Nature, Nurture and Mental Culture

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ABSTRACT

The nature vs nurture debate has had a long history in psychology, and indeed in other human sciences. One set of early views considered hereditary/genetic factors to be foremost in determining a person's behaviour and personality, while an opposite set of views considered everything to be moulded by the environment. These polarized views have now given way to recognition of the need for multi-factorial explanations. This paper provides a brief discussion of these issues, and goes on to consider them with special reference to mental culture. The Buddhist perspective on mental culture is explored in the final part of the paper.

Introduction

The question 'How we come to be as we are' has been a key concern of all students of human behaviour and experience. We see many similarities among individuals, and also differences. There are common features as well distinctive features. How does one explain this?

In the history of psychology, two main viewpoints existed on this question. The behaviourist school, founded by J. B. Watson in 1913, took a totally environmentalist view. The child was born as a *tabula rasa*, a blank slate which experience, from the environment, could 'write on' and produce a person (Watson, 1913). In a publication in 1924 Watson stated that if he were given 'a dozen healthy infants .... and my own specified world to bring them up in, and I'll guarantee to take any one at random and train him to become any type of specialist I might select – doctor, lawyer .... and yes, even beggarman and thief ....' (Watson, 1924).

This extreme and uncompromising environmentalist view, which considered nurture as all-powerful, contrasts with nativism. In the 1940s Gessell argued that children developed totally as the result of genetic influences, with their environment having little effect or impact (Gessell, 1943).

The debates and arguments between these two views have filled thousands of pages in the literature of psychology, and have also influenced political thinking in some countries in some eras. Genetic purity, genetic superiority and related concepts have had much public prominence, and governments in some cases have based their policies on such notions. Equally, in the early decades of the Soviet regime, the official position took nurture, or environmental influence, as the supreme determinant of what a person, or an organism, turned out to be.

Even today, there are some who consider genetics far more important than experience, and *vice versa*. However, there is almost universal recognition that both genetic and environmental factors play key roles in determining the human person's development and his characteristics. This is the position represented by present-day psychology text-book authors. (e.g. Carlson, Martin & Buskist, 2004). Genetic transmission is recognized, as is environmental influence. Equally

important, how the two interact in crucial ways is also recognized. Perhaps it is worth giving some examples to illustrate this.

Examples of nature-nurture interactions

The ethologist Konrad Lorenz, many decades ago, demonstrated that the young greylag goose would develop an attachment to a human being, or indeed any other moving object, and follow it until they were almost adult. This happened if they were exposed to the person or moving object at a particular time after hatching, and were able to follow it continuously for about ten minutes. Lorenz called this phenomenon 'imprinting' (Lorenz, 1958; see also Moltz, 1963). What is now recognized is that some initial experiences occurring at a crucial time in development, a sensitive period, promote the learning and establishment of a particular behaviour. This shows the necessary interaction between nature and nurture. In the normal course of events, the goslings of course follow their mother about – but this is not because she is their mother, but because of their exposure to the mother, a moving object, at a critical time of their development.

A second example may be given from the field of psychopathology. There are many people with specific phobias – those who fear the dark, those who fear heights, those who fear particular animals, those who fear large open spaces, those who are afraid to go in an elevator, and so on. Early behaviourist psychologists took the view that these were essentially learned responses. One learns to become afraid of, and thus avoid, a stimulus or a situation, because of a learning experience. If, for example a child is badly bitten by a dog, he may become severely dog phobic. Any previously neutral stimulus can become a phobic stimulus by association with a painful or terrifying experience. This was seen as occurring through the basic form of associative learning termed 'classical conditioning'. This is in a sense true, but it is not the whole story. Martin Seligman, one of the leading psychologists in the United States, proposed in the early seventies that human beings tend to become phobic of certain things rather easily. This, he argued, was due to a 'preparedness' that humans have, as a result of past evolutionary pressures (Seligman, 1972). It makes adaptive sense, from a survival point of view, for one to learn to be afraid of the dark, or of poisonous snakes, or of vast heights from which one might fall. Thus the threshold for learning these phobias is low – so one is safer, avoiding potentially dangerous stimuli and situations. Empirical evidence for the 'preparedness' hypothesis has been found in several studies (e.g. de Silva, Rachman and Seligman, 1977). Again we see here nurture interacting with nature, to maximise adaptation and thus survival.

Individual differences: personality and intelligence

The nature vs. nurture debate has played a major role in psychologists' attempts to understand and explain personality. Numerous issues have dominated the literature on human personality, including stability and change, traits and dimensions, biological and social influences, and so on. Many classical theories of personality and its development have emphasized some of these aspects and neglected others. The current general consensus is that human personality is the product of a variety of influences, including biological inheritance and social influence. It is also recognized that personality as such is not a rigid, invariant entity that strictly determines how a person behaves in, or responds to, a situation. Transient, situational factors may also play a key role in determining one's actions

at a given time in a given set of circumstances. There are significant empirical findings that support such a broad view of personality (see McCrae & Costa, 1990), although there are continuing debates in the literature.

