

## Virus tuning

The title of this article came to being not as an echo of the past pandemic, but rather as a consequence of the acknowledgement of the traceable tendency of standardization of the level of modern tuning of pianos. This article asks, are pianos really sounding great today, as they should be sounding? Before I begin explaining the essence of the question, I would like to determine certain minimal parameters related to the undeniable objective characteristics of a piano tuner and his abilities. First, they must possess sufficient and more than sufficient physical and psychological abilities. Second, they must possess a developed musical hearing, in particular the hearing of a piano tuner. Third, they must possess a minimal musical education, from a music school at least or better a Bachelor's Degree in Music. Fourth, they must have a developed technique of the right and left hands and conscious knowledge of piano tuning. Also, they must possess experience, will, energy, etc. (I'm not referring here to the numerous pseudo-tuners that have a tuning tool set and a tuning software, who as we will later see, are missing many aspects.).

Through progressive development, thanks to the accessibility of tuning softwares, we have gone from a world of constant quest, careful daily attentive listening and exhausting comparison, to a world of "harmony", "ideal temperament", and "ideal tuning" of the instrument within a very short period of time. But are pianos really sounding great today, as they should be sounding?!

More or less, the aggregate sound conception of the instrument's sounding is more realistically possible after a minimum of one full tuning pass of the instrument. Experienced tuners that have tuned by ear for many years, depending on their qualifications, experience and knowledge of the sounding of a particular model of piano (i.e. Hamburg Steinway Model B, Yamaha C3, Steingraeber, Bosendorfer, Shigeru Kawai) possess an ideal pattern of the sounding of unisons, intervals, chords, beats within intervals, registers (Bass, Middle, Treble) related to the size of the instrument. The layman, most of the time, if they don't have the necessary musical education level, accepts "as is" the product of piano tuning included with the purchase of an instrument with the "image" of the store and the brand name, not dividing tuning service and the purchase of the piano as separate.

I would like to note that the quality growth development trajectory of Asian piano production steadily goes upwards, both in branding and quantity, creating "chef-d'oeuvres" without halt in piano manufacturing. Despite sometimes being improperly or poorly tuned, their sound is nevertheless surprisingly of a decent quality. It is difficult for an inexperienced tuner to ruin them, even with a poorly accomplished tuning on the level of perception of a layman (beginners, parents, etc.).

Everything surrounding us in this world remains in a state of relative quietude. For example, in common understanding, a piano tuner from the mass possessing relatively enough work experience in the field will have an incredible tuning software and will work with a very tight pinblock. The tuner in question, after attempting to create a new tuning, 5Hz higher or lower

than initial pitch, the result is a virus tuning, done by eye, with a superficial level of control, and with an unconscious sound perception of the instrument, leading to unstable ternary unisons, and poor tuning stability (meaning the piano gets out of tune relatively fast afterwards). The instrument gets infected with a virus as a consequence, and acquires a memory of erroneous sounding. What is involved in this notion? It could be an incorrect sounding happening because of an incorrect setting of the tuning pins and incorrect tension of the music wire and bass strings in correlation to improper action regulation, the sounding won't be optimal as it could be or how that particular piano model was designed to sound optimally at the factory. Also, the minimal destruction of tuning pin holes, because of too much unnecessary motion of the tuning pins, brings tuning instability with time.

In the moments of "re-tuning" those virus tuning infected instruments, it is quite difficult to stabilize them within one tuning session, as if the piano is cursed or tuning it is like "getting lost in a forest of 3 trees". It might seem that the initial pitch of the piano is at 440 Hz, but the process of re-tuning that particular piano takes, in terms of duration, close to a pitch raise, and also takes much more energy, concentration and effort. Some pianos are more infected with the virus than others. Before we forget, I wanted to focus our attention on the evened out relation of speaking and non speaking length tensions of the strings that are crucial in achieving a proper sounding, they must have tensions that are even in relation to each other through the entire instrument. Undoubtedly, progress and regression are both close and distant, and everything depends on our ethical, psychological, and professional mood setting (and philosophy). From a virus tuning, one should cross to the immunity tuning, with the use of software, the right techniques, the use of new tools and technologies, but most importantly our will of self-improvement and healthy, harmonious sounding of the piano.

P.S. In this article, I'm not touching on the subject of the influence of a virus tuning upon the piano player and the audience listening to the virus tuning, which is frequently heard from TV, phone, tablet screens and everywhere, even on CD's. Neither am I talking about the causes of why virus tunings are existing.

P.P.S The example taken in this context of a pinblock with good tuning pin torque is just one of the hundreds of possible variations encountered. As an example, It could be that the tuning pins are loose, etc.

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