Analyzing the discourse of Girls Who Code concerning gender inequality

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Abstract

STEM (Science, Technology, Engineering, and Mathematics) fields currently face a significant gender gap. As it is widely recognized that the shortage of women is caused by lack of access and lack of an inclusive culture, multiple initiatives emerged that focus on getting more women into STEM fields. However, some of these initiatives received criticism for the fact that education for women is not a fitting approach, as it is STEM culture itself that needs revision. This thesis aims to expose how the initiative Girls Who Code (GWC) constructs this gender inequality problem in the discourse of their website and Instagram platform. Specifically, it investigates whether this discourse aligns with the actual problems of the gender gap in the STEM sector. Here, discourse is the way a topic is talked about that holds certain implications or power structures. I conducted a critical discourse analysis in order to place the discourse of the GWC website and Instagram in the current social and political context of gender inequality. The analysis showed how their Instagram is pointing explicitly the toxic masculinity in tech culture, while the website is more nuanced. Also, the gender-specific approach of GWC might not be the appropriate solution to fixing the gender gap. Overall, I conclude that the discourse of GWC indicates that GWC is maintaining the exact culture it is trying to improve, by focusing on fixing women instead of fixing the system itself i.e. the toxic traits of tech culture.

Contents

Introduction

The number of women[1] pursuing majors in Science, Technology, Engineering and Mathematics (STEM) at a college or university level is growing, but men still outnumber women significantly on the work floor in these technical fields (AAUW Report, 2010). The phenomenon of women dropping out of STEM jobs, the more they seem to advance when looking at academic education, is often referred to as the leaky pipeline effect, which is demonstrated in the latest UNESCO science report. Here it states that as of 2015, female bachelor's graduates even outnumbered their male counterparts, while women in the STEM workforce only account for 28% (Huyer, 2015). What is striking is that when women do drop out of (under)graduate programs, about three-quarters of them represent women from minority groups (Wilson et al., 2012).

The leaky pipeline metaphor thus describes the declining presence of women in beta careers. Research shows that this is due to, on the one hand, the appeal of STEM towards women and how they lack either access and/or confidence to pursue a career in one of these fields (Heybach and Pickup, 2017). On the other hand, when women do choose to work in STEM, they tend to drop out because the work environment is not fitting or desired (e.g. Mavriplis et al., 2010). A non-profit initiative called Girls Who Code (GWC) focuses on the former of these two reasons and is trying to get girls more interested in STEM fields from a young age onwards. On the homepage of their website they state that they are building "the world's largest pipeline of future female engineers (Girls Who Code, 2021)," and their CEO Reshma Saujani claims to have fixed the pipeline problem with the GWC initiative (Girls Who Code, 2019c). Their results look promising, as they are introducing girls and women into STEM fields at a rate that is fifteen times the national average of the U.S.A. and have already served 300 thousand girls worldwide. Not only are they encouraging women to pursue a career in STEM, but they also aim to include historically underrepresented groups (e.g. Black and Latinx girls/women) and see this as one of their top priorities.

Girls Who Code thus claims to make significant contributions to closing the gender gap, but the initiative seems to only solve one side of the problem. In the UNESCO report, it says the following:

> The approach of getting more women to study science and choose a scientific career needs replacing with an approach oriented towards 'fixing the system,' that is, addressing the points of attrition,

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[1] When I use the term women or girls, I use it in a sense that is inclusive of all who identify as women or girls (cisgender, transgender, or non-binary).

barriers and culture that are causing women to abandon science (Huyer, 2015, 102).

This report stresses that in order to close the gender gap, it is necessary to not only focus on getting women into STEM, but also addressing STEM culture that is apparently discriminating against women and pushing them out as a result. There have been many papers dedicated to research on why women leave STEM (e.g. Alegria and Branch, 2015; Casad et al., 2021; Heybach and Pickup, 2017; Hill et al., 2010; Riegle-Crumb et al., 2012), which is why I decided not to look into the results and/or effect of GWC specifically. However, I will look into the discourse of GWC and research what the initiative does or does not do; I will look critically at how the solution provided by GWC corresponds with the gender disparity in STEM fields. I will therefore look into the following research question:

What is the discourse on gender inequality in STEM on the website and Instagram of Girls Who Code from 2019-2020?

I will use the following sub-questions:

(1) What are the main causes for and consequences of gender inequality in STEM?
(2) How does Girls Who Code discuss the problem of gender inequality on their website and Instagram?
(3) To what extent do the solutions provided by Girls Who Code correspond with the actual problem that is causing gender disparity in STEM?

Even though there are some researches take GWC as a case study, these papers focus mostly on results or analyses of the programs offered at GWC (e.g. Oladipo, 2016). However, there has not been any research conducted that looks into how the discourse of GWC describes the causes and consequences of gender disparity in STEM, and whether GWC provides a fitting contribution to closing the gender gap. By analyzing the discourse of GWC we will be able to understand better what it is exactly that GWC is doing to tackle the gender gap in STEM, and thus whether they are providing a solution that is fitting to the problem. Furthermore, this research initiates from the fact that with new media comes bias in data, such as in algorithms that lack data from and for women, making it biased against women (e.g. Criado-Perez, 2019; O'Neill, 2016). One of the suggested solutions to the biases is making sure that women have a chance to take part in conversations on the research agenda as well, so gender bias can be avoided. GWC's approach to this solution is making sure that more women have

the possibility of becoming part of the STEM workforce and therefore gain more power of data. This sparked my interest, as I could look into what GWC promises to do, and what it actually does: if there is a difference between these, then how could this be solved? Relating the subject to this master's program, GWC is an initiative that involves the new media practice that is coding and can be explored in its cultural, social, political, and economic context. Here, it is important to depart from a multi- or interdisciplinary perspectives, such as gender studies, (feminist) media studies, and political science.

In order to expose the discourse of GWC, I will first look into the current debate on how the gender gap in STEM came to be, and what theories explain the deteriorating number of women in STEM. This is closely linked to genderwashing practices that are performed by tech companies, which happens when companies and organizations claim to be more gender-equal than they actually are. In addition, I will also dedicate part of the theoretical framework to feminist theories, as proposed by Donna Haraway and Kimberlé Crenshaw. Concerning the analysis, I will look at GWC's discourse on gender, as I will analyze (1) whether a gender-specific approach, such as GWC, is even necessary (2) if GWC is actually "fixing the system (Huyer, 2015)" (i.e. tech culture) by focusing on education for women, and (3) whether the claims they make on their website and Instagram align with what they are doing.

