


Utilizing gaze as an input method For the benefit of people with disabilities

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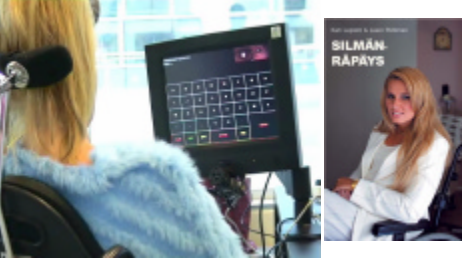
Gaze direction ...



... as a means of communication



Eye typing






Late-stage ALS



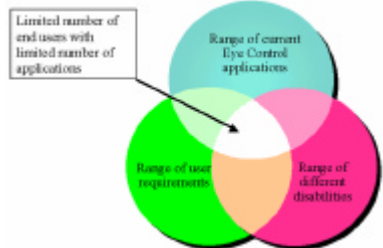


Bjorn Andre can use eye control easily





...limited number of requirements met by...



...a limited number of applications...

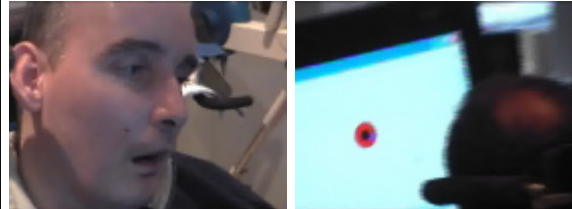
Out of 450 million people in EU



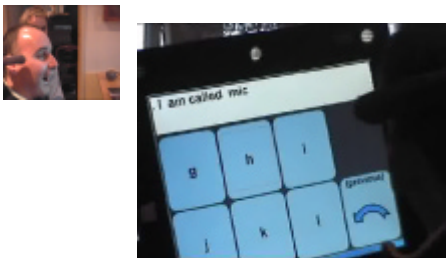
Condition	Approx Number
ALS/ MND (Amyotrophic Lateral Sclerosis)	27,000
MS (Multiple Sclerosis)	135,000
CP (Cerebral Palsy)	900,000
Quadriplegia (Spinal Cord Injury - SCI)	36,000
SMA (Spinal Muscular Atrophy)	54,000
Muscular Dystrophy	126,000
Brainstem Stroke	688,000
TBI (Traumatic Brain Injury)	675,000
*Total	*2,641,000

*Very approximate, not comprehensive

Involuntary eye movement



Larger targets are easier to hit



Involuntary movements



Voluntary control causes involuntary movements



... can benefit from eye control



Involuntary movement not induced by eye control



Step by step



Limited eye movement

Yes

No

"Have we got three children?"

It is all about choice

... and more

Joining forces...

Network of Excellence on
Communication by Gaze Interaction (COGAIN)

www.cogain.org

Thank you for your attention!

Special thanks to Mick Donegan from the ACE Centre

www.cogain.org