one of the earliest Upanisads the Bṛhadāraṇyaka Upanisad the seer Yājñavalkya sums it thus: "The heart is the world (h.rdaya.m loka.h)". He then goes on to identify the heart as the basis on which rests truth (h.rdaye hi eva satya.m), faith (h.rdaye hi eva sraddhaa), form (h.rdaye hi eva ruupaa.ni), speech (vaaci), even biological existence (reta.h) [III.19.20-24]. Liberation to this seer comes when all desire that dwells in the heart is cast away (sarve pramucyante kaama ye'sya h.rdi srita.h) [IV.4.7]. The Chāndogya Upanisad also expresses a similar idea: "... so far as the world extends so far extends the space within the heart" (yaavan vaa ayam aakaasa.h, taavaan eso'ntarh.rdayaa aakaasa.h) i.e. everything that is of significance is contained in the heart [VIII.1.3]. Similar ideas could be quoted from other Upanisads as well.

The Buddha repudiated this line of argument developed in the Upanishads. He correctly saw that emphasis on the heart as the most important base of sentient existence led to a false metaphysics and

ultimately belief in the divine and of an eternal soul (atman). In fact the Chaandogya Upanisad clearly establishes this nexus between the heart and the "soul":

"Verily does the Self abide in the heart. Thus can it be explained: This one is in the heart, thereof it is the heart. He who knows this goes day by day into the heavenly world." (sa vaa esa aatmaa h.rdi, tasyitad eva niruktam h.rdi ayam iti, tasmaadd h.rdatam, ahar ahar vaa eva.m-vit savrga.m lokam eti). [VIII.3.3]

Since the Buddha emphasises the negation of atman it would follow that the heart must be emptied of its supposed content. In post-Buddhist times the Hindu tradition elaborated even more extensively the notion of heart as a seat of the soul and of the divine essence, combining it with intense devotion and faith (bhakti) in the Godhead. One of the best known of these cults was that established by Chaitanya, but it is common to most Hindu schools except perhaps the strict monist (advaitya) school. The Western world is familiar with Hindu devotionalism of the Chaitanya tradition in the Hare Krishna movement. This is an even more vulgarised development than that which we encounter in the early Upanishads.

The modern-day Bhikkhus, and others, who want to revive the heart-cult and combine it with "faith" could be considered as abandoning the Buddha's enlightening teaching and either regressing to the Upanisadic doctrine or importing the more vulgar forms of Hindu devotionalism into Buddhism. The latter is more likely as many of them are ignorant of the Upanisadic usage. But the immediate inspiration may not be Hindu at all but Christian. It is to this tradition that we must now turn.

It is said that in the Old Testament the word heart (lev) occurs 1024 times. This prominence given to the heart was due to a fundamental ignorance of human biology. In periods of emotional stress the heart beats faster and this was taken to mean that the heart was the organ which reacted to sense stimuli and worked out the appropriate bodily response. Today we know that the heart merely reacts to electrical and chemical signals sent from the brain. But this was not known before the eighteenth century. This is seen in Yahveh's utterance about his people, "I shall put my law within them and write it on their hearts" (Jer. 31:33), which counsel itself comes from the Lord's heart (Ps 33:11). The following are a few references which show the importance which Judaism attaches to the heart. In Prov 4:23 we are told: "Keep thy heart with all diligence for out of it are the issues of life". Even wine and bread nourish "the heart of man" (Ps 104:15), In Gen 8:21 in the Covenant after the flood God claims that the "imagination of man's heart is evil from youth". The heart is seen as the locus of logical thought and memory: in Deut 29:4 it is claimed that God has given "an heart to perceive, and eyes to see, and ears to hear"; Moses asks that his instruction not "depart thy heart" (Deut 4:9). Of course emotions are always considered as being located in the heart: thus

"Pharaoh's heart is turned against the people" (Ex 14:5) and "gladness of heart" is mentioned in Is 30:29, where it is also said "your heart shall rejoice" (Is 66:14). In the Biblical view it is not only emotion and sentiment that reside in the heart; it is in fact the seat of the mind itself.