In order to look into the object of my research and its context, I will be investigating the Girls Who Code initiative through a Critical Discourse Analysis (CDA). Here, I will perform a textual analysis of a selection of the content that is available on the GWC website, such as annual reports, research reports, and general statements from the company. Moreover, I will also look into the Instagram page of GWC. I chose to only look at texts from the time period 2019-2020, in order to narrow down my research. A CDA will allow me to look into the discursive practices of GWC, how they construct the gender gap problem in STEM, and how they aim to fix it.

Theoretical Framework

In this section, I will discuss the current debate on the gender gap in STEM, divided into three sections: gender inequality in the STEM workforce, genderwashing, and feminist theories on knowledge and intersectionality. Addressing the debate on these issues is necessary to shed light on the underlying problems that cause gender inequality in science and its implications. As Jessica Heybach and Austin Pickup mention in "Whose STEM? Disrupting the Gender Crisis Within STEM," the current discourse of women in STEM focuses merely on women's abilities and merit, as there are many educative initiatives that are aimed at getting women or girls interested in the field of science. The problematic aspect behind this approach is that it then seems as if STEM is more important to women than the other way around. Moreover, this discourse therefore neglects the fact that STEM culture is a masculine environment that is unwelcoming towards women, and that we need to look into how science and science culture is shaped, as this can contain bias that disadvantages women (Heybach and Pickup, 2017). First, I will look into the ways women are being excluded from the STEM workforce and how they are being discriminated against. Then, I will note how this is closely tied to genderwashing in terms of "the myth of equality" and the inability to address women's needs. Finally, I will address Donna Haraway's take on situated knowledges, as an indication of a more inclusive form of scientific inquiry, and Kimberlé Crenshaw's concept on intersectionality, which draws on crossed forms of discrimination. The primary focus of my research will be on gender disparities, but I will also take note of inequities for women of color and other marginalized people, as sexism is not the only problem in STEM. I will not elaborate on this aspect much throughout the analysis, but it is important to mention this as well, as the focus in STEM is on the white, Western, heterosexual male, and diverging identities are thus often excluded or being discriminated against.

Gender Gap at the STEM Workforce

In the most recent UNESCO report on issues regarding science, it states that there is a significant gender gap in STEM, which has increased over the last decennia even though more women are pursuing STEM majors at university level. In this report, Sophia Huyer introduces the problem of the leaky pipeline, which is a model that demonstrates how women make up half of the students at university level, but this percentage drops significantly when looking at female researchers in STEM (Huyer, 2015). The percentage of women in research or STEM jobs is even lower among women from minority backgrounds, add Zakiya

S. Wilson et al. (Wilson et al., 2012). Joan C. Williams writes in a Harvard Business Review that common solutions to the pipeline problem revolve around the idea that if we can interest girls and women in beta subjects and provide education, then the problem will solve over time (Williams, 2015). However, Bettina J. Casad et al., describe in their research on the problems and solutions for STEM women, that this decline is not due to the abilities or skills set of women. Conversely, the main proof indicates that women leave STEM because of negative experiences on the work floor that causes women to leave STEM at a rate twice as high as men. The academic and working climate tends to be chilly or even threatening towards women, and they overall do not feel very welcomed into the male-dominated culture. This influences the number of women that choose to work in STEM, and those who already work there but do not feel at comfort and therefore leave (Casad et al., 2019).

One of the reasons why women often do not feel at home in STEM has to do with the norms and values that are often of importance to women, but which are not being pursued in tech culture. Alegria and Branch discuss in their literature review how research on the underrepresentation of women in STEM indicates how organizations often don't fulfill women's desire of a reasonable work-family balance, and also lack the necessary mentorship for women (Alegria and Branch, 2015). Heyback and Pickup argue that if STEM careers would allow for more focus on family, women would not drop out of the workforce as often as they do now. Moreover, STEM is often characterized as a field with masculine features, such as more individualistic and success-orientated. However, research shows that women thrive in STEM when they are being cared for, have proper mentoring, and work in a more collaborative community: this will not only help with recruiting women in order to draw them in but also in retaining them in STEM (Heyback and Pickup, 2017). If STEM culture does not change its gendered norms, women would need to adapt to the existing norms and values of the male-centric tech culture, in order to have a successful career in the STEM workforce, explains Kimberly Griffin (Griffin, 2018). This is however not the favorable option, as the gendered culture often features discrimination towards women.

STEM culture as it is now is built around the norms and values linked to men. It is therefore not uncommon for women to be discriminated against, as they do not fit the STEM stereotype. Bobbitt-Zeher claims that gender ideology, which is the ideology that certain characteristics are bound to gender (e.g. women should be parenting, while men should focus on breadwinning), is the main cause of gender discrimination as it has tendencies to stereotyping (Bobbitt-

Zeher, 2011). In STEM, Casad et al. explain, independence and being competitive is more common to be of value than being cooperative or nurturing (i.e. masculine versus feminine traits) (Casad et al., 2019). These stereotype traits often cause discrimination against women: Alegria and Branch describe the five common forms of discrimination. First, women are more likely to be seen as a mother or (sexual) object, than as a worker. Second, in male-dominated culture there tends to be the idea of superiority over women, where women are not seen as intelligent beings, but rather as emotional or hormonal when doing their job. Third, women do not fit into the stereotype of "men's jobs," such as STEM. Fourth, women are expected to behave or look a certain way, and therefore often deal with double standards. And finally, women are seen as weak, with unfitting abilities (Alegria and Branch, 2015). These five points are at the root of more specific forms of discrimination, such as lower publication numbers, less money for research funding, fewer opportunities for promotion, or not being recruited for the job in the first place despite being better qualified than male candidates.

Fortunately, solutions to issues of discrimination and the gender gap in STEM have been set up and thoroughly researched. Casad et al., for example, mention how it has been proven that efforts aimed at eradicating gender bias during the recruitment process and offering mentorship programs, have helped to get women into STEM and keep them there. Successful programs and initiatives focused on diversity and inclusion, also make women feel like they belong at their workplace, which increases job satisfaction. One of the most important and crucial offered solutions is teaching men about current disparities that disadvantage women in STEM and create more inclusive and welcoming policies and culture that will help advance women in their careers (Casad et al., 2019). Moreover, as Griffin states in her article, even though initiatives aimed at the recruiting and retaining of women, together with education and mentoring programs have deemed to be successful, it is necessary to tackle the gender inequality problem in STEM at the root (i.e. tech culture), by continuing to invest time and resources to change current STEM culture, as this still perpetuates the exclusion of women and minorities (Griffin, 2018).

