

# Who We Are



**Ian Bogost, Ph.D.**



**Mia Consalvo, Ph.D.**



**Jane McGonigal, Ph.D.**



Game Developers  
Conference 08

# Why Game Studies?

Game researchers are very smart people who **care a lot about games** the people who play them, and **the future of the medium.**

They have **targeted expertise** in: HCI, economics, computer science, psychology, narrative, anthropology, artificial intelligence, architecture, and more.



# Get Ready

- We looked at **hundreds** of new articles and studies
- This is our rapid fire **Top 10 Countdown!**
- It's **10 big ideas** & **10 practical takeaways**
- Download the slides later:  
**[www.avantgame.com/top10.htm](http://www.avantgame.com/top10.htm)**



# #10 Top Research Finding



The best content understands how the player likes to play -- and makes it slightly harder

**“How do you keep players at the very edge of performance?”**



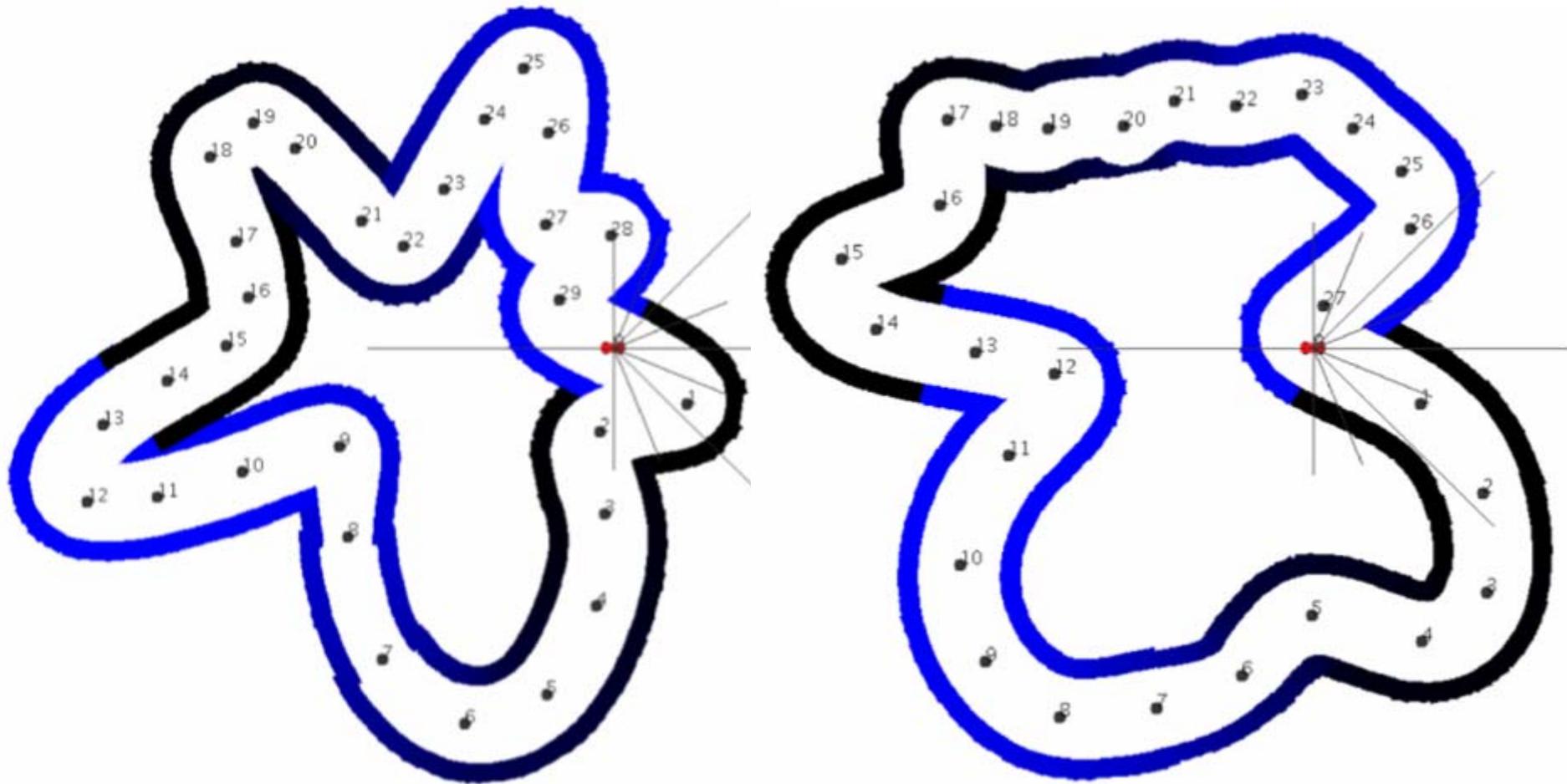
**Julian Togelius, Renzo De Nardi and Simon M. Lucas, University of Essex**

# “How do you keep players at the very edge of performance?”

## The big insights:

- ④ Optimization is uninteresting!
- ④ Fun tracks are the ones in which the player almost loses control
- ④ Player behavior can be sources for generation during play — or before play, as archetypes

Julian Togelius, Renzo De Nardi and Simon M. Lucas, University of Essex



Julian Togelius, Renzo De Nardi and Simon M.  
Lucas, University of Essex

# #10 Top Design Takeaway



Custom procedural variations in a limited environment can be more fun than big environments & open worlds.

