INTRODUCTION

When Donna Haraway put forward her argument for situated knowledges, it was a call for change to the way meaning is made, in particular in research and in the formation of knowledge. She argued for a move away from 'objectivity', which had long been touted as the cornerstone of research and meaning making, but, according to Haraway, only served as code for '[m]an' and '[w]hite' (1988: 581). She pleads for a ‘doctrine of embodied objectivity that accommodates paradoxical and critical feminist science projects: Feminist objectivity means quite simply situated knowledges’ (1988: 581). Traditional objectivity, as male-infused approach to research, should, according to Haraway, be discarded in favour of ‘feminist embodiment’ which ‘resists fixation’ (1988: 581). What situated knowledges would attain is ‘better accounts of the world, that is, “science”’ (Haraway, 1988: 590).

Traditional research writing requires ‘[d]etachment, objectivity, rationality, and the convention of taking on authority without placing one’s subjectivity in the discussion’ (McNenny, 1994: 10). McNenny, however, believes like Haraway that such an approach can only contribute to ‘the alienation that students, especially women and minorities, often experience’ (1994: 10). Very importantly, McNenny (1994: 11) says that ‘[a]lienated knowledge separates feeling from thinking and reason from emotion in ways that deny the validity of our subjectivity’. The most important disadvantage of traditional research writing is that ‘it separates knowledge from ethical considerations, thus removing a sense of accountability in knowledge assertions’ (McNenny, 1994: 11). Monica Rogowska-Sangret also summarises Haraway’s theory to mean that in male-centred research ‘objectivity was compromised as only seemingly neutral and in fact overburdened by power relations’ and that ‘objectivity understood as impartiality … is a perspective that under the guise of neutrality… hides a very specific position (male, white, heterosexual, human) and thus makes this position universal’, rendering all other positions ‘invalid and subjective’ (2018: 1).

Haraway’s theory and the debates around it have brought about an increased awareness of the diversity of women, leading in turn to ‘an increased acknowledgement that the identities and experiences of women are expressed in many different ways’ (Brandth, 2002: 113). In order to be truly objective, knowledge has to be situated; ‘not universal and totalizing but partial and incomplete’ (Brandth, 2002: 114). Brandth (2002: 114–115) further...
interprets objectivity to require ‘to be situated, and to disclose one’s position of race, class, and gender’. She is in agreement with Longino that it is ‘the subjection of hypothesis and theories to multivocal criticism’ which makes objectivity possible (Longino, 1990: 212-213).

Haraway herself (1991) argues that it is a fact that situated, incomplete knowledges are connected to theoretical frameworks that ‘counter the possibility of relativism’. Situated knowledges do therefore allow for commonality. Brandth says ‘whatever is unique about the local can also be theorized in relation to more global trends’ (2002: 115).

Haraway’s understanding of science is the traditional view of it as natural science, usually considered to be the primary maker of knowledge about the world we live in. Science is pursued both in academia and outside it, while academia embraces the natural sciences, the social sciences and the human sciences, all concerned with creating knowledge. Although they are not synonymous, the realms of science and academia do overlap in their pursuit of knowledge. As such, scientists and researchers often interact with or function within the sphere of academia, where universities serve as places of knowledge making. Universities have, traditionally, been male-centred and it is in the hallowed halls that the credo of objectivity has been much touted – to the detriment of women in the field. While situated knowledges require a different way of creating knowledge, a different way of doing research and an acknowledgement of diversity and the particular in the stead of objectivity, it also requires closer scrutiny of the institutions of knowledge making. Where is the research done, and by whom? Has the concept of situated knowledges contributed toward making universities as centres of science and research into safe areas for women where a ‘feminist objectivity’ is accepted and nurtured?

Much of the debate around situated knowledges deals with the individuality and subjectivity of the research subjects, and at the same time there is a call for women in science and research to situate themselves. My main question in this article is not so much whether research takes into account individual subjectivity of research subjects in the place of the traditional, male inflected objectivity. Instead I want to investigate how the institutions of knowledge making, the research centres and the universities, advantage or disadvantage the women involved in the process of knowledge making: the female scientists, researchers, professors, and students. Does the fact that they find themselves situated in the academic sphere afford them agency and individuality (not only in how they create knowledge, but in their own situated lives), or are they, based on their gender, negatively impacted in terms of their chosen profession, their personal lives, their gender performances, their sexuality and, pertinent to this discussion, their intimacies and who/how they love?1

GENDER STUDIES AND GENDER EQUALITY IN THE HALLOWED HALLS

Much work has been done in universities toward the attainment of equality for women and also for feminist research. Lea Skewes and Stine Willum Adrian (2021) recently documented a conversation with the founding mothers of feminist studies departments in many European universities, Professors Rosi Braidotti and Nina Lykke. The main aim of the conversation was to examine the history of the feminist studies movement in academia, but also to explore the effect of new political and ideological conditions on the future of feminist research at universities. The biographies of Braidotti and Lykke showcase their ‘passionate desire to establish a solid basis for feminist researchers’ and their dedication ‘to the struggle to expand the fragile spaces of academia’s interdisciplinary feminist borderlands’ (Skewes and Adrian, 2021: 1). My interest in the conversation is not so much in what had been achieved by Braidotti, Lykke and their peers, massive as the impact thereof has been. Rather, I am interested in their attitudes to academia as it currently stands. Lykke finds herself ‘worried about the precarious conditions of people in academia today’ and describes it as ‘getting increasingly worse – especially for academics who are pursuing careers in critical studies such as feminist studies’ (Skewes and Adrian, 2021: 10). Braidotti, while saying that the establishment of feminist studies departments in universities ‘has changed the world’, adds that ‘a lot of feminist scholars today are not located in gender, feminist or queer studies programmes’ (Skewes and Adrian, 2021: 10). Crucial to my argument and the close reading that follows, both these eminent scholars seem to be disillusioned with the state of academia, and specifically the current state of feminist studies in universities.