STEM culture has often been associated with masculine traits and behavior. Callum Jones, Verity Trott, and Scott Wright describe how hegemonic masculinity is a dominant social construction in contemporary society that sees men as "powerful, dominant and authoritative." Hegemonic masculinity becomes problematic when some of its toxic and socially destructive traits take hand: this is known as toxic masculinity. Some examples of these traits are misogyny, the urgency for violent behavior, and denigrating or discriminating against women

(Jones et al., 2020). In tech culture where toxic masculinity is present in abundance[2], Miller et al. explain in ""It's Dude Culture": Students with Minoritized Identities of Sexuality and/or Gender Navigating STEM Majors," that it is not just women who do not feel included in STEM culture, but everyone who does not identify with the normative identity in STEM, which is the heterosexual, white and male: also referred to as cisheteropatriarchy (Miller et al., 2020). This power structure is problematic because "cisgender men, masculine behaviors and heterosexuality" are being privileged, and those who do not comply with this ideal are being marginalized (Miller et al., 2020). Miller et al. found that toxic tech culture is often characterized by: "bonding over hypermasculinity and assumed heterosexuality, treating students with MIoSG[3] as if they are inferior or invisible, and sexualizing and objectifying others" (Miller et al., 2020, 6). As contemporary tech culture is thus often associated with toxic masculinity traits, some scholars argue that discrimination, bias, and harassment issues are a result of toxic masculinity and that it is important to see this as the root cause of the gender gap and thus treat gender disparity accordingly by creating a more inclusive culture.

Genderwashing

After the introduction of *greenwashing* where companies pretend to be more sustainable than they are, now comes *genderwashing* where companies and organizations claim to be more diverse and inclusive than they actually are. Wendy Fox-Kirk, Rita A. Gardiner, Hayley Finn, and Jennifer Chisholm wrote an article on the subject where she explains the "myth of equality" that emerges as genderwashing takes place. Fox-Kirk et al. define genderwashing as

> (…) the process whereby organizational rhetoric about equality differs from the lived experiences of marginalized workers creating the myth of gender equality while individuals in the organization continue to experience persistent gender discrimination due to organizational structure and cultural practices such as policies, procedures, and norms (Fox-Kirk et al., 2020, 588).

Fox-Kirk et al. thus explain how genderwashing practices cause female employees to be supposed to be treated equally when looking at the claims of a company or organization, while this is not the case in their day-to-day lives as discriminating practices are embedded in the structures of the company or organization.

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[2] Hereafter referred to as toxic tech culture. The toxic masculinity traits in STEM are the reason that tech culture is sometimes referred to as "toxic dude culture" or "toxic bro culture" (Miller et al., 2020).
[3] Minoritized Identities of Sexuality and/or Gender (Miller et al., 2020).

Genderwashing emerges from power structures that are being perpetuated by the discourses of an organization, that promote the idea of equality but are not addressing the structural inequities properly that allow these forms of discrimination to continue (Fox-Kirk et al., 2020).

Genderwashing practices are often used to silence the resistance (i.e. those who do not identify with the "normative identity" in STEM) as they can prove to work on it by having policies on gender equity, but in reality, the situation often does not improve. For instance, these policies are often used as a way to work around them, rather than using the policy as guidelines for organization in a company. Genderwashing does not only cause silencing but also tends to focus on individual cases instead of looking at the institution where the toxic practices are often hidden in its structures and culture. This means that the focus is on fixing individuals, instead of the organization itself that needs to be fixed. This works two ways as it is either women that needs fixing in order to fit into STEM or, in the case of for example sexual harassment, it is the fault of the harasser and not of the organization's culture. If incidents like these are the rule rather than the exception, then organizational change is needed to tackle these genderwashing issues as they emerge from structural power inequities (Fox-Kirk et al., 2020).

Organizations are often perceived as gender-neutral or objective, while they are created based on gendered principles: the same principles that have gender inequality as a consequence. Looking at *From Barbie to Mortal Kombat* by Justine Cassell and Henry Jenkins, this book originally applies to videogames but is also relevant when looking at gender in STEM. An example used in the book is that when students had to create unisex software, the software was actually aimed at boys because there is the implicit assumption that male is the "default value for student (Cassell and Jenkins, 1998, 13)". This phenomenon takes multiple shapes, but it shows us how a supposedly gender-neutral culture is actually a masculine one, where girls often do not align with: this explains why tech culture is often not appealing to girls. Looking at the bigger picture, Cassell and Jenkins explain that when masculinity continues to be "the invisible norm," it is likely that the dominance of men in tech maintains. Attempts to make videogames, or technology fields in general, more attractive to women has been to take existing programs and "paint them pink" by adding more girly graphics or colors (e.g. pink and pastel colors) that fit into the stereotypical aesthetic of women. In addition, when separate environments are created in order to make it more appealing for women, this only reinforces the idea that women do not fit into tech culture as it is, making them feel more unwelcome as a result. Cassell and

Jenkins, therefore, propose to aim at a more inclusive culture for everyone, instead of just increasing old stereotypes (Cassell and Jenkins, 1998).

Feminism

It is important to include women and minorities in STEM, not only to avoid bias in e.g. software or algorithms but also for companies to broaden their view and enhance their business or organization. Donna Haraway writes on a more feminist approach to epistemology in her work "Situated Knowledges: The Science Question in Feminism and the Privilege of the Partial Perspective." The concept of situated knowledges is how feminist objectivity comes to be. It points to the idea that knowledge is a reflection of the context and conditions from which it is produced. Haraway uses vision as a metaphor when she draws on the dominant gaze that registers "all the marked bodies, that makes the unmarked category claim the power to see and not be seen, to represent while escaping representation (Haraway, 1988, 581)." This means that the unmarked bodies, which are signified by white men, do not acknowledge or describe themselves, but only those that do not fit into the description of white men: this is then the marked category. Those who are overpowered by the unmarked category, hold the standpoint that is preferred because the less dominant groups of society are those that are familiar with the denial via repression of the dominant group of white men. According to Haraway, the standpoint of the overpowered category is thus ought to be more objective and therefore more acceptable, than the standpoint taken by the unmarked category that claims to know all (Haraway, 1988). In addition, Heybach and Pickup argue that the idea of science as we know it being objective originates from the masculine values where the mind (i.e. male) rules nature (i.e. female). It is therefore suggested that the abundance of men in STEM should be seen as a consequence (not a cause) of the masculine values that are implicit in the 'objective' scientific train of thought. Hence, it is important to acknowledge that there are masculine assumptions in traditional science, and science should be reinvented as human instead of male (Heybach and Pickup, 2017).

