



deGendering Games: Towards the Development of a Gender-Inclusivity Framework (GIF)

Introduction

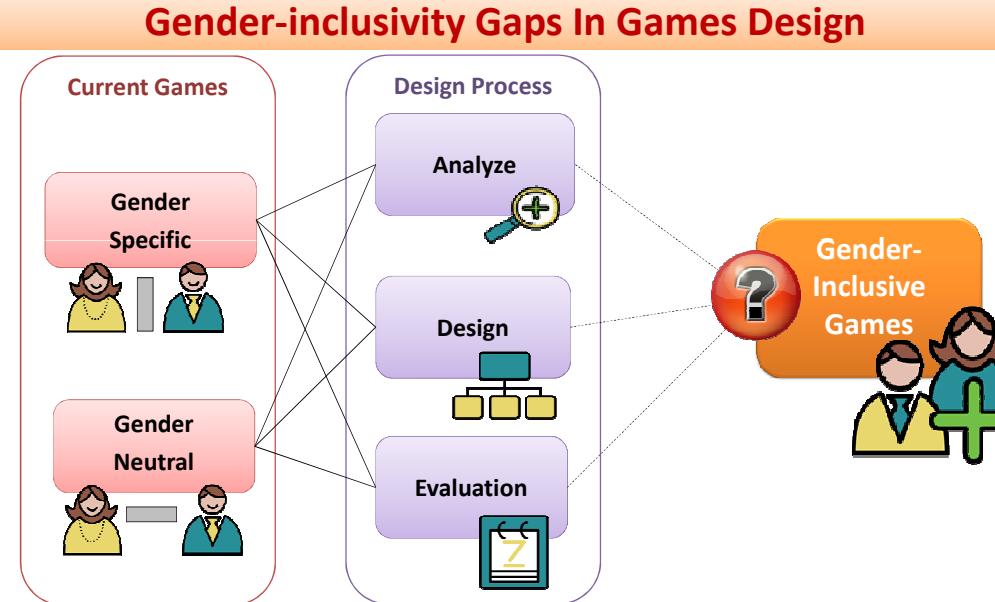
Gender-inclusivity in games may support certain features and in turn may even determine the features of applications built based on it. This poses a challenge: although we have good techniques for analyzing, designing and evaluating current games, our techniques for gender-inclusive games are much less formed. A framework was proposed to provide a theoretical context and scope about gender-inclusivity in games. The framework defines gender-inclusivity in three components: (1) gameplay, describes the game behaviour; (2) content, describes the aesthetics content and; (3) genre, indicates the type of game.



Gender issues in games are concerned with:

- how different gender competes and their style of conflict resolution [2], [4], [9], [10].
- how each gender responds to stimulation [10];
- how each gender views rewards in games [5], [10];
- which genre and game content each gender prefers [6], [11], [12], [13], [14], [15];
- what kind of play environment each gender prefers [1], [7], [10]; and
- what kind of design features each gender prefers [3], [8], [10].

It reveals a number of distinct differences between a female and male player in terms of gameplay styles, genre choice, preferences in game content, play environment and design preferences.



When creating a game, designers add features to their design with the intention to enable certain gameplay experiences. However, there is a degree of separation between the desired gender-inclusive experience in games and the mapping of that experience.

Currently, the determination of gender-inclusive features in games is not particularly documented and is largely based on a designer's experience and intuition. These were progressively developed based on prior designs.

Consequently, how can we tell if the gender-inclusive gameplay experience is really compelling or even 'right'? There is little reported experience in the issues that arise in determining what features should go into a gender-inclusive game and for determining the success or failure in the evaluation of those features.

The results of previous research were relevant and yet somewhat inconclusive. Most focused on identifying gender preferences and did not sufficiently include the application of gender-inclusivity nor does it provide guidance about how to design games with some level of gender-inclusivity.

The questions that arise from this situation include:

- How to define gender-inclusivity in games?
- How to incorporate gender-inclusivity into a game design process?
- How to accurately measure gender-inclusivity in games?

[1] Bryce, J. and Rutter, J. 2005, 'Gendered Gaming in Gendered Space. *Handbook of Computer Games Studies*'. J. Raessens and J. H. Goldstein, Cambridge, MA, MIT Press: 301-310.

[2] Carr, D. 2005, 'Contexts, gaming pleasures, and gendered preferences.' *Simulation Gaming* 36(4): 464-482.

[3] Flanagan, M. 2005, 'Troubling "Games for Girls": Notes from the Edge of Game Design. DIGRA 2005 Conference: Changing Views—Worlds in Play.'

