

The Role of Interface in virtual Gender Representations

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ABSTRACT

This paper investigates the impact of digital interfaces on the reconstruction and deconstruction of virtual gender representations. We regard gender representations as a result of interface design and the applied semiotic code. In this case, we focus on interfaces of online role playing games. In order to investigate the different media effects on gender performance, we compare the text based game LambdaMOO with today's most popular image based world Second Life.

We show how gender performances can be restricted and expand by the interfacial conditions and discuss the deconstructive potential of textual versus visual representations.

Keywords

Gender, Interface Design, Online Role Playing Games

INTRODUCTION

In this paper, we present the results of an exploratory investigation of digital interfaces in their impact of the bodily representation and expression of gender. We exemplarily show how interfaces can restrict and expand the individual performance of gender. In this case, we also show how interfaces can confirm as well as question the bipolar gender model.

This interface analysis belongs to an overarching research project which generally explores the impact of design on gender images. It aims at developing a gender sensitive design framework in order to contribute to a more gender conscious design practice. On a political level, we bemoan an insensitive and stereotypical design practice which still reproduces gender as a historically grown and still existing hierarchy which positions men superior to women. On an empirical level, we analyze artifacts from an interfacial perspective drawing attention to the applied categories and design strategies which preserve or modify gender images. We regard interfaces as the designers' materialized - more or less conscious - assumptions about gender. In this context, we concentrate on one part of the user's gender experience which is determined by the respective interface design and ignore the other part which derives from the



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Appealing to the social responsibility of designers and also programmers, we do not want them to prevent from designing stereotypically at all, but we want enable them to decide consciously about their social and cultural contribution and point out alternative strategies for gender representations.

In this case, we refer to direct bodily representations in form of virtual characters of online role playing games. We are especially interested in exploring interfacial aspects which offer alternative and unconventional ways besides or between stereotypical images of femininity and masculinity. Finally, we want to deduce implications for a gender sensitive design practice and software development and also discuss the effects of textual versus image-based representations.

BACKGROUND

Virtual communities, especially MUDs, have raised a lot of attention of the social sciences and still are very popular objects of investigations, because of their disembodied conditions [9, 16]. They are declared as "social laboratories", "identity laboratories" and "spaces of pure gender" [4, 28, 29] and for these reasons are even reflected as deconstructing media [16, 28].

Virtual spaces question the concept of identity which originally referred to the idea of a body as closed unit. They question the body and its gender as natural, unchangeable biological conditions by unmasking them as variable cultural constructions. Besides the physical, the body and gender are revealed as significant carriers of cultural meanings which provide the basis for communication.

Taking face-to-face communication as a basic model of interaction, the body communicates by its cultural connotations of its outer appearance and by its behavioral expressions like facial expressions, gestures, vocal intonations and accentuations which are very important to understand the individual meaning of the communicated content [21]. Especially the aspect of gender plays a crucial role in communication. It is supposed to be the most guiding information for interaction [10, 16] Being polite, e.g. opening the door for someone is often a decision made in dependence of the counterpart's gender [21]. Not knowing about the counterpart's gender causes behavioral confusion [2, 16].

Today, disembodied and virtual experiences have become a part of our ordinary life. ICT transfers face-to-face communication into an interaction with hard and software interface. In this respect, we understand the term 'virtual' in the sense of 'immaterial and in opposition to 'real'. Referring to Descartes' metaphor of a free mind imprisoned in a restricted body, we regard virtuality as a human property to transcend the physical [32]. In this sense, also culture could be regarded as virtual space. In reference to Haraway's concept of cyborgs [12], this enhanced understanding of 'virtuality' offers the possibility to interrelate social, cultural and computer generated spaces of interaction. It promises to get deeper insights in the relationship between human beings and their environments and tools.

Virtual experiences as real experiences with real consequences. Therefore designers and programmers have to be aware of the immaterial properties of the body and the effect of gender on communication. They do not only make ICT usable, but also culturally significant. Consequently, designers and programmers also deal with the cultural constructions and implications of gender which have to be reflected by their screen and interaction designs. Their interfaces are carriers of their assumptions about the respective target group and the context of use. Moreover, they are also expressions of their more or less explicit cultural values and norms. In this context, we asked:

Do they really use the freedom of disembodiment to explore alternative gender experiences by their designs and software features?

