# Gendered power relations and sexual harassment in Antarctic science and remote fieldwork in the age of #MeToo

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# **Abstract**

Antarctica is a remote, historically masculine place. It is also a workplace, and the human interactions there are connected to power structures and gendered expectations. Today, nearly 60% of early career polar researchers are women (Strugnell et al. 2016). However, women in Science, Technology, Engineering, Mathematics, and Medicine (STEMM) are 3.5 times more likely than men to experience sexual harassment during fieldwork (Clancy et al. 2014) making questions of safety, power, and harassment pertinent. Gender equity initiatives coupled with #MeToo have provided new platforms for reporting sexual harassment and challenging problematic research cultures which position science as meritocratic and gender-neutral. Yet, the impact of #MeToo in Antarctic science is uneven. The termination of Prof. David Marchant is widely cited as evidence that #MeToo is positively affecting Antarctic science. We argue it is problematic to focus on individual cases at the expense of the wider culture. We examine the complex historical (e.g. gendered interactions with the Antarctic landscape), cultural (e.g. identity politics), and relational (e.g. gendered power dynamics) tensions underpinning recent #MeToo revelations in Antarctic science with a view to providing more nuanced approaches to structural change.

### Keywords

Antarctica, gender, feminism, fieldwork, sexual harassment

#### Introduction

On 6 October 2017, one day after the publication of the New York Times exposé of Hollywood sexual harassment, the Antarctic science community had its own 'Weinstein moment'. Science published a piece reporting that geoscientist Dr. Jane Willenbring and several other women had accused their former Boston University PhD supervisor, Professor David Marchant, of sexual harassment during Antarctic research fieldtrips in the late 1990s and early 2000s (Wadman 2017). Following an 18-month investigation, in April 2019, Boston University finally terminated Marchant's employment (Wadman 2019). The Marchant case is not unique in that the harassment of women and other marginalised groups in Science, Technology, Engineering, Mathematics, and Medicine (STEMM) is an enduring problem (NASEM 2018).

Here, we use Antarctic science as a case study to argue that it is a mistake to judge the effectiveness of #MeToo in STEMM via individual cases and at the expense of examining

wider organisational cultures and identity politics (Rottenberg 2014). Although #MeToo is forcing institutions globally to reckon with the meaning of sexual harassment in different organisational environments, women who do remote Antarctic fieldwork often do not report harassment (Nash et al. 2019). There is a need to address the wider culture of gendered power relations and harassment to make fieldwork safer for all, and to remove the onus on those who have been harassed to come forward with #MeToo stories that prompt reactive change.

Building on earlier examinations of gendered inequality and harassment in STEMM, we take an interdisciplinary feminist approach to assess the impact of #MeToo in Antarctic science. We examine the complex historical, cultural, and relational tensions that sit beneath #MeToo in Antarctic science, providing a more nuanced approach to structural change.

#### Out in the field

Whether researchers are based on vessels, national stations, or remote Antarctic field camps, fieldwork plays an important role in knowledge creation. Yet, women in STEMM are 3.5 times more likely to experience sexual harassment during fieldwork compared to men (Clancy et al. 2014). Harassment in the field can take many forms; ethnic harassment, gender harassment, sexual harassment, and generalized workplace harassment can make workplaces unsafe (Raver and Nishii 2010). Remote environments can magnify the effects.

Gender harassment is 'a form of hostile environment harassment that appears to be motivated by hostility toward individuals who violate gender ideals rather than by desire for those who meet them' (Berdahl, 2007, 425). Gender harassment shares similarities with 'sexuali(ized) harassment' which 'is largely an expression, exertion, and recreation of (male) power to control the recipient's behaviour' ( $Klo\beta$  2017, 399) – both recognise the importance of patriarchal systems in underpinning behaviours. With a few exceptions (e.g. Strugnell et al. 2016), research in the Antarctic context has rarely focused on gender or sexual harassment. Here, we primarily discuss sexual harassment and its primacy in the #MeToo movement.

Although sexual harassment is underreported, 63% of the women responding to our 2017 survey about their experiences in Antarctica with the Australian national program (Nash et al. 2019) experienced inappropriate or sexual remarks when in the field. Of those, half took no action. The context of small research teams in remote field sites compounds challenges around gender and sexual harassment, making it difficult to report incidences, or to leave the situation. A female scientist interviewed by Hague (2015) recalled, 'I heard the sentence "what happens in the Antarctic stays in the Antarctic" so many times'. This suggests Antarctica is viewed as a place that is removed from home geographically and in terms of ethical standards. Historical, factors, cultural factors, and relational factors all come into play when analysing power relations and harassment in the Antarctic fieldwork context.

## Historical factors: Gendered interactions with landscape in Antarctica

Antarctica has a young human history, throughout which tales of masculine endeavor have predominated. This continues to influence the ways the continent is viewed today, as iconic Antarctic images of heroic explorers like Shackleton and Mawson continue to circulate. Yet, Antarctica itself is often ascribed female pronouns and characteristics.

