“WHAT WOMEN LIKE AND WHAT MEN SEEK”: GENDER POLARIZATION IN (PSEUDO) SCIENTIFIC DISCOURSES

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ABSTRACT: This study, inserted in the field of Language and Gender, investigates the reproduction of gender polarization in (pseudo) scientific discourse. In order to do so, we first analyzed a workshop proposal for a research event at a renowned higher education institution in Brazil entitled “What women like and what men seek: the neurobehavioral basis of passion”. In order to have a more contextualized understanding of such workshop, we also looked into the curriculum of the researcher who proposed it (which is available in the Brazilian Lattes platform) as well as a personal blog in which he writes about relationships and his views on related issues. Departing from an analysis grounded on theories of Language and Gender (FAIRCLOUGH, 1995, 2003; CAMERON, 1998; WODAK, 1997), our purpose is to problematize the ways in which scientific discourse may function so as to reinforce gender binarism and gender stereotypes. Indeed, it is possible to conclude that the texts not only reproduce gender polarization but also seem to work to maintain the heterosexual market (BING; BERGVALL, 1996). Moreover, the problem of gender polarization in scientific discourses seems to be related to another kind of binarism: the division between hard sciences and soft sciences.

KEYWORDS: gender polarization, scientific discourse, heterosexual market.
RESUMO: Este trabalho, inserido no campo de estudos de Linguagem e Gênero, investiga a reprodução da polarização de gênero em discursos (pseudo) científicos. Para tanto, primeiramente analisamos a proposta de um workshop para um evento de pesquisa de uma renomada instituição brasileira de ensino superior intitulado “O que as mulheres gostam e o que os homens procuram: as bases neurocomportamentais da paixão”. De forma a compreender tal proposta de maneira mais contextualizada, também investigamos o currículo do pesquisador proponente do workshop (que pode ser localizado através da plataforma Lattes) e seu blog pessoal com textos sobre relacionamentos e outros assuntos similares. A partir da análise conduzida da perspectiva teórica de Linguagem e Gênero (FAIRCLOUGH, 1995, 2003; CAMERON, 1998; WODAK, 1997), objetivamos problematizar as maneiras como o discurso científico pode funcionar de forma a reforçar o binarismo em termos de gênero e os estereótipos de gênero. É possível concluir que os textos não apenas reproduzem a polarização de gênero como também servem para reforçar e manter o mercado heterossexual (BING; BERGVALL, 1996). Além disso, o problema da polarização de gênero parece estar relacionado a outro tipo de binarismo: a divisão entre ciências exatas e humanas.

PALAVRAS-CHAVE: polarização de gênero, discurso científico, mercado heterosexual.
“The logic of racist and sexist pseudo-science has spread through our social bodies like a poison in the blood. It has seeped into our veins, and we can hear it on our lips – it whispers … ‘boys are logical, girls are emotional, blacks are physical’. And while it is not a new discourse on difference it remains omnipresent. Like a vicious dog its teeth are sunk into the haunches of our minds… it clings onto the fabric of our society”

(MIRZA, 1998, p. 123)

INTRODUCTION

While there seems to be agreement in the area of Gender Studies regarding the fact that gender is a social construction, it is not surprising to come across essentialist discourses in our society that reinforce gender polarization based on biological arguments. One of the main ways in which these discourses are disseminated is through the mass media. As Bing and Bergvall (1996) explain, “[n]ot only does the popular press exaggerate and overgeneralize difference, it also completely omits any mention of evidence of similarities” (p. 13). In this sense, even though there is a large body of research and theorization arguing that gender is constructed through repetition and reiteration, that is, through performativity (e.g. BUTLER, 1993), our world is still organized around binary thinking that sees gender as simply biological. The academia should be then, or at least we would expect it to be, one of the few places where such deterministic ideas could be questioned. Unfortunately, however, some scientific discourses also seem to reproduce such problematic notions. We came across one instance of this reproduction recently, while browsing through the list of available workshops that were to take place at a scientific fair at a renowned Brazilian university. Among the workshops, on different areas of knowledge, we found one entitled: “What women like and what men seek: the neurobehavioral basis of Passion”1. Just by reading the title, one could say that, for the person responsible for this workshop (who holds a Doctoral degree in the area of Pharmacology and works as a Professor at an institution of higher education), gender difference can be explained solely based on biology.

