



Better Movement Games Using Psychology:

5 Reasons Some Wii Games are More Fun Than Others

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So you're going to build a Wii (or other motion-based) game...



What you hope for...

- ‘The real joy (read: playability) comes from the ingenious use of the Wiimote to control the action.’
- ‘a control setup that's accessible, unbelievably satisfying, and nearly flawless.’
- ‘Moving the Wii remote, for example, will be the only motion neededThe implementation works well and allows for new gamers to immediately join in on the fun.’

What you hope for...





What you fear...

- 'While cute at first, these motions become tired, annoying and bothersome as the games goes on.'
- 'Nearly all of the Wii Remote functionality here feels inessential and tacked-on, whether it's pointing to uncover hidden doors, jostling the Wii-mote to cure status ailments and use items, or timing a good shake when you stomp foes for extra points. None of these actions detract from the experience, but it's painfully clear that this was a quick-and-dirty transplant job.'
- 'swordplay feels more like Neanderthals clubbing each other than like a fencing match between highly skilled, agile swordsmen.'
- 'to jump, you have to flick your Nunchuck up twice. Which doesn't sound too bad, but if you want to actually go somewhere, you have to use the Nunchuck's thumbstick. And pointing your character in any kind of logical direction while flicking your Nunchuck upwards is quite a feat, and it requires some extreme coordination that I just do not possess'



What makes the difference?!

- Designing (and teaching) great movement mechanics is a radically new paradigm.
- It can't simply be grafted onto previous tactics.
- You need to step back to the fundamentals of what is fun and why, as well as how to get a player into the fun.



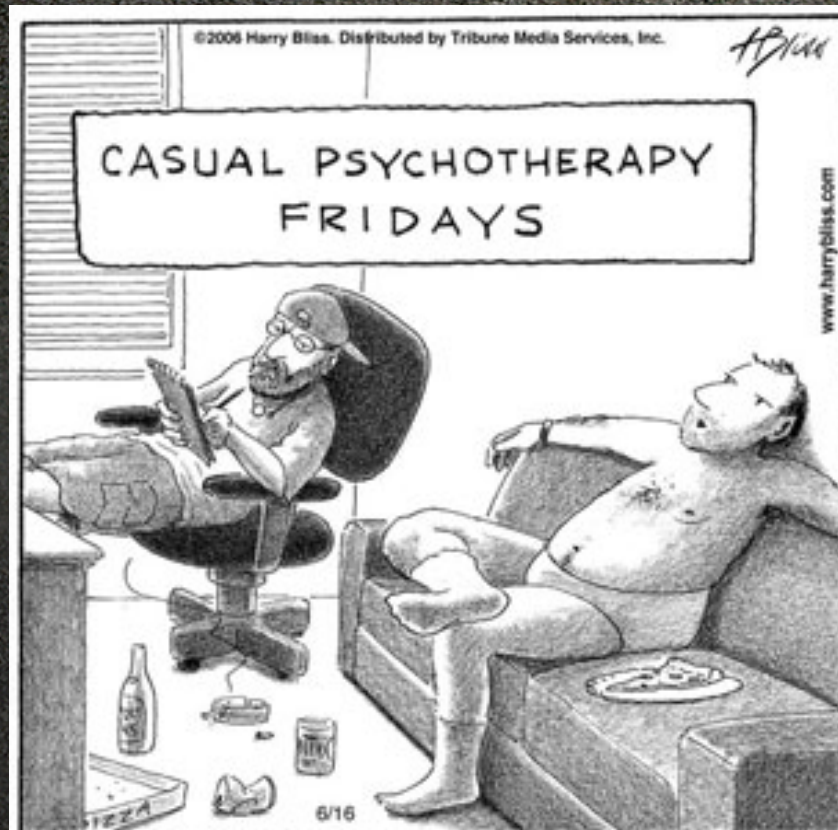
What do I know about it?

- We study movement game play in my lab at NYU.
- We analyze what makes it fun and why, as well as how people learn new moves.
- We can help explain what we see using research and theory from Psychology, about how people work.

Social Game Lab



Why Take a Psychological Approach?



Why Take a Psychological Approach?





Why Some Wii Games are More Fun than Others

- Reason #1

Imitating real-life movement is a double-edged sword!

