Summary

There are perceptions which sow, and perceptions which reap.
Ludwig Wittgenstein: Various Observations (1949)

The "perceptions" gathered in this study are contributions to the **Systematisation of Musical Kinetics** project, which is being undertaken as one of the research tasks of the Institute of Music Theory at the Music Faculty of the AMU (Academy of Musical Arts) in Prague.

The key impulse of the project was the book **Introduction to the Study of Musical Kinetics,** by Vladimír Tichý, published in 1994. The extent of the problem, in his own words: *"is limited temporally to the period from about the Baroque to today – and territorially, in the European cultural tradition."*

The aim of my work is, above all, **to supplement** Vladimír Tichý's study with a view of kinetic phenomena and their taxonomy from **the point of view of ethnomusicology.** My work thus consciously and intentionally builds on Tichý's earlier study in all respects, including general premises, periods and taxonomy.

To summarise in two basic points, it aims:

1. To establish and **define** how, and in what ways, **kinetic conceptions** of the most important ethnic musical phenomena differ from those European.

2. To attempt to **integrate** the **established** differences **into** their respective places in Vladimír Tichý's recognised **taxonomy of music kinetics,** possibly offering the simplest and most logical expansion of the given system.

The study is conceived as an **open system,** which not only does not amount to a claim at completeness, but in actuality, necessarily presupposes further reworking and expansion of individual problematic spheres and thematic areas, for which it **defines boundaries** and mark outs areas for **further research.**

The nature of ethnic music precludes the absolute **existence** of any kind of **composer's score.** This fact caused me to preferentially infer the **arguments,** by which I support my findings, **from my own analytical research of musical recordings.** Ethnic music, and particularly its **documentation,** as necessary starting points for research, are phenomena too ambiguous and dependent on the subjective interpretation of researchers. Therefore, to abandon my own analytical assessment in such a situation would be unwise.

From the research of ethnic musical phenomena it is quite clear that

rhythm is a very **significant element** in ethnic music. Above all, therefore, other elements, so important and valued in European music – for example, harmony, or melody etc. – are not the carriers of so-called **essential links** – decisive form-making factors. They are often even wholly **omitted**.

Kinetic phenomena of ethnic music are, in comparison with European music, must more dependent on **kinetic-aesthetic principles** of perception; particularly strong are connections with **dance** and magic dances, facial expression etc.

In comparison to European music, the rhythms are much more consistently and fixedly tied to **timbre** – not to general patterns, but rather to given concrete timbre models. These are very often handed down and communicated by means of mnemonic devices – onomatopoeic interjection-syllabics, which phonetically recall best the actual beating of the given instruments.

In the kinetics of ethnic music, particularly in the majority of Asian music, we find the principles of codification and established stable **formulae** applied much more often than we are used to, serving as prefabricated building blocks. Patterning principles are applied very often. A **pattern** is, as a rule, a short expressive musical construction, functioning as a model, whose multiple repetition, as well as even additional overlaying, forms music streams. The principle of the pattern is especially characteristic of the music of Sub-Saharan Africa (in the European context, particularly for so-called minimal music).

A variety of **percussion instruments** and **rhythmic accompaniment** play a much more important role in musical activities. The rest, according to iconographic documents, doubtless first occurred in Europe. The situation changed during the Renaissance and Baroque as a result of the development of polyphony and harmony, and more particularly, however, due to the influence of instrument development and the growth of instrumental music. The unusual importance of kinetics, particularly rhythm, in ethnic music is attested to by the fact that the **percussionist leads** and "**conducts**", in practicality, all ensemble and orchestral formations. A model example could be the Japanese imperial ceremonial *gagaku* orchestra. There also exist ensembles of just drummers, for example, the *"Ingoma* Royal Drums" in Burundi, the groups of traditional drummers of the *Malinke* tribe in West Africa, percussionists of the Indonesian *gamelan etc*.

