.5,.5,0

1,0,0

0,1,0

Text-based RPGs
NARRATIVE
S

Arcade Games
COMPETITIVE
G

.33,.33,.33
. Vader Immortal
.368,.281,.350

.5,0,.5

0,.5,.5

R

PERFORMATIVE

Avatar Improv

0,0,1

Multimodal Framework for Enhancing RPG Playfulness through Avatar Acting Affordances

Christopher Maraffi
Assistant Professor of Art & Design
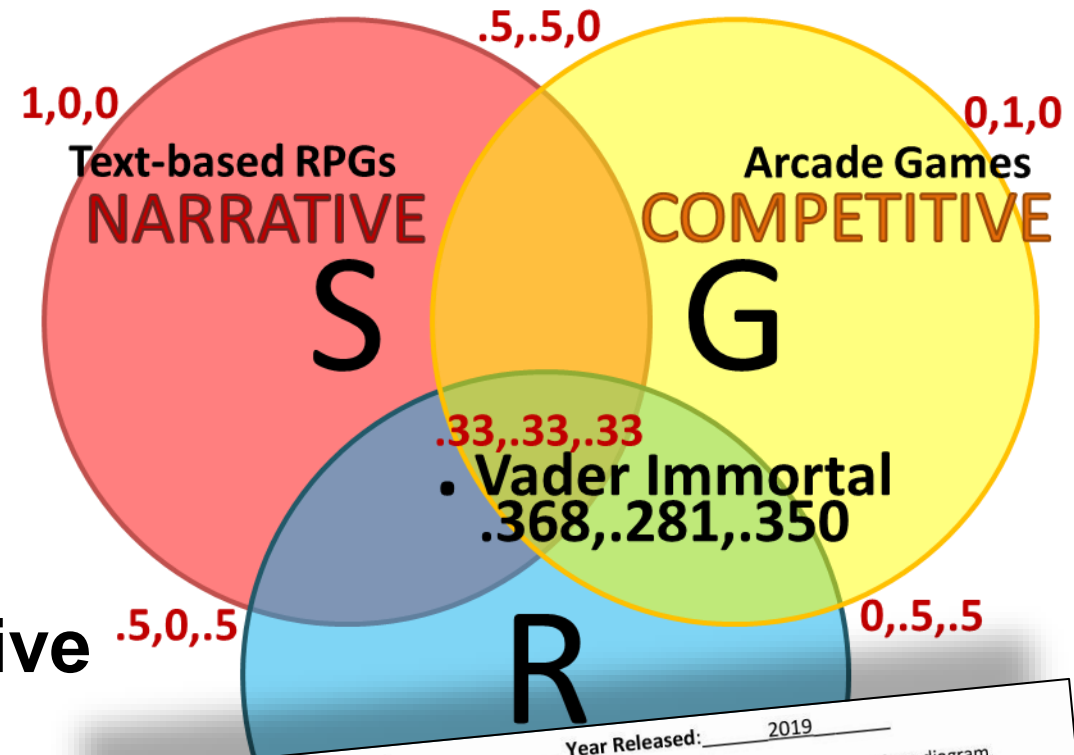cmaraff@ncsu.edu
https://tophermaraffi.com/

NC STATE UNIVERSITY

Seagate Internal

- **SGRplay multimodal framework for analyzing three types of play (Screenplay, Gameplay, Roleplay) in RPG games and XR experiences.**

- **Key contribution is adding a performative role play type that is studied separately from the competitive and narrative play types.**

- **Player experience of each mode is calculated through a questionnaire, and then visualized on a Venn diagram as a multimodal "playfulness" factor.**

.5,.5,0

1,0,0

0,1,0

Text-based RPGs
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.33,.33,.33
• **Vader Immortal**
.368,.281,.350

.5,0,.5

0,.5,.5

R

Game:_____Vader Immortal_____   Year Released:_____2019_____

SGRplay Survey: rank questions, and then calculate the Playfulness Factor to plot on the Venn diagram.

