

Michel Waisvisz: The Man and the Hands

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Michel Waisvisz, electronic music impresario and dedicated inventor and performer, was the closing plenary speaker at CHI 2005. We were pleased to be able to interview him and we hope his life, his work, and his comments inspire you to follow his lead: Have vision, be fearless, experiment, play!

Michel Waisvisz finished high school, ran away from home, and pursued a passion for freedom and expression through his explorations with circuitry and sound in live performance. Michel is an inspiring, warm, sincere, and funny man who has dedicated more than 30 years to live electronic performance. Self-taught by reading everything he could and relentlessly experimenting, Michel Waisvisz has earned a worldwide reputation pursuing his own personal visions of sonic experience.

Since 1967, Michel has continuously devel-

oped electric and electronic instruments including the Cracklebox, likely the first commercially available portable, self-powered, alternative analog audio synthesizer with an internal loudspeaker. Many in the electronic music community refer to the Cracklebox as the archetype of “glitch” or “circuit bending.” Sold in the 1970s and long unavailable, the Cracklebox has returned and is once again sold commercially. Michel brought it to the CHI 2005 closing plenary stage along with The Hands, his own personal favorite of the devices he has developed over the years.

Michel usually works in the music community as one of the “pioneers of touch” and a creator of personal and extremely physical musical instruments. He was quite curious about the level of interest formulated in the different context and language of SIGCHI. Why would we invite him? For one, his interface to his instruments defines him as a person: He completes the circuit in his musical instruments. It is the touch—closing a circuit with your body—that makes the music; the conductor of electricity and the conductor of the music experience are one.

Michel has been making music and instruments and the software that controls them for 30 years. He is now documenting his efforts and his part in the electronic music world, an element of invention that is often forgotten or incomplete. For example, Leon

Theremin's contribution to electronic music is substantial—the theremin is still used today for movie soundtracks and is imitated by other instruments—yet Leon Theremin (also at one point at STEIM, see sidebar at right) wasn't accepted in the serious music scene. Theremin is one of the early electronic music development people who are now badly documented and not institutional. STEIM is making an effort to get this process going.

Looking Back. Michel's father, Jacques, was a chemist and a ham radio operator. Michel grew up with a lot of electronics and "don't touch that!" instructions, which of course he did anyway under cover of night. In the mid-1960s Michel and his brother forever damaged their parents' piano, discovering that not only do you not need to play the piano in a traditional way to make music, in fact, you don't even need the whole piano. At the Vrije Akademie, an art school in The Hague, he started to build all kinds of equipment, using televisions and fake computers for music theatre.

Michel became very interested in electronic music as a way to move toward control and away from a keyboard. Away from steps and pitches and toward *sound* music, Michel's idea was that sound can flow, or stream, so the instrument is navigating sound rather than responding to discrete keypresses.

At the time he started, elec-

tronic music was created in the studio and mastered to tape. It was the tape that was played for other people; Michel thought he could do better. He discovered he could "scratch" two identical tapes, making a continuous sound by cutting the volume on the back draw of scratching. It was in 1973 that Michel moved to STEIM to build a series of "touch" electronic instruments. Synthesizers at the time had patch panels to connect modules. The patch panel had pins with resistors in them; Michel discovered he could physically interfere with circuits by touching them and completing the circuit through his fingers, making a different kind of sound, and a different sonic experience for the performer.

This concept was employed in the Cracklebox. In the space of one-and-a-half years, 4000 squeaking and crackling Crackleboxes were sold without any advertisements. Seen at the time as a toy, variations soon followed, and Waiswicz created a more serious instrument, an analog portable synthesizer. He made a record with it and traveled to the US. But somewhere along the way he made up his mind again—as he did earlier when he rejected tapes for live performance—that electronic music needs to be experienced as a live event in a hall. For many years he didn't record until releasing Sonig, a new CD that he says "ends a phase and starts a new one."

Michel's performance was loud, noisy, and a relentless sonic

experience. He improvised with feedback on The Hands, and talked to us about his life, his ideas, his feelings. At the end of his talk a cadre of student volunteers paraded to the stage, each doing their best to outCrackle each other with the devices Michel gave to them to keep.

On Musical Interaction.

"Musicians deal with processes that have a life of their own—a string is a pretty wild thing and it takes a while to come to grips with it; you learn to engage with it. A real player knows that it will never be fully under control, and the art is somewhere in the middle. Sometimes you have a tight grip, or a loose grip; in between is the art. DJs perform, although their "performance" is limited. It's important to make the distinction between total control and traditional instruments. I like the word interaction, engagement; it's more emotional."

On Inspiration. "There wasn't a way to easily cause sounds and visions to happen. It wasn't interesting to me to go to the music conservatory; my life has a lot to do with creating my own little world: freedom with rules. This is not a selfish thing; in the late '70s there were millions of people doing the same thing. We designed a lot of experiments at the STEIM workshop—visual artists, theatre artists, all kinds of people could just play with things there. We discovered that children are the best beta testers, something STEIM still does today. Let

people then play with prototypes: if the prototype is understandable, has a clear response, or is wild enough, you learn something!”