Both Braidotti and Lykke bemoan the increasing focus of universities on funding and generating an income. Lykke lists under the advantages of being a post-retirement independent researcher that she ‘can do, write and say’ whatever she likes. She no longer has a need to apply for funding from ‘neoliberal funding agencies’ or ‘subscribe to the cruel optimism about topics’ she has no real affinity for, ‘but which may attract funding’. She no longer needs to ‘spin applications in order to get money out of funding agencies’ (Skewes and Adrian, 2021: 5). Very illuminating are the answers provided by both Braidotti and Lykke to Braidotti’s question: ‘But would you still apply for a

1 This is reminiscent of Arundhati Roy’s ‘love laws’ in The God of Small Things which determine ‘who should be loved, how much and how’ (1997: 31).
university job today if you were 30…?’. Braidotti admits that she ‘would truly hesitate to enter the university today’ while Lykke ‘would rather once more commit [herself] to activism’ (Skewes and Adrian, 2021: 11).

It is not that our society resists women in science – it resists women as makers of knowledge, validating my earlier argument claiming parallels between women in science and women in academia. Taking into account the views of eminent scholars such as Braidotti and Lykke, can it then be argued that academia is not truly conducive to situated knowledges? I am interested in whether a line can be drawn further to say that for women to be situated in such institutions of traditionally male-centred knowledge production can be detrimental to more than simply their contribution to knowledge, but particularly to their gender choices and personal freedoms.

Current research supports the concerns raised by Braidotti and Lykke. Pamela Eddy and Kelly Ward, for example, acknowledge that much has changed in universities in the last generation, but maintain that ‘hierarchical and bureaucratic structures in higher education remain’. Regardless of any changes for the better, they believe that higher education is still formed around ‘the division of work along gender lines and the reinforcement of existing power structures that reify gendered roles’ (2015: 8). Focusing on the employment aspect of gender inequality in academics, their research shows that ‘the academic pipeline begins to leak at the associate-professor level’ where only 42% of associate professors and only 29% of full professors are women (Eddy and Ward, 2015: 8).

Mark Joseph Stern et al. (2018: 160) confirm that while there has been an increase in the visibility of gender-nonconforming and trans people in all spheres of society, ‘the issue of their civil rights has stirred widespread debate, perhaps most visibly in the context of education’. There is positive development, as their findings show that ‘Generation Z … are quietly rejecting rigid gender identity norms and the male-female gender binary, defining gender classification on their own terms, and offering support for judicial defense of inclusion and human dignity’ (Stern et al., 2018: 160).

When discussing existing gender discrimination in higher education, however, Stern et al. (2018: 160) point out that it includes so much more than the usual sexual harassment or unequal pay. Laws have been drawn up to counter ‘sex stereotyping’ and ‘mistreating a worker for failing to comply with gender norms’, implying that those remain issues in places of learning. This is supported by Annie Schulz, who claims that women in academia are still subjected to ‘expectations informed by dated gender norms’ in particular the expectation for them to act as ‘mothers and home makers, even if only on an emotional level (2019: 141). She refers to the ‘gendered precariousness of academia’, claiming that the ‘academe continues to be a precarious space for women as working professionals and as scholars’.2

Schulz identifies two aspects of gender inequality specific to academia. Firstly, she argues that higher education employment is still rife with ‘gender-related inequities’ (2019: 144). More pertinent (as it relates to situated knowledges), she criticizes the ‘institutional ethos of university campuses and the expectations that women remain in the role of meaning maintainer rather than meaning constructor’ (2019: 144).3

While the ‘dated gendered expectations of role fulfillment’ endemic in institutions of higher education may be ‘subtle and ambiguous’ they are undeniably part of academia (Schultz, 2019: 144). Eddy and Ward explicitly claim that women ‘are often assigned “mom” work on campus’ (2015: 9) while Schultz refers to an expectation at universities for ‘women academics to be motherly, nurturing, and to perform homemaking work’ (2019: 145). Schultz further argues that ‘there may still be a tendency on university campuses to view the male academic as the challenger, the provoker of higher-level thinking, and the female academic as the one assigned to care for and nurture the students’ (2019: 145).

This disproportionate allocation of ‘service and care work roles’ to women on university campuses means that women academics’ ability to make meaning is undermined, or at least put secondary to that of their male colleagues (Schultz, 2019: 147). Women are charged with ‘making the university homelike’, while their male counterparts ‘are presumed to disrupt the temporality of the bourgeoning identity by intellectual rigor and knowledge production’ (Schultz, 2019: 147). Inadvertently then, the university replicates the traditional home, casting the women who work there as mothers, and the men as fathers. This leads to a reinforcement of historical gender roles on campus: ‘mother stays home and maintains meanings; father comes home in the evening … and generates new meaning in the minds of the children’ (Schultz, 2019: 145). Schultz (2019: 148) disturbingly finds de Beauvoir’s argument that ‘transcendence’ or then ‘meaning creation’ is reserved for men still relevant to modern day academia (de Beauvoir, 2011: 74). Instead of having moved on, she argues that placing women academics in service roles where they are tasked with caretaking and nurturing of students puts them in a similar position to de Beauvoir’s ‘imminent incubator’ (Schultz, 2019: 148).

2 See the full conversation between Rosi Braidotti and Nina Lykke (Skewes and Adrian, 2021).

3 See also de Beauvoir’s The Second Sex.
SITUATING THE RESEARCHER AS MUCH AS THE RESEARCH

It becomes apparent that the field of science, the practice of research and universities as centres of knowledge making are lacking as spaces where women can express themselves in terms of their careers. I would, however, like to further investigate whether women in those spheres are allowed agency in terms of their personal lives. Situated knowledges, as discussed earlier in this article, refer to the role of the researcher/scholar in her research. Does it also apply to her life outside of the centres of knowledge making, to her person? Does it affect the very way she portrays gender, how she loves, who she has sex with, how she chooses to be intimate?

