

## ACQUIRING THE FELDENKRAIS PROFESSION

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### 19. Corollary Discharge and "Relative Conjugate Movements"

Any voluntary action produced by a person involves not only the downward discharge to the peripheral effectors, but also a simultaneous central discharge from motor to sensory systems, preparing the latter for those changes that will occur as a result of the intended action. The motor systems mean here specifically the programming centers of the CNS. The sensory systems of the CNS are also those that integrate the afferent impulses coming from the various sensory modalities. This train of impulses coming from the motor to the sensory system is called corollary discharge (or efference copy). As an example, when I touch myself somewhere (on the knee or on the shoulder), it will not occur to me to ask, 'who is touching me?'; or when I am talking, I will not ask 'who is talking here?', because the corollary discharge is preparing the sensory systems for the consequences of my doings. Moreover, the presence or absence of a corollary discharge would determine whether an action is voluntary or involuntary.

When an action is repeated several times (becoming "habitual"), the repeated (learned) corollary discharge converts the anticipated sensory outcome into a part of the pattern (See also (18) "The Constituents of a Pattern of Action, Sensory Anticipations").

In certain instances, as constituents, habitual patterns might have anticipated limiting outcomes (See "Defense Mechanisms, (Anti-patterns)"). It might be desirable in certain instances (when there is no apparent structural impediment, for example) to "convince" the pupil to give up the restrictive anti-pattern, by using the idea of the "relative conjugate movement". For example, it circumvents the limiting anticipation, by changing the moving of a distal part of the body relative to a stationary proximal part, into moving this proximal part relative to that distal part, which is now fixed. It is changing a habitual pattern (having its anticipations ready) into a non-habitual pattern (devoid of limiting expectations).