# Can You Guess My Gender?

Differences between Male and Female Writing Styles

Emily Connovich

English 430

Professor Pleiss-Morris

30 March 2015

**Emily Connovich** 

**Professor Pleiss-Morris** 

English 430

5 May 2015

Can You Guess My Gender? Differences between Male and Female Writing Styles

### 1. Preface

This paper is a discussion of gender differences in writing styles and in writing themes. However, it is important to note before beginning that the terms "male" and "female" are naturally ambiguous; one's sex does not determine his or her gender. While this paper is primarily interested in *gender*, and most of the research and findings are applicable to gender and not sex, given the time period during which many of the authors used in this paper lived and wrote, the words "sex" and "gender" may, at rare times, be used interchangeably.

As the modern research in this paper will show, men often have an informational, eventoriented, egocentric writing style and women often have a relational, rapport-driven, conciliatory
style. Better terms to use might be report versus rapport, or informational versus relational
instead of male versus female since they do not categorize a person into a gender box and do not
intrinsically argue for one being better than another. Therefore, when this paper, another author
or program calls a piece of text "male," that only means that the text is presented in a manner
that is more frequently seen in male writing than in female writing and vice versa. In that way,
the quest for a feminine writing style might be better described as "female typical" and could
apply to any gender.

This paper will attempt to demonstrate that though today, research has shown both stylistic and thematic differences between male and female writing style, male and female

Caucasian short story authors in the 19<sup>th</sup> century show very few, if any, stylistic writing differences—though they do show differences in theme—perhaps in order to gain acceptance as writers and because they had very few female authors to model themselves after.

# 2. Introduction: Feminism and Female Writing

"It is through ignorance that most readers, critics, and writers of both sexes hesitate to admit or deny outright the possibility or the pertinence of a distinction between feminine and masculine writing" (248) —or so says Helene Cixous in her 1975 essay "The Laugh of the Medusa." The strong, second-wave feminist had no qualms about calling her sisters to written arms, exhorting them to free themselves from patriarchal oppression both in and outside the written world. Women, claim Cixous, have been driven away from writing (242) so much so that with a few "rare exceptions" there have been no writings that "inscribe femininity" (245). And since, to her, writing is the embodiment of "the very possibility of change" (245), it is of the utmost importance that women get their chance to write and to define themselves as women instead of (as has previously been done) what men are not. That includes their writing styles. Cixous demonstrates these thoughts by fiercely declaring:

Women must write through their bodies, they must invent the impregnable language that will wreck partitions, classes, rhetorics, regulations and codes, they must submerge, cut through, get beyond the ultimate reserve-discourse, including the one that laughs at the very idea of pronouncing the word "silence," the one that, aiming for the impossible, stops short before the word "impossible" and writes it as "the end." (250)

In other words, Cixous believes that women's bodies—women themselves!—can be freed by women through their "subversive" (246, 252) writing used to "smash," "shatter," and "blow up" (252) preconceived notions of truth. And while she is perhaps more dramatic in her support of a

feminine writing style, the idea of a distinct style of female writing did not start with Cixous nor did it end with her.

Virginia Woolf, for instance, in her famous 1929 essay *A Room of One's Own* spends a great deal of time regarding the woman's "sentence" (79-94). Unlike Cixous, however, Woolf believes that men are not an "opposing faction" in women's writing (92). To her, there is male writing and there is female writing, neither better than the other except that women's writings have been suppressed for so long. The differences between the sexes, she argues, should be celebrated. "For we have too much likeness as it is," Woolf writes, and explains that deviations from the typical male style of writing, women's creative power, should not be "hindered or wasted" (87).

Woolf agrees with Cixous in that women both do and should have their own writing style and that furthermore, they should not force themselves or that style to be anything besides feminine. Unlike Cixous, however, Woolf believes that, even in 1929, "there are almost as many books written by women now as by men. Or if that is not yet quite true, if the male is still the voluble sex, it is certainly true that women no longer write novels solely" (79). In other words, female authors now have enough "foremothers" after which to mold their sentences. On the other hand, however, Woolf writes that "there is no mark on the wall to measure the precise height of women" (85); women have no ultimate role model, no female genius to set the standard as Woolf claims Shakespeare did for male authors.

This idea of "unclassified" (85) female writers appears to contradict her previous statement that modern women writers are descendants in a long line of female authors (80). But perhaps she is foreshadowing Alice Walker's 1984 "In Search of Our Mothers' Gardens." In her essay, Walker discusses black women trying, and often failing, to find inspiration from their

ancestors for their creativity (406-408). The high art of today's world, very similar to when Walker wrote, does not appreciate beautiful quilts made from rags and cannot recall the songs, stories, and flower gardens that the women created. In this way, modern day black women have anonymous predecessors for their own creativity—something after which to model their own art, but too transient to be a standard. Their mothers who "were artists driven to a numb and bleeding madness by the springs of creativity in them for which there was no release" (402) pass on to their daughters the "creative spark" (407) that the mothers themselves could not fully realize. This language of a repressed creative spark can symbolize centuries of women who have had their creativity, their art, their writing, ignored or cut down due to the patriarchal notion that when two things are different, one must automatically be better than another. That thought is something Woolf, Cixous, and Walker will not stand for.

While these three authors have their differences (as all authors do) they share three beliefs in common: 1) women's writings have historically been oppressed and treated as inferior to those of men, 2) it is imperative that women creatively express themselves through writing in a way that is different from men, and 3) women naturally have their own creative style that is distinct from men's. The remainder of this essay will focus on the lattermost of the mentioned similarities.