Universities in the Stars

Existing literature presents a picture of universities being neither conducive to situated research, nor considerate of the women physically situated there. To take one step away from the ‘real world’, I would like to investigate how this scenario is presented in The Sentients of Orion, a space opera series by Australian author Marianne de Pierres (2007, 2008, 2009, 2010). Science fiction is a genre very well suited to further investigate whether science and universities (as centres of knowledge making) are conducive to the wellbeing of female academics. While Kingsley Amis and Darko Suvin already provided a working definition for science fiction, they also illuminated its singular use of ‘cognitive estrangement’ (Amis, 1960: 99; Suvin, 1988: 99). In New Maps of Hell, Amis defines science fiction as ‘that class of prose narrative treating of a situation that could not arise in the world we know, but which is hypothesized on the basis of some innovation in science or technology, or pseudo-science or pseudo-technology, whether human or extra-terrestrial in origin’ (1960: 18). Placing familiar situations in unfamiliar contexts thus allows for deeper examination and new perspectives. It was only in the 1970s that women authors started making use of science fiction’s particular quality of ‘estrangement’ and, with authors such as Le Guin and Joanna Russ at the forefront, women began to manipulate the genre to ‘challenge and expand prevailing notions of gender roles’ (Bowers, 2009: 27). This aspect of the genre makes it highly suitable to my investigation.

Further ground for the suitability of science fiction to investigate situated knowledges lies in the commonalities between feminist science fiction and feminist science studies, as pointed out by Christy Tidwell (2011: vi) even as she bemoans the continued disconnect between the two fields. Important questions asked by Tidwell are:

Would scientific practice and experimentation—would the world—look different if women were in charge? Would women do things differently? … Feminist science fiction is one place where these questions can be addressed and where storytelling, specifically storytelling about science, can occur, helping to give women control over, if not the world, at least the stories that are told about them. (2011: 5)

Tidwell (2011: vi) claims that science fiction ‘stimulates thought about the social construction of science and creates the ideal space for discussing who does science, what counts as science, and how science is represented’. Importantly, she points out how these findings ‘can have a direct impact on the real-life production of science’.

When it comes to using science fiction as a vehicle for examining a real-life issue, Merrick claims that literary analyses of feminist science fiction often ‘imply that the genre is merely a convenient vehicle for certain devices and locales (aliens, alternate worlds or futures) that better enable an examination of gender from an estranged perspective’ (2007: 214). She admits that that might actually be so in some instances, ‘but for many others a feminist revisioning or critique of scientific discourses and cultures is an integral function of the text!’ (2007: 214).

Science fiction would thus seem a suitable vehicle through which to investigate situated knowledges in science and academia. Feminist science fiction in particular could be expected to allow for a thorough examination of this real world issue from the relative neutrality of a different galaxy.

Love and Gender

Gender issues in particular have long been a focus in science fiction written by women, and numerous studies on gender roles in feminist science fiction already exist (Merrick, 2009:1). Queer Universes: Sexualities in science fiction, for example, demonstrates the diversity in the field (Pearson, Hollinger and Gordon, 2008). An established tradition of investigation of gender and sexuality in science fiction bodes well for my examination of situated knowledges in universities through a literary analysis of The Sentients of Orion, as the series is very deliberately set against an academic backdrop. De Pierres’ Orion is a universe grounded in academia with science and research integral to the plot in which many characters are scholars, scientists, researchers and students.

Against the backdrop of questions this discussion has so far raised regarding career and professional implications to women situated in science and academics, I hope to provide a more nuanced angle from which to approach the investigation, moving from the professional to the personal by focusing on intimacy, closeness and love as indicators of agency in gender performance and attitudes of women in academia. By analysing instances of intimacy and expressions of love and closeness of three female academics in The Sentients of Orion I aim to show if
and how they might be compromised by the academic milieu they find themselves in. Using the sexual and emotional intimacies of these women to examine their gender performances, stereotypes and portrayals might reveal whether de Pierres, as woman author of current science fiction, poses a challenge to the patriarchal oppression revealed in the aforementioned review of the literature.\(^4\)

The element of estrangement, the well-documented function of feminist science fiction to challenge the patriarchal status quo, and the pertinently academic setting makes _The Sentients of Orion_ uniquely suited to this analysis. The series, which has been referred to as a ‘blockbuster space opera’ (Suciu, 2008: no pagination), provides Amis’s ‘hypothesized’ world; allowing for a detailed analysis (Amis, 1960: 99). Rather than the clichéd space operas of old, the series is more aligned to ‘new space opera’, which is deemed a much more respected sub-genre of science fiction (Levy, 2008: 132; McAuley, 2003: 24). New space opera often incorporates principles of cyberpunk such as hard science and ‘fine writing’ (Levy, 2008: 132). There is a focus on ‘character development’ and ‘literary standards’ infused with political commentary, but it often retains the wider planetary backdrop associated with original space opera (Levy, 2008: 132).\(^5\) _The Sentients of Orion_ conforms to ‘new’ space opera not only in its cyberpunk element, but also in its detailed characterisation and its move away from the ‘chauvinism’ present in original space opera (Wolfe, 2014: 67). The series consists of four novels, namely, _Dark Space_ (2007), _Chaos Space_ (2008), _Mirror Space_ (2009) and _Transformation Space_ (2010). The novels are available as e-books in the Kindle Store (Amazon, 2016), but for this article I use the 2007-2010 Orbit editions for page numbering and ease of reference. To expedite reading, in-text citations of the novels are abbreviated as follows: _Dark Space_ is referred to as _DS_, _Chaos Space_ as _CS_, _Mirror Space_ as _MS_ and _Transformation Space_ as _TS_.

Before continuing with the close reading, some terms need to be clarified. I do not imply in any way that gender can be indicated by different kinds of intimacy or that intimacy is a defining attribute of gender. Gender performativity, however, most certainly intersects in complex ways with desire and with behaviour in situations of sexual intimacy. Depictions of intimacy can therefore be used as a tool to portray specific gender qualities in order to comment on existing gender roles, gender performances and societal stereotypes. How an author chooses to portray different gendered characters or characters with different sexualities approaching, taking part in and being affected by intimacy (with the inclusion of agency and embodiment) will show whether or not that author is instigating an investigation into gender, and will most likely reveal the depth of such an investigation. I aim to further use the expressions of intimacy and love the characters engage in to ascertain whether de Pierres is questioning the effect that being situated in science and academia (whether positive or negative) has on the agency of female academics in their personal lives. Could love and intimacy be used to present an imperative of dissent in a patriarchal academia?

