

The East German Room (Das Zimmer der Deutsche Demokratische Republik)

Curator **Rainer Linz**

Your Highness, Prime Minister, Herr Generaldirektor, Distinguished Guests, Ladies and Gentlemen, Friends and visiting Rosenberg scholars:

Let me begin by thanking you all for coming tonight. It's gratifying to see so many people captivated by this first hand, tactile and visceral experience of Rosenberg's remarkable oeuvre. Having said that, I'm afraid I'll have to apologise because we are not able to go into the East German room at this time. This is because of the sensitive nature of some of the exhibits - we are still waiting for permission from the central committee to open the display to the public. That decision is expected any time now, but until then I'm afraid we must make do with what we have: namely the official photographs of the exhibits that are here on display. I hope you can bear with me as I introduce some of these marvellous instruments to you tonight.

Those of you who knew Rosenberg will remember that leading up to the second world war, he had become so disillusioned with Western culture that he joined the Japanese Imperial Air Force as a pilot. The proof of this is literally hanging over our heads as I speak (fig. 1). We know that many of Rosenberg's works are autobiographical in nature, and so the Kamikaze Violin of 1937 can be seen as a foreshadowing of ominous things to come.



(Fig. 1) The Kamikaze Violin (1937)

Unfortunately his project came to nothing, and after the war Rosenberg moved to East Germany to take part in its reconstruction. As you know East Germany's best and brightest – the so-called 'rocket scientists' – had been called to finish their work in the United States, while many others emigrated to Soviet Russia for similar professional reasons. The resulting brain drain would have devastating consequences for East German culture, and to his credit Rosenberg understood that where the scientists had failed, it was truly the duty of artists to fill the void.

And so: Das Institut für Alternative Violinpädagogik, established in East Berlin in 1947 along what was then the Große Frankfurter Strasse. What was the inspiration behind this culture-reforming initiative? I can tell you it wasn't 12 tone theory, that much we know. It wasn't even string theory. No, above all, Rosenberg was convinced he would find his inspiration – and the rejuvenation of East German culture – in the emerging Quantum Theory.

You've probably noticed that Quantum Theory has been thrust into the limelight again more recently, due as much to its media potential as its evolving application in computing. The Canadian Prime Minister, Justin Trudeau, was even asked to explain Quantum Theory on live TV, which he was easily able to do in a way that the average Canadian could understand. Such is its importance in emerging technologies that even prime ministers have to be apprised of its possibilities.

So what is it really, and how does it work in computing – and music? Well, you'll know that our old-style computers are made up of millions of tiny little switches, each of which can be turned either on or off – being ones and zeros – together representing the instructions and data inside the machines. Our modern Quantum computers have millions of these tiny little switches too, only



(Fig. 2) Schroedinger's Violin (1947)

they can be turned both on and off *at the same time*. This simple mechanism has been declared as the next big revolution in computing.

How is it even possible for a switch to be turned on and off at the same time? The East German philosopher Erwin Schroedinger explained it best with his own little thought puzzle called Schroedinger's cat. I'm sure you've all heard of it. This is a mind exercise which involves a hypothetical cat inside a hypothetically sealed box. We are asked to consider whether the cat is alive or dead, and as we all know, are led to conclude that until we can open the box and look for ourselves, the cat must be both alive and dead *at the same time*.

So there you have it. Almost everyone has heard of Schroedinger's cat. But who has heard of Schroedinger's violin? No? It's one of the early works on display here, highlighting Rosenberg's engagement with Quantum Theory. Yes, we are very lucky to have Jon Rose's reconstruction of this enigmatic work right here in the East German room tonight (fig.2). As you can see, the hypothetically sealed box motif is obvious, and the cryptic features of a violin can also be discerned. Yet here we have a work that is no simple conundrum about a cat, but rather a musicological quandary as to the nature of identity itself, for we ask: "is it a violin or not?" And clearly, because we will never know the answer, we conclude that it both is, and is not a violin *at the same time*. A truly great quantum musical experiment from the illustrious Johannes Rosenberg.



(Fig. 3) The Data Violin reconstruction by Riches, Kartadinata, Rose (2016)

Another instrument we will have on display once the room opens is the so-called 'data violin', or 'robot violin' as it is less often called today (fig 3). The sensitive nature of this exhibit means that I can't really say much about it yet. It was originally designed to connect via cable to the New York stock exchange, converting the raw data into musical sounds. Or as one pundit put it, it's the only violin in the world that can play the stock market!