Today, as these essayists feared, we live in an atmosphere focused on the "sameness" of equality rather than the diversity of it. Having been oppressed by a binary system for so long we sought to "equalize" male and female by portraying them as "same" instead of different but equally valuable. Suggesting, as our feminist writers do, that men and women are distinctly different might be considered politically dangerous. Promoting the existence/acceptance/approval of gendered writing styles, could be seen as akin to suggesting the

automatic superiority of one sex over the other. As has been shown, however, the idea of gender differences in writing was a commonly held belief throughout the 20<sup>th</sup> century. Nonetheless, regardless of which famous authors write down their beliefs, the question that remains is, do men and women actually write differently?

Gliding through a library, Woolf criticizes those women whom she believes try to write like men. What was wrong with Austen's sentence? (90) she asks of the shelves. She muses that the "terseness, this short-windedness, might mean that [the author] was [...] afraid of being called 'sentimental' perhaps; or she remembers that women's writing has been called flowery and so provides a superfluity of thorns" (81). Intuitively, having spent her life reading works by both genders, Woolf believes she can sense when a woman is writing as herself and when she is not. Woolf uses her apparent expertise to judge the female author whose book she held as though the "female sentence," or feminine writing style, is an inescapable fact of life and the author was trying to evade it and write like a man.

But does a "woman's sentence" actually exist? Or are Cixous, Woolf, and Walker pining for a difference that just cannot be found, or worse, one that must be forced? Unfortunately, as are most topics worth studying, the answer to the question "is there a female writing style?" is complex. The answer is yes. And no. And sometimes.

For that reason, the original research in this paper will attempt to simplify the answer by placing parameters on the question, and examine only the time period before Woolf (the oldest of the three feminist writers) penned her beliefs. Therefore, as this paper will demonstrate, while differences between modern male and female writings have been discovered, one can be fairly certain that there is no major difference in writing style between male and female Caucasian

short story authors in the latter part of the 19<sup>th</sup> century. There are, however, other interesting differences in topic.

# 3. Common Sense? and Female Writing

A modern day camp of critics might say that regardless of what research shows us, common sense dictates that males and females do have different writing styles. For instance, Mike Duran (by no means a scholarly writer) discusses in his blog the differences he has noticed in male and female writing styles. He introduces his readers to what he calls the "gender genie" (Hacker Factor: Gender Guesser) which allows people to copy and paste into or write in a text box then have the program analyze the writing style to determine whether the author is likely to be a male or a female. Duran writes that the program almost always guesses him to be a female. Nonetheless, he, along with probably many others, believes he has discovered "the thing" he considers different between male and female writing styles. Duran says that "the girls almost always key on a character's motivation and reaction [while he, a male] almost always key[s] in on the visceral and atmospheric elements." This is an interesting observation but it changes nothing about the gender genie's opinion of his writing.

The gender genie's disagreement with Duran leads readers to conclude one of two things:

1) the gender genie is an inaccurate program designed for fun and nothing more useful or 2)

Duran has no idea what he is talking about regarding the differences between male and female writing styles and actually does possess a typically female style. Considering the reliability of things found on the internet, each of those possibilities is equally plausible. However, since the present author has her own reasons for trusting the validity of the gender genie (that will be discussed at the end of this section), let us entertain the second option.

If Duran is as inaccurate at determining gender differences as he appears (despite his proclaimed frequency in reading things written by women in his "writing group") what does that mean for Virginia Woolf? How likely is it that she, with only as much scientific training in detecting gender differences as website creator Mike Duran, is more accurate in determining what does and does not make up female writing? Not likely. If psychology teaches us anything, it is that humans do not understand humans, even ourselves, nearly as well as we think we do. Our "common sense" often contradicts itself (Myers 13-16).

For instance, do "birds of a feather flock together" or do "opposites attract?" Is a loved one "out of sight, out of mind?" or does "absence make the heart grow fonder?" Empirical research has shown that the former two "common sense" sayings are correct. However, no matter which bit of "common sense" turns out to be correct, people are likely to fall subject to the aptly named "I-knew-it-all-along phenomenon" (Myers 15). And now, despite what our common sense tells us, empirical research will answer this question: did women in the late 1800s have a natural distinct "woman's sentence" because their style had not yet been tainted by patriarchal politics? Or did female short story authors write like males because they were without many earlier women writers to mimic and felt the need to conform to the writing style status quo? In this case, the present study will demonstrate the latter answer to be correct.

The only way to satisfactorily confirm what these feminist authors so strongly believe is to study that belief empirically. Therefore, this essay will take advantage of the interdisciplinarity of Book and Textual Studies and use distant reading a means of analyzing and understanding word usage between authors of different sexes. This topic, as Fredson Bowers seems to fear in his article "Bibliography, Pure Bibliography, and Literary Studies," may not be perfectly in-line with bibliography's "original intent" (27). The essay will, instead, take a page

from D.F. McKenzie's "The Book as an Expressive Form" and "consider anew what bibliography is and how it relates to other disciplines" (35). While, as Bowers suggests, there are advantages to having a clear definition of the study of books (28), there may be more strength in diversity, in this case, the addition of science to the study of literature.

