

Pearl Acoustics

Sibelius SG close to perfection

Words & Photos by Dirk Bogaerts





Back in November 2016 we covered Bang and Olufsen's story and how they came up with their HiFi loudspeaker masterpiece the Beolab 90. With its 18 drive units and an equal number of built in digital amplifiers, the result was simply staggering.

This month, however, we want to turn our attention to another loudspeaker manufacturer and how they also produce truly remarkable sounding products but in an entirely different way.

Pearl Acoustics, is a relatively new company but its design roots go back almost as far as B&O. But whereas B&O is an extremely technology and appearance led business, Pearl Acoustics is much closer to a musical instrument maker than a traditional HiFi manufacturer. In fact, apart from one single drive unit and its connecting cable, there are no electronic components to be found anywhere inside their 'Sibelius' loudspeakers.

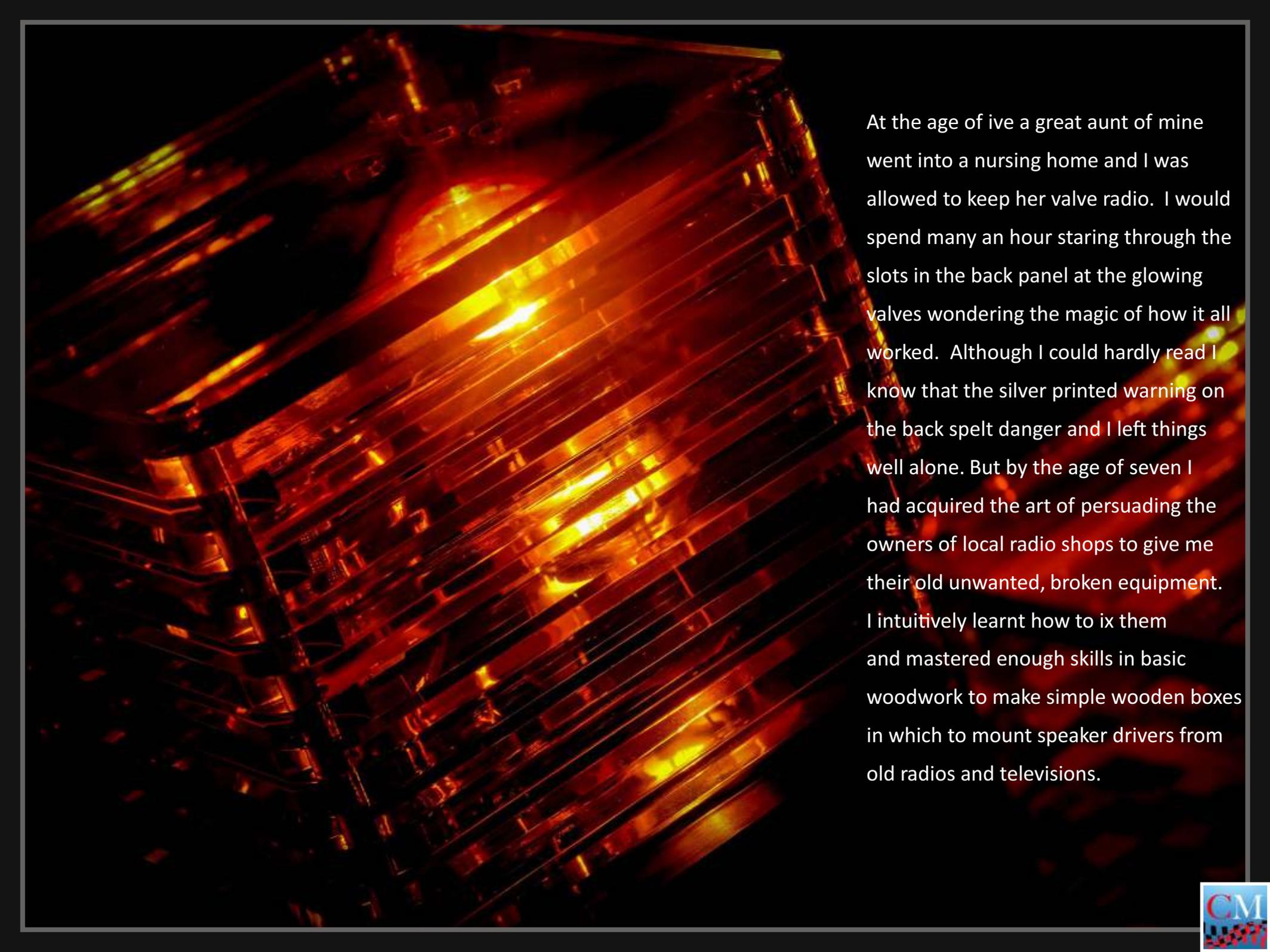






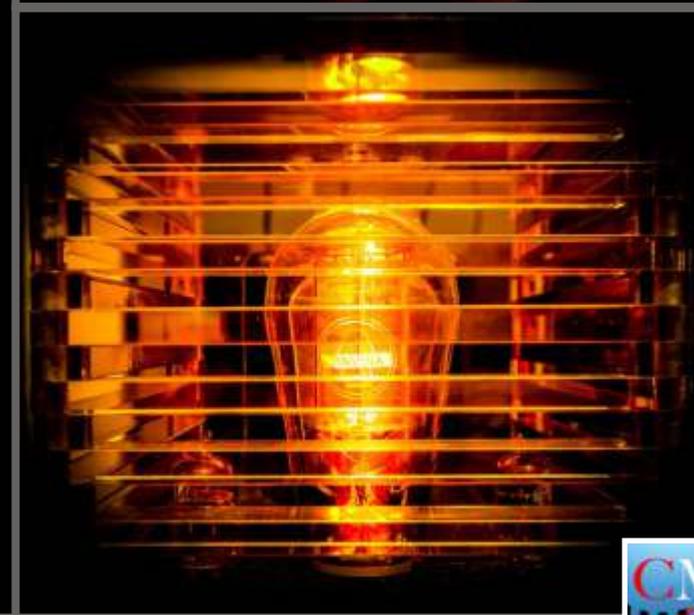
Named after the great Finish composer, the Sibelius is the lifetime realization of Pearl Acoustics technical director, Harley Lovegrove. His goal as a teenager was to one day build a loudspeaker that sounded exactly as if the live musicians were performing in the room of the listener. "It all started for me around the age of three or four. My father bought me a large, floor standing, wind up gramophone with doors on the front that one could open and close to make the sound louder or quieter. I remember my older brother making me a little wooden step for me to stand on, so I could crank the gramophones handle easier. It was the early sixties and in those days people were literally throwing out their shellac 78's onto the streets or giving them away to junk shops. By the time I was five and starting school, I had listened to so much music that I could intuitively tell the difference between Mozart and Haydn, Brahms or Beethoven or Max Bruch and Bach. My Dad bought me jazz records too from Glen Miller and Duke Ellington.





At the age of five a great aunt of mine went into a nursing home and I was allowed to keep her valve radio. I would spend many an hour staring through the slots in the back panel at the glowing valves wondering the magic of how it all worked. Although I could hardly read I know that the silver printed warning on the back spelt danger and I left things well alone. But by the age of seven I had acquired the art of persuading the owners of local radio shops to give me their old unwanted, broken equipment. I intuitively learnt how to fix them and mastered enough skills in basic woodwork to make simple wooden boxes in which to mount speaker drivers from old radios and televisions.