I do include sexual intercourse as a subset of intimate behaviour in spite of the expected ‘resistances, ambivalences, and concords that inevitably arise when someone speaks with passion and authority about sex and identity’ (Berlant, 1995: 379). How people act in sexually intimate situations is deeply nuanced. The same nuances that inflect general intimacy are pronounced in sexual intimacy.\(^6\) While focusing on intimate acts and thoughts related to sexual intercourse, the study thus also includes acts or thoughts in references or allusions to sexual intercourse are symbolic in nature. This includes, for example, pleasing, emotional warmth, violence, emotional blackmail, enabling, suppression or fulfilment (Ricci, 1994: no pagination). Cognisance is therefore taken of the impact of emotional intimacy (not only during sexual intercourse, but also on its own). Intimacy, as addressed in this paper, also touches on negative intimacy, inclusive of ‘negative affect in relationships, negative dialogue, rejection of commitment or concern for others, interpersonal disharmony, nonreciprocated friendliness, and escape from or avoidance of intimacy’ (Suedfeld, Wilk and Cassel, 2013: 195).\(^7\)

Like intimacy, love is a nebulous concept. Love can take many forms, ranging from platonic to romantic love. This paper will address various kinds of love; from the love of a mother for her child, to the kind of love that culminates in sexual intimacy. Siksha Deepak _et al._ (2019: 513) claim that love is inclusive of ‘diverse feelings and emotions, thoughts and corresponding behaviour patterns respective to a relationship which is intimate in both

---

\(^4\) Amis claims that sex in science fiction is ‘almost oppressively normal’ and often glossed over (1960: 64-66, 84). In contrast, more recent science fiction such as _The Sentients of Orion_ gives sex (sexual intimacy) a prominent role.

\(^5\) *Locus* published a 2003 issue (Issue 522, Volume 51(2)) entitled ‘New Space Opera’ which contains contributions by some influential authors in the subgenre, such as Gwyneth Jones and Stephen Baxter. Also see Gardner Dozois and Jonathan Strahan’s (2007) edition of _New Space Opera_.

\(^6\) Masters _et al._ also refer to people being ‘discouraged from conversations or questions about sex’ (1986: 28). Their seminal work contributed greatly to demystify the topic by dedicating their second chapter to a detailed discussion of sexual biology (Masters _et al._, 1986: 27-54).

\(^7\) Isolina Ricci includes anger, hate, victimisation, emotional abuse, humiliation, violence, bullying and fear in her definition of negative intimacy (1994:no pagination).
the physical and the psychological aspect’. According to them, being able to love ‘is considered as a valuable and a core component of the institutions of which the individuals are a unit’ (2019: 513).

A ‘strong feeling of deep rooted love leads to expansion of the self’ (Deepak et al., 2019: 513). If, as I am arguing, women situated in academia are deprived of love and intimacy or compromised in their choices because of the very institutions in which they find themselves, they will not be ‘considered a valuable and core component’ of those institutions (Deepak et al., 2019: 513). A circle of deprivation is created – the institution (academic in this case) deprives the women situated there of love and intimacy, and that in turns limits the women’s ability to contribute to the institution.

Deepak et al. (2019: 514–515) refer to health benefits, actual chemical changes to the body; ‘enhanced social support’; and ‘subjective wellbeing’ such as improved self-esteem as some of the benefits of love. Susan T. Fiske (2014: 13) goes so far as to say that people’s very lives are affected by their social ties. She says (2014: 18) that ‘belonging to a group helps individuals to survive psychologically and physically, whether on a college campus, the Burkina Faso savanna, or the Kansas prairie’.

‘The spectrum of the positive effects of love are [sic] quite varied and profound’ according to Deepak et al. (2019: 515) They summarise by saying the presence of love can lead to people perceiving themselves ‘in a more favourable light as it is rightly said that until you love the self you cannot the other’ (2019: 515). Clearly being deprived of, or being unable to express and experience love and intimacy will be seriously detrimental to an individual.

Conducting an investigation into intimacy and love of actual women scientists and academics will hold all manner of ethical concerns and practical obstacles. Using characters from *The Sentients of Orion* as source for a close reading applies science fiction’s element of estrangement discussed earlier to allow an investigation of a situation very similar, yet suitably removed from present day reality. I will focus on instances of intimacy in the lives of three female academics in *The Sentients of Orion* in order to ascertain how de Pierres uses her work, and these intimacies in particular, as a tool to not only address, but also challenge the manner in which traditional centres of knowledge may be toxic to women. To facilitate my discussion, I will provide an outline of key elements of the plot.

Mira Fedor, a student at a military-type university or ‘Studium’, is a pilot who inherits from her father an innate gene, which enables her to pilot the royal biozoon – a sentient, biological spaceship. The male-centred academic institution threatens to strip Mira of this gene. She has to flee both her antagonistic university and a war when the Saqr, a water-based alien species, unexpectedly invade the planet Araldis. During Mira’s flight, she is raped by a fellow student, ‘Trinder ‘Trin’ Pellegrini.

Mira flees in *Insignia*, the sentient ‘biozoon’ space vessel, on a mission to find help for Araldis elsewhere in the Orion galaxy. She travels in the company of a space pilot, Jo-Jo Rasterovich, Rast Randall (a female mercenary), and two scientists, Bethany Ionil and Thales. They stop at Scolar, a planet of scholars and philosophers, where Mira’s child (conceived by rape) is born.

Belle Monde is another planet of elite scientists and academics, also known as ‘Godheads’ who study and serve Sole, a godlike entity discovered at the edge of the universe. Sole is instrumental in the Saqr attack, something he uses the Godheads to further. Two Godheads, Tekton and Dieter Miranda Seward are in competition for academic funding and recognition and their ruthless efforts to further their careers lead first to the drug-induced dumbing down, and ultimately the destruction of the academic planet, Scolar.

Mira’s daughter de-escalates the war and destruction by reaching an agreement with Sole, while Trin is overthrown as leader of the survivors upon Mira’s return to Araldis. The underlying setting of science and academia, and the direct and indirect influences of those centers of knowledge making on especially female characters in the series is a recurring theme.8

**WOMEN IN ORION’S ACADEMIA**

The academics in *The Sentients of Orion* are not portrayed as a homogenous group. In line with situated knowledges, and the stance Butler (1990: xxxi) takes, they are diverse in terms of background and expectations, as well as their cultural understanding and performance of gender. In spite of this diversity, there are common bonds and a sense of solidarity in the face of inequality in their chosen field.

