

Comparison of the Metaphorical and Concrete Uses of the Word *hold* across Gender

Kafungo Wangure^a

^aCarnegie Mellon University – Qatar, Alum

Plain Language Summary

The way we use language can provide insight into many social issues, including how gender is conceptualized in society. This study examines the metaphoric usage of the word *hold* with gender pronouns to uncover patterns of gender representation. Using a 100-million word corpus, this analysis reveals that women are more often portrayed as being held, while men are frequently depicted as holding objects, ideas and women. These findings and others shed light on the conceptualization of gender embedded in language usage that could influence how we perceive and understand gender roles in society.

Publication Category

Course-based Assignment

Academic Context

In *Introduction to Corpus Linguistics*, students complete a high-stakes assignment in which they analyze a corpus of texts using some combination of quantitative and qualitative analyses. The balanced combination and the specific computational methods applied depend on each student's research question(s). As a methods course, close attention is paid to the intentionality of analytical choices and the ability to communicate those intentions in the project.

Introduction

The study of language is deeply interwoven with the study of gender and ideology since discourse is both shaped by and shapes our world view. Language both reflects and influences the communities in which it is used because people use it to perform and negotiate their identities (Johnstone, 2008). Language also contributes to the formation of individual and group identities, including gender, ethnicity, and social class by providing the vocabulary and linguistic patterns for expressing and interpreting meaning. Therefore, studying aspects of language such as metaphor can be useful for understanding the ideology and identities of its users. When we use metaphors, we take a concept or experience from one domain (the source) and map it onto another concept or experience (the target domain) to create a meaningful connection. For example, *swallowing a pill* and *swallowing an argument* shows a mapping of the same word from a tactile domain to a metaphorical one. Since this mapping is a result of how language users interact with the world as language develops, it follows that metaphor is not only a stylistic tool but also an act of cognition (Stefanowitsch, 2005).

Studying the use of metaphors can inform our understanding of how they shape our worldviews and shed light on how we conceptualise and communicate ideas (Lakoff & Johnson, 1980). For example, in her 2011 study, Veronika Koller examined the complex interplay between metaphor, gender identity, and discourse. She combined discourse analysis and corpus linguistics to study how speakers and writers in politics use metaphor based on their gender, how metaphors in business magazines depict men and women, and how metaphors in marketing construct gendered discourses. She found that there is a correlation between the gender of language users and their use of metaphor, and that metaphors can influence societal perceptions of masculinity and femininity on an abstract level.

Metaphor is a subset of polysemy where there is a resemblance in word sense (Cruse, 2000). Polysemy is the capacity of a word to have multiple meanings or senses (Verspoor & Lowie, 2003). For example, *to acquire*, *become* or *learn* are different senses of the word *get*. The experiences that are represented abstractly in our conceptual thinking can be perceived and quantified by comparing the metaphorical and concrete senses of a word. In this light,

corpus linguistics is an indispensable tool for studying polysemy and metaphor. It involves the study of language as it is used in real-world, naturally occurring texts, utilising large and structured quantities of these texts, referred to as corpora. Large samples of data provide a more nuanced view of language patterns, reflecting the intricacies of polysemy and metaphor in context (Baker, 2018).

Research shows that the study of metaphor—particularly the metaphorical and concrete senses of verbs—is useful to understand the complex environments and abstract topics that they describe, such as time, life and human events (Krennmayr, 2015). This is because how our concepts interact, how we move around the world, and our social relationships are largely metaphorical. Furthermore, since we often overlook the small actions we take from day to day, studying language may serve as linguistic evidence for our conceptual system. For example, Gilquin (2008) observed that the most frequent and salient meanings of *give* and *take* that people came up with during elicitation tests are different from those in the Frown (written) and Switchboard (spoken) corpora. In the study, Gilquin (2008) presented native speakers with two occurrences of the words *give* and *take* and asked them to type the very first sentence they could think of including the word. The sentence produced for a word was taken to reflect the writer's most salient meaning of the word. He demonstrated that contrary to popular belief, the most frequent sense of a word does not necessarily coincide with what comes to mind, by comparing the results of the elicitation tests with the salient meanings of *give* and *take* in written and spoken corpora. This shows that the study of metaphors through corpus linguistics is useful for revealing how speakers of American English conceptualise their environment.

In another study, Aijmer (2004) used corpus linguistics to examine how translations can be used to understand the metaphorical and concrete senses of the word *see*. She used The English-Swedish Parallel Corpus to study the semantic features and usage of *see* across translated texts. She compared the occurrences of *see* in Swedish and the texts translated to English, ultimately revealing that only 69% of the cases of *see* were directly translated from the cognate form in Swedish. This suggested that the conceptualization of the world through the concrete and metaphorical senses of the word *see* was different in at least a third of the cases across speakers of different languages. She found that the metaphorical extensions of the verb *see* are based on conceptual frames that are culture-dependent. Aijmer (2004) notes that the metaphor-

ical extensions of a word are important for understanding the speaker's wider context.