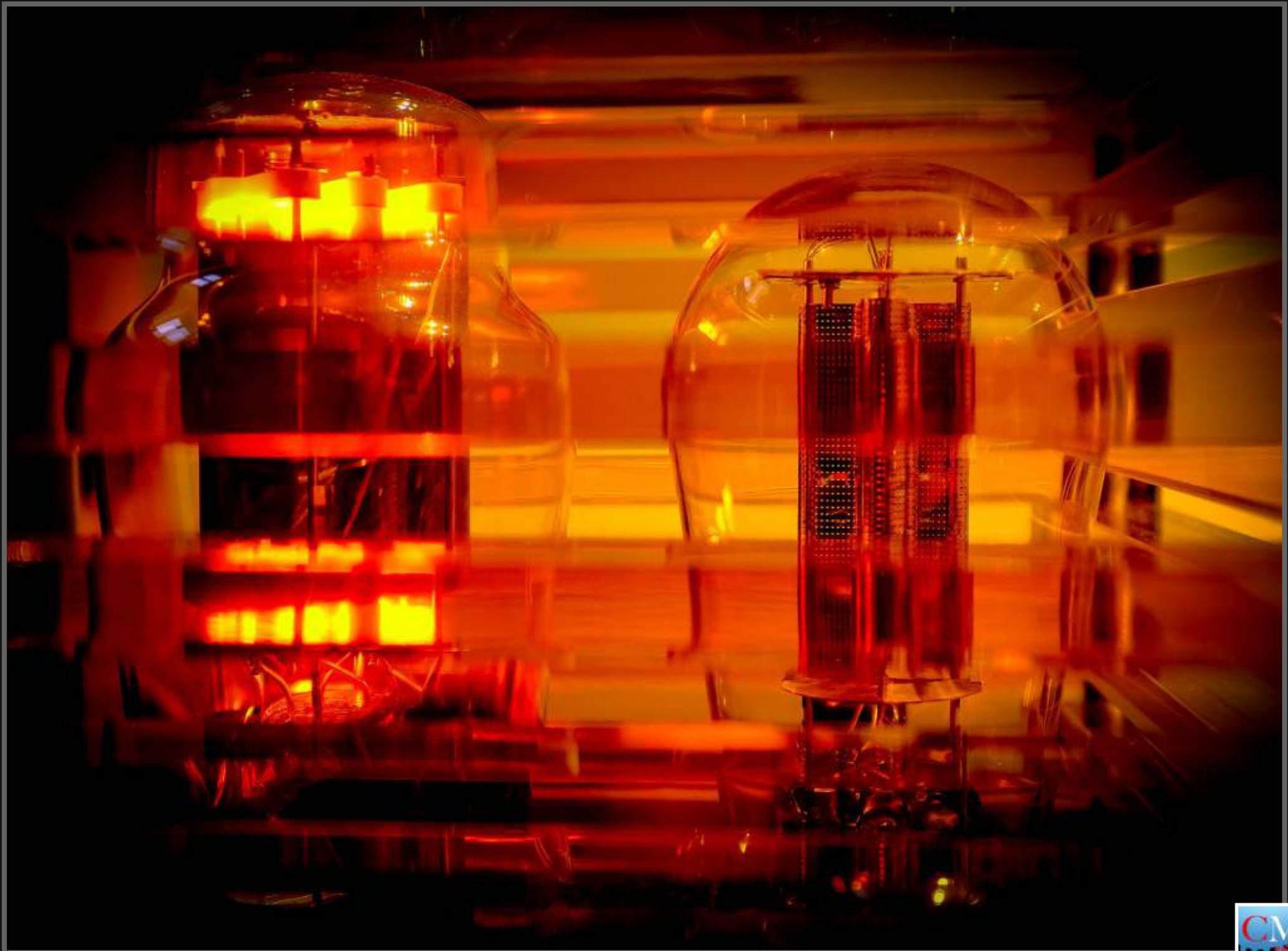
But it was around the age of nine when my parents moved me away from my progressive junior school to a more traditional one in the next town, that the big moment occurred. Travelling to school by train my route from the station to the classroom took me past the Lowther Loudspeaker company's factory. On summer days I would wander in through the open door and watch the men making cabinets, placing drive units and testing the finished articles. In the back room women would sit at what looked like tiny sewing machines, winding incredibly thin silver wire onto delicate paper cones. And although I would later understand that the monstrous cabinets they made gave out a boxy mid-range, a muddled bass and very little at the high end of the audio spectrum – the concept of the simplicity of a single drive unit was indelibly etched in my brain.





By my teenage years I was building much more complex speaker designs. With tweeters, and mid-range cones and big lat bass drivers – these new creations sounded amazing but that was the problem. They sounded like loudspeakers and not real musical instruments, in the way they would sound on a live stage. (Listen to any Wurlitzer juke box and you'll know what I mean). The domed tweeter would push out a domed sound pattern, the mid-range a coned pattern and the bass unit another. On their way to the listener, these three different sound patterns would collide and clash, creating a kind of acoustic distortion that would (along with the three way electronic bypass filters inside) destroy the soundstage and feeling of space between the musicians. There was no concept of front and back or careful positioning between the instruments. From one's armchair you could easily pick out the sound of the tweeter and the mid-range cone. The bass driver too would thunder away in a world of its own. And so it continued for nearly another forty years! My speaker designs would improve and ebb and low like the sea but no massive improvement to the soundstage could ever honestly be claimed."





