Game Studies

Prepare to be schooled.

GameDevelopers Conference

Who We Are

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Why Game Studies?

Very smart people who **care a lot** about games and the people who play them.

Targeted expertise in: psychology, group dynamics, performance, human computer interface, narrative, cinematics, physiology, artificial intelligence, economics, computer science, visual arts, and more.

Get Ready

- a rapid fire **Top 10 Countdown**
- we have **handouts**!
- you can **download the slides** later.


POSITION
1 / 2
LAP TIME
1:09.573
Kenrchoi
-0:31.612
BLADERUNNER DAN has left the Lobby.
LAP 3 of 3
GAMES

#10 Top Research Finding

“How does game music impact a player’s effectiveness?”

Gianna Cassidy, et al
Glascow Caledonian University,
Psychology Department and
eMOTION game lab

#10 Top Research Finding

What they found out:

- Measured 4 gameplay factors: speed, accuracy, emotional arousal, attention
- High emotional impact of music ≠ high player effectiveness
- Control of and preference for music = best overall player experience

#10 Top Research Finding

The big picture take-away:

Game music is not just about emotional impact or world-building. SUCCESS hangs on it.

How and when are you using game music to support or to challenge your players?


0
0
100
The enemy has the ball, recover it!
Katana (100)
Nafiret (V)
100
995
www.unrealchampionship.com

#9 Top Research Finding

“What do players really think about voice chat and its usefulness in gameplay?”

Kevin Hew, Martin R. Gibbs & Greg Wadley. The University of Melbourne, *Department of Information Systems*

#9 Top Research Finding

What they found out:

- Poor usability hindered players' attempts to be social
- Players disliked the lack of control over what was sent over channel
- Voice isn't always an advance

#9 Top Research Finding

The big picture take-away:

Voice communication needs to be designed with a particular purpose in mind within your game.

What specific elements of your gameplay does voice chat enable or enhance?


A
b
a
Nintendo

#8 Top Research Finding

“Gestural and embodied controllers are fun. But are they good for gameplay?”

Stephen Griffin, The Georgia Institute of Technology (*Information Technology*)

#8 Top Research Finding

What they found out:

- Trend toward transparent interfaces in HCI
- Weird controllers => interaction that accounts for the body
- But buttons abstract complex action well

#8 Top Research Finding

The big picture take-away:

Buttons are best for complex, symbolic action. Designs for new gestural systems should take this balance into account.

Are you choosing the right gestural vs. symbolic control system?


computer and video
GAMES
.com


Gamer's Hell
Terrorist Forces: 1
CT Forces: 7
$ 11600
You killed an Enemy!
Win the round by eliminating
the opposing force.
[GK]Frosties
Blood Brother Slugger
Level 2
Minion
Actions
Map Contact Mission Clues Badge
Chat Tray Target Nav Menu
You are not looking for a group
Search Comment
Find Member
Team Friends Super Email
to Peterson Waste Management.
You gain 21 experience and work off 21 debt.
You have 1 unclaimed respecs available.
You gain 21 experience and work off 21 debt.
Blood Brother Chopper: You don't want to
see me angry
Hannah: Please no
Entering Atlas Plaza
Chat
Local
SWISSCHEESEMIND
Level: 11
Technology · Controller
Powers Badges PvP Arena
Illusion Control: Spectral Wounds, Blind, Flash
Trick Arrow: Entangling Arrow, Flash Arrow, Glue Arrow
Flight: Hover
Manage
Powers Inspirations Enhancements

#7 Top Research Finding

“Does the presence of other players make an online game more or less immersive?”

Cheryl Campanella Bracken, et al
Cleveland State University
Department of Communication

#7 Top Research Finding

What they found out:

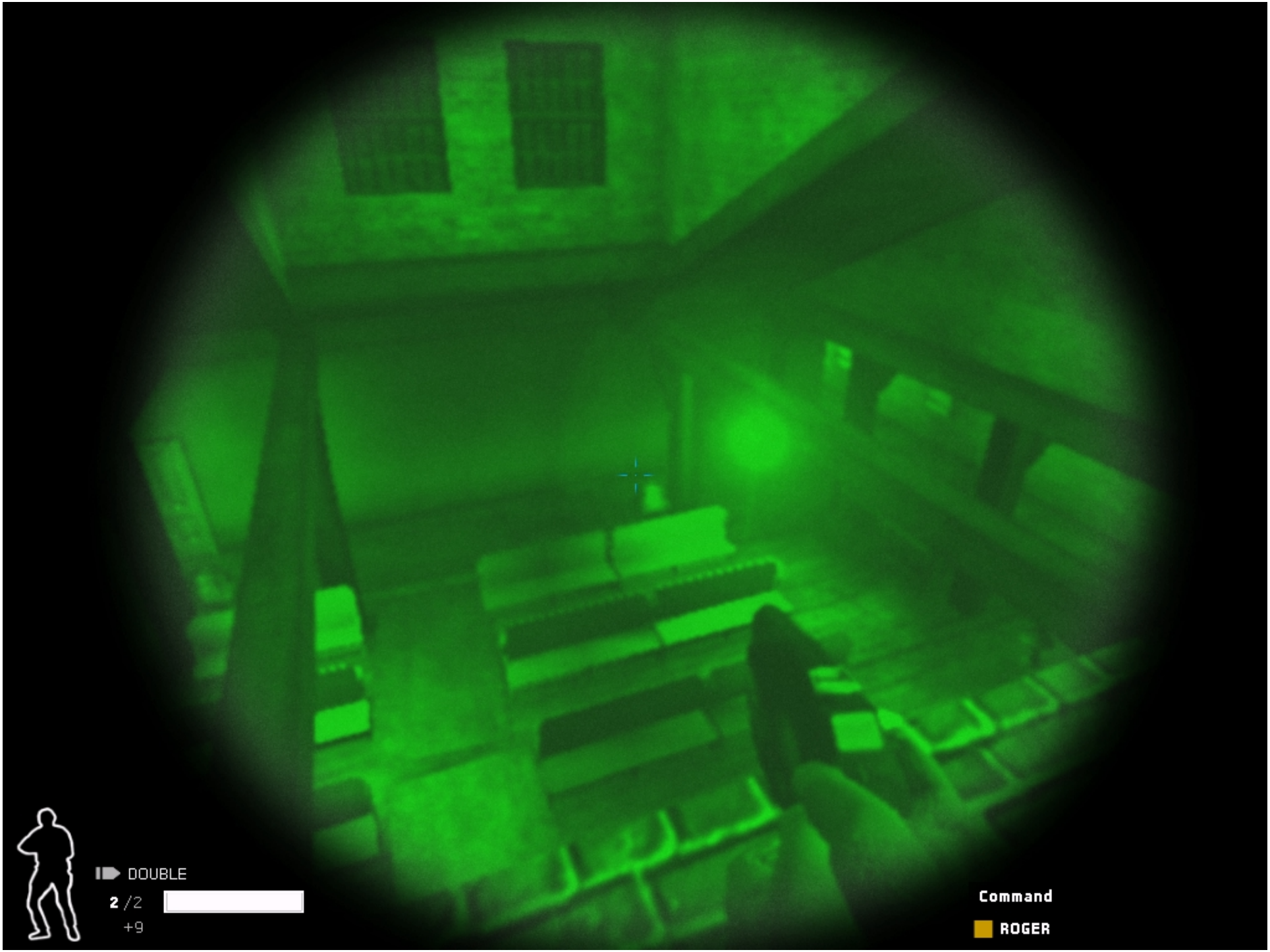
- 3 kinds of "strong presence" identified: spatial-physical, social, & co-presence
- Adversaries were depersonalized-- "the same as bots"
- All 3 forms of presence experienced mostly strongly in "collaborative online environment" games

#7 Top Research Finding

The big picture take-away:

Collaboration is an extremely powerful driver of immersion and stickiness.

Where could you add moments of multi-player collaboration in your game?


DOUBLE
2 /2
+9
Command
ROGER

#6 Top Research Finding

“Are players cheating as much as we (and other gamers) think they are?”

Dale Miller, Stanford University, et al. *(Personality and Social Psychology*)

#6 Top Research Finding

What they found out:

- If someone is supervised, we believe he would act dishonestly without the supervision
- People attribute dishonesty and cheating to those they *think* might commit such acts

#6 Top Research Finding

The big picture take-away:

Perceptions are often more important than reality for fairness in multiplayer games.

