

CONDITIONING.

Conditioning implies acting in an automatic way in response to external forces. We may be conditioned both in the way we act in the world and in the way in which we perceive it.

The potential for conditioning lies in the instinctive level ('Instinct Conditioning' on the Saros System Diagram). The 'Emotional' or 'Interactive Body' is governed by automatic control mechanisms operating to maintain the integrity of the whole. These mechanisms include 'unlearned' or 'reflex' responses to certain external stimuli. Such responses are genetically determined ('Instinctive Emotion').

These reflexes form the basis for the simplest level of conditioning ('Emotional Conditioning'). The classic example is that of 'Pavlov's dog'. The Russian scientist Pavlov was investigating the physiology of digestion in dogs. The unfortunate animals were operated on to expose the salivary glands in the mouth. There is a reflex response whereby the introduction of food into the dog's mouth induces the production of saliva. It was found that on the basis of this reflex the animals could be trained to salivate in response to other stimuli apart from food. If a bell was sounded prior to feeding, eventually the dog could be made to salivate at the sound of the bell alone. It seemed the dog had 'come to associate' the sound of the bell with food and responded accordingly.

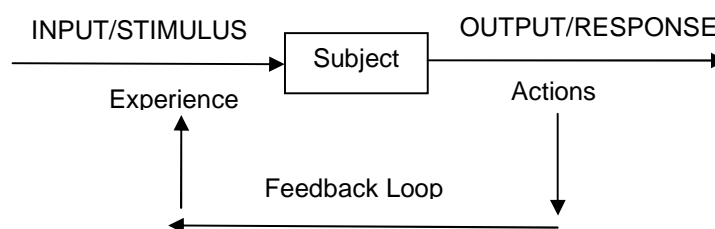
Similar 'conditioned reflexes' occur in humans, as is demonstrated by the oft-quoted case of 'little Albert'. A loud noise was produced whenever a cat came into this young child's presence. This elicited poor little Albert's instinctive fear-response to loud noises. Very soon the child began showing distress whenever the cat entered the room - even in the absence of loud noises.

Such conditioning processes could be the basis of many of our 'gut reactions'. Often our feelings don't tell us about people, they tell us about the way we respond to particular people, which is not quite the same thing.

It was found, that in the case of 'little Albert' his fear was extended to anything that resembled a cat (e.g. his mother's fur wrap). This is a common phenomenon known as 'stimulus generalization' (an aspect of 'Emotional Abstraction') A similar mechanism may contribute to various prejudices. The reasoning seems to be: I live next door to a French family. They give me no end of trouble. Therefore all French people are bad.

This type of conditioning is often called 'Pavlovian conditioning' (after its discoverer Pavlov) or 'classical conditioning' (because it was the first type to be scientifically documented). It is also known as 'respondent conditioning' because the subject becomes conditioned by its passive response to the environment.

There is another type of conditioning which depends on the subject performing some action as opposed to being passively programmed. This conditioning arises as a result of the feedback relationship between our actions and subsequent experience (our actions and their consequences are fed back to us as part of our ongoing experience i.e. 'kamma').



If the consequences of a given action are pleasant we are encouraged to repeat the action (the action is said to be 'positively reinforced'). If the consequences of a given action are unpleasant we are less likely to do it again ('once bitten, twice shy'). Such actions are said to be 'negatively reinforced'. This is the principle used in training by punishment and reward: "Good boy Jonny" / "If you do that again you'll get a smack."

This type of conditioning is known as 'type 2' or 'operant' conditioning (because the subject must perform some operation on its environment for the conditioning to be set up). It is also known as 'instrumental' or 'Skinnerian' conditioning (the latter after the scientist Skinner who pioneered research into this type of conditioning).

The principles of conditioning are simple. For those interested the details can be found in elementary psychology text books and are well known to animal trainers and people who work in advertising.

To observe ones own conditioning is however a more difficult task. This is especially true of 'emotional conditioning'. Here, even if the existence of a particular 'conditioned reflex' is inferred, the mechanism may remain outside one's normal powers of control, being associated with what is often termed the 'autonomic' portion of the nervous system. The habits of the 'Emotional Body' can thus be seen as constituting a level quite distinct from the more accessible 'operant conditioning' of the central nervous system and the 'Conditioned Body'.

There are a number of what I would consider to be errors in discussing conditioning. One is the refusal to acknowledge that one is conditioned (this is denial of conditioning as distinct from overriding one's conditioning). Freedom is only possible if one sees one's current position clearly.

Equally misguided is the attitude that we are all just conditioned by our parents/society/the environment, and there is nothing we can do about it. Applied to oneself this argument is a 'cop-out', a way of shirking responsibility for your actions. Applied to others this way of thinking breeds lack of respect for the individual. This is a trap that a number of behavioral psychologists seem to have fallen into - with the best of intentions of course (the desire to produce an objective account of behaviour uncluttered by meaningless concepts such as 'consciousness' and 'volition').

A third error is the attitude that conditioning is 'bad'. Some conditioning is useful e.g. toilet training. One could argue that conditioning should not be got rid of so much as understood and brought under conscious control.

When the process is conscious it forms the basis of learning - learning by association (related to classical conditioning) and learning by trial and error (related to operant conditioning).

This enables the emergence of more sophisticated learning by 'sudden insight'. This is clearly demonstrated by experiments done on apes. The subject was presented with two upturned cups of different colours (say a red and a blue cup). Under one (say the blue cup) was a peanut (the reward). By trial and error the ape would discover which of the two cups the peanut was under. If the same test was repeated a number of times with the peanut always under the same colour cup (in our example the blue) the ape would eventually learn that that particular colour was associated with food (operant conditioning by positive reinforcement). Now if presented with the two cups the ape would reach straight away for the cup hiding the peanut.