Casting Antarctica as 'a kind of female body which must be mastered and penetrated by bold, resourceful males' (Manhire 2004, 23) is central to Heroic Era narratives.

Given the historical framing of Antarctica as a remote, feminised landscape, and canvas for masculine feats of endurance, it is unsurprising that women were denied access to the continent because of 'ideological legacies of empire and Victorian notions of manhood' (Seag 2017, 320). Although women travelled to Antarctica as the wives of whalers and expedition leaders during the early twentieth century, the prospect of single women heading south as researchers was viewed with much anxiety. Women's access to Antarctica has been uneven, and dependent upon national policies (e.g. British Antarctic Survey only allowed women to overwinter in the 1990s) (Seag 2017, 331). Figurative renderings of Antarctica as a feminised landscape and the historic absence of women on the ice provide important context for contemporary organisational experiences in Antarctic research and fieldwork (Nash et al. 2019), and for polar science more broadly.

## Cultural factors: Identity politics in polar science

Despite a patriarchal gender order, the lack of diversity in STEMM fields is now widely acknowledged. For instance, although women now make up 45.8% of postgraduates, only 20.6% of senior STEMM leaders are women (SAGE, 2019).

In Antarctic research, women and men of colour and those with other marginalized identities remain underrepresented relative to white heterosexual men (O'Reilly and Salazar 2017) though gender remains the primary lens through which Antarctic science organisations are addressing their institutional cultures. An intersectional approach to gender and sexual harassment in Antarctic science is essential because harassment is seen primarily institutionally through a heterosexual lens and as a practice that occurs between men and women only. Further, existing studies of gender and sexual harassment also tend to focus on the experiences of white women even though women of colour experience the most hostile STEMM workplace environment of any group (Clancy et al. 2017). This highlights the need to understand the ways in which diverse groups experience oppression, and to incorporate a range of under-represented voices to create an inclusive research and fieldwork environment.

## **Relational factors: Gendered power dynamics**

Considering #MeToo, making sexual harassment visible and bringing it into a space where it can be institutionally addressed is difficult due to the hierarchical nature of relationships inside scientific research, higher education institutions, and in the field. For instance, PhD students are reliant on a PhD supervisor to provide feedback, funding, fieldwork opportunities, mentorship, and guidance throughout the candidature. The fear of losing this support is often a motivating factor for students to stay silent in relation to sexual harassment. Dr. Jane Willenbring waited nearly 17 years after her last Antarctic expedition with Prof. Marchant – to report her harassment claim because she was no longer worried he could ruin her career (Scoles 2018).

The power imbalance between supervisors and PhD students is acute for those people working in small scientific sub-fields – which is common in Antarctic science – because scientists cannot easily escape one another. As Ahmed (2017) observes in relation to her own experiences of exposing institutional sexual harassment, making a complaint is

to 'become the location of the problem' which can lead to further harassment. In Antarctic fieldwork, the onus is on the victim to make a complaint and we argue that there is unacknowledged emotional labour associated with having to determine if a complaint is justified (e.g. is being grabbed on the bottom worthy of an investigation?). Gendered power dynamics in Antarctic science and fieldwork manifest in many ways and harassment is only one of many structural obstacles (see Nash et al. 2019), but relational factors must be taken into account.

## **Implications**

We have argued that there is a need to rethink equity and inclusion in the context of polar research, and to address the structural inequalities underpinning STEMM. Our intention has been to spark a conversation about identity and systematic change within Antarctic research, and to reveal the broader context behind what #MeToo has brought forth. We argue for broader recognition that identity and science are intertwined, and not mutually exclusive.

Looking forward, there is a need to recognise intersectionality (Seag et al, 2019), and for greater inclusivity in Antarctic science and research cultures. Rather than asking individuals to say #MeToo, an awareness of the nuances of Antarctic history and relational power dynamics is essential background knowledge for those planning remote field research. Encouraging scientific communities to reflect on their histories is an important step towards making Antarctic field work safer and inclusive. Whereas harassment is often presented neutrally in human resource documents and policies, there is something radical about asking scientists to account for the gendered/sexualised imagination of the Antarctic to frame their experiences. 'Breaking the silence' about fieldwork through specific kinds of conversations is critical in framing the issues. Fieldworkers might be encouraged to be selfreflexive about their position (e.g. race, gender, sexuality) and how social identity contributes to (dis)comfort in certain settings. For instance, the experience of living in close quarters where white heterosexual men predominate and without the possibility of exit is one that comes up regularly in the stories of fieldwork from women and other marginalised groups (Nash et al. 2019). A dialogue about identity and unequal power relations makes it less likely that scientists will individualise and potentially conceal challenges encountered in the field. This approach will enrich the diversity in STEMM and affect the quality of outputs. Intersectionality can transform how we think about harassment in STEMM, but this will also require global institutional commitment to fostering cultural change in Antarctic research communities. At the end of the earth, #MeToo is needed more than ever.

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