### **ELOY Flutes – The goldsmith's flutes**

I think nowadays it is rather difficult to come out with something original at flute making, especially when you want to catch one's eyes. When I first met Eloy Flutes I immediately thought it is something definitely worth of reporting. Harry van Ekert's and Cilia van Uffelen's work will very likely gain a great fame. Not only because their technology is out-and-outer, or because they are obsessed with building flutes but by pointing out the fact flute making is still not a commonplace, it may have plenty of amazements and revelations in store.

#### GCC: What is the story and who are behind the Eloy Flutes?

Harry van Ekert: "Eloy Flutes" is the business we run and own jointly with Cilia van Uffelen. We also personally make the flutes together. I prepare the head-joints and bodies which Cilia then assembles. She also finishes the instruments. Since 20 years we work together repairing and making flutes. After working for different companies for many years Cilia had a feeling that time has come to start a professional enterprise on our own. We knew that we have to make something utterly original and special to gain a share in a market already crowded with high quality products. We started in 2006, at that time I had been busy with experimenting with a material called Mokumeum<sup>©</sup>, therefore two years later we could already exhibit officially our new instrument at the Flute Meeting in Manchester.

## GCC: What makes your products so extraordinary so that they surpass many flutes in the premium category?

HvE: Cilia was seeking a new flute sound different from which we are accustomed to. And I developed Mokumeum<sup>©</sup> - which is the patented material used in the headjoints and bodies of Eloy Flutes - I was introduced to and worked with the Mokume-gane technique as a young goldsmith 20 years before. Cilia was very much inspired by the results because this technique had not been applied in flute making. We have also made some changes to the traditional flute mechanism. Our flutes are completely pinless. Pins make the steel rods weaker so we use bridge parts instead of pins. This results in perfectly balanced, smooth key work that performs faultlessly. We have added a small spring to the trill keys – this avoids play in the trill keys, which can occur after extensive use.

#### GCC: Being goldsmithes, have you ever made jewels, too?

HvE: Yes, we' ve made, but only occasionally. Cilia has worked at a jeweler workshop in London where she designed jewelry.

#### GCC: How did you come close to flute making as goldsmithes?

HvE: We are both gold- and silversmithes, our company is named after Saint Elegius<sup>1</sup>, patron of goldsmiths and metal workers. It was only by chance we started working with flutes 20 years ago. After our apprenticeship in Schoonhoven we got to Trevor James's company to London as assistants. Trevor appreciated our proficiency at goldsmithing because making flutes requires just this kind of fine, elaborate

<sup>&</sup>lt;sup>1</sup> Saint Elegius (french: Éloi, cca. †660, 1. dec.) was born into an educated and influential Gallo-Roman family. He was a goldsmith then he emerged to the rank of the chief counsellor to Dagobert I, King of France. After the death of his king he become a clerical person and went among the germans to evangelize them. Eventually he became the bishop of Noyon. Paying regard to his former occupation he is the patron saint of goldsmiths and other metalworkers. The saint is invariably depicted in bishop's cope, holding his emblem, a goldsmith's hammer. The only exceptions are in illustrations to his vita, that depict episodes before his investiture as bishop. On these images pincers and windbags also appear as well as a horse leg because blacksmithes were also healers of horses.

craftsmanship. We worked for him for two years, during that time I made several headjoints. From the United Kingdom we went to Boston to the Powell company where we had a further two years of vocational training, we learned a lot there.

## GCC: As a matter of fact what is Mokumeum<sup>©</sup> and what does it add to the flutes?

HvE: Mokume-gane is an ancient Japanese artisan technique (it originates from the 17th century) that always has amazed me because it is beautiful and every piece become unique by it. I was very interested in what effect it has to the resonance of the flute if it is made of a so much complex material. Of course I had to modify somewhat the usual technique of making the head-joints and it took a couple of years till I found the ideal composite. The material itself is made by plying thin plates of gold and silver alternately on each other, and by molding them under pressure and heat. Thus atomic bonds are formed between the layers which is not the same result as if we would solder them. Then I drill cone shape holes into this layered material with a special tool, and then flat roll the sheets. Thus different layers begin to appear and a distinct surface comes into being which gives Mokumeum<sup>©</sup> its typical appearance.

# GCC: As I understand Mokumeum<sup>©</sup> is a plate hence the body tube has to be soldered?

HvE: Yes, Mokumeum<sup>©</sup> can be manufactured only in a flat shape which one has to form into a tubular shape and solder up. Beside the materials used by us this is what makes our flutes so special. Only very few other flute makers work with soldered tubes. Bigger factories can afford machine-drawn tubes in large number, this is a very cost effective solution for them. Making a soldered tube is a big challenge and requires much practice. I have learned it from Mike Allen in England. The exciting thing is what effect the soldered tube has on the sound. These tubes has to be drawn several times again after soldering. The gold and the silver exist beside each other, they do not constitute an alloy. Both metals can be seen, and though they are united they keep their respective densities. This makes our instruments resonate in a peculiar way.

