

Konrad Lorenz's Imprinting Theory

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By Saul McLeod, published 2018

Lorenz (1935) investigated the mechanisms of imprinting, where some species of animals form an attachment to the first large moving object that they meet.

This process suggests that attachment is innate and programmed genetically.

He took a large clutch of goose eggs and kept them until they were about to hatch out. Half of the eggs were then placed under a goose mother, while Lorenz kept the other half hatched in an incubator, with Lorenz making sure he was the first moving object the newly hatched goslings encountered

The naturally hatched baby goslings followed their mother, while the incubator hatched ones follow Lorenz.

To ensure imprinting had occurred Lorenz put all the goslings together under an upturned box and allowed them to mix. When the box was removed the two groups separated to go to their respective 'mothers' - half to the goose, and half to Lorenz.

Imprinting does not appear to be active immediately after hatching, although there seems to be a critical period during which imprinting can occur.

Hess (1958) showed that although the imprinting process could occur as early as one hour after hatching, the strongest responses occurred between 12 and 17 hours after hatching, and that after 32 hours the response was unlikely to occur at all.

Imprinting has consequences, both for short-term survival, and in the longer term forming internal templates for later relationships. Imprinting occurs without any feeding taking place.

Lorenz and Hess believe that once imprinting has occurred, it cannot be reversed, nor can a gosling imprint on anything else.

References

Hess, E. H. (1958). Imprinting in animals. *Scientific American*, 198(3), 81-90.

Lorenz, K. (1935). Der Kumpan in der Umwelt des Vogels. Der Artgenosse als auslösendes Moment sozialer Verhaltensweisen. *Journal für Ornithologie*, 83, 137–215, 289–413.

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