# #10 Top Design Takeaway



How can your next game use player-inspired procedural variation?

# #9 Top Research Finding



Breaking the “immersive spell” can make  
gameplay *more* engaging.

**“Does immersion really have to be seamless?”**



**Ewan Kirkland, Buckinghamshire Chilterns  
University College, UK**

# How can disrupting immersion make a game more engaging?

## The big insights:

- 🕹️ Breaking the fourth wall can be good!
- 🕹️ Clumsy controls can heighten fear and frustration, driving emotional reactions
- 🕹️ Games that comment on themselves provide memorable content, atmosphere
- 🕹️ Disruptions can contribute to a unique game style

Ewan Kirkland, Buckinghamshire Chilterns  
University College, UK

# #9 Top Design Takeaway



Making players remember it's a game can heighten their experience.

# #9 Top Design Takeaway



Could you engage players by breaking their immersion at least once?

# #8 Top Research Finding



Reality-based gaming is already a bigger market than you think.

# “Are game players really getting tired of screens?”



Zhao Chen Ding, Academy of Art & Design,  
Tsinghua University Beijing



切换到Majoy|Location Game

进入社区

游戏介绍

武器装备

场地环境

游戏资讯

拓展训练

时尚舞台，炫酷秀场。打造精英团队，挑战天下英雄！

登录

注册

玩家体验

### 我在Majoy听到了集结号



- 航天玩家精彩体验 (一)
- 航天玩家精彩体验 (二)
- 百度培训，趣味十足
- Majoy玩家自制精彩视频
- 感受Majoy场地游戏的真实魅力

>>

精彩视频



A计划-暗影中的救援



Majoy游戏最新宣传片



麦当劳大叔最爱  
Majoy



## Majoy好不好? 百度知道!

1 2 3 4 5 6

07年Majoy游戏风云榜 德勤公司体验数字战争

# “Are game players really getting tired of screens?”

## The big insights:

- ④ In China, reality-based games are perceived as a better way to play with friends & family
- ④ Standardized tools facilitate fair gaming → 1.5 million XClub members
- ④ WAN-enabled game engines extend the immersive environment (see Majoy City)
- ④ Consoles & mobile game devices are key to next-gen reality games

Zhao Chen Ding, Academy of Art & Design,  
Tsinghua University Beijing

# #8 Top Design Takeaway



Reality gaming is taking consoles and mobile devices in a more “traditionally social” direction.

# #8 Top Design Takeaway



How can your next game go beyond the screen to better facilitate playing with friends and family?

# #7 Top Research Finding



Gamers can be altruistic, empathic, and nurturing.

**“Can games tap into ‘nice’ emotions?”**



**Aki Järvinen, University of Tampere, Finland**

# “Can games tap into ‘nice’ emotions?”

According to emotion theory, there are 4 types of emotions to explore:

- ⊕ “Prospect-based” - tied to an event
- ⊕ “Attribution” - relating to the emotions of others
- ⊕ “Fortunes-of-others” - eliciting empathy and altruism
- ⊕ Attraction - likes and dislikes

Aki Järvinen, University of Tampere, Finland

# Prospect-based



# Attribution



# Fortunes-of-Others



# Attraction



# “Can games tap into ‘nice’ emotions?”

## The big insights:

- ⊕ Current games privilege prospect-based emotions and attribution emotions
- ⊕ There is an unexplored design space in developing fortunes-of-others and attraction emotions.

Aki Järvinen, University of Tampere, Finland

# #7 Top Design Takeaway



Empathy, altruism, and attraction can add emotional depth to *any* game.

# #7 Top Design Takeaway



How can your next game make players want to be nice to game characters?

# #6 Top Research Finding



It takes 10 hours of gameplay for women to play with the same spatial attention skill as men.