## GCC: What materials are used in combination when producing the Mokumeum<sup>©</sup> material?

HvE: We are offering two kinds of Mokumeum<sup>©</sup>. One consists of sterling silver combined with 14 Carat Palladium white gold and the other is a mix of sterling silver with 14 carat red gold. The tubing of a Mokumeum<sup>©</sup> flute is produced using 29 layers that are then fused together and every tube is seamed, like the old French flutes. The ratio I have chosen is 75% silver and 25% gold content. These amounts bring forth the balance I wanted to achieve between the silver and gold sound. However, in the future, I plan to experiment with mixes of different alloys. This way I can steer the way a flute sounds in any direction. For example, I can carefully measure the amount of colour, brilliance or darkness I "add" to the instrument. Between the two Mokumeum<sup>©</sup> types I am currently using there is such a distinct difference. I feel there is much more to be researched in this area and I am very eager to discover the results of other metal combinations!

#### GCC: What response had the new flute got in Manchester?

HvE: We were very excited when the flute was introduced and had been looking forward to the responses. Before that time we had already gotten positive feedbacks from Robert Pot, Emily Beynon and Andrea Liebknecht. In Manchester we could get to know the opinion of a great number of participants. The flute got a warm welcome. The flautists noticed the light touch, and we got many observations about how easy to sound it. On every flute we offer white gold springs and Straubinger pads. The foot joints levers are set up to be ergonomic so that the right little finger can be held more

comfortably. The flautists have talked very positively regarding the acoustics of the instrument, too. I have spent much time to measure as many flutes as I could. My aim was to find a balance between the characteristics of the contemporary, modern instruments and of the more ancient, Louis Lot type flutes to incorporate these findings into my own instruments. The products of Eloy Flutes are extremely versatile. Everybody can find something they like in the voice of them. We also make silver and gold flutes not made with Mokumeum<sup>®</sup> technology in exceptional quality. But Mokumeum<sup>®</sup> has got to offer something very special: the resonance of gold, a rich sound with abundant overtones, and the lambent and sparkling sound given by the silver. Two kinds of Mokumeum<sup>®</sup> flutes are offered, one is made of rose and white gold, while the other is made of a platinum/white gold alloy and silver.

# GCC: I was very happy when I tried your flutes in the exhibition and recital in Budapest. What has happened since your 2008 launch in Manchester, and following your visit to Budapest? Have other countries also managed to introduce the instrument?

HvE: Eloy Flutes are now are being played in several European countries. We have taken the flutes around the world. We have shown and introduced Eloy Flutes at many conventions in Europe and the US. Also South Korea and Japan are now getting to know our flutes.

In all these places, our flutes have aroused great curiosity and awe but I have also found out that the flute market is very crowded these days. It really takes a huge effort to introduce yourself and all that promotion in order to draw attention to your instruments has to be carefully planned. We are still working hard to build our profile and gain a place alongside established brands.

Up to now we have undertaken the task of selling Eloy Flutes within Europe ourselves. Although the distance from other European countries to The Netherlands is easily covered with cheap flights nowadays, we are currently looking for distributors around Europe. It is a better way to get our instruments to flute players. This enables them to have much easier access to them and also gives them a chance to try the flutes over a period of longer than a day. It is important to have the opportunity to try a new instrument in different settings, discuss it over with colleagues or teachers and get to know how to approach the flute in general.

#### GCC: Would you, please tell a few words about the head-joints?

HvE: Well, this is the point where flute making becomes very complicated. I am sure that our head-joints can offer the maximum quality for the flautist. For me their versatility, good reactivity and a huge dynamic range are of vital importance, while for the flautist the richness of overtones, buoyancy and the strong, low pitched register can be a revelation. In my opinion, the tube gives the flute a lot of its character, hence my interest in Mokumeum<sup>©</sup> and seamed tubes. What kind of embouchure hole a player prefers is definitely a matter of personal taste. I achieve precision by pre-cutting the embouchure hole with a CNC-machine. Then the real work on the head joints begins. I complete the cutting and polishing by hand. Each head joint is rigorously tested and, if not up to Eloy standards, it is re-cut and polished.