PROBLEM & KNOWLEDGE GAP

This research project derives from our complaints about artifacts which are explicitly promoted as gender appropriate solutions, but instead confirm existing clichés about masculinity and femininity. Although the design practice has already been critically reflected from a feminist perspective [7, 23, 25], the aspect of gender is still not sufficiently reflected. They mainly regard interfaces from the following from the point of view of formal-aesthetic [1, 19], from the perspective of usability [16, 22], from the angle of interaction-design [8, 24].

Designer can be regarded as victims of the 'omnipresence of gender' [30] or the dominance of the 'theory of gender dichotomy in everyday life' [15]. That means, gender seems to be an unchangeable aspect of nature and still make designers blind for the unconscious or stereotype gender dimension of their 'neutral', respectively gender appropriate artifacts.

RESEARCH PERSPECTIVE & RESEARCH QUESTIONS

In contrast to a sociological point of view, a conventional design perspective or technological requirements, we add a new aspect to design and technologically driven inquiries in two respects:

- By taking the body as a benchmark for analyzing gender representations of digital interfaces.

- By investigating the virtual body and its gender representations from an interfacial point of view.

Our investigations and reflections are guided by the following questions:

- Which impact does the interface and the technical conditions have on gender performances in the sense of preserving, respectively modifying traditional gender images?
- Which assumptions about gender are incorporated in the interface design and programming?
- Which impact does the symbolic code (text / image) have on the gender performance?
- Which categories are offered and which design strategies are applied to create gender?
- Does the interface support individual gender expressions and how?

OBJECTS OF INVESTIGATION

LambdaMoo and Second Life are two examples to illustrate how the interface design and the way of programming restrict or expand self-expressiveness and gender performance. They are especially suitable for this purpose in two respects: 1. They directly refer to bodily representations in form of virtual characters. 2. They base on different semiotic codes to compare the effects of opposite interfaces on the virtual embodiment of gender: LambdaMOO as text-based world is contrasted with the image-based world of Second Life.

METHODOLOGY

We use the methods of content analysis and participatory observation, the first to explore the interface with its options and tools to create virtual gender representations. The latter in order to investigate the effects of the interface features in a self exploration. Our analysis is structured by the dimension of the body which derives from the investigation itself. Within these bodily categories of body, different aspects of gender are identified:

Body presence

- modes of existence

Personality / individuality

- forms of personal performance, non-verbal communication (facial expressions, gestures, vocal intonations and accentuation) and emotional expressions

Patterns of gender

- categories or models of gender

Behavior and spatial movements

- modes of behavior, actions, spatial orientation and navigation

Communication and interaction

- modes of speaking and interacting with each other

RESEARCH RESULTS

In the following, we give a summarizing overview about how the different bodily aspects are treated by the respective interface of LambdaMOO (Fig. 1) or Second Life (Fig. 2) referring to their effects on the gender performance.

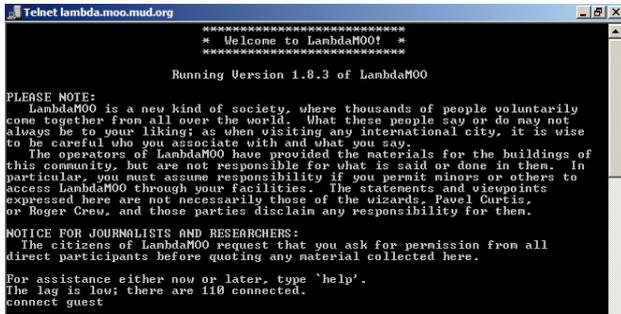


Fig. 1 Interface of LambdaMOO



Fig. 2 Interface of Second Life

Body Presence

In LambdaMOO, the only bodily representation of a player is his/her nickname. It can be voluntarily chosen and modified at any time (Fig. 3.1). The nickname can address more or less explicitly cultural associations of gender. In this case, the virtual persona calls 'Magenta' (Fig 3.2.) – a color which is more associates with a female character in western societies.

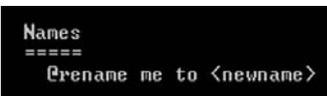


Fig. 3.1 Rename Command



Fig. 3.2 Nickname

In Second Life, the player is represented by a nickname and an avatar. In this case, the availability of the nickname is checked by the system at the first registration (Fig. 4.1; Fig. 4.2). After the confirmation, it is not allowed to change the name again. Additionally, the player has to choose his bodily representation out of a default set of 6 male and female avatars (Fig. 5) which then can be modified individually by the 'Appearance Editor'.