[4] Goritz, CM and Medina, C 2000, 'Engaging girls with computers through software games.' *Communication of the ACM* 43(1): 42-49.

[5] Hoefl, F., Watson, CL, Kesler, SR, Bettinger, KE and Reiss, AL. 2008, 'Gender differences in the mesocorticolimbic system during computer game-play.' *Journal of Psychobiology* 42: 253-258.

[6] Jansz, J. and Martis, RG. 2007, 'The Lara Phenomenon: Powerful Female Characters in Video Games.' *Sex Roles* 57(3-4): 141-148.

[7] Jenkins, H. 1998, 'Complete Freedom of Movement': Video Games as Gendered Play Spaces. *From Barbie to Mortal Kombat: Gender and Computer Games*. J. Cassell and H. Jenkins, Cambridge, MA, MIT Press: 262-287.

[8] Jurafsky, YB. 1999, 'Video Games for Girls and Boys: Variability and Consistency of Gender Differences. *From Barbie to Mortal Kombat: Gender and Computer Games*'. J. Cassell and H. Jenkins, Cambridge, MA, MIT Press: 90-117.

[9] Lewis, M. 1998, 'Sugar, Spice and Everything Nice: Computer Games Girls Play.' viewed 8 July 2008. <http://www.state.com/id/2713/>

[10] Miller, L., Chakila, M. & Groppe, L. 1996, 'Girls' Preference in Software Design: Insights from A focus Group.' viewed 17 July 2008. <http://www.helsinki.fi/science/otitek/1996/n2/miller.htm>

[11] Miller, MK and Summers, A. 2007, 'Gender differences in video game characters' roles, appearances, and attire as portrayed in video game magazines.' *Sex Roles* 57(3-4): 733-742.

UNIVERSITY OF Southampton
Roziana Ibrahim¹, Gary B Wills² & Lester Gilbert³
School of Electronics & Computer Science, University of Southampton
[1] <http://www.ecs.soton.ac.uk/people/ri07r>
[2] gbw@ecs.soton.ac.uk [3] lg3@ecs.soton.ac.uk

Gender-inclusivity Framework (GIF)

GENRE			
• Action	• Children	• RPG	• Sports
• Simulation	• Strategy	• Adventure	• Classic/board
• Educational	• Racing	• Shooting	• Puzzle/Quiz
GAMEPLAY		CONTENT	
<ul style="list-style-type: none"> • Non-violent action (NVA) • Game support (GS) • Forgiving gameplay (FG) • Non-violent challenge (NVC) • Feedback system (FEED) • Variety of activities (ACT) • Personalization (PER) • Collaboration (COLL) 		<ul style="list-style-type: none"> • Character/avatar portrayal (AVP) • Gameworld Graphics (GW) • Sound/music (SM) • Storyline (STOR) 	

The **Gender-Inclusivity Framework (GIF)** contains description of gender-inclusivity components and sub-components with its corresponding behaviour.

The Gender-Inclusivity Framework (GIF) aims to:

- Help define gender-inclusivity in games.
- Guide the gender-inclusive game design process.
- Measure the level of gender-inclusiveness in games.

The components are (1) *gameplay*, which describes the game behaviour e.g. conflict resolution, feedback, challenge and flexibility, (2) *content*, which describes the game content including character/avatar, music, storyline and game world graphics and; (3) *genre*, classify games into 12 broad genres.

Potential Use

- Serves as a reference point.
- Serves as a boundary.
- Serves as a filtering tool.
- Serves as a design guidelines.
- Serves as a measuring tool.

[12] Ogletree, SM and Drake, R 2007, 'College students' video game participation and perceptions: Gender differences and implications.' *Sex Roles* 56: 537-542.

[13] Proctor, S. 2005, 'Gaming in the UK: Digital Play, Digital Lifestyles.' viewed 17 July 2008, http://open.bbc.co.uk/research/research/BBC_UK_Games_Research_2005.pdf

[14] Roberts, DF, Foeth, UG, Rideout, V, Brodin, M. 1999, 'Kids & Media @ The New Millennium: A Comprehensive National Analysis of Children's Media Use.' viewed 17 July 2008, <http://www.kff.org/entmedia/1525-index.cfm>

[15] Subrahmanyam, K. and Greenfield, PM. 1998, 'Computer Games for Girls: What Makes Them Play? From *Barbie* and *Mortal Combat*.' *Gender and Computer Games*. J. Cassell and H. Jenkins, Cambridge, MA, MIT Press: 46-71.