



*Netherlands Institute for Advanced Study
in the Humanities and Social Sciences*

Brain mechanisms of aggression and emotion

A brief overview of the psychology and neurobiology of some affective processes

by Dick Jennings & Michael Potegal

NIAS Seminar
Thursday 27 October 2011
11.00-12.30h @ Lecture Room

On Thursday 27 October the first of this year's NIAS Seminar Series will be held by Dick Jennings and Michael Potegal in which they will give an overview of Brain Mechanisms of Aggression and Emotion:

Affective processes are the complex result of our social and cultural experiences as mediated through inherited biological processes embedded in the nervous system. Advances in the study of the brain have led to a greater understanding of the neurobehavioral processes involved in emotion and aggression.

The overview is divided into two parts:

- 1) Neural circuits for carrying out aggressive acts that are embedded in lower brain structures and that can be accessed and triggered by incoming sensory information that is typically filtered and organized through upper brain structures.
- 2) Upper brain structures that contain the neural circuitry that form conscious (and unconscious) emotion in situational context.

Part 1 of the presentation will briefly cover current typologies of aggression and then the basics of brain structure and function, with particular emphasis on the lower brain mechanisms for organizing and executing motor acts of aggression; results from (other) animals and humans will be compared.

Part 2 will integrate emotion and aggression by reviewing historical concepts of the biology of emotion and showing how advances in neuroscience have reopened rather than closed controversies in the area.

The informal presentation will not require any prior knowledge of brain structure and function; Jennings and Potegal will provide the minimum necessary background. The goal is not to cover a fixed amount of material, but to facilitate understanding by answering participants' questions throughout.