On Accessibility. “If you make things very strong, you challenge people to break them. Take, for example, the tea-set story. We created an installation that was a tea set; each piece had its own behavior. It was fragile, and kids would break things. But they would go home and get tools and come back to make repairs. If you make something very high-tech and inaccessible it’s a challenge to the user, the audience, to break it or go away, because you can’t own it. The crucial thing in this interface design is to find the right metaphors to really invite people to have a different behavior especially with mechanical things.”

On Rebellion and Freedom. “Our experiments at STEIM didn’t have masochistic or sadistic aspects like Survival Research Labs, but they were dangerous and fun—a big game. At that time it was a signal of freedom away from the normal tunes. It was very exciting because it was new. I am always rebellious with father figures. My father came from the war, escaped, and moved his family to Switzerland and then went into the army and actively took part in fighting the fascists. He was a brave man and a socialist, a kind of cool father who didn’t give any room to breathe. I liked Stockhausen because he was so authoritarian that you could posi-

tion yourself clearly. With John Cage he was everywhere and so kind that you couldn’t get around him; I’d rather have a guru where I can say I’ve learned my lessons and I can go away now, but Cage never let you go. What he did for me was open up the idea that any sound can be seen as a musical value. He opened up perhaps more areas than anyone else. A crucial element for me is that I don’t destroy things but I reappropriate things, although sometimes [said with a twinkle in his eye] it makes it impossible to do the original things with them.”

Études in Fearlessness, Safety as Pleasure. “My influences were early airplane builders, Otto Lilienthal who made a glider, people like the Wright brothers. I appreciate the ingenuity to build and to try, the idea that you can try not to be led by fear, not to give in to it: études in fearlessness. Really this thing about safety and technology—if you think about safety, it’s about pleasure. You can measure safety by the amount of pleasure you have. If you want safety, you have to open up! It’s not about locking down, it’s totally the other way. It is not about closing and checking everyone but by opening up. In times like this, when there are threats that are real or not real, there are important aspects of overcoming fear, and art is a fantastic way to create models where you can escape from that stuff and it can work! These musical instruments in a way look like torture

About STEIM

Michel is the artistic director of Amsterdam’s STEIM, the Studio for Electro-Instrumental Music. STEIM was established in the autumn of 1967 as the modest initiative of a handful of avant-garde Dutch composers brought together by their shared sense of political and cultural rebellion. STEIM was and continues to be the sonic home of the Netherlands’ most prominent and progressive composers: Peter Schat, Konrad Boehmer, Jan van Vlijmen, Misha Mengelberg, Louis Andriessen, Reinbert de Leeuw, and Dick Raaymakers. At the time STEIM began, electronic music was not performed live in the concert hall; it was produced in the studio and played or the public via magnetic tape and loudspeakers. Determined to perform live using real-time processing and their own new instruments, STEIM musicians and composers brought electronic euphoria to the public. STEIM was born and remains today a research laboratory and development workplace for live electronic music.

Over the years a great variety of pioneering artists of the live electronic performance arts have worked at STEIM. More recently, STEIM is being discovered by DJs and VJs who want to liven up their act with physical control of their sound machines and laptops. Dancers, actors, and visual artists also extend STEIM to explore and create at the only independent live electronic music center in the world exclusively dedicated to the performing arts.

The foundation’s artistic and technical departments support an international community of performers and musicians, and a growing group of visual artists, to develop unique instruments for their work. STEIM invites these people for residencies and provides them with an artistic and technical environment in which concepts can be given concrete form. It catalyzes their ideas by providing critical feedback grounded in professional experience. These new creations are then exposed to a receptive, responsive niche public at STEIM, before being groomed for a larger audience.

Read more about STEIM and Michel Waiswicz at: <http://www.crackle.org> and <http://www.steim.org>

devices... If you think about safety you can think of barbed wire and towers, or alternatively you can think of a beacon, a lighthouse put there so it's good to know you are there, it is openness and a notion of safety that is really nice.

"In order to deal with this stuff you have to deal with fear. Through my work it's always been a subject to try to go from fear to pleasure but not as a masochistic kind of thing, just going away from fear towards pleasure. In certain kinds of jazz music there are languages that are too fast—you can fall and miss a note and everything goes wrong—I love the improvising, the rapidity in it. But when you are fearful you can't play the notes any more."

On Control. "I like to avoid the notion of control; if you see me dancing with someone, and I'm leading the other person, someone who does that in ballroom dancing is not dictatorial, they are very sensitive and engage very successfully. Like in making love, it's not something you can control, it's something you engage in and to which you are sensitive. You can be determined if you want, but it only works if you are with the other person. With an instrument it's the same thing; but I have to induce life into that instrument. So I program certain sounds and I trigger a key and nothing happens but it plays something. But then I start changing its course, and manipulating the sound. So it's engagement, and a nice form of

synchronicity rather than control: Control is a total illusion."