1 “O que as mulheres gostam e o que os homens procuram: Bases Neurocomportamentais da Paixão”.
Intrigued by such finding, we decided to investigate the contents of the workshop by reading its objectives and abstract. In this process, we also looked into the curriculum of the researcher who proposed the workshop (which is available in the Brazilian *Lattes* platform\(^2\)) in order to understand the kinds of research that he had conducted in this area of study. In addition, we also looked at a personal *blog* in which the researcher writes about relationships and his views on related issues.\(^3\) Departing from an analysis of these texts – the proposal for the workshop itself, the scientific productions of the researcher and his blog - , our purpose in this article is to problematize the use of scientific discourse as a way to reinforce gender binarism and gender stereotypes.\(^4\)

**LANGUAGE AND GENDER**

Since this study aims at investigating gender construction in scientific discourse, it is important to bear in mind the relation between language and gender. According to Fairclough (2003), language, as a major component of human cultures, is a social structure: it encodes values and concerns and transmits them to new generations. In this sense, it is possible to argue that gender hierarchy is also constructed through language: women, for instance, are ‘kept in their places’ in culture in part through the teachings of linguistic representations. Thus, representation has become a major strand in the feminist critique of language.

Cameron (1998) points out that while many feminists are concerned with ‘difference’ in the sense of inequality, socially-oriented feminists prefer to argue that dividing the world into a masculine and a feminine sphere based on the grounds of (natural) sex differences is an ancient patriarchal strategy that should be rejected by modern women, and that the idea of a feminine language in fact aids and reinforces anti-feminist thinking. Simone de Beauvoir (1972), for instance, rejected the notion that rationality, self-

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\(^2\) [http://lattes.cnpq.br](http://lattes.cnpq.br)

\(^3\) For ethical reasons, the name of the researcher and his blog will not be mentioned in this article.

\(^4\) Since all the available material is in Portuguese, in the body of the text we will refer to specific passages by making use of paraphrases or translations into English. The originals will be included in the footnotes.
control, assertiveness, competitiveness and other traits valued by culture are inherently masculine. They are in fact human, social and universal, she claimed, but dishonestly appropriated by men. Equally, traits like emotion, passion, and caring are human, and not inherently female. Cameron (1998) also argues that the feminist critique of language has at least sensitized language users to the non-neutral nature of representation, and that our notions of the natural, the masculine and the feminine, the elegant and the offensive, are open to challenge and modification.

In this sense, the discursive, or the ‘ideological-symbolic’ (GAL, 1995), is a powerful explanatory resource for the relations between language and gender. Ideology is an arena for power and resistance, and language is the best means through which ideology gets materialized. As Wodak (1997) puts it:

“The function of ideology as it has traditionally been understood is to serve the interests of the powerful by mystifying the sources of their power, making it appear ‘natural’ and immutable, and inducing us to desire at least some aspects of the status quo though it disempowers us. Gender differentiation serves this naturalizing and mystifying purpose with respect to male dominance and female subordination” (p. 34-5).

The view of discourse as social practice emphasizes its constitutive nature: discourse constitutes knowledge, representations, beliefs, identities and social relations. Moreover, it highlights issues of power and ideology connected to language and discourse. Fairclough (1995) emphasizes, in this sense, that discourse may serve to reiterate the status quo as well as to subvert it:

“Discourse is socially constructed, as well as socially conditioned – it constitutes situations, objects of knowledge, and the social identities of and relations between people and groups of people. It is constitutive both in the sense that it helps sustain and reproduce the social status quo and in the sense that it contributes to transforming it” (p. 131).

Bearing in mind that language may either promote gender binarism or challenge it, we shall now focus on the analysis of the so-called scientific texts selected for this study.