Christianity took over this interest in the heart. In the New Testament the Greek word kardia is used to denote the heart. There too it becomes a central term with a relative frequency not less than in the Old Testament. The early Christians are described as having "one heart and one soul" (Acts 4:32). Here we see an echo of the Upanisadic view that the heart is the abode of the soul, but it was probably arrived at independently.

In several places in the New Testament we get a clear statement of the doctrine that good and bad actions spring from the heart:

"A man out of the good treasure of his heart bringeth forth that which is good; and an evil man out of the evil treasure of his heart bringeth forth that which is evil: for of the abundance of his heart the mouth speaketh" (Lk 6:45).

"For out of the heart proceed evil thoughts, murders, adulteries, fornications, theft, false witness, blasphemies" (Mat 15:19).

The view expressed here is quite contrary to the views expressed in Buddhism. When "Buddhist teachers" extol the importance of heart in generating karmically significant acts they are in fact propagating this Christian doctrine, not the Dhamma of the Buddha.

In Christianity the Heart is where the Holy Spirit lives (1 Cor 6:19). The beatitudes prefacing the Sermon on the Mount speak of those who are "pure in heart" (Mat 5:8). The heart is the source of speech: "out of the abundance of the heart the mouth speaks" (Mat 12:34), as well as the location for the lesser emotions: "Let not your heart be troubled" (Jn 14:1). Speaking of Simon who wanted to buy the power of healing it is said: "... thy heart is not right in the sight of God" (Acts 8:21) and the Romans speak of the "hard and impenitent heart" (Ro 2:5).

Catholicism took the heart-business one step further when it started the cult of the Sacred Heart of Jesus in the 13th century. This grew more and more grotesque as time progressed until it was given universal recognition in the Church in the 19th Century. The hagiography of Catholicism contains almost repulsive depictions of this cult especially when the "wounded heart of Jesus" is shown.

In contrast to the overwhelming importance attached to the heart in both the Brahmanical-Hindu and the Judeo-Christian traditions Buddhism has been free of this particular delusion until misguided Bhikkhus and other Western "teachers" of Buddhism began to import it

into Buddhism, mainly from Christianity.

In Buddhism mind (mano, manas) is the forerunner of everything that is spiritually and karmically significant: "mano-pubbangamaa dhammaa manose.t.taa manomayaa" (Dhammapada 1). As Nyanatiloka has shown the Buddhist texts do not identify any specific human organ as the seat of mind. In Brahmanical and Judeo-Christian thinking it was the heart; the modern scientific view is that it is the brain. Where does the Pali Canon stand in this heart-brain controversy? We can answer this question in two ways. One is to examine it in terms of the literary evidence of the Canon, and the other is to examine it in terms of the central propositions of the Dhamma interpreted in terms of modern scientific and secular knowledge.

Consider first the evidence of the texts. The Pali word for heart is hadaya. This occurs very sparingly in the Pali Canon compared to its relative abundance in Upanisadic and Judeo-Christian scriptures. There are some references to the heart as a physical organ but this is often popular usage. In some places the mind is referred to as something different from the heart, e.g. in the Samyutta Nikaya where there is a reference to an "upset mind and a broken heart cittam vaa te khipissaami hadaya.m vaa te phaalessaami" (Yakkha-sa.myutta, S I, 207). But such usages may well be idiomatic. The mention of heart in a context that seems to imply that it is the seat of the mind occurs only in later writings like the Abhidhamma Pitaka and the Jataka. A good example of this kind of reference is the definition of citta and mano as given in the Dhamma-sangani, e.g, "cittam mano maanasa.m hadaya.m pandara.m" (Dhs 6, 17). There is a similar usage in the Nidessa (412). However the references found in the later Jataka (I.65, V.180, VI.349. VI.469) can be construed as being idiomatic rather than strictly doctrinal. The Buddha's reluctance to use the term "heart" in his actual discourses was not that he was unaware of the importance of this organ for physical existence but that he wanted to dissociate himself from the metaphysical meanings that had become attached to it in Brahminical-Upanisadic usage. But some reversion to the old usage occurs in some of the commentaries.

