

Helga Neira Zugasty, 2011

Properties and conditions of the phenomenon of rhythm, their coherence with developmental, neurobiological processes and the consequent significance for the support of learning processes

Definition of rhythm according to Jost Trier (1949):

"Rhythm is the order in the course of structured figures which is designed to arouse and satisfy a desire to tune in by the regular recurrence of essential features."

Definition of rhythm in terms of music theory, Marshall Cavendish (1996):

"Rhythm is the sequence of tones varied in time in a fixed metre (basic beat); this sequence may be free or, as in dance, may occur in definite periods of time (e.g. in beats)."

Definition of Eurhythmics according to Christina Priebisch-Löffelmann (s.a.):

"Eurhythmics is a procedure that can bring about and shape life's own immanent processes, structurally present in natural development, in a very specific way required by and corresponding to the situation. Rhythmic-musical processes produce, as it were, constellations of tension and equalisation of tension, through the active engagement with contents and situations."

The phenomenon of rhythm has inherent characteristics and conditions that are of fundamental importance for pedagogical work, especially with regard to the developmentally dynamic support of learning processes:

*Rhythm **synchronises** bipolar processes:*

... Individual time and group time are synchronised, individual ideas are integrated into a common design.

*Rhythm is actualised in the **holistic** interaction of all elements that determine the form:*

... Rhythmically structured learning processes activate all developmental functions, are multifunctional, and cover all developmental phases.

*Rhythm corresponds to the **homeostatic** balancing of bipolar processes:*

... The neurobiological control of cellular activity has the highest developmentally dynamic beneficial (as opposed to blocking) degree of effectiveness in tension-balanced situations; the pedagogical field of action lies in the shaping of the bipolar tension fields.

*Rhythm is created through **repetitive** elements that make up the essence of a gestalt:*

... Repetition enables differentiation, stabilisation, flexibility, integration and generalisation of patterns.

Rhythm orders:

... The spatio-temporal ordering of the essential elements of a rhythmically structured process enables the structuring or restructuring of the existing patterns, feedback and control of the process as it progresses.

Rhythm is activity-oriented:

... Networking, storage and reactivation of patterns only happens in active engagement with inner and outer processes, developmentally dynamic pedagogy is process-oriented, not result-oriented.

Rhythm is interdependent:

... Each formative element of a rhythmic progression is conditioned by the form of the preceding elements in their spatial-temporal-dynamic manifestation. Learning steps can be carried out most effectively if they result logically from positive preceding patterns.

Rhythm flows continuously:

... Continuity enables the stabilisation of situations in which developmental processes take place.

Rhythm is variation-bound, it is formed by the recurrence of the similar, not the same, and thus differs from metre. Rhythms therefore carry within them the seeds of change:

... Variation enables the shaping of the primary impression, the comparison with positive preceding patterns and the generalisation of essential elements of the basic pattern of a process.

Rhythm can only be shaped subjectively in terms of the organism:

... Individualisation is the basis for learning that corresponds to personal development.

Rhythm is goal-oriented:

... In the structure of a rhythmic process, the orientation towards goals is immanent. The goal-orientedness and purposelessness of developmental processes enables openness for the learning steps to be differentiated at any given time.

Rhythm is irreversible:

... The effects of a rhythmic movement cannot be retraced. Learning processes cause restructuring, reorganisation, and they are always future-oriented. (Regressive behaviour is also a future-oriented strategy.)

Qualities of Rhythm and its references to development and learning (summery)

Helga Neira Zugasty, 2006

The following characteristics and conditions of rhythm guides actions for a child-appropriate, development-oriented pedagogy.

Synchronisation („Synchronisation“):

accordance within individual structures and their accordance with common structures
→ empowerment

Entirety („Ganzheitlichkeit“):

multifunctional activation of capacities
→ combined storing of data

Polarity („Polarität“):

equilibration of tension
→ condition for developmental effective learning

Repetition („Wiederholung“):

refinement, of the essential aspects of a figure,
→ base for feedback and anticipation

Structure („Ordnung“):

necessary for safety, competences of the self
→ condition for self-organized learning

Activity („Tätigkeitsorientiertheit“):

active dealing with inner impulses and impulses from outside
→ learning by doing

Interdependency („Interdependenz“):

logical connection of contents
→ mutual dependency of data

Continuity („Kontinuität“):

stabilizing in sensitive learning periods
→ tuning of the networking process

Variation („Variation“):

intensifying and amplifying new experiences
→ condition for generalisation

Subjectivity („Subjektorientiertheit“):

individual dealing with information

→ increasing autonomy, self competences

Goal-orientedness („Zielorientiertheit“):

individual approach to solutions

→ focus on capacities, not on deficits

Irreversibility („Unumkehrbarkeit“):

respecting each act as the best possible for the moment

→ future orientation

Periodicity („Periodizität“):

maturation of complex patterns

→ developmental loops