Imitating Real-life Movement is a Double-edged Sword



Imitating Real-life Movement is a Double-edged Sword



Imitating Real-life Movement is a Double-edged Sword



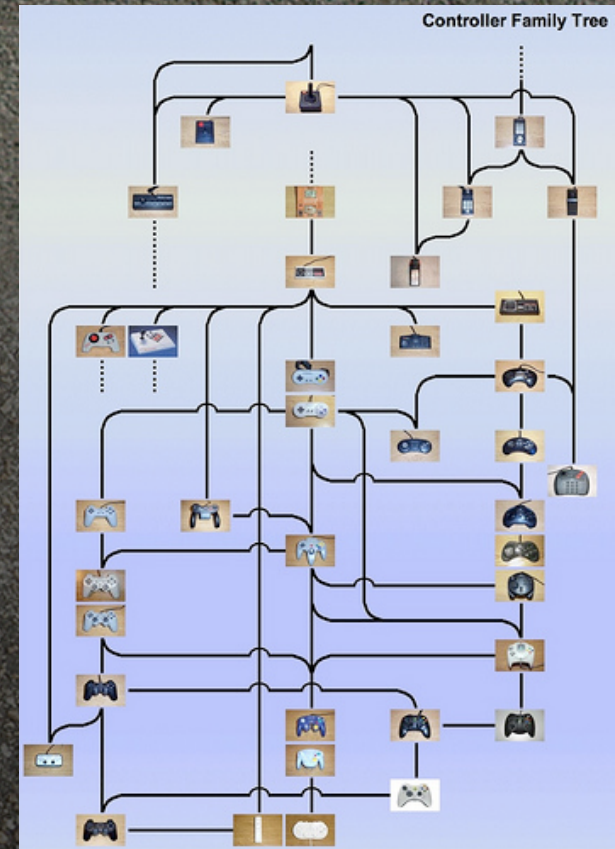


Imitating Real-life Movement is a Double-edged Sword

- It gives players a powerful, useful metaphor to leverage in learning the game, with a kinesthetic reality to it.
- It's still only a metaphor! You have to pick the control scheme carefully to preserve what is loved about the movement itself, and then show the player what really will map.
- You can cue the level of intended realism with game graphics and overall aesthetic.

Imitating Real-life Movement is a Double-edged Sword

- It has to be blended carefully with existing control schemes.
- Pick moments where a gesture feels right versus burdensome, in blended metaphor design.





Imitating Real Life Movement is a Double-edged Sword

- What works well
 - Preserving the core fun of the imitated movement.
 - Keeping the movement scheme simple and consistent, to let mapping really happen.
 - Minimal button presses and complex combos layered over movement.
 - When you do blend, choose the right moments.
 - Don't fight the controller's limitations, embrace them!

Imitating Real Life Movement is a Double-edged Sword

- Successful examples:
Shaun White Snowboarding



Imitating Real Life Movement is a Double-edged Sword

- Successful examples: Boom Blox



Imitating Real Life Movement is a Double-edged Sword

- Successful examples: Wii Cheer



Imitating Real Life Movement is a Double-edged Sword

- An example of a less successful imitation of real-life movement: Boogie Superstar





Imitating Real Life Movement is a Double-edged Sword

- To sum it up:
 - It brings a powerful metaphor and set of actions into play.
 - You want to capture the joy of the movement, allowing room for improvisation and whole body engagement.
 - It's risky to combine tight button-press with broad movement (can take away the fun).



5 Reasons Some Wii Games are More Fun than Others

- Reason #2:

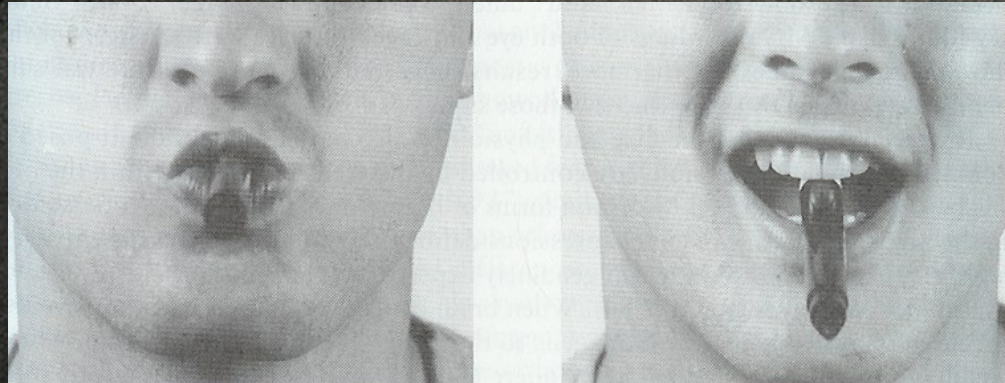
Movements Cause Emotions.

Movements Cause Emotions



Movements Cause Emotions

- Physical Feedback Loop





Movements Cause Emotions

- Therefore you can literally create feelings in your player by having them enact those feelings!