The brain is rarely mentioned in Brahmanical-Hindu or Judeo-Christian scriptures, but it does occur in the Pali Canon although not too frequently. The Pali words for "brain" listed by Buddhadatta Mahathera, one of the greatest Pali scholars of modern times, are: lasii, mati, matthalunga, and buddhi (English-Pali Dictionary). Of these the first appears to occur only in the commentaries and may be disregarded, but there are significant references to the other three to advance the view that the "brain" was considered by the Buddha to play an important role. The word mati comes from the same root as the English "mind" (via the Latin mens). Its usage in the Pali literature is seen in such terms as purisamati used to denote a man's thoughts (Vin III.138), dumati (a synonym of dupa~n~na) used to indicate foolishness (J III.83) and amalamati used to denote the "pure-minded" (which may be considered as

the Buddhist equivalent of the Christian "pure in heart"). There are more references to matthalunga (Skt mastulunga) but this term seems to have been used in a purely descriptive sense to denote the physical organ rather than its role in the thought process. A typical usage is that in the Vijayasutta contained in the Uravagga of the Sutta Nipata (v. 199). This is a typical listing of bodily organs to be used in the repulsive contemplations. A more elaborate account along these lines is contained in the Visuddhimagga (260) and shows how little of the brain was known even in Buddhaghosa's time. The references to buddhi occur throughout the Canon, as it is perhaps the most fundamental term in Buddhism. If Ven Buddhadasa's interpretation that buddhi could refer to the brain is accepted, then many of the references to this term could be taken to mean that the brain is the physical locus of enlightenment. A detailed examination of usages of this term in this sense cannot be undertaken in this brief essay.

The textual evidence on the heart vs. brain problem is thus hardly conclusive. Because the function of the brain was poorly understood until recent times what is important in the early Buddhist position is not the unequivocal acceptance of the brain as the base but the rejection of the earlier view of heart as the base as contained in Indian religious thought. That the Buddha was reluctant to import this concept into his system, which he could easily have done given its wide acceptance of that usage in his day, indicates that the Buddha did not accept the heart as the physical basis of the mind. There is however greater justification for the adoption of the brain as the physical focus of the mind if we are to understand the central Buddhist notions in terms of modern scientific knowledge. In the Buddhist scheme the human individual could be decomposed into five groups (pancakkhanda). The first of these the material group (rupakkhanda) need not concern us here. Three others are intimately connected with the brain. These are the group of feeling (vedana), perception (sanna) and consciousness (vinnana). The location and functioning of the remaining group (sankharakkhanda) is one of the great unknowns of Buddhism.

The interconnection of these groups can be interpreted in terms of the chain of causation (paticca-samuppada). The six bases (salayatana) play an important part in the "rebirth process". These bases are: eye, ear, nose, tongue, body (tactile sense) and "mind". To appreciate the role of the brain in this process consider how the first of these six bases, the eye or visual organ (cakkhaayatana) operates. To initiate the process there must first be contact (phassa or samphassa) with an external object. This occurs when the visual image in the form of electro-magnetic radiations strikes the retina of the eye generating electrical current. This current is then conveyed to the brain (not the heart!) via the optic nerve. These signals stimulate the visual cortex where the signals are analysed, often using pre-recorded memory (which is the input from the sixth sense organ recognised in Buddhism). It is at this stage that feeling (vedana)

occurs. It is still in the brain. On the basis of this purposive actions (sankhara) can take place. Of course in almost every situation the eye-contact is accompanied by sensory input from the other sense organs where too a similar nexus is opened between the organ concerned and the brain. As we have seen the mind organ (manoindriya) plays a crucial role. This mano- indriya can only be physically located in the brain for no other candidate exists. A similar process can be postulated for the other bases.