While the comparison of metaphorical versus concrete polysemous verbs in corpora has been used to study a wide range of conceptual phenomena, it has not been used often to study gender differences. The study of polysemy across genders would not only provide a compelling site to find linguistic patterns that reveal conceptualizations of men and women, but also discuss how language can influence how its users come to view the world (Hunt, 2015). Furthermore, the use of a corpus allows us to be more fully aware about how such representations are formed, and tabulate frequencies to determine, for example, how a particular word is used to characterize males and females. Corpus studies have been used to study the asymmetrical representation of men and women in language (Baker, 2018), illustrating how language is often used to cast females into subjugated and marginalised positions. These corpus studies include the examination of generic masculine pronouns (e.g. *Every citizen must serve his country*) (Mills, 2008), the examination of address terms and titles (Baker, 2018) as well as the social implications of equivalent word pairs (e.g., *spinster* and *bachelor*).

I extend this body of research by examining gender representations through polysemy. In particular, I explore how the polysemous verb *hold* differs in usage and representation when associated with different gender pronouns in the British National Corpus 2014, and what this reveals about gender conceptualizations in modern British English. The word *hold* has been chosen because it is often used both experientially and metaphorically. Furthermore, *hold* is a stronger verb than other equally widely used polysemous verbs such as *set*, *get*, *keep*, *do*, *have*, and *be*, which often serve as helper words.

Methods and Data

The British National Corpus (BNC) 2014 was used to conduct this study. The written and spoken corpus contains 100 million English words. The corpus focuses on modern British English and includes a wide range of genres and sources, with the intention of being representative of current British English (Brezina, 2018).

In order to find all the senses of the verb *hold* in a gender context, I used the queries "{hold/V} * (him|her|he|she)" (referred to as Q1 henceforth) and "(him|her|he|she) * {hold/V}" (referred to as Q2 henceforth) on the *BNC Web* (Brezina et al., 2018) website. These searches returned 2336 hits from 666 texts, and 3401 hits from 1061 texts, respectively. Since the process of inspecting all these would

be prohibitively time consuming, I chose to sample a representative 250 entries for each query. I used the thinning feature of the BNC interface to select a reproduceible random selection. Thinning makes a best effort to select a smaller portion of the corpus that is most representative of the larger set. Thinning the BNC2014 is acceptable because it is considered a generally balanced corpus (Love et al., 2017).

I downloaded the 500 samples and labelled every concordance line based on the usage of the word *hold*. The files exported by BNCWeb were text files formatted as Tab Separated Values (TSV). Below is an example concordance row where each column is separated by a tab:

Row Number	Text Name	S-unit Number	Concordance Line
1	A06	1017	<<< He holds >>> up a cricket bat.

I added a column before the concordance line indicating the usage category of *hold*. The concordance categories used were: metaphorical (M) and concrete (C). Examples of metaphorical and concrete usage include *she held her tongue* and *he held her by the waist*, respectively. For sentences such as *he held him close*, where it was unclear whether it was metaphorical (in the *keep your enemies close* sense) or concrete (where he physically held him), I located the original text from the corpus for further context.

The TSV was viewed in the Visual Studio Code text editor because it supports a regular expression search of plain text files. To clean the data for text search, I removed the <<<...>>> delimiters used by BNCWeb to indicate the matching concordance queries and “dead” text such as 2 consecutive spaces.

The following query was used to count occurrences of male pronouns in the concordances exported from Q1:

`L.*([^\s]he|him) (\w| |\s){0,3}(hold|holds|held|holding)`

The following query was used to search the Q2 concordances in order to find the number occurrence counts of each category:

`L.*(hold|holds|held|holding) (\w| |\s){0,3}([^\s]he|him)`

L is used for brevity to represent the *M* and *C* symbols that I used. Similar queries were used to count female pronouns. These queries find a gendered pronoun and *hold* separated by zero to three words, and *hold* and a gendered pronoun separated by zero to three words, respectively.

Results and Discussion

Gendered pronouns preceding the word *hold*

Enumeration and analysis of concordances using the query “(him|her|he|she) * {hold/V}” indicated that the word *hold* was often used in a way that portrayed men in positions of power or skill, while women were associated with more passive or nurturing roles.