# “How fast can women gamers improve spatial attention?”



Jing Feng, Ian Spence & Jay Pratt, University of  
Toronto, Canada

# “How fast can women gamers improve spatial attention?”

## The big insights:

- ⊕ Spatial attention requires the ability to detect, localize and identify a target
- ⊕ Gamers are always better than non-gamers at spatial tasks
- ⊕ Female players achieved spatial attention proficiency in the game after 10 hours of gameplay
- ⊕ Abilities were maintained over time (5 months)

Jing Feng, Ian Spence & Jay Pratt, University of  
Toronto, Canada

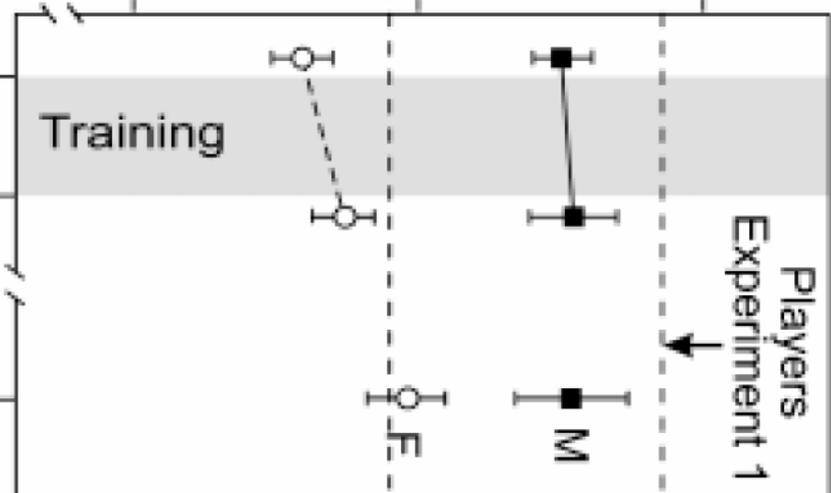
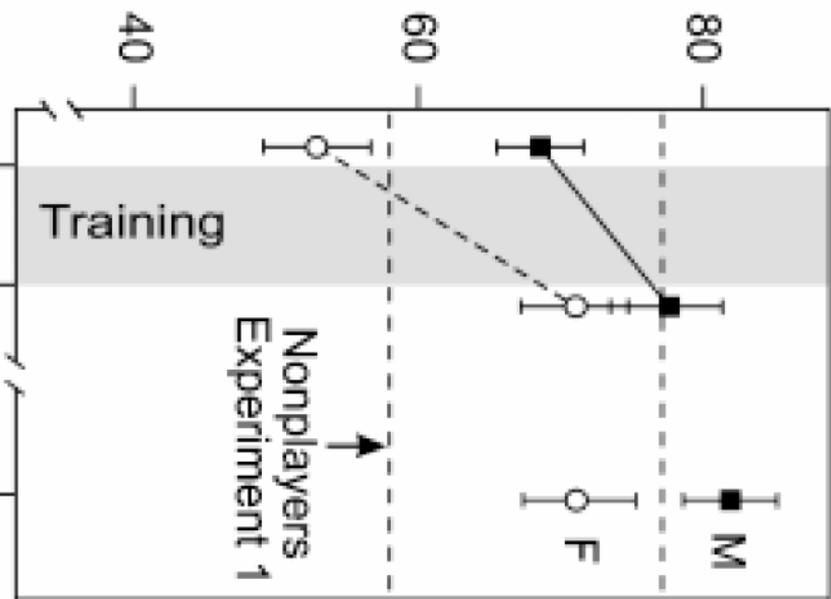
# Video Game Training

Action

Non-action

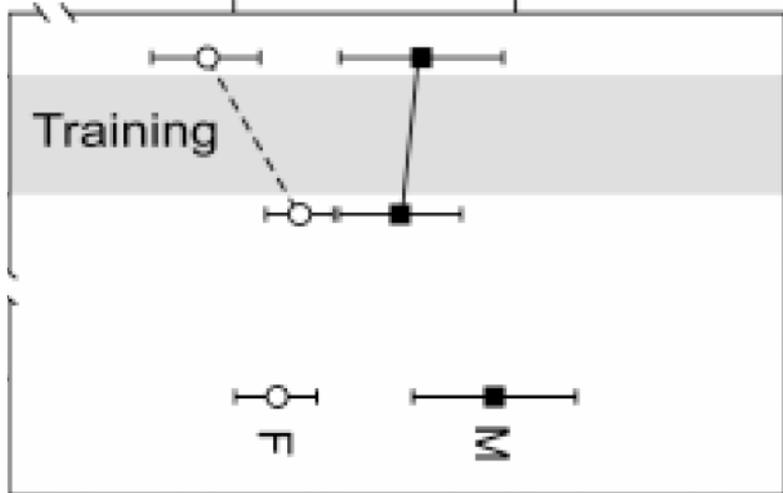
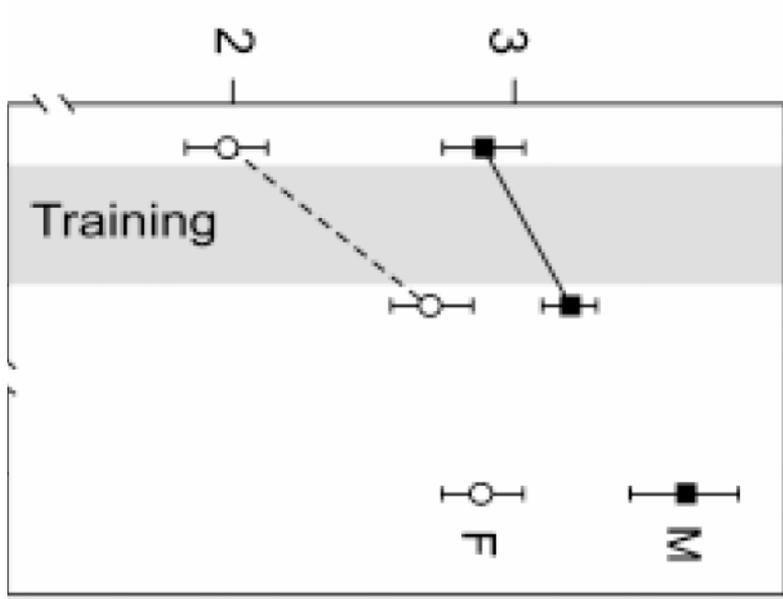
## UFOV

