

RESEARCH ARTICLE

Feminism and gender in thinking about extraterrestrial intelligence

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Abstract

In this paper, we offer an outline of a feminist approach to considering the issue of extraterrestrial intelligence (ETI). Dominant ways of discussing ETI, particularly first-contact scenarios and protocols, are characterized by what feminism terms male bias. As with other cultural texts and disciplines, ETI studies can also be enriched by a feminist perspective. In this paper, we propose two possible applications of a feminist approach to considering ETI, such as using feminist categories to analyse our discourse about ETI, as well as understanding ETI in terms of sex and gender. We also propose a vision of ETI as genderless.

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Introduction

The main contribution of feminism in relation to scientific and cultural texts is to point out that they presented and often still present today a male point of view. As feminism points out, this male point of view functioned as implicit, universal and objective, while in reality it expressed only the interests of privileged men (Purdy, 1996; Mikkola, 2016). Consequently, not only the vision of the world but also the production of knowledge is not objective, but is the result of a particular approach, a particular perspective and also serves particular interests (Szocik, 2022a). Can the same be said of the texts on extraterrestrial intelligence (ETI)? If so, it would mean that the dominant cultural ways of

thinking about ETI are only the so-called male point of view. In the following paper, we turn our attention to whether existing thinking about ETI is dominated by a male bias, then consider what feminist thinking about ETI might look like. Finally, in the final section, we consider the biological and cultural gender of ETI and whether and how this might matter.

Thinking about ETI so far

Feminist philosophers accuse non-feminist philosophy and non-feminist style of thinking primarily of individualism, abstractionism, rationality, exposition of autonomy. The alternative to this masculine style of thinking is a perspective that takes into account relationality and relationships, particularity, dependence, individual differences and context, as well as emotionality (Marway and Widdows, 2015). There is no doubt that the feminist perspective is closer to the real human condition and takes into account all people, whereas the non-feminist perspective is an idealization that rarely takes place in reality.

In thinking about ETI to date, one dominant perspective has been a reflection on first-person scenarios and protocols. One scenario often considered is one based on the notion that ETIs will be either intentionally or unintentionally dangerous to humanity. One such scenario is considered by Kelly C. Smith and John W. Traphagan. Starting from the precautionary principle, the authors point out the need to be cautious in case ETI has sinister intentions. Hence, the passive protocol they propose, which suggests not reacting, if only because of the risk of the other side misinterpreting the signals and behaviours as signs of preparation for a fight (Smith and Traphagan, 2020). There is no doubt that this scenario is very rational and probably advisable, as are many other behaviours in analogous situations of meeting for the first time with a new agent and in a new situation. Nevertheless, it is an abstract scenario, based on the assumption that both humans and ETI operate on abstract principles without attention to circumstances and context. There are many good reasons why the precautionary principle in relation to ETI should be rejected. Smith and Traphagan seem to base their inference of ETI at least in part on appeals to the culture of militarism (Szocik, 2022b). Thinking about ETI to date is characterized by the aforementioned abstractionism often using categories of risk, aggression, danger and threat (Lindsey, 2022). It is a thinking that generalizes, makes some prior assumptions and at the same time some ideal ideas about how civilizations can or should look like. A consequence of this abstract approach based on preconceived general assumptions is that ETI is often viewed in literature about ETI in terms of an existential risk to humanity (Miller and Felton, 2017; Jebari and Olsson-Yaouzis, 2018; Moynihan, 2021; Santana, 2021).

In summary, thinking about ETI to date is often based on adopting abstract models (ETI as aggressive, as indifferent, as peace-oriented) and then developing equally abstract encounter scenarios and contact protocols. This thinking ascribes to ETIs a mode of action analogous to that of the authors who create these models and scenarios. That is, the assumption here is that the ETI also functions on the basis of abstract principles and rules like the aforementioned precautionary principle, the principle of justice, of doing no harm (or doing harm as a consequence of the principle of self-defence or preemptive attack) or autonomy. In these models, we are dealing with autonomous parties, or specifically understood moral agents, with the agent here being the entire species (humanity versus ETI) who make decisions based on abstract models under idealized conditions (usually according to such four general scenarios as do nothing, attack, flee, offer a peaceful message).

Feminism in thinking about ETI

The ways of thinking about ETI outlined so far lack those qualities that characterize feminist thinking. Thinking about ETI in feminist terms means moving from a universalist, abstract perspective, based on general principles and rules, to a particularistic perspective, based on reference to individual differences and context. It also means that one's vision of the world depends on one's social position and the social

roles one plays, which applies both to individuals' thinking about ETIs and to ETIs' perceptions of the world (Szocik and Abylkasymova, 2022).