There were 151 occurrences of a gendered pronoun preceding metaphorical uses of the word *hold* and 91 instances of non-metaphorical uses preceded by gendered pronouns. Of the 151 metaphorical uses, 96 occurrences were preceded by either *he* or *him* and 55 preceded by *she* or *her*. Of the 99 concrete uses, 65 were preceded by male pronouns and 34 by the female pronouns (Table 1).

TABLE 1. Use of the word *hold* preceded by a gendered pronoun.

Occurrences of <i>hold</i> preceded by pronouns			
Gender	Metaphorical	Concrete	Total
Male	96	65	161
Female	55	34	89
Total	151	99	250

Table 2 shows the expected values computed from Table 1 using a spreadsheet. The Chi-square tests demonstrate that the frequency of the word *hold* preceded by the male and female gendered pronouns is statistically significant ($p=0.0054 < 0.05$).

TABLE 2. Use of the word *hold* preceded by a gendered pronoun expected values.

Occurrences of <i>hold</i> preceded by pronouns expected values			
Gender	Metaphorical	Concrete	Total
Male	76.50	76.50	153
Female	44.50	44.50	89.00
Total	121.00	121.00	242

Overall, the meatphoric usage of *hold* was notably more frequent than the concrete usage. Furthermore, male pronouns preceded the word *hold* significantly more frequently than their female counterparts.

The following are the first five concordances with a male holding a concrete object:

1. *He holds up a cricket bat*

A male character is depicted as holding a cricket bat, suggesting engagement in sports, a traditional portrayal of masculinity.

2. *I knew that, in the cold light of day, he held all the aces.*

The phrase *held all the aces* suggests a position of advantage or control, again portraying the man as powerful or in a dominant role.

3. *He held her close*

The man is shown as an emotional support, holding a woman close, implying a protector or comforter role.

4. *Akhsharumov makes the reader certain he holds a masterpiece in his hands*

The word *he* implies the writer assumes that the reader is male or that *he* stands in for both male and female readers. Contextual investigation confirmed *he* was not referring to Akhsharumov.

5. *Her hands enclosed Pertwee 's wrist as he held the lighter*

A woman holds a man's wrist as he operates a lighter. Preceding context shows she was trying to steady her hands since *the girl's hands were trembling*.

Generally, when male pronouns preceded the word *hold*, they were often presented in various contexts implying power, emotional support, possession, and skill. All concordances in the sample represented the man in a positive light.

When *hold* was used with women, it was typically associated with careful or delicate actions, often in domestic or personal settings. Most instances indicate a woman holding everyday items such as a book, a cup of tea, or flowers, suggesting more passive or nurturing roles. The holding seems to be more about care, attention to detail, or preserving something.

1. *She held Lucy's hand still to light her cigarette*

Contrasted with concordance (5) of a male holding a concrete object, the female's hand holding lighter is presented needing steadying.

2. *She held a book as if reading and sipped wine*

3. *She held a book, reached out to a tall glass of pale gold wine*

4. *On the bus to Alan's flat, she held the flowers carefully in her lap*

5. *She held her coffee cup poised above its saucer*

6. *She held half of the soap with the embedded dragon*

7. *She held the cup of tea to her mouth*

All concrete concordances in this sample show the female either holding a household or stereotypically feminine item such as flowers and soap.

Furthermore, males were extensively portrayed as holding jobs and positions while analogous representations of women within the corpus were lacking. Men were presented as breadwinners or members of management, while females were rarely held in a similar regard. In fact, there were 5 times as many occurrences where men held a position relative to women. See the following examples.

Male:

1. *He held a chair position in physics from 1937 until his retirement, publishing more than 150 papers on atomic and nuclear physics*

2. *He held a similar position a Tamla Motown before becoming the president of EMI Records*

3. *He held the job for five years and became heavily involved in*

4. *Morrisson will be literary editor; He also leaves the Observer; where he held the same position*

5. *He holds four national titles, three with Baxter*

Female:

1. *Liddell was Maxwell 's official mouthpiece on matters concerning the Scottish Daily Record and Sunday Mail, where she held directorships.*

In the only concordance where a female holds a position, the position is contextualized as being inferior to a male's position. Liddell's position is a mouthpiece for Maxwell's.

Gendered pronouns following the word *hold*

The query "{hold/V} * (him|her|he|she)" revealed that women were often depicted as caretakers in concrete contexts and as obstacles in metaphorical ones, while men

were generally depicted positively and associated with power and control.

The results show that there were 107 occurrences of a gendered pronoun followed by metaphorical uses of the word *hold* and 143 instances of non-metaphorical uses following gendered pronoun. Of the 107 metaphorical uses, 22 occurrences were preceded by either *he* or *him* and 85 preceded by *she* or *her*. Of the 143 concrete uses, 33 were preceded by male pronouns and 110 by the female pronouns (see Table 3).

