your own loudspeaker?	come into my parlor
L- How we got started with this conversation 2 - An introduction to Acoustics and Hearing 3 - Acoustics and Mechanics 4 - Acoustic Measurements 5 - Electronics and Sound	1 - The Creation 2 - Me and the Planet 3 - Reality and Meaning 4 - So, what?

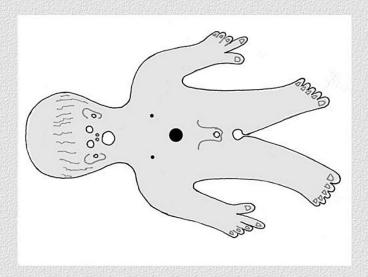
'Me and the Planet' as PDF

.... come into my parlor said the spider

Me and the Planet

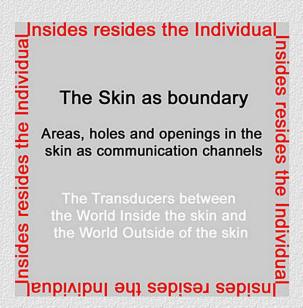
SL: Several years ago I saw in London the exhibit "Bodies", which displayed in respectful manner real human bodies preserved in plastic. It showed the muscles and organs of humans in various forms of frozen motion but with the human skin removed. There was also a display of just the skin, rolled out and laid flat on a table. I learned that the skin is the largest human organ. What impressed me was to see the holes for the eye balls, the holes in the nose, the large hole between the lips and the nails on fingers and toes.

I do not have a photo of that skin in its display case, but the drawing below hints at what I vividly remember from the display of another human's skin.

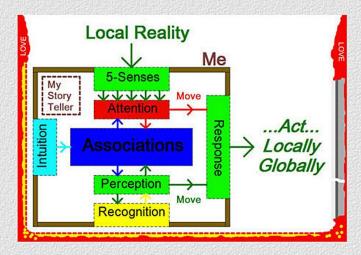


The Skin

The Skin

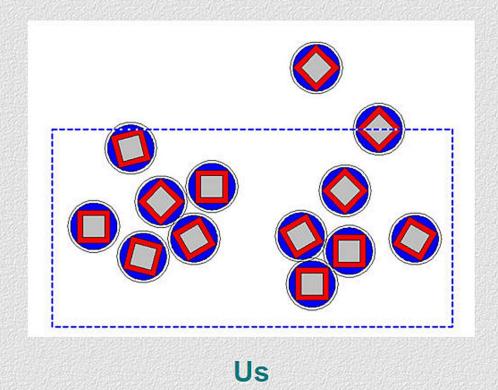


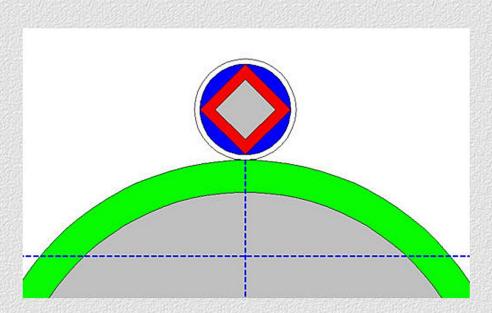
Me



Association Model of Perception

Attention } -- Movement -- { Perception





... like rolling stones on a planet that favors balance ...



SL: During the <u>Interlude</u> it occurred to me that the **Association Model of Perception** is as important to understanding life and living, as is Einstein's ($e = mc^2$) to understanding physics.

The **AMP** describes how we take in the outside Reality and deduce from our perspective a Subjective Reality, which has Meaning to us in context of previous observations of Reality. We associate current input data with stored memory data, many of which are hard to access directly, and we respond accordingly: physically, mentally, emotionally and intuitively.

The AMP also allows us to recognize what elements are important for designing a loudspeaker, a loudspeaker that is friendly with our perceptual apparatus, when we use the speaker in the room we happen to have.

Pause

Fitz: It is just amazing to me, where our conversation has taken us, since you brought up the tree falling in the forest. And then you put in this <u>'Intermission'</u> for gathering visual material, that you thought was needed to explain the association model, which you now call AMP.

SL: Yes, I am surprised too.

I now see, that the process of gathering material brought up thoughts in me, which were related to more than psychoacoustics and your speaker design. It dawned on me how important this model is in everyday living, when we make decision about how to act.

A while ago I had read Daniel Kahneman's "Thinking, Fast and Slow", in which he describes the interplay between the automatic functions of the brain and the deliberate functions of the brain, and how that affects our decisions, particularly when it comes to business and money. It's a good read and coming from a Nobel Prize winner in economics.

Fitz: I will add that to my reading list.

SL: And then there is this whole thing about information, what it is, who sends it, how it is received. And the idea that information is always sent in a context and received in a context, but that the sender's and receiver's context are rarely one and the same.

I was not even a teenager during WW2, when I often sat with my mother and older brother in our living room to listen to our Telefunken radio with the long and wide glass dial and the fascinating names, like Ljubljana, of cities from all over the world on it. The radio could receive Long Wave, Medium Wave and Short Wave. My father was not home at the time. He was in the German Army.