Enter the 2003 article "Gender, Genre, and Writing Style in Formal Written Texts" researched and written by Argamon, Koppel, Fine, and Shimoni. The researchers apply a specific algorithm of their own design to the writings of a "large subset of the British National Corpus" (321) to discover if there were any significant differences between the writing of males and females over a wide range of genre. Some of their main results involve discovering that the features most useful in distinguishing male writing "included a large number of determiners {a, the, that, these} and quantifiers {one, two, more, some}" (326). On the other hand, a large amount of pronouns (especially, I, you, she, her, their, myself, yourself, and herself) are strong indicators of a female writer, especially if they are written in a relational way (326-327).

Argamon et al. describe their results indicating the difference between male and female writers thus: women say "I know that you know what I am referring to, therefore I will present the information as if we both know it" (327). Men, on the other hand, are more likely to say "here are some details about the things being mentioned" (327). More specifically:

female writers use more pronouns that encode the relationship between the writer and the reader (especially first person singular and second person pronouns), while males tend to not to refer to it [...] female writers more often use personal pronouns that make explicit the gender of the "thing" being mentioned (third person singular personal pronouns), while males have a tendency to prefer more generic pronouns. Both of these aspects

might be seen as pointing to a greater "personalization" of the text by female authors. (328)

These short excerpts from the Argamon et al. article explain the many pages of technical detail that shows the small yet visible divide between male and female writing. In general, however, all of those details add up to men being more informational and women more involved in their writing styles (329). Men, for instance, might use an article while women use a pronoun to describe an object. It could be "a table" or it could be "her table." Both phrases are equally plausible and grammatically correct, but the latter case shows a more involved writing style because the table has a relationship to a character; in this case, it belongs to "her." In other words, women are more apt to describe things in relation to other things or people, instead of just objects or characters that stand alone.

So confident are the authors in their gender determining algorithm that they declare that "unseen documents can be correctly categorized on the basis of features considered in [their] study with an accuracy of about 80%" (327). While not perfect, 80% accuracy is still high considering something as fluid as writing style. Assuming the article is valid, discovering a way of applying Argamon et al.'s algorithm to texts might be valuable and definitely interesting.

Fortunately, the hard work of converting the Argamon et al. study into a computer program has already been accomplished. The previously mentioned "Gender Genie" that our Mike Duran was so concerned about is a version of the "Hacker Factor: Gender Guesser" and is based off of the Argamon et al. study and claims to be 60-70% accurate—just better than chance. The present study will utilize that program as well as other aspects of the Argamon et al. article to examine short stories by Caucasian authors in the 1800s.

## 4. The Present Study

Since Woolf was the earliest of our authors to suggest a "woman's (typical) sentence" in the 1920s, the present paper proposes to examine some of the literature created in the time immediately before Woolf (the mid to late 1800s) to see if modern standards of male and female typical writing can be applied to the literature that Woolf likely read.

### 4.1 Methods and Results

Using distant reading, the present paper used a total of 80 short stories by alphabetically taking eight short stories from five male and five female authors, written during the 19th century (See Appendix A for specifics). The genre was chosen for ease and accessibility since short stories by these authors are readily available for free on the internet and essays less so. Novels are sometimes accessible in smaller numbers but are more cumbersome to work with and often are only found written by the most well-known authors. For example, one can find novels by Mark Twain and Kate Chopin online, but few other authors have gained enough fame for their books to be found easily while browsing the internet. Additionally, using short stories allowed this study to generate large amounts of data more quickly than other genres would have.

### **4.12 Gender Guesser**

First, the short stories were examined by using the Gender Guesser that Mike Duran described. Meaning, the stories were individually copied and pasted into the "Analyze" box of the program, and results for both "Formal" and "Informal" writing styles were recorded onto an excel spreadsheet. The program's results were qualitatively described as "male," "weak male," "female," and "weak female." Instead of utilizing a chi-square test to see if the program guessed one gender as "male" or "female" more often, the four possible results were given Likert scale values in order to analyze them using more sensitive independent t-tests. The number values

were set up so that the higher the number the more "female" the writing, and the lower the number the more "male" (1: male, 2: weak male, 3: weak female, 4: female). That way, once averaged, the Gender Guesser's results could end up being an infinite number of possibilities between one and four. For example, if averaged results ended up as 3.567, that would indicate that, on average, the program guessed that group of short stories to be somewhere between "weak female" and "female."

As shown in Figure 1, when the Gender Guesser was judging the stories based on informal writing parameters, results were not significant, t(78)= -0.881, p = 0.381. However, when the program was judging based on formal parameters, results were significant, t(78)= -3.573, p = 0.001. This indicates that that the program judged female authors to have more of a feminine writing style than men when the short stories were analyzed as a formal genre. However given that the male short stories were averaged at 2.42, and the females averaged at 2.95, (again, see Figure 1) this significant difference is not very extreme. It means that, on average, the Gender Guesser program guessed short stories written by male authors to be a little bit more female than male, and the ones written by female authors to be almost labeled "weak female," or a little bit more female still.

The results also suggests that when analyzed as formal writing, short stories written by both genders appear more female typical by modern writing standards than when analyzed under informal parameters. When analyzed as an informal genre, the Gender Guesser guessed both male and female authors to be somewhere between "male" and "weak male." This seems to indicate that the program believes people write differently when they are writing formally and informally. Furthermore, it would also suggest that males tend to have a more formal writing

style than females and that if these short stories were written informally, that is one explanation for the relatively female results for both male and female authors.