Percentage Correct



## MRT

Square Root Items Correct



# #6 Top Design Takeaway



Women **can** excel at spatial attention games,  
given time with the game.

# #6 Top Design Takeaway



How can you get new gamers to invest 10 hours in your game while they improve their spatial attention?

# #5 Top Research Finding

If you try to leave during a championship race, a question popup.

**Session Result**

ワールドコンパクトカーレース 第1戦

Pos.	Car	Question 質問	Pts.	Total
1	スズキ カブチーノ `95	このレースを中断して メニューに戻りますか？ (再開することができます)	10	10
2	日産 マーチ 1200S `02		6	6
3	VW ルポ 1.4 `02		4	4
4	プジョー 206		3	3
5	BMW 120i `04		2	2
6	マツダ デミオ スポーツ `03		1	1

Cancel  
キャンセル OK

Do you want to stop the race and return to menu ?  
(you can continue from here again) リプレイ

The exit screen matters.



Are you sure you want to quit this game?

Egyptian Farmer

0  
8

25/25

TIM

Speed On!

**ALERT**

You are now leaving Phungoria!

BACK SAVE LOAD

SF

# MYST ONLINE URU — LIVE —

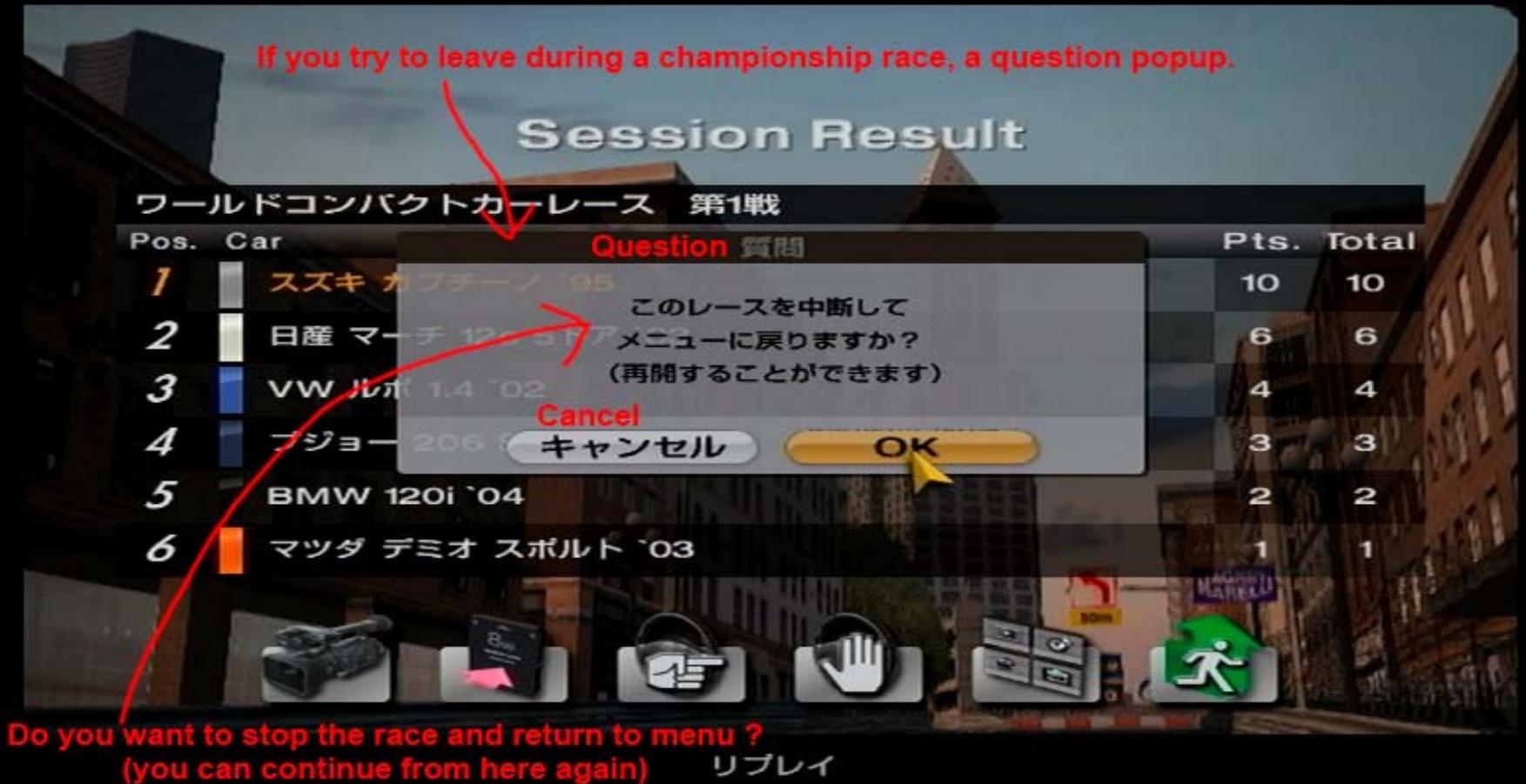
Are you sure you want to quit Uru?

