

M4C Collaborative Doctoral Award (CDA)

PROJECT TITLE				
Unearthly Ecologies: Exploring Environmentalism and Sustainability Beyond Earth Through Literature and Culture				
LEAD INSTITUTION				
Name of HEI institution	Nottingham Trent University			
Lead regional city	Birmingham <input type="checkbox"/>	Coventry <input type="checkbox"/>	Leicester <input type="checkbox"/>	Nottingham <input checked="" type="checkbox"/>
PARTNER ORGANISATION				
Name of organisation	The Science Museum, London			
Website	https://www.sciencemuseum.org.uk/home			
<p>Project This project will explore environmental and ecological issues relating to space exploration and establishing habitats beyond the earth.</p> <p>Ambitions to expand human activity in low-earth orbit, on the Lunar surface, and on Mars have escalated significantly in recent years, with:</p> <ul style="list-style-type: none"> geological sample and return missions to the Lunar surface and Mars intensifying night sky pollution producing new inequalities on Earth future space exploration threatened by a substantial increase in orbiting objects and debris national and commercial space agencies stepping-up plans to establish low earth orbit, lunar, and Mars habitations. <p>These activities raise questions about anthropogenic environmental impact beyond the earth's surface and atmosphere. But they also suggest opportunities to establish new ecosystems and planetary habitats that embrace more ethically responsible ways for humans to coexist with each other and with the places they inhabit. There is now significant critical interest in anthropogenic climate change, but contemporary ecocriticism usually focuses exclusively on the Earth as a site of ecological concern. This project will allow you to develop ecocriticism and the interdisciplinary field of the Environmental Humanities by exploring how the Earth is now experienced as an expanded and expanding ecosphere that extends beyond terrestrial or atmospheric limits. It will draw in scholarship in the new field of space environmentalism which considers, for example, low earth orbit as a new waste zone, sustainable scientific and economic growth in orbit and beyond, and resource extraction and terrestrial appropriation beyond Earth.</p> <p>Questions asked might include:</p> <ul style="list-style-type: none"> How can literature and other cultural forms contribute to increased awareness of the environmental consequences of low-earth orbit and planetary exploration and habitation? In what ways are concerns about anthropogenic environmental change reflected in national and commercial space agencies' mission narratives? How might an environmentally responsible relationship with space environments be imagined and conceptualised? 				

Process

Over the four years of this project, you'll produce a high-quality PhD on the space environment, as well as work with Science Museum resources and on public engagement events hosted by the Museum. In the first year of the project, you'll identify key literary and other cultural texts which address environmental (eg, geological, oceanographic, atmospheric) considerations relating to orbital waste and low-earth orbit, lunar, and Mars exploration and habitat construction. Material for analysis might include, for example, novels by Kim Stanley Robinson (*Mars Trilogy*, 1992-1999); *2312*, 2012), and Martin Maclnness (*In Ascension*, 2023); National Geographic's docufiction *Mars* (2016); and films directed by Blomkamp (*Elysium*, 2013), Cuarón (*Gravity*, 2013), and Scott (*The Martian*, 2015). Throughout the project, you'll also have the opportunity to carry out research on Science Museum archival and object resources held by the Dana Library and National Collections Centre.

Place

Supervisors in English at NTU and Astrophysics at the University of Warwick will provide expert support relating to literary and other cultural engagements with space ecologies, and approaches in Astrophysics to planetary habitability and the future uses of space. At NTU, you'll join an established and rich research culture which includes staff and doctoral students working on literature and ecocriticism. You'll also benefit from the 'Habitability' Global Research Priority at the University of Warwick, which brings together researchers in Life Sciences, English, History, Film Studies, Physics, Politics, and Global Sustainable Development. The Science Museum will provide you with expert supervision and access to archival holdings that will help you to develop this project. You'll be able to carry out primary research in the Museum's Dana Library and National Collections Centre, which include professional and personal papers, observation notes, visual media (including posters and DVDs), broadcast scripts, photographs, pamphlets, and ephemera relating to satellites, space objects, and space stations, lunar cartography, UK, European, US, and Russian space policies and programmes. You'll also be able to contribute to the Museum's Public Programme of activities, such as the Lates programme, which has space as a recurrent theme. You'll also be provided with unparalleled access to the bulk of the Museum's reserve collections and to work with staff to develop resources for public engagement.

Person

We are looking for candidates who are interested in developing new connections between culture and science. You'll bring to this project knowledge of how to identify and analyse key cultural texts, such as novels, poems, films, TV programmes, visual art, and other material that might be essential to the development of the project. You'll work with archival resources in the Dana Library and object holdings in the National Collections Centre. Experience of working in archives and with heritage objects is desirable, and training can be provided if needed.

HOW TO FIND OUT MORE. Please email the lead university supervisor if you want to find out more about this CDA project.

Lead HEI Supervisor:	Prof. Phil Leonard
Lead HEI Supervisor Email:	philip.leonard@ntu.ac.uk