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Dynamics of consciousness-emotion interaction: an explanation by NDHB-Model/RT

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Abstract: Traditional cognitive sciences have not treated human behavior as the emergence of the result of intense interaction between consciousness and emotion. Rather, these two functions have been studied separately. However, in the existing internet era, it is urgently necessary to develop unified theories that can deal with the dynamics of consciousness-emotion interaction in order to design appropriate information systems. This paper provides an explanation to the interaction based on the architecture model we have been developing as a candidate for such unified theories, the Nonlinear Dynamic Human Behavior Model with Real-Time Constraints, NDHB-Model/RT, presented at Cogsci2007 and Cogsci2008. NDHB-Model/RT represents consciousness as one-dimensional linear operations (language) and emotion as a hydrodynamic flow of information on multi-dimensional parallel operations in the neural networks. NDHB-Model/RT also has autonomous memory systems that mediate between consciousness and emotion to exhibit their dynamic interactions.