I. Screenplay (S) Rank *narrative* play features 1-10 (1 = very little, 5 = average, 10 = very much):

1. Does the game have a linear or branching storyline? 1.__10___
2. Is there a narrator or narration (text or voice), possibly by the main character? 2.__5___
3. Does the game have dialogue choices? 3.__1___
4. Are there quests that support the narrative or take you on a new storyline? 4.__4___
5. Does the game have cut scenes or cinematics throughout? 5.__8___
6. Does the game require reading or writing (manuscripts, clues, backstory)? 6.__3___
7. Are there in-game reference to literature, cinema, or theatre? 7.__5___
8. Does game interaction further the storyline or dramatic arc? 8.__10___
9. Do the game characters have a backstory that is revealed? 9.__3___
10. Is the game part of a greater transmedia storyline or universe? 10.__10___

Add 1-10 to total (1-100), and then divide by 10 to get **(S)** value:__5.9___

II. Gameplay (G) Rank *competitive* play features 1-10 (1 = very little, 5 = average, 10 = very much):

1.__3___
2.__6___
Does the game system keep track of a score, lives, or health? 3.__5___

- ***Ludology VS Narratology Debate*** **(2000s) and the tension over games as ludic vs narrative types of play, which may lead to *ludo-narrative dissonance*.**

  (Frasca 2003) **(Murray 2005)** **(Kokonis 2014)** **(Kapell 2016)** **(Hocking 2007)**

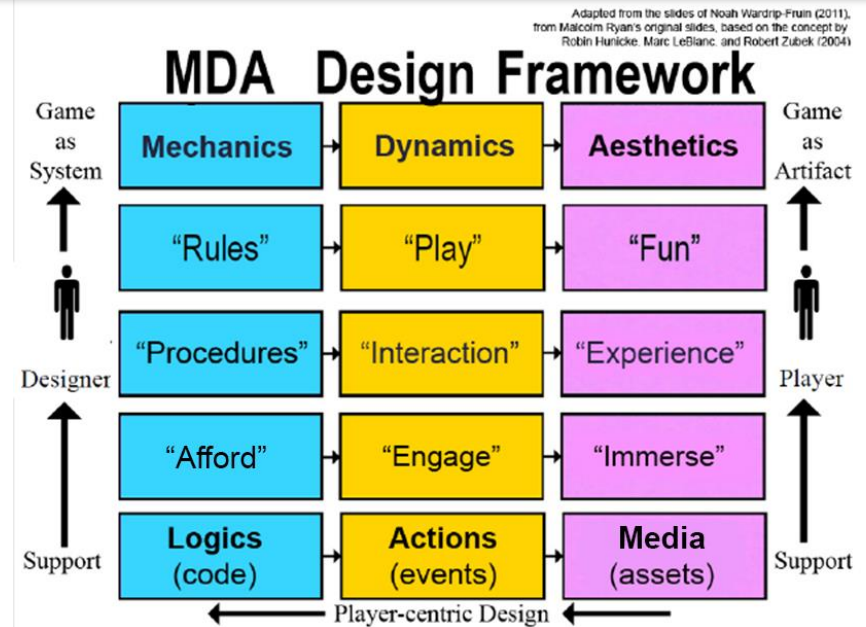- **MDA (Mechanics, Dynamics, Aesthetics) Game Design Framework (GDC 2004).**

  (Hunicke et al. 2004)

- **RPGs that feature character roles evolved from games like D&D that have both narrative and LARP-style performative play.**

  (Jonsson et al. 2006)

Adapted from the slides of Noah Wardrip-Fruin (2011), from Malcolm Ryan's original slides, based on the concept by Robin Hunicke, Marc LeBlanc, and Robert Zubek (2004)

MDA Design Framework

Assassin's Creed Odyssey, Ubisoft 2018

Mafia III 2K Games 2016

Stranger Things, Netflix 2016

Mazes & Monsters, CBS 1982

- **Jenkins' *Convergence* culture and *Transmedia* storytelling are driving cinematic games.** (Jenkins 2006, 2007)

- **Players can perform characters in the Star Wars universe, or iconic figures like Lara Croft and Spider Man.**

- **Player experience is partially mediated through the avatar performance, which has an artistic heritage from puppetry, masked theatre, and improv acting.**

- **The player affects of flow and narrative immersion are well studied in games, but character actors also experience similar flow/immersion features.**

(Csíkszentmihályi 1990)

(Chen 2007)

