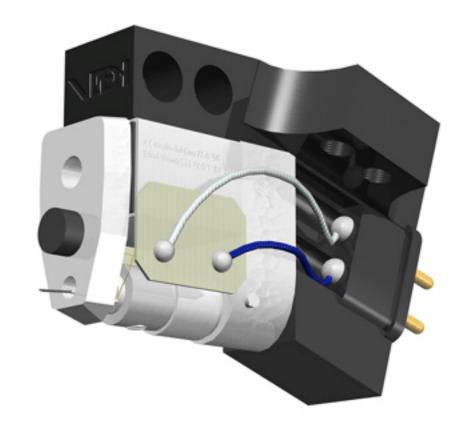
## **Black is Beautiful**

Original text by Walter Fuchs Hörerlebnis, issue 25 (Translation from German)

can explain it all to you; how things work or how things are built,

what any material is made of or what its effects are in a certain configuration! From the point of technology or physics things are no secret to me. But if someone actually manufactures it I am each time amazed that music can be coaxed out from such devices. One tightens the screws, attaches the connecting leads and eagerly pins back one's ears for their first tones. A little additional adjustment (one otherwise never allows oneself to intervene in the audio installation), and there we are.

Oh, you want to know what I am talking about? Phono cartridges of course — to me they are one of the last wonders of the hi-fi technique.



Where is the price per gram dead-weight often higher than that of gold? With phono cartridges of course — even when gold often finds use inside!

What polarises the mind and listeners more strongly than all other devices? The phono cartridge of course!

What has led to impossible, unbelievable and partly totally insane adjustment orgies? The phono cartridge of course!

What experienced a technological upswing by the appearance of digital technique like no other device before? The phono cartridge of course!

About what nowadays still more nonsense is told than about all other components together? About phono cartridges of course!

The question nevertheless arises why only so few of them are still in use? The record player, the indispensable other part if I want to listen to a phono cartridge, meanwhile has the same status as the dinosaurs. Looked at it that way one can only hope for success on part of the gene technicians that are trying to copy the film Jurassic Park, because sometimes the revival of something old can have positive effects.

Or, to use a term from the "Star Wars" trilogy, this time we speak of the "Dark Side" of hi-fi. Admitted, I am a representative of the "Dark Side" provided that it is 30 cm in diameter and has a 7.2 mm hole in the middle. Often 25 cm will also do. One does not need to have be trained as a Jedi knight to find that a record player of DM 700,- and a cartridge of DM 250,- combined with care wipe out each CD player up to DM 4000,-.

Do you know what biggest enemy of the record player is? Convenience.

Reconstruction of a conversation that went about as follows:

- "I know that records are much better, but I gave them all away".
- "Why?"
- "Well eh, one becomes easier with time and those CD's are just more practical. Besides, they're also much more immune to damage."
- "But is it not that in the first place you want to listen to music. When you play a damaged CD then aren't you listening to more error correction than music?"
- "Yes, but I don't notice that directly....." (end of discussion for the moment)

At this point to me the question arose whether this person wanted to listen to music or to the medium that stores it. The argument whether or not being able to be operable by remote control also didn't count, since here my discussion partner could not show any button on his remote with which he could steer his wife to change CD's.

The same naturally also applies to women.

Annoying and endlessly old-fashioned as I am (a short word for this is "stubborn"), I consecutively screwed 2 phono cartridges under my arm (the record player's of course) and each time again dealt with the torment of running it in.

The candidates came from the family of moving coil cartridges with medium output level. The test unit was doubly

available and the comparison between it and its slightly modified counterpart is in fact the most interesting aspect of this "trial".

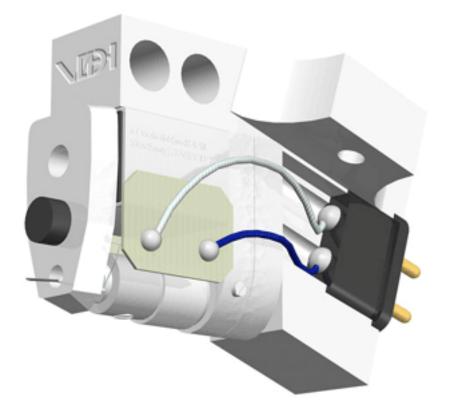
Moving coil cartridges are the physically "more correct" pick-up when compared to moving magnet cartridges. They are characterised by having the lowest moving mass of all phono cartridge types, which provides the widest frequency response. They are almost immune to cable capacitances and also false load impedances hardly show noticeable influence on the frequency response.

