# Dr Mueller? Dr Mueller!? Oh, boy :(

# J. Simon van der Walt for clarinet and acoustic laptop

### Programme note

*Dr Mueller? Dr Mueller!? Oh, boy :(* is a postlude to *Spiricom*, the third piece in Gordon McPherson's 2007 trilogy *Ghosts.* The 'spiricom' was a psuedoscientific electronic device built by a couple of cranks in the 1980s, who convinced themselves that with it they could hear and talk to dead people including, supposedly, a certain 'Dr Mueller'.

While the tone of my remarks may betray a certain skepticism towards the notions underlying the work, Gordon's music strikes me as interesting, challenging, and even entertaining. My 'postlude', on the other hand, may prove less rewarding to listen to. It may useful to know that the lack of amplification for the laptop sounds, and the resultant borderline audibility, is deliberate: and that the clarinet line is based on pitch material transcribed by ear from the original work.

#### Instructions to player

- Launch the Pd patch offstage and make sure it is working
- Close the lid of the laptop and wait for the laptop to go to sleep and for the patch to fall silent
- Take the laptop onstage, and place it on a table beside you, facing the audience
- Prepare your clarinet to play
- Open the lid of the laptop. Wait for the patch to start playing, and listen to it for a short while.
- Work your way slowly through the page of notes given, one by one, in order. Each note must be played quietly, with no inflection, for more or less as long as you can comfortably hold it while retaining control. In between each note, stop and listen to the patch for a while: perhaps a third as much listening as playing.
- Start with the first note G: the piece may then end on any of the three Bb's marked with a fermata, depending on how long the piece feels it should be. Alternatively, start at the C marked with the triangular fermata, and play to the final Bb.
- After playing the final note, listen for a while, then shut the laptop lid. The patch will play for a few moments longer, then the machine will sleep and the patch will fall silent. This is the end of the piece.

## About the Pd patch

The piece requires a laptop with a built-in mic and speakers. In performance this is to placed on a small table to one side of the player, with the screen facing the audience. The sound from the laptop is not to be amplified in any way! Even if the sounds being made by the laptop are almost inaudible, that's fine. The laptop should be run from the battery, not the mains.

The sounds produced by the player are picked up on the internal mic of the laptop and modified by a PureData (Pd) patch, supplied by the composer. The sounds produced by the patch also feedback to a certain extent through the laptop speakers into the mic: this is intentional.

The patch is designed to launch and run automatically without any further interaction from the performer. It cycles through a sequence of presets every minute or so: as the length of each note and the pauses between are up to the player, the results are unpredictable. Some of the settings can produce fairly extreme feedback, but so far nothing which seems in danger of damaging anything.

### Quickstart

These instructions assume an Intel Mac running OS X 10.4 or later:

- Unpack the folder 'Dr Mueller Pd patch.zip' to any convenient location your local drive: the desktop is fine
- Go into 'System Preferences... Sound', make sure 'Input' is set to 'Internal microphone', and that the input volume is set appropriately when playing the clarinet
- Turn the output volume on the laptop speakers all the way up
- Drag the file 'drmueller.pd' onto 'Pd-extended-mueller.app' to launch the patch

That's it: everything should now run automatically.

#### More on the patch

The Pd patch was authored in Pd 0.42.5-extended on a MacBook Pro under Snow Leopard. The patch itself should also be capable of being run under Windows or Linux. However, there is an unfortunate dependency on Thomas Grill's xsample library, which is not part of Pd-extended. This would need to be installed in order for the patch to work on another platform. This is also the reason for distributing the so-called 'Pd-extended-mueller.app' with the patch: this is a version of Pd-extended for the mac which has been hacked to include and load the xsample binaries.

The closing and opening the lid on the patch has not been tested on anything other than mac hardware, and may not work on other machines.

It may be advisable to set the Energy Saver preferences so that there is no danger of the laptop going to sleep during the performance, although in my experience running audio apps on a mac seems to keep it awake anyway. Also, make sure there is enough charge in the battery!

Here are screenshots of the Sound control panel – doesn't matter if 'Aggregate Device' is not there:

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When the Pd patch is launched, you should see two windows. The first one is labelled Pd-extended, and should look something like this:

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If there is anything there which looks like an error message, you'll need to get the composer or someone else who understands Pd to have a look at it. The window labelled drmueller.pd should look something like this:



As the patch runs, various things should turn themselves on and off automatically every 15-35 seconds. You should see the input level meters moving in response to sound coming in.

The patch is designed to go pretty crazy at times, including some very strong feedback sounds. These should not damage the machine. However, as a panic measure, try hitting the < (comma) key a couple of times, this will curb feedback by bringing the input level on the patch down. The > (period) key brings the input volume back up again. The esc key can be used to toggle the whole patch off and on again.

It is possible to experiment with the patch without having it automatically run through it's own set of presets. Do do this, click on the box labelled lib/natseq. In the window that opens (called natseq.pd), untick the red checkbox labelled fullauto. If you break something, quit and launch the patch again, everything should go back as it was.

JSVDW 16/12/2011

# **Dr Mueller? Dr Mueller!? Oh, boy :(**

Clarinet in Bb

