

THE BUCKEYE BACKCHECK

Newsletter of the Columbus Chapter of the Piano Technicians Guild

Volume 32 Issue 9 December 2007

CHAPTER NEWS AND NOTES

President's Message

Welcome to all. It is finally winter, though winter's official start date hasn't arrived yet. For me, the presence of snow on the ground, cold temperatures (it was 13 degrees this morning on leaving the house), and crazy drivers crashing into everything in sight herald winter, regardless of official dates.

Put aside the third Tuesday in January for our annual Christmas dinner/meeting. It will again be held at Bucca de Beppo Restaurant, a server of fine and plentiful Italian food. The firm time, directions and other details will follow in January's newsletter. We will again ask for an R.S.V.P. so enough space may be reserved so, when you know that you are planning to attend, please drop an email note to me (caltenburg@aol.com).

November's meeting at the Piano Warehouse was short and sweet. Dave MacDonald and I were in attendance, and no one else. The meeting was called to order at 7:30 P.M., no quorum was

present so official business could not be conducted, and the meeting was closed at 8:05 P.M. after Dave and I enjoyed some of the desserts he supplied for the meeting.

There is no meeting scheduled for December. As I am sure is the case for everyone, we are busy tuning and repairing pianos, attending parties, etc.

I wish you and yours a joyful Christmas and a fruitful new year in 2008.

Til the party, then,

***Merry Christmas,
Chris***

**Again, the next chapter meeting will be the
Holiday Dinner, Tuesday January 15.**

THE COLUMBUS CHAPTER OF THE PIANO TECHNICIAN'S GUILD

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FROM THE PIANOTECH DISCUSSION LIST

Duplex Scales

Dale Erwin <Erwinspiano@aol.com> writes:

Bob Davis suggested an experiment which, any one with a roll of masking tape can do.

Our test subject was 1953 Steinway B with an original board, new strings and action. The voicing is in the range of what many people would find acceptable. We enlisted one of members to play the same piece of music after taping off the three rear duplex bars. As he played we took off the tenor area tape. The clarity sustain & flavor of the piano tone was greatly more appreciated by all present and of all areas & most pronounced of the 3 individual sections.

We then did the same thing with capos section 2 & 3. Similar result in capo 1. Capo 2 was less obvious but still preferred.(i.e. increased sustain,clarity & color. We taped off the front duplexes as well and a similar outcome was observed though not nearly as pronounced.

In our follow up assessments I was surmising that the more efficient and strong the tone of a sound board is the greater the duplex effect may be.

I suggested the exercise because of my own experiments in this area, and because I didn't agree with recent talk about the duplexes not being worth much. The first piano on which I had practical use for it was a Steinway D some years ago that had been braided all the way up the tenor at the factory. There was something unsatisfactory about the tone, and I was poking around, and noticed the braiding. I pulled it out and was surprised at the improvement.

So try it yourself and see if it's just smoke & mirrors. Whether it is a desirable affect is your call. I personally like it.

I was in Los Angeles following up on a 1905 Victorian Steinway A-2. I did a rib crowned belly job last Dec. It got everything else new as well as new key set and beautiful Ronsen Bacon felt hammers. On this A I removed the bass cantalever (first time) which has been a dynamic unqualified improvement. It now

has a huge bottom end the likes of which I've not encountered in an A-2. ...

It was such a wonderful sound. As I listened more closely I started plucking the rear duplex in the first capo area and I could hear these sounds in the music as he played. It was then I realized the sound I was hearing was possibly coming from this duplex.

I am fully aware that a great tone comes from many things in a belly that is functioning at maximum capacity, and perhaps the duplex isn't all that affective unless all those things are. It was great fun and I was stunned and enthralled by the entire experience.

Food for thought?

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Ron Nossaman <RNossaman@cox.net> writes:

It's not much of a stretch hearing the difference between muted and open duplexes, both front and rear. I don't recall anyone ever advocating muting duplexes except when absolutely nothing else would work. Incidentally, taping off the speaking lengths produces interesting results too. Meanwhile, I'd like once again to point out that with the exception of open low tenor back scales, the tuned front duplex is the real abomination, and the bane of our existence in trying to eliminate the zings, whistles, and wails they produce in the capo sections as they deliver their benefits.

Untuned back scales actually add more to the sound and sustain than tuned rear duplexes, for no other reason than that the segments are longer. Otherwise, the rear duplex (top half of the scale), tuned or not, is fairly benign and helpful if you don't braid it off.

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David Porritt <dporritt@mail.smu.edu> writes:

From my observations - admittedly not double blind studies - I have not missed anything nor did I want any sound I couldn't get by traditional voicing techniques. I'll admit that the front duplex does make a difference. It's just that it's not a difference I want to keep at the expense of not being able to control the sounds it makes.