However everything has a disadvantage: To operate these phono cartridges an additional preamplifying stage placed in front of a normal phono preamplifier is necessary. The required gain is between 20 and 36 dB, which corresponds to an amplification figure of 10 to 63. The output signal of a MC phono cartridge is this order of magnitude smaller than that of a MM phono cartridge. The MC preamplifier stage should have the following characteristic properties: Very low self-noise, low distortion and a linear frequency-independent input impedance. The phono preamplifier that follows should have a frequency response that is linear to within +/- 0.5 dB at least!

The financial sacrifice to obtain these two analog artists ranges from approx. DM 6400 to DM 6900, which already rather causes the cheeks to get a little pale and calls for heavy financial sponsoring. "For that money I would rather buy a car" was the comment of a friend.

The track to be finished however was the same for both participants and consisted of the following hurdles: Record player Girati Grande with SME 345 tonearm, SAC Epsilon preamplifier fully battery-operated with balanced MC input, SAC 160 power amplifiers (prototype, not yet available at the time of writing of this article), SAC Piccolo loudspeakers, Rasta 3 loudspeaker cables and Numero due interconnects with Clearaudio connectors. The tonearm cable was the well-known Van den Hul D - 502 HYBRID. The balanced phono input rules out negative influences even on a very quiet system since possible hum stray effects do not get a chance to corrupt the smallest signals. The record player furthermore stands on a 40 kg heavy concrete block and, except by an earthquake, is not able to vibrate. Additional listening was done by AKG K 1000 headphone with an A 1000 amplifier. All components were fed from filtered mains. A cross-check was done with a middle price class device; the integrated amplifier ICON.

Perhaps a few additional words on my way of listening. I am not interested in high-praised record labels or overpriced rereleases, good music can be found on a great variety of records. Likewise I am against all too often used "reference records". An old recording with Maria Callas from 1956, despite lacking recording and pressing quality, in 5 minutes can unleash more emotions than a complete modern production with Cecilia Bartoli. And that is an immeasurable parameter which plays nearly the most important role when evaluating a phono cartridge. In return one can forgive other eventually occurring errors. Errors? What am I talking about? What are errors in the reproduction of music and when are they made where? I see it quite simple: I take each recording the way it comes. Since I cannot say what the guy behind the mixing desk (or the producer) was thinking of, I am simply forced to accept the recordings the way they were made.



Then the way it always goes with such pricy phono cartridges: with somewhat shaky fingers one screws it under the headshell (while in the mean time the replacement of a broken cantilever in this case costs DM 600,-), adjusts the thing a little and plays a record. Oh? You want to know which phono cartridges I am talking about? Look at the title: Van den Hul's Black Beauty, and because it is so fine also the White Beauty. First the system ended up in a SME 345 tonearm, for me a universal fellow combatant that can be quickly adjusted and has excellent all-round qualities at its disposal.

A friend's remark: "When the thing runs that way directly from its installation, then what is to happen only after the running-in time?" I can tell you what happens: Nothing at all. The part runs along the record and gets forgotten. Really, the phono cartridge disappears completely behind the music, it is completely transparent in its

presence. Not one instant comes one into the temptation to want to evaluate the system. However a certain desire arises to listen again and again to recordings one already always has been fond of. Rarely have I been so little sceptical about the functionality of and reproduction through a "device" as with this test. I nevertheless want to try to depict some characteristics and differences between these two systems and in comparison to other phono cartridges.

Stated first, there is of course a run-in time and it is miserably long. You should count with 200 hours. During this time the unit unnoticeably continuously improves, so that the craving to want to hear ever more manifests itself in a strongly reduced television consumption. The investments for the purchase of black discs grow and a record washing machine is absolutely necessary. There we have arrived at the inevitable record noises and a strange phenomenon: Never have I played a phono cartridge that reproduced so little record surface noise as this one. In no way is this the consequence of a tamed frequency response or other moving coil characteristics, totally to the opposite: The Black Beauty attacks mercilessly when the right music is on the turntable. Astonishing, the way it manages to jump from absolute silence to the loudest levels. And all that brute force goes together with an almost unnaturally high resolution, the simultaneous

presence of concert timpani and a softly played triangle is audible at all times and never questionable. Apparently certain intermodulation effects, as they must occur in such a case, are non discernible.

Mount the cartridge completely horizontally, this against Van den Hul's intent to lift the rear side of the arm as much as possible. It is true that tilting the arm does further increase the resolution with a small amount, it can however make the sound turn over towards sharp or raw. You should own a phono input with an input resistance of at least 1 kilo-ohm, with less you will castrate the cartridge, both dynamically and tonally. With the tonearm a damping option is absolutely advantageous. The system thanks you with increased transparency and better imaging sharpness.