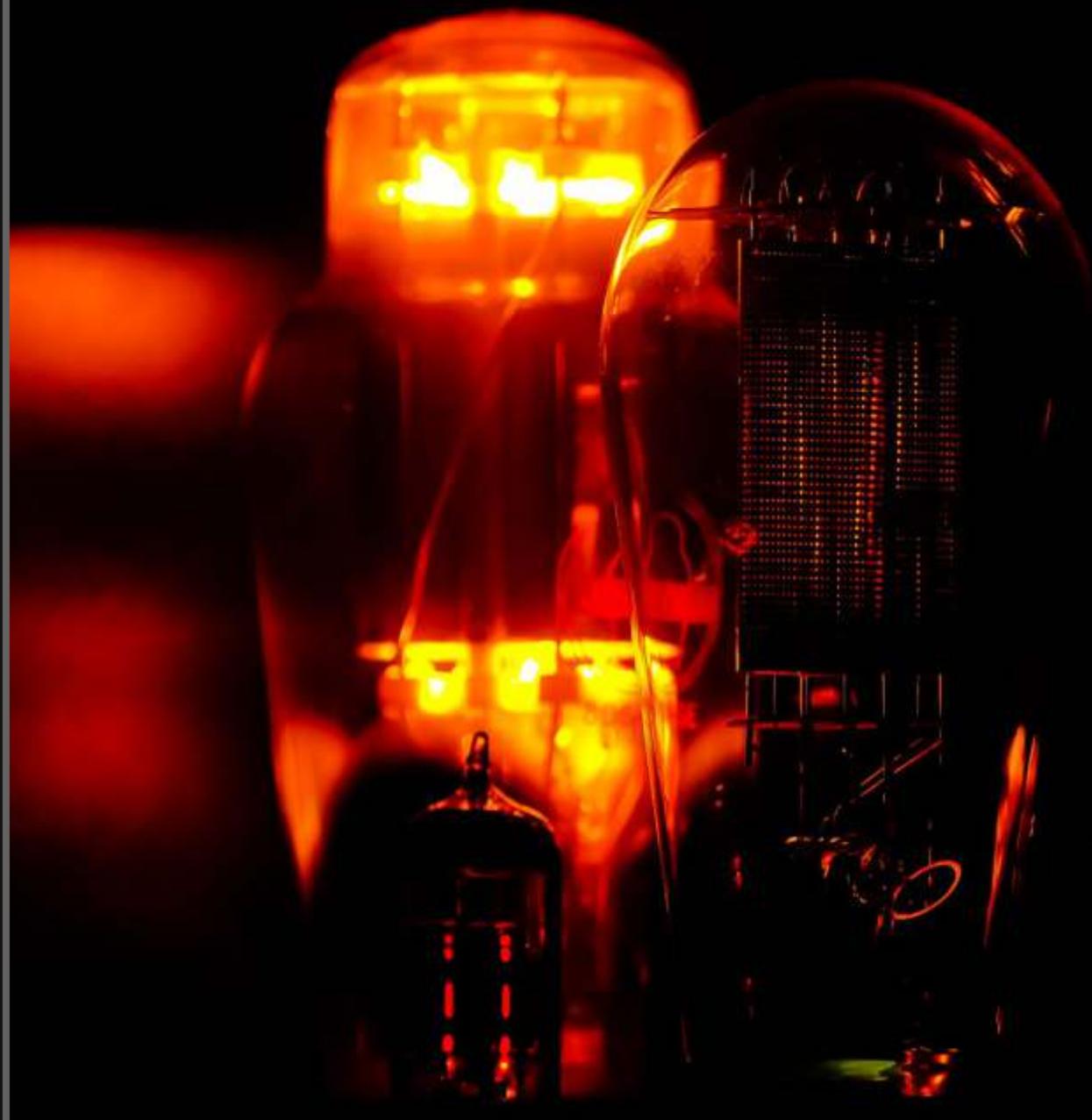


What do the Sibelius loudspeakers sound like? I have heard the BeoLab 90's and the Sibelius SG speakers and it is clear that both are capable of producing an incredibly realistic soundstage and although the massive BEOLab 90's are clearly better suited to very large rooms, the Sibelius speakers really come alive in more domestic situations.