It is necessary to state that the overwhelming number of kinetic phenomena in ethnic music are relatively simple, very familiar to our comprehension and lacking significant problems for the methods of our music theory and our terminology. This is the case for almost all the music of Australia, America, Oceania and a significant part of Asia.

Kinetics common in European musical thought overlap with some phenomena typical for cultures of **Southeast Asia.** Among the numerous idiomatic **rhythmic formulae,** one prominent and, as it were, ubiquitous, formalised representative rhythmic formation dominates unquestionably – the quickening of the sequence of impulses. This formula is an example of a variable, regularly accelerating succession of impulses and it is completed, as a rule, by a fractional coda in the opposite order – regularly decelerating. It seems that this obviously very archaic musical-ideological element is connected with the conception of time in **Buddhism.** Buddhism is present in every culture where this formula is present. (The use of similar musical-structural processes also occurs in European music of the 20th century, for instance, with Bartók etc.)

In the musical culture of Southeast Asia a quite prominent preference for **binary division** is apparent as both a basic metrical unit and tempo impulse for certain rhythmic structures.

Sophisticated works with subtle **tempo phases** are characteristic (*gamelan, gagaku etc.*) and in general understanding, rhythm, as a rule, is not connected to timbre.

Arabic culture also displays more complicated kinetic phenomena to those we are used to in European music. Here, there is a characteristic system **of cyclical rhythmic modes.** Every cycle is a formalised formation, additionally compounded in a number of parts by from 1 to 5 basic metrical units – periods. In each mode there is also an exactly determined timbre differentiation of each of the basic metric units, which are **low sonority** – *Dum,* or **clear sonority** – *Tak*.

Kinetic concepts are quite uncommon in the classical music of **India.** This represents the clearly most sophisticated and, at the same time, most cultivated known system of kinetics. The Indian *tala* system is a special type of **multi-metre.** Each *tala* is a **cyclical multi-metric model,** sequenced on an **additive** principle, which functions as a strictly determining framework for all rhythmic events in each rhythmically organised musical presentation of the classical music of India, for example, parts of compositions with the titles *jor, gat etc.* In contrast to European rhythms, which, in essence, take no account of timbre, there exist in India the tightest **ties** of rhythm to **timbre.**

From our European perspective, the traditional music of **Sub-Saharan Africa** is a very complicated example of particularly ambiguous kinetics.

A very strong preference for constant metric frameworks of colliding conflicting rhythmic structures is very significant for musical thinking here (e.g. syncopation, off beat etc.). Very obvious is the frequent use of **imaginary impulses** in musical structures. A more regular pulse and more isochronous sequence (a sequence of impulses of the same duration) de-

monstrate, as a rule – from our view – **light beats** which, as such, probably function like supporting beats in the role of our basic metrical units. A very frequent method of developing the musical flow is a **pattern principle** – a multiple repetition and variation of a short expressive model-**pattern.** There is a characteristic tendency towards **layering** with more varied rhythmic and metric layers, often in the form of a pattern. The resulting kinetic structures form their consonance and **interference,** combining as both **additive,** and even **dividing** and **multiplying** principles of organisation, thus reaching **the most complicated** forms.

The musical phenomena here, much more than in other cultures, require musicians and listeners to have the ability to maintain the **exact beat** of the basic metrical unit, even if it is in conflict with the expressive accents of the given rhythm.

A significant factor in the kinetics in the music of Sub-Saharan Africa is one of **the richest varieties of percussion instruments** that can be found there.

All the results and the investigation of the answers gained in the individual and general questions of this study support the fact that one of the most current tasks of **musical theory** is to attempt to systematically widen its methods and instruments enough to cover the musical phenomena of **all cultures.**

The majority of differences in the music of various cultures exist on the **social, functional, aesthetic** level etc., whereas the principles on the level of **musical thought** are in **essence the same,** or similar. By widening this subject to include **all** musical phenomena generally, musical theory can lead us to a sense of our appurtenance even with these most distant cultures.