

Perceptual Phenomena and Computer Games

The phenomenon of perceiving time

Anyone wanting to try his hand at virtual Formula One racing usually begins at 10 laps, advances to half the distance (about 30 laps in 40 minutes), and ultimately reaches the full distance (a complete race of some 60 to 70 laps with a total game time of an hour and a half). The first time you go the full distance, the demands seem inhuman. You're tired after forty laps at the very latest, your vision blurs, and your back and fingers start aching. After a couple of races you've gotten used to it all. And after a complete season, everything but the full distance seems unacceptable. Months later, you play your first NASCAR race. These stock car races last twice as long as Formula One races: three whole hours. Now the hour and a half of Formula One dwindles to an amusing quickie. For after all, there's still the 24 hours of Le Mans. And someday a complete Paris-Dakar rally. Time is relative. And so are performance limits.

What is more, time passes faster while you're playing: "What? It's been five hours already? I didn't even feel hungry or thirsty. Where did the time go?" Strict escapism. Just one more try. Then another. Just one more. The very last. This is really the last. Though it would be dumb to stop now, when things are rolling so nicely.

The phenomenon of perceiving difficulty

The practice-makes-perfect effect: time limits or tests of skills which had seemed insurmountable at the start come closer and closer to being within reach as time progresses. Eventually you just miss the mark several times; nevertheless, it's now easier for you to get further each time than it was on your first five attempts. Both the action and you move on to ever higher levels. What had once been difficult is now easy. Though what was easy becomes difficult again when you're out of practice for a few weeks. The beginning and the end always border on one another.

The phenomenon of perceiving details

You begin to see selectively. A game can have a wealth of textures, patterns and objects, but if you are missing the piece of the puzzle that has to fit into a star-shaped space, the eye perceives hardly anything else but objects that are roughly star-shaped. In real life the spectrum of sensory stimuli is too diverse for you to proceed so selectively. In contrast, a computer game permits you to narrow down your vision, and not only does it not penalize you for doing so, it rewards you. You see everything simultaneously and yet register only the few things that are important.

For racing, there's tunnel vision. You perceive hardly anything else but the stretch of road directly in front of you. For adventures with an element of reconnaissance, there's expanded vision. Each and every detail is scanned, but in your mind you filter out the backgrounds from the interactive objects, which enables you to save a lot of senseless legwork. You perceive everything, in fact even more than you would in reality, because in virtual reality nothing is accidental, everything may be significant. No: everything is significant. The significance of the insignificant elements is to camouflage the significant ones.

The phenomenon of hallucinating

Sometimes while playing a computer game you see something that isn't actually there. "Is that another racing car looming up in front of me, or is it just the effects of the graphics as they form the roadside structures? Was that something moving there or was it just a flickering in the graphics? Is that a face there in the rocks or merely a play of shadows?"

Since three-dimensional virtual terrains are in reality merely flat surfaces, optical misunderstandings are possible. A light area alongside the road can either be the road receding into the background or a rising rock embankment at the road's edge. In the first case, you drive on; in the second, since you'd thought you'd seen something other than rock, you crash right into rock.

A dark area in a cliff can either be an entrance to a cave or simply the shadow of an overhanging ledge. In the first case, it may be the only way out left; in the second, since you'd thought you'd seen something other than rock, you're wasting your time, energy and well-being climbing around there.

In William Gibson's *Neuromancer* universe, which is largely set in the computer matrix, voodoo justifiably plays an important role. When the game begins to profile its own ghosts, association is given free rein. And when the virtual generates its own rumors, lies and tales it becomes so similar to reality that differentiation hardly makes sense.

The phenomenon of translating

Visual habits from computer games can be transferred to reality. Labyrinthine factory buildings, with stairways running around them and ladders attached to their exterior walls, are seen from the angle of how to explore them most quickly and least noticeably. The premises of department stores, crammed with shelves, are examined for their suitability for shooter scenarios or for their jump 'n' run climbability. While driving along on the freeway, you consider what maneuvers would enable you to blaze a path at 300 hundred kilometers an hour past all the other road users. A young boy is leaning on a window sill and muttering: "I would just be able to nab that guy down over there on the street corner with the laser gun from that game."

Reality is seen through a grid, given sharper contours and evaluated in its substance as cover and range of fire. Everything perceptible becomes a zone of action, an adventure playground. Potential offenders see the world this way, and so do creative people. Every author and every computer-game programmer has seen the world as an adventure playground and then tried to communicate his notes which he jotted down so hastily.

The phenomenon of seeing beyond the looking glass

If the player also bears in mind what is programmatic about the program while making choices during a game, then Dorothy's dog Toto never fails to lift the curtain on the Wizard of Oz.

"No, it would be ridiculous for me to run all the way back through the mansion. The next relevant spot just has to be somewhere nearby."



"Big_Drozdowski, 115"

Beate Geissler & Oliver Sann, 2001



"Mutter Theresa, 90"

"I've already found half the amulet, the other has to be around here somewhere too."

"If there are so many medi-kits lying around here, then I bet I'll need them soon."

"If there is so much ammo for the rocket launcher so near the end, the rocket launcher must be the best weapon to use against the final enemy."

"Since nowhere else goes anywhere, the altar will probably move aside if I push these three buttons."

The more computer games you've played, the easier it becomes to see through the narrative "if...then" system of a game. Thinking like the programmer helps you to make headway; it doesn't spoil the fun, but confirms your own ability for thinking analytically.

There are, however, effects that were not desired by the programmers, which the player then has to imagine aren't there (e.g. slow-downs in the graphics), or which he even uses (e.g. errors in the graphics that enable him

to see through doors). For the great part the effects of these errors follow their own parameters. Even a computational delay in a hectic sports game always occurs at the same spot and can be included in the player's strategies.

In such cases, the player becomes the subject of a meta-reality, or to be more exact, of a meta-reality trinity: that of the game itself, that of the game including its technical shortcomings, and of the fact that it is only a game and turning off the computer is a way back to the real world.

In the age of virtualization of leisure time, Dorothy is no longer just a curious child. She has taken on the traits of Deep Blue, at present the most advanced chess computer ever. Players perceive time differently.

They perceive difficulties differently.

They see new types of details, they hallucinate and see ghosts, they transpose to other levels of existence and as a matter of course see beyond the looking glass of the roles assigned to them in the overall system.

They are children, old people, machines and abstraction, all at the same time.

Though usually they are only these things inwardly, for they lack the ability or interest to articulate.

They become looking glasses themselves, and then it is up to others to learn to see beyond them.

Since early 2000, Beate Geissler and Oliver Sann have been staging so-called "Lan Events" (lan = local area network)—that is, networks that are set up like an experimental array. Selected players from chat channels are invited to pose for pictures. They come from different occupational and social backgrounds. The images displayed here represent a cross-section of this photographic work. The title of each image consists of the name adopted by the player, and the pulse rate of the individual player at the time the picture was taken.