The combined results are interesting because they suggest that in the 1800s, males and females both wrote in more similarly than Argamon et al. claim authors do today. Furthermore, because short stories appear to be written fairly informally, the numbers demonstrate that both male and female authors tended toward the "male" side of gendered writing styles. This is indicative of how writing has changed within little more than a century with both males and females writing more distinctly one way or the other.

## **4.13 Voyant**

Next, the short stories were examined for pronoun count, specifically first, second, and third person pronouns. Each short story was individually copied and pasted into the program Voyant, which describes itself as "a web-based reading and analysis environment for digital texts" (voyant-tools.org). This allowed the present researcher to find, categorize, and quantify the pronouns in each short story. However, since the lengths of the short stories were highly variable (ranging from a paragraph to double digit pages) pronoun percentages were calculated (using Microsoft for the word count since it seemed to be more accurate that either the Gender Guesser or Voyant) and used instead of actual pronoun number. Therefore Story A may contain 30 pronouns, and Story B may contain 120 pronouns but they could both be given the value of 10% pronouns based on how many words the short story was comprised of.

There were no significant differences between the total percentage of pronouns written by male and female authors, t(78)=0.562, p=0.576; between first person pronouns, t(78)=-0.365, p=0.716; between second person pronouns, t(78)=0.720, p=0.474; or between third person pronouns; t(78)=0.595, p=0.553. In other words, this study could not find any difference

whatsoever in pronoun use between male and female 19<sup>th</sup> century short story authors. However, since the Gender Guesser program, while not completely accurate, did see a difference between the writings of male and female authors, future studies might examine the Argamon et al. article more in depth and run tests on articles and pronoun ratios within one gender to determine if the Gender Guesser program just does not work for 19<sup>th</sup> century short stories and the slight difference it found was a fluke, or that it was measuring something this paper does not.

Finally, distant reading was once again applied to examine frequently used words in each of the short stories. Still using the Voyant program "English (Tapoware)" "Stop Words" were applied to each short story (taking out thematically unimportant words such as pronouns, determiners, quantifiers, articles etc.) so that the most frequently occurring words were more easily viewed and recorded. In that way, the short stories were examined thematically by recording the most frequently occurring words in each short story then copying and pasting that word list back into Voyant to determine which words frequently occur in multiple short stories written by a person of the same gender. The interested reader should see Table 1 for more details.

These results are more telling than the ones previously discussed. While male and female authors appear to use many of the same words frequently, there are some interesting differences as well. For instance, female authors write about women more often than male authors do, but they also write about men approximately the same amount as male authors do. For instance, the words "Mr." and "Mrs." make it onto the list of frequently occurring words for both genders, and males use the word "Mr." frequently in eight short stories and females use it frequently in nine short stories demonstrating a clear similarity. In contrast, the word "Mrs." is used frequently by men in only three short stories and by women in 17 short stories.

Likewise, words that the female authors used frequently but that did not make it onto the list of frequently used words by males include "Miss," "Mother," "Aunt," "Girl," "Lady," "Madame" and "Wife." That difference signifies that women talk about women and use female characters much more than their male counterparts. The list of words describing men that do not make it onto the list of frequently occurring words in short stories by female authors is much smaller and only includes "Gentleman," and "Sir" (and perhaps "Doctor" if we assume all doctors at that time to be male). However, the female authors more frequently used the word "Father" than males did. In fact, "Father" did not even make it on the list of frequently occurring words by males. This evidence indicates that women write about women more than men do, but they also write about men nearly as much as men do.

Women also used more relational words than men. "Dear," "Child/Children," "Father," "Mother," "Aunt," and "Wife" all describe a relationship between characters and are not found in the list of frequently used words by males. Moreover, the male-authored stories contained no frequently occurring relational words that did not appear in women's stories. In other words, while women use the word "Aunt" quite often, men do not appear to use the word "Uncle" very frequently. This supports the findings of Argamon et al. that claim female typical writing is more involved. Even using distant reading (so, without actually reading any of the short stories) it is clear that the female authors talk more about relationships and write more about women and girls than male authors do.

Therefore, this paper concludes that while there is no stylistic difference between Caucasian male and female short story writers in the late 19<sup>th</sup> century, there is a thematic one. This difference between relational writing versus informative writing is interesting because it is a difference that is found frequently in modern research.

## 5. Empirical Research and Female Writing

# 5.1 Writing Style Gender Differences in Children

A good place to start looking for modern gender differences in writing is among children. If gendered writing styles exist today it seems likely that they would be noticeable from a young age. The following section will demonstrate a congruency between writing style differences discovered in this study and writing style differences among children. It seems as though there are a few, mostly topical differences, found between the writings of male and female children, but that overall, those differences are few and can be changed quite easily.

Still, a few studies maintain that as early as elementary school, people, especially teachers, can often identify the sex of the young author of an unsigned piece of writing. Shelly Peterson, for instance, in a qualitative, observational study she conducted, noticed some distinct gender differences in the writing styles of elementary school children. Girls tended to demonstrate more emotion, prosocial behavior, and wrote about their immediate experience in topics normally regarded as "safe" to write about (451). Boys, on the other hand, have a tendency to write about violence (455), things "beyond their lived experience," and may not be very adept at taking another's perspective (451).

Peterson noticed, however, that these apparent gender differences appear to be little besides "gender as a reproduction of stereotypes" (452). She postulates that the disparity between male and female writing styles in elementary school classrooms may hearken back to societal expectations that the students seem to have taken to heart even at their young age. Her students would say things, for example, similar to the modern stereotype that "girls can sometimes write about "boy" topics, but boys cannot write about "girl" topics" (454). Furthermore, those gender

norms were strictly enforced by the classroom culture so that all the children knew what to and not to write about due to social pressure.