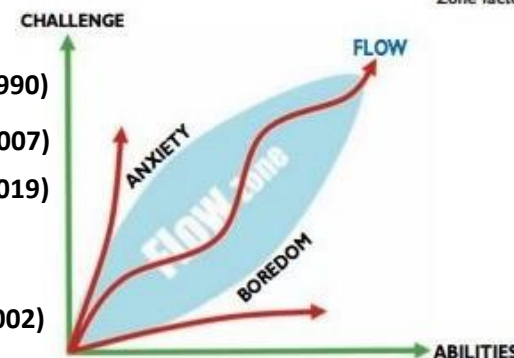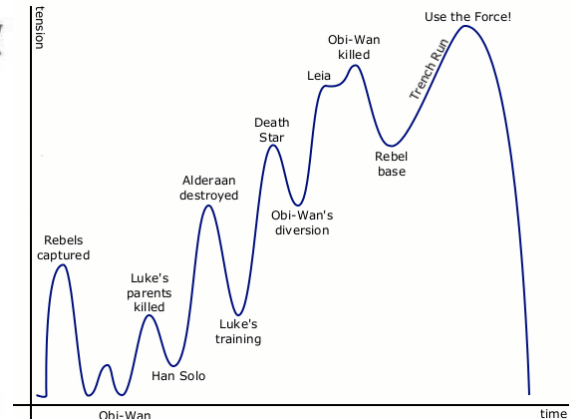(Sunderland 2019)

(Martin & Cutler 2002)

CHALLENGE

FLOW

ANXIETY

FLOW zone

BOREDOM

ABILITIES

Figure 1. Flow Zone factors.

tension

Use the Force!

Obi-Wan killed

Leia

Death Star

Alderaan destroyed

Obi-Wan's diversion

Rebel base

Trench Run

Rebels captured

Luke's parents killed

Luke's training

Han Solo

Obi-Wan

time

- **Performative play is similar to improv acting, afforded by choices for avatar expression not specified in the script or level design, and can reflect player acting styles.**

  (Mass Effect, BioWare/EA 2007-2017)

- **In RPGs players can perform as masked actors (1ˢᵗ person) or puppeteers (3ʳᵈ person).**

  (Shadow of the Tomb Raider, SquareEnix 2018)

- **Avatar affordances such as gender, body features, and costumes reflect player style and expression, as does skills and resource management, which can support both gameplay and storytelling.**

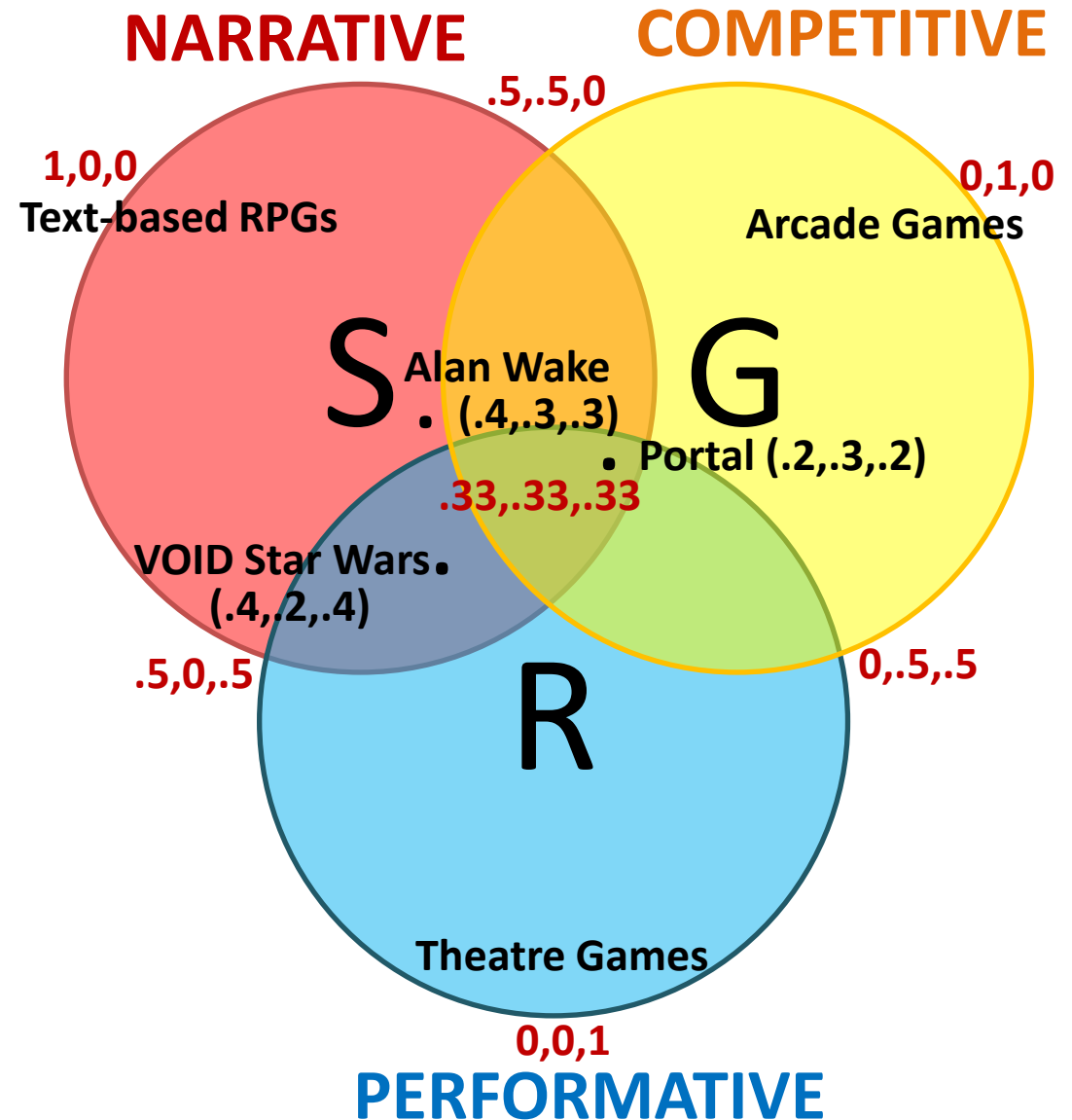 **(Assassin's Creed Odyssey, Ubisoft 2017)**

