#### Hannes Fessmann:

interview 27/10/16



# SH; what you do is called Klangstein, where does that originate from, what's the history of Klangstein?

**HF**; sound and stone has a very old history, there are even pictures of monkeys hitting stones. In the very early history and development of mankind, humans discovered that stones can sound and it has been accompanying human history and perception ever since, through that knowledge man has been able to find new sounds all around, if you hit different stones you find different sounds, that knowledge somehow goes through the history of all mankind.

## SH; why do you think they did that?

HF; because these sound properties are only found in stone, there is hardly any other material that has this specific sound, each material has its own properties, if you hit on wood for example the sounds you get from that can only be found in wood, really high sharp sounds you only really find in metal but this doesn't exist naturally, it has to be worked out of the stone, each stone has different sound quality's so in finding different kinds of stones you find different sounds of quality's.

## SH; why do you think the ancients banged stones?

**HF**; it's difficult to explain exactly why but most probably it has to do with group think and how religions were built up, maybe they thought that ghosts were speaking to them and it involved some mythological elements.

## SH; so you think they were played in rituals and masses in places like Stonehenge?

**HF**; this was way later, Humans had a lot of ideas about sounds by then and were able to create and work with sound, very early people were moving around the planet becoming aware of certain sites that had amazing sound properties, I think these were the ancient sites of sound and perception.

## SH; like some kind of stone banging theme park?

**HF**; yes, stone banging was part of it, you would get different kinds of acoustic properties in these places for example, if you shouted at a stone it would answer you but going closer say 15 metres, the echo would be gone so you would have to go closer again for it to answers you once more, these kind of acoustics tricks surly inspired and impressed people.

### SH; maybe they thought it was some kind of magic back then?

HF; most probably, nowadays we can explain sound waves and acoustics however I still meet people who have never heard a stone sing and they think it's some sort of trick. The history of stone and sound is huge, if you look at the history of stone perception it spans thousands of years but in between you have so many steps, many times it was lost and re found, each time it was rediscovered and worked on in a new way then lost again and rediscovered, it is still the case today, man has to rediscover what was always there but lost.

### SH; would you say that stones are the oldest instruments in Human history?

**HF**; yes I think so together with a hollow trunk, I think its half the process of discovering the acoustic properties found in nature, Bernie Krause's work on the biophonic properties of nature is very interesting, hearing, discovering and imitating is definitely part of a bigger process and I'm sure stones played a huge role.

## SH; a stone been played in its perfect environment would be outside?

**HF**; I think the ancients played them in caves, this is also where they lived and depending on the geometry of the space they may have had a very strong experience. Sound in a cave doesn't really travel away, it is just captured and reflected possibly bringing the whole space into vibration, this coming together of the different layers of perception may have had a profound impact on them.

## SH; would that be rubbing stones?

HF; sure, through rubbing you can get the sound into vibration which will make it modulate.

## SH; to your knowledge when was the first time things were rubbed to create sound?

HF; this part of archaeology isn't really worked on, there are some hints that rubbing played a role in ancients cultures, it's just very difficult to prove that a stone has been polished, you have cylindrical lithophones in France that show some signs of polishing and some pillars in Indian temples that may have been rubbed by many people to bring the whole temple into vibration, but as I said these are just hints.

## SH; are there people actively doing this research?

HF; I know of some people who are working on it but they haven't published anything yet. Hitting a stone is a very easy way to get a sound from it, rubbing is less common within a musical context, for example if you rub a wine glass you get sounds, there was Benjamin Franklin's glass armonica but that wasn't really recognised in its time, Glutny also developed a number of glass instruments like the U phone and the Clavi Cylinder but in my opinion glass has a very sharp tone that doesn't really sound so nice, maybe that was why it wasn't accepted by musicians in the past.

## SH; how would you define the sound of your stones?

**HF**; even if the stones look the same and have a similar geology they will always have different sounds, there will be small nuances, some will be clear, others more nasal, in some you can hear the sounds travelling inside the stone which you don't get in others, these are small details that don't really play a role in the modern discussion of timbre but I think to some extent the stone is above the fundamental of that discussion.

