List of incorrect content

Chapter 1

"The Hang is a hand-struck steel idiophone made of two metallic hemispheres glued together"

The Hang was never made in steel. It is made with a composite named Pang with nonmetallic behavior of its surface. It is not made out of two raw forms in the shape of hemispheres but in the shape spherical segments.

The two parts are fixed together in different manners. (glued, welded, screwed)

"An opening in the center of the hemisphere amplifies the sound"

The GU, the opening does not amplify the sound.

"A few years after the Hang has been launched, customers had to sign an agreement"

That happened only 8 years (2008) later when the integral Hang was launched.

People were invited who agreed to sign an agreement.

"Seventy years apart..."

The first steelpans 1945: 55 years !

1.4

"The Trinidadian steelpan has been featured as a research subject for interrogating its social function (Grant)"

Cy Grant came to Switzerland and visited PANArt (1998). There is a long chapter on the Blackpans made by Rohner and Schärer and its social context. You can find it in the following publication: **Ring of Steel** The Pangs of Bern, Switzerland. Echoes from the Gotthard: A case study.

2.2

We miss Kim Johnson, one of the well-known historian and journalist of Trinidad, as a source in your work.

Imortant publications:

Kim Johnson

- The Illustrated Story of Pan
- If Yuh Iron Good You is King
- Ted Talks

2.3

"In 1985 he founded the Steel Panmanufaktur."

The correct name was: Steeldrum Manufaktur Felix Rohner

"By the mid 1990, PANArt developed a gas nitraded sheet steel"

Already in the late 80s Rohner worked with <u>nitrided</u> steel, 1993 PANArt created a rawform with the new composite Pang

"Inceases hardness.... "

It increases only the hardness of the surface (about 5-10/1000mm)

Nitriding increases consistency. The term "hardness" is too simplistic in this context.

"PANart"

Since the foundation of PANArt in 1993 the Brand is written **PANArt**

"Schärer glued two already-tuned prototype instruments shells together, top to top and cut a hole into one of them"

Schärer and Rohner fixed (with screws) two prototype instruments shells (one tuned) together.

We didn't cut a hole! That was months later done.

"A plastic ball between 3-5 cm in diameter...."

This procedure is a snap through one, a preforming of the notefield.

"Rohner described the Hang as a drum in the early days.....(Hutchison)"

Rohner never called it a hang drum. The first who called it a Hang Drum was Lark in The Morning a distributor (2002) in California. We stopped that immediately.

2.4

"Hang in HongKong ... chromatic"

PANArt created only two chromatic Hang. One is in the Hand of Murat Coşkun (Germany) the other one in the hands of a Bernese guy. This story maybe is invented.

2.7

"Stainless steel in general produces...."

The sustain depends not only on the material properties! Shape and in-plane compression are important parameters! Impedance ratios also...

2.8

"PANArt invested in a deep drawn machine...."

PANArt didn't invest in a deep drawing machine (this would have cost half million...)

PANArt invested in a tool, some thousand Euros. PANArt had to create the tool, the right curvature, the right size, the right material. The deep drawing was made by a specialized company near Bern.

2.9

"On a properly tuned Hang/Handpan1:2:3"

There are many other vibration modes! 1:2:3 are only the lowest. One has to study papers of Rossing/Hansen! This is very important. The first three are just the fundamental drum-like mode, then two stringlike modes (Octave and Fifth) and then are many bell like modes around the dome! The so-called <u>shoulder notes</u> are nothing else than the bell-like modes of the DING.

2.11

"Culturalist...."

In which mail did I say this? I never use that word. Maybe a translation problem.

3.2

"Foundation PANArt"

Eichenberger was not a member of the Bernese Oilcompany Steelband.

"A tenorpan they named....Black Pan"

Black Pan was a whole family of instruments with a standard whole tone scale layout, nitrided in a special way. It came out of the bath black. (See Cy Grant - Ring of steel)

"Terminated the production and repair December 2013 (page 98)"

PANArt stopped the repair service only for 1. Generation Hanghang which were not under agreement.

"They reduced the quantity of production... (Page 100)"

We didn't reduce, we just invested in higher quality, research, lower sculptures which demand more work.

"Refused to repair Hang... " (Page103)

We stopped repair service for old Hanghang (prices 300 to 800 Euros) without agreement.

"The license was offered.... " (Page 104)

You mix two offers we made:

- We offered the rawform in the mid 90s (Pang with stainless steel skirt, 600mm diameter) made in 1994 to steelpan tuners worldwide for 250 Euros. Sonobe bought two of them.
- The license was an offer for using the Pang nitriding method for 10 000 Euros a year. All Handpan makers got it. Just Tzevaot and Beery (USA) were interested.

"Introduction of the Integral Hang" (Page 106)

The Integral Hang which can be played with other Integral together, could be ordered in 2016/17 again. On www.panart.ch we offered it for special use.

"Technique is not open for sharing (Bueraheng)"

PANArt published many papers with an insight in our tuning process.

For example: The tuning process. ICSTS 2000

<u>4.3</u>

Reto Picture (146)

Reto plays the Ghatham, not the Udu. About 7 times wrongly named in your work.

"Process of Hanghang is, to me, similar to handpan tuning." (Page 167)

You never saw us tuning. This is an important point! It is all about the art of PANArt which bases on the research of 45 years. Achong unlocked some mysteries of making, he dedicated his life to that.

He writes -as you know- "don't copy the shape" "don't use hydraulic machines" "don't use templates"

The mystery is in modulation and for modulation you need compressive stresses—a lot! You must go to the limit of the material (in some part of the playing surface).

Our tuning has nothing to do with handpan making. The result of a weak handpan is fingertip playing, because the handpan has little spring power—no TRUE NOTE (Achong). Maybe you will understand us better if you read this part of his book (secrets of the steelpan, page 847):

would cause the notes to be pushed 'upward' relative to the pan face being depressed. Sure enough you end up with what looks like a fully formed pan face complete with note but the big question is, what is inside?

Something that looks like a pan is not necessarily a pan! I call these things 'dummies' and I would not dare even to call them 'dummy pans'! These 'dummies' do not possess the required increased stiffness on the internote nor the necessary stress distributions relative to the 'notes' — blocking conditions will be difficult if not impossible to establish. To bring some functional semblance to a 'pan' the tuner would have to completely rework these dummies (I would personally advise that they not be used at all!).

- It is clear that 'copying' note shapes is a waste of time.
- Press forming panface plus notes will not produce anything close to the desired state of 'tuned notes' in fact it burdens the tuner with more work. 'Detailing' has been ignored.
- Anyone planning to introduce a new pan making technique that involves press forming both the pan face and the notes using single or multiple die must take note of the statements immediately above!

It is all about the art to give beauty to a sound sculpture.

<u>7.2</u>

"Which would later rename itself as PANArt...."

It was renamed to PANArt Hangbau AG (2003)

Bern, May 14th – the PANArt Team