

Hero of the Needle

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Formerly, van den Hul had a reputation of being a brand with proud image and proud price. Nowadays almost everybody can afford its prestige objects. A stirring reunion in the Dutch Vaassen with the myth A.J. van den Hul.

Part of the character of these company reports is that the authoress up till now granted much place to the weather (changeable), the condition of the image editor-in-chief (even more changeable), the clothing of the firm (casual correct to rakish elegant) and the desserts (national typical). Not this time.

Because first of all A.J. (Ancient Jakob) is a legend. Secondly a legend, which still lives. Thirdly, in comparison with a

black tailor-made suit or radiant sunshine, he also has a clearly higher culture-historical meaning. And fourth, to get to the point, for me a van den Hul is the most beautiful, most fascinating and most desirable phono cartridge in the world. Of course now the danger arises to be thus suspected of an uncritical mythologization. To succumb to a prepubertal childish rave. Yes, you could have a point there.

Legends are usually hard to come by. Either they are dead or live on such a teeny-weeny island that nobody has ever heard of it. It so happened that I had a twist of fate when in Munich May 2004 A.J. van den Hul - correctly indicated - faced me in person and invited me with him. A good year later the time has come. Mansour Mamaghani and Jürgen Reichmann of Audio Reference, the company that exclusively sells his products in Germany, bring us nearer across narrow roads along astonished cows and the thatched farmhouses of Vaassen, an unagitated small town in the middle of the Dutch province of Gelderland. We park directly at the town limits sign. A well-kept garden with pond and stone benches. A one-story low rise brick building which becomes two-story to the rear. A large traffic sign requests the visitors to turn off the engine for the sake of the environment. Company president van den Hul opens the door. White shirt, beige flannel trousers and blue tie. Slender, the grey hair casually cut, the blue eyes shine.

His office - large, much wood, watercolour paintings and drawings made by his sons, on the windowsills stand white and vermilion orchids. Here and in his farmhouse, the 67 year old phono cartridge and cable manufacturer does his work. 80 hours a week, sometimes more, never less. He is convinced that the work keeps him young. "That gives one the good feeling that one has its value. It makes one feel happy in one's skin". Thus he also explains his unbroken vitality. He feeds himself consciously. Little meat, little coffee, no alcohol. Lots of fish and vegetables. He swears by his daily dose of vitamin E, ginseng, garlic and olive oil. The devourer of healthy food radiates something triumphant when he says not having been ill one single time during the last 30 years. Not even a cold. His motto: "My family and I never go to the doctor".

It is not easy to lead him back from the passion of his bio-dynamic explanations to the realm of concrete recollection. His father was a producer with Philips. From him he inherited the interest in hi-fi and his love for Bach. Although he also likes other "fine-musical composers" like Mahler and Vivaldi, but still best of all he likes to listen to the "complex" Bach. As a 13 year-old he builds his first analog component, a record player. He studies physics. During those years he is



Amongst the staff: The hero of the needle and his admirer, flanked by Mansour Mamaghani (on the right) and Jürgen Reichmann (on the left) of Audio Reference

particularly taken with hydraulics, damping and the different types of adhesives. His favourite subjects are chemistry, metrology and metallurgy. He decides in favour of journalism and writes for two Dutch hi-fi magazines. At some point that doesn't satisfy him any longer, he doesn't want to commit himself in perpetuity to an occupation that steals his precious time and diverts him from his mad ideas and wild visions. He is 37 years old when he founds his one-man company with a diamond needle as working capital. With programmatic intention he gives the company his name. "Thus I was forced to do the best. To make an effort to reach the highest possible quality".

Three years later he presents the suspiciously awaiting up to undoubtingly enthusiastic hi-fi world his invention. A sensation, this lengthwise extended and downward tapering needle with the narrow edges. For him the perfect and only right shape. With it, replay losses would belong to the past he believed. It would guarantee the best (read: smooth and close-fitting) contact between needle and groove. All in all, with the daring novel shape of this tiny needle, van den Hul has laid the foundation for his great reputation. It revolutionized the image of a complete category. With it he strode into immortality. Together with a Swiss manufacturer, he constructs a machine for the series production.

Now it unfortunately is a cheap cliché that genius inventions can be sold well, the reality looks different. More rough and dismissive. The inventor was received with suspicion by the phono cartridge manufacturers. In unison he was met with disapproval and criticism. His needle would be far too sharp-edged. It would just scrape all music from the record. Some of them even went as far as to claim the nutty idea of having seen smoke and vinyl shavings rise from the sound carrier. Finally the patience of the Dutchman is rewarded. He manages to wipe the ridiculous reservations aside - Goldring buys his needle and has success with it. The name van den Hul becomes established.