LOOKING AT GENDER REPRESENTATIONS IN SCIENTIFIC DISCOURSES:
PROCEDURES

In order to analyze gender representations in scientific discourses, this study focuses on a workshop proposal for a research event at a renowned Brazilian public university, which was entitled “What women like and what men seek: the neurobehavioral basis of passion”. In order to have a more contextualized understanding of this workshop, we also looked into the curriculum of the researcher who proposed it (which is available in the Brazilian Lattes platform), as well as at the personal blog in which he writes about relationships and his views on related issues. All these materials were collected in the year 2012, which was when the abstract for the workshop was published. Because this work is guided by studies on Language and Gender, the analysis of the texts is mostly grounded on the theoretical understandings of Fairclough (1995, 2003) Cameron (1998) and Wodak (1997) about language, discourse, gender and power. Our aim with this investigation was to identify, through the analysis of the texts described above, discourses and representations about gender roles and relations that are produced and reproduced “scientifically”.

PROBLEMATIZING (PSEUDO) SCIENTIFIC DISCOURSES: ANALYSIS THE WORKSHOP PROPOSAL

As we try to make clear in this section, the analysis of the proposal for the workshop (see table 1 below) seems to confirm the hypothesis generated by our reading of its title. To start with, the objective of the workshop is defined as:

“To disseminate the most recent findings in the area of neuroscience about the neurobiological and behavioral characteristics that aim at explaining the different forms of human feelings and attachments to the opposite sex: passion, love, attraction.”

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5 “Objetivo: Disseminar as descobertas mais recentes das neurociências sobre as características neurobiológicas e comportamentais que buscam explicar as razões das diferentes formas de apego e sentimentos humanos a em relação ao sexo oposto: paixão, amor, atração.”
Not only does the objective contain the assumption that women and men have different feelings and distinct ways of feeling attached to other people (which supposedly could be explained in biological terms), but it also presupposes that these relations are heteronormative in the sense that people only love, feel attracted to or are passionate about “the opposite sex”.

Table 1 – Workshop proposal (our translation)

At first, the abstract itself seems to be an example of egalitarian discourse in the sense that it postulates that “women have ascended socially”, a fact that seems to contribute to “diminish the inequalities present in a sexist and patriarchal society”\(^6\). Later on, however, it says that “cognitive science has shown that relations which were considered purely social are now explained – thanks to advances in the area – neurologically”. Besides saying that “these neurobiological bases have remained intact throughout time”, the text makes it clear that “different behaviors regarding feelings can be explained by brain functioning”\(^7\). Once again, the idea behind the abstract is that gender relations in our society are a result of differences between male and female brains.

\(^6\) “(...) o sexo feminino tem mostrado uma ascensão social que, com justiça, está reduzindo as desigualdades em nossa sociedade machista e patriarcal.”

\(^7\) “(...) a ciência cognitiva busca explicações para os mais variados comportamentos, que outrora, pareciam apenas relações puramente sociais, e hoje sabemos que se mostram solidificados em bases neurobiológicas as quais não evoluíram muito ao longo dos séculos. Diante desta realidade, se faz necessário a popularização dos conhecimentos científicos que tentam explicar os mais variados comportamentos humanos, visando mostrar que muitas coisas que pareciam tabus, são simplesmente demonstrações de que mantemos nossas bases neurobiológicas intactas ao longo das
As Bing and Bergvall (1996) postulate, there are indeed “biological differences between most women and most men”. However, the problem here has to do with stereotyping and oversimplification: “[o]ne obvious oversimplification is that of using statistical differences between two groups as proof that all members of one group have certain characteristics shared by no members of the other group (and vice versa)” (p. 15). This process of oversimplification is frequently aided by scientific discourse, which is frequently used to legitimize arguments based on biological/neurological differences. As Sandra Bem (1993) explains about the workings of this ideology of biological determinism, “a cultural connection is forged between sex and virtually every other aspect of human experience, including modes of dress and social roles and even ways of expressing emotion and experiencing sexual desire” (p. 2). In the same line, Eckert and McConnell-Ginet (2003) point out that in scientific discourse frequently similarities are erased and “biological differences are exaggerated and extended in the service of constructing gender” (p. 13). This is highly problematic if we consider that this type of discourse is produced in the academia, which is considered the source of state of the art scientific knowledge, a knowledge which is disseminated to the various other sectors of society and which frequently functions as basis for public policies and market decisions.