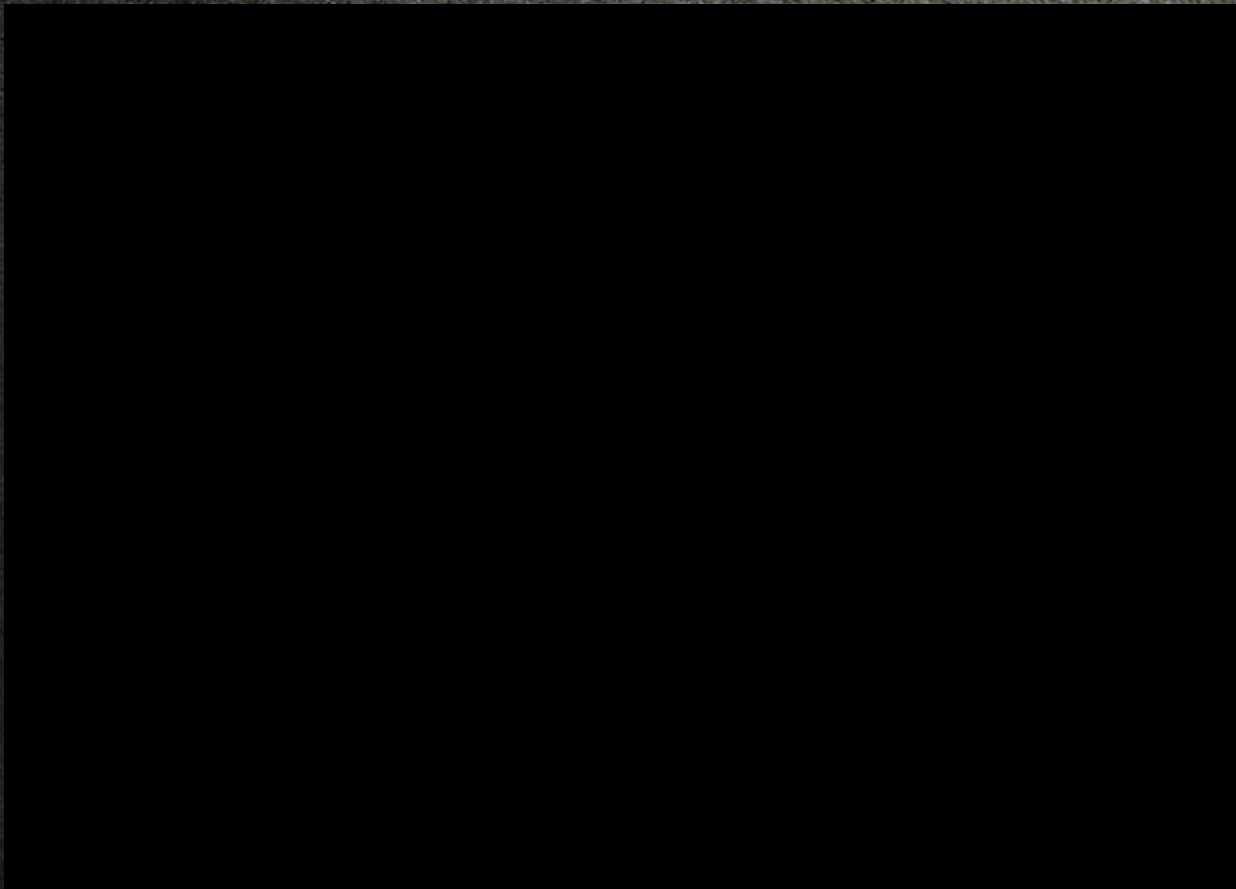
Movements Cause Emotions

- Certain qualities of movement 'read' as having emotional characteristics... try these at home 😊



Movements Cause Emotions

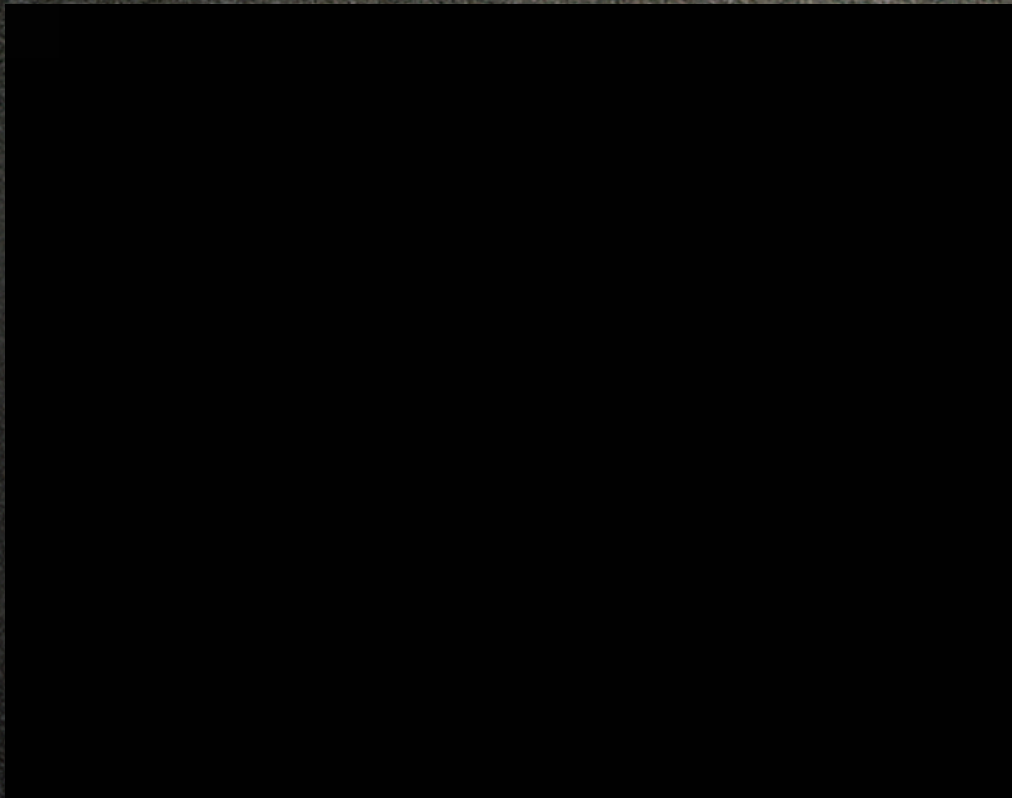
- Successful examples: Flower (floaty)