Considering that the dominant group in STEM consists of white heterosexual men, it needs to be clear that the subjugated individuals are those who do not identify as such. On that account, I will introduce the concept of intersectionality as defined by Kimberlé Crenshaw, which is a feminism that is more inclusive of all women instead of just middle-class white women. Intersectionality describes the crossed forms of oppression that occur with women or men's social positioning of race, class, and/or gender (Lutz et al.,

2011). In addition, intersectionality includes all of the ways that add to implicit or explicit forms of oppression, such as sexuality or disability, but I will use intersectionality in my research as a concept to address that I am aware of the complex intersections of discrimination in STEM. This approach can help to understand how disadvantage and privilege come about and may be perpetuated through these complex relations.

Method

I will show with a Critical Discourse Analysis (CDA) that discourse can reveal power structures and gendered ideologies in implicit or explicit ways. This thesis exposes how GWC defines the problem of gender inequality, and how this might hold underlying power structures, through a close reading of the website and Instagram of the GWC platform. When performing a CDA, it is important to look critically at the selected texts and analyze this with care and precision, as it is presumed that every aspect of the text is there for a reason. All of the text elements are carefully chosen and some are purposely left out. I will focus on particular words and statements that are used on the GWC platform from which certain ideas or assumptions unfold.

Critical Discourse Analysis

The term discourse, as described by Michel Foucault, describes not one particular example or occurrence of language use, such as (part of) a text, but rather the specific regulations, divisions, and systems of a larger body of information. Discourse constructs topics and influences the ways ideas are put into practice (Foucault, 1972). Reflecting on Foucault's statements about discourse, Iara Lessa defines discourse as a construction of "systems of thoughts composed of ideas, attitudes, courses of action, beliefs and practices that systematically construct the subjects and the worlds of which they speak" (Lessa, 2006, 285). This definition is closely tied to the concept of ideologies. Teun van Dijk defines ideology as a belief system that is shared by a social collective: ideologies consist of fundamental ideas that construct the social identity of a group and control other beliefs they might have. Moreover, ideologies are relatively stable and do not change overnight. When an ideology is widely shared and accepted, it can become a common belief. The relation to discourse is that the ideologies are expressed, reproduced, and enacted by the practice of discourse. It is important to note that "discourse is not always ideologically transparent (van Dijk, 2006, 124)." Therefore, I will use the context of the theoretical framework as a way to look into the discourse and analyze how GWC constructs gender inequality in

STEM. Norman Fairclough describes how in discourse analysis, it is crucial to take social issues as a starting point when analyzing texts (Fairclough, 2001), which is why I will use the theoretical framework as a reference for the justification of my claims on GWC.

One of the main purposes of using a CDA is critically examining everyday assumptions and beliefs, as they might hold hidden ideologies. Often, dominant ideologies may seem neutral because a majority of society thinks about matters the same way, or forget about the existence of "alternatives to the status quo" (Fox-Kirk, 2020). One of the key focus points of a CDA is power. CDA can be used to look into who is given power, who is denied power, and how power structures are (re)produced in a text. Discourses not only reflect what people believe but also constitute these beliefs (e.g. gender models or inequalities). This double role of discourse makes researching power interesting. Hegemonic discourses are discourses used by those who benefit from current structures of power to maintain structural inequalities (Fox-Kirk, 2020). Texts in organizations inform and shape action. Whether the text is a document, policy, contract, or email, texts have consequences. Texts produced by organizational members are consequential regarding issues of power relationship, effectiveness or control. Texts act as coordinators of people's activities within institutions (Fox-Kirk, 2020). I will use CDA, as Teun van Dijk puts it, to study "the way social power abuse, dominance, and inequality are enacted, reproduced, and resisted by text and talk in the social and political context (van Dijk, 2015, 352)." More specifically, I will describe how discourse constructs a reality that appears neutral, but actually is shaped by, and constructs power structures in gender.

In this research, I will thus look into the underlying ideologies and power structures behind GWC. Ruth Wodak wrote one of her books on discourse analysis, where she explains CDA as a method that is used for criticizing existing ideologies and power structures by looking at texts. Here, discourse either sustains the current state of affairs while it also contributes to changing it. By exposing discourse, you can reveal hidden power structures, e.g. between men and women, that are produced by the ideological effects of discourse. Wodak states that by using CDA, you can thus make the implicit relationship between power, ideology, and discourse, explicit (Wodak, 2007, 304). I expect GWC to enhance the progress that they are making and have made on the part of the problem that focuses on women's abilities and confidence.

Michelle M. Lazar describes in her book *Feminist Critical Discourse Analysis: Gender, Power and Ideology in Discourse* how gender, power, and ideology are becoming more complex and hidden in discourse. Lazar states that

"studies in CDA with a gender focus mostly adopt a critical feminist view of gender relations, motivated by the need to change the existing conditions of these relations (Lazar, 2005, 2)." As GWC is an initiative that sees the need to change the current gender gap in STEM fields, I will apply a feminist CDA in order to expose the "interrelationships of gender, power, and ideology in discourse" (Lazar, 2005, 5), and provide a critical examination that emphasizes the need to change the current gender relations. Moreover, Lazar explains that researching as a feminist critical discourse analyst, the most important matter is critically looking at discourses that are sustaining the status quo where women are disadvantaged or being discriminated against. Performing a CDA could therefore reveal how power relations in gender are established by GWC, or even reinforced. I expect GWC to only look into the part of the problem, that does not tackle the gender inequality problem in STEM at the root (i.e. tech culture itself).

It is not only important to look into what is being told, but also on what is not being told when looking at discourse. Raka Shome elaborates on this by saying that you need to consider that within discourse, there is always part of the story that is not being told, whether purposely or not. She states that within the part that is not being told, the "racialized, gendered and sexualized" beliefs become evident (Shome, 2001, 325). In the analysis, I will look at what is not being told, so what is being suggested instead. To show what is made invisible, I will summarize the most important causes and consequences of the gender gap in STEM in the analysis to compare the statements of GWC.

The Selected Platforms and Texts

For the first part of the analysis, I will discuss some examples that will prove to be exemplary of toxic tech culture, in order to paint an accurate picture of the current situation where women are being pushed out of STEM. I will look at articles that cite first-hand stories of women in STEM, which support the claims that are made in the theoretical framework. For an analysis of the discourse of GWC, I choose to focus on their website, and their Instagram platform. The GWC website consists of an elaborative set of information on the non-profit organization. I will look into their mission statements, the annual, advocacy, and research reports, and their sources of income that are partners such as Google and Uber. Regarding the Instagram platform, I will look into a selection of their Instagram updates, which will provide more of the day-to-day discourse of GWC, as the website functions as a more general source of information on the organization. The period chosen for this study is the time period from 2019 to 2020. The reason for choosing this specific time period is that this will not only

provide for the latest information on the company and its developments but also critically examines the statement of the CEO Reshma Saujani on their website that claims that they have fixed the leaky pipeline problem.