## SH; how many stone players are there in the world? [How many people are playing the stones as a musician]

**HF**; around 50, it's slowly spreading. The lithophone way of playing is to be found all over the world, rubbing is just a bit more unusual so it's probably the case that it needs a bit more time.

## SH; are these people who are playing the stones as a direct result of seeing and hearing yourself and your father play?

HF; I don't know all the people who do it and there maybe more than I know, the modern practice of stone playing has a long history, Elmar Daucher started in the 1970's and had quite a lot of success in the south of Germany, a lot of community's bought his sculptures and that inspired many artists and musicians to explore them, normally they are either musicians playing them or sculptors making them, combining the two disciplines doesn't really happen.

If you look at the sculptures that Elmar Daucher that sold in the 1980's and how they are treated now, you wouldn't believe they were even instruments, they are treated more like sculptures, I once visited one and asked if I was allowed to play it and they said no.

It's maybe this thing where humans have a concept of what sculpture is and when they see a sound sculpture they treat it as they would a regular peice of sculpture.

## SH; when did you first play the stones?

**HF**; the practice of playing them was introduced to me by my father (Prof Klaus Fessmann) when I was young, they were so interesting to me, as a 13 year old boy they were the most interesting instrument I had ever seen and through a co creative process (with my father) it has manifested into my work today.

#### SH; how did your father discover them?

HF; he worked with stone and sound in the early 90s with the poet Werner Durrson, they went to a cave in the South of Germany and worked on the relationship between speech, cave stone and music. Later on a gallery approached him and asked if he would play a stone by Elmar Daucher they had, he played it and didn't want to let it go, he asked me to join him on a trip to the Swiss Alps in 92 to collect some stones to take home and cut, these were the first steps.

### SH; how long have you been playing the stones?

HF; 24 years

## SH; do you think you have mastered it yet?

HF; no, surly not, with each form you have new things to master, new playing techniques to discover, your whole movement has to change. If a person has bought a stone and played it for a very long time they become the master of that stone, if I had played the same stone all my life I would be very good on that one but as I develop and try new forms I don't have the time to concentrate on just one, it's much more diverse for me.

#### SH; so every stone is a unique instrument within itself?

**HF**; each stone has its own properties, you have ones with strong sounds, ones with deep sounds, others that have very low vibrations, it very much depends on the shape.

### SH; did you have any formal training in the arts?

**HF**; no, I have always liked to do things with my hands and I worked a lot with an angle grinder when I was younger. As the son of a composer my music perception had been developed throughout my

youth, music has always been an expression for me. When the Sound Stones came into my life I recognised right away that this was the clearest, strongest sound I had ever heard, you could feel the vibrations and that very much shaped my perception.

As I got older I was looking to do something new, you have all these these huge sculptures with lots of very strong sounds but many times they just overwhelm people, my idea was to create a lot of possibility's with smaller things and as I knew how to play that opened me up to many possibility's to do new things and go into more detail, I think "the new" lays in the details.

### SH; where is the stone coming from to make your sculptures?

HF; mainly from India right now, also Italy, Switzerland, Iran but mainly from India.

## SH; what is the logistics of getting the stone, how does that happen?

**HF**; there have been many ways, you go there and find it, somebody tells you about it, you get a tip off, there are all different kind of ways, there isn't really one way of doing it.

# SH; i'm just trying to get my head around the process, do you go somewhere, see the stones you want and then get them shipped home?

**HF**; yes, but this is right at the end, I'm always looking for stones with good quality's, so whether that is talking to another sculptor or visiting a stone mason, I'm always on the lookout, sometimes you can get a small piece from a quarry and see if it tells you anything.

## SH; would you be able to guess what a piece of stone may sound like without cutting the lamellas into it?

**HF**; yes and no, if the stones have all been manufactured in the same way you can see it in the structure sometimes but other times the colours and composition don't give anything away, questions like "are the crystals well connected or not?" plays a big role, the chemical composition and how the crystals are interlocked determines whether the sound travels or gets blocked.