What concrete steps can you take to assure players that a competition is fair?


den

#5 Top Research Finding

“What innovative game design uses are there for player-controlled cameras?”

Michael Nitsche, The Georgia Institute of Technology (*Digital Media*)

#5 Top Research Finding

What they found out:

- Interactive equivalent of cinematic montage is rare (sniper)
- Goldeneye (sniper), Siren (sight-jacking), overhead (Doom), Fatal Frame II (3P fixed)
- Reinforcing player positioning = meaningful cut

#5 Top Research Finding

The big picture take-away:

Player-controlled camera movement can be thought of as an "adaptation" of cinematic montage.

How can your game make more creative use of player-controlled camera cuts?


Battlefield: 1942 - Work In Progress
www.ign.com

#4 Top Research Finding

"What strategies do gamers invent to communicate to other players in online games… and can games be designed to better support these strategies?"

Tony Manninen and Tomi Kujanpää
University of Oulu, LudoCraft *Game Design and Research Unit*

#4 Top Research Finding

What they found out:

- Players want to communicate 3 things: intentions, actions, and effects
- A design-oriented taxonomy of 10 kinds of communication strategies
- Least-supported strategies currently: gesture, non-verbal audio and non-violent physical contact

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#4 Top Research Finding

The big picture take-away:

Players are trying to invent new ways to communicate and coordinate in your games.

Have you explored non-standard possibilities for interaction forms?


HEALTH
100
SUIT
200

#3 Top Research Finding

“Can alternative controllers like eye tracking devices offer a PC gaming experience that is more fun and involving than mouse control?”

Erika Jönsson, Royal Institute of Technology, Sweden. (*Human Computer Interaction*)

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#3 Top Research Finding

What she found out:

- With a 2D shooter, everyone rated the game as more fun when played with the eyes
- In *Half Life*, combining eye and mouse functions led to more players responded positively

#3 Top Research Finding

The big picture take-away:

Use of eye-tracking could be a successful addition to your game, provided it has a useful function and is properly play-tested.

What novel input devices are you considering for your PC game?

WHAT'S NEXT GDC:06

#2 Top Research Finding

"How can we generate facial animation that combines speech AND variable emotion?"

Yong Cao, UCLA (*Computer Science*), Wein Tien, Petros Faloustos, Frederic Pighin, USC (*Institute for Creative Technologies*)

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#2 Top Research Finding

What they found out:

- Speech-driven faces are common
- But people look and speak differently under different emotional states
- An original method for generating facial animation with lip syncing AND emotional blending

#2 Top Research Finding

The big picture take-away:

Manually specify emotional content, or use a Support Vector Machine to identify emotional content from a script.

Could your characters' facial expression be more emotionally specific during speech?

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SCORE 0000057
TIME
049
98
001
29 mph
8 INCHWORMS

#1 Top Research Finding

“How do game events marking success vs. failure affect a player’s level of engagement?”

Niklas Ravaj, et al
Helsinki *School of Economics*,
Media Interface & Network Design
(MIND) Labs

#1 Top Research Finding

What they found out:

- More pleasure and excitement in active failure than in success
- However: passive experience of failure makes players disengage.
- Attaining a goal DECREASES player arousal and interest.

#1 Top Research Finding

The big picture take-away:

Failure is an unexpected hot spot for excitement and pleasure.

How much fun is failure in your game?


STAGE
2nd
PERFECT!!
PERFECT!!
combo
combo
LIGHT
LIGHT


Challenger
47
ATTACK


FIFA.com
MY GAME IS
FAIR PLAY
16

#0 Top Research Finding

“How do we design for spectator as well as player experiences?”

Stuart Reeves et al, University of Nottingham, UK (*Learning Sciences*); Mike Fraser, University of Bristol, UK (*Computer Science*)

#0 Top Research Finding

What they found out:

- Spectator Experiences = Manipulations & Effects (see chart)
- Visible gestures that the system doesn't respond to still matter
- Design principles: Secretive, Expressive, Magical, Suspenseful

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#0 Top Research Finding

The big picture take-away:

Secretive and Suspenseful spectator experiences are uncommon in spectator games.

Have you considered the spectator experience in your game?

WHAT'S NEXT GDC:06

Download the slides and handouts:

www.avantgame.com/top10.htm

QUESTIONS?

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