



The irruption of time in the neurological space

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If I place an orthoses beneath a limited area of the plantar sole, I must accept the idea that this limited area of the plantar sole comes into contact with the ground before the neighboring areas. It is then possible to accept the hypothesis that this time lag between the ground contacts of the different zones of the foot sole introduces a temporal shift of the sensory messages emitted by the plantar sole. If this temporal shift of sensory messages does exist, which is not proven, then the placement of an orthoses beneath a limited area of the plantar sole alters the time series of events affecting the central nervous system. This modification may — must (?) — vary according to the height of the orthoses, which of course changes the time difference it causes.

If I place an optical prism in front of an eye, I change around the direction of the visual space perceived by that eye. Whatever the mechanisms used by the central nervous system to compensate for the sensitive and sensory incoherencies produced by this displacement of the visual space, one is entitled to logically attribute them a temporal component since it is a displacement (sooner or later my foot touches the marks of this new visual space).

It can be assumed that these changes in the temporal series of events affecting the central nervous system have no consequences for the individual, especially if these changes are minimal.

Conversely, knowing the properties of non-linear dynamic systems, it can be assumed that changes in the temporal series of chained events affecting the central nervous system have consequences for the individual, especially if these changes are minimal ^[1].

Until now, as far as we know, only a few researchers have tested this latter hypothesis, among human beings ^[2-6] or animals ^[7]. The conclusions of their works make it possible to propose this statement to criticism: « The regulation of the postural tonic activity of a subject can be modified by a minimal modification of his interface with the environment. »

As this statement implies therapeutic potentialities, so long as it is not falsified it will represent a certain irruption of time in the neurological therapeutic thought, traditionally a little frileux and stuck within its spatial representations.

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