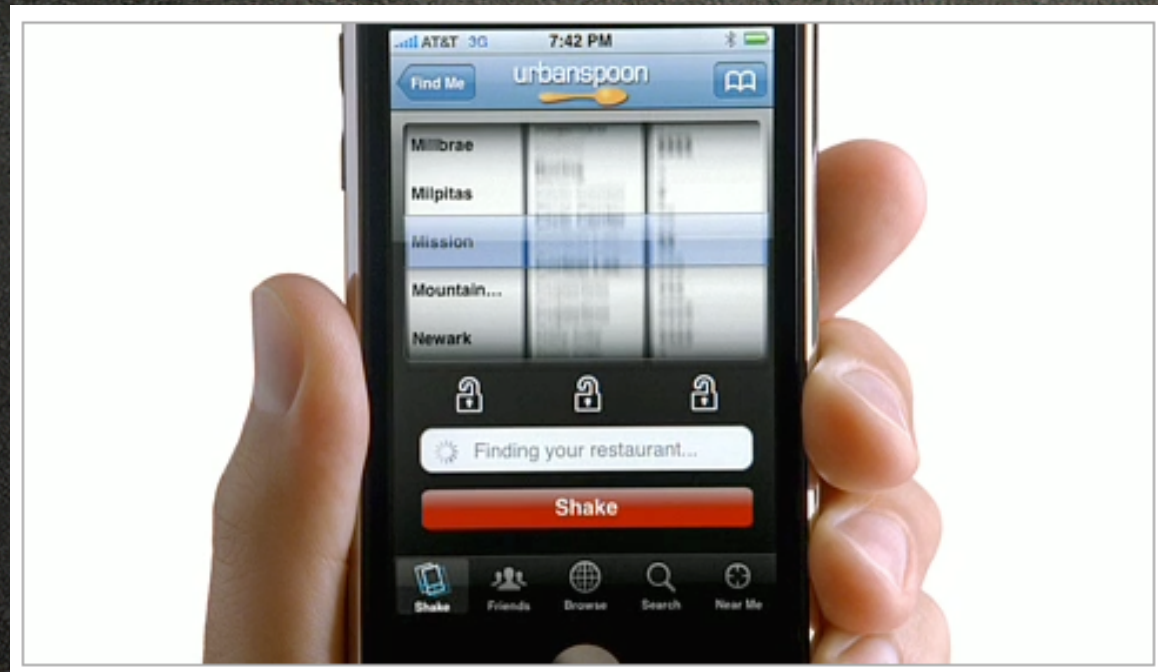
Movements Cause Emotions

- Successful examples:
Wario Ware Smooth Moves (quick, light)



Movements Cause Emotions

- Successful examples:
Urban Spoon (rapid, tight movement)



Movements Cause Emotions

- Successful examples:
No More Heroes (satisfying finish slashes)



Movements Cause Emotions

- Note: In our lab we're doing research to get at which emotions are caused by what kinds of movement.
- We're using movement taxonomies like LMA (Laban Movement Analysis) to guide this work.



Movements Cause Emotions

- To sum up:
 - Realize you are evoking emotions through movement
 - Study emotional movements and what they look like, learn about LMA
 - Create game mechanics that encourage the ‘feel’ you want in the player.
 - Side benefit: emotions are also contagious to observers! (more in point 5)



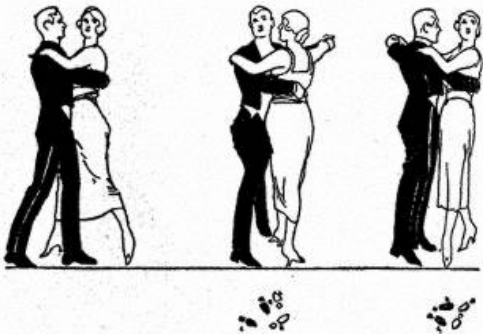
5 Reasons Some Wii Games are More Fun than Others

- Reason #3:

Showing What to Do is Tricky.