Fig. 4.1 Choose sure name



Fig. 4.2 Availability-check of the name



Fig. 5 First set of avatars

Personality/ individuality

LambdaMOO offers a command for describing the persona's character which then can be read by other players (Fig. 6). Moreover, actual feelings and moods can be communicated by using the emote command (Fig. 7).

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How to Describe Yourself
=====
@describe me as <text>

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Fig. 6: Self-Description Command

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Non-verbal Communication
=====
emote <text>
:<text>

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Fig. 7: Emote Command

Editing the body

Within Second Life, the central tool for modeling the player's virtual character is the 'Appearance Editor' (Fig. 8.1) which offers a lot of options to detail the bodily properties. This tool offers the common gender categories 'male' and 'female', but also allows creating transgender images to a certain extent (Fig. 8.2.; Fig. 8.3).



Fig. 8.1 Appearance Editor

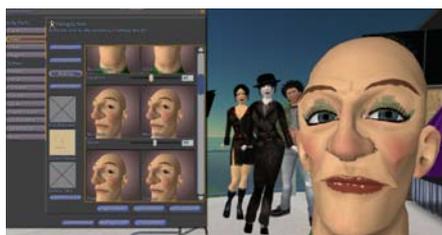


Fig. 8.2 Male avatar with make up



Fig. 8.3 Gender switch male to female

Body Language

The avatars body language consists of gesture sets which are separated within common and gender specific gestures. The common gestures of male and female characters are the same. Consequently, the body language is predefined and very restricted. It can be individualized if the player posses the appropriate programming skills.

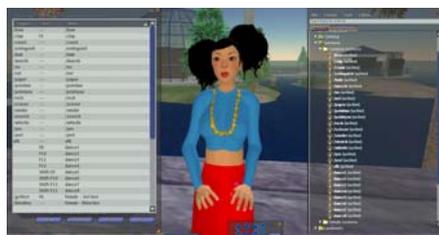


Fig.10.1 Common gesture set



Fig.10.2 Common gesture set (identical between male and female avatars)

Self-Descriptions

Analogue to LambdaMOO, the player also has the opportunity to add self description in a profile window (Fig. 9) which even makes a connection between the second and the first self.



Fig. 9: Profile Window for Self-Descriptions

Patterns of gender

LambdaMOO offers 10 different gender categories which also include categories of social status (royal) or a persona l attribute (egoistical). Selecting one of these categories determines the displayed personal pronoun of the character. The category 'Spivak' is an invention of LambdaMOO which indicates 'genderlessness'. It shall

Available genders: neuter, male, female, either, Spivak, splat, plural, egotistical, royal, or 2nd

Fig. 10: Gender Categories

prohibit other players to address someone in a sexual/gendered manner at all, refuse to be address as male or female character. Changing its gender category is possible at any time (Fig. 11).

```

Characters & Gender
=====
@gender
@gender <gender>
    
```

Fig. 11 Re-Gender Command

Gender categories and images

Second Life first forces their players to decide between male and female avatars (Fig. 5) which later can be individually modified. But the avatars are just males and females on the surface. After undressing them, ‘Spivaks’ appear (Fig 12.1). Sexual attributes, in this case masculinity can be emphasized or marginalized by the genital area of the trousers (Fig. 12.2., Fig. 12.3).



Fig. 12.1 Male avatar without genitals



Fig. 12.2 Edit masculinity via trousers (big)



Fig.12.3 Edit masculinity via trousers (small)

Potentially, it is possible to change the avatars gender by selecting the opposite gender category offered by the ‘Appearance Editor.’ Unfortunately, the gender specific

gesture set do not switch accordingly. Moreover, female to male avatars get problems with their clothes which do not

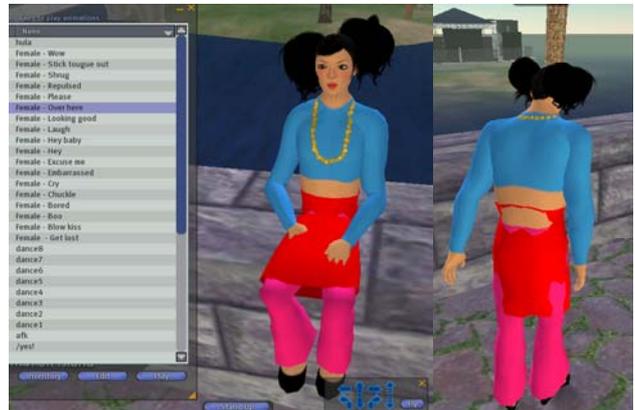


Fig. 13 Female-to-male avatar with unfitting clothes and gestures set fit any more (Fig. 13).