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David Love <davidlovepianos@comcast.net> writes:

I think the one thing about tuned duplexes (rear duplexes that is; I'm in total agreement about the contributions, if you can call it that, of front tuned duplexes) is that they necessarily are shorter. One of the side issues that you mention is backscale length.

If one of the goals of a tuned rear duplex is to create the illusion of greater sustain then a better and more direct benefit might be realized by increasing the backscale length, which means untuning it, so that the bridge is not tied down so much. The direct benefits of that seem to be far greater than the indirect benefits of a tuned rear duplex, all other things being equal by which I mean that the rear duplex is not muted. As far as Dale's and Bob's experiment goes, it concurs with my findings that muted rear duplexes seem to have a drier sound than unmuted ones. The same thing might very well be true of rear segments that sit on rest felt on the plate rather than aliquots or directly on the hard surface of the plate itself.

Ron Nossaman writes:

Plucking those long back segments in my vertical hitch converted pianos produces hugely more sound and sustain than plucking the much shorter tuned rear duplex segments does. Since there's no direct correlation between speaking segment and rear duplex like there is in the front, I don't see the reason for tuned duplexes, especially when some of them are 30mm long. I don't think those little guys will be beefing up or filling out the sound much.

I can't tell the difference between tuned and mistuned duplexes. Even sitting through Duplex Dan's class as he described how much better it sounded, I really couldn't tell the difference.

THIS MONTH'S UNUSUAL PIANO

Sauter's 1/16 tone microtone piano

from

<http://www.sauter-pianos.de/english/pianos/microtone.html>

If the term "microtonality" means anything to you it is probably the attempt to divide up the generally accepted system of intervals which is based on whole tone and semitone steps.

However, with microtonality it is much more an attempt to explore the areas between the semitones of the usual system and thus to activate new areas of tonality. In pianos this system has increasingly been the subject of schemes and structural activity for more than 100 years. Quarter tone instruments have already been around for a long time. Particular pioneers of these ideas were Charles Ives and the Czech Alois Hába who in turn extended his ideas to the 1/6 tone.

However, in 1895 the Mexican Julian Carrillo (1875 - 1965) worked on the problem of the 1/16 tone interval for the first time, as yet probably the smallest unit between the usual semitone step. In 1925 he devised an original notation for these ideas. Together with the conductor Leopold Stokowski he founded an "Orquesta Sonido", in other words an ensemble which played microtonally and with which he and Stokowski even went on tour in the '30's. Then in 1940 Carrillo took out a patent on a project for 15 differently pitched pianos. He found the piano maker Carl Sauter in Spaichingen which was able to build him the relevant prototype pianos for his project. He presented his instruments built by Sauter in 1958 during the Brussels World Fair. These were pitched, according to the model, from whole tone down to the sixteenth tone.

Success was not long in coming for Carrillo and the piano maker Sauter: the instruments went on to win a gold medal in Brussels. Today two of the instruments are in the Paris Conservatoire: one in the sixteenth tone and one in the third tone. Others are in the Conservatoires in Nice and Mexico City.

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The sixteenth tone piano is pitched from key to key in 1/16 tone intervals so that a normal fifth on this instrument sounds like a semitone, missing out a 1/16 tone. From the bottom to the top tone there is a span of exactly an octave on this piano. The sound is remarkable as it does not have the traditional sound sensation of a piano but, due to the continually developing vibrations of the individual tones, completely new sound waves are produced. These tonalties result in new challenges for a pianist and also for the composer writing for this type of instrument. The piano stands 116 centimetres tall with 97 keys and 291 steel strings which are stretched trichordally (three strings per tone).

Jurgen Goering of Piano Forte Supply writes:

There are a few interesting sidelines to making this piano. It is a special plate of course, and it is obvious that the instrument is straight (parallel) strung. The keyboard with its 97 keys is pretty

wide! (Although it only goes down to C3, I believe). I understand there are dampers all the way to the top. To collect all the hammers for each microtone instrument took a while - they were "pinched", one at a time, from 97 sets of Abel hammers.

Gene Nelson <Nelsong@pbic.net> writes:

Regarding the tuning: would it make sense that each note is 12 cents wide ($1200/97 \approx 12$ cents).

So it is said that each p5th on the keyboard would be equal to a semi-tone. If equal temperament were tuned then all p5ths would be in tune.

To fill in the notes between the semi tone 5ths would be setting whatever beat rate is correct for 12 cents from note to note - all the same and when you tune 8 of them and get to a p5th (semi tone) it should all fit.





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www.ptgcolumbus.org

Upcoming Events

Holiday Dinner and Chapter Meeting

Tuesday January 15, 2008
Buco di Beppo, 60 E. Wilson Bridge Rd., Worthington

Please call or email Chris to RSVP !
792-7839 caltenburg@aol.com

(No meeting in December)

PTG Rebuilding Seminar

March 6 - 9
Home Office, Kansas City
Contact: Kathy Maxwell



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