Showing What to Do is Tricky

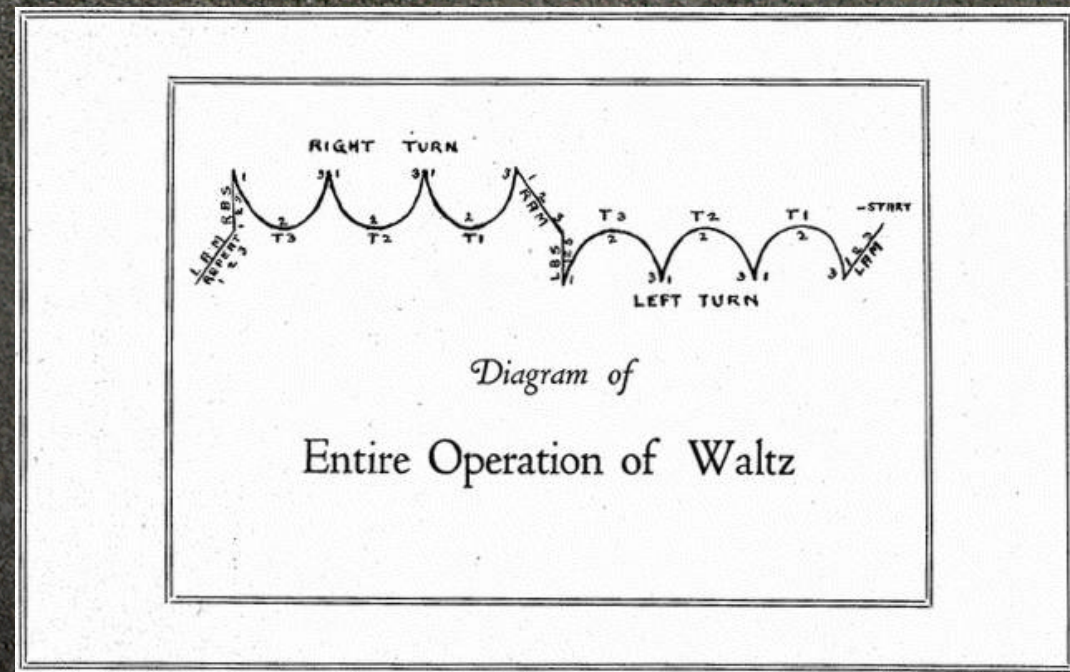
DANCING MADE EASY



glide and make the second turn same as the glide turn to the right.

Having stepped this off so far, try it to some waltz music and count 1-2-3-4; 1-2-3 and 1-2-3 and 1-2-3 and 1-2-3 and (.). and you will find you have made two revolutions.

Now the gentleman takes four steps back; lady walks four forward; count 1-2-3-4 and 1-2-3 and 1-2-3 and 1-2-3 and 1-2-3 and you have made two turns to the left (25-26-28). [102]



