

Best Friend versus Best Servant

A Few More Thoughts on the Subject of Acoustic and Digital Pianos

When *Progressions* magazine published my article “Acoustic or Digital Pianos: The Great Controversy” (see www.bcrmta.bc.ca/Acoustic_versus_Digital_-_Fall_2008.pdf) I was really flattered by the great response from different music teachers’ organizations. The article was re-printed in music teachers’ magazines across Canada and even in an English Language magazine in Bulgaria. Soon after the first publication, however, I felt that I had left out a few important issues. Most of them concern the sound production of digital and acoustic pianos in the context of performers’ and listeners’ unconscious expectations. Unlike my previous article, this one is unapologetically “pro-acoustic”.

It is common knowledge that the sound of the high quality digital pianos is sampled from the sound of real grand pianos, and, as such, it possesses a great degree of beauty. Several experiments have proven that it is virtually impossible to distinguish the recorded sound of a good digital piano from an acoustic one. In fact, the recorded sound of a digital piano was often found to be more beautiful than the sound of a real grand, and, occasionally, an acoustic grand was distinguished only by its slight imperfection in tuning (You can see several discussions on the subject at the forums of www.pianoworld.com). All this evidence suggests an unambiguous victory for the Digital Camp, right? Not so fast.

Firstly, remember that the issue is the RECORDED sound. When we are listening to recorded sound our brain creates expectations which are different from the expectations in a real-life acoustic situation. Do you often confuse a sound or speech coming from the radio or a sound system with a sound coming from a real person talking or playing acoustic music instrument in your house, or, especially, in the same room? Probably not.

Secondly, the relatively limited range of touch response of a digital piano often shifts the blame of an unsatisfactory performance to the player. As a friend of mine wittingly commented “my recordings on a digital piano often sound like a crappy pianist is playing on a gorgeous instrument”.

How is a beautiful, expressive, warm, and “round” sound achieved on an acoustic piano? Oversimplifying a bit, generally such sound is a product of applying a significant amount of (arm) **weight** combined with a **low velocity**. In pianist’s terms, the good sound should be “solid” and “warm” but “unforced”. The problem with the digital pianos is that they equate the **key velocity**, which is how fast a key goes down, with the **weight** behind the key pressing.

I will illustrate this problem with the following example: If you have both a digital and an acoustic instrument try this experiment: hit a key with your second finger with a quick and forceful “thrusting” movement. The acoustic piano will respond with an unpleasant ear-piercing sound, while the digital’s sound will simply be louder, without changing its basic characteristics. In other words, it will keep its pleasantness and roundness. So why is this not an advantage of the digital? The surprising answer is: because of our inherent tendency to attribute human characteristics to inanimate objects we love.

On an unconscious level we anticipate a reaction that displays some healthy human qualities. We will not expect a friend to accept physical abuse without protest, and if a protest is absent our respect for this friend will inevitably decrease. In the strange universe of human psyche we would also value a crystal vase that can be shattered into a thousand pieces much more than an unbreakable vase made of clear plastic which may look exactly the same; the very fact that an object cannot or will not sustain abuse increases our fondness for it.

In a nutshell, despite their practicality and advanced technology, digital pianos will never reach the status of good acoustic ones. Only an acoustic piano can become our best friend, a digital one, in the best of circumstances can become only our best servant.

Dimiter Terziev, piano teacher and dealer
www.kamloopspiano.weebly.com