On Design and Redesign. "A crucial statement in my story is the whole idea that people design and redesign instrument interfaces mechanically quite often and thus change the instrument's response. So they never become a virtuoso on their instrument. This is the reason I still use my original instruments; the Hands has changed slightly over time as I found a way to make it easier to hold, but it is fundamentally the same instrument. When you play a game—even the simplest pinball game—there's hardly anything you can do. But if you have to think about it you react too late. There is a direct mental loop but there is no language involved; if you're very good it becomes an instinct. So this whole phase where you go from thinking about your actions to doing it, being engaged with your instrument, is crucial. Interestingly in new interfaces, people don't reach this level of virtuoso performance because the interface changes so quickly. I've played the same interface since 1984; I've thought of a thousand variations that would be better and have developed them, but I stick with my own original. (People say 'You're still playing that old thing?' Would you ask a violin player why they don't change the instrument?!) A crucial idea in development is that things need time."

On Vision. "I see myself as a future user, not as a creator or

inventor. It's not something special, it's just BS, everyone has it, it's there. I speak with people from the corporate world and they are fantastic artists in their way. I think it should be about focus more than anything else, and it should really be about vision—saying it's about creativity is too easy.

"Randy Pausch, in his opening plenary comments, related that one splits a team according to roles and strengths, each operating at their best, only accountable for their own talents. To split the role over several persons doesn't appeal to me at all. I'm the other side—no way—at STEIM we're all engineers and we all play a lot of roles, and it's an interesting constant conflict. Working in a center where all these people come together for many years, we don't each play a single role. For me that's not helpful. You should make people aware it's within reach: If you think about safety, if you want to appropriate your world, you have to have a makeable world: Hack stuff, make stuff, make it like you want it to be. We can learn from kids who play with our things. You have to see it's in your own hands. In an educational situation it's good to see groups like a bus: There are twenty people on the bus, what does the person in the sixth row second seat say? Where do they want the bus to go?"

Make, Do, Think. "I find crucial The Makeable Thing—like technology, the way it is present-

ed now, it's not ours. If you buy a telephone, yes—but it doesn't feel like being yours. There is this whole skin-able story, so you can put skins on things, or people put loved ones on their desktop, and this erodes the photos' emotional value by putting it under your work. It's skin deep. I want to end by saying that what we should do is think about products that really become our property, our mental property, not by small differences. It should be about hardware. The whole thing about physicality is crucial—you can build it, you can touch it."

Report on the First All-India Human-Computer Interaction Conference

Sanjay Prasad and Dr. Andy Smith, General Chairs

Dr. Anirudha Joshi, Program Chair

Iqbal Ahmed, Organizing Chair

The First All India Human Computer Interaction Conference (IHCI 2004) was held in Bangalore on December 6 and 7, 2004 under the aegis of the Indo-European Systems Usability Partnership (IESUP), a non-profit EU Asia IT&C initiative. This event was organized in cooperation/associ-

ation with the Computer Society of India, the British Computer Society/HCI Group, ACM/SIGCHI, and the International Federation for Information Processing (IFIP). This was the first pan-Indian meet of all stakeholders from academia and industry with a true international presence to discuss the issues related to HCI, Systems Usability, and User-Centered Design. Approximately 150 delegates from various organizations from all over India and abroad attended the conference.

The first keynote address was given by Dr. John Karat of IBM TJ Watson Research Center, New York. He shared a case study on user-centered design approaches in organizational privacy technology on the basis of understanding of organizational requirements for privacy management.

The second keynote was given by Steve Howard, Department of Information Systems at the University of Melbourne. He talked about designing innovations and drew comparisons between current user-centered design practice and future desires.

The Program Committee (PC) had representation from India, Europe, the UK, the US and Australia. Papers were invited on a wide range of themes such as HCI in the Indian industry, Culture, context and society, Institutionalizing HCI, Global products/applications, local development, interaction design, user-centered design, and HCI Education.

PC members did a soft-review of submissions in the first review round, providing feedback to the authors. This round was specifically conducted to encourage new researchers and practitioners, considering that IHCI 2004 was the first peer-reviewed conference related to HCI in India.

The 17 papers accepted for the main conference were broadly classified under the themes: Culture, Context and Society, HCI in Indian Industry, Interaction Design, HCI in Indian Curriculum, HCI in Text and Speech Systems, and New Directions in HCI. Another six papers were accepted for a conference workshop on developing HCI research in India.

Among the invited speakers, V. Durgaprasad (SAP Labs India) and Kaladhar Babu (Cordys India)



L to R: Dr. Andy Smith and Sanjay Prasad, general chairs, IHCI-2004 and co-convenors IESUP; chief guest Dr. Shankar Lingegowda, honorable IT Secretary, Government of Karnataka; ML Ravi, president of CSI; Ms. Sudha Raju; Iqbal Ahmed, India operations head, IESUP and OC chair, IHCI2004; and Dr. S. Rao at the inaugural session

provided perspective on the current trends in the usability and HCI design processes in their companies. Dr. Jan Gulliksen (University of Uppsala, Sweden)