---

8 An as yet unpublished short story by de Pierres called ‘The Echo of Love’ details how senior academics at a space university manipulate a junior academic’s yearning for love and belonging, destroying his career and his life for the sake of an experiment.
Mira the Student

The protagonist of The Sentients of Orion, Mira Fedor, is neither an academic nor a scientist, but a student at Studium, which seems to be Orion’s equivalent of a university. While degrees are conferred, there is a military element to it in that at graduation, some students would emerge pilots.9

The Studium graduation ceremony reveals Araldis society, and by virtue of where it is situated, Orion academia, as a sycophantic patriarchal hierarchy full of hidden agendas and gender inequality. As a top graduate, Mira has certain expectations of acceptance and recognition during the ceremony. The public moment, however, becomes an intimate one when Mira is openly shunned. She is humiliated by a fellow student speaking ‘loudly enough for all to hear’: ‘You are different, …[s]o somber, Baronessa. So thin’ (DS 8, emphasis in original). It is telling that this humiliation comes not from a man but from another female student. Patriarchy in general, and as shown here patriarchy in academia, has led women to turn on each other instead of uniting against male oppression. bell hooks points out that even within the feminist movement, those who think differently are seen as ‘a dangerous threat’ (2000: 12). Similarly, Mira’s failure to fit in is as much a threat to her female peers at the university as it is to the male establishment.10

Mira is being snubbed by her fellow students at the Studium based on her being in possession of the ‘Innate gene’, something that is considered abnormal in a woman. Her possession of a special ability (usually reserved for men only) makes her ‘Other’ in her academic sphere. Mira’s belief that she will receive the award of ‘Pilot First’ at the end of the graduation ceremony allows her to ignore the slights. She believes that ‘if [h]en she would be properly honoured … and Cochetta Silvio and her brittle friends would dare not speak aloud their demeaning thoughts of her again’ (DS 11). It is, however, doubtful that those who resent her for being different would suddenly come to accept her once it is officially acknowledged that she possesses the special ability. More likely, it will only confirm her otherness, and increase the scorn and animosity that she has been experiencing.

While Mira seemingly remains ‘self-possessed’, able to remain immune to the taunts and deaf to the ‘perfunctory applause’ (DS 9), she is completely aware of the rejection. This is not only a rejection of her as person, but of the recognition due to her after years of academic effort. According to Taylor (2013: 97), denying recognition is a form of interpersonal violence and, as such, an act of intimacy. Actions such as ‘disrespect’, ‘disregard’, ‘mean spiritedness’, ‘humiliation’, ‘violence’ and ‘bullying’ are all manifestations of ‘negative intimacy’ (Ricci, 1994: no pagination; 1997: no pagination).

Mira, as a woman, is allowed to attend an academic institution, and even graduate with top honours, but the degree she completes, and for which she receives scant acknowledgement from her peers, is considered a ‘feminine degree’ (DS 11). This is similar to present day reality where Martin (2012: 3) claims that women are largely ‘underrepresented in both education and careers involving science, technology, engineering and mathematics’ (Martin, 2012: 3). Research further shows that even when confronted with successful women mathematicians, ‘women and men held consistent implicit stereotypes that men are associated with math’ (Stout, Dasgupta, Hunsinger and McManus, 2011: 256). De Pierres here further implies the extent of sexism in the Studium, using the estranged galaxy of Orion to comment on and raise questions around hegemony in academia. Reminiscent of current trends in Western higher education, where women are often still considered more suitable for ‘easy’ degrees in Humanities than in the ‘rational’ Sciences, girls like Mira are only deemed able to study easy or ‘soft’ degrees – Mira is not offered the same ‘neural fact-augmentations’ as the male students, ‘being a woman who would never truly hold a position of importance’ (DS 284). Instead, she has to study at night and ‘secretly’ to master the arts of piloting, in spite of her possessing the Inborn right and ability to pilot biozoons. Academia is not allowing Mira, as a woman, the right to be herself.

While society tends to be more concerned with a physical variety of interpersonal violence (Cvancara and Kinney, 2009: 329), verbal violence has been shown to be more pernicious (Gortner, Gollan and Jacobson, 1997: 337) and also more harmful in the long term (Ney, 1987: 371). Verbal violence, such as that which Mira is subjected to, often results in victims experiencing their social environs as antagonistic (Vangelisti, Maguire, Alexander and Clark, 2007: 360–365), and can result in problems with commitment and closeness (Vangelisti, 2002: 656–657). The manner in which Mira is rejected and deprived of recognition by her academic peers plays a role in the formation of her character and may be instrumental in her very guarded and sombre demeanour, her thinness and the lack of intimate social relationships in her life.

The academic environment literally turns hostile when Franco Pellegrini announces on the graduation stage that the ‘Fedor birthright has come to an end with the Inborn gene falling to a woman’ (DS 12). Mira is deprived of official recognition of her abilities. Instead, she is publicly shunned and shamed for being a woman and stripped of her birthright by the patriarch, who seems to be fulfilling the role of Chancellor. This open hostility glaringly amplifies any previously implicit gender inequities in academia on Araldis. Mira finds herself a helpless woman in...

9 See Ender et al. (2017) for a very relevant examination of transgender integration into the military.
10 Also see Alanna Callaway’s reading of The Handmaid’s Tale as an example of women turning against each other (2008: 68).
an environment that is suddenly more than just pettily maleficent; it is actively discriminating against her on the basis of her gender.\textsuperscript{11} The escalation of violence culminates when Mira is raped by Trin, something that would not have happened had they not met at Studium, or had Studium not perpetuated a culture protective of ‘rapists and societal cannibals’ (\textit{DS} 10). METRAC’s \textit{Campus Safety for Women} edition is only one source pointing to the way that universities fail to be safe places for students, ‘staff and faculty of diverse abilities, sexual and gender identities, races and faiths’ (Komiotis, 2013: no pagination). For Mira, university offers poor protection: what starts out as rejection based on her gender, ends in rape.

