Evolutional Theories Based On Human Emotions

Evolutional theories based on human emotions have been explored by evolutionary psychologists for many years as it ties the scientific approach with emotions and behaviour which range over all aspects of psychology. Professor Darwin (1872/2009) was the first to discover the concept of evolution and natural selection in addition to how emotions solve a range of adaptive dilemmas. This empirical approach in psychology is responsible for many human attributes such as the structure of our brains, aggression and how it can be seen as a successful survival trait, disgust memory and how we display language compared to hominins.

J.E. Stets, J.H. Turner (eds), Handbook of the sociology of emotions: Volume 2 examined evolution, the human brain and natural selection of the hominin, from this they have concluded that through the circumstances, it has made us the most emotional animal on Earth. From one of their experiments on the structure of the human brain, they have found that the amygdala in humans, more specifically in the basolateral component, is predominantly utilised for pleasure compared to the apes and reptilians who primarily used this part of their brain for fear and aggression. Not only did they find it larger, yet the connection between the subcortical centres and the prefrontal cortex whereby higher-functional thinking and problem solving occurs is much denser in humans compared to apes. From this, we can analyse that during hominin evolution, the subcortical areas of the brain were enhanced in terms of emotionality due to natural selection meaning there was a constant change in the environment that caused this adaptation. However, aggression is a primal component in human emotion and survival as shown in the article Al-Shawaf, Conroy-Beam, Asao, Buss, Human Emotions: An Evolutionary Psychological Perspective whereby emphasised displays of aggression were a utile tactic to stimulate a mate to handle greater burden on one’s welfare. Emphasised shows of anger can be used as a method of establishing social hierarchies, thereby proving itself as a successful survival trait (Alcock, 2009; Dawkins,1976; Zahavi&Zahavi 1997) as it places the most feasible to be successful at protecting their mate or offspring, as the leader.

Additionally, in Al-Shawaf,Conroy-Beam,Asao,Buss’ article, disgust memory seems to play a role in evolution as it allows memory to encode certain dangerous or infectious components which is useful for future encounters with partners, marking them as inadequate. Therefore, having a higher chance of providing healthy, non-diseased offspring. Although, emotions such a shame and guilt, when repressed, can sabotage social situations as shame can diffuse into anger and guilt into anxiety (J.E. Stets, J.H. Turner (eds), Handbook of the sociology of emotions: Volume 2) thereby, disturbing social relationships and constructs. However, emotions can become a liability due to the fact that apes do not have authority over their emotions hence making them a liability. Primary emotions such as anger,fear,sadness and happiness are built-in to the brain and negative emotions hindering bonding. Thereby, through natural selection, there was an increase in connectivity in the human brain by administering emotional outbursts by amplifying the neuro-nets from the prefrontal cortex and subcortical centre (J.E. Stets, J.H. Turner (eds), Handbook of the sociology of emotions: Volume 2, p18) which is one of the biggest contrasts between the brains of humans and apes this can be theorised to be evolved early on with the hominins in the savanna. Due to this increase in direct management of the brain and emotions, the neurology to expand the variations in negative emotions would be in place and as a result, various different levels of primary emotions can be made.

Another evolutionary approach is cross-species evidence as it is often seen that the most fundamental emotions such as aggression and pain must be present in apes and non-human species (Ekman,1992; Ekman&corado,2011). However, the modern evolutionary theory implies that even the ‘complex’ species such as humans share the same basic adaptations as other species. For example, language is seen as a sole human adaptation however it can be considered as a basic characteristic of human nature due to its complexity compared to other forms of communication that non-human species have evolved to have (Pinker,2007;Pinker & Bloom,1992;Roach,Venkadesan,Rainbow &Liberman,2013) Finer emotions such as pride , guilt and love are uniquely adapted in humans but this does not mean that they are not just as important as other emotions shares with other species. Similarly, another way in which humans are unique within their portrayal of emotions is through fine enunciation and linking emotion to body language. Evidence of this can be seen through research in gene regulation in the muscular tissue that is needed for fine speech production which entails that the gene regulation for this specific muscular tissue has only been under ultimate selection for 200,00 years which was when the first Homo sapiens came about (Enard et al. 2002a,2002b). Thereby, emphasising the contrast between hominins and humans, with hominins utilising emotions through face and body whereby humans having a more highly complex enunciation.