It is also striking that the workshop here discussed was accepted to be presented at a research event of a renowned institution, which is also home for several important researchers in the area of Gender and Feminist Studies. So much so that the university has a well-known institute of Gender Studies and an academic journal on Feminist Studies with national and international circulation, besides holding an international conference on gender studies every three years.

THE RESEARCHER’S CV AND PERSONAL BLOG

gerações. Portanto, podemos explicar muitos comportamentos em relação a sentimentos baseados em funcionamento cerebral.”
According to the Curriculum Vitae of the researcher who proposed the workshop, his area of study is defined as “Neuroscience and Psychopharmacology with an emphasis on gender difference”. He also claims to work as a relationship coach and a lecturer for both corporate businesses and academia. In this sense, his lectures and interviews mentioned in his curriculum - which are mainly about relationships and include subjects such as “Women and the world: today they rule, tomorrow they will dominate”, “Women that love too much”, “Why do we fall in love?”, “Brain and behavioral differences in men and women” – seem to make use of his position of authority in the area to disseminate gender stereotypes. His curriculum in the Lattes platform also contains a link to a video of a news program in which he talks about “why men do not pay attention to their wives during an argument”. In the interview, he argues that the male brain shuts off during an argument – that would be the reason why men do not listen to what women are saying during a row. His reasoning seems to be ‘grounded’ on a type of research that, as argued previously, uses differences between groups to make simplifications about gender.

In a way, these discourses do not seem to be any different from the ones that are found in the media or, more specifically, in the pop science magazines that constantly make overgeneralizations about gender issues as a way of attracting potential buyers (see an example of a headline from a pop science magazine in the image below).

8 “Mulheres e o mundo, hoje elas mandam, amanhã dominarão”, “Mulheres que amam demais”, “Por que nos apaixonamos?”, “Diferenças cerebrais e comportamentais em homens e mulheres”.
9 This interview can be watched in the following link: https://www.youtube.com/watch?v=cyuo-fStgCI.
It is interesting to notice that these gender issues are dealt with by the researcher mainly in lectures, since all of his published academic articles are about other issues in the area of pharmacology, dealing with topics such as “Effects of scopolamine” and “Olfactory discrimination and social recognition memory deficits in rats”. This might be due to the fact that in order to be published in a serious academic journal, an article goes through a process of peer-review to make sure that it meets several criteria, including being adequately grounded in terms of scientific arguments.

In contrast to his academic publications, the researcher’s personal blog does not rely on any scientific evidence whatsoever. Rather, it contains a series of texts in which the author exposes his opinions and advises his readers. A discussion of some of these texts might be helpful in the sense of providing connections between the researcher’s beliefs and his practices in and out of the academy.

Most of the posts found in the blog are about tips regarding heteronormative love relationships. Some of them are statements (by the author or even by other people) which supposedly serve as advice for the readers. One of them, for instance, states that “in times in which aesthetics are highly valued, it is better to have a fake thin woman than a real fat one.” Even though the first part of the sentence acknowledges that our society values beauty and appearance above anything else, the author finds no problem with that. Instead, he suggests that it is better to be (or to “have”, in the case of men) a ‘fake’ thin woman than a real fat one. In this sense, this discourse is perfectly aligned with the ones that circulate in the mass media, in which appearance, besides being mostly associated with women, is also highly valued (for women, not for men).

11 “No período de estética que vivemos, é melhor uma falsa magra que uma gorda verdadeira.”
12 “Só exija sinceridade quando estiver preparada para ouvir”.
Another piece of advice that is worth discussing is: “Only demand sincerity if you are ready to hear it”\textsuperscript{12} This command (notice that it is the imperative mood) is clearly directed to women, since the verb “preparada” in Portuguese presents a feminine inflection in the suffix ‘a’, which indicates that the writer is referring to female readers only. We have to keep in mind that in Portuguese, as in many other languages, the generic/universal reference is the masculine, not the feminine. When the feminine inflection is used, it refers only to women, not to everyone. Since, in the example above, the author is saying that women should only “demand sincerity if they are ready to listen to the truth”, the sentence implies that, on the one hand, it is not uncommon for men to be insincere in relationships and, on the other hand, that women usually demand sincerity but do not know how to handle it. The message, then, is that men are usually unfaithful and/or cannot express themselves truthfully, while women are fragile and do not know how to face problems and difficult situations.