It is true that the texts do not explain the process involved in the way our modern understanding enables us to do. Nonetheless there is nothing in them that precludes the operation of these forces which modern science has discovered. The Buddha could not use such techniques as secular knowledge of his day was very rudimentary in scientific matters. But as could be expected from a supremely enlightened person what he does say is not incompatible with scientific discovery in these areas. Had Buddhism been based on the heart-concept as Upanisadic and Judeo-Christian religion is, it would have to resort to empty metaphysical speculation to bring some rationale to its basic beliefs.

A logical corollary of giving the heart a central place in Buddhism is the view that faith is the cornerstone of Buddhist practice. The Pali word saddha (Skt sraddaa) means "confidence" not "faith". The word faith always involves an element of blind belief while the Buddha always advocated verification of all beliefs. Even for this some confidence in the doctrine or its proponent is need, and this is only what Buddhism requires. From its inception faith is an essential component of Judeo-Christian religion, but it entered Indian religion only with the Bhagavadgita where bhakti-yoga is recognised as one of the valid paths to moksha. This is a post-Buddhist development in India, and it should not be translated into Buddhism.

In popular usage thought is attributed to brain-activity while faith is usually attributed to the heart. The latter is only metaphorically true, but it could be allowed if only to distinguish it from rational thought. In Buddhism the opposition between the brain and the heart is nothing other than the opposition between panna and bhakti. While the former is the essence of Buddhism the latter has no place in Buddhist practice. Whatever practices Buddhists undertake should be based on panna and understanding, not blind devotion. This is particularly important when Buddhism is established in a new country in the modern age.

It is not surprising that those who advocate the primacy of the heart are also advocates of faith, and the practices that go with it such as rite and ritual, relic worship, idolatry, etc. Such practices are quite common in ethnic Buddhism as introduced to Western countries. The question of ethnic Buddhism has been explored elsewhere (see the author's Ethnic Buddhism and some Obstacles to the Dhamma in the West) and need not be considered in the present context.

It is important that the alleged primacy of heart and faith, and the denigration of the role of the brain in the cultivation of panna, and in Buddhist practice generally, should be refuted in the strongest terms. This is particularly true of the West where several other misconceptions about Buddhist theory and practice prevail. Already ethnic Buddhism, with its propagation of several Asian practices for which no sanction exists in the Buddha's discourses, and its crass commercialism, is doing considerable damage to the image of Buddhism in the West. This should not be compounded by the propagation of misrepresentations of the Dhamma itself.

<end of file>

The religious life in Buddhism consists in living in accordance with Dharma, and it is believed that anyone who follows the Eightfold Path can replicate the spiritual transformation achieved by the founder. Given the central importance of the concept of a Path in the teachings, and the need to cultivate specific habits and a certain type of character as one progresses along that Path, it seems that in terms of ethical typology, Buddhism is best understood as a teleological virtue ethic. This means that Buddhism postulates a certain goal or end (telos) as the fulfillment of human potential, and Let's get right to the heart of the matter: What is consciousness? I use the word consciousness to cover three things: awareness, the changing contents of awareness " what we're aware of from moment to moment when we're awake, or when we're asleep, or meditating " and then ways of identifying with certain contents of awareness as self. Is consciousness just a brain process, as many neuroscientists and biologists would say? Is it something that is not understandable, as many philosophers would argue, because we cannot bridge the gap between biology and first-person experience? Sometimes in Buddhism some people will say, "Mindfulness is always an ethical notion," while in the way it's being used in the West today, it's often used decoupled from ethics. "Buddha's Brain is compelling, easy to read, and quite educational. The book skillfully answers the central question of each of our lives-how to be happy-by presenting the core precepts of Buddhism integrated with a primer on how our brains function. This book will be helpful to anyone wanting to understand time-tested ways of skillful living backed up by up-to-date science. Tired of flaky theories and dubious claims? We found the perfect antidote in Buddha's Brain: The Practical Neuroscience of Happiness, Love and Wisdom by neuropsychologist Rick Hanson and neurologist Richard Mendius.