

## Tangible situations: Representing data as music

The notion that music is essentially just data, is not new in itself. And it is gaining more supporters every day: Bit Torrents are channeling Gigabytes of sounds from one user to another. And the leading label of the new millenium is iTunes – run by a Software- and Hardware-Developer. So the whole notion that sound can be represented by computer files is not just a fanciful idea, it has become an everyday reality. More and more, artists are coming to terms with this reality – or, in some cases, they are making the struggle of coming to terms with this reality part of their art. If music is data and can be described by machines, doesn't that limit the space for human creativity?

That is certainly still quite a bit off, but I was reminded of this when I recently found out about uplaya. Uplaya is a program developed in the USA, which is supposedly capable of determining whether a particular song has hit potential or not. Its mechanisms are simple: You upload a track to their server and only a couple of seconds later, the algorithm has calculated whether you've got a winner in your hands or a flop. Now it's not really all that surprising that there is a market for these kind of gadgets. Especially in times, when everybody can record and publish their songs, every solution to make you stand out from the masses, no matter how ridiculous or improbable that solution may be, is welcome. What is a lot more interesting, however, is that uplaya apparently predicted that Norah Jones' debut album, which was recorded when she was a complete nobody, would go on to take the charts by storm – and it did.

What this Software accepts is not that music *is* data – but that music can be *represented* by digital data. And digital data, in turn, can be quantised and statistically analysed. So it can evaluate which combination of chord changes, beats, melodies, lyrics even – have been succesful in the past. After that, it then procedes to compare a particular song with these clusters of hit songs and finally arrives at a conclusion. It doesn't rule out human creativity just yet – but it does claim that the way we perceive and listen to music is bound by a set of fundamental rules, which in turn can be put into numbers.

Another interesting development with a similar thought behind it was initiated by Pete Townsend of The Who. He had an idea for a program called „The Method“, which was able to generate musical portraits of its

users. You would upload three things: A photograph of yourself, a personal sound which you liked (maybe your doorbell or your phone ringing) as well as a short musical segment (a song by Norah Jones). After that, the Software would create a piece of music which would essentially tell you who you were in sound. Townsend had great plans for his pet-project, because he thought that, in the end, you could use it as part of an online community. So instead of just having your picture on your facebook account, you would also have your very own personal tune to tell other people who you are in just a few seconds time.

Still today, both projects sound a bit alien. What makes us scratch our head, mostly, is that music could ever represent something other than what it essentially is: organised sound. But if you really think about it, in their own way, a CD, LP, Tape or MP3-file are also not entirely representative. Recorded music is also a translation of a real situation into a very, very condensed space. All the elements that make up a live performance – sweat, cigarette-smoke, all the noises from the room, your uncomfortable chair or your back aching from standing all night, that one beer you've had too many, the way the musicians act on stage, all this can physically not be transmitted in the recording stages. And yet, some select live-albums are capable of somehow making you feel all this nonetheless. Even on some of the live albums of German electronica-pioneer Klaus Schulze, which were recorded straight to a hard drive without any kind of ambient sounds from the concert hall, convey some of this tension. So obviously, sound can imply much more than just what the ear can hear.

And then there's an even more important aspect . Questions such as these are no longer academic or eccentric. What someone like Roland Etzin is doing – freezing sound and trying to capture the sonic characteristics of a photograph - might have seemed wild a couple of years ago. Now there are plenty of Software-programs that will do the trick and they are not just easy to use but affordable as well. The point is therefore no longer whether it can be done. But whether it can be done in a way that seems to be genuine, emotionally engaging and sensible. We're already far past the post of mere experimentation. A plethora of artists are dealing with the relationship between sound and information their work is firmly grounded in very tangible situations and deal with very concrete artistic challenges:

- Andrea Polli has tried to sonify very particular conditions on Antarctica, inspired by her stay there.
- Derek Holzer was frustrated with traditional ways of performing music and has turned to using light – another carrier of information – to arrive at intuitive experiences.
- Achim Wollscheid is interested in how music is always both input and output, how it can or rather should not be separated from its inherent reaction.
- Roland Etzin, as has been mentioned, was looking for a way to create the sonic equivalent of a particular photographic moment.
- Christoph Korn is taking a slightly different stance by drawing an analogy between collecting data and the process of composing and how different they are – and that, in composing, some of the hidden data, the information you're withholding from your audience, can be the most effective part.
- Lasse-Marc Riek has documented the sound properties of churches in Tilburg, questioning the idea of churches being spaces for silence, asking questions such as: When do these noises turn into noise? Is it actually okay if there *were* complete silence? How is the idea of silence picked up by visitors, how are they reacting to it?

Contrary to what the developers of that hit-software mentioned at the beginning are promising, though, there are no definitive answers. There's a quote by Jeff Tweedy of Wilco which nicely delineates the territory still left to human creativity: *„Music is just data until listeners put that music back together with their own ears, their mind, their subjective experience.“* As such, you don't need to worry that all you will be served in the future is just software, algorithms, concepts and algebra. It is always, above all, music.

By Tobias Fischer