



PERFORMANCE NOTES

February 5, 2007

Composer	Peter Tchaikovsky	Piotr Ilic Tchaikovsky																
Compose Date	Finished in 1878	Maybe mostly created over a span of several months																
Title	Violin Concerto in D Major																	
Performers	Hardware	<table border="0"> <tr><td>CPU</td><td>AMD Dual-core +4800 overclocked</td></tr> <tr><td>Memory</td><td>4GB</td></tr> <tr><td>HD</td><td>10 KRPM</td></tr> <tr><td>O/S</td><td>XP 64 Pro</td></tr> <tr><td>Sequencer</td><td>Cubase SX</td></tr> <tr><td>Sample Player</td><td>Kontakt2 (full-version)</td></tr> <tr><td>Violin</td><td>Garritan Stradivari Violin 2.01</td></tr> <tr><td>Orchestra</td><td>Garritan Personal Orchestra</td></tr> </table>	CPU	AMD Dual-core +4800 overclocked	Memory	4GB	HD	10 KRPM	O/S	XP 64 Pro	Sequencer	Cubase SX	Sample Player	Kontakt2 (full-version)	Violin	Garritan Stradivari Violin 2.01	Orchestra	Garritan Personal Orchestra
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Software																		
Samples																		
Method	Totally input by computer keyboard and mouse . . . not one bit of real-time MIDI keyboard nor Controller devices.																	
Performance	Conductor/Player	Jim Thomasson																
	Part #1 – 21 minutes	Melodic, energetic <i>10% slower than traditional 19-minute performances</i>																
	Part #2 – 10 minutes	Slow, melancholic <i>43% slower than traditional 7-minute performances</i>																
	Part #3 – 14 minutes	Fast, exciting <i>27% slower than traditional 11-minute performances</i>																
	Total - 45 minutes	<i>24% slower than traditional 37-minute performances</i>																
Personal Notes	<p>In 1990, I started work on the Concerto using the original Emu Proteus2 Sound Module hardware and Musicator Sequencer software. Finishing the concerto during 1992, I was totally dissatisfied with the violin sound, but other people appreciated the work behind the not-too-perfect sound. Nonetheless, I attempted to produce the best possible sound with the controllers available . . . lots of controller work to achieve sort-of delayed but fixed-frequency vibrato.</p> <p>December 2005, with GPO in hand, I started to learn Sonar5 Pro (S5) and Garritan's Kontakt Player. I got excited when I saw the announcement about the upcoming Stradivari – perhaps here was the authentic-sounding violin that I always wanted!</p> <p>January 2006, I received Stradivari 1.07 and Kontakt2 full-version (K2).</p> <p>February 2006. building on the MIDI file from the 1990 work, I started to learn S5 and K2. Sadly, the 64-bit Sonar would not function with the 32-bit Kontakt2 VSTi. However, the 32-bit S5 functioned with K2 DXi and VSTi.</p> <p>Even though S5 functioned with K2 DXi, it showed grossly erratic results – dropping notes, cutting notes short, etc..</p> <p>In addition, S5 would not correctly send MIDI Program Changes to DXi K2. Not knowing differently, I wanted to build Instrument Banks in Kontakt from all articulations of a single instrument. In this manner, I could then switch articulations in a single MIDI track . . . much convenient than a separate track for each articulation.</p> <p>In March 2006, guessing that Steinberg's VSTi had a better chance of working with VSTi Sample Players, I abandoned Sonar in favor of Steinberg's Cubase sequencer because it correctly handled Program Changes (K2 VSTi Instrument Bank addressing). Now, I could ignore the technical stuff, and the serious playing and conducting could start!</p>																	

Movement #1 first rehearsal was September 2006, 6 months later. Being excited with the results, I shared my work with Giorgio Tommasini, the Strad creator. Giorgio asked Gary Garrigan to share it on the Forum (<http://www.northernsounds.com/forum/showthread.php?t=48208>). Absorbing listener comments, I began to make revisions.

Some listeners said, "You are beating the violin to death. Too heavy bow attack everywhere!" At first, I was saddened by their comments. The bow attack was exactly what I had been missing for years and years, and now I had it – O joy! Everything now had my previously-missing attack. Back in 1992, people had said, "Sounds a bit like a pipe organ." Well, it sure didn't sound like an organ now!

Begrudgingly, I began to back off the attacks. I'm still backing off the attacks.

First public rehearsal of Movement #2 was November 2006, 2 months later – it's a shorter, more simple composition (less instruments). A further sharing brought more comments, suggestions, prompting me to make more revisions – more backing-off the attacks (<http://www.northernsounds.com/forum/showthread.php?p=452842>)

A few listeners were shocked with the super slow tempo of both movements, particularly #2. My 14 minutes were being compared to famous violinists' 7 minutes. Here is my explanation: the violin sound of my 1990-1992 work was so terrible, that I fell in love with the wonderful "muted" Tommasini Stradivari sample. It reminded me of human crying. I wanted even more emotion, more melancholy. It became slower and slower, bending here and there, and more heart-wrenching. Later, I kicked up the tempo (to 10 minutes) . . . but not much!

Along the way, I had to learn about and how to create . . .

- Harmonics – natural and artificial
- Good sounding tremolo
- Vibrato during slides
- Double-stop slides
- All the bowing techniques

First rehearsal of Movement #3 was January 2007, 2 months later. Obviously, I was learning how to play all these instruments, conduct the orchestra, and operate the programs.

Thinking back, I've often asked myself: "What is the most important musical parameter to make the computer's violin performance sound emotional?" While superior sample sound quality, clever K2 script massaging, appropriately bending the frequency, balancing relative instrument intensities are all important, I think that tempo variation is the most important parameter for an "expressive" instrument.

At the end of January, the Concerto was ready for its first performance as a whole. Although I conducted and performed this work only for my personal enjoyment and personal sense of accomplishment, it's all the better when you also enjoy the music. Your comments and suggestions are welcome.

What took me a year (spare-time) to conduct and perform, Tchaikovsky composed in 2-3 months (full-time) – without computers, without sequencers, without score writing programs, without samples . . . maybe only a piano, maybe only a mind, finger, and an eye. How did the great masters do it?

Giorgio, you have allowed me to pretend, to enjoy my life-long goal of playing the violin while conducting an orchestra. Even though I don't know for sure, I believe that you personally created the vastly-complex K2 Script that powers your samples. In particular, I never sensed transition discontinuities while moving from ppp to fff. V2.01 bending as a function of intensity derivative adds noticeable vibrancy and life. Your basic control of vibrato intensity and frequency as a function of time truly mimics the art. Thank you!