If the experiment was repeated using cups of two different colours (say brown and green) the poor ape would have to go through the whole learning process again until it learnt what colour was associated with food.

But after a number of such experiments something different would happen. The first time the ape found the peanut under a particular colour it would keep selecting that colour in all subsequent trials - getting the peanut every time without going through the gradual process of learning. It had seen the pattern running through all the different experiments: In any given experiment, the peanut was always under the same colour cup. The ape had acquired what is known as a 'learning set'. This is the beginning of abstract thinking ('Conditioned Abstraction'), perhaps leading to that strangest of abstractions - the 'Ego'.

At the level of 'ego' or the 'Abstract Body' we perceive the world in terms of categories into which we fit all our experiences. The time-lapse between the reception of a sense impression and the categorization, labeling and interpreting of that impression is usually extremely short. It is so short that it is difficult to believe this interpretation is occurring at all: we take the way we see the world for granted.

The mechanism only becomes apparent when there is a temporary hitch. The classic example of this is the ambiguous object seen on a dark night. One may actually 'see' a man only to discover on closer inspection - a tree stump or a road. Here the labelling mechanism has made a mistake as it were. This sort of thing happens all the time but we usually only note the more spectacular discrepancies.

If one is fortunate enough to be unexpectedly confronted with something totally unfamiliar one can just catch the mind frantically sorting through its filing cabinets until it finds an acceptable label.

It would appear that the mind is to a certain extent compartmentalized into different sets or 'matrices' of associations and categories. These may correspond to different facets of personality. Under certain circumstances it seems possible to free the perception from its mechanized routine and see the world in novel ways - this enables jumping of the barriers normally separating different areas of experience - allowing new associations to emerge. Arthur Koestler terms these juxta-positions of normally separate modes of thought 'bisociation' in contrast with the normal 'run of the mill' process of 'association' within established patterns.

Such a creative act seems to imply the operation of 'Psyche' ('Psyche' here implies an integrative function which can perceive and coordinate the totality of personality in all its facets). This ordering activity of the 'psyche' can be seen as a very sophisticated level of learning ('Psychic Conditioning') involving becoming aware of ones own conditioning and leading to the establishment of a 'Psychic Body'.

LEVEL OF SAROS SYSTEM DIAGRAM.	LEVEL OF LEARNING/CONDITIONING.
Psyche	Bisociation.
Ego / Abstraction	Learning Set.
Conditioning	Operant Conditioning.
Emotion	Classical Conditioning.
Instinct	Unlearnt responses.

The presence of 'psyche' enables the occurrence of creative thought transcending our normal conditioning. But there are levels of 'creativity'. Much of Human creative activity occurs, of necessity, within the bounds of an established world-view peculiar to the culture and time ('Human Morality' on the Saros System diagram). Many a creative insight or idea has fallen on stony ground because the world was unready for it.

A successful artist or scientist must have an eye to the needs of the time. 'Socially-relevant' knowledge is concerned with this level. Hence the socialist ideal of 'science for the people'.

'Love of Life' is not concerned with adding to or enhancing the existing world-view. its concern is a bigger world: Life and Life more abundant. This may threaten the old order (Love of Life is also Love of Death).

Artists who have a contact at this level may work and die in poverty and obscurity. They are driven not by success or recognition but love of creativity itself. To quote the astronomer Kepler: "Yes, I give myself up to holy raving. If you forgive me, I shall rejoice. If you are angry, I shall bear it. Behold, I have cast the dice, and I am writing a book either for my contemporaries or for posterity. It is all the same to me. It may wait a hundred years for a reader, since God has also waited six thousand years for a witness."

This illustrates the awful power of the inspiration that can blast down through the 'Creative Ego'. It is significant here that 'theorizing' is derived from the Greek 'theoria' - a word of orphic origin implying a state of fervent contemplation and participation in the sacred rites.

The religious and mystical 'aberrations' marring otherwise great scientists such as Newton, Einstein and Maxwell are well documented. A few perceptive commentators have grasped the central role such 'eccentricities' may have played in their work.

References to Darwin's 'deep inward experience' in the grandeur of the Brazilian rain forest indicate that the 'father of modern evolutionary theory' may have touched on this level. However, he seems to have subsequently lost this contact with 'Love of Life' resulting in a 'curious and lamentable loss of the higher aesthetic tastes'. When in his later life he was asked his views on religion he is reported to have said that although the question of God is beyond our ken 'Man can do his duty'. "His reason may occasionally tell him to act in opposition to the opinion of others, whose approbation he will then not receive, but he will have the solid satisfaction of knowing that he has followed his innermost judge of conscience".

This possibly represents a consolidation at what we are calling the level of 'Morality' (prior to his atheism Darwin had been a rigid fundamentalist). Simultaneous contact with both 'Love of Life' and 'Human Morality' would enable the putting out of ideas calculated to enhance the creative possibilities of a society.

We may speculate that at the level of 'Love of Truth' the concern is that more possibilities may be realized through the 'Gate of Necessity'. Work at this level does not deal with works of art or theories in the ordinary sense of the word, but with metatheoretical considerations - the essential relationship between Man, the Universe and Unity. Its concern is the perpetuation of knowledge.

The position of 'Love of Light' implies a concern not with the possibilities of the manifest universe but with the integrity of the universe itself: The level of right action in accordance with the dynamic balance of the multiverse (this is perhaps the old Chinese idea of the man in tune with the Tao or the kabbalistic concept of Tikune – conscious amendment to cosmic imbalances?)

Little can be said of 'Love of Unity' except that it is in accordance with The Will.