TABLE 3. Use of the word *hold* followed by a gendered pronoun

Occurrences of <i>hold</i> followed by pronouns			
Gender	Metaphorical	Concrete	Total
Male	22	33	55
Female	85	110	195
Total	107	143	250

Table 4 shows the expected values computed from Table 3 using a spreadsheet. The Chi-square tests demonstrate that the frequency of the word *hold* preceded by the male and female gendered pronouns is statistically significant ($p=0.0315 < 0.05$)

TABLE 4. Use of the word *hold* followed by a gendered pronoun expected values for Chi-Squared test

Occurrences of <i>hold</i> followed by pronouns expected values for Chi-Squared Test			
Gender	Metaphorical	Concrete	Total
Male	27.50	27.50	55
Female	97.50	97.50	195.00
Total	125.00	125.00	250

These results revealed that females were significantly more often receivers of the action *hold* than males. Furthermore, women were held (in the concrete sense) significantly more often than men, and notably more physically than metaphorically.

12 of the 85 metaphorical phrases by females are of a woman holding out her hand or arm. For example:

1. *She held out her arms, and Nathan happily snuggled against her.*
2. *Without taking his eyes off of her baby, she held out her hand to help her mother up*

When women are portrayed as holding out arms, it was often for hugs or support, and helping someone up, implying a sense of caring, tenderness, and interpersonal connection. The women are portrayed as caregivers, which often falls into the traditional stereotype of women in caretaking roles.

Moreover, not only was the number of males as an object of the word *held* notably lower, but they were also presented positively as opposed to the women. For instance:

1. *If Mr Clinton believes in these things, no amount of European nervousness need hold him back*

The male is being bold, only being held back by the nervousness of others.

2. *There was nothing holding him here, except her*

The woman is shown to curtail the progression of the man. Without her, the man would move on.

3. *I've worked out a way of stalling, but it won't hold him forever.*

From the context of the sentence, the man being stalled is in a position of power. For this reason, the other individuals of unknown gender seem to be avoiding him.

4. *He allowed her to hold him but it was an effort, he was impatient to act.*

The woman's ability to *hold* the man is contingent upon his permission, underlining his control over the situation

5. *"Your sweet, milk-sop charms may be attracting him now," she'd said, "but it takes a woman to hold him."*

The woman's worth is presented as being linked to her ability to keep a man interested or committed.

Overall, women who are *holding* men are often presented as *holding* them back in the metaphorical sense. Men are represented as being restrained from reaching their potential or moving forward.

Conclusion

The goal of this study was to find patterns of gender representations by examining the polysemous verb *hold*. The study found significant differences in the ways *hold* was used in relation to men and women. Overall, men were often portrayed in positions of power or skill when the word *hold* was used—whether in a concrete or metaphorical context—while women were often depicted in more passive or nurturing roles when associated with the word *hold*. In contrast to men, women were more frequently the object of the action *hold*, particularly in a physical context. The results support previous research that found that women are often represented as inferior to men in language (Baker, 2018). The word *hold* has the overtone that the actor executing the *hold* action has power over the object or person receiving the action. Males are more often represented as holding ideas, positions and objects, while females are largely subjects of holding. These findings support the idea that society unjustly conceptualises women as inferior and that language serves to further influence how women in society are perceived (Hunt, 2015).

Despite compelling insight from this study, it is important to acknowledge limitations that might have influenced the outcomes and their interpretations. These limitations do not nullify the value of the research, but instead point to areas that could be explored further for a more comprehensive understanding of gender representations in language. This paper focuses on the word *hold* as a proxy for the usage of metaphor to represent gender. *Hold* may not be representative of how other polysemous verbs interact with gender pronouns. Future work may focus on the semantics of other polysemous verbs preceded and followed by gendered pronouns. The exploration of which classes of polysemous verbs show statistically significant differences or lack thereof in gender representation may be a promising avenue of research.

Additionally, the randomly sampled 500 concordance lines I used may not be entirely representative of the 5,737 lines that matched the search queries Q1 and Q2, or British English more broadly. Therefore, a larger sampling and labelling of the metaphorical and concrete senses of the word may yield different results. I utilized a relatively large portion of the results and took advantage of the representative random sampling feature provided within the *BNC web* interface. Therefore, the study's findings are likely representative of the larger corpus data. But even so, more research should be done to examine how stable these representations are in the larger corpus.

While the study has some limitations, it provides useful evidence that gender representations in language are manifested through metaphor. Given that *hold* is a widely used polysemous verb with strong metaphorical and concrete senses, it reveals prevalent patterns in societal conceptualizations of gender.

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