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## ASYMMETRIES IN THE VERTICAL VESTIBULO-COLLIC REFLEX

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Whole body rotation about the interaural axis evokes Vertical Vestibulo-ocular Reflex (VVOR) in cats and Torsional Vestibulo-Ocular Reflex (TVOR) in rabbits. These reflexes result from the activation of macular and ampullar receptors. However, when rotating the animals placed on their side about their interaural axis the reflexes are due only to the semicircular canal stimulation (VVOR 90°side-down). In this condition, upward eye velocities in cats and extorsional ones in rabbits are higher than oppositely directed response velocities. No ocular asymmetry was observed during roll or yaw stimulation. Therefore, it seems likely that there is an intrinsic asymmetry in the circuitry of the reflexes elicited by semicircular canal stimulation and it is masked by macular coactivation. In the present study, we searched for an asymmetry in the Vestibulo-collic Reflex (VCR). In cats and in rabbits the activation phase of EMG responses of extensor neck muscles to pitch stimulation was more leading than the inhibitory phase both in the upright position and in the 90° side-down position as well. The flexor neck muscles showed an opposite phase pattern. Hence the neck muscle responses to pitch stimulation were clearly asymmetric. No asymmetry was seen in the roll or in the yaw plane. Our results support the hypothesis that VOR and VCR share a common circuitry having an intrinsic asymmetry aimed at counterbalancing the gravity load during upward head displacements. This asymmetry is present in VCR while it is suppressed by the macular input in VOR because of the insignificant eye gravity load.

## THE BASIC PATTERNS OF ADAPTIVE RESPONSE ACCORDING TO THE UNIFIED BIOSOCIAL THEORY OF PERSONALITY OF CLONINGER: A PRELIMINARY INVESTIGATION BY THE TRIDIMENSIONAL PERSONALITY QUESTIONNAIRE (TPQ)

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 Cloninger hypothesized that there are three dimensions of personality that are genetically independent and that have predictable patterns of interactions in their adaptive responses to specific classes of environmental stimuli. The three underlying genetic dimension of personality are called novelty seeking, harm avoidance and reward dependence. These three dimensions should reflect variation in three brain system: dopaminergic system (novelty seeking), serotonin system (harm avoidance), nor-epinephrine system (reward dependence). The biogenetic predisposition to the stimulus-response characteristics of each of these three systems appears to be independently set in each individual, but the systems are functionally interconnected. For example an individual who is high in novelty seeking will usually show behavior that is impulsive, danger seeking, and aggressive if he is also low in harm avoidance. Our investigation has been conducted on a sample of 100 young soldiers (all of 20 years of age) which came to observation in a Military Hospital for psychological disadaptation to military duty. About 20% of the sample have shown aggressive behavior and grief reactions against objects or fellow-soldiers as main manifestations of difficulty of adaption to military duty. In this paper the AAs present the result of a preliminary investigation using Cloninger's instrument to explore the above described personality dimensions: Tridimensional Personality Questionnaire (TPQ). The results are analysed and discussed.