# DAIKATANA

Are you broken?

- SINGLE PLAYER
- MULTI PLAYER
- LOAD GAME
- SAVE GAME
- SOUND
- VIDEO
- MOUSE
- KEYBOARD
- JOYSTICK
- OPTIONS
- CONFIG
- CREDITS
- RESUME
- QUIT**

# “How do players experience the moment they exit a game?”



Mark Wigley, Graduate School of Architecture,  
Columbia University

# “How do players experience the moment they exit a game?”

## The big insights:

- ⊕ Exiting a game is not like turning off the TV or putting down a book
- ⊕ The abruptness of exiting a game reveals how deeply you have been immersed
- ⊕ The only real risk in games is to exit!
- ⊕ Like any other architecture, the real key to game space is the design of the entrance and the exit

Mark Wigley, Graduate School of Architecture,  
Columbia University

# #5 Top Design Takeaway

If you try to leave during a championship race, a question popup.

Pos.	Car	Pts.	Total
1	スズキ カブチーノ `95	10	10
2	日産 マーチ 1200S `04	6	6
3	VW ルポ 1.4 `02	4	4
4	ブジョー 206	3	3
5	BMW 120i `04	2	2
6	マツダ デミオ スポルト `03	1	1

Do you want to stop the race and return to menu ?  
(you can continue from here again) リプレイ

The exit experience is an under-designed game space.

# #5 Top Design Takeaway

If you try to leave during a championship race, a question popup.

Pos.	Car	Pts.	Total
1	スズキ カブチーノ `95	10	10
2	日産 マーチ 1200S `04	6	6
3	VW ルポ 1.4 `02	4	4
4	ブジョー 206	3	3
5	BMW 120i `04	2	2
6	マツダ デミオ スポーツ `03	1	1

Do you want to stop the race and return to menu ?  
(you can continue from here again) リプレイ

How will you architect a grand exit to your next game?

# #4 Top Research Finding



Musical instrument tutoring can make you a REAL music hero.

