

# FEMINIST THEMATIC DISCOURSE ANALYSIS IN CS

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## ABSTRACT

How conversation takes place is a well-researched area in the field of Linguistics, particularly when it comes to how Feminist Methodologies are applied to this. What remains to be seen, however, is the application of these techniques in the field of Computer Science. Although some research has started to emerge in this area, this paper argues that there needs to be an examination of the subtleties in conversation, through a union of three methodological practices: thematic analysis, feminist methodologies, and discourse analysis. This reflective paper summarises a consideration on discourse and conversation analysis, the existing cross over with feminist research, and presents areas of further research within the field of Computer Science.

## KEYWORDS

Conversation, Discourse, Feminism, Methodologies, Design

## 1. INTRODUCTION

When considering the analysis of conversation in design, there are a number of methodologies outlined in the field of linguistics, many of which have already been adapted to be in line with theories surrounding Feminist Methodologies (Sprague, 2016) and therefore may prove valuable. Conversation Analysis (CA) and Discourse Analysis (DA) both offer differing advantages, and pose contrasting limitations, but both do allow for the analysis and understanding of how conversation takes place (Wooffitt, 2005). How these can be brought into alignment with Feminist Methodologies, as stated, is an area that has been researched over many years within linguistics, with Boden (1994) and Holmes (1986) looking at this more historically, and scholars such as Stokoe and Weatherall (2002) leading the narrative more recently. What remains to be seen, however, is how these can be applied thematically to the field of Computer Science (CS) and the sub-fields within this.

This paper will outline the existing areas of research and understanding, and how these could overlap when it comes to methodologies within the field of CS, not just linguistics. The effect a field of research has on a methodology is well understood (Wisniewski, et al., 2018), as context is always significant in research, and perhaps even more so when Feminist Methodologies are applied. As this applies to CS, and Human Computer Interaction (HCI) within this, it is important to consider that Feminist Methodologies and “Feminism seems well positioned to support HCI’s increasing awareness and accountability for its own social and cultural consequences” (Bardzell & Bardzell, 2011). When it comes to Feminist Epistemology, however, “there has been debate between feminists about whether there can be feminist epistemology” (Barbour, 2018), but if epistemology refers to the theory of knowledge and understanding, and the subjects of the research 'have gender', then the argument from feminists that “gender and individual identity are significant in the process of becoming a subject and a knower” (Flax, 1993) (Barbour, 2018), then surely they must be relevant in social research. How this applied in CS and HCI, however must be considered, they are areas of research where often logic and structure are seen as important values, and therefore this may clash with the more general understanding of how knowledge is formed. As stated by Hancox-Li & Kumar (2021), “feminist epistemology has long taken a critical stance towards fully formalized systems, instead emphasizing the interactive nature of knowledge creation and the importance of exploring multiple possible meanings”. This could be argued to be even more important to consider where gendered language is the topic of research, as this research quickly became, as the misunderstanding of language, or its interpretation is key to understanding the effect of gendered language in CS.

## 2. CONVERSATION AND DISCOURSE ANALYSIS

CA and DA offer similar approaches in the “qualitative analysis of the functional and sense-making properties of language” (Wooffitt, 2005). The similarities in these methodologies cover ‘talk’ as a topic for analysis, and the way in which this is done in both approaches could be argued to be quite similar when it comes to their break down of conversation. The main differences between CA and DA lie in substantive and methodological issues (Wooffitt, 2005). These differences lend themselves to discussions surrounding Feminist Methodologies by each method, allowing a different level of detail to be applied to conversation depending on the aim of the analysis. It could be suggested that it should be the aim of both practices to allow for Feminist Methodologies to be applied, but with the combination of Thematic Analysis, this may allow a broader approach to be applied when it comes to CS.

### 2.1 Thematic Conversation Analysis

Thematic Conversation Analysis (TCA) is the process of applying Thematic Analysis methodologies onto Conversation (Ashcroft, 2020). Whilst CA relies heavily upon the coding of conversation and specific attention being given to intonation, TCA is more concerned with how things are said through phrasing, as opposed to the overlaps, and more detailed structure (Ashcroft, 2020) than CA is traditionally interested in (Wooffitt, 2005).