It is possible, that given the strength of adherence to current gender stereotypes at such a young age, that adults also are confined by the pressure to write about what is generally accepted for his or her gender. Given this author's interpretation of what happened in her classroom, one might speculate that the thematic differences the present study found between male and female short story writers may be a product of gendered expectations in the 1800s. Perhaps the reason those authors used more words like "aunt" and "mother" is because women were expected to be more relational and family oriented.

On the other hand, a similar observational study, conducted by teacher Jay Simmons, came up with different findings. While the author cited many sources that found girls often write more about things such as friendship, themselves, their families, school, and life, and boys focused on grand adventures and factual accounts (116), Simmons stressed the similarities between the sexes (116-123). For instance, both male and female students used popular culture to set up their stories (dolls, action figures, video game characters, etc. [116]). Both males and females used plays on words for entertainment value (118), and pushed for audience reaction using argument and shock (116).

Furthermore, Simmons found some perhaps promising results. The more frequently boys and girls read each other's stories, the more gender neutral their own writing became (118-120). In other words androgynous (and some might say "mature") writing may stem from exposure to writing of the opposite sex. This is hopeful because it indicates that writers do not necessarily have to be stuck in a specific writing style based on their gender. Perhaps, that is why the Gender Genie labeled Mike Duran as a woman; maybe the women in his writing group rubbed off on

him. Likewise, because women read men's writing almost exclusively in 1800s, that may be an explanation for the lack of writing differences found in this study, and why the Gender Genie called most of the female authors men.

Educational researchers Susan Jones and Debra Myhill put a different spin on writing gender differences among children. Their article looked into the modern stereotype that females are better at language related tasks than males. They found that, although gender differences are few and not wholly pervasive "the repeated pattern of differences in boys' writing mirror [...] patterns in able writers" (456). According to Jones and Myhill, then, boys, actually have a tendency to be better writers than girls. However, the phrase "able writers" is used interchangeably with more differentiating terms such as "better writers" throughout the article. This phrasing is disturbing because what is "able" and "better" is never operationalized within the article. Therefore, while putting to rest modern stereotypes that may inhibit boys' ability to see themselves as writers, the authors of this article may be reviving the stereotype that writing is for men instead of just labeling boys' and girls' writing as different.

Because the terms "better" and "able" writers were never clearly defined, they could mean any number of things. Perhaps the boys in their study wrote "better" because they modeled their style after canonical authors (the majority of whom are male). The "able" writers the Jones and Myhill discussed could have been writers with a high degree in education (the majority of whom are also male). "Better" writing could be writing that is culturally popular, that made the bestseller list, that was written by a famous journalist, published in a famous magazine, or any number of different things. Clearly, these researchers have once again fallen prey to the "better/worse" binary instead of embracing the differences they found.

Fortunately, they do stress, that "few gender characteristics may be visible in writing" (Jones and Myhill 460) and perhaps it is best to leave it at that. A few gender differences in writing style may exist among children, but they are few, and as Simmons argued, may be subject to change. The minute, concrete differences in writing styles Jones and Myhill found include such things as boys using "I" and girls "we" more than the opposite sex (459). They also found that boys tend to be more egocentric, assertive, argumentative, and event oriented while girls had a more "conciliatory" voice (460). Other findings had to do with the complexity and length of paragraphs and sentences with boys striving for good organization and girls for complexity and diversity (468, 459). Therefore, while it is evident that Jones and Myhill did find some small differences between male and female children's writing style, their conclusions that boys' writing is better falls into that "male/female, better/worse" mindset that Cixous, Woolf, and Walker were attempting to change into a celebration of diversity.

Overall, these studies seem to indicate that gender differences in writing are not as bold as one might think and the thematic differences that the researchers found could be due to engrained societal stereotypes that are subject to change. This is consistent with the findings of the present study that discovered females to be more relational but found few stylistic writing differences between male and female short story writers in the 19<sup>th</sup> century.

The next question, then, is how different do modern male and female adult authors write? Are adults likely to continue writing within their gender stereotype, or, as Simmons proposed, do those differences slowly die out with continued exposure to writing by the opposite sex as Peterson suggested? Again, the answer seems to be that there are differences, but that they are not so extreme as one might think.

# 5.2 Writing Style Gender Differences in Adults

One study conducted by Katherine Thomas and Marshall Duke found that writing style can be affected within different groups of adults. Their study found that cognitive distortions are more common in the prose of depressed authors and less common in the poetry of depressed authors than non-depressed writers (204). However, while the researchers looked into gender differences as well, no significant differences regarding cognitive distortions were found between male and female writing (204) indicating that depression has the same effect on male writing as it does female. This research is one example of the similarity between male and female writing style.

However, while the Thomas and Duke study found no distinct differences between male and female writing, other studies have. For example, Ann Colley and Todd Zazie examined "gender-linked differences in the style and content of emails to friends" (380) and though the study is very specific (as most research is) and unique (since emails contain elements from both writing and speech [382]) they found a number results fairly typical for the study of gendered language and similar to what this paper has already discussed.

For instance, female writing is often considered "weaker" because it employs hedging and tag questions (indicating apparent self-doubt) compared to the more competitive and assertive male writing style (similar to what Jones and Myhill found in children [Thomas and Duke 380]). The article indicates that female writing tends to be more relational and intimate and male more informational and factual—rapport talk versus report talk, a common finding among those who study gendered writing (380-381).