# “Can music games teach you to play for real?”



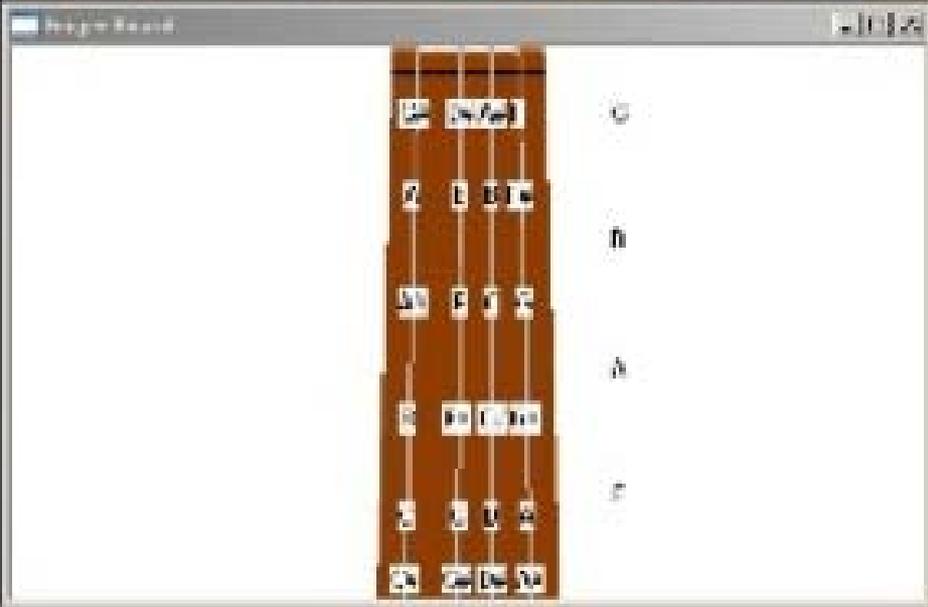
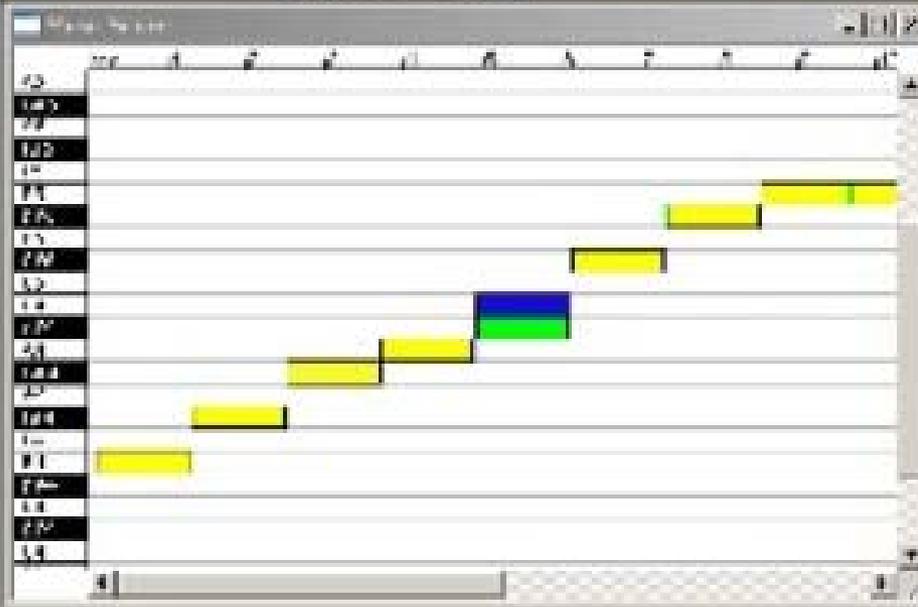
G.Percival, G.Tzanetakis University of Victoria,  
Y.Wang National University of Singapore

# “Can music games teach you to play for real?”

## The big insights:

- ⊕ Explain **why** a performance gesture is wrong, not just **that** it was wrong
- ⊕ Practice can be enhanced by generating exercises based on computational analysis of pitch problems
- ⊕ 3 goal areas for future work: teacher’s lessons, student’s practice, and student motivation





