

Bodies working in space: Bridging inclusiveness of gender and dis/ability?

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Project Description:

For the first time in the history of humans in space, the European Space Agency (ESA) recently made a call for more women astronauts and for applicants with disabilities to join the astronaut core (UK Space Agency & Office of the Secretary of State for Scotland, 2021). The call for more women astronauts reflects the reality that only two women from the European Union have flown in space (ABC News, 2021). Furthermore, ESA's "special call for candidates with physical disabilities" (UK Space Agency & Office of the Secretary of State for Scotland, 2021, para. 3), or the Parastronaut Feasibility Project (ESA, 2021), is the first time in the global history of space exploration that such a call has been made. This parastronaut project is a ground breaking step towards achieving "space for all humankind" (Andrews & Lim, 2021). Such an initiative is supported by international Human Rights Laws and Right to Equal Access to Space, building on the 1967 Outer Space Treaty, which talks to States' obligation to "respect, protect, and fulfil human rights as it applies across their outer space activities" (Andrews & Lim, 2021, p. 10). These women astronauts and parastronauts are expected to be deployed to and working daily in the International Space Station and potentially on the Moon.

While the call is exciting in and of itself, another important 'giant leap for humankind', these future astronauts will be joining not only a historically male-dominated astronaut core but also an able-bodied dominated astronaut core. The focus of the Parastronaut Feasibility Project, in particular, is centred on finding and defining accommodations of mechanical structures (i.e. changes to space vehicles, access to equipment panels, and the like) above everything else. The many aspects of dis/ability (Warner & Brown, 2011) and of gender (Butler, 1990, 2004) in such a workforce must not be ignored as some cultural and team composition issues research highlights (e.g. Bell et al., 2015; Sandal, 2001). The fact that visible and invisible dis/abilities are under-examined in the broader contexts of work and employment literature (Sang et al., 2016) also drives this PhD research proposal.

The PhD research project, starting February 1st, 2022, proposes to study the ESA's and the UK's effort to include women and individuals with physical dis/abilities to work in space. Notably, with respect to physically dis/abled bodies, ESA's focus is on those individuals with

“lower-limb deficiency or who are considered to be of short stature” (UK Space Agency & Office of the Secretary of State for Scotland, 2021, para. 3). This study proposes to follow the outcomes of the 18-month selection process, starting in May 2021, and the materiality and identity concerns of selecting bodies to work in space. The space industry has been chosen for empirical exploration for this studentship because it represents a significantly under-studied context in organization studies. It is also one with fascinating implications for increasing inclusivity – here around gender and dis/ability. However, applicants are welcome to propose a similar sort of study in a different science, technology, engineering, mathematics (STEM) occupational sector, as long as this sector is also significantly under-explored in our discipline, has equivalent implications around widening inclusivity and is one to which they are confident they would be able to gain research access.

Project Aim:

The aim of this project is to invite students who are interested in adding to our knowledge of and to engage with personnel in the space industry or equivalent STEM occupational sector. Within critical management studies (CMS), knowledge and engagement means to develop awareness in doing anti-oppressive work. This implies a need for incorporating intentionality, reflexivity and an attention to the order that marginalizes the Other (Butler, 1990; Prasad & Prasad, 2002). We can accomplish such CMS studies, in part, by engaging with certain theoretical frameworks and by acknowledging a need to adopt anti-oppressive practices. CMS scholars emphasize the importance of questioning our self-knowledge in order to re-articulate our praxis. As history shows us, we must be prepared to learn and to incite change, to work towards many possible futures that value equality, equity and inclusion in work/jobs/occupations.

Theoretical perspective:

To achieve this CMS goal, we are inviting students interested in studying bodies working in space or an equivalent sector to build on previously published theoretical and empirical work to explore models and concepts that can be developed or that can be layered into said models. This can include theoretical and empirical research focused on how gender, sex and sexual orientation, race, ethnicity, class, dis/ability, and so on, intersect in their lived work experiences, resulting in an order that can marginalize and oppress (Collins & Bilge, 2016; Crenshaw, 1989, 1991). In using such frameworks, the student will be invited to make not only a theoretical contribution but a practical contribution to the inclusion of historically oppressed individuals in significantly understudied contexts.

Proposed methodology:

The preference for the proposed methodology is for qualitative work, but mixed methods will be accepted. This can include ethnographies, autoethnography, interviews, discourse analysis, case-based studies, archival analysis, etc. (see for example: Bryman & Bell, 2011;

Eriksson & Kovalainen, 2016; Mills & Helms Mills, 2018). Access to ESA and UK Space Agency personnel and documents will be initiated by Dr. Ruel and Professor Brewis, depending on the methodology chosen by the student in consultation with the supervisors.

Some possible areas of inquiry could include but are not limited to:

- Collecting stories and narratives, and analysing these collected data to surface impacts on marginalized individuals' identities or to reveal experiences of marginalized individuals throughout the ESA astronaut selection process or the selection process in place for a similar and significantly under-studied context;
- Cross-disciplinary study of various space or similar under-studied organizations (e.g. the UK Space Agency, ESA or private contractors) involved in trying to achieve an inclusive space workforce;
- Application of video/digital technologies to capture daily experiences of marginalized individuals in a significantly under-studied context, through a selection process and thereafter;
- Archival study of historical bodies (e.g. gender, dis/ability, sex and sexual orientation, etc.) attempting to work in space or in a similar and significantly under-studied context; or,
- Discourse analysis of news reports and press releases through an astronaut selection process or similar process elsewhere, and the follow on training period.

About the Supervisors:

Dr Stefanie Ruel, a former Life Sciences Mission Manager in the space industry, investigates and addresses the exclusion of individuals in STEM contexts. Her growing body of research, published in "Feminist Encounters Journal", "Journal of Management History", and "Equity, Diversity and Inclusion: An International Journal", is recognized via a number of awards including the Emerald Literati 2020 Outstanding Paper.

Professor Jo Brewis is interested in gender, identity and the body in organizational contexts as well as academic practices in management and organization studies. A lot of her current work focuses on investigating the menopause as a workplace issue. She has published in a range of journals, most recently on the receipt of peer review as an example of prescriptive emotion management in "Culture and Organization".

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