

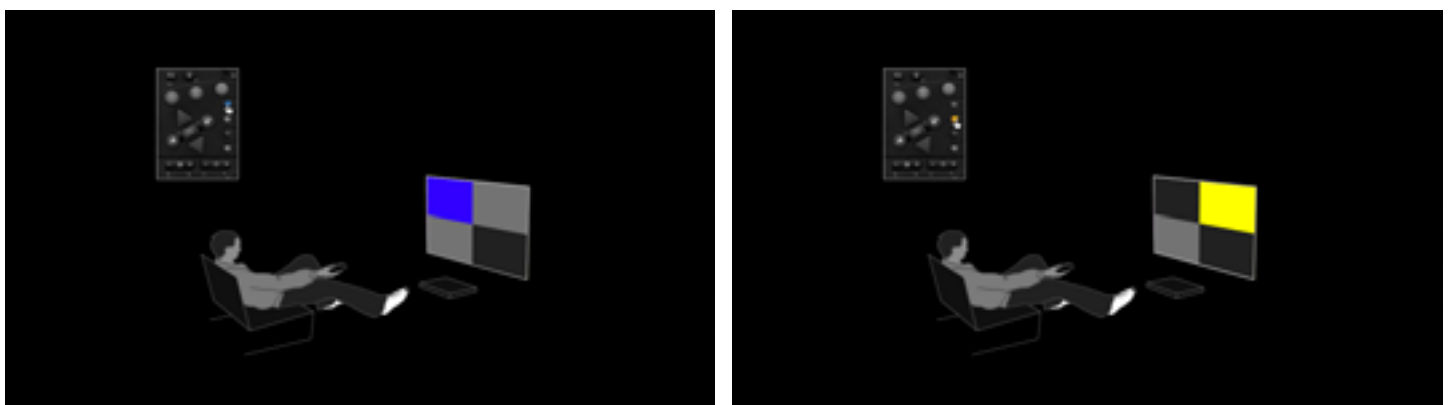
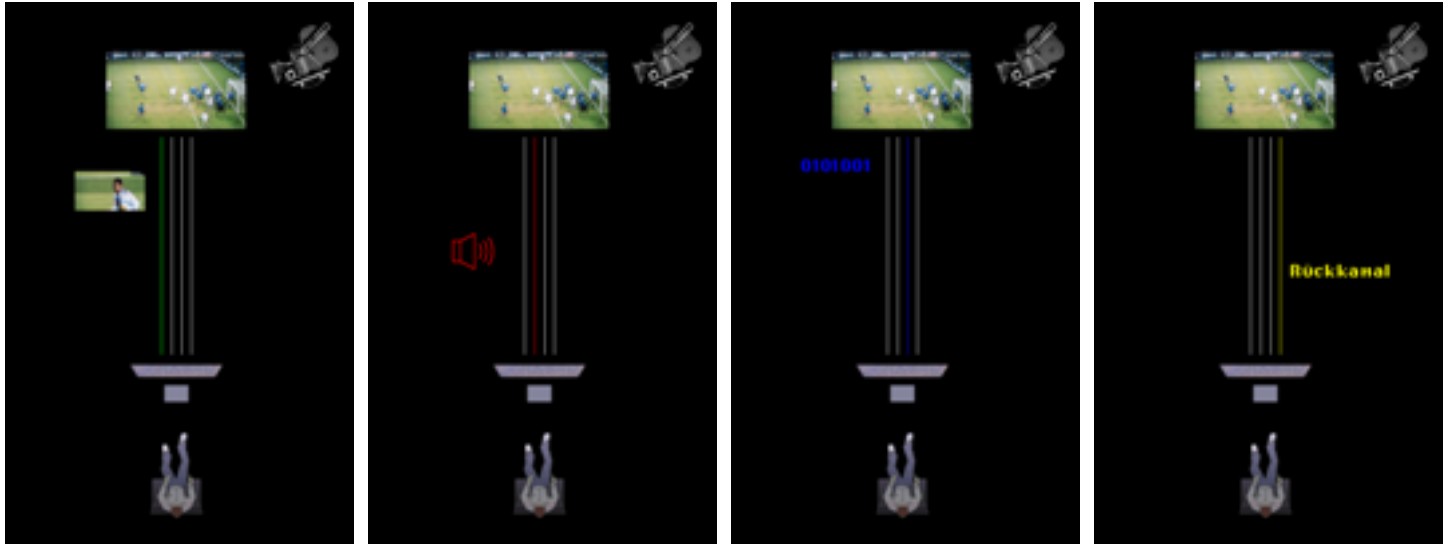
THE STATUS QUO OF TELEVISION

The analogue technology presently used by television will be gradually replaced by digital technology that allows us to handle the growing number of broadcasters and programmes. During this development the traditional TV set transforms to a computer.

