Explain how determinism relates to the biological perspective

Determinism is an important aspect in the biological perspective. This perspective focuses on a biological basis in explaining behaviour. The key element of hormones, neurotransmitters, genes and brain structures suggests how behaviour is influenced. Consequently, this perspective is deterministic, due to the fact that it emphasise that some behaviours may be biologically determined. Hence, it suggests that humans may have limited control and free will is determining their behaviours. Several empirical studies have outlined the deterministic aspects in this perspective. However, it may be reductionist to only focus on biological elements to explain complex human behaviours because there is evidence that suggests that cognitive and behavioural factors can also play an important role in determining behaviour.

Theorists in the biological perspective assume that some behaviour may be innate, or biologically determined. This is illustrated through a study conducted by Lorenz, on how ducklings imprint. The results showed that the ducklings imprinted on the first moving object, after coming out of their shells. Moving objects included a moving ball and Lorenz himself! This study suggests that their behaviour may be biologically pre-determined. Lorenz illustrates the deterministic aspects in the biological perspective. The duckling's lack of ability to choose the object or person to imprint on depicts their lack of free-will, because they were unable to "choose" their behaviour. However, another possible explanation is that there was a "critical period" in which this needs to occur, which shows the interaction between genes and the environment. Thus, behaviour may not be 100% biologically pre-determined.

The significance of determinism in the biological perspective is also evident in a study by Noam Chomsky, on the role of the language acquisition device (LAD). Chomsky studied a girl, who was known as "Genie", who was locked in a room for 13 years. She was deprived from normal verbal interactions with others. However, she soon was able to learn language, but she never developed completely normal linguistic abilities. Chomsky concluded that humans have an innate mechanism which allows us to develop speech, and language, which other animals lack. This illustrates the role of determinism, which can shape human's behaviour and abilities. Furthermore, this study depicts that our LAD plays an important role in human linguistic abilities.

Another example is a study by McGuffin, on twin studies, which suggests that gene can dispose an individual to develop depression, but it is not full determined; not 100% of the twins developed depression, thus allowing the

possibility that environmental, and possibly cognitive, factor that can influence behaviour.

Thus, the study by Lorenz and Chomsky outlines the deterministic elements in the biological perspective. It suggests that behaviour may be pre-determined, but not 100%, where biological factors, such as innate mechanisms (the LAD) play an important role in influencing human behaviour. Hence, determinism is an important aspect related to the biological perspective. However, there may also be a role for the interaction between the individual and the environment and cognitive aspects which could influence behaviour, as shown by Chomsky's study on "Genie" and McGuffin's study on twins with depression.