// Editorial

Women's agency in art and science

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Abstract

Women in the field of art and science have an unquestionable presence worldwide that exceeds their visibility in the general visual art scene. When cataloguing women's range of practices and exploring their agency in art and science, a new model of inclusivity and access to the public sphere for all individuals working in art emerges. First, these are contributions reflecting on projects being carried out by women in the broadest interpretation of the term – individuals who identify themselves as women, cisgender, non-cisgender, transgender, gender fluid and independent of their sex and gender. Second, these are contributions that reflect on research methodologies, collaboration strategies, knowledge sharing, as well as public vs. personal, embodiment and materiality.

The call for this Special Issue of Technoetic Arts: A Journal of Speculative Research (TA) dedicated to 'Women in Art and Science' was launched in collaboration with the third FEMeeting: Women in Art, Science and Technology conference, which took place in September 2022 in Evora, Portugal. As a result, five of the eight contributions are by members of this active network, which was created in 2017 by Portuguese artist Marta de Menezes and scholar Dalila Honorato (Robles Mateo 2020: 264).

The objective of FEMeeting is to disseminate projects that are being carried out by women worldwide and, as a result, to contribute (1) to the development of research methodologies in art and science and (2) to the development of cooperation strategies that can increase knowledge sharing and bring communities together (Żyniewicz et al. 2022: 458). Therefore, although much of the work done in the network might aim to increase the visibility of women artists and scientists, the self-proclaimed moving force of FEMeeting is to encourage collaboration and to promote non-hierarchical gathering spaces for individual and collective expression. For this purpose, since the first FEMeeting (Czegledy 2018: 221–23), the conferences are designed as a travelling experience where the speakers integrate an 'on the road tour' in a programme containing a few public presentations in larger urban centres and the main part of the presentations held behind closed doors in smaller locations.

Besides the conferences, FEMeeting objectives include: (1) providing strong personal support through instant internet communication between women doing research work (in the broadest sense of the term) in art, science and technology (2) and encouragement towards the formation of local nodes to support community research and artistic creation. With the COVID-19 pandemic, the project was redefined to include the development of online gatherings. Such was the case of the non-structured weekly online meeting known as 'Teapot Chat' (Yetiskin 2022) and 'Sister Labs', the cartography of lab spaces led by FEMeeting members, both constituting a hybrid model of interaction between local and global, between digital and physical.

The eight contributions in this 'Women in Art and Science' issue of *TA* focus on art and science practice-based research and/or critical theory approaches either from an autoethnographic or from a non-participant observation point of view. The authors, with preferred gender pronouns including She, He and They, come from a variety of disciplinary backgrounds based in Greece, Canada, United Kingdom, Australia, Brazil and the United States. Therefore, this issue of *TA* covers not only a multiplicity of art and science, media and feminist practices but also diverse perspectives on art and science interdisciplinary thematics, such as artificial intelligence (AI), electronic performance, gender and sexuality, scientific imaging, bio-design, discard studies and bioacoustics.

Caterina Antonopoulou (2023) defends that current AI research reveals pervasive algorithmic bias in AI systems due to the under-representation of women in AI design and training datasets, resulting in gender-biased technological products. This bias