

The Making of

The World Beyond the World

I had read how an autistic found a way to cope with the "real" world: by means of a flashlight that he could switch on and off as he wanted. The relationship between man and machine has interested me ever since. And now, with the advent of the personal computer, a new (mathematically intellectual) machine was developed that increasingly approached the human capacity for abstraction. Shot all over Germany in 1985/86, the film essay *The World Beyond the World* was broadcast in the science program of German public TV broadcaster SWR.

At that time, information technology was still in its infancy. No internet, e-mail, or smartphone existed. The computer mouse was just being introduced, but otherwise the human interface was still quite unwieldy. We filmed bulky monitors displaying endless green lines of literally cryptic program code. Intuitive graphic user interfaces were still a long way off. We were in the computer stone age.

However, I was not interested in the technical, but in the philosophical and cultural backgrounds: why people got involved with virtual machines, why they could actually get lost in them. In this respect, this film essay about the man-machine symbiosis is as relevant today as it was then – for the very fact that, in 1985, the computer's hold was not yet so comprehensive and pervasive; the convergence of the human and the digital worlds had not yet become so taken for granted and internalized.

Chaos Computer Club hackers had just pulled off the very first electronic bank robbery, using the now-defunct interactive videotex service BTX to easily debit € 67,000 from the Hamburg savings bank – a feat they would soon make public. Steffen Wernèry and Wau Holland, whom we interviewed in their Hamburg Altona apartment, presciently demanded a different approach to computers. They demonstrated how they are programmed by human beings – with all their human imperfections.

Another example was Frankfurt philosopher Grant Johnson, who was working on the BTX videotex system – for the German Postal Service, which at that time still reigned over German data connectivity. He told us about the computer scientist's sense of being lost in the virtual spheres.

For others, however, this loss of reality became a posture – with many a young nerd letting himself be celebrated as a super programmer; such as the prodigy "Computer Mozart", whom we visited at his parents' home in Ludwigsburg.

Artificial intelligence and artificial art (yes, the latter actually existed), were still in their infancy. It worked only due to the human being's cognitive abilities, due to his taking the machine seriously and thus taking its limitations into account.

Joseph Weizenbaum had already proven this effect in 1966, with his *ELIZA*: The program behaves like a speech therapist who uses simple counter-questions to prompt his or her patients to reveal more and more. In the case of *ELIZA*, this was done by means of stored text modules, which were all too readily taken seriously by the test persons. For this film, I did an interview with *ELIZA* myself. However, when I began to leave the specified track of our conversation and grow critical, it tersely remarked: "We are discussing you, not me."

The visual part of the film was dedicated to robotics. In Neuchatel, Switzerland, we filmed the oldest freely programmable automatons from 1774: The watchmaker Jaquet Drosz's androids, which played the piano, drew the king's portrait, or wrote with quill and ink.

A good 200 years later, no less than Joseph Haydn's *The Creation* would do – performed by a piano-playing robot, at the 1985 Japan World's Fair.

At that time, we also encountered the street artist and pantomime Gilbert "L'automate". Perfectly straight-faced, he imitated the jerky movements of an automated human with such perfection that pedestrians stopped and marveled. Two years later, he would feature in the circus troupe of my movie *Earthbound*, about (muscle-propelled) flying machines.

In fact, essentially, the way humans deal with and are absorbed by machines has hardly changed to this day. Since the technologies were not so far developed in 1985, our view behind the scenes was perhaps even better.

I regret the absence of only one aspect in the film, one that didn't exist back then: Today people with Asperger syndrome (a mild form of autism) are specifically entrusted with complex programming tasks. Thus, the flashlight (with its two binary states) has become a universal man-machine symbiosis, within a sea of data that requires ordering.

(*Oliver Herbrich, 2016*)