SGRplay ("sugar+play") Theoretical Framework

Screenplay (S)	Gameplay (G)	Roleplay (R)	
Narratology	Ludology	Performatology	
Narrative Immersion	Competitive Flow	Performative Medium	
Script/Storytelling	Challenge/Skill Balance	Character/Expression	
Cinematic/Dialogue	Goal/Achievement	Avatar/Improv	
Cinema Play (passive)	Gaming Play (active)	Theatre Play (creative)	
Related Models and Influences			
Dissimulation (spect-)	Misdirection (joker)	Simulation (-actor)	Magic/Empathic Theatre (Maraffi, 2021, 2022) Theatre Games (Boal 1992)
Mechanics (structure)	Dynamics (interaction)	Aesthetics (style)	MDA (Hunicke et al 2004) Structure VS Style (Hecker 2008)
Dramatic Text (author)	Staging (director)	Performance (player)	Performance Studies (Fernandez-Vara 2009)
Mythos (lore)	Topos (place)	Ethos (behavior)	Transmedial Worlds (Klastrup and Tosca 2004)
Intent Horizon (beats)	Action (phase space loc)	Interpretative (consequence)	Game Studies (Upton 2015)
Narrativist (dramatist)	Gamist	Simulationist	GNS/Threefold Model (Edwards 2001/1998)

- **Given to my FAU game studies and design students in 2020-2021.**

- **Qualitative survey with 10 questions for each play type to rank the player experience of any video game.**

- **The play rankings are calculated as 3-tuple decimals that normalize to 1, and are plotted on a Venn diagram.**

- **Playfulness, or "fullness of play", is defined as maximizing all three types through harmonic interplay, and plot towards the center of the diagram (.33, .33, .33).**

NARRATIVE   **COMPETITIVE**

.5,.5,0

1,0,0   0,1,0
Text-based RPGs   Arcade Games

S. **Alan Wake**   G
   (.4,.3,.3)

   • **Portal (.2,.3,.2)**

.33,.33,.33

VOID Star Wars.
(.4,.2,.4)

.5,0,.5   0,.5,.5

R

Theatre Games

0,0,1
PERFORMATIVE

Game:_____Vader Immortal_____ **Year Released**:_____2019_____

SGRplay Survey: rank questions, and then calculate the Playfulness Factor to plot on the Venn diagram.