A feminist philosophy of ETI as a starting point assumes the existence of a specific standpoint and positionality inherent in ETI that we cannot even imagine based on any analogies with human history. Moreover, the feminist view of ETI assumes that we cannot speak of ETI as such – for the purposes of this paper, we hypothesize that perhaps there is an ETI anywhere beyond Earth. This means that if ETI exists in an analogous way to the existence of humanity, that is, inhabiting a single object in space, then we should not so much speak of the existence of a universal ETI being as of the existence of many different ETI beings. This heterogeneity of ETI will be even greater if ETI resides in different facilities. It can be conjectured that the influence of environmental differences will amplify the plurality of ETIs, thus further weakening those considerations of ETIs that present ETIs as a collection of homogeneous entities.

The analogy of a non-feminist narrative about a humanity confronting a feminist narrative is useful here. Non-feminist narratives have and tend to talk about humans as such, in an abstract sense. The feminist perspective draws attention to the diversity of human beings. An analogous approach should be considered when discussing ETI. Even if we assume that ETI is likely to be aggressive and hostile toward other living beings rather than neutral and peaceful, this does not preclude the existence of individuals within the ETI community who may share a different approach. As an analogy to illustrate how this approach works, we can imagine humanity from the perspective of the history of conflicts and wars. Despite the fact that human history is full of various wars, we cannot say that all humanity fights wars, that waging wars is the essence of humanity, that all people have always and everywhere supported wars and so on. A feminist perspective shows us that wars have only been fought by leaders, that huge portions of the population have been enslaved and exploited – including not only slaves, but huge portions of the population, peasants, exploited women, as well as exploited children. The subjects of history and universal history were usually male leaders. Extrapolating their perspective to an entire species fails to capture not only the diversity and psychological and moral variability but also the power structures that define relations of domination and submission. It cannot be ruled out that analogous dynamics characterize the ETI community. The missing element in dominant considerations of ETI is precisely their homogeneity and the assumption of ETI universality. ETI is usually seen in terms of a unified, unanimous community (Ansbro, 2022).

The standpoint and positionality category is key. In the case of feminist critique of non-feminist discourses, the change advocated was to allow excluded groups to speak. This is impossible in the case of ETI, but it does not mean that thinking about ETI can be modified to abandon universalism in favour of relativism and particularism. When analysing possible scenarios for a first encounter and planning protocols for contact with the ETI, it is worth taking into account the possible dependencies that exist within the ETI community and thinking about the nature of expeditions organized by the ETI that might result in a human encounter. To what extent might analogies to the categories of missions and reasons for human space exploration be useful? Will interplanetary or intergalactic expeditions organized by ETI be political in nature? As on Earth, especially during the Cold War, will the ETI also organize a similar space race in terms of national pride, nationalism and patriotism? Will it therefore also be internally divided into at least two partisanships as many countries were divided after World War II? But is such division conducive to the development of technologies that enable interplanetary and even interstellar flights? As we know from the history of humanity, such a division during the Cold War allowed only to land on the Moon, but not to reach Mars by human flights. Perhaps a similar dynamic will characterize the ETI in terms of cooperation and competition. Thus, it remains to be seen whether ETI space exploration will be state and nation politically motivated.

But a feminist perspective also allows us to take a new look at potential space exploitation in capitalist terms, which is now becoming more dynamic on Earth. For a capitalist model analogous to humans to be developed by ETI, the exploitation of working people is required. Did ETI also develop based on the continued exploitation of certain groups of its community? Did the ETI colonize other

living forms capable of doing work for them that became a source of wealth analogous to the current post-colonial states on Earth? This perspective leads us to reflect on the potential development of another intelligent civilization in terms of exploitation and colonization.

The feminist approach to ETI is also indicative of the language used. The belief that ETIs are dangerous to humanity stems from attributing to ETIs an approach to the world based on exploitation and conquest. However, this is not a natural, universal approach to reality. It is undoubtedly the approach of European colonizers who looked at the lands they discovered in terms of rights, property and power (Ghosh, 2021). But the view of reality can also be based on categories of cooperation and coexistence. Thus, the feminist approach reminds us of the need to critically evaluate the language and categories attributed to ETI that are inherent to male hegemony and to approach reality in terms of property to be conquered. This applies not only to territories, but also to people (historically, these have included women and non-white people).