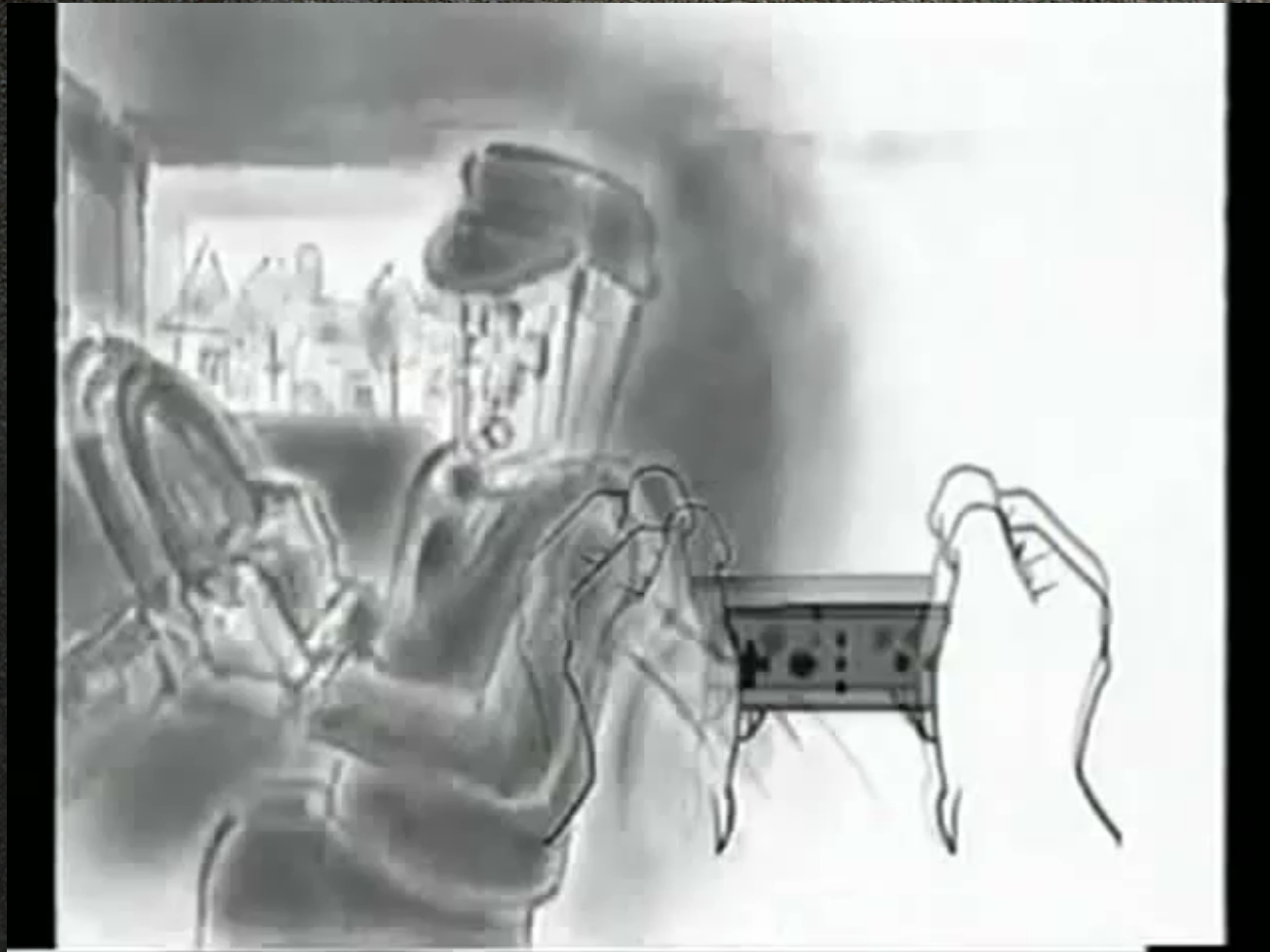
Showing What to Do is Tricky



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Showing What to Do is Tricky



Showing What to Do is Tricky



Wii.

Showing What to Do is Tricky

- Use familiar modes for teaching (modeling on an instructor's observable actions is gold standard).
- Try filming someone teaching someone else how to do the movements, to see what needs explaining.
- You can't overcome bad metaphor mapping with extensive tutorials...people will keep trying to do the physically logical thing.
- Mixed HUD and observational learning can be really confusing.



5 Reasons Some Wii Games are More Fun than Others

- Reason #4:

Awareness of Feedback about Play is Different.

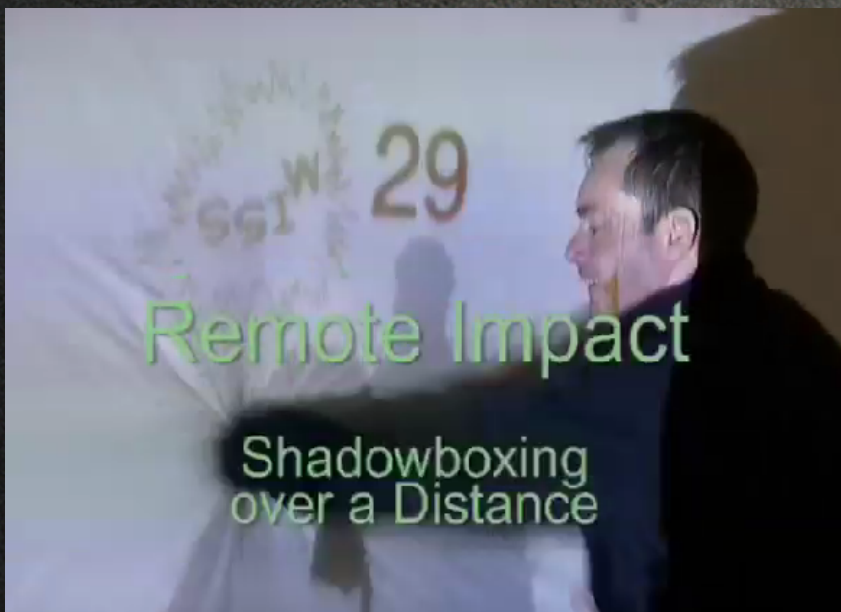
Awareness of Feedback about Play is Different.

- These people are not tracking point tallies —they are waiting for a knockout.



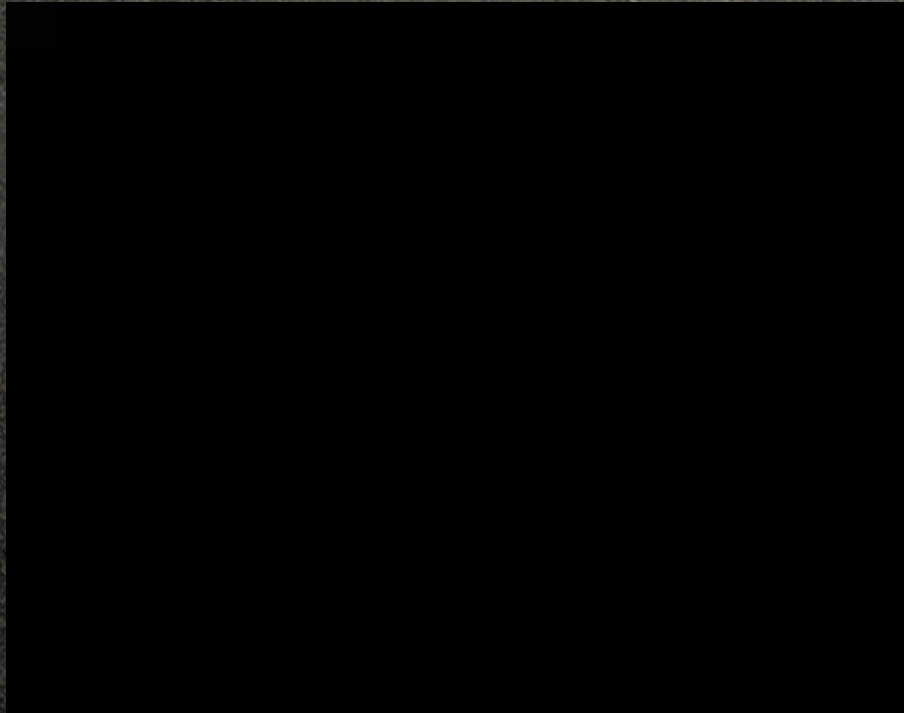
Awareness of Feedback about Play is Different.