Joern Kruhl a geology professor at Munich Ludwig Maximillian University has had a project running over the last few years researching why stones sound different, he cuts the stone to view the intersections of the crystals and has found that temperature plays a major role, heat creates a vacuum, the hotter the stone gets the smaller the gap is, the better the crystals are interlocked the better the sound can travel.

### SH; how many stones do you think you have made?

**HF**; I have personally made over 100 and co-developed many more.

## SH; how do you approach making the shapes, what's your thought process behind that?

HF; I have been playing for a long time so I know what the difficulties are of playing the old square edgy shapes, the major problem that you can't easily travel from the top to the sides. I decided to make some round forms as I knew these would be easier to play and through that all kinds of new applications have developed, like the sound therapy, some new playing styles and a number of new concert stones, as our original concept changed we started to considered different ways of playing.

This process is similar with a sculptor I collaborate with from Canada called Juan Carlos Prada, we interact between sculpture and sound sculpture, I think about the sounds and the playing

techniques, then we come up with the shapes. The form is sometimes there and it may speak but the main focus is always sound.

## SH; so sound always comes first, then the shape?

**HF**; yes, the sound comes first then you have aesthetic questions for example, if you use wood, then natural wood is the best, if you use stone, the black stone, deep down from in the earth has the best sounds because they have had the heat and the pressure so they are very condensed and strong in comparison to other stones.

## SH; does the shape effect the sound, for instance the more elaborate the shape the better the sound?

HF; the basic is the sound quality of the stone, there have been concepts in the past to create natural forms but at this point I know what works well, what is important is the fundamental blade, its stand and the cuttings[lamellas], that has a huge effect on the sounds. The desire to get diverse sounds or many complex sounds is somewhat problematic as the sound stones can become too difficult to handle if you have too many options.

The form of your hand is also very important as you have to put the vibration on one point, if the shape is always different you have to adapt your hand to that change, if you try and do this consciously it's very difficult to play so you have to just try and do it naturally.

## SH; how is the sound actually created?

HF; you have a stone and you have the lamellas [blades], the lamellas are stiff but also elastic, if you want to modulate the stone you use your hand with some water. Water has adhesive properties over very short distances so the water molecules build a bridge over the surface a bit like when you have a plastic sheet on the ground and it takes off with a gush of wind, however, if the same sheet is a little wet you will struggle to pull it up, that's the force, it's the same thing with the stone. The water builds a bridge with the molecules and then gets loose again in a very short amount of time, if you move your hand along the stone it glues and lets go, glues and lets go and depending on the surface of your hand you will get different sounds, with the rough part of your hand you get the high tones and with the soft part you get the deep tones.

## SH; are the stones tuned to a specific scale?

**HF**, you can tune them but the positive thing about the stones is that they allow for way more harmony [consonants]. In the classical definition of instruments you have the interference of overtones, if you play tones that are very close together they create dissonance, here you have a pure tone without dissonance, a clear frequency without the interference of overtones.

With this you suddenly you have new possibilities which have not yet been discovered, so yes you can stick to the normal concept of overtones and harmonics if you want but you have the option of way more possibilities to explore sound and music.

I don't see any reason to keep the stones in the old concepts when new things can be explored, the stone may have a C but also slight differences in between the notes so the modulation can become it's aesthetic, you can make them faster, get them stronger and it doesn't ever sound bad, just something new and different.

### SH; are there many techniques for playing the stones?

**HF**; you have all possibilities of movement, you can move evenly, you can alternate, you can use 2 hands to do different sounds , you can go up to the top, you can play on the sides, depending on the shape of the stone you get different sounds and different options.

## SH; how would a composers collaborate with you?

**HF**; Prof Helga de la Motte-Haber who wrote a sound art book in the 90's said "the strength of sound art is to be able to fit into everything but not belong to anything" and this is somehow the case with

me. The positive thing about the stones is that you don't get overtones so working with people who are open to something new can create some very positive outcomes.