I. Screenplay (S) Rank *narrative* play features 1-10 (1 = very little, 5 = average, 10 = very much):

1. Does the game have a linear or branching storyline?   1.__10____
2. Is there a narrator or narration (text or voice), possibly by the main character?   2.__5___
3. Does the game have dialogue choices?   3.__1___
4. Are there quests that support the narrative or take you on a new storyline?   4.__4___
5. Does the game have cut scenes or cinematics throughout?   5.__8___
6. Does the game require reading or writing (manuscripts, clues, backstory)?   6.__3___
7. Are there in-game reference to literature, cinema, or theatre?   7.__5___
8. Does game interaction further the storyline or dramatic arc?   8.__10__
9. Do the game characters have a backstory that is revealed?   9.__3___
10. Is the game part of a greater transmedia storyline or universe?   10.__10__

Add 1-10 to total (1-100), and then divide by 10 to get **(S)** value:__5.9____

II. Gameplay (G) Rank *competitive* play features 1-10 (1 = very little, 5 = average, 10 = very much):

1. Does the game system keep track of a score, lives, or health?   1.__3___

10. Is the game part of a greater transmedia storyline or universe?   10.__10__

Add 1-10 to total (1-100), and then divide by 10 to get **(S) value**:__5.9____

II. Gameplay (G) Rank *competitive* play features 1-10 (1 = very little, 5 = average, 10 = very much):

1. Does the game system keep track of a score, lives, or health?   1.__3___
2. Do you play on teams or join co-op squads of players (human or NPCs)?   2.__6__
3. Does the game result in winners and losers (human-human or human-computer)?   3.__5__
4. Does the game feature hard play or bosses that result in a flow-zone experience?   4.__5__
5. Does play simulate games of chance (possibly betting- gambling) or finding treasure?   5.__7__
6. Does game challenges require thinking ahead or strategically?   6.__1___
7. Is pattern matching, resource management or puzzle solving a core part of the game?   7.__4___
8. Does the game give out rewards or badges as you progress?   8.__1___
9. Does game play simulate physical tests (fighting, racing, shooting, jumping, etc)?   9.__10_
10. Are there any timed challenges in the game where you race against a clock?   10.__3___