With a CDA I can look at selected texts from the website and Instagram of GWC critically, and point out what exactly the company values or dismisses. Here, the formulation of the problem by GWC might ignore or lack a significant part of the problem. What is not being said can thus show to be more important than what is being said, in terms of exposing the hidden power relations. What I will look for during the analysis are statements on the current problems with STEM culture, statements on GWC's mission, and statements that are phrased in a passive way (e.g. "women leave STEM" instead of women are being pushed out of STEM).

This thesis is not aimed at exposing the effect of GWC; that is looking into what is true about their statements of fixing the pipeline problem. However, this thesis can reveal the structures within which thought is given to the topic of gender discrimination and bias in STEM. It is aimed at using relating discourses and relevant theories to expose how GWC describes the gender problem, what it is doing to fix this problem and what the underlying power structures here are. I will therefore aim to emphasize what is said (and not said) on the website and in the Instagram of GWC, including its context and history concerning gender.

Analysis

In order to better understand how GWC is trying to tackle the problem of gender inequality, I will examine the selection of the material in the analysis section. I will focus on how GWC describes the main reasons for the existence of the gender gap in STEM and how they are going to help more women get into STEM fields. To do this, I will research the discourse on gender inequality and GWC's mission by looking into the research reports, advocacy reports, and statements made on the website, as well as a selection of Instagram posts from 2019-2020.

I will divide the analysis per sub-question. First, I will address the current situation on gender inequality in STEM to illustrate the causes and consequences of the disparity between men and women in tech. Second, I will address how GWC defines the gender inequality problem, and what their according mission statement is. And finally, I will look into whether and to what extent the actual problem of gender inequality in STEM, and the solution provided by GWC correspond. Per discussion of the second and third sub-question, I will first look into the material provided by the website and then look into the Instagram posts, in order to retain structure.

Gender Inequality in STEM

On the GWC website, they discuss that it is important to combat stereotypes and that "you can't be what you can't see (Girls Who Code, 2021)", as women are currently not seen as the STEM stereotype and therefore do not see STEM as an obvious career choice. Joan C. Williams writes in a Harvard Business Review that fixing the leaky pipeline in STEM by interesting and educating young women has proven to not be effective, as the number of women has been decreasing over the past 30 years. She addresses multiple studies that point out that the main reason for this is bias, instead of issues of interest or education, and that women of color are even more affected by bias. These forms of bias are, for example, present in the ways that women need to prove themselves over and over again in order to be taken seriously, as the stereotype of a woman in STEM signifies that women do not perform as well as men do (Williams, 2015). This refers to the gender ideology where men and women are assigned certain roles, such as the masculine traits of being independent and competitive, which are important in STEM, while more feminine roles such as being creative or nurturing are being looked down upon. Moreover, women often feel the need to behave either masculine and feminine on the work floor, as they can not be too feminine (i.e. not suited for STEM) or too masculine (i.e. perceived as bossy or too direct). One of the interviewed women, an astrophysicist, said she "had to damp down her

ambition and become as amiable as possible (Williams, 2015)," as women in STEM who see themselves as assertive or direct, may come over as aggressive or rude. This is especially true for women of color, as Black or Latinx women are often perceived as short-tempered or very straightforward. Because of the intersections of discrimination, non-white women are also subject to bias that are race or ethnicity bound, such are assumptions that "discuss Hispanic people as being lazy" or assuming that Asian women are foreigners and "speak English surprisingly well (Williams, 2015)."

Next to discrimination and bias based on gender and ethnicity, toxic masculinity in STEM also causes (sexual) harassment on the work floor. One of the major sponsors of GWC is Uber, which received backlash in 2019 when whistle-blower and former software engineer at Uber, Susan Fowler, spoke up about the harassment and discrimination that happened at the company. When her superior sexually harassed her during her first week at the company, Uber's HR management told Fowler that it probably was not his intention and that she could transfer teams if she did not feel at ease. Uber did not want to press any charges on the male employee in question, despite allegations from multiple women, because of his high performance in the company (Fowler, 2017). This shows again how tech companies condemn toxic behavior by men and refuse to address men to change: they focus on making women adapt instead. Fowler mentions that when she joined Uber "the organization I was part of was over 25% women. By the time I was trying to transfer to another engineering organization, this number had dropped down to less than 6% (Fowler, 2017)". Uber is just one example of a company that refuses to address structural issues and uses diversity policies as a way to silence the resistance, but genderwashing practices like these are not uncommon in the STEM sector.

In the research report on how to keep women in tech, GWC addresses an example from one of their corporate partners Google. This report explains how Google is working on its diversity policies and how these policies increased the number of women in tech roles from 17% in 2014, to 24% in 2020 (Accenture and Girls Who Code, 2020b). Even though this increase can be seen as a positive development, there may still be problems in the day-to-day structure of Google in terms of genderwashing. In 2017, a male Google employee wrote a memo on how Google is discriminating against white men by implementing hiring measures to increase diversity at Google. Here, he wrote that women are genetically not capable for tech jobs, such as software engineering. Even though the employee received lots of backlash and got fired, his memo also got attention from people in tech culture who agreed on the matter (Hicks, 2017). This shows how

misogyny in tech culture is not an isolated incident, but rather part of the toxic masculinity traits in contemporary tech culture and patriarchy. This is also visible in an article from *The Guardian,* which stated that several Google employees threaten to sue Google because of its hostile culture towards women and its significant gender wage gap where some women claim to only earn two-thirds in comparison to their male colleagues (Levin, 2017). Moreover, more recently Google hired a Black woman called Timnit Gebru, who was working as a Google Ethics employee to look into the ethics of their Artificial Intelligence (AI) technology. But when she found bias in their technology and critiqued the company's diversity efforts, she was fired as a result; and so was her superior who was defending her. Moreover, the head of AI released a statement that she resigned and that her research "didn't meet our bar for publication" (Wong, 2020). The fact that Gebru is a woman and Black, makes this a textbook example of the discrimination Black women face because of their intersectional position in tech culture. Misogynistic practices are often implicit in tech culture, as it is deeply embedded in its structures. It is therefore not surprising that misogynistic practices like these are often not properly acknowledged or dealt with.

These scandals at Google and Uber show how genderwashing takes place, as both companies portray themselves as diverse and inclusive companies, while it is clear that the power structures in the workforce are still shaped by cisheteropatriarchy that condemns discrimination and harassment towards those who do not fit the white, masculine norms. Referring back to the theoretical framework, research indicates that these scandals at Google and Uber are not isolated incidents, but can happen in all tech companies and organizations where toxic tech culture still exists. In addition, it could be questioned if GWC is also participating in genderwashing practices, as it teams up with companies like these: this would not fit their activist claims as seen on their website on which I will elaborate in the following part.