Quite a number of companies send him their phono cartridges to have them revised by him. Some desire a higher resolution, others more dynamics. In 1982 he comes on the market with his first own system. The DDT (Depth, Detail and Timbre) becomes a best seller from the start. A screwed together metal body with a cross-shaped modulator in the middle of the magnet gap: an absolutely linear symmetric magnetic transfer curve which speaks for a corresponding signal transmission. Van den Hul doesn't make it a secret that after initial good cooperation he got difficulties with the partner company. He breaks up with it and since then does "everything" on his own. He develops and builds every phono cartridge by hand, he test listens them, he repairs. His own as well as the competitors' products.

Which of them does he have particular respect for? Oh, he sighs, most of them just don't develop anything new. Nothing has changed, even the errors, for a period of 20 - 30 years, only the marketing and price change. To palm such a thing off on the customers as novelty he finds dishonest, and a 12,000 Euro phono cartridge just plain fraud. With him one can already start from 1,100 Euro. That's the actual price of a DDT II at the moment. One pays the maximum for a van den Hul system, namely The COLIBRI Platinum at 4,000 Euro. Down-to-earth is what also characterizes his cable prices. The price range starts with a stereo pair of The NAME at 60 Euro a meter and ends at 2,296 Euro for 100 connector terminated centimetres of the highly pure MC - SILVER IT Mk II Balanced.

Naturally he designs and develops his cables himself. The production on the other hand is undertaken by seven of his altogether 14 employees. To show us how they maintain his quality specifications, he invites us to a tour round the company. He looks concentrated and tense when he remains standing in front of a glass display cabinet and points at the



The new company building impresses with generous offices flooded with light. The lady and the gentlemen coordinate the export into 65 countries

streamers and other devotional objects from the Ukraine. Yes, the power of life which blows over from the Eastern Bloc to the old Europe inspires him. And again, yes is his answer to Dirk Sommers' question, in the referendum he has voted for Europe. The no of his compatriots' majority to him seems petit bourgeois and greed driven. He is a supporter of the European concept. What he needs for his cables, is without exception obtained from the western part of Europe, a thing or two from Germany. On the one hand because of the quality, but on the other hand to also preserve the jobs locally. For him "any manufacturer moving to a low-wage country is on the run". And would add to one factory having to close after the other, as well as rising unemployment figures.

Environmental protection is the second important pillar of his company philosophy. Waste paper and plastics are collected in the city of Vaassen and recycled separately. Van den Hul cables have to do without PVC and since 1989 - the birth year of his son Mark - also without halogens. He enumerates that burning this isolation material produces at least



A look into the stockroom: Here only a fraction the supplies can be seen



This little machine accurately removes the insulation from the different cable types



Assembly of the cables requires much manual work

200 different kinds of highly poisonous substances. He vigorously deplores that nearly all audio manufacturers tend to set aside thinking and acting environmentally friendly because of the costs. In fact there would have to be a kind of obligation for hi-fi manufacturers to take things back, like with cars. "But that will not come. I find that a great pity". Because nature reacts rapid and intensely, says the 12 cylinder Jaguar driver. And after a thoughtful while he apocalyptically adds: "someday, probably earlier than we would like, there will be no more people on this planet". Between the high and infinitely long shelves, on which the cardboard boxes creep up to the sky, a kind of Titanic mood arises. The feeling to be on a luxury liner floating towards an unavoidable shipwreck has taken possession of all of us. It now is dead quiet in the light-flooded stockroom.

The conversation slowly gets under way again when we stand before the computer-controlled cable stripping machine. In the past they removed the insulation by hand and visual estimate, that was not bad either; but the 80,000 guilder expensive machine works more reliably and more precisely. Every cut fits like a glove, accurate to ten microns. Without damaging the cable strands or exerting surface pressure. Contrary to other cable farmers, with him the quality of the conductivity calls the tune, less its value. Or stated otherwise: A cable must be able to transfer emotions. Cables only conduct optimally if their "structure" is right. And if it is stable and indestructible. Wood, water and olive oil for example have a harmonious structure. Metals such as copper don't, they distort, sound granular and harsh.

Cables made of carbon in contrast are "the pure sound". The ideal solution. Exceptionally spatial. Virtually perfect in the mid-tone range. Chemically, mechanically and thermally extremely stable. That's why since 1989 he takes the nature material - which is expensive compared to copper, not even sensitive to nitro-hydrochloric acid and guaranteed remains stable for 100 years - for a part of his product range. Since the rigid carbon however has a higher electrical resistance than the for example soft copper, he bundles it to innumerable small single fibers. Thus further reducing the resistance. The assembly takes its time and is very complex. A single cable takes an employee at least 70 minutes. That means: he could not live from his pure-carbon cables alone.