Add 1-10 to total (1-100), and then divide by 10 to get **(G) value**:__4.5____

III. Roleplay (R) Rank *performative* play features 1-10 (1 = very little, 5 = average, 10 = very much):

1. Do you play or perform a fictional character in the game world?   1.__10__

10. Are there any timed challenges in the game where you race against a clock? 10.__3____

Add 1-10 to total (1-100), and then divide by 10 to get **(G) value:**__4.5____

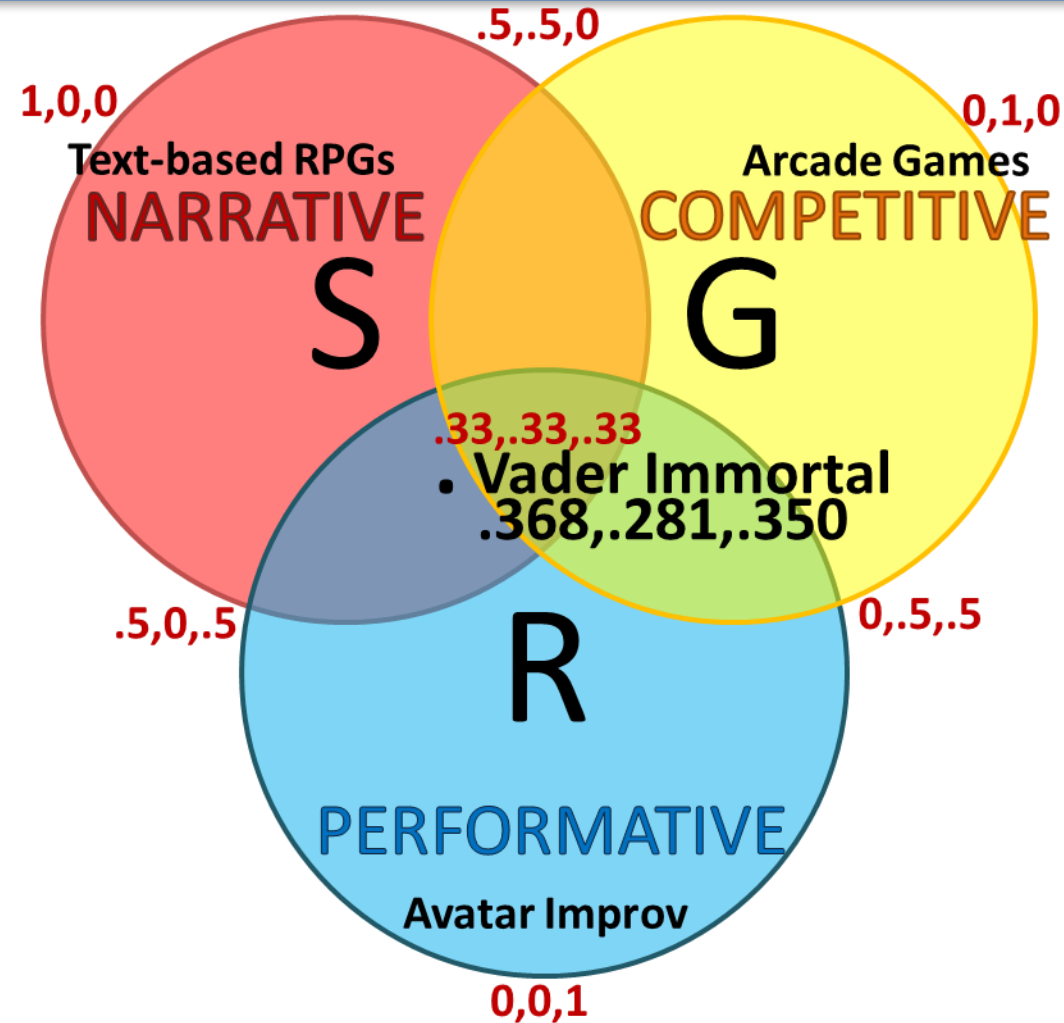III. **Roleplay (R)** Rank *performative* play features 1-10 (1 = very little, 5 = average, 10 = very much):

1. Do you play or perform a fictional character in the game world? 1.__10__
2. Does the game give skill points you can assign to various character abilities? 2.__1___
3. Can you initially customize your avatar or change costume later in the game? 3.__5___
4. Can you see your avatar's body (arms or more) in the game? 4.__5___
5. Does game choices have moral consequences for your character? 5.__5____
6. Can you improvise challenges and level-up in multiple ways (warrior, mage, etc)? 6.__3__
7. Do you ever identify with the avatar when playing (like you did the actions)? 7.__10__
8. Can you go off script and explore the game world in your own time? 8.__3___
9. Does the game require gestures by the character that are not everyday actions? 9.__10__
10. Can you develop a unique play style in the game that reflects your interests? 10.__4___

Add 1-10 to total (1-100), and then divide by 10 to get **(R) value:**___5.6___

IV. Add individual play totals **(S+G+R)** for the **SGR Total Value (max 30):**__16____. Then calculate

Game Playfulness Factor: [(S/SGR), (G/SGR), (R/SGR)] = **[S(0.368), G(0.281), R(0.350)]** = 1.0

.5,.5,0

1,0,0

0,1,0

Text-based RPGs
NARRATIVE
S

Arcade Games
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G

.33,.33,.33
. Vader Immortal
.368,.281,.350

.5,0,.5

0,.5,.5

R

PERFORMATIVE

Avatar Improv

0,0,1

SGRplay :

Add individual play totals (S+G+R) for the SGR Total Value (max 30):___16___. Then calculate
playfulness factor: [(S/SGR), (G/SGR), (R/SGR)] = [S(0.368), G(0.281), R(0.350)] = 1.0

- **Refining each play mode's survey questions to better define features but also explore how modes can support a harmonic play experience.**

- **Use online tools to automate the process of calculating and visualizing the playfulness factor and to crowdsource the results using big data.**

- **Performatology studies on how theatre arts concepts like Boal's "spect-actor/joker" roles can affect player perception, and how creative character affordances may promote flow and/or immersion.**

- **Apply the SGRplay framework to the design of RPGs and serious play storytelling, especially for XR interfaces where players have the perception of being transported to a 360-world interacting with life-sized props and figures.**

- **Address claims that gamers are not performers using performatology studies and data that games are becoming more performative.**

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