

Musical Thought and Action

Musical thought can lead to musical action. What is their relationship? And how does musical thought differ from other thought that leads to action? In 1968 we first postulated a unit of thought and voluntary action as an existential entity: the Acton. An acton is a thought of a simple voluntary action together with its execution, e.g. the action of moving a finger a particular amount. It involves the will (awareness), and the body acting together. Having initiated it, it cannot be reversed within the time of its entity, i.e. about 0.2 sec. Actons have different minimum durations for different species, that probably also have different rates of time consciousness. Expressive actons are those whose function is to communicate qualities of experience. In humans these follow distinct spatio-dynamic forms for particular emotional qualities - these are called essentic forms. Essentic forms are programmed biologically into the Central Nervous System both for acton production and for recognition. They are the basis of spontaneous emotional communication in everyday life; in touch, or in the tone of voice, in music, and in the arts.

Rhythm involves repeated production of action-thought and of action, through function of the Central Nervous System called Time Form Printing. TFP allows a single decision to determine both the rate and the form of repeated temporal-spatial patterns, in thought and in action.

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In music, this important action decision determines the character of the musical pulse. This in turn determines the microstructure of rhythm in music - faithful not to the written score but to a better formed aspect of reality. That aspect encompasses the personal nature of the composer, ethnic characteristics, and specific piece proportions. It sets the point of view, and in a sense, the characteristic emotional tone of the music. Thus action and meaning combine in the repetitive phenomenon of the musical pulse which is a substructure of almost all music.

Non-repetitive action is superimposed on this structure to carry the specific emotional or sentic story of the music. This action ^{representing inner musical gesture} is faithful to the essential forms, to carry its emotionally meaningful communication.

Thus in music, the action of expression and the inner listening to the musical thought needs to correspond. That is a secret of beauty and life in music. And having discovered experimentally the subconscious grammar and anatomy of musical thought - the musicality without which life in music cannot exist - it is possible now to program computers to perform in precise detail with nuance and microstructure appropriate to music, that gives back to it the life and beauty that was in the musical thought of the composer before he wrote it as a score, preserving but almost killing it in the attempt. This subconscious musical grammar also delimits musical action and musical event in meaningful terms.