Regardless of whether this rape is one of passion, one with power permutations or (in Trin’s mind) one of necessity to procreate, Mira is violated, and rendered powerless with ‘no choice’ (\textit{CS} 19, emphasis in original).\textsuperscript{12} Anne Cahill points out how, as a woman, ‘[t]he possibility of rape shapes the space I inhabit, designating certain hours and places as dangerous to me while to men they remain open prospects … I was rapable, and therefore I had to be careful’ (2001: 1). Mira’s ‘rapability’, a social vulnerability of her gender, affects her freedom. Academia, where she is situated, actively contributes to her being robbed of her agency.

The series concludes where Mira returns to Araldis, having overcome the many obstacles between her and saving the planet. To say that she triumphs, though, is not completely accurate. She saves the planet, her life is full with love for her children, and she does have close friends, but in a series with many graphic depictions of sexual intimacy, Mira is one of the only characters to never have voluntary sex. She does form close bonds with a number of characters, notably Jo-Jo Rasterovich, but she is never able to love romantically again after Trin, her ‘college sweetheart’ rapes her. For Mira, the protagonist, a brush with patriarchal academia not only limits her agency, it impacts her ability to love romantically and to engage in constructive, consensual sex.

\textbf{Bethany the Scientist}

The female scientist I will focus on is Bethany Ionil, known as Beth. As the sister of warlord Lasper Farr, Bethany embodies the ‘scientist’s daughter’, a stereotypical character often used in early science fiction to depict women (Amis, 1960: 45; Russ, 2007: 209). Bucking the trope, though, there is both depth and complexity to Bethany, whose gender, sexuality and love for her child deeply inflect the novels.

Bethany, a disgraced scientist, first enters the story as a prisoner. As her story unfolds, it becomes clear that her physical circumstances are symbolic of the psychological prison in which she finds herself. She is described as having a ‘sagging thin arse and tiny odd-shaped breasts’. The men imprisoned with her do not find her ‘in the slightest’ attractive in spite of, or perhaps because of, her being ‘permanently naked’ (\textit{CS} 31). Beth’s body, like her physical imprisonment reflect the impoverished state she finds herself in after abandoning her child.

Mostly based on his lack of sexual interest in her, Beth is able to confide in her fellow prisoner, Jo-Jo Rasterovich, about her decade-long relationship with a Mioloaquan\textsuperscript{13} man. In order to please her lover, who eventually abandoned her, Beth not only compromises her career as scientist, but abandons the mixed-species child from the union. Interspecies relationships are frowned on, as Jo-Jo makes clear: ‘You were flipping a scaly? How the hell did that happen?’ (\textit{CS} 30–32). By heteronormative standards, the illicit relationship is afforded a certain level of respectability by virtue of its duration and the fact that they union yielded a child, but it is clearly not within the parameters of acceptable behaviour in Orion. Agonito (2014: 38) points out a similar surface respectability granted to gay relationships in modern-day, liberal society where a greater level of mainstream acceptance is afforded to long-term, stable gay relationships, solidified by the presence of children.

Beth fears losing a man, and her efforts to claim love leads her to making the ‘moral mistake’ of sacrificing motherhood and abandoning her child. She is eventually abandoned by her alien lover, but her subsequent regret begs the question of what she would have done if he had not left her. This tale of intimacy gone wrong is used to highlight the double standard and the stereotype of poor parenting by a man not being considered nearly as abhorrent as poor parenting by a woman. Agonito, for example, refers to a mother rejecting a child as the ‘last taboo’ (2014).

In spite of Mira and Beth sharing many instances of semi-intimacy their relationship never develops further than a superficial friendship. Mira chooses not to confide in Beth (\textit{CS} 323), even if she later feels ‘a pang of loss

\textsuperscript{11} Hate crimes against women (for no other reason than that they are women) are commonly perpetrated. Relevant to this discussion, there has been a notable increase in such crimes on university campuses and (as in the case of recent rape allegations on the University of Cape Town campus) victims of such crimes are not necessarily backed by their academic institutions, not even when the institution is led by a woman (Macupe, 2022: no pagination).

\textsuperscript{12} See Anne Cahill’s \textit{Rethinking Rape} (2001).

\textsuperscript{13} An alien species.
for [the] brief friendship' (TS 8). Two factors contribute to the two women never truly reaching intimacy. Firstly, they are unable to connect because of the depth of their individual misery. Beth is ‘submerged in her guilt’ while Mira is ravaged by emotional pain (CS 284). Mostly, however, the distrust that Mira feels toward Beth is based on Beth’s position as a scientist for the powerful Laspar Farr (CS 281-282).

The depth of enmity between Beth and her brother ‘poisoned the air’ (MS 92). Beth fears ‘the casual and complete callousness’ with which her brother ‘dispensed violence’ (MS 93). She, however, sets aside her fear and her pride in order to find her daughter, saying ‘You were right. And I was wrong, Lasper. And I need your help’ (CS 257). Even as she asks Lasper for help, Beth deeply resents his attitude toward her gender and her sexuality, something he uses to belittle her in every sense. He ties what he thinks are her moral flaws to her profession and to her ability to make meaning. Lasper despises Beth because she is a woman. He implies that the only reason she can think is because he taught her to do so (MS 94). This represents not only a typical male view of women’s intellect as inferior to that of men, but also a view often still found in academia today. It fits in with Schultz (2019) and Eddy and Ward’s (2015) argument that women in academia are often not considered for their minds, but for their ability to mother.

Beth’s accusing her brother of ‘not seeing the things driven by simple emotion’, is key to the debate around situated knowledges. Laspar Farr represents the traditional way of making knowledge while Beth is making a plea for situatedness. Of interest is Laspar’s response to Beth’s stance. He attacks her morals: ‘While you, my dear, have always given in far too readily to simple primitive urges’ (MS 95). Lasper despises his sister for her ‘preferences’ and for her ‘attraction to alien species’ (MS 100), but it is difficult to say what he rejects more violently – her different way of approaching science (which he ties into her being a woman), or her choice of whom to love and have sex with. While Beth has undeniably made poor choices driven by emotion and sexual need, the manner in which Lasper uses those mistakes to cast doubt on her confidence, her intellectual ability and her competence as a scientist, demonstrates how women in any patriarchal society are both punished for and held back by their sexuality. The double standard, also in academia, remains – ‘[a] woman’s worth and status are diminished if she is perceived as being sexually experienced, whereas a man’s social status is enhanced by his sexual promiscuity’ (La France, 2010: 299).