ETI's feminist scenarios

ETI's feminist scenarios make no claim to universality and assume standpoint as well as contextuality. Moreover, unlike the male paradigm that dominates sexist culture, feminist scenarios do not rely on the notion of human nature, from which, by the way, the aforementioned claim of neutrality grows (Hollinger, 2003, 125). This assumption will serve as a starting point for proposing two thought experiments designed to illustrate a hypothetical way in which ETI functions when understood from a feminist perspective.

Scenario 1: ETI as a peaceful civilization

In this thought experiment, we assume, for simplicity's sake, that ETI has a disposition that is different from what is associated in human history with the male character and male domain. This is a simplification because the stereotypical division of traits into feminine and masculine is a product of a sexist culture that is oppressive towards women, so this set of traits that we stereotypically ascribe to men and women is not universal, nor does it need to be replicated anywhere outside the human species. However, let us assume that, analogous to how Earth culture has been dominated by men, ETI is dominated by women. Let us also make the controversial assumption that women are closer than men to the care ethic, while men are closer to the power ethic. In such a model, an ETI dominated by the feminine perspective finds no particular motivation to focus on expansion and conquest either within its own civilization, let alone outside, beyond its planetary boundaries.

This assumption has a number of far-reaching consequences for people's understanding of ETI, as well as the sketched scenarios of the meeting. First, it is not clear that such a female-dominated ETI would produce a technological civilization. Technological civilization serves quite a bit of expansion and invasion, with military technology as a frequent first area of technological investment and experimentation. Women's ETI may produce a high-tech civilization, but its motive and goal will not be invasion and conquest, but – depending on the type of environment on their planet – the development of well-being and optimal adaptation. Consequently, investment in means of transportation will not be of a military nature, and investment in armaments may be of a very limited, preventive nature. Such a scenario clearly demonstrates the androgenic thinking of the encounter scenarios dominating the ETI discourse exposing a moment of caution, danger and uncertainty.

Second, there are certain socioeconomic implications from the above assumption. The reproductive rate of such a civilization may be much lower than on Earth. This may be due to both concern for the environment and not treating people as labour tools. Consequently, the evolution of capitalism as a system that requires constant exploitation of the environment and people and commodifies everything that exists is not obvious. The absence of capitalism has a positive effect on reducing the need for expansion, and certainly does not generate the phenomenon known as 'disaster capitalism'.

Scenario 2: ETI as a pluralistic and equal civilization

A feature of the expansion of European culture was racism, which found expression as well as led to slavery. Inequality was also a structural feature of other, non-European cultures. The reference to Europe, however, is related to the domination of the world by European colonists in the last few centuries, as well as to the domination of the North American-European male point of view of ETI discourse.

Let us imagine that ETI has evolved socially in a very different way than humans have. What characterizes ETI is the absence of inequality and social divisions. The categories of gender, race, social class, but also age or physical and intellectual ability do not determine the social position, opportunities or rights of individuals. Consequently, the possibility of exploitation of some individuals by others disappears, or is made very difficult. The basis for preferential treatment of selected groups also disappears.

Let us assume that the feminist vision of ETI means a society that realizes the ideal of social justice and equality. In such a society, the processes mentioned in scenario one may occur, regarding the possibility of rapid technological development, which in human history has been and is based on slave or quasi-slave labour today.

Such a feminist ETI society can be a viable sustainable society. This means that production, industry and technological development will not require or be determined by the lust for profit and the conquest of others, which requires the cheapest possible labour of the largest possible number of people. Authentic immanent sustainability means that ETI civilization will produce only as much as is needed to meet authentic needs, through optimal modes of production. If it is a civilization in which neither sexism, racism nor classism evolves, it probably will not evolve capitalism as known on Earth, which generates artificial needs. Consequently, ETI's environmental degradation may be minimal when compared to human degradation of the Earth. Consequently, thinking about space exploration and exploitation in commercial and military terms as known from Earth may not evolve as not required by conditions and lifestyles.

ETI and feminism and gender

Viewing ETIs in a homogeneous way, as unified beings, should be complemented by a feminist view of diversity, which in turn encourages the recognition that different individuals, but also different groups, have their own interests, worldviews and interpretations of the same situation. A feminist philosophy of ETI prompts reflection on whether the ETI community can be divided along categories such as sex and gender, as well as race, social class, the able-bodied/disabled divide and other categories that divide people. This section will focus on only one pair of categories, sex and gender.

