

# MOTIVATION

# Inspiration

Is it really so sad and dangerous to be fed up with seeing with your eyes, breathing with your lungs, swallowing with your mouth, talking with your tongue, thinking with your brain...

Why not walk on your head, sing with your sinuses, see through your skin....

Where psychoanalysis says, stop, find your self again, we should say instead, let's go further still! **Find your body without organs.** Find out how to make it. It's a question of life and death!

–Gilles Deleuze and Felix Guattari, A Thousand Plateaus: Capitalism and Schizophrenia.

Oral Exam  
Cati Vaucelle  
Tangible Media  
MIT Media Lab  
14-11-2008

## Introduction

## Part I - Motivation

- Inspiration
- Beyond Picture This!
- Lifecycle
- Learning
- Communication
- Connection
- Mindful Learning
- Motivating Feedback

## Part II - Opportunities

- Percepts
- Vision . Smell . Hearing . Touch
- Concepts
- Memory . Intelligence . Identity
- Conducts
- Feedback . Perspective . Friendship

## Part III - Vision

- Where do I stand?
- Dimensions in my work
- Picture This!
- Hap-bit
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## Part IV - Sensing Technologies

- Exchange information
- Gesture communication
- Piezo vibration sensor
- Hardware vs software
- Generalizing Picture This!
- Other methods
- Mapping

## Conclusion

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Imagine when one can say:

**“the technology delivered him from all his automatic reactions and restored him to his true freedom.”**

# Digital Body

## Beyond Picture This!

We have already partially discovered a body without organs by creating:

- A digital copy of oneself.
- A copy that will coexist online starting from birth.
- A copy that will perpetuate its existence after death, living in a digital reality.

This copy will be our digital body, a body without organs.



The Human Speechome Project by Deb Roy. Record every minute of a baby's life, 2006.



MyLifeBits by Gordon Bell, 2003. Capture everything and going paperless.

Socioscope by Alex Pentland, 2006. Track location and conversation patterns.

The goal of Lifelogging: to record and archive all information in one's life.

# Digital Body Lifecycle

- Google indexes our name and we can be found at any time!
- Even after our death, we remain on the Google search engine!
- If Google sentences us to an electronic death, we cease to exist online and we cease to be found!

**Edith Ackermann - Associations**  
400 x 327 - 37k - jpg  
[web.media.mit.edu](http://web.media.mit.edu)



**Edith Ackermann - Massachusetts**  
...  
100 x 120 - 21k - jpg  
[idc08.northwestern.edu](http://idc08.northwestern.edu)



**Hiroshi Ishii**  
154 x 205 - 26k - jpg  
[web.mit.edu](http://web.mit.edu)



中裕 (Hiroshi Ishii) 教授的音樂瓶 ...  
300 x 300 - 24k - jpg  
[www.myoops.org](http://www.myoops.org)



**Joe Paradiso - Massachusetts**  
100 x 100 - 5k - jpg  
[bme.ee.cuhk.edu.hk](http://bme.ee.cuhk.edu.hk)

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# Digital Body

## Learning

50 years ago  
Progressive learning under the family's supervision.

Now  
Very fast "learning" curve. Children believe that one can be a champion of Karate without moving a finger. However there is almost no common point between physical and digital Karate.

Despite a learning curve, there is no limitation from the physical body.



A champion of Karate!

### Reference

Gauthier, J. M. and Moukalou, R. (2007) De la guerre des boutons à Harry Potter: Un siècle d'évolution de l'espace-temps des adolescents, pp 5-16 and pp153-173.

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**You will never be denied the opportunity of being a digital Karate champion because you are physically weak!**

# Digital Body Communication

- No need to interact through body language!
- It might avoid miscommunication!
- Now we communicate via our digital body, on social networks controlling the level of engagement and disengagement.
- Construct your digital body \*free of risk\*!



Twins in tree by Rodney Smith, 1999.  
In face to face communication, distance between people can be an obstacle.

With the computer, the relationship between distance and proximity, direct communication, corporeal versus indirect and mediation is transformed. (Gauthier and Moukalou, 2007).

## Reference

Hall, E. T (1973) The Silent Language. A Doubleday Anchor Book.

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## Connection

- Children with atypical interests find other children with the same hobbies.
- By connecting to someone else, one can relate and create bonds, can project onto someone else's life and empathize.
- Connecting with a digital body might sharpen our perception through sharing perspectives.



Moving Pictures, 2004.  
Children capture media to share with children who live in a different city.

### Reference

Harel, I. and Papert, S. (1991) Constructionism, Ablex Publishing Corporation.

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## Mindful Learning

Walking through the Internet requires:

- being open to novelty
- being alert to distinction
- being sensitive to different contexts
- being aware of multiple perspectives



Scratch, Resnick et al. (2008).

### Reference

Langer, E. J. (1998) The Power of Mindful Learning. Published by Da Capo Press, 1998

The Internet teaches children to adapt themselves to new situations rather than providing them with conditional learning - fitting themselves to an external norm (Langer, 1998).

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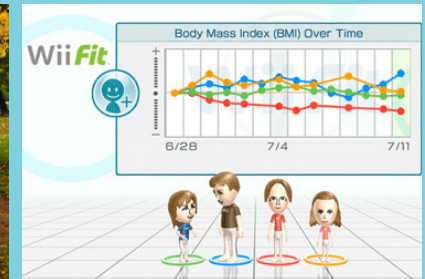
# Digital Body

## Motivating Feedback

- A digital body motivates us in exercising!
- Joysticks that vibrate are ironic: they remind us of our body! As if the joystick said: Remember! You had a body!
- This is not entirely grounding: this is the difference between a reminder that your hands exist and giving someone tools, asking them to craft a piece of furniture.



My virtual model!  
Free weight-loss calculator  
on a virtual model, Glamour  
magazine, 2007.



Wii Fit, 2008.

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Delicate Boundaries  
by Chris Sugrue.  
Using human touch to dissolve  
the barrier of the computer screen.

Things get lost with de-materialization.

## Where are the senses?

The digital world gives us power at the same time that it disconnects us from our physical body.

## We connect to the world using our senses.

To have the benefits of technology without losing our connections to the body, technology needs to bridge to our senses, grounding us in our surroundings.

**Only being grounded in experience can give birth to new ways of living and new dreams.**