## SH; when you're playing live, how you do follow a score or a predetermined piece of music?

HF; out of matters of space and perception it is always different, you may be able to play the same notes but the effects in space and perception will never be the same because in some places the floor is vibrating and others it's not. Out of the score kind of thinking it is possible to play the same set of notes but actually it's never really the same for the recipient, once you get one lamella into sound you then need time to get to the next one going because you're moving a lot of matter.

In a way I'm making slow music and I guess there are parallels to the work of James Turrell and his slow light art, I guess I make slow tone art.

### SH: How does the recording process work?

HF; this is quite a fundamental question, you could say the difference between music and sound art is the audio visual perception, that's the main thing these days and that is somehow always missing. With a video we have visual and auditive but we are missing all the other levels of perception such as body and space so making a converse is always a limitation, in the past the stone was always been in the centre but the problem with a recording is you miss so much and this has always held me back from doing cd's and videos. It conveys something but it's not really what it is, showing people what the stone can do and sharing in the vibrations, that's the real thing.

### SH; so a recording is a very simplistic version of something quite complex?

**HF**; maybe in an ideal world there would be spaces where people can start the process of getting in touch with the process and learning about it, that's maybe the most difficult problem nowadays.

We are living in a time where everybody thinks they can do everything and they want to consume things as fast as possible but that's the opposite of what a stone player needs to be, you need to take your time, prepare yourself and get into the right space to accept the slow music process.

In acoustic history rubbing was missed out, there's a blank space that now needs to be filled yet people still think everything has been done, only through direct experience and discovery is this space does it get its place.

### SH; does that mean you would have to play for hours?

**HF**; maybe not for hours, it's more a thing of attitude, listening for too long is also not the right thing especially if you are hearing it for the first time.

I would suggest if you're playing a stone to start slowly because it's quite an intense experience, you have a lot of matter very close to your body and that brings all your liquids into movement, it can be that you cannot sleep during the night because you are too much in movement , you also need to know the conditions in which to get in communication with the stone such as cleaning your hands before you play and not trying to get too much out of the stone by pressing really hard, that's the opposite of what you need to do, you need to be calm , let go , respect the fine tones and then you will have a positive outcome.

### SH; at what point do you know a piece is finished?

**HF**; its different approaches, at the foundation is the sound sculpture itself so within that you have to work out its possibilities.

There are also limits to a composition in regards to what notes and instruments you can use with it, I try to show the beauty and not go right to the limits of what is possible, each sculpture is there to

present sound in a beautiful way so people can understand it and take it in, from that place you can then move on to more complex compositions, people who have never heard it before need some kind of entrance and from there they can decide whether they enjoy the more simple compositions or the complexities of something much more challenging.

# SH; you have said in a previous conversation that you didn't consider yourself a composer, what it is that you are doing?

HF; all my activities together are way more diverse than just composing, Dr Harry Lehmann suggested that "composing is building an instrument" so in that sense I am a composer, when I play my concerts I do use patterns and compositions but I feel society is always giving people roles like composer, musician or sculptor. I work with acoustics, the effects of sound, its medical purposes, sound art, geology etc, all that together brings me somewhere in between so I wouldn't just consider myself a composer.

## SH; how are the stones used in medical purposes?

**HF**; a lot is evolving right now, physical medicine plays a major role and so does psychology. In physical medicine you are connected to this vibrating instrument which brings all your liquids into movement, playing the stone is a very easy way to create vibrations and movement within your body.

In psychological medicine the stones have been played by a number of dementia patients with some very positive results.

## SH; what are your plans for the future?

**HF**; I have so many concepts and plans but in many cases it depends on finance, I have to work with heavy stones and the logistics of this is very expensive. I have a lot of concepts I haven't tried yet and my plan is to actualize them and learn more about how it all works.

I would also like to develop the theory side of things so it gets the recognition it deserves and also make sure that the practice of stone playing continues to go in the right direction.

## SH; at what point would you feel like the stones had been fully accepted?

**HF;** I don't think there is a problem with them not been accepted, it's only a matter of time, you have to experience the stones in time and space, right there in the moment, if you have that experience you understand it right away and get it.

Sound is a powerful tool that you can learn to control so ultimately it all depends on your reason for wanting to control it.

The END.