"Change the Face of Tech"

Here, I will discuss a more extensive discourse analysis of GWC, that looks into the discourse of GWC and their utterances. I will do this by discussing how GWC is defining the gender inequality problem, and what its mission statement is. Here, I look into a selection of Instagram posts and the main reports found on the website, which will be numbered throughout the analysis as (1) Accenture and GWC: Cracking the Gender Code in Computing (2) Accenture and GWC: Resetting Tech Culture (3) 2019 Advocacy Report on the State of Girls in K-12 Computer Science Classrooms (4) 2019 Alumni Data Report on Applying for

Internships as a Women in Tech, and (5) 2019 Annual Report. If there are any separate statements from the websites, I will say so in the analysis.

What Is the Problem According to GWC?

In one of their research reports, called "Cracking the Gender Code: Get 3X More Women into Computing", GWC describes how the gender gap in STEM has become bigger than it already was, as there are fewer women in STEM than there were 20 years ago. Here, they stress that action needs to be taken now, as the gap is increasing in spite of many efforts and initiatives aimed at getting more girls and women interested in computing (Accenture and Girls Who Code, 2020a). Even the implemented policies that aimed at increasing access to computer science, which are stated in the "2019 Advocacy Report", seem to be doing more harm than good, as these policies have not made girls significantly more interested in pursuing majors in computer science at school (Girls Who Code, 2019a). This lack of interest despite the policies and efforts already made is especially concerning, considering that the STEM industry is growing and more jobs are opening up (Accenture and Girls Who Code, 2020a). More women are needed to fill up the jobs in STEM, otherwise, men will fill up these jobs and even further increase the gap.

The idea of a leaky pipeline, as seen in the UNESCO report, is a model that is often referred to when describing women in STEM. Even though more women become interested in pursuing tech education at college and university, the dropout rate is high, almost 40%, resulting in only 25% of graduates worldwide being women. GWC research with Accenture in "Resetting Tech Culture: 5 Strategies to Keep Women in Tech", points out that women leave STEM at a pace that is 45% higher than men. Moreover, as of today, only 32% of the global tech workforce consists of women: this number goes down even more when looking at the engineering industry (16% women) and women in computing careers (27% women). Furthermore, half of the women working at a tech job, quit before turning 35, where there is only 20% dropout comparing to jobs in fields other than STEM (Accenture and Girls Who Code, 2020b). Strikingly, in GWC's "2019 Alumni Data Report: Applying for Internships as a Women in Tech: Findings From a Survey of GWC-Affiliated Women", results show that it is not only at an older age that women drop out or are discouraged to continue: already at the age of 19, young women have to deal with the problems in the tech industry and as a result are not encouraged to follow the pipeline. The former CEO of GWC says on this matter: "We've brought our girls so far – through obstacles in elementary, high school, and college – only to face this kind of behavior in the workforce.

What's worse though is that it's happening in an industry that claims to be working toward gender parity (Girls Who Code, 2019b)." Here, Saujani addresses the pipeline problem that girls often start off well with help of GWC, but walk into issues once they are introduced to tech culture in either education or workforce.

Tech culture is often seen as predominantly white, straight men, with a tendency to exclude those that do not fit this description. Especially women of color, or women who are queer, face difficulties in the tech sector due to the crossed forms of discrimination (i.e. intersectionality) and the limited perceptions of inclusivity in the tech culture. Looking at a survey on inclusive cultures performed by GWC, it turns out that in a less inclusive environment, only 35% of LBT [4] women would say they love their job, compared to more inclusive organizations where this number rises to 83%. Not feeling a sense of belonging impacts job satisfaction, which often leads to women quitting their jobs in STEM: this also applies to dropping out of tech majors as toxic tech culture is present throughout the entire field of STEM (Accenture and Girls Who Code, 2020b). This adds to what several of GWC's Instagram posts are saying, e.g. "Me vs my patience for toxic bro culture," "dreaming about when toxic bro culture is gone from tech." or a meme that says "We can't close the gender gap till we get rid of toxic bro culture (see below)." On their Instagram, GWC clearly shows how toxic tech culture is one of the major issues that need to be solved in order to reach gender equality.

Figure 1. Memes on toxic tech culture. (@girlswhocode, *Instagram*).

Toxic tech culture brings several complications that have more specific consequences than merely making women feel as if they do not belong. One of these things is the lack of diversity in STEM. As stated on the homepage of the

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[4] GWC states LBT in their reports, instead of LGBT, as they are only mentioning women.

GWC website it says that "You can't be what you can't see," which is why women need to have women like them to look up to when looking for a tech career. This is especially visible in leading roles, as only 18% of CTOs or CIOs are women in the largest 1000 tech companies (Accenture and Girls Who Code, 2020b). This phenomenon already occurs during the internship or job application process. A survey on application processes pointed out that there are often no female interviewers or recruiters, which can make the interview feel more intimidating for young women. Moreover, one of their surveyors described that: "there is a very uncomfortable feeling when a company tries to tell you about their commitment to diversity and you're sitting in a room with only white, male faces (Girls Who Code, 2019b)." This links to the concept of genderwashing, which perpetuates "the myth of equality", as companies and organizations almost always dedicate money to policies on diversity and equality, but these often do not tackle the structural gender inequalities resulting in little to no improvement in the everyday life of women at work (Fox-Kirk et al., 2020). One of the Instagram posts of GWC provides the perfect example for this, as it exposes a tech event in Italy where two women were photoshopped into a picture of 15 men: the tech industry is keeping women out and makes up excuses for their lack of diversity.

Almost 80% of HR leaders of the 1000 biggest tech companies think that women feel empowered in their workplace, while only 54% of women agree with this statement (Accenture and Girls Who Code, 2020b). More than half of the women that participated in the survey on applying for tech jobs or internships said that their experience had been unpleasant, or know someone who had felt this way about an interview. The survey states that "the experiences of these young women ranged from bias to discrimination to outright harassment, and were representative of start-ups and Fortune 500 companies alike (Girls Who Code, 2019b)." For instance, interviewers did not take women and their abilities serious, all the interviewers were white males, the women applying felt "pressure to consider their appearance," men that were less qualified for the job or internship got the job, and some women were being flirted with or even asked out by the male interviewers or recruiters. Some examples of these discriminating practices is when interviewers asked "What makes you stand out as a girl?" or making biased assumptions by saying things such as "You are Asian, but you can't do math?" or assuming Muslim women need a visa sponsorship for the job (Girls Who Code, 2019b). "At GWC, we believe it's likely there is a direct connection between the discrimination women face in recruiting and the harassment and retaliation that awaits them once they enter (Girls Who Code,

2019b)." Here, GWC thus describes how the culture that currently exists in STEM is biased and discriminates against women and minorities in every aspect of the field.

