

Chapter 3

The Gendered Nature of Chatbots: Anthropomorphism and Authenticity

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ABSTRACT

The majority of chatbots are built, by default, as women. In doing so, dangerous stereotypes and behaviors are perpetuated by those responsible for designing the chatbots, and ultimately the users. It is therefore crucial that gender identity and expression are well understood by all those involved in designing the chatbots. This chapter explores this alongside a literature survey regarding feminist methodologies, anthropomorphism, and authenticity to put forward three recommendations. That those responsible for building chatbots should keep up to date with research, look to widen the diversity of their own team, and to integrate ethics in their design processes. Only in doing so will chatbots that are fit for purpose be built.

INTRODUCTION

This chapter outlines a review of existing literature pertaining to gender and anthropomorphism in chatbots. Anthropomorphism is referred to in this work as the attribution of human characteristics to inanimate objects, animals, or others (Duffy, 2003). chatbots, by default, are frequently designed to present as women or female

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(Fortunati, 2022). On the surface, this may not appear problematic; it could be argued that these decisions are random. But with many of the major voice interfaces being built to present as women, consideration must be given to both the reason for this, and the potential impact this might have. There is an inherent tension between designing chatbots anthropomorphically, as users will always see a chatbot through a gendered lens, and in a current default gender or aim for gender neutrality. This tension will be discussed at length throughout this chapter.

Using feminist theories (De Hertogh et al., 2019) and existing research pertaining to both gendered language and the design of chatbots in a software development process, this chapter will outline many potential areas where gender stereotyping may cause issues when it comes to chatbots, their use and the perpetuation of stereotypes, as well as provide recommendations to reduce the impact this can have. Using the example of marketing, and aligning this with how the brand's personality which fits with the user's self-image, or, self-brand congruence (Grohmann, 2020), this chapter suggests that the gender expression of a designed chatbot should be intentional, not presumed, and could in fact be a tool for brands and those building the chatbots. Three recommendations are derived from this (see the section entitled, 'Recommendations') and should be considered by anyone who is involved in the design and creation of chatbots. Firstly, that chatbot creators should keep up to date with current research. Secondly, that they should work not only on widening the diversity of their own team, but work more closely with stakeholders, for example users and marketing. Thirdly, teams should make ethics a part of their design process.

FEMINIST CHATBOTS

Before the impact of gender regarding chatbots (from the beginning through to their use) can be understood, there must first be an acknowledgement of the feminist methodologies and theories which already exist. In doing so, chatbot designers and creators can make full use of existing understandings that allow for equality. Furthermore, there should be an acknowledgement of Intersectionality, not as simply the overlapping of characteristics, but as a product of Black feminist theory (De Hertogh et al., 2019).

Feminist methodologies, generally, but also when applied to HCI, are built and operate on the understanding that gender will have an impact on anything built or researched previously, due to being built as part of a patriarchal society and will have an impact on anything being built going forwards (Ashcroft, 2022a; Sprague, 2016). With chatbots increasing in popularity (Seaborn et al., 2022), it should be considered where the responsibility lies to ensure that they are built for purpose, and therefore are able to be used by as much of the population as possible, without

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