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10 Propositions or Stellingen
pertaining to the thesis of J. S. Lach

entitled

Harmonic Duality

From interval ratios and pitch distance to spectra and sensory dissonance

Four propositions on topics drawn from this dissertation

1. ‘This disharmony, to paraphrase Bergson’s statement about disorder, is simply a harmony to which many are unaccustomed’. (John Cage, Experimental Music). The imperative of this study is to analyze the sonosphere into its harmonic components, spanning from various movable centers towards ever higher periodicities.

2. A ‘harmonic object’ is not necessarily a pitch interval. It is kept in tension between its sensual (timbral) and essential (harmonic) qualities, an opposition commensurate with the relation between difference and sameness: “diversity compensated by identity” together with “identity compensated by diversity” (Leibniz).

3. In the land of the frozen noise, there is a lake with harmonic islands.

4. Harmony is the hidden musical exercise of my self, unconscious of its surroundings.

Four propositions on topics drawn from the area of study

5. Tenney’s For Ann (rising) is a piece that achieves a multi-level stasis: its single morphology, an ascending ramp, is traversed simultaneously at various time scales in fractal ways, each level canceling the others out, an effect at once dynamic and fixed — like a spiral that flickers at each tier but is itself still. For Ann remains an object outside time, even if it takes 12 minutes to perceive this fact, its duration being the time required for its qualities to unfold, therefore maybe Cage’s ‘primary dimension common to all music: time’ is not so fundamental after all.

6. Perhaps one day courses on harmony will include the discoveries of Archytas, Euclid, Aristoxenos and Ptolomy, not just as historical curiosities but as relevant topics. Moreover: musicians learn the language of ratios instead of loosing their cool every time a composer writes an innocent 5/4 on top of a note.

7. ‘Software is frozen thought’ (Gregory Chaitin). The way a musician programs leaves traces of musical thought, the algorithms distilling the process of musical discovery; conversely, it is interesting to begin with abstract algorithms and translate them into instructions for musicians.

8. ‘I do not see colour-sensations but coloured things, I do not hear tone-sensations but the singer’s song etc. etc.’ (Edmund Husserl). We should avoid accounting for perception only in terms of efficient causes; I think the other Aristotelian causes (material, formal and final) hold promising insights in relation to music.
Two propositions on general topics

9. Today’s new-age superstition is the art of reasoning badly from well drawn figures. (In case anyone survives to read this proposition after the Mayan apocalypse scheduled to happen 8 days after the defense of this thesis).

10. *Veritas in numeris continetur* (Remigius of Auxerre, IX century). What is more: numbers are contained in sound, which is why music can be understood as a search for truth.