Gender specific gestures

The body language differentiates between male and female gestures which refer to common gender stereotypes. The male gesture set consists of 12 items (Fig. 13.1), while the female gesture set consist of 18 items (Fig. 13.2) consolidating the common sense that women are generally more emotional than men, explicitly articulate their emotions (cry, embarrassed), love to coquet (hey baby), set a high value on their appearance (looking good) than men.



Fig.13.1 Male gesture set



Fig.13.2 Female gesture set

Behavior and spatial movements

Within LambdaMOO, the virtual characters walk through the textual environment by moving around commands which consist of cardinal points (Fig. 14). These commands

simulate spatial movement by causing a change of environmental descriptions

In Second Life, spatial movements are stereotypically programmed. While male avatars walk and sit bow-legged, female avatars sit with closed legs and walk with swinging hips (Fig. 15.1, Fig. 15.2).



Fig.15.1 Gender stereotype walking



Fig.15.2 Gender stereotype sitting

Communication and Interaction

The personality is mainly developed within the progression of communication within LambdaMOO. Therefore the player can decide about how much the gender aspect shape the self performance, unless the style of communication and the used words can disguise a player as male or female besides the selected gender category and selected nickname. In this paper, gender specific forms of communication are out of scope.

With the shout command textual contributions became visible for everyone who is actually online. With they say-command (Fig. 16.1), players could post messages which just became visible for the ones who are at the same place, in the same room. And the long-distance-command (Fig. 16.2) enables communication with remote characters.

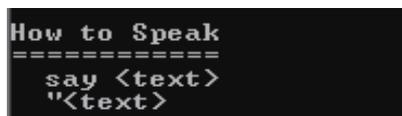


Fig. 16.1 Chat-Command



Fig. 16.2 Long-distance-communication Command

Second Life potentially offers the same communication commands. Say-commands for local messages, shout command to post message to everyone, the Instant Messenger option for communication with players who reside in remote places. But in contrast to LambdaMOO, the personality is much more defined by the outer

appearance of the avatar than by its textual contribution. Communication between avatars is just displayed as little speech bubble at the bottom of the interface which disappears quickly. In this respect, verbal interaction as tool for self expression is inferior to the visual self performance within the dominant graphical environment of Second Life (Fig. 17).



Fig. 17: Marginalization of communication within the graphical environment of SL

CONCLUSION

The comparison demonstrates how interfaces can restrict or expand individual gender performances and preserve, respectively deconstruct the bipolar model. It also reveals the underlying assumption of gender: Second Life is a conservative space, just offering the common gender categories of male versus female. Although the 'Appearance Editor' – the central tool for editing the virtual body - allows creating transgender images to a certain extent, Second Life sticks to the common model: In case of gender switches the gender specific gestures set does not shift correspondently. In case of a male-to-female modification, the avatars clothes do not fit any more. Moreover, the patterns of spatial movements and the body language still refer to stereotypes of masculinity and femininity. In contrast, LambdaMOO questions the analogue gender model by violating and expanding it up to 10 categories.

DISCUSSION

From a historical point of view, LambdaMOO and Second Life represent different stages of technical developments. They even may be regarded as examples for a cultural change which is denoted as 'pictorial', 'iconic turn' [18, 30]. Within the conference, we may reflect the consequence of this cultural shift on gender performances and discuss about the deconstructive potential of semiotic codes.

Referring to Pierce's theory of signs [20, 26], images denotes iconically or indexically due to its similarity with the object of reference, while words denotes symbolically by cultural convention. From a rhetorical point of view [11], images communicate by (seemingly) evidence, while text argues by logical conclusions. "Language systems may be much better equipped to deal with non concrete world of

ideas and abstractions (...), but they are not nearly so conveying precise information about physical realities.” [20].

Following these theoretical concepts, the interface of LambdaMOO seems to offer better conditions to deconstruct gender images not only by the variety of offered gender categories but also due to its textual code. Individuality or personality in LambdaMOO indeed derives successively within the progression of communication. Within Second Life, the individuality and gender is mainly expressed by the outer appearance of the virtual character. Communication is just visible in small speech bubbles which disappear after a while. In this case, the graphical environment of Second Life indeed marginalizes textual contributions.

We do not want to advice in favor of one semiotic code referring to the deconstructive potential of gender. But this comparison may inspire designers and software developers to think and trigger a discussion about the appropriate proportions of text and image of an interface.

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