

concept

"remembering simplified pictures of quantities is better than forgetting exact numbers" (otto neurath)

the project deals with the impartment of statistical connections with the help of the mass medium computer game. this popular platform is used for conveying informations. real time data are shown as easily perceptible pictures. the exact reading of the incoming data is put to the background in favour of a fast and entire conveyance of information. the impartment of knowledge in such an environment makes it possible for the recipient to experience complex connections in a playfull way and therefore understand it by intuition.

realization

as an example for other possible sources of real time data, the behaviour of german internet users during surfing is projected in a three-dimensional-world. different topics (computers, politics, sex, sports, environment, economy) are described by external appearance, behaviour, and the sounds of an avatar. all queries that are found are categorized by topics and are shown in the world by the corresponding avatar. the stream of data creates and changes thus the population of this world, which shows thereby a mirror image of the net society.

the game consists of three scenarios with different levels of interactivity and abstraction. the first level shows an abstract landscape of islands, each island representing a subject area, coded by colours and textures connected to the topic. the avatars feel attracted by the topic islands to which they belong and stay close to them, whereby it is possible to recognize mass proportions. the player has a mere observing function here.

the second level demands an active participation of the player, which visual appearance and gameplay are based on nintendo games. the colourful landscape with islands, meadows and trees invites to explore it. this world is also populated by the representatives of the search words. here the player has more possibilities for interaction and to influence what is happening in the game. tasks are to solve riddles and to pass tests to prove your skills, to get through to secret places, where are new, exciting points of view for the player.

different from both abstract levels, the third level represents a realistic environment. a scene in the street with a supermarket, cars and lawns. this representation projects the statistics in a real world. in a later further development the game could be experienced in an augmented reality environment, meaning that the avatar would be projected in a real scenery.

in all three levels there are more options for representation and comparison. a mere real time representation gets new data from the search machines every 30 seconds and represents these. the avatars stand for the search words, for which are looked for on the net during this moment. besides the possibility exists to compare the search words of different points of time. search words which date back further in the past are represented by so called ghost-avatars.

in contrast to conventional ones these are transparent in order to symbolize the past. one can recognize here very fast how different weekdays and daytimes influence the search words and hereby the significance of the categories. on a sunday morning you will find another population as during the nightly hours of a working day.

technology

the whole system needs four computers: database-server, quake-server, quake-client (visualization) and controllinterface. the database-server gets the current queries from the search machines, categorizes them according to their subject area and files them in a sql-database. for visualizing, a modified version of the computergame quake 3 arena by idSoftware is used - especially the artificial intelligence would have to be adapted. the quake-server gets orders from the databankserver which level and which avatars should be represented. the visualizing is done by the quake-client, the database-server is controlled by a web-based controlinterface.

outlook

during the next period of the project, the software, as well as the visualization, shall be further developed.

the further design of the scenarios and the avatars demand a lot of work. the possibilities for the avatars to express themselves and their behaviour have to be optimized, furthermore the worlds have to be equipped with sounds and speechsamples.

the sourcecode of the quake3engine will be further adapted to arrange the artificial intelligence in a more flexible way and to increase the possibilities of interaction.

the software in the background is built on a modular base, so that it is possible to bind all thinkable visualizations in a modular way (flash, svg, html,...) and to progress further sources of data.

therefore we soon will document and reveal the sourcecode to give others the possibility to develop it further and to develop their own forms of visualization on it.