- Physical play takes up much more of your attention in a pleasurable way.
- <http://exertioninterfaces.com/cms/remote-impact.html>



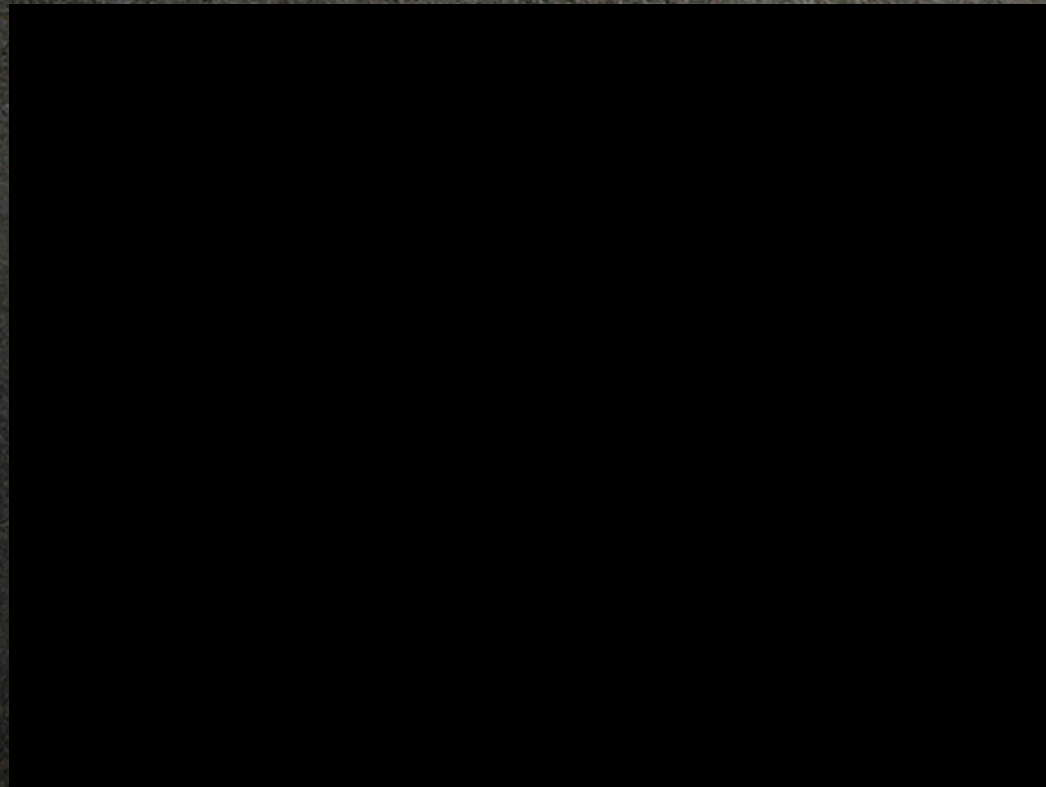
Awareness of Feedback about Play is Different.

- Creating pleasurable, peripheral feedback (more like casual games) can be more appropriate and satisfying.



Awareness of Feedback about Play is Different.

- Extreme example: Flower



Awareness of Feedback about Play is Different.

- A less successful implementation:
Major Minor





Awareness of Feedback about Play is Different.

- The moment-to-moment pleasure is the important thing, not the point tally.
- It's a visceral, immediate experience, not a heady, strategic experience (at least in the play period).
- Provide peripheral cues and immediate values that bolster any complex scoring scheme.
- Consider saving the tally for the end, providing tips on how to improve then.



5 Reasons Some Wii Games are More Fun than Others

- Reason #5:

Movement is Deeply Social.