On the @girlswhocode Instagram, GWC created the hashtag #OverheardTech with which women could share their stories about any negative experiences they might have had during interviews for tech jobs. These quotes, as seen in Figure 2, result from the toxic masculinity traits of tech culture, where women are seen as inferior to men and therefore not treated as equals on the work floor. The posts are examples of, among others, unfair hiring practices, making assumptions based on gender, and lack of inclusive cultures and harassment, which are associated with toxic tech culture.

Tech company's formal hiring assessment prompt: We're selecting 5 employees for advanced training. There are 5 males and 3 females to choose from. The only requirement is the team has to consist of at least 3 males and at least 1 female.

#OverheardTech

Male tech interviewer: "Why do you want to go into the tech field if you're a female?"

#OverheardTech

Male tech interviewer: "We're really committed to diversity."

Girls Who Code Alum: *sitting in a room with only white, males*

#OverheardTech

Male tech interviewer: "What makes you stand out as a girl? How would you deal with harassment in the workplace?"

#OverheardTech

Figure 2. Quotes from #OverheardTech. (@girlswhocode, *Instagram*).

What Is Their Mission?

GWC has a clear goal in mind, which is, said briefly, closing the gender gap in STEM. They set the ambitious goal of getting three times as many women as there are now into computing by 2025: the number of women in the STEM workforce will then rise from 24% to 39%, which adds almost 300 billion dollars to the cumulative earnings of women in the U.S. GWC is planning to achieve this

by focusing on the three stages of education for girls in order to change the path of their careers. The first step is to already get girls interested in junior high, then make sure to sustain this engagement throughout their further education, in order to eventually inspire young women to pursue a career in STEM (Accenture and Girls Who Code, 2020a). GWC mentions in their advocacy report that there are forms of bias and discrimination towards women during every stage of the pipeline. GWC emphasizes how it is possible to bring more girls and women into tech, but how girls need to be (or taught to be) brave and resilient (Girls Who Code, 2019a). In order to achieve this, GWC aims to help (young) women throughout the entire pipeline, as "girls and women need a system that supports them, and a feeling of belonging, in order to truly persist, thrive and lead in this industry (Girls Who Code, 2019b)."

In the advocacy report, GWC focuses on the benefits of a gender-specific approach. By analyzing data provided by the state and how the different states of the U.S. are trying to get girls into computer science (CS) classrooms, it becomes clear that simply providing for CS classrooms in schools is not enough as boys are still the majority here. However, recent research points out how GWC shows promising results in getting girls interested and participating in CS classrooms by using a gender-specific approach. One of the surveyees in the advocacy report explained this by saying that: "I miss the connection that I had at GWC, where it was so easy to ask and improve in a place where there wasn't any pressure to outperform the boys, or just prove my worth." Here, GWC thus creates a safe space where girls can feel more at ease, inspired, and supported, instead of having to compete with the boys in CS (Girls Who Code, 2019a).

Concerning current toxic tech culture, GWC claims to have "cracked the code" to reverse this culture. They say that: "We have found that an inclusive culture – on that is not only diverse on paper, but that enables everyone to have a voice – is the master key that unlocks opportunities for women who are studying and working in technology (Accenture and Girls Who Code, 2020b)." GWC set up five tactics that need to be applied in order to create an inclusive environment (1) allow women *and* men to take parental leave when needed (2) companies should make their progress on any advancements they are making in terms of diversity public, so they can be held accountable if they are not (3) women should be provided with support in forms of "mentors, sponsors and employee resource networks" that should allow for proper compensation for the biased or uneven workforce (4) women should be rewarded when being creative and innovative, as this will also attract more women into the field (5) events that provide for opportunities, such as networking, should be planned during working

hours, in order to ensure that everyone can participate. GWC claims that if these practices are adjusted by, among others, companies and organizations, women would not only retain in STEM but also become more drawn to the sector (Accenture and Girls Who Code, 2020b).

The Problem-Solution Gap

After explaining the gender inequality gap in STEM according to various scientific articles, and a thorough discussion of this problem and the accompanying mission according to GWC, I will now address where these two are at cross purposes.

After a thorough examination, it was remarkable that GWC only emphasizes how they are getting women into STEM, but they do not have any backup information that supports the idea that getting women into STEM will fix the gender gap. More specifically, if more women get into STEM because of education and guidance provided by GWC, does GWC then assume that tech culture will automatically adapt and become more inclusive? Looking at the part of the academic debate that reflects on solutions to the gender gap in STEM, it becomes clear that if tech culture is going to change, the focus needs to be on the environment itself instead of women. If tech culture changes, it will become more appealing to women and will keep them in STEM as a result. As multiple articles that are mentioned in the theoretical framework have pointed out (e.g. Griffin, 2018), STEM is a gendered, male-centric field that causes toxic outcomes that disadvantage women. Even though GWC acknowledges on their website and Instagram that tech culture needs to change, they merely make suggestions in their reports but do not make any real attempts to tackle this problem.

GWC has a lot of information on their website and Instagram on the problem, and provides solutions, in their research reports with Accenture for example, how to put an end to the gender gap. I will first address what it is exactly that GWC is doing to fight gender inequality. The main activities provided by the GWC are providing for coding clubs and summer programs for girls, which can be found on their website. The clubs take place after school for grade 3-12 and are created in order for girls to "explore coding in a fun & friendly environment (Girls Who Code, 2021)." In these clubs, girls join each other in a "safe and supportive" class where they come into contact with their peers and connect with women from the tech industry. Here, they learn to code by finding solutions to real problems in their neighborhood or community. In the summer programs, girls from grades 10-12 are working on similar activities as the clubs, but then in a more immersive program that last 2 weeks during the summer.

What is striking is that a "safe and supportive environment" is necessary, as mixed classrooms (with boys) are apparently not safe nor supportive for girls.

The creation of separate spaces can be questioned for several reasons. (1) Girls have said to work and learn better in a boy-free environment as they feel safer, but if they pursue STEM education and careers, they will inevitably end up in a mixed-gender environment, where the intimidation by men will still exist (2) when classes are separate the focus is brought to the girls, while it might be more important to teach boys and men on how to be inclusive so separate classrooms will not be necessary in order for women to feel safe (3) creating separate classrooms and therefore focusing on girls who code, does not change tech culture and might even reinforce the notion that women do not belong in STEM, as mentioned by Cassell and Jenkins (1998), as they apparently do not feel included in regular (i.e. mixed) STEM classrooms.