However, the situation of watching digital TV will be different from sitting in front of a computer with its keyboard and mouse. Though the combination of input and output devices may be similar, the TV viewer is in a leisure situation. Even if the convergence of TV and computer would only require one device, the different intentions of the user (like relaxing, leisure activities versus concentrating, work) prevent us from unifying both situations.

TASK

The new possibilities of digital television constitute new problems. One problem, the operation of the new medium will be tackled by this design. The goal is to develop a working interface between human and machine.

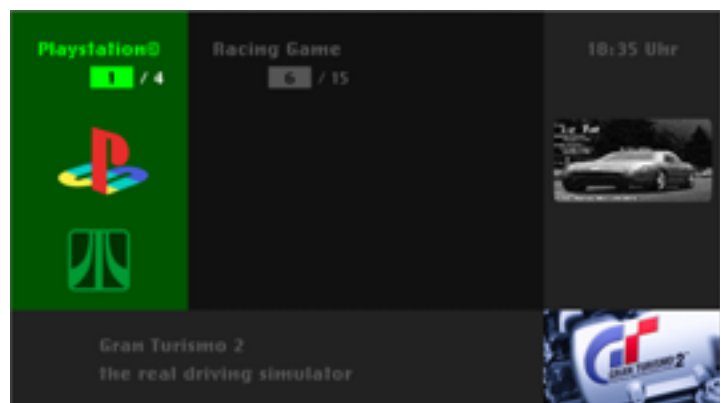
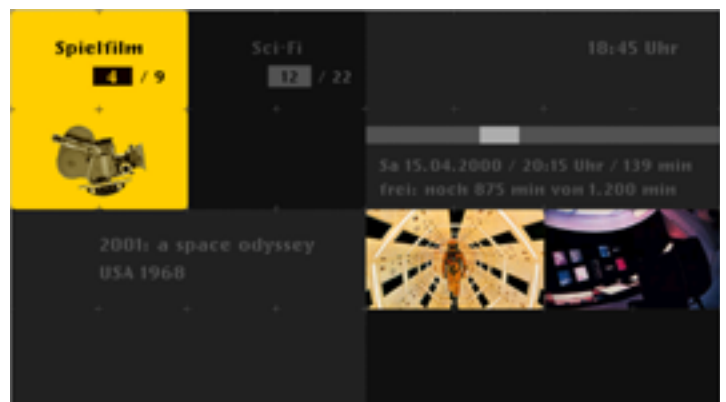


INTERFACE

What is an interface? It is not sufficient to describe the surface of a screen. An interface constitutes the interaction between a user and a system - in our case the TV viewer and the digital TV set. The screen apart, the interface includes the remote control, the set-top box and the user. The interaction of these elements results in the interface. The interface is a catenation of perception, action and result. Applied to the graphical user interface this means: the viewer perceives signs of evidence about his possibilities to fulfil a desire. This process is supported by a remote control tool. In our case the form, the layout the labels of the remote control buttons in the context of the user situation constitute these signs. Due to his experience, the user recognizes the signs and acts accordingly: he presses a button.

An important premise for the handling of the new medium is the haptic experience. Handling of a new medium has to fall back on other experience. Since the field of action on the TV screen cannot be touched, everything has to be grasped, experienced and evaluated by reason. Therefore, users of computers or game consoles will have less difficulties with the new medium.

As a basic principle one can say that a user interface is not self explaining. It always need a cultural experience with handling things.



NAVIGATION

The computer user interface uses the analogy of a desktop. Documents are stacked on each other in "windows". The upper one conceals the lower one - like the chaos of a desk full of files, sheets of papers and tools.

For the TV user interface we also need an analogy to something known. In order to embrace the special situation, it essential to look for alternatives to the 3-dimensional stacking of layers.

The solution divides the screen into four fields which constitute a "crosshair" that can be

moved to nine positions on the screen. The content of the fields is not predefined. As a basic rule of this concept, the amount of information is proportional to the size of a field. As a result, the viewer can move informations which appear to be unimportant to a corner while their field keeps its function and can still be activated.

The interface is controlled through a traditional remote control. The cursors are used for selecting elements in the screen areas. The color keys change the partitioning of the screen.

