

[engl un-edited]

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## **Another concept of harmony**

After i have started the "Places"-Series I noticed how something was changing on the concept of harmony. The experience of this situations presented to me not any more the duality of consonance and dissonance but another one, of integration and non-intergration.

The instruments would sound integrated whenever they play the analyzed formants in perfect intonation. No matter how complex the resulting microtonal harmonic relationships would be, in relation to exactly this given room, there is no possible constellation that would be more harmonious. A comparison with other than the analyzed formants played in the same room leaves the sounds disintegrated, unrelated and non-contiguous.

Consonance then would have to do with something like "being included", while dissonance would indicate that something is "not included".

The cross-check - when the "correct" sounds were played at the "wrong" place - showed that the tones sounded not only somewhat flat and disintegrated, they also seemed to unfold less and remained tied to their place of production. It is certainly an interesting quality of these "wrong" sounds that they remain clearly localized.

By contrast, the spectrum that belongs to the room - however aperiodic it may be - can be perceived as harmonious. The sounds unfold without pressure (a minimum of energy is necessary to fill the space) and the resulting sound is no longer localized. It seems to come from everywhere and not only from the instrument that produces - or better stimulates it.

Harmony is here the direct result of the space-pitch relationship. And as such, even a perfectly intonated C major chord (or even a C major in just intonation) - when played in a space which is itself built "in C#" could appear as a false and dissonant sound.

# Harmony and electricity

Another complication of the harmony concept aligned to the respective room, I observe in Electricity: There is hardly any more a place, be it inside or outside, where electricity is not present, so that it is always the electric spectrum which is priming the respective place. Electricity is priming not only our social/economic world but also our acoustic environment. And more, it has made itself to their condition. And (especially) concert halls, places that were originally built to shield and protect us from the social/economic world, are not only affected by electricity with their lighting and audio technology, but are based precisely on the premise electricity.

The world is divided into countries with a current frequency of 50 Hz (eg. Europe) or 60 Hz (eg. North America). With a few exceptions in railway and industrial applications, the world is reduced in two harmonies. A 50Hz frequency consists of a basic tone between G and G# below the bass clef plus all its harmonics. A tempered or "pure" intonated g or g# - regardless of its octave - inevitably generates beatings or dissonance. Thus, a single tone already generates inharmonicity. Harmonic music in the strict sense would only be possible if they are based on the local power frequency (and on the room!).

Everything else is dissonance.