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Digital Fukurawai



In Japan, mainly at New Year's celebrations, it used to be common to play a traditional game called "Fukurawai". The player is blindfolded and tries to correctly place pieces (eyes, eyebrows, nose and mouth) of a traditional humorous face onto a model face drawn on a piece of paper spread on the floor. After a certain time, the player is allowed to take off the blindfold, and every one looks at the face she/he has made. If the face is good, they admire it, but even if it is not, everyone enjoys the humorous or artistic work.

We have developed a Digital Fukurawai by improving classical Fukurawai using high performance video processing technology. Whereas classical Fukurawai uses ready-made elements of a face, in Digital Fukurawai, real-time video images of the player's face appear as jigsaw-shaped pieces.

One way to enjoy this installation is for the participants to compete with each other. Two video cameras each capture the image of one participant, and the images are then decomposed into 24 jigsaw-shaped pieces, which are then arranged randomly. The two participants attempt to find their own pieces and assemble them into a complete image of their own face using a mouse or a touch screen device to select and drag the pieces. Each piece is dynamically updated based on the real-time video image of the participant and therefore never freezes at any operation made by the participants. Alternatively, they can simply enjoy mixing parts of their faces in collaboration. A participant might find a re-organized version of her/his face mixed with parts of another participant's, to be more attractive than the original.

The novel feature of this game is to bring new interactivity with facial expressiveness, which has not been achieved by existing games, merely by using interactivity with a mouse or control pad.