Good that there are such different tastes. The Japanese, Taiwanese and Koreans like it harsher than the European softies and the Chinese appreciate a crisp reproduction of high tones. For the far eastern market the emotional catalyst carbon is inappropriate, here he preferably earns his money with metal. Are good cables rigid?, Jürgen Reichmann wants to know. Yes, because they guarantee a long-lasting high-quality transmission. But with metal cables an internal stiffness also has disadvantages, like higher acoustic coupling, unstable transmission and an accelerated aging process. Stiffness and conductivity simply don't go together. He has tried to dissolve this contradiction in terms with his tunnel technology. With it, even metal cables normally don't age any more, the time (around the signal's zero crossings) during which the cable is able to let very small signals cross increases and the Brownian motion decreases. The thus equipped van den Hul conductors are his reverence to the customers with different

listening habits and a small purse.

A further large customer is the high fidelity scene: 20 loudspeaker and electronics manufacturers are his regular customers. Companies like Tannoy, Graaf, Meridian, SME and Sonus Faber. Once he had a lucrative offer to wire a loudspeaker on the outside around at the visible places. The internal wiring was of cheap Taiwan-made wire and should remain so. Van den Hul did not hesitate a second to refuse this offer with the words: "that is fraud on your customers!, I do not take part in that!"

After so much theory some practice does good. We ascend to the listening room and drop down into the colourful bean bag chairs. Three audio racks stacked with electronics, five loudspeakers and a view on the wide plains of Gelderland through four windows. He has much fun with the five channels, the Dutchman responds to Dirk Sommer's frowned eyebrows. They compensate the poor sound quality of CD, he says, at the same time switching on the Graaf pre-amplifier. After having listened to Bach and Armstrong, the editor-in-chief unmasked and friendly comments: "All in all, that sounds very beautiful. I think that the power amplifiers also have enough drive". Since I know that our host can look at people

and see from their habits, their writing or the tip of their nose what and how they like to listen, I ask him for a short characterization of the editor-in-chief. Mr. Sommer he says, is the calm, non agitated type that likes to live in a controlled environment and therefore also prefers a controlled, a technical sound. Yes, I agree and he also listens to jazz. And what kind of sound does he like himself? The British. Castle, Kef, ProAc - that's what he appreciates. Spatiality and locatability, separation and depth.

Van den Hul customers can be found in 65 countries of the world. All over Europe, almost everywhere on the Asian continent, including Iran and India, as well as on the American continent. But in no African country. A political principle decision of him. He finds that the people there need money for other things. Not for hi-fi, but for schools and hospitals for instance. If he would allow his goods to be sold there, the urgently needed money would just flow back to Holland. At all we're a low-status company... What!, I cry out, you of all people, the legend... ..spending little money for advertising? He ignores my uncontrolled fierceness. Employee, director and marketeer Maarten Binnendijk nods bitterly: Little?, pff, no money, no money at all. He makes 90 per cent of the total sales with cables, only one in ten Euros comes from building phono cartridges. How would he describe the typical van den Hul customer? Well, there are all kinds. The very young, the very old, music lovers, unaggressive, not keen on status symbols.

In the evening we are invited to dinner with the van den Huls. We sit before the fire-place in the living room of the old thatched farmhouse of 1852. Next door Mrs. van den Hul serves the meal. Dirk Sommer uses the time and asks the host whether one can create linear frequency responses oneself, and if so, how. Of course, every frequency response measurement is in essence a noise measurement. Deviations can quite easily be covered - i.e. be ironed out - when considering the summation differences (read: the differences in readout between $(1/n)$ octave weighted frequency bands).

Time is the most important factor in measuring. One recognizes good frequency response measurements by the fact that synchronisation (i.e. correlation) is used at all frequencies. We still experience that reverberation induced time errors for the most part are replaced by sound volume. So if one quite has to turn up the volume in order to hear well, something is wrong.

Why is analog better? Why do his heart and delicate ears cherish the melodious vinyl? Why does CD sound at least dubious to him? He answers with an example: If one would translate Shakespeare's King Lear into Italian and then back again into English, then in the course of action everything would still be correct - Lear would still die in the same place as in the original - but the emotions would have been gone. With every translation one gets more remote from the original and clearly gets worse. With CD, he explains, the combination is simply not correct: Too much technology, too little emotions. That's why he's glad that record players nowadays are sold again. Good and relatively cheap ones. For 500 - 600 Euro one can already get something decent.