# #4 Top Design Takeaway



Music games can answer the criticism “why not play a real instrument” – without sucking.

# #4 Top Design Takeaway



How can future music games connect fantasy performance with real-world practice?

# #3 Top Research Finding



Voice chat measurably makes you like your guildmates more – *usually*.

# How does voice chat impact the social bonds of gamers?



D. Williams, L. Xiong, USC Annenberg; S. Caplan, U Delaware

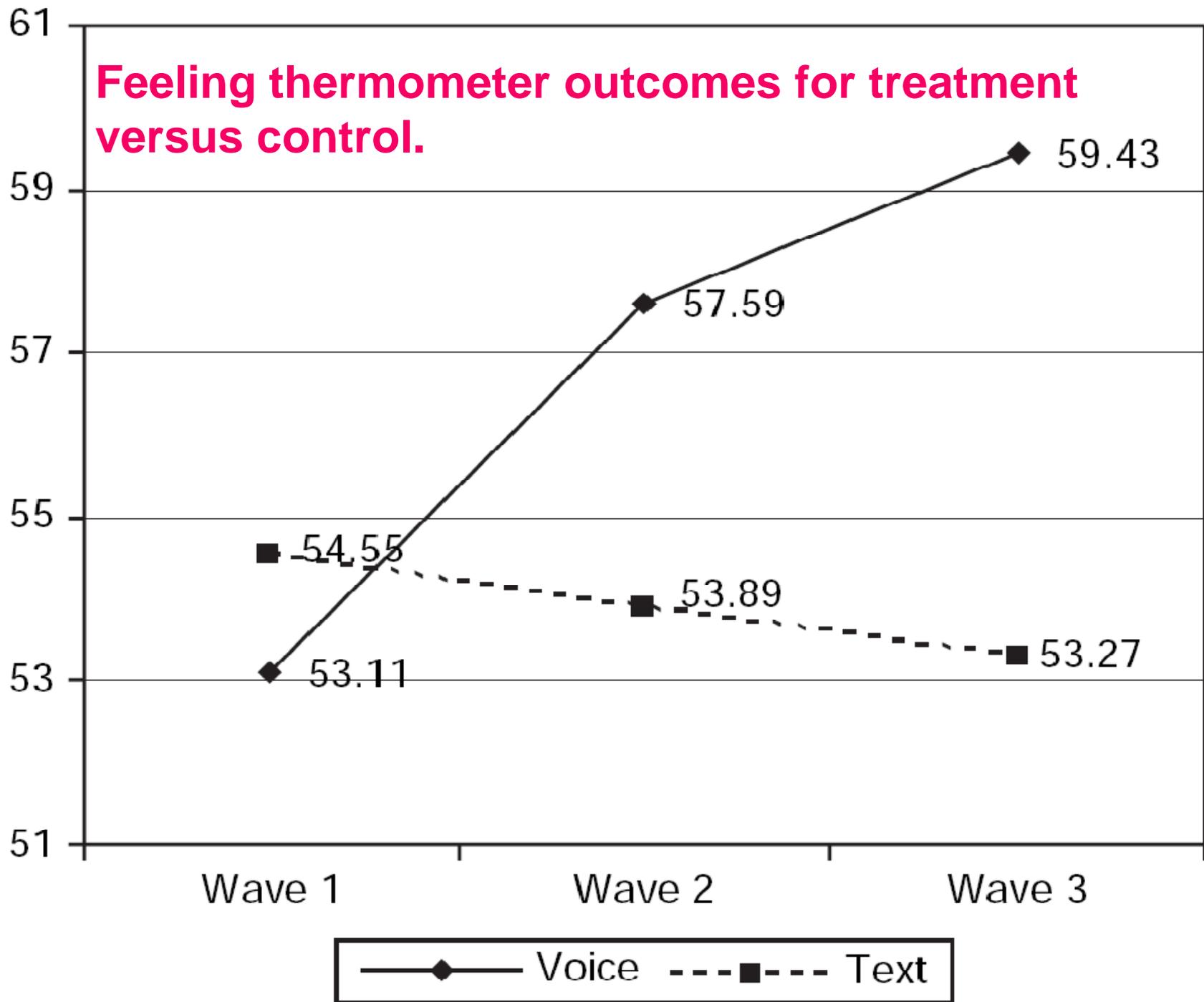
# How does voice impact the online gaming experience?