Some other statements were even more explicit in (re)producing binary notions of gender, such as “Men are like auctions, and those who bid higher will take them”\textsuperscript{12} and “Men are distinguished based on what they are able to do, while women are distinguished based on what they make men do”.\textsuperscript{13} The latter one is attributed to the Brazilian poet Carlos Drummond de Andrade and implies that men are the ones who act (they do things), while women’s existence is only acknowledged in relation to men. In this sense, according to the statement, women only distinguish themselves based on their influence on men. Commonsense discourse claims that this influence can be achieved through women’s “seductive power” and attractiveness. In fact, the ideology behind this statement is very similar to the one behind the title of the workshop proposal (“What women like and what men seek: the neurobehavioral basis of Passion”), in which men are the ones who seek things, implying movement and action (“seek” is a material process, according to Systemic Functional Linguistics), while women are the ones who want things, implying

\textsuperscript{12} “Homem é igual lance de leilão: quem dá mais, leva!”

\textsuperscript{13} “Os homens distinguem-se pelo que são capazes de fazer, as mulheres pelo que levam os homens a fazer.” 15 For more on Systemic Functional Linguistics’ (SFL) view on how we represent reality through lexicogrammatical choices, see Eggins (2004) and Halliday (1985, 1994).
stillness and lack of agency ("want" is a mental process, also according to Systemic Functional Linguistics\textsuperscript{15}).

Even though most texts in the blog were written by the researcher himself, there were a few written by other people and endorsed by him. This is the case of the post “Talking about men”, which is, according to the owner of the page, an “excellent” text authored by the Brazilian actress Fernanda Montenegro. The text is supposedly written by a woman and its target readers are also women. It is mainly about tips to women on how to ‘keep’ a man. Firstly, it says that men should not be kept captive, since those who are imprisoned “end up losing their DNAs”. Besides, the author says that what “keeps a man” with a woman is a frail bond, something that needs to be reinforced daily through dedication, attention, tenderness and love.\textsuperscript{14} Secondly, the text says that the woman should feed the man correctly; otherwise he might look for food and shelter with other women.\textsuperscript{15}

According to the text, women should also treat men well and respect their “nature”, which includes tolerating beer, soccer, fishing, friends, freedom and cars. Based on that, it is possible to say that the text perpetuates the idea that women should not deny their “origin” – since traditionally men have been the breadwinners, women should take a supporting role. In this sense, not only does the text rest on stereotypical views of gender, but it also implies that women and men have different “natures” that should not be fought against. Lastly, the text encourages women to support men’s success as a way of “saving themselves”. The author says that if the readers think men are “too much work”, they should try marrying a woman.\textsuperscript{16} By doing that, they would understand what bad mood really means.\textsuperscript{19} Once

\textsuperscript{14} “Homem não pode ser mantido em cativeiro. Se for engaiolado, fugirá ou morrerá por dentro. Não há corrente que os prenda e os que se submetem à jaula perdem o seu DNA. Você jamais terá a posse ou a propriedade de um homem, o que vai prendê-lo a você é uma linha frágil que precisa ser reforçada diariamente, com dedicação, atenção, carinho e amor.”

\textsuperscript{15} “Homem vive de carinho, comida e bebida. Dê-lhe em abundância. É coisa de homem, sim, e se ele não receber de você vai pegar de outra.”


\textsuperscript{19} “E Minha Amiga, se você acha que Homem dá muito trabalho, case-se com uma Mulher e aí você vai ver o que é mau Humor!”
again, the text reinforces the notion that women depend on men. Not only that, but it also implies that whenever there is a relationship problem, it is the woman’s fault. For the author, women should be careful and “serve” men well so that they will stay – as if a male presence was something women could not do without. Moreover, despite the fact that the endorsed text was written – at least in theory – by a woman and aimed at women, it disqualifies them by affirming that they are the ones who are difficult to deal with.