#### GCC: How many headjoint cuts do you offer at this time?

HvE: We are using 2 different embouchure cuts at the moment but I am working on a third. We also use two different tapers to form our headjoint tubes. The combination of these different cuts and headjoint tubes give the flute player the chance to pick a head that suits them. Of course, the combination of materials used to construct the headjoint tube itself is also important and influences the overall sound. I am not seeking an "Eloy sound"; I feel that would stop me from being creative with metals and experiment with sounds.

## GCC: Do you sell Mokumeum<sup>®</sup> head-joints separately?

HvE: Certainly. If someone wants to improve the performance of his own flute, this is a relatively affordable solution. Mokumeum head-joints can enhance and bring their typical sound aspects into a "donor-body". What I'd like to emphasize is that - in theory - if the head-joint produces 80% to the overall sound quality than the body made out of the same material only needs to provide the 20% rest to reach a perfect sound. But it does not mean we can only achieve this 100% if the parts are made of the same material! Combinations of different alloys give the flautist a broader potential of sound tone and quality to chose from that she is searching for.

## GCC: Have you got any observations on how a Mokumeum<sup>©</sup> head-joint behaves with a silver or golden flute body?

HvE: The experiments in which we are searching the ideal sound cannot be limited to making head-joints out of different alloys because the head is a kind of sound generator that contributes decisively to the tone of the flute as a whole. As well as a golden head-joint on a silver body alters significantly the whole instrument the Mokumeum<sup>®</sup> head-joint can have a similar effect on a golden or silver flute body. Generally a Mokumeum<sup>®</sup> head-joint can convey the color and brilliance of its sound to a flute made of any material.

## GCC: Where are the instruments produced? Where exactly is Eloy Flutes' workshop?

HvE: We are located in Someren, a small town in the South of The Netherlands near Eindhoven. Our workshop is beside our house so it is very convenient. Working from your home also enables me to always be there when my kids come home from school. I feel very fortunate that I have the chance to be able to see them grow up.

#### GCC: You have measured many flutes. Have you got a scale of your own?

HvE: I use an old Powell-scale that is somewhat closer to the original Cooper-scale than to the scale used today. The scale mentioned had been used till the 1980s and flautists had been very satisfied with it. I think I have found the ideal tuning for Eloy flutes in the combination of this scale and using seemed tubes which I apply to every flute except for the 14-carat gold ones. I use different caliber profiles for head-joints but only one scale for the bodies.

#### GCC: Have you learned to play the flute?

HvE: Yes, but not on a professional level.

#### GCC: Do you have a "sound ideal"?

HvE: This must be a trick question... As a flute builder my objective is "the creation of an ideal sound and mechanical concept" which can satisfy possibly all expectations of a flautist about a flute. Certainly I always respect and listen to the voice of my customers. I appreciate their problems and demands like Albert Cooper did in the '70s before his renewal of flute making. Large volume is of key importance today but you have to achieve it very carefully so that other aspects of the sound de remain unhurt. This is where the flaws are at the case of the average quality head-joints. The real challenge for me is how can I satisfy the conflicting requirements and build all of them into a sole head. The keyword is balance. I love the different colors in the flute sound that reaches its plenitude when they make use of the whole dynamic range. The flute sound has to be saturated in the whole range and in each of the three octaves it has to deploy all of the virtues. And I love dark voice but not the too dark. When we put a 14-carat gold head to a silver flute body sometimes we get close enough to my personal sound ideal. This is why I started to experiment with Mokumeum tubes.

#### GCC: What do you think about the direction of flutebuilding in this century?

HvE: Flute makers have to be very inventive these days. Over the last few decades, flutes have started to lose their distinct identities. For example, one used to be able to distinguish the sound of a Haynes from a Powell flute with eyes closed from the first notes. It is not easy these days to tell one flute from another just by playing or listening. Many have started to sound alike. This is a great opportunity for the smaller flute makers. By working with new materials one can bring new sounds to the instruments that stand aside from what is already out there.

In terms of the mechanism, professional handmade flutes have risen to a very high standard. But here too, still a lot can be improved, ensuring a flute that is reliable and trustworthy.

Finally there is the scale used. Trevor Wye recently informed me of his latest amendments to tone hole proportions and positions. So here too there is still room for improvement.

Nowadays, flute makers have to look for small details in order to enhance their flutes but over all I think there are still many ways that the instrument can be improved.

## GCC: Could you, please sum up what is the most important to you in flute making?

HvE: It is a considerably relative notion what we consider as a novel sound. Naturally a flute has to remain a flute. I love the sound which is low-pitched and transparent at the same time. But every flute as well as flautist has got a unique personality. This has to be reflected in flute making. We are obsessed flute makers making instruments for obsessed flautists. Living in a time of standardization we want to give something outstanding and personal to the performing artists.

GCC: May I wish you continue your good work, and thank you for the interview!

http://www.eloyflutes.com/