So how do the Sibelius speakers work? By removing all electronic filters, crossovers and other gadgets, and by utilizing only one driver Pearl Acoustics have reduced all possible forms of electronic and acoustic distortion. This means that the Sibelius speakers get extremely close to the quality of the source material. Up until the last five years or so it has been impossible to make a single drive unit that is capable of handling the full ten octaves of the symphony orchestra or live band. However, Mark Fenlon, a loudspeaker drive unit designer with decades of experience, managed to do so. The problem was to find a cabinet that could do his creation justice. And like all great stories, it was the accidental coming together of two very different people, looking at the same problem from two very different viewpoints that produced the magic.



While Harley Lovegrove was working on extremely rigid cabinets made from solid oak, instead of MDF and chipboard like his competitors, Mark and his team were designing drive units on the same principle as the microphones that captured the recordings in the first place. In a recent interview with the on-line Hi-Fi reviewer Jason Coleby, Harley Lovegrove said “For me speaker building is more like instrument making. It’s a passion and a craft all at once. Sure there is science too but not many Luthiers know much about science, they don’t need to test their cellos, violins or classical guitars in anechoic chambers to know if they are any good or not”.



And so it is that unlike almost any other loudspeaker on the market today, The Sibelius speakers are designed to last for life, to be passed down to the next generation. Pearl Acoustics have no plans or intention to launch a MkII or a new improved version. They have the SG and the CG (featured on pages 40-43 & 46) for their best possible all-round performance and the 'P', a paper coned driver, for the traditionalists (page 44). Just like the piano makers Steinway, Pearl Acoustics do not see the need to keep launching new models with the intention of enticing their customers to replace their old models with new ones. They have their designs exactly to the level they want and see no need to take them any further. It's a unique approach that seems to be becoming more and more popular with high-end manufacturers. It is no wonder that I came across Harley via his passion for classic cars and British ones at that. To find out more about Pearl Acoustics and the Sibelius' remarkable story you can visit their website www.pearlacoustics.com – or read Jason Coleby's full review here (<http://inearspace.com/2016/10/25/pearl>

Powering the Sibelius Speakers: Amplification

“Over the years, I have repaired, built and played with dozens of different types of amplifier to drive our loudspeakers and to be fair most of them sounded OK in their own way. But so far, none have sounded anywhere nearly as realistic and exciting as the ‘old fashioned’ valve amplifier designs. It’s like they lift an invisible curtain between the listener and the musicians. One amplifier stands out in particular, it’s a Ming Da variant by Mark Manwaring-White which uses 805 and 300B vacuum tube valves in a Single Ended Triode (SET) configuration. These valves first saw the light of day back in 1931 and 1938 respectively, it’s fascinating to think that, just like some classic cars, the performance of the very best HiFi components invented over 70 years ago can still outperform the very best digital based equipment coming off today’s production lines. Mark Manwaring- White is currently designing a special build Ming-Da based amplifier, customized precisely for our Sibelius loudspeakers.

We hope to have it out on the market early on in Q2, 2017. I see Mark as a modern day John Cooper (the famous car designer). He’s a humble sound electronics genius who is not prepared to accept ‘OK’ or even ‘very good’ as a deliverable to his clients.” Said Harley Lovegrove.

Editor’s note: Interestingly, in Harley Lovegrove’s private listening room he not only has the two massive valve amplifiers shown in this article but also a hand built, vacuum tube powered CD player from Ayon in Austria. And I can vouch that what he says is true – when we sat together listening to Dire Straits ‘Sultans of Swing’, the detail was breath-taking, it really was as if the entire band were directly in-front of us. Every detail of every instrument came alive and Mark and David Knopfler, together with John Illsley and Pick Withers were right there in the room before us. Uncanny.



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