PG-13 PARENTS STRONGLY CAUTIONED
Some Material May Be Inappropriate for Children Under 13
HiTV

Affective Interaction and Feedback Interface for TV

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SIGGRAPH 2006
The average person in Britain or America spends a quarter of his waking life in front of the TV set.
Watching TV is not a healthy hobby.
Watching TV is **not a sport** at all.
TV programs are getting worse.
Turning off the TV can’t express our anger.
Only if you…
TV program should be able to afford/accept people’s emotional feeling.
Interactive TV !?

*Interactive TV (iTV) is any television with what is called a “return path”.*

*Information flows*

*Traditional TV:* broadcaster -> viewer  
*Interactive TV:* viewer -> broadcaster

- **T-commerce**  
  - You will be able to buy a pizza without dialing a phone.
- **Interactive Goodies**  
  - You will be able to pause live TV or record shows. You will be able to click on advertisements to “find out more”.
- **Click stream Analysis (“telegraphics”)**
Interactive TV + Emotional feedback = HiTV
HiTV

Hit-TV (HiTV) is any television with what is called a “Emotional return path”.

*Emotional flows*

*Traditional TV:* broadcaster $\rightarrow$ viewer  
*HiTV:* viewer $\rightarrow$ broadcaster

- **H-commerce**  
  - You will be able to hit a jxxk without dialing a phone.

- **Interactive Goodies**  
  - You will be able to interfere live TV or recorded shows. You will be able to hit on advertisements to “find out more fun”.

- **Hit Frequency Analysis** (”emographics”)

No more passively receiving information.

Let’s stand up and act!
It consumes calories, too.
System Architecture

TV, DVD, Cable…

HiTV Ball

Accelerometer
Tmote sky RF transceiver

Visual effect

HiTV Box

Video

Audio

Audio effect
Computer Graphics + Interactive Techniques

- Extra-layers of visual/audio amplification
- Soft/graspable interface
- Emotional reaction as input mechanism
  - Pillow actions
    - Blocking
    - Touching
    - Squeezing
    - Tossing/throwing
    - Shaking
- TV program with user-input effects
- Respectful feedbacks for your action
Conclusion

- HiTV introduces a new activity in the living room.
- TV watching experience can be more interactive.
- TV can afford and respect audience’s emotional feelings.
- Information retrieving processes should be respectful.
Future works

• Emotional reactive TV programs
• Emotional annotation study
• Interact with objects inside the TV program
  – Object recog. & real-time interaction
• Content-dependent visual/audio amplification
• New interactive TV toys in the living room
Thank you.

We thank MIT Media Lab for this underground research project.

Please come to see our works.

• Posters:
  – Lover’s Cups Jackie, Hyemin
  – Musical Blocks Elysa, Jackie

• Educator Paper:
  – Attentive Interaction Design Toolkit Jackie, Jon, Ted
  – Wed. 3:30-4pm