Understanding Avatar Customization Affordance in Gender Expression

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Keywords

Avatar customization, interface, gender expression

INTRODUCTION

Leading up to the launch of the latest action adventure game series *Saints Row* (2022), Volition released an avatar customization system named *Boss Factory* for players to pre-create their own avatars. Unlike other games, it offers no gender selection, but instead a 'build triangle' for players to adjust body shapes. Players can control the bone structure, chest, and groin shapes using additional sliders. *Boss Factory* boasted an ambitious statement: "there are no gender boundaries or restrictions; goodbye binary".

Although the treatment of gender in *Saints Row* may represent a trend that videogames are becoming more gender inclusive (Shaw 2017), it is not the primary choice of existing games. Using a binary slider to determine the gender/sex of the avatar is more common, however sex and gender are often confused (Drenten et al. 2019). The terms "sex" and "gender" are not the same: sex describes individual biological differences, while gender is a socio-cultural construct (Hyde et al. 2019; Torgrimson & Minson 2005). According to Butler (1990, 191), gender is considered "a stylized repetition of acts" with a politically enforced performativity instead of a fixed identity, suggesting that a simple slider could not entirely express a person's gender. So, what does the gender/sex option determine? And how do the other options collectively constitute the player's gender expression?

This ongoing research focuses on the avatar customization interface and the customizing process itself. It aims to understand how this interface can afford the gender expression of players. Early research was conducted on 15 game customization interfaces. Selected games encompassed a wide range in terms of genre, theme, style, platform, and release time. The analytical framework in this research is based on the Avatar Affordance Framework which was proposed by McArthur et al. (2015). It compares the various aspects of gender options within different games. The Avatar Affordance Framework is composed of six attributes of interface widgets: 1) **Function** describes the purposes of the widgets; 2) **Behavior**

refers to the range of player's available choices; 3) **Structure** is the technical description of the widgets; 4) **Identifier** presents the textual or symbolic descriptions of the widgets; 5) **Hierarchy** indicates the order of widget presentations (Number "0" indicates the option before entering the customization system); 6) **Default** refers to the appearance of the widget before making a choice. For this research, we are mainly interested in the representations and multiple meanings behind the options, hence we omitted *Behavior* and *Structure* from analysis. Meanwhile, we expanded *Function* into *Appearance* to provide specific customization details.

For each game we examined every interface hierarchy in the avatar customization process to determine what avatar features are controlled by the gender option, and what impact that has on subsequent options. Table 1 shows the initial findings from the selected 15 games. Based on the available gender options we group them into roughly three types for discussion.

No.	Games	Identifier	Appearance	Hierarchy	Default
1	*Animal Crossing: New Horizons* *	Please Choose Your Style	Symbol	0	None
2	*Cyberpunk 2077*	Body Type	Body Shape, Bone Structure, Facial Hair; *Face*	1	None
3	*Disney Dreamlight Valley*	Body Type	Eyes, Nose, Mouth, Jaw, Body Shape	3	Female
4	*EA Sports UFC 4*	Gender	Bone Structure, Body Shape (Including Weight & Height), Facial Hair, Body Hair; *Head, Hairstyle, Body Type*	0	Male
5	*Elden Ring*	Body Type: Type A & Type B	Body Shape. Bone Structure, Voice, Sexual Characteristics, Underwear	0	None
6	*Lego DC Super-Villains* *	Head	Face	6	Male
		Hair Pieces	Hairstyle	5	
		Body Pieces	Body	6	
7	*Mount & Blade II: Bannerlord*	♂ & ♀	Body Shape, Bone Structure, Voice, Facial Hair, Sexual Characteristics, Underwear; *Hairstyles, Face Marking, Eyebrow Type, Voice, Teeth Type*	1	Male
8	*Nintendo Switch Sports* *	Face	Face	2	Random
		Hairstyle	Hairstyle	2	
		Outfits & Accessories	Clothes	2	
		Title	Self-description in two words	2	
9	*Pillars of Eternity II: Deadfire*	Choose Sex: ♀ Female & ♂ Male	Body Shape. Bone Structure, Voice, Facial Hair, Sexual Characteristics, Hairstyles	0	Male
10	*Rumbleverse*	Body Shape	Body Shape, Bone Structure, Sexual Characteristics, Underwear	1	Male
11	*Saints Row* *	Figure	Bone Structure	2	Female
		(Body) Build	Body Shape	3	
		Chest Size	Chest	2	
		Groin Size	Groin	2	
12	*Stardew Valley*	♂ & ♀	Bone Structure (Height, Foot Size)	1	Male
13	*The Elder Scrolls: Online*	Gender	Bone Structure, Voice, Sexual Characteristics, Adornment	1	Male
14	*The Sims 4*	♂ & ♀	Sexual Characteristics, Underwear	2	Random
		Gender	Physical Frame, Clothing Preference, Ability to Pregnant, Toilet Standing	3	
15	*World of Warcraft*	♂ & ♀ (Male & Female)	Sexual Characteristics, Underwear, Facial Hair, Accessories; *Hairstyle, Face, Race Features*	1	Random

Table 1. Avatar affordances data for gender. Games marked with an asterisk (*) do not have definite gender options; in *Appearance*, options in italics are influenced by gender options, e.g., hairstyle may indicate that female avatars will have more/less hairstyle options.

In the first type of games, one of the two terms is used as an umbrella term for both gender and sex. As a result, gender and sex present a confusing yet interchangeable definition that is ostensibly based on the avatar's appearance, while encompassing both biological and sociocultural expressions. Examples include *Pillars of Eternity II: Deadfire* and *EA Sports UFC 4. The Sims 4* represents the second type of games, which splits gender and body type, and allows players to choose separately under both categories. However, gender and sex are still confusing due to the complex intertwining of the two concepts (Hyde et al. 2019), even if it gives the players more options to customize body types. Contrasting that with *Saints Row*, which gives players more flexibility and brings space for gender-diverse expression, representing the third type of games. They have no explicit gender or sex options. Instead, these games allow players to express gender on a wider gamut, including sexual characteristics, clothing, or voice.

How can these intricate options affect players' experiences when performing new game avatar creations? The next step will include semi-structured interviews with players so that we can explore the player's opinions on these different types of games, and if or how gender emerges as part of the character creation process. Overall, this research seeks to understand the affordance of avatar customization interfaces in gender expression by exploring and analyzing the options that contribute to the avatar's gender construction. It provides game designers with new insights on how gender inclusiveness and fluidity can be better reflected in the avatar customization system.

BIO
Yisong Han is a MRes of Design student in the Faculty of Art, Design and Architecture at Monash University. His dissertation focuses on the gender affordance of the avatar customization in videogames with a perspective beyond binary gender.

Xavier Ho is a Lecturer in interaction design at Monash University's XYX Lab and SensiLab. He is also a Junior Visiting Chair in Sexuality Studies at the Hunt-Simes Institute within the University of Sydney and curating a queer games exhibition Pride at Play with a team of games researchers and developers.

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