It is difficult to ascertain whether Beth’s poor choices in love are caused by the lack of confidence in her professional abilities, or whether she lacks confidence because of her poor choices. Is this an example of hegemony in her chosen profession affecting her private life? Even after the Mio man has deserted first their child and then herself, Beth still goes to him when he calls for her. Thales, her human lover, comes across them behind a closed door:

The front of her nightdress was open, her eyes closed and mouth creased in pain. Beside her was a stranger; a heavily gilled and scaled Mioloquan with modified limbs and primitive facial features. The Mio’s sharp teeth and fish mouth were clamped around her nipples and its fins were lashing at her side, whipping against her flesh … When she saw Thales her expression sharpened. The Mio pulled his teeth roughly from her breast. Thales did not miss the flush spreading across her chest and the quickening of her breath at the pain. (MS 98)

This scene, both in the opening of the door (MS 98) and in Beth’s plea for acceptance (MS 99) symbolises a ‘coming out’ in a sexual sense. Thales’s sense of betrayal, however, is more of relevance to the discussion. He feels an immediate urge to ‘[r]un to his home, and his wife, and his bed; to the comfort of the things he knew and trusted’ (MS 99). How insecure he is in his masculinity becomes evident when he asks for reassurance about his own sexual prowess: ‘Are you saying that I cannot please you?’ Beth turns out not to be ‘the simple, sad woman trusted’ (MS 98). How for her ‘attraction to alien species’ (an immediate urge to ‘[r]un to his home, and his wife, and his bed; to the comfort of the things he knew and her own child, and the automatic assumption would be that she is acting like a typical abused woman in her inability to break away from a cycle of abuse. While this may be relevant in Beth’s choices, but a closer reading of her

---

14 See Mommy Myth by Susan Douglas and Meredith Michaels (2004) for a description of how patriarchy keeps women (who could potentially be allies) isolated from each other through convincing individual women of the uniqueness of their perceived failures.

15 Referring to possible double binds women in leadership may find themselves in, Kathleen Hall Jamieson says ‘childbearing is expected to be chosen over intellectual pursuits, silence over shame, and invisibility over acknowledgement of aging’ (1995: 14).

16 Nikki Wedgwood (2009: 336) claims that ‘sexual desire is socially constructed (along with gender) through a long and conflict-ridden process’. She states that gender theorists and feminists alike need to do more research on why certain people are sexually attracted to certain other people, but specifically why women are often physically attracted to men who are abusive
subsequent conversation with Thales shows her reasoning to be more closely aligned with traditional masculine attitudes than with traditionally feminine ones: Beth ‘switched on the light’ as she enters the room, strengthening the ‘coming out’ theme by removing any vestiges of shame and secret (MS 99). Her apology to Thales is not for what she just did, but for ‘not [having] been more discreet … She didn’t look guilty. Nor did she seem to want forgiveness’ (MS 99). Beth states her appreciation for their relationship, but is very direct in saying ‘that is not enough. I have sought pain for a long time. It’s part of me, and you are only temporary’. Like a man, she is completely unemotional when she puts the picture in perspective for Thales, exposing his hypocrisy and the ridiculousness of his attitude. Beth reminds Thales that he has no right to expect exclusivity from her while he is still married: ‘I don’t judge you for it, Thales. So please don’t judge me’ (MS 99). She points out that she offered Thales comfort when he needed it from her and exposes his hypocrisy in denying her the same, just because her ‘comfort sometimes takes a different form’ (MS 99). Her insistence on being allowed to be different and to embrace her sexuality, allows her to deny both her lover and her brother ‘the pleasure of guilt or embarrassment’ (MS 100). Beth displays extraordinary clarity and courage, something unexpected in a woman living in such a traditional society.

While Beth’s efforts to reunite with her child are commendable, it is a fact that motherhood, as constructed in a patriarchal society, has an impact on her career as scientist. The Mommy Myth (Douglas and Michaels, 2004: 1-27), Of Woman Born (Rich, 1977: xiii-xxii) as well as The Last Taboo: Saying no to motherhood (Agonito, 2014) provide numerous examples of how the social structure of modern motherhood disenfranchises women physically (Agonito, 2014: 7-28), mentally, creatively (Agonito, 2014: 55-77) and economically (Agonito, 2014: 91-100).

Overcoming the limitations placed on her among others by general attitudes against women scientists, Beth proves herself to be the exception rather than the rule. She embraces sexual agency and non-normativity, thus coming into her own. As she assumes leadership of Consilience, a large military cooperation, her new role manifests certain physical changes. She starts to look ‘older, more worn, but there was a tautness to her body, a resolution...’ (TS 378). Beth’s altered appearance reminds Thales of both the warlord Lasper Farr, and the mercenary Rast Randall. This observation echoes what de Pierres has already established through her portrayal of two female soldiers, Rast and Faris – for a woman in Latino society, whether a soldier or a scientist, to seize freedom and operate independently, she has to eschew femininity to a certain degree and embrace a performance of masculinity.17

By the end of the novel, Beth loves whom she wants to and has sex with whom she chooses. She is reunited with the daughter she truly loves and she takes up a leadership position. Her road to self-discovery entails her constantly fighting men like her alien lover, her brother and Thales for her right to choice. In her professional capacity as a woman in a field based on male-inflected objectivity, she is not allowed agency nor individuality. While she does claim her right so agency eventually, it seems that being a scientist and a woman in a hegemonic community has a damaging effect on her self-image, which in turn has an impact on her agency and the choices she makes regarding love and intimacy.