After the meal, Mr Sommer and I may ascend into the host's sanctuary. Where the butter house's second-cut hay once was stored, nowadays things of a completely different sort are accumulated. The hayloft as a multifunctional listen, adjustment, stock and showroom. Records, CDs, books, cameras and folders climb up to the ceiling. Respectable stacks of measuring equipment, two- and four-track tape recorders, Russian amplifiers, German record players and Quad electrostats pile up to mountains against the walls. On the floor a carpet of cardboard boxes, cases and crates pouring out with printed paper, cables, records, small plastic boxes and electric drills which seem to multiply by themselves. An organic, natural disorder overgrows the plain furniture. Two writing desks moan under the burden of heavy electronics, clarifying that this here isn't a museum of a layabout nor just the depot of a hunter and collector. There's also concentrated and quite essential work being done here.

I hunker down on the floor because the green chair is taken by Mr. Sommer. When the Louis Armstrong record plays on the Brinkmann turntable, he praises: "An incredible speed. Very rhythmic. Rarely heard something like that". Then Elly Ameling sings songs by Schumann. Mr. Sommer stands up. "You shouldn't listen to that for too long, otherwise you'll get used to it". A last melancholic glance at A.J. van den Hul's soul that lies open here. All the wonderful treasures, in the course of the years they will get ever more dusty and will inexorably get at him.



Is it because of the abundance of records, tapes and historical hi-fi and professional equipment? The sound in the listening room is fantastic



The cartridges on the white Brinkmann Balance turntable complete the listening test for fine tuning



A.J. van den Hul at the workshop in his house where the systems come into being

The next morning we are his guest again. This time in his workshop on the ground floor. On one man's request (after all we haven't heard the editor-in-chief grouching any more) we may look over his shoulders to see how he assembles a Frog Gold phono cartridge. Also here ring binders, soldering irons, paper rolls, portable radios, auto books and plastic bags pile up against the walls. But the floor is largely freely accessible. The worn table is enthroned with a microscope, accompanied by whole legions of batteries, small screws, elastic bands, cantilevers, safety goggles and pliers. Van den Hul takes place on the swivel chair and reaches for a coil. Mr. Sommer: "Do you still wind them yourself"? Yes, all by hand. That allows him to directly correct the automatically occurring increase in friction. For his coils he takes soft materials. Gold for instance. Gold wire, by the way, is considerably more difficult to wind than copper, he says.

After a short side glance at our main questioner, he declares: "The soldering time must be short, otherwise the wire does not hold". Then he adjusts the coils to the 45 degree angle, adjusts the needle ("with this it comes down to the tenth of a degree"), glues on the cantilever with a tiny droplet ("screwing gives sharp edges"), puts on the cover, pushes it a little outward in order to free the coil ("but only very gentle because of the material stresses"), convinces himself that everything runs perfectly parallel and seems to be content. Deeply moved we stare at the stylized Frog. Whoever gets himself a van den Hul doesn't just buy a phono cartridge. Included with the price are his righteousness, his curious and widely diversified world of imagination and the image.

MEM is his watchword. Mechanical, Electrical and Magnetical, his systems must perform outstandingly in all three disciplines. He for instance makes sure that the settling time of the suspension rubber, which carries the coils and attached cantilever, is very short; the longer it takes, the more boring and less interesting it all sounds. Also regarding magnetism the suspension rubber plays an important role in avoiding instability. He therefore additionally builds in auxiliary magnets made from strongly magnetic samarium. In other respects the AlNiCo combination (aluminum nickel cobalt) ensures the best sound. The E (electrical), which is dropped by most, is important for the conductivity. Only if the tiny coil wire's consistency and strength are optimally tuned to it, the phono cartridge sounds as it is supposed to sound.

Van den Hul is a religious person who also respects his Thai wife's faith. In the living room of his farmhouse hangs a picture of the Buddhist monk who married them both and advises them by telephone. At this distance the priest must leave the bodily cover and enter the universe. A daring enterprise with potentially fatal consequences, because sometimes, says van den Hul, one can't find his body any more. Slips into another, a wrong body. In former times I personally found such a thing highly improbable. However if the extremely pleasant Dutchman speaks about it and thereby does not waste any thoughts on logic or consistency, the thing somehow begins to look different. One then finds certain tendencies of a personality transformation with himself. One day longer in his aura and I would believe in flying saucers and black holes. And only the fewest can manage that. Only heroes and legends.



The coils are already wound on the cross-shaped modulator core which waits to be joined with the boron cantilever



Under the microscope Mr. van den Hul solders the coil wires to the cartridge's connecting pins

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