Collie and Zazie found other interesting differences as well. Women, it seems, are more likely than men to send warnings, ask questions and use markers of excitability (e.g. exclamation

marks [386]). Furthermore, men and women wrote differently when their recipient was of the opposite sex. For instance, they self-disclosed at a higher rate. In other words, women wrote more personally when writing to a male, and males were more personal when writing to a female. The authors speculated that participants in their study may have been writing to their audience (386). As interesting as those findings and others in the study are, however, email writing style may not predict anything about another writing style. Thus, we have come full circle back to the Argamon et al., article that claims to have discovered consistent, predictable stylistic differences between male and female authors.

### 6. Conclusions

Given the results of the present study that used the Argamon et al., study as a base, and the Gender Guesser program modeled after the work of those researchers, it appears as though white, female short story authors in the late 19<sup>th</sup> century did not have stylistically different writing styles from their male counterparts. However, the qualitative analysis of the words in each text indicated that male and female authors wrote *about* different things. Furthermore, those qualitative results agree with modern empirical research suggesting that men often have an informational, event-oriented, egocentric writing style and women often have a relational, rapport-driven, conciliatory style.

However, as touched on briefly in section 4.13, in order to discover if Argamon et al.'s study truly cannot be applied to short stories written in the 19<sup>th</sup> century, more of their parameters would have to be applied to future research. Other researchers should look at article and qualifier use in addition to a more in-depth study of pronoun use to determine if any stylistic differences can be found that way. Furthermore, it might be valuable to look at stories that were written in

the same voice—meaning all first person, or all third person. Adding those parameters might allow stylistic difference to show within the texts.

However, even with that added research, the present study is fairly certain that there is no apparent difference between male and female pronoun use in the 19<sup>th</sup> century because of the similarity in Gender Guesser results. But what could have caused that similarity? Why did those female authors not have their own "woman's sentence" as Woolf, Cixous, and Walker wanted them to have? There appear to be a few possible explanations.

Given that they were surrounded by male authors in a patriarchal world, Cixous might claim that those authors were repressing their natural female selves in an attempt to fit into a male dominated society. And perhaps she would be correct in that assessment. As previously mentioned, researchers Collins and Zazie speculated that authors might write to their audience (386). And since in the 1800s the audience was accustomed to male writing, it makes sense that female authors might taper down their female instincts in order to sell their writing and gain in popularity.

Instead of freeing themselves as Cixous promotes, or embracing their differentness from males as Woolf advocates for, 19<sup>th</sup> century female authors may have tried to write like their male counterparts in order to be accepted as writers. Instead of being endorsed as a beneficial difference, any dramatic change in writing may have been scoffed at as being a woman's attempt at a man's task. Certainly this is one reason why the male and female authors in this study examined appeared to be so similar.

On the other hand, as discussed in the introduction of this paper, those female writers had no "foremothers" after which to model their art. Perhaps these authors were struggling to create in ways that were uniquely feminine as Walker believes black women in the 20<sup>th</sup> century

struggled. Maybe women were not consciously repressing their femininity; perhaps they mimicked the only writing they had abundantly available: male writing. There is research to back up this hypothesis as well.

For example Ireland and Pennebaker write in their article "Language Style Matching in Writing: Synchrony in Essays, Correspondence, and Poetry" that people tend to match their speaking and writing styles to that of those around them. They write that "even in asocial contexts, individuals tend to produce utterances that match the grammatical structure of sentences they have recently heard or read" (549). Similarly, Simmons found that the more male and female children read each other's stories, the more androgynous their own stories became. That would indicate that because the ratio of male to female writers in the 1800s was greatly skewed toward men, writings did not become androgynous; they became more masculine. Therefore, that they unconsciously matched their writing style to the works that they had read is another valid explanation for women's lack of a female style in the late 1800s. Since most things at that time were written by men, women's writing style tended toward what was then considered male.

Interestingly, though, if we recall from section 4.12, that when short stories were gauged as a formal genre both male and female short story authors were described as writing with a slightly more female than male style. This would suggest that what makes up male and female writing has changed drastically from the 1800s to now, with males and females becoming more measurably different (though those differences still appear to be small). Perhaps males wrote more relationally than they do today and women a little less relationally than they do today so that both genders were fairly androgynous by today's standards. If this is the case, then modern

writers may actually write very differently than those in the 19<sup>th</sup> century. Gaining differences in writing style may be a modern phenomenon.

On the other hand, when classified as an informal genre, both male and female writers were guessed to be overwhelmingly male. And, given the colloquial language used and the everyday tales contained within most of the short stories, the present study is more inclined to believe them to be semi-informal works of writing. In that case, it is apparent that women wrote very much like men and that male writing has not changed all that much. If this is the more likely scenario than the one discussed in the previous paragraph, then we have returned to our first two possibilities for a lack of writing difference among male and female authors in the 1800s. Either women suppressed their natural style to gain acceptance, or they simply did not have enough experience to write any other way besides male. Likely, the answer is a combination of both.