Sex is usually associated with the existence of biological correlates that divide people into females and males (Mikkola, 2016). This is a simplistic understanding of sex that has many flaws and does not take into account other types of people who are neither male nor female. It is also worth noting the social construction of seemingly biological sex through the act of calling a newborn male or female, as well as medical and surgical attempts to fit the newborn into one of these two categories in ambiguous situations. A feminist view of ETI leads us to reflect on whether ETI will be divided into female and male individuals, and perhaps still others.

Much more significant, at least from the perspective of humanity, is the division between gender, or men and women. It is not clear that ETI, even if, like our species, it predominantly exists in the form of female and male individuals, will derive cultural, social, legal and political consequences from these biological differences. The starting point for this discussion is whether, assuming for the sake of argument that ETI individuals exist as female and male, either of these biological sexes will gain dominance over the other sexes. Sexual dimorphism may be conducive to the desire to create such dominance, but it is not necessary. Female ETI individuals may be larger than individuals of other ETI sexes.

When introducing the categories of sex and gender into discussions of ETI, we encounter at least two possible scenarios. One is the scenario in which, taking the sex and gender characterization of humans as a starting point, the dominant gender in ETI becomes female rather than male. It is difficult to imagine the characterization of women as the dominant gender in earthly settings because women have been oppressed and subordinated to men in many cultures. Contemporary gender equality not only does not remain ideal. Even if it were ideal in select communities of people, it is still reactive rather than primary. Consequently, a model in which women are the dominant gender from the beginning is unknown on Earth. For this reason, it is unknown whether women would have developed the same characteristics as they have today when they were traditionally gender subordinate. There are many reasons to believe that the traits currently attributed to women that they supposedly possess as women evolved largely under conditions of oppression and subjugation. Imagine, however, for the sake of argument, that female-gendered ETI has been the dominant gender in ETI from the beginning, and yet possesses traits that are close to women on Earth despite their history of subjugation. Although the attempt to define typically feminine traits runs the risk of stereotyping and reproducing oppression, even feminists believe that women are closer than men to an attitude of peace, cooperation, respect for others and nature, rather than aggression and violence (Tong, 2009).

Another problem worth mentioning in this context, which plagues liberal feminism, is a certain paradox in that often, in practice, the ideal of equality between men and women is to match women with men, that is, to match an established social ideal created by men and expressing male interests. If this were to be the case with female-dominant ETI, it would be a scenario with positive consequences for humanity in the event of contact between such ETI and humans. But if female gender were indeed dominant in ETIs, a number of other considerations about ETIs would have to be modified from the dominant discourse. First of all, it is unclear whether female ETIs would be interested in space conquest for political and military or commercial motivations. Perhaps they would rather invest in the development of their own planet, and if they did decide to pursue space expansion, the chances of a peaceful approach would be much higher than for male ETIs – assuming that the characteristics attributed to gender on Earth would coincide with the analogous gender distinction for ETIs.

The second scenario of viewing ETI as composed of female and male gender (but perhaps many others as well) assumes that for some reason ETI has evolved in a manner analogous to the social history of humans on Earth, which would mean that humans are repeating the evolutionary history of ETI, rather than ETI mapping the dynamics that characterize humans. In this scenario, ETI women were also oppressed, but are now liberated, and this liberation is firmly established and has become natural and obvious. This is a reality that we are not currently familiar with on Earth because men are still the dominant group, and it is the interests and viewpoints specific to men that are being pursued in relation to many policy spheres, including space policy, environmental policy, military policy, fossil fuel policy and others. We can imagine, however, that actual equality between men and women will become a reality on Earth in the future, and is now a reality in some ETI community that will come into contact with humans in the future. In a community with such a *de facto* equality we can in principle speak of a genderless community, because the division into male and female loses any sense, while we could still speak of a division into female and male sex – as well as others – but then it is not clear what would be the purpose of maintaining the division into sex, if no gender is derived from it.

In such a truly equal, gender-free ETI community, it would be impossible to speak of defending, fighting or representing female or male interests. One can presume that the ETI society would be very egalitarian, free from discrimination and oppression of any group. Thus, as in the previous female-dominated ETI variant, ETI space expansion would not pose a threat to humanity.

Thinking about ETI beyond the gender category

Thinking in terms of gender from a feminist perspective can involve either emphasizing the invalidity of biological, and therefore cultural, differences between men and women, or proposing a social vision in which women are the dominant gender. Reversing the historical oppression of women can lead to

ideas such as identifying human beings as women rather than men (Merrick, 2003). In both cases, however, the very use of the gender category as ostensibly relevant, even if in a seemingly non-oppressive and discriminatory sense, replicates categories established in an oppressive, sexist society.