We also had a second radio, a DKE. During the day it could only receive the broadcast station from Hannover, some 70 km (50 miles) away. After sunset you could try and sometimes get many more stations before the radio started to whistle and howl. So we preferred the Telefunken. But every German was supposed to have a DKE. That way you could not tune into London and the BBC. But with the Telefunken we did. My mother pulled the curtains and kept the volume low, as we learned, which battles were being fought, where they were, how many prisoners had been taken and so on.

Not much later, my 16 year old brother's high school class of boys was stationed near the railroad bridge and the autobahn bridge over the river Weser to defend the bridges with Flak, artificial fog and captive balloons against enemy

Not much later, my 16 year old brother's high school class of boys was stationed near the railroad bridge and the autobahn bridge over the river Weser to defend the bridges with Flak, artificial fog and captive balloons against enemy aircraft. He had access to a map, which showed Germany divided into little squares and with a letter in each square. He also knew of a radio station, which broadcast to the military the course through the squares, which enemy bombers were flying. That way we had a pretty good idea of where the bombers were headed and what to expect and whether the air raid sirens would start railing later on or not. The Telefunken gave us early warning after my brother had made a copy of the map.

I say this because I want to emphasize the importance of information to every moment in your life. For example, I can still hear in my mind the tone of Goebbel's voice, of Hitler, of the speaker from the BBC, though I do not remember words. But I remember the story that went with the tone. Today I call these memories 'associations'.

When I came to the US in 1961 I was struck by the lack of news about Germany on American radio stations and on TV. Everything was about this country and everything was in superlatives like: the best, the greatest, the most. Other than about Communism and how communists are going to take over the world and how ruthless and godless they are, not much else seemed to be of interest. As university students in Germany we had discussions amongst each other about racism against the Jews and about racism against the blacks as reported from Little Rock. Now in the US I got an inkling of prejudice because I was German. But then I was overwhelmed by the openness and friendliness of people here. The assumption that the other person is well intended was always there. Whereas in Germany you seemed to start out a relationship from a basis of mistrust, and the other person first had to prove itself to you. Seen from Germany the Americans seemed naive, teenagers in the history of the world and unencumbered.

Working at HP in research and development of the most advanced electronic test equipment was a dream come true for this fresh baked engineer coming out of post-war Germany. The people I met here, their welcoming openness, their ideals and searches for the highest, those experiences were ultimately what kept me in the US, for wanting to become a citizen, to join and to actively participate in shaping our future to the best of my abilities.

During the last few days my wife Eike and I listened to some of the Republican Convention speeches. Last night I sat through Trump's whole speech. I could not help it, that associations came up from memory, from my early years. But memories also came up from a time at HP, when I designed and built myself a dual conversion, multi-band, short wave receiver using just JFET's. I did that not only as a learning experience about the applications of JFET's, but also to have a receiver of news from outside the US. Important to me at that time was Radio Moskau and Radio Beijing with words from Chairman Mao Tse Tung, to hear the other version of propaganda to that of the Voice of America. Today we have cable network 'news' from CNN, Fox, MSNBC, etc. Each giving their slant to what has happened and talking endlessly and spinning stories on little information and data, bringing in their own favorite associations to what they perceived. Listen for the tone in the voice.

When I heard Trump, I heard fear, aggression, war, fight, law and order. I can understand that many, many people in the US are frustrated with how their lives progress and about the future they see for themselves and their children. The gap between poor and rich has ever widened during the years, which I have lived in this country. Money rules everything and has taken on a life of its own, where it is no longer an exchange currency for value, but has become a tool to manipulate and control. When looking at the US from the outside I do not see this country as a democracy and a beacon of light, but rather as a dictatorship of money with organized corruption. Capitalism has wildly gone off track, serving the few. Democracy was meant to serve all, to bring out the best in each of us. Of course Communism has been a failure, because it negates the individual's dreams and aspirations. And what does organized religion have to offer? There is so much judgment and hypocrisy. So little mercy.

In the end, everybody in the world wants peace. Who does not want to live and fulfill their life? Why were you born?

Ours is a planet of **Balance**. You can clearly see this when you observe vegetation or animals. The lion kills the zebra for food. The lion does not kill zebras to dominate the herd, but just for food. He even serves the health of the herd. After the tragic fight and the kill, they both continue to live with each other in relative **Peace** and in a form of balance, which assures survival of either species. But it is a peace, which requires constant attention.

When I look at our time, at what we are doing to each other and our planet, then I see a scary trend towards much greater imbalance, towards violence and domination. Maybe it has to get worse, before we wake up and say: Enough of that!

Is Trump the change agent, the wake up call? And where will Hillary take us? Will battles be fought, which lead to balance? In the end, everybody in the world wants peace. Who does not want to live and fulfill their life? Why were you born?

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Neither a man nor a crowd nor a nation can be trusted to act humanely or to think sanely under the influence of a great fear.

Bertrand Russel (1872-1970)