When I use such negative emotion loaded expressions as sharpness or resolution here then you should consider it as if I were talking about a photograph. Irritating harshnesses or other inglorious aspects are completely unknown to this phono cartridge, or it would be when it plays a miserable recording. The cartridge then also directly makes this so clear that one gets terrified of it.

With appropriate termination resistance (> 2 kilo-ohms) the output voltage is adequately high enough to obtain a very high output level with regular phono pre stages. If in addition you possess an adjustable preamplifier, then you should set it to the highest possible gain at which it does not yet distort. Thus you can substantially increase the system dynamics and completely overcome the hum and noisefloor. When I turn the volume right open at my place (which would probably correspond to a stroke of the woofers of half a meter) I only hear moderate noise. With normal operation nothing, but then absolutely nothing at all can be noticed.

Both systems are open phono cartridges, meaning that the transducer system is not enclosed by a housing. The clear advantage: Where there is no housing nothing can resonate! The seeming disadvantage: The transducer system is not shielded. This disadvantage is truly just seeming. The only noise influences with such a system are the electromagnetic stray effects that can be caused by the mains voltage or by transformers. And since most "shieldings" are made of aluminium or in a single instance of wood, one can not count on shutting out such signals.

At first look one could mistake these phono cartridges for a Grasshopper IV. As distinction serve the colour of the system's body and the even shorter cantilever. The tapered front side of both systems slides with an adventurously small distance over the record surface, yet even with strongly warped records the system body never touched down. The tracking force I used was 1.5 gram, the effects of adding/subtracting 0.2 gram are to be directed to the realm of speculation and can not be sensed. The Antiskating force rather is to be set somewhat smaller.

So much about technique. It does hurt a little to think about a poor needle that for several days has been working its way through the endless repetitions of a lead-out groove. With this way of running in you should pay attention that the needle does not hop on the label at some moment. You should also not necessarily use your favourite record for this. Afterwards I went listening!

Do you know Louis Moreau Gottschalk? The best piano recording on LP that I know is named "Der Bananenbaum", the English title reads: "Great Galopping Gottschalk". It is simply unbelievable what great moment of recording technology has been perpetuated there. All pieces are of South American origin and here and there have a strong French undertone. Never before did I have a piano standing so seizably and naturally in my living room, conjured in virtual dimensions extending between the loudspeakers as never before, which regarding the dimensions of my living room is also necessary since otherwise extra space for a grand piano would be required. Or listen breathlessly to the Symphony "Night in the tropics".

At the moment my favourite opera is: La Cenerentola with Giulietta Simionato and conductor Oliviero Fabritiis. A fantastic overture is followed by the quarrelling and vanitous singing of two sisters that are jealous of each other, in which the beautiful mezzo-soprano of the Cenerentola being a sister of both mingles herself. An absolute must for all opera friends! (Decca). A fairy tale about an Italian Cinderella. The story ends as already very well-known.

The Swiss electronic band Yello has released a double album titled "Yello 1980-1985 the new mix in one go". On it probably the heaviest chunks of sub bass reproduction and bass dynamics can be found that ever have been pressed on record. Under enjoyment of the pleasant diaphragm massage and the small earthquake (3.5 on the Richter scale) in my living room I never questioned the phono cartridge, especially since, when compared to its digital counterpart, it outclassed it so much that I was struck by astonishment. Moreover my loudspeakers subjectively seemed to reach one octave deeper.

As time passed the phono cartridge became ever more unobtrusive, it moved as it were behind the sound happening. And that equally applied to both versions, the Black Beauty and the White Beauty. The probably most serious difference has to do with the way in which both reproduce the musical happening. Here one must say that the White Beauty rather draws a somewhat more soft but also less sharp picture. These statements have to be regarded as being on an unbelievably high level, since what I call overcast would imply a revelation for other systems. In the first instant the White Beauty also seems to be the more dynamic system, which is because of the somewhat higher output voltage. If one however owns a phono amplifier which has very little noise, then the amount that the volume needs to be increased is very small, rather insignificant. At identical volume the Black Beauty's better resolution becomes apparent in the form of an increased

density of information, or to take the bread from academic gabble: Much more is happening between the loudspeakers.