When one focuses on mental functioning, one is inevitably drawn to the great controversies that existed not very long ago about nature vs nurture in relation to intelligence. Francis Galton argued in the late nineteenth century that 'genius' was necessarily inherited (Galton, 1884). In the 1960s and '70s great debates raged within psychology and beyond about the genetic determination, or otherwise, of human intelligence. What appeared at one time to be clear evidence of genetic determination of intelligence, including therefore racial differences, have been called into question. This is not to deny that people can be different in their abilities, in level and in style. However, exposure to good learning environments does help children to do better in school work and in tests. People also change, and adapt, in their learning ability and patterns during the life-span. Thus, once again one recognizes that nature and nurture are both important, and interact in crucial ways, to determine intellectual, and broader mental, functioning (Sternberg & Grigorenko, 1997; Storfer, 1990).

Mental culture

Psychological development takes places with maturation, with exposure to social experience, and in response to formal education. One develops a way of functioning mentally, not as a deliberate planned strategy, but as a result of these numerous influences. One can by choice enhance this functioning in various ways, and people often do this successfully. One might acquire a vast knowledge of literature, or of philosophy. One might develop a special interest, or a special ability to do crossword puzzles or to produce poetry. All of these are examples of mental culture in the widest sense. The potential one has inherited in a general way, is developed through interactions with the environment, through one's experiences, and through one's efforts, to actualise this mental culture.

Mental culture and personal development in Buddhism

In a narrower sense, mental culture is a crucial aspect that one endeavours to develop in one's quest for personal, or spiritual, developement. Steps of various kinds have been proposed and used in various religious and spiritual traditions as a way of achieving such mental culture. The details of what is considered essential in mental culture varies from tradition to tradition. From a Buddhist perspective, the definition of mental culture includes the development of the person in terms of how he interacts with the environment – in a calm, balanced way, not unduly dependent on attachments, able to remain stable in fluctuating circumstances. It also includes an ethical stance: one does not harm others, but engages in behaviours conducive to one's and others' well-being and happiness. One may be committed to the ultimate aim of seeking a very high state of personal development: the *arahant* state or, in some traditions, the state of Buddhahood. However, one's mental culture is valued in its own right, even if one has not embarked on such a path.

Within one's genetic endowment, mental culture of this kind is considered desirable and indeed achievable. One needs, as a preparatory framework, an ethical life style, as noted above. In addition, one engages in mental exercises which may be broadly described as mental cultivation, commonly referred to in

the English translations of Buddhist texts as 'meditation'. Equally, mental culture also has a role in shaping the life style itself. That is, in one's endeavour to develop an ethical 'good' life, one might resort to mental exercises. For example, in order to control, and eliminate, feelings of anger and hatred towards a person or persons, one may use *mettā* (loving kindness) meditation. There are numerous examples of mental exercises, or aspects of mental culture, explicitly recommended in Buddhist texts for the purpose of enhancing an ethically sound life. Controlling anger, controlling and eliminating unwholesome attachments, combating slothfulness, reducing greed and gluttony, overcoming excessive grief reactions, are but some areas where such exercises in mental culture are recommended as a means. Some of these have already been discussed in the literature (e.g. de Silva, 1984; 2003). From this perspective, mental culture is a particularly crucial element in one's personal development.

There is a further, even more interesting, aspect that is worth highlighting. Nature by definition includes basic human drives, including the desire for sexual and sensory gratification, aggression in self-defence, jealousy, grief, and attachments, among others. It includes the need for food, the need for drink, and the need for sleep. The person embarked on a path of personal development endeavours to control these, to keep them from becoming overdominant and from leading to acts that are harmful and/or likely to produce unhappiness in others and themselves. Mental culture helps one in this endeavour of gaining control over these naturally occurring drives. Depending on one's goals, one may control these in varying degrees. For example, one person may choose a life of celibacy; another person may choose a life where the sexual desire is not eliminated, but is not allowed to lead to excesses on adultery.

A particularly important point that needs to be emphasised here is that this is not a war by the mind against nature. Mental culture uses some aspects of one's natural resources to modify and moderate other aspects. Thus anger is controlled through recourse to loving kindness. It is not the case that anger is basic and natural, and loving kindness is contrived and unnatural. The latter is natural, too, as seen universally in a mother's selfless love for her child. What mental culture does is to use what is already present in a person's natural repertoire, enhancing and employing these positive factors for the purpose of controlling the less wholesome ones, such as anger and greed, and preventing them from dominating one's life and functioning.

Concluding Comments

This paper briefly reviewed the role of nature and nurture in determining human behaviour and characteristics. Early theories were commented on, and the acceptance of a basic interactionist perspective in present-day psychology was noted. Mental culture was discussed in this context. Some aspects of mental culture in the psychology of Buddhism were highlighted. There is a need for further elucidation and discussion of the relevant issues, especially the contribution that Buddhist practices of mental culture can make to the betterment of everyday life through helping people to acquire skills of living that are adaptive and wholesome.

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