



Rehabilitation of Phantom Limb Using Virtual Reality

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Phantom Limb

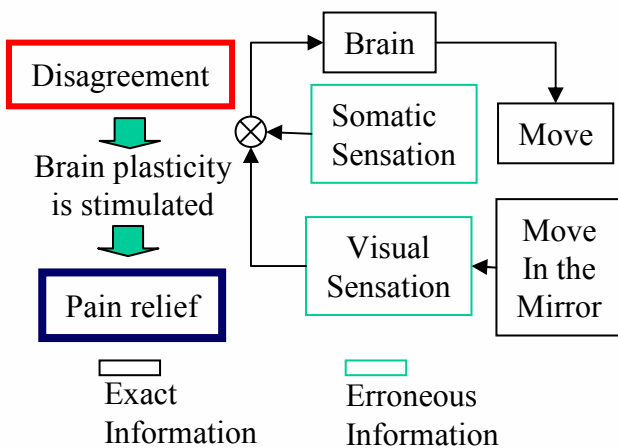
Phantom Limb is the sensation that a missing limb is still attached to the body.
Patient comes to have a pain in Phantom Limb.

Back Ground

Mirror Box ~Traditional Therapy~



It appears as if the Phantom Limb is existing



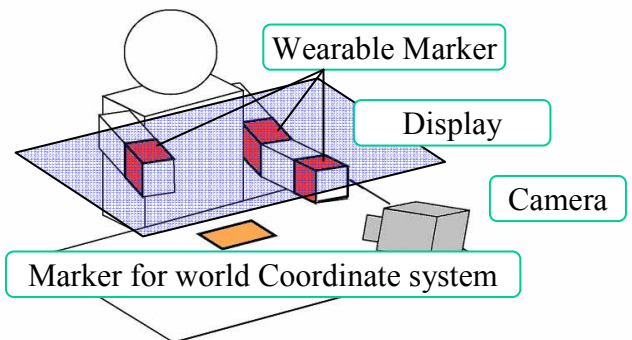
Point

- If shape of Phantom Limb is different from original, this method is not applicable.
- Patient's movement is restrict.
- There are few body parts in which rehabilitation is possible.

Purpose

Rehabilitation system using CG in substitution for mirror

System



Experiment

The subject moved his right hand to the target while seeing the display. The difference with the position of target and his hand is evaluated as an influence.

Experimental condition

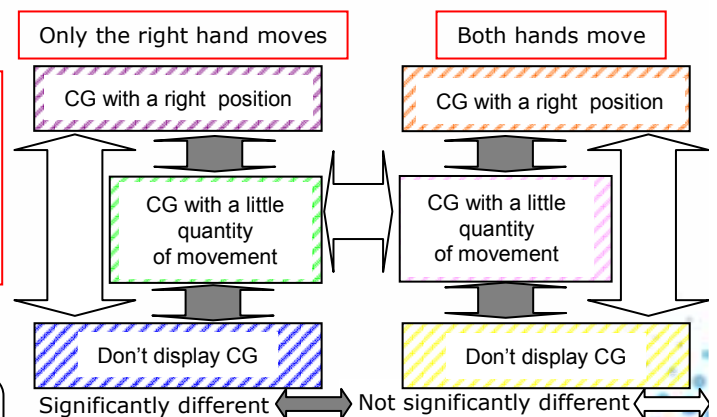
Display

- Display CG with a right position
- Display CG with a little quantity of movement
- Don't display CG

Move

- Only the right hand moves
- Both hands move

Experimental Result



Movement of the CG which is slightly different from the imagination of the subject is desirable. When rehabilitating, it is important to move that kind of presentation.