Miranda Seward the Academic

Miranda Seward is a ‘Dicter’, a title seemingly equivalent to a PhD in our world. Most of the women in The Sentients of Orion are involved in desperate struggles for survival, contributing in various ways to the war against the Saqr, which raises questions about how Miranda, as uninvolved, self-serving academic, is characterised. Dicter Seward is a woman of excesses, and this aspect of her nature is reflected in her ‘bosoms quivering in hyperbeat with her chins’ (DS 210). According to Tekton, it seems ‘almost as if her chins acted as repositories for the food, freeing her tongue to do what it did best – complain’ (DS 242). She has ‘more than her fair share of chins and equally shivery thighs’ (DS 114). Miranda’s appetite for food is only matched by her appetite for sex (CS 224), but while such appetites in other women characters speak of health, strength and agency, in Miranda, they somehow bespeak inadequate control and a lack of morals. Janet Tomiyama and Traci Mann point out how obesity is ‘stigmatized’ and there is much social pressure on overweight people to conform to the slimness ideal (2013: 4). While de Pierres could thus merely be commenting on the fat shaming prevalent in modern-day Westernised society, she could be depicting Miranda as a weak, indulgent woman whose body reflects her excesses.

A selection of top academics and scientists, carrying the title ‘Godhead’, are selected to move to Belle-Monde to study ‘God’ (DS 21). Miranda uses the fact that she is the only female Godhead in her favour. For her, seduction is a tool as she has sex with Jo-Jo ‘in return for an introduction to God’ (DS 114). She further uses ‘artful timing’ to expose her thighs to Tekton in order to elicit information from him (DS 79). She lacks emotional involvement in her sexual encounters, and treats the men she has sex with like ‘priced meat’ (DS 211), attitudes which do not toward them.

17 This raises the question of whether Orion society expects a degree of masculinity in a leader, or whether masculinity is an inherent quality of leadership, something which falls beyond the scope of this article.
conform to the stereotypical feminine image. She is not beyond playing into the stereotype, however. When she is caught snooping through a fellow academic’s materials, she is able to slide smoothly into portraying a girlish side as she produces a ‘single tear’ and ‘lifted her skirt to display the full undulation of her thighs’ (DS 244).

Miranda’s pride in her ‘repertoire’ of ‘erotic’ techniques (DS 114), are more often than not applied for functional purposes and not for her own sexual pleasure. She is only once depicted to have sexual intercourse without any gainful motive, namely when Tekton finds her ‘quaffing champagne and eating oysters out of parts of Doris’ that not even Doris’s lover, Tekton, has accessed before (DS 243). Miranda’s choice of Doris as partner in this motive-free sexual encounter allows for the possibility that she might be lesbian, and not bisexual, only having sex with men when it serves a purpose. De Pierres shows how ‘abusing’ and performing gender in a specific manner in order to attain her academic aims seems to have compromised Miranda’s choices with regard to sexuality. It can be argued that Miranda’s potentially damaging choices in how she performs gender are a direct result of the toxic academic sphere in which she finds herself.

Miranda’s driving ambition means there is very little she would not do to further her academic career. She accepts money to create a biological weapon used to suppress the mental capacity of the people of Scolar in order to fund her academic research (TS 259). While it might be coincidental, de Pierres chooses one academic’s scholarly ambitions to pave the way for the destruction of a whole planet of other academics. This is open criticism of the manipulative and ambitious nature of academia in modern-day liberal democratic society, of a lack of research ethics and of questionable academic conduct.18

To strengthen my argument, Miranda is the only woman in The Sentients of Orion who never forms any kind of emotional intimacy with another person. She is very different from all the women on Araldis, for whom survival is a binding factor. Modern feminism is sometimes accused of having turned into a theory-based discipline exercised by academics, far removed from the lives of everyday women (Nussbaum, 1999: 45; Braidotti, 2005: 171). There is the added suggestion in the depiction of Miranda’s lack of emotional intimacy, or even love, that women in positions of great power (such as being companion to a god) are forced to lose their ‘feminine’ ability to forge meaningful relationships.19 In relation to Lykke and Braidotti’s views, de Pierres seems to be using Dieter Mirinda Seward to comment not so much on the current state of feminism as the current state of feminist academics.

CONCLUSION

Lorraine Nencel (2004: no pagination) finds that studies on sexuality are ‘primarily concerned with how oppositional gender relations are expressed and affect women in their sexual experience and practices’, thereby defining women’s subjectivity through the paradigm of heteronormative power. She feels that in spite of an increasing emphasis on positive aspects such as ‘agency instead of victimization’ such studies still serve only to prop up the paradigm of power. Nencel, however, writes within a paradigm of radical feminism, not in line with this more literary study of intimacy, gender performance, love and sexuality. Although the role of power in the gender performance and sexuality of the three academics and scientists discussed here has an impact on their lives, whether through instances of inequality or instances of empowerment, the aim of this article is not to strengthen oppositional gender categories. Rather, it is to see how de Pierres comments on and challenges male hegemony in the spheres of science and academia through her depiction of intimacy and through how these characters find their way in terms of gender performance, intimacy and love.

De Pierres applies science fiction’s function of estrangement in The Sentients of Orion with its particular academic backdrop and its focus on scientists and meaning makers to challenge the status quo of hegemony in knowledge making, science and in academia. Moving beyond mere surface comment on obvious discrimination in a patriarchal system as addressed in the introduction, this article shows how three female characters; a student, a scientist and an academic researcher, are deeply affected in their love, gender performance and intimacy by virtue of them being situated in the field of science and academia typically characterised by patriarchal dominance. In this, de Pierres uses love and intimacy, or the lack thereof, to question and challenge the manner in which academia does not allow for spaces of individuality and agency in the private lives of women.

The other women on Araldis, the housewives, lovers, daughters and soldiers who have survived the alien attack have negotiated ways in which to come to terms with their sexuality and perform gender in ways that allow them

18 Some researchers argue that feminism has been ‘hijacked’ by academics who use it as political correctness platform to suppress freedom of expression on campuses (Hoff Sommers, 2015: no pagination).
19 All the women who are depicted as ‘free’, such as Rast, Fariss, Samuelle and to a certain extent Miranda and Beth, conform to Ezzell’s signifiers of masculinity, namely, ‘control of self and others, resisting being controlled, resisting exploitation’ (2016: 192).
to function optimally in a hostile patriarchal society. The same does not seem to apply to the women of science and academia.

REFERENCES


Copyright © 2023 by Author/s and Licensed by Lectito BV, Netherlands. This is an open access article distributed under the Creative Commons Attribution License which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.