Emotion and Metacontrol

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In the **ICEA Project** we are concerned with the extraction of general designs from rat brains. We are interested in designs that capture the core integrational aspects of emotion and cognition.

The role that emotions play in the control the behaviour of animals and eventually may play in robots is still unclear. This is so, because the huge amount of research and theorising on emotions notwithstanding, there is still no deep, causal, functional theory of the emotional phenomena.

Some of the reasons for this situation can be traced to a excessive **lassitude in emotion categorisation** that has lead to a major difficulty in defining a solid taxonomy of emotion. Other reasons can be traced back to the **lack of rigourous languages to express the theories** coming from psychology or philosophy. If the phenomena to be described is unclear, the theory pretending to be explanatory is necessarily so. More **rigourously expressed theories are needed**, both to be fully shareable and to be falsifiable, hence providing a solid basement for advancing the science of emotion.
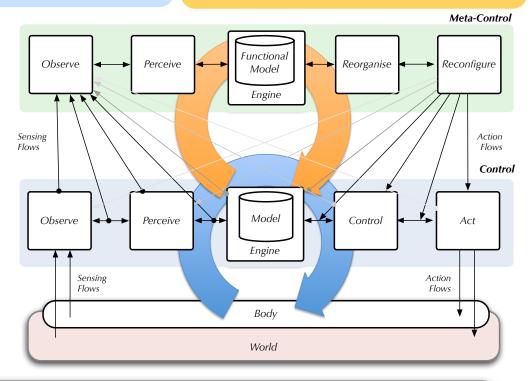
The **ICEA theoretical model of emotion** is based on a systemic, architectural analysis of the autonomic, emotional and cognitive control of mammals and autonomous systems at large. This analysis leads to a theory of emotion placed inside a larger framework for cognitive autonomous systems architecture theory.

The **metacontrol theory of emotion** is both:

· **explanatory** of the natural phenomenon of emotion -state, process and perception of emotional state- and, at the same time,

· **operational** in the endowing of machines with similar functionality.

Emotion is metacontrol

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An unifying vision of emotion and cognition ?