If the ideal is to eliminate gender categories, or at least to deprive them of their oppressive and discriminatory consequences, why not assume that ETI will be a genderless society? Imagine that the ETI does not use or even know gender categories at all. Thus, we cannot distinguish individuals who would differ as men and women often differ on Earth. A society that has always been genderless is certainly more unified in terms of behaviour patterns. It is also devoid of the source of a serious type of discrimination, which was and is discrimination against women simply because they are women, or are recognized and interpreted as women. Of course, even for the highly speculative terms of the thought experiment, it is difficult to offer any conjecture as to whether the genderless ETI community will not generate other types of social segregation and discrimination, which may run along other criteria such as size, physical strength or age.

We can also assume that the ETI was a gender-divided society, but has effectively eliminated this division, for example, with the help of technology. This is a scenario that could happen to humanity. The fascination with new reproductive technologies and medical advances has given hope to some among feminists that technology will liberate women from biological determination, as in the past was the burden of bearing children and then attributed mainly to women to raise them (Firestone, 1970). This is a very complex issue and interpreted differently by different feminists. However, this idea that we want to point out is that the function of procreation traditionally associated with women, which even in today's pro-feminist societies on Earth can stereotypically generate an image of women as mothers and more connected to children and the home than men, can, hypothetically through ectogenesis, permanently separate women from the function of pregnancy and childbearing. Humanity's contact with such genderless ETI, which became genderless through the application of ectogenesis, could provide an instructive lesson and possible inspiration for humanity.

Feminism, ETI and the real-life meeting scenario

It is already a classic tenet of feminism to point out that the approach, as well as the experience of women, is more connected to the reality of everyday life, to real, tangible life situations, than the perspective and experience of men. The context of felt experience is a fundamental hallmark of feminist epistemology (von Morstein, 2006, 159). In real life, therefore, people have different interests, desires, goals, they also differ in their views and beliefs. An analogous situation may also apply to ETI. Consequently, the existence of differences can affect the way ETIs and people alike imagine first meeting scenarios.

The male-dominated way of narrating first-meeting scenarios sees humanity as an abstract unified entity, represented by one or more leaders representing humanity. It is noteworthy that, usually, humanity, which has not expressed its opinion on the first-contact scenario, possibly has been raised on male cultural patterns that view such contact from a militarized perspective.

Taking a feminist perspective, it is impossible to sketch the course of the first contact scenario. What is worth considering, however, is the aforementioned complexity and diversity of people, as well as their contextuality, which can also characterize ETI. Both particular groups of people and individuals may perceive this first contact differently. Different groups may have different cultural and religious perceptions, not necessarily determined by the Western cultural model. In the non-feminist model, the social contract theory, the drivers of history are great political figures who individually make important decisions that determine the fate of nations, such as joining a war. In the feminist model, people with different interests should strive to avoid exploitation as well as inflict suffering on others. The same can apply to ETI from a feminist perspective. Accordingly, first-contact scenario decision-making among both humans and ETIs could be pluralistic in nature, which is at least hypothetically particularly easy today with the help of internet communication (however prone to manipulation and fake news).

Conclusions

Our paper emphasizes the value of enriching the consideration of ETI with a feminist perspective. Feminism applied to ETI studies has at least two meanings. One means a way of thinking about ETI with feminist categories in mind. The essence of feminist categories is to realize subjectivity, point of view, contextuality, as well as the existence of different individuals and groups with different interests, problems and expectations, as well as interpretations. In this light, feminist ETI methodology is interested in clarifying whose views, interests, expectations, knowledge and perspectives are expressed by culturally dominant texts and reflections as well as studies on ETI. They certainly do not express the universal position of all humanity. But perhaps feminism's most important contribution to the consideration of ETI will be the realization that there is no one universal, 'human' approach to ETI issues. This includes considerations of whether an encounter with ETIs will be harmful or beneficial to people. The dominant considerations speak generally about the impact on humanity. But will an encounter with an ETI really affect all people in the same way? Will it only benefit those currently already most privileged? Will it have negative consequences for everyone, the poorest or perhaps the wealthiest?

The second way the article proposes to apply a feminist perspective to the consideration of ETI is through the use of sex and gender categories. Analysing ETI through the lens of these categories will allow for more accurate development of possible encounter scenarios and protocols. Such scenarios will be more accurate, more realistic and will go beyond simple schemes based on single abstract principles. In turn, imagining ETI as a genderless society can inspire humanity in abandoning the gender category as a source of oppression and discrimination.

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