GWC also provides support for the women that are pursuing a college or university-level education majoring in STEM. Where the clubs and summer programs are focused on middle and high school girls only, the college loops are created for all young women that are over 18 years old and are enrolled in a college or university. These college loops are aimed at facilitating network events with people from the tech industry, who for example support girls on how to achieve leadership. The college loops were created for women who want to become involved in a community that is supportive and helps them "persist and succeed in the field." The word choice of women needing to persist, makes it clear that women have to live and work through difficult conditions. Here, GWC thus emphasizes on how women need to adapt to the toxic circumstances, instead of looking into these circumstances themselves. This refers to the idea mentioned by, among others, Heybach and Pickup (2017), that STEM is a fixed entity to which women need to adapt in order to fit into the values of cisheteropatriarchy. This is also visible on their website when they mention activism as one of their core values. They state that "we're not just preparing our girls to enter the workforce – we're preparing them to lead it, improve it, to completely and totally transform it (Girls Who Code, 2021)." The fact that they want girls to improve and transform the workforce, instead of men who created the toxicity of the workforce in the first place, does not seem right.

Throughout the materials from the website, some phrases were passive in the way that it implicitly blames women for not fitting into STEM culture, instead of STEM culture not being suitable for women. For example, saying that "women leave tech roles (Accenture and Girls Who Code, 2020b)" instead of saying that women are being pushed out of tech roles. Moreover, even though this report is

dedicated to improving tech culture, it does not state anywhere that tech culture is a consequence of toxic masculinity and is a gendered field. Or in another Accenture report, where it says "who will crack the code: the answer is all of us. Its girls and young women, schools, businesses, government and non-profits (Accenture and Girls Who Code, 2020a)." Here, girls and women are even named as the first who will need to work on changing the gender gap, where GWC does not address that it is men and the toxic masculine traits in tech culture that are at the root of all discriminating problems in tech: that is what is necessary to "crack the code" on fixing gender disparity in STEM culture. Moreover, the advocacy report mentions that "building girls' bravery and resilience (Girls Who Code, 2019a)" is needed to close the gender gap, but this implicitly indicates that girls will enter rough conditions that they will need to endure. This raises the question of why women will need to adapt in order to work in STEM, while men can also contribute to making STEM a better place for women to work so that they do not need to be brave or resilient. Another phrasing that is stated in the annual report of 2019 is that "women need to combat stereotypes (Girls Who Code, 2019c)," which is problematic as it states again that women need to do something in order for men to accept them into STEM fields. It is however the perception of toxic tech culture that women are not good enough, and women should not be forced to prove their worth.

     If GWC really wants to make a difference it needs to be consistent. The first statement you see on their website is "we're building the world's largest pipeline of future female engineers (Girls Who Code, 2021)," which refers to the fact that GWC is trying to fix the leaky pipeline by getting girls interested in STEM and providing them proper computing education. On the GWC Instagram however, a meme is posted that says: "When they say it is a pipeline problem," captioned with: "and you know it's a lie," which acknowledges that GWC knows that it is not a pipeline problem (i.e. the issue is not due to a matter of interest nor ability of girls in STEM).

Conclusion

This thesis aimed to expose the discourse on gender inequality of Girls Who Code. Based on a feminist CDA of a selection of texts from the GWC website and Instagram, I have shown how media discourse can, directly and indirectly, sustain inequality. I chose to do a CDA, because it is critical to take into consideration the socio-cultural context in order to properly understand why the discourse is as it is. I expected to find, as already indicated in the introduction, that women should not be the main focal point when trying to fix the gender gap

even though this is what GWC is doing. It could therefore be said that GWC is, deliberately or not, maintaining the exact same culture it is trying to improve, by not focusing on the root that is toxic tech culture.

During the research process, some insights arose, as I wondered why the content from the GWC website was very nuanced in its ways of addressing tech culture, and never mentioned it in a way that directly calls out the toxic masculine traits from the tech industry. On the GWC Instagram however, some posts were pointing explicitly to toxic tech culture and addressed the need for it to change if we want to close the gender gap. GWC frames the root of the gender gap problem on their website in order to attract more partners, or not insult their partners when calling them out: as if this is more important to them than actually closing the gender gap. If GWC wants to put an end to the gender gap as an organization with activist purposes, is it then just that there is a difference between the Instagram and website? Why is GWC acknowledging toxic tech culture in memes for young women, but not addressing this culture to their partners (e.g. Uber and Google) and/or holding them accountable for it? Or, why is GWC even partnering up with companies that condemn behavior that create a hostile environment towards women, instead of only partnering up with companies who are inclusive and just towards women and other marginalized people? It does not seem fair to not call these companies out for their mistakes, and instead appoint women to fix the problem.

From a feminist perspective, my critique on GWC is that the current discourse is mainly concerned with changing women, while research has repeatedly pointed out that the gender gap cannot be closed until tech culture changes. Cisheteropatriarchy is the unmarked norm in STEM, while women and other marginalized people are seen as the marked category that needs fixing. Genderwashing in STEM currently conceals the fact that it is the sector itself that needs fixing, by focusing on fixing individuals rather than the system. What is missing in STEM is addressing men for their toxic masculine behavior; this is more important than teaching girls how to code if you want to change the gender gap. It is striking that a problem caused by men needs to be fixed by women, as men then remain unaffected. GWC needs to acknowledge this (not only on their Instagram) and portray this more explicitly in their discourse on the problem, as the solution to the gender gap will be getting rid of the toxic masculine values by creating a more inclusive culture that will attract and maintain women as a result.

Looking at how GWC's discourse describes the gender inequality problem in STEM, I will draw the following conclusions: (1) making a girls-only environment solely increases the idea of women not fitting into STEM, and is a

step away from the solution of a more inclusive tech culture (2) if GWC wants to contribute to "fixing the system" (i.e. tech culture) then it is crucial to change the gendered values of STEM, instead of merely focusing on computing education for women, and (3) GWC needs to make sure that what they state on their platforms aligns with what they are actually doing, as well as being persistent with only choosing partners that do not pursue genderwashing practices. If the discourse and practices of GWC are not tackling the main problem (i.e. toxic tech culture), this indicates that they are actually maintaining the same culture and practices they are trying to improve. As the common belief in STEM is that women are not suitable for STEM and therefore need to change in order to fit in, the discourse of GWC reinforces this idea as it puts the focus on women, as if they are the focal point of the problem. GWC enhances the progress they have made by repeatedly stating that many girls are becoming more interested in beta fields, while not properly addressing the fact that men and tech culture need to play their part as well.

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