TCA does, however, bear quite a few resemblances to DA, in that it focuses on the interactions as opposed to the more detailed parts of the conversation, allowing for themes to then be extracted from this. How this applies to feminist theories is already well understood by the linguistics community, but the impact this has on CS and the products which are continuously designed, used, and built by the CS community has yet to be uncovered in much depth. There is an understanding of the need for variety when it comes to gender to be present and involved in the process, but seemingly very little practical research has been done when it comes to the direct impact gendered language has on CS. Furthermore, this could be supported with a systematic study or literature review to fully understand the potential areas of CS this may impact. However, to understand how this can be applied further, the principles of Feminist Conversation Analysis should be comprehended, and then considered with regards to CS itself.

### 2.2 Feminist Conversation Analysis

The fundamental principle of Feminist Methodologies lies in the assumption that any prior research or literature may be built upon a patriarchal bias (Sprague, 2016). The removal of this could be argued to be simply good research practice, and any researcher should strive to have no bias in their work, yet since bias is often unconscious, a conscious effort should therefore be made in order to overcome this. Furthermore, Bardzell and Bardzell (2011) clearly outline the differences between “Gender and Computing” as a field of research, and “Feminist HCI methodologies” as the application of feminist methodologies to the field of HCI. This important distinction must be considered throughout this reflective paper, as although the field of this researcher is Gender and CS, and within this HCI, the aim of this reflection is to understand and explore Feminist CA in context. Therefore, when Feminist Methodologies are applied to CA, work by Stokoe and Weatherall outlines how an understanding of gender, and the way in which boys and girls are taught to speak, leads onto how men and women do speak. This understanding is paramount when carrying out any observation, recording, and analysis of conversation (Stokoe & Weatherall, 2002). Throughout their work, they pose that many classic CA traits are not immune to being affected by gender (Stokoe & Weatherall, 2002). Furthermore, the researchers make comment to the widely argued discussion that “gender difference research is counterproductive for feminism because it reifies the gender dualism and perpetuates stereotypes”. However, they also state that although gender is something they “have” and not something they “do” (Stokoe & Weatherall, 2002), it is important to consider the affect that this, and any other trait a person has, will have on conversation that takes place. This includes not only how words are spoken, but how they are received. What shall be discussed in Section 3 of this paper, is the impact this may have on the field of CS, when conversation takes place.

### 3. REFLECTION

Applying a Thematic Analysis to discourse, with the understanding of the principles of Feminist Conversation Analysis, could be argued to be a vital part of understanding any process with Computer Science. Conversation is seemingly one of the main ways in which decisions are made and interactions take place, even if these are done digitally (Brooke, 2021). Although efforts are continuously made to improve the significance and importance of interdisciplinary research, there seem to be only a few areas of CS where the intersection of gender, language and CS have begun to be uncovered (Ashcroft, 2020). The importance of this cannot be understated; only by looking for existing areas of research, their suggested methodologies, and applying these to CS, can we uncover if there are any issues caused by gender, and only then action be taken, to overcome these issues.

Traits of conversation, such as turn-taking and overlap, consistently referenced throughout a range of CA literature, must be analysed in industry practices within CS, and other fields within CS (e.g. CS Education), to uncover their significance. Failing to do so would be a waste of an opportunity provided by the field of linguistics.

### 4. FURTHER RESEARCH REQUIRED AND CONCLUSION

If all members of the CS community are not only recruited into the sector without bias, but then listened to and respected within the community, the advantages of this cannot only be seen in the bottom line of an organization (Hunt, et al., 2018), but lead to higher employee retention (Holtzblatt & Marsden, 2018), an increased sense of belonging (Widdicks, et al., 2021), and the creation of services which contain fewer amounts of bias, and therefore advantage the customers more significantly (Criado Perez, 2019). Therefore, further research in this area is essential to uncover any potential changes which should be implemented in the sector to ensure that when women, or any under-represented group for that matter, are in the room, they are heard, listened to, and their views are given the same heed as any other.

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