However, the similarities in writing style do not negate the differences in theme. Even using distant reading, it is apparent that men and women write *about* different things. These differences, relational/informational, rapport/report still exist today and, as section 5 shows, have been well documented in both children and adults. This means that even when women first began to write prolifically—or more than they had before—they wrote about different things. It is possible, as Peterson discussed, that women may have written about things that were deemed culturally acceptable for them such as family. However, given that that difference still exists today, it is equally possible that females are naturally more relational than males and that modern research conducted on writing style as well as on topic reflects that difference. Perhaps women today feel more free to write, not only about the topics they want, but how they want to write.

It would seem, then, that Woolf, Cixous, and Walker's exhortations toward a female specific creativity have merit. Until recently, it is possible that distinct male and female writing

styles did not exist except in the topics the authors wrote about. Nonetheless, that is to not say that a great victory has been won and that writers are finally doing as Woolf desired and celebrating gender differences. On the contrary, modern researchers such as Jones and Myhill are once again trying to separate "different" into categories of "better and worse" without fully explaining where these standards are coming from or why they should be implemented in the first place.

As Cixous proclaims, those who claim the gender of "female" should be proud to be different from the patriarchal world and fight to keep that difference. Now that written works include measurable stylistic differences, we may thank these feminist writers, and many like them, for encouraging diversity. Female authors today have creative and successful mothers to look at and measure themselves against in a way that Walker yearned for. Female writers, though, should not let their guard down because progress has been made, but rather embrace the change that has been made and fight for the change that has yet to come. After all "it would be a thousand pities if women wrote like men, or lived like men, or looked like men, for if two sexes are quite inadequate, considering the vastness and variety of the world, how should we manage with one only?" (Woolf, 87-88).

#### Works Cited

- Agamon, Shlomo, Moshe Koppel, Jonathan Fine, and Anat Rachel Shimoni. "Gender, Genre, and Writing Style in Formal Written Texts." *Text and Talk* 23.3 (2003): 321-346. Web. 22 April 2015.
- Bowers, Fredson. "Bibliography, Pure Bibliography, and Literary Studies." *The Book History Reader*.

  Ed. David Finkelstein and Alistair McCleery. London and New York: Routledge, 2006. 27-34.

  Print.
- Cixous, Helene. "The Laugh of Medusa." *Critical Theory: A Reader for Literary and CulturalStudies*. Ed. Dal Parker. Oxford Up, 2012. 242-256. Print.
- Colley, Ann, and Zazie Todd. "Gender-Linked Differences in the Style and Content of E-Mails to Friends." *Journal of Language and Social Psychology* 21.4 (2002): 380–392. *jls.sagepub.com*. Web. 20 Feb. 2015.
- Duran, Mike. "The Differences Between Male & Female Writers." *deCOMPOSE*. N.p., n.d. Web. 20 Feb. 2015
- "Edith Wharton Home Page." N.p., n.d. Web. 20 Feb. 2015.
- Ireland, Molly E., and James W. Pennebaker. "Language Style Matching in Writing: Synchrony in Essays, Correspondence, and Poetry." *Journal of Personality and Social Psychology* 99.3 (2010): 549–571. *ProQuest*. Web. 20 Feb. 2015
- Jones, Susan, and Debra Myhill. "Discourses of Difference? Examining Gender Differences in Linguistic Characteristics of Writing." *Canadian Journal of Education* 30.2 (2007): 456–466,468–482. Print.
- "Kate Chopin Home Page." N.p., n.d. Web. 20 Feb. 2015.
- "Louisa May Alcott Home Page." N.p., n.d. Web. 20 Feb. 2015.
- "Mark Twain Home Page." N.p., n.d. Web. 20 Feb. 2015.

- McKenzie, D.F. "The Book as an Expressive Form." *The Book History Reader*. Ed. David Finkelstein and Alistair McCleery. London and New York: Routledge, 2006. 35-46. Print.
- Myers, David G., and Jean M. Twenge. "Social Psychology." *Social Psychology*. 11th ed. New York, NY: McGraw-Hill, 2013. 13-16. Print.
- "Nathaniel Hawthorne Home Page." N.p., n.d. Web. 20 Feb. 2015.
- Peterson, Shelley. "Gender Identities and Self-Expression in Classroom Narrative Writing." Language Arts 78.5 (2001): 451–457. Print.
- "Sarah Orne Jewett Home Page." N.p., n.d. Web. 6 Mar. 2015.
- "Short Stories by Frank R Stockton [Category: Short Story]." N.p., n.d. Web. 20 Feb. 2015.
- "Short Stories by Mary E Wilkins Freeman [Category: Short Story]." N.p., n.d. Web. 6 Mar. 2015.
- "Short Stories by Richard Harding Davis [Category: Short Story]." N.p., n.d. Web. 6 Mar. 2015.
- "Short Stories by Robert Louis Stevenson [Category: Short Story]." N.p., n.d. Web. 20 Feb. 2015.
- Simmons, Jay. "Attack of the Killer Baby Faces: Gender Similarities in Third-Grade Writing." *Language Arts* 74.2 (1997): 116–123. Print.
- Thomas, Katherine M., and Marshall Duke. "Depressed Writing: Cognitive Distortions in the Works of Depressed and Nondepressed Poets and Writers." *Psychology of Aesthetics, Creativity, and the Arts* 1.4 (2007): 204–218. *ProQuest*. Web. 20 Feb. 2015.
- Walker, Alice. *In Search of Our Mothers' Gardens: Womanist Prose*. San Diego: Harcourt Brace Jovanovich, 1984. Print.
- Woolf, Virginia. A Room of One's Own. Penguin Books, London, 1945.