Movement is Deeply Social

- We love to move together



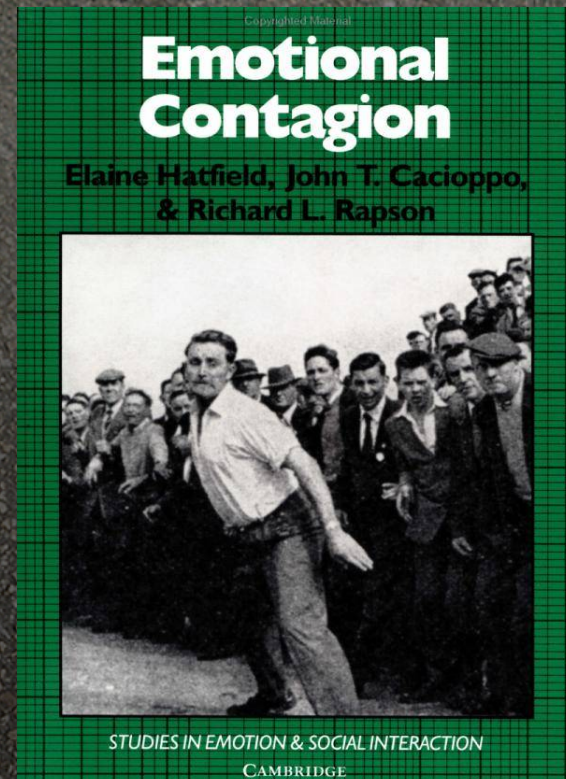
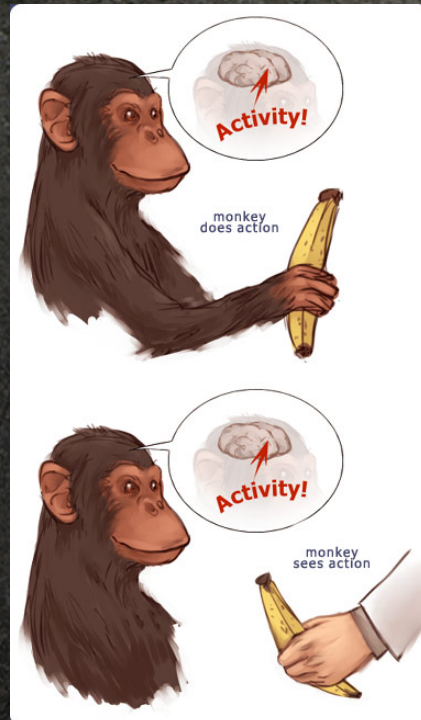
Movement is Deeply Social

- Co-movement builds trust and connection



Movement is Deeply Social

- We 'catch' feelings from one another



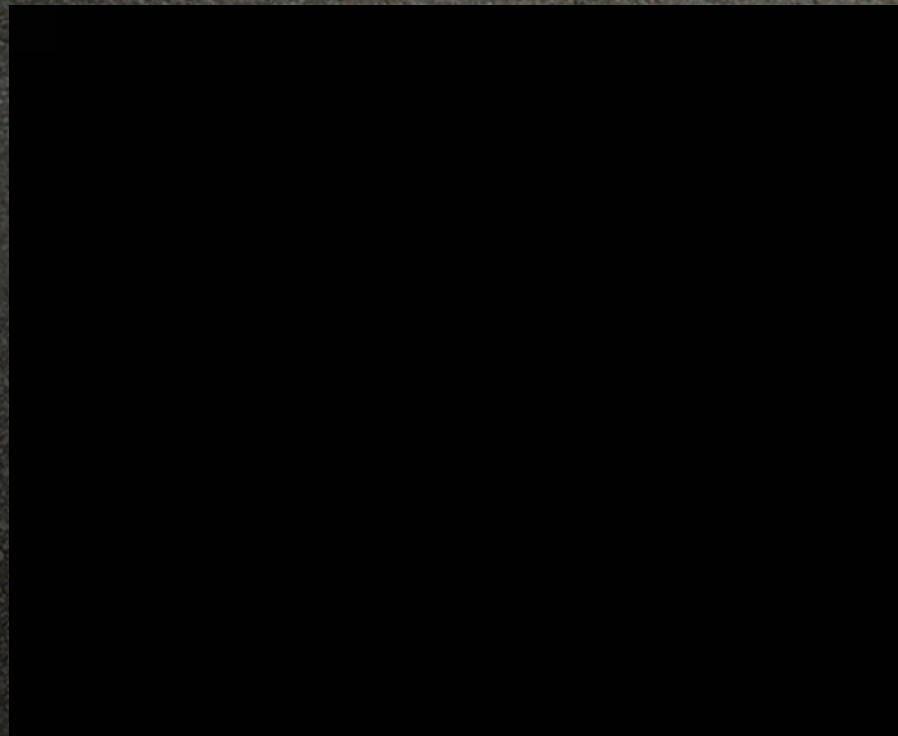
Movement is Deeply Social





Movement is Deeply Social

- Wario ware Smooth Moves—doing embarrassing stuff together builds connection and trust.



Movement is Deeply Social

- Wii Boxing—playing out social power dynamics and rivalries in a group of friends is very fun.





Movement is Deeply Social

- Experiments in our lab—game mechanics all about collaboration and connection, interdependence.
- <http://bxmc.poly.edu/~ulfschwekendiek/PassTheTorch.html>





Movement is Deeply Social

- Consider the over-the-shoulder emotional experience.
- Consider the relationship qualities you want to create or enhance between players.
- Experiment with new mechanics that really push this!

A Few Practical Tips

- Prototype early and often, it may take you in strange and wonderful directions and fend off bad reviews.
- There are great tools for this (like bodystorming) from the Human Computer Interaction community.



A Few Practical Tips

- Have a clear target experience in mind that drives the movement design, and be ready to test for it and iterate! You may have to completely let go of early ideas to get the right final result.



A Few Practical Tips

- Don't think of movement as icing on the cake (more likely to be a train wreck if it's not planned from the beginning)



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A Few Practical Tips

- Use the **strengths** of movement (immersion, emotion, over the shoulder appeal, social bonding). Take calculated risks that exploit these strengths.





For more information

- <http://socialgamelab.bxmc.poly.edu/>
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