Also with extreme recordings in concerto form such as Paganini's "La Campanella", where amidst the entire enormous orchestra a tiny bell is played (that's how the piece got its name: Campanella means bell), fascinatingly the spatial structure always remains constant even at immense levels. Nothing gets smeared and no instrument jumps from its place; whereas that tiny sharp bell back in the left always remains noticeable. One only hears something like that in a concert hall. That is the largest praise that I can express. The affinity for the real happenings at a concert is astonishing. It however unbelievably strongly depends on the recording how convincingly everything is reproduced. And something else may not be withheld: These two systems let "less well" audio components show up, both amplifiers and loudspeakers. So when using these phono cartridges, your own audio system might well have to undergo some change or tuning. That doesn't mean that they cannot be used with normal components, quite the contrary.

I have used the Black Beauty with a normal integrated amplifier and it works as marvellous as always. It however doesn't leave any second of doubt that its full potential by far has not been reached. There are a few system combinations where I would disadvise to use this phono cartridge. Those are all rather "relaxed" sounding phono preamplifiers which besides are also not DC-coupled. Though DC-coupling is no absolute must, experience shows that with it things go substantially better. Likewise I would cross out several Japanese pre and integrated amplifiers in the DM 1000,- range from my wanted list, since with these obviously the principle of mass rules instead of class. I also see problems with some pre-pre's that have a very high resolution but tend to sound rather harsh. Just like the phono cartridge does not seem to have any specific characteristics of its own, the pre-pre should act without own characteristics. That does quite significantly thin out the selection, and many high-praised test winners already drop out in the first run. So far I had only found the nature of a phono cartridge absolutely confining itself to its job in such a way with the Ortofon Rohmann. The Van den Hul's have this nature to a substantially higher extent, paired with an unrestrained temperament; So, no phono cartridge for cuddle-rock.

The Black Beauty is not choosy regarding the tonearm, though it appreciates every improvement with an almost frightening tonal progress. The fierce triumph march from Aida (the Herbert von Karajan recording) is rendered first-class with a SME 5. After having switched to a new single point suspension tonearm which perfectly matches with the Girati Grande, the masses marched in line through the living room and the tiniest little things that beforehand could not be heard now were discernible in the whole happening.

Up till now I always thought that the violinist Salvatore Accardo was a perfect Pagannini specialist, particularly because of his unbelievable technique. That he can play romantic violin concerts of Max Bruch in a tremendously sensitive manner (no, not only the one that always can be found together with Mendelson on the same record; and the others I anyway find much more beautiful), first became really clear with this phono cartridge.

Maria Callas, my favourite singer! Not a fantastically beautiful voice like for instance Kiri Te Kanawa, but with a stage presence like no one before (and after?). And that can even be heard from record, she dominates the happening. The emotions that she expresses (brings forth, syntheticizes or whatever) on stage do not disappear in the partial bad quality of these old recordings. In La Traviata she sets such a high standard that to this day she counts as a touchstone for me. A Bartoli can't take a bite off that! And get yourself the old black discs from EMI or CETERA. Those are all together classes better than the once again remastered and de-noised (I believe it is the fourth) new edition. Admirable what the EMI technicians have achieved there. However musically spoken one can forget those recordings.

And that is not the case with many old and also new black discs. On every flea market you can acquire the recordings of the Russian Melodia with Tschaikowski's symphonies under Swetlanov, originating from around 1980; you usually only have to haggle a bit. Anyhow, that is the case on the common flea markets in the German Ruhr area. Some that clear out sell Brit almost brand-new recordings of this type, also of Schostakovitsch. Do you know which treasures in black can be found there? Forget all western conductors, no matter how much you cherish them.

What can one say more about these exceptional phono cartridges? Nothing, except that you may have noticed that I have spoken more about music than about the cartridge. And that's good: When one forgets such a part after having installed it, this makes the biggest compliment that one can give to a component. And that is being said to you by someone that before already has played with a Grasshopper IV Gold for many years. To me this phono cartridge brings out a maximum of playback quality and musical emotionality without neglecting anything else. All other manufacturers will have to let themselves to be measured against that.

Naturally? Van den Hul takes consideration of people using his systems that have a different opinion regarding their operation — like I carried through mine. So the party of sworn transformer lovers can order a system with lower output resistance, even also with lower output level. Likewise, if anybody thinks to require such: In Oene/Holland also coils are wound that deliver up to 12 mV!!! output voltage. And in his inimitable "serious" manner of speaking Van den Hul told me that it is his dream to wind a phono cartridge that delivers an output voltage that is so high that one would be able to drive a loudspeaker directly from it:) Up to that point however still another few turns of wire may be required.

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