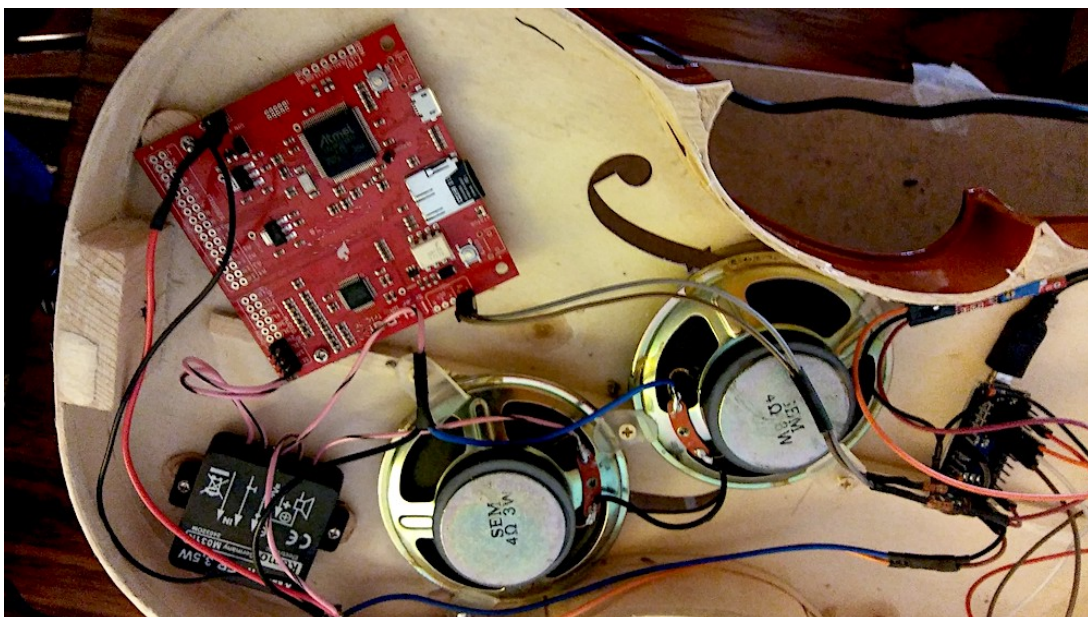
But there is a much more sinister side to this construction, warning us of the danger of applied *violinology* where this can be accessed by the State. By taking the data from the stock exchange, mapping it as music, then subjecting it to musical and compositional processes (which are still unknown to us), and finally - under state compulsion - sending it back as data to the stock exchange, it was hoped to undermine the entire Western financial system. Is it any wonder that artists are so fearful, and so loathing of politicians to this day?

But I've said too much already. I would like to turn it on for you to hear, but I daren't. We do need to be careful because the last time we left it running there was an ASIC investigation! But if I were to describe its music to you - it's rich, deep, string tone - it would be as an intermittent rising and falling of apparently random configurations of sound, punctuated by moments of crisis.

As you can imagine, it is a work that cries out for us to ask whether it is intelligent, or merely some form of codified financial information escaping into the ether. In other words, is it music or not? Our pitiful level of funding means we have years of research ahead of us to even begin to understand what is at work here, and so until then once again we are forced to conclude that it both is and is not music *at the same time*. A truly remarkable contribution to musical philosophy from Rosenberg's Institute.

Finally I'd like to introduce my own reconstruction of Rosenberg's famous Quantum Violin, first conceived in 1948 at the Institute in Berlin. It provides an advanced technological solution to the original design framework, for if this violin had actually been built in 1948 it would have been the size of a room. Today it looks just like an ordinary violin, as you can see (fig 4).

Not that a violin can be both a Quantum violin and an ordinary violin *at the same time*. That's not really how it works. So how should we understand the Quantum conundrum posed by this particular reconstruction? Well if you listen carefully to the youtube clip, you will hear that it is playing, even though no one is actually playing it. (pause). This is not filmic trickery, it's actually playing even though no one is playing it. And now see how the performer picks it up and begins playing. Can you hear how the violin continues to play, even though someone else is playing it? What kind of music is this emanating from 1948? It should be clear, if you've been both watching and listening carefully, that here is a violin deliberately designed to be played and not played *at the same time*. A quantum violin, if you will.



(Fig. 4) The Quantum Violin (1948) a reconstruction by Rainer Linz (2019)

And so, this brings us to the end of our short introduction to the East German room featuring Das Institut für Alternative Violinpädagogik. Unfortunately, because of the decades of official secrecy surrounding these works, their impact on subsequent generations has been, shall we say, limited at best. But I wonder if you can imagine the consequences for the future of a music that could have been? For here Rosenberg has conceived an instrument which both is and is not a violin. It can be played or not in order to produce what is and is not music! *All at the same time.* "Oh brave new world that has such wonders in it!"

As I mentioned before, we hope to receive permission to open the East German Room to the public very shortly (Fig. 5) Until then I will hand you back to the Generaldirektor Dr Jozef Ceres, who will lead you through the rest of the Rosenberg Museum tour.



(Fig. 5) The East German Room (Melbourne 2019) remains closed and not.

The complete theoretical proof of The Quantum Violin can be found here, as it takes its place these days, as standard post graduate pedagogy in physics:
https://www.youtube.com/watch?v=JWIN_Pqwn8g&t=5s

Beware of charlatans and AI generated fakes on the internet posing as quantum violinists - manchmal ist das Problem, daß Problem! For an authenticated copy of this address and cutting edge research on The Quantum Violin, don't hesitate to write to:
contact@rainerlinz.net