Table 1

Frequently Occurring Words by Male and Female Authors	# in Male- Authored Texts	# in Female- Authored Texts	Words Appearing Frequently in Male-Authored Texts	#	Words Appearing Frequently in Female-Authored Texts	#
Away	3	13	Doctor	5	Home: 9	9
Boy	3	3	Year(s)	5	Miss	8
Cried	5	4	Gentleman	4	Say	8
Eyes	3	10	Night	4	Dear	7
Face	7	10	Sir	4	Going	7
Good	12	15	Youth	4	Right	7
Great	12	11	City	3	Child/Children	6
Hand	6	4	Door	3	Father	6
Head	6	6	Heart	3	Mother	6
House	4	10	Rose	3	Room	6
Just	5	9	Side	3	Aunt	5
Know	10	19	Spirit	3	Folks	5
Life	6	7			Poor	5
Like	13	27			Road	5
Little	15	28			White	5
Long	3	13			Best	4
Look/Looked	4	21			Felt	4
Make	7	6			Girl	4
Man/Men	30	15			Lady	4
Money	3	5			Love	4
Mr.	8	9			Madame	4
Mrs.	3	17			Stood	4
New	8	6			Things	4
Old	13	21			Kind	3
People	4	3			Lost	3
Saw	3	4			Oh	3
Tell	3	3			Wales	3
Think/Thought	6	8			Want	3
Time	21	17			Wife	3
Way	6	12			Yes	3

Young 9	9		
---------	---	--	--

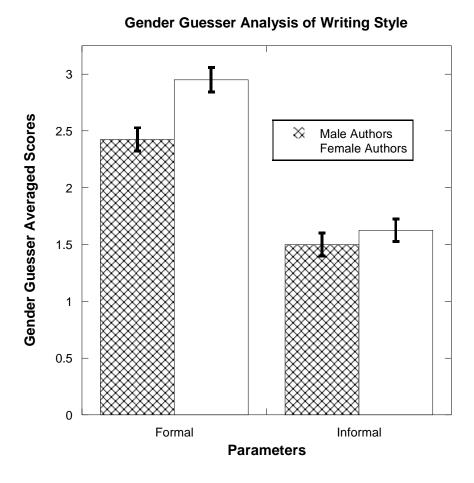


Figure 1. Figure 1 shows the Gender Guesser program's analysis of short stories written by male and female authors under both formal and informal parameters. Because higher numbers equal a more female typical writing style and lower numbers a more male typical style, this graph demonstrates the significant difference between the program's analysis of male and female authors under formal parameters. It also shows that when analyzed as formal writing, short stories written by both genders appear more female typical by modern writing standards than when analyzed under informal parameters which are more male typical. Error bars represent standard error.

# $Appendix\,A$

Male Authors		Female Authors		
Author Name	Story Title	Author Name	Story Title	
Mark Twain	About Barbers	Edith Wharton	A Coward	
	About Magnanimous-Incident Literature		A Cup of Cold Water	
	About Play-Acting		Afterward	
	About Smells		A Journey	
	A Burlesque Biography		April Showers	
	A Cure for the Blues		A Venetian Night's	
			Entertainment	
	A Curious Experience		Crucial Instances	
	A Curious Pleasure Excursion		Expiation	
Nathaniel Hawthorne	A Rill from the Town-Pump	Kate Chopin	A December Day in Dixie	
	Chippings with a Chisel	•	A Dresden Lady in Dixie	
	Circe's Palace		A Family Affair	
	David Swan		After the Winter	
	Dr. Heidegger's Experiment		A Gentleman of Bayou Têche	
	Drowne's Wooden Image		A Harbinger	
	Edward Fane's Rosebud		A Horse Story	
	Egotism; or, The Bosom Serpent		A Lady of Bayou St. John	
Frank R. Stockton	"His Wife's Deceased Sister"	Louisa May Alcott	A Country Christmas	
	American Lord, An		A Modern Cinderella	
	Amos Kilbright; His Adscititious		An Old-fashioned Thanksgiving	
	Experiences			
	Asaph		Aunt Kipp	
	Baker Of Barnbury: A Christmas Story, The		Cousin Tribulation's Story	
	Banished King, The		Cupid and Chow Chow	
	Battle Of The Third Cousins, The		Debby's Debut	
	Bee-Man Of Orn, The		How They Ran Away	
Richard Harding Davis	"There were Ninety and Nine"	Sarah Orne Jewett	A Native of Winby	
	Amateur, The		A Winter Courtship	
	Andy M'Gee's Chorus Girl		Decoration Day	
	Assisted Emigrant, An		Going to Shrewsbury	
	Bar Sinister, The		Looking Back on Girlhood	
	Billy and the Big Stick		The Flight of Betsey Lane	
	Blood Will Tell		The Gray Mills of Farley	
	Boy Orator of Zepata City, The		The Passing of Sister Barsett	
Robert Louis	Adventure Of Prince Florizel And A	Mary E Wilkins	Horse House Deed, The	
Stevenson	Detective, The	Freeman	,	
	Adventure Of The Hansom Cabs, The		Adopted Daughter, The	
	Bandbox, The		Amethyst Comb, The	
	Body Snatcher, The		Ann Lizy's Patchwork	
	Bottle Imp, The		Ann Mary - Her Two	
	**		Thanksgivings	
	Cart-Horses And The Saddle-Horse, The		Balking Of Christopher, The	
	Devil And The Innkeeper, The		Big Sister Solly	
	Distinguished Stranger, The		Bound Girl, The	