## The big insights:

- ④ Voice chat intensifies social feelings – both positive *and negative*
- ④ “Push to talk” has a strong bonding effect on guildmates...
- ④ ... but the annoying become more annoying.

D. Williams, L. Xiong, USC Annenberg; S. Caplan, U Delaware

# Feeling thermometer outcomes for treatment versus control.



# #3 Top Design Takeaway



Voice intensifies social impact, which is a mixed blessing.

# #3 Top Design Takeaway



How can you help players mitigate potential downsides of voice chat?

# #2 Top Research Finding

CHOOSE YOUR avatar.

☹ Big splashy screenshot goes here



There are 3 key ways to increase the monetary value of avatars.

**“What’s my game character worth?”**

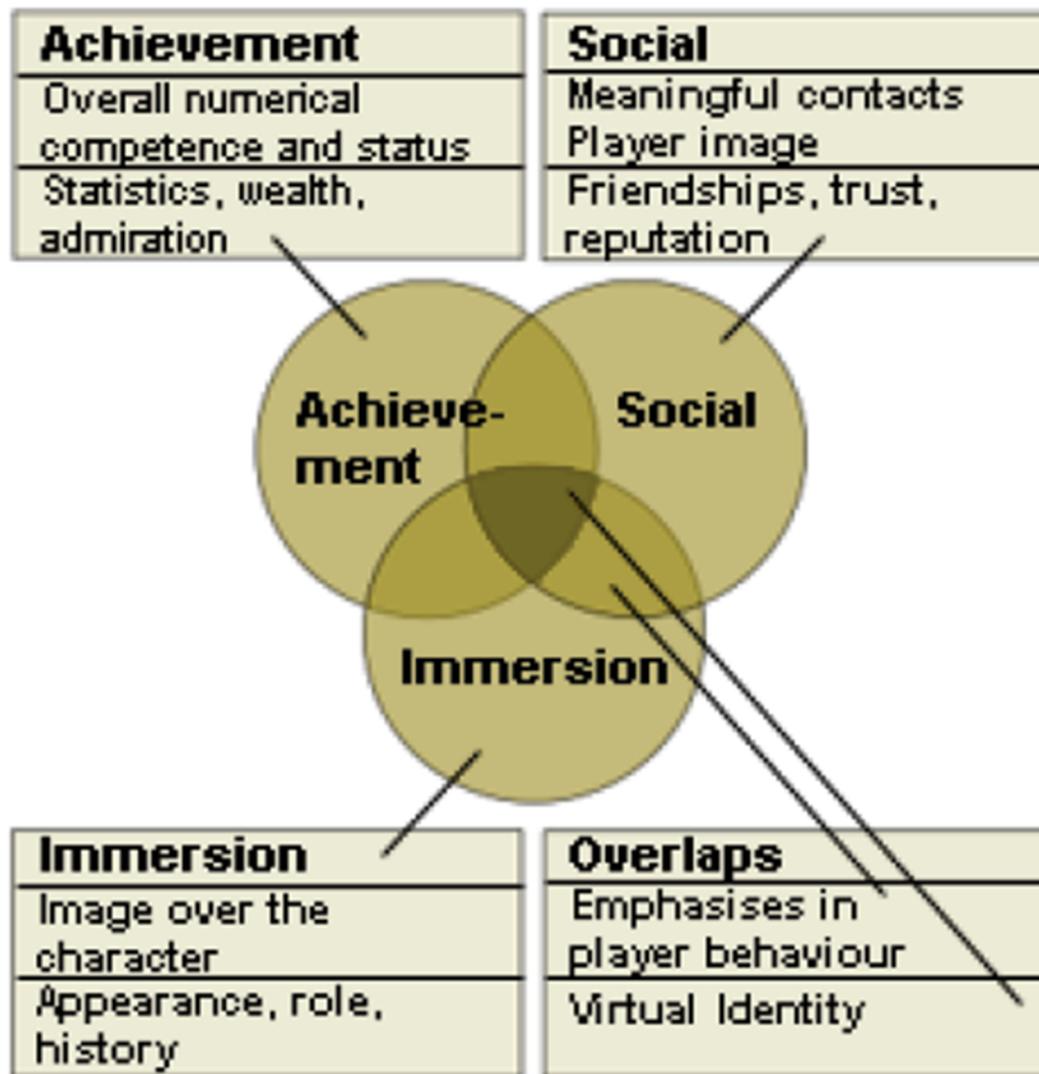
**CHOOSE YOUR avatar.**



T.Kujanpää, T.Manninen, L.Vallius, Game Design/Research, U. of Oulu

**Table 1: Motivations of play in online games [27].**

<b>Achievement</b>	<b>Social</b>	<b>Immersion</b>
<b>Advancement</b> Progress, Power, Accumulation, Status	<b>Socializing</b> Casual Chat, Helping Others, Making Friends	<b>Discovery</b> Exploration, Lore, Finding Hidden Things
<b>Mechanics</b> Numbers, Optimization, Templating, Analysis	<b>Relationship</b> Personal, Self- Disclosure, Find and Give Support	<b>Role-Playing</b> Story Line, Character History, Roles, Fantasy
<b>Competition</b> Challenging Others, Provocation, Domination	<b>Teamwork</b> Collaboration, Groups, Group Achievements	<b>Customization</b> Appearances, Accessories, Style, Color Schemes
		<b>Escapism</b> Relax, Escape from RL, Avoid RL Problems



**Figure 1:** Different value components overlap and sum up as the overall value.

# “What’s my game character worth?”

## The big insights:

- ④ You can increase player investment in your game by building more “social”, “achievement” and “immersion value” in your characters
- ④ Overall value of game characters is increasing due to the persistence of MMO worlds & overall growth in economy

T.Kujanpää, T.Manninen, L.Vallius, Game Design/Research, U. of Oulu

# #2 Top Design Takeaway

CHOOSE YOUR avatar.



Gamers are increasingly looking for maximum  
“character value”.

## #2 Top Design Takeaway

CHOOSE YOUR avatar.



How will you use social, achievement, & immersion value to increase your next game characters' net worth?

# #1 Top Research Finding



Videogames are the future of live sports.

# How can real sports events mix with virtual ones?



J.Bardzell, S.Bardzell, C.Birchler, Will Ryan,  
Indiana University

# How can real sports events mix with virtual ones?

## The big insights:

- ⌚ Sports viewing is changing. Internet access is pushing TV aside as a dominant way for sports fans to participate with games, teams
- ⌚ Videogames don't let fans participate except with rosters and the like
- ⌚ But live sports generates a ton of live data, ready for transmission

J.Bardzell, S.Bardzell, C.Birchler, Will Ryan,  
Indiana University

# How can real sports events mix with virtual ones?

## The bigger insights:

- ⊕ There's a whole new world of untapped mixed-reality games
- ⊕ Not wonky augmented reality or telepresence!

J.Bardzell, S.Bardzell, C.Birchler, Will Ryan,  
Indiana University



The  
Weather  
Channel  
weather.com

Showers  
104° F

THE BIG GAME



ARIZONA



ARIZONA STATE

SUN DEVIL™ STADIUM

AM  
720

NBA Game  
Broadcast



3 QTR  
3:04

CHICAGO  
BOSTON

FANS  
27  
18

+

NBA  
51  
67

=

FANERGY™  
78  
85



Cab31: Nice steal, rabidK!  
RabidK: Its all in the wrists  
You: More like he bribed a ref  
SillaSee: Wide open here  
SillaSee: Ready for my famous jump shot  
Cab31: WOOT!

We're not afraid of your jump shot Sill |

Send

DEFENSIVE STYLE



# #1 Top Design Takeaway



Sports viewing is changing – and videogames have a huge role to play in their future.

# #1 Top Design Takeaway



How can your next sports game mix the realities of a live professional sports with a virtual version of it?

# #1 Top Design Takeaway

... and really, how might any game mix the realities of a live real events with a virtual version of it?

# Download the slides and complete references – and our secret “Top 10 SHADOW List!”



[www.avantgame.com/top10.htm](http://www.avantgame.com/top10.htm)