

Resonanzio Podiums capture the World's Concert Halls

Matthias Beltinger, Principal Double Bassist with the German Chamber Philharmonic Bremen and founder of Resonanzio, Germany

In my long career as an ensemble and orchestral double bassist, I have been obsessed with figuring out how to get the best sound from my instrument. I experimented (and still do) with different strings, with double bass endpins, and a wide variety of bows. At some point, the great significance even of the floor as a reflective surface for the sound became apparent to me. I started searching for a podium that aimed primarily at the improvement of the sound, but couldn't find anything on the world market.

Idea

I wondered if it would be possible to build a well-sounding podium with the right wood, and at some stage I shared my thoughts with a friend who is a carpenter and who had been building HiFi speakers for a long time. He was immediately fascinated with the idea, and we agreed to put together a few podium prototypes. The effects of even these first experiments with "Sound Podiums" were so much better than the usual podiums used just for increasing height that it quickly became clear that we should dig deeper into the subject. Thus began a phase lasting almost two years, during which we experimented with different types of wood, shapes, and playing heights. I founded **Resonanzio** for marketing the podiums, and since then, Bernhard Prösler, the carpenter-designer who loves detail and I, principal double bass player of a world-renowned orchestra (and therefore an ideal link to the world of classical music), have made a complementary and successful duo.

Pure Wood Product

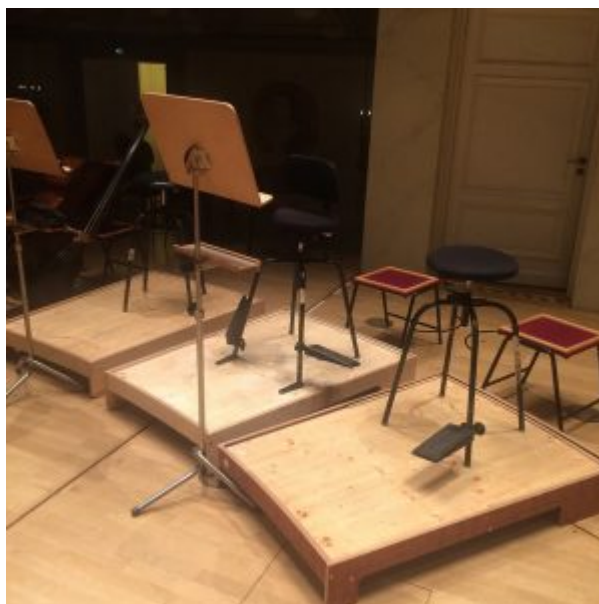
At the core of the podium is the resonance board made from soft wood. The sound of the instrument causes the board to vibrate, thus allowing more freedom for the sound of the instrument. It is in particular the lower frequencies that are supported by the Resonanzio podium. Notes are articulated more clearly, and more overtones are projected into the space. Musicians can hear themselves better, and the sound is perceived in the hall transparently and clearly present. Cellos, double basses, harps and harpsichords are the ones to benefit the most from playing on Resonanzio podiums. The lower tones sound clearer and fuller, and fast passages are much better articulated and can be heard more distinctly.



Acoustic Model

Through the countless tests we understood on many different instruments, we discovered an interesting phenomenon: it wasn't necessary for an instrument to have direct contact with the Resonanzio podium to result in a clearly audible difference in sound. On the Resonanzios, Baroque cellos and viols, too, which play without spikes, sound much clearer and more rich in overtones. We also tested bassoon, horn, and violas: all the instruments demonstrated a freer sound.

This led to the idea that our Resonanzio podium could be an acoustic model for a concert hall. All stage floors need to be able to support tons of weight, but of course these massive floors cannot vibrate really freely. Putting it the other way round: the phenomenon of the increased freedom of instrumental sound on the Resonanzios means that a standard stage floor swallows part of the sound. World-class halls like the Elbphilharmonie or the Pierre Boulez Hall in Berlin have acquired our Resonanzio podiums because they support and benefit the sound of the instruments.



Matthias Goerne

We were particularly pleased by the reaction of the famous baritone Matthias Goerne after we suggested that he have a go singing on a Resonanzio podium. He was immediately taken by the sound, and as a result recorded Schubert Lieder with the Chamber Philharmonic Bremen standing on *Resonanzio*. He reported that he heard himself better and he very much enjoyed the sound feedback coming from below. This inspiring response from Matthias Goerne confirmed previous experiences: that the sound from the instrument (in this case, the singer) was transferred to the resonating board, which in turn, acting as an additional acoustic unit, optimized the sound in the concert hall. The next question is: will the Resonanz surfaces work also for a choir? What might the impact on the sound be? No detailed tests have so far been carried out in this respect.



Sound Test

Talking of sound tests: we only needed to play a few notes – once on the stage floor and once on the Resonanzio podium – to bring out the difference in the sound. Even musical amateurs can hear the difference. The Elbphilharmonie in Hamburg gave us the opportunity to play the double bass in an empty concert hall on the stage first without a podium, then with a normal heightening podium, and finally with our Resonanzio podium. It didn't take the management of the Elbphilharmonie, who'd been listening, long to decide to acquire Resonanzio podiums.

It shouldn't really come as a surprise that the quality of the floor on which instruments play, plays an important role. Why, then, is it that even today, concert halls, churches, or other performance spaces only have regular heightening podiums,

rather than podiums that prioritize sound? The experience of listening in order to compare is very important: we recommend to all musicians who play on podiums that they find a second person to listen from the hall and try to identify the impact a normal heightening podium really has on the sound. In our experience, a closed wooden box results in a sound that is perceived as louder by the player but foggier to the listener. Some manufacturers punch F holes in the surface of podiums, which naturally immediately gives the emotional perception of a good sound. But the use of cheap plywood for podiums won't have a positive impact on the sound. Likewise, playing on regular heightening podiums with plastic surfaces and removable feet in different heights will reflect a harsh, less beautiful sound. Resonanzio offers trial periods during which the Resonanzio podiums can be tried out in the concert hall or performance space without pressure of time.

Well-known Customers

Resonanzio can meanwhile be found in numerous orchestra and concert halls. Renowned orchestras in almost all European countries, the New York Philharmonic, Toronto Symphony Orchestra, Oregon Symphony Orchestra, and the Australian Chamber Orchestra have all acquired our Resonanzio podiums. We are especially proud of a review from Simon Rattle: "These are fantastic resonance podiums! A real treat!" He made sure that now the double bassists of the London Symphony Orchestra, too, play on our podiums.



Of course the Resonanzio team is proud to inspire amazed reactions from the music world in the 21st century with our new, pure wood product. I myself remain a dedicated performer and am thrilled every time I rediscover the physical experience of vibrations coming from underneath while I play. Our Resonanzio podiums are luxury goods for a very limited market, and do not result in major profits. But they are a niche in the world of acoustics which can really enthuse people fascinated by sound.



MATTHIAS BELTINGER is the principal contrabassist for the German Chamber Philharmonic Bremen and the founder of Resonanzio. As a young student, he was a member of the Chamber Philharmonic and helped shape it into the world-class orchestra it is today. The organizational structure of the orchestra, wherein each player is also an owner and therefore

responsible for the organization's success and risks, left a significant impression on Matthias Beltinger. After many years of wrestling with the question, „What do I need to do or not do to establish a successful brand?“, he gained the courage to found his own company. With knowledge about the fantastic quality of the Resonanzio Particular Podium and his experience in brand management, he has in a short time led RESONANZIO to notable success as a small business.