Other texts ideologically loaded texts found in the blog are written by the author himself. Such is the case of the text “Dia da parideira”, in which he discusses the idea of Mother’s Day. For the author, we should instead celebrate the day of “the one who gives birth”, since most women nowadays do not take proper care of their children and therefore do not qualify as ‘real mothers’. The author even affirms that if women want to have professional careers, they should not have children.¹⁷ There seems to be some contradiction in the author’s discourse, since further on he says that both parents are responsible for the child’s upbringing. At the same time, he postulates that, as women are usually the ones who raise children, the fact that many teenagers and children are undisciplined is to be blamed on the family, but mostly on mothers.¹⁸ In this sense, the author seems to believe that women are ‘essentially’ good caretakers, as if their entire existence were focused on men and on having children. For him, women with professional careers should not have children as they would have not enough time to look after them – confirming the idea that looking after kids is primarily a woman’s role.

In the article “The contribution of feminist criticism to science”, Bandeira (2012) argues that the representation of women as caretakers is directly related to the fact that science is still mainly dominated by males. In this sense, women’s distance from science is produced “as they are directed to activities that are regarded as ‘feminine’”. This process is “extended later by life difficulties and constraints such as

¹⁷ “(...) se precisa trabalhar e não terá condições para estar com o filho, NÃO TENHA FILHOS.”
¹⁸ “Já estão me chamando de machista por afirmar isso, mas se você refletir um pouco em porque vivemos em um mundo de muitos adolescentes e jovens sem limites e educação, verá que a culpa está na família e, principalmente na educação, que vem muito mais da mãe do que do pai.”
having to make a choice between family, motherhood and a professional career” (p. 14). For Bandeira (2012), women’s silencing in the history of science reveals “the hegemonic association of masculinity and scientific thought” (p. 4). With that in mind, the author points out an important contribution of Feminist Studies to science: the introduction of criticism to totalizing discourses. After all:

“[f]or feminist criticism, any form of science which is considered or proposed as universal must be harshly criticized, since all supposedly universal categories are stuck, in the end, with permanent parameters, including parameters of power” (p. 8).

However, the author makes it clear that transposing long-established boundaries is not an easy task – the so-called hard sciences, for instance, are constituted of disciplinary fields in which males are still systematically predominant (p. 11). In this sense, as the analysis of the texts chosen for this study has demonstrated, Feminist Studies still have a lot to contribute to the discussion of gender issues in/about these areas.

In relation to the texts found in the blog, it is also interesting to notice that, at some points the researcher tries to reproduce a discourse of gender equality. One example is the post “What sexism is creating”\(^{19}\), in which he states that for the past five thousand years sexism has ruled almost every culture. He even acknowledges that the Bible is a sexist book. However, his texts are only egalitarian on the surface, since later on he endorses the folk notion that it is women who disseminate sexism, especially because they are the ones who raise children. For the author, sexism also produces positive effects on women: he believes that, since men (fathers or husbands) usually provide financial support for women, they have been able to study more and become better prepared for the job market. He encourages women, then, to prepare themselves and invest, as he says, “not only in their appearance”, but also in knowledge.\(^{20}\)

\(^{19}\) “O que o machismo está criando”.

\(^{20}\) “Portanto mulheres aproveitem as oportunidades que os homens estão lhes dando e vão à luta, preparem-se, invistam em vocês, não apenas na aparência, mas na intelectualidade e conhecimento, assim a liberdade para conseguir o que quiserem lhes será dada.”
In this sense, even though one might at first think that the author supports women’s rights, a closer reading indicates that he fails to acknowledge that sexism is rooted in patriarchal society. Because gender differences are seen by the author as biological and natural, he fails to acknowledge and understand sexism. In fact, sexism is reproduced in discourses that reinforce gender difference, associating women with physical appearance and with the task of raising children. Not only that, but it also tries to deny the several negative implications of a patriarchal society by saying that women might in fact benefit from sexism. Thus, the discourse presented in the blog is superficial since it ignores the violence and the inequality created by gender hierarchies. Moreover, gender equality is never mentioned since the rationale seems to be that such different beings (men and women) should not even contemplate being equals.

**GENDER POLARIZATION AS PART OF A WIDER Binary ISSUE: FINAL CONSIDERATIONS**

Based on the discussions above, we can say that the texts analyzed reproduce gender polarization. Gayle Rubin (1975) explains why in our societies difference is much more emphasized than similarity among women and men. For the author:

“Gender is a socially imposed division of the sexes. It is a product of the social relations of sexuality. Kinship systems rest upon marriage. They therefore transform males and females into “men” and “women”, each an incomplete half which can only find wholeness when united with the other. Men and women are, of course, different. But they are not as different as day and night, earth and sky, yin and yang, life and death.” (p. 94)

In addition, the idea of a “natural” binary system of gender can be debunked if we take into account that in many cultures the gender system is not binary (TYSON, 2006, p. 110). This is evidence to the claim that “women and men usually behave in ways associated with their assigned gender because they are socially programmed to do so, not because it is natural for them to do so” (TYSON, p. 110).
Moreover, the texts analyzed can also be seen as instrumental to the maintenance of the heterosexual market. As Eckert and McConnell-Ginet (2003) explain, “[t]his market is the means by which the social order comes to presume heterosexuality, marginalizing and rendering deviant any who do not eventually participate” (p. 27). In this sense, besides emphasizing and perpetuating/reproducing gender binarism, these texts regard heterosexuality as given and natural, since other possibilities are not even referred to. As Bing and Bergvall (1996) point out, “[g]ender polarization is a failure to accept diversity” (p. 18). Therefore, one might argue that the aforementioned texts are problematic in two main ways: firstly because they fail to accept that there is a wide range of possibilities between the two gender poles; and, secondly because other forms of experiencing gender, sexuality and love are ignored while heterosexuality is naturalized.

What is most striking is the context in which the texts analyzed are inserted. If we understand that “[p]eople’s beliefs and view of the world are based in their position in society” (ECKERT AND MCCONNEL-GINET, 2003, p. 41), one would not expect a researcher, who is inserted in the context of science (the academia), to make such stereotypical and prejudiced claims about gender. We face here an almost ethical problem: the fact that these biased ideas are legitimized because of the researcher’s position of prestige in academic terms. It is common for people to look for answers in scientific findings, which are used, especially by the mass media, to construct and naturalize certain “truths”, as in the case of gender polarization. Our aim here is not to point the finger at one specific researcher, but rather to alert to the fact that similar biased and prejudiced representations of gender relations are probably reproduced by other members of academia. The same heteronormative discourse is also reproduced by the mass media, since the popular press and television frequently make use of the “voice of the expert” to confirm specific claims about gender. Thus, it is our role as researchers and educators to not only look at such discourses from a critical perspective, but also to promote students’ critical literacy by unveiling the ideologies behind language.
The problem of gender polarization in scientific discourses seems to be related to another kind of binarism: the division between hard sciences and soft sciences. This binary division is problematic to the extent that there does not seem to be much dialogue between these two broad areas. In the case of the texts discussed here, one issue that seems to lead to such problematic texts is the lack of familiarity with discussions and theorizations on gender produced in the areas of Sociology, History, Philosophy, Discourse Analysis, among others. We believe that an interdisciplinary approach to research would allow the incorporation of critical perspectives to the so-called hard sciences. As Bandeira argues, feminist criticism, for instance,

“while opting for methodological proceedings (...) that invoke criticism and doubt, (...) has served (indirectly) to question traditional ways of doing research, its blindness concerning women, as well as casting doubt on the conceptual premises of the conventional hypotheses that structure the logic of positivist investigation.” (2012, p. 19)

In this sense, there is still a lot to be done so that scientific knowledge can be used in favor of society to promote equality. After all, in order to have a more egalitarian society, we also need science to be “without borders”. Ironically, however, what is nowadays called “Science without Borders” is a program created by the Brazilian government, in partnership with other countries, benefitting mainly students from the hard sciences, especially from the areas of technology and engineering. Unfortunately, social progress and science itself seem to be understood in our society, and even in academia, from a neoliberal capitalist perspective which values production, results and numbers. This way the Humanities and other social areas such as Gender and Feminist Studies are usually put in a secondary, and consequently less important, level in the hierarchy of the sciences.

21 For more on this program, visit: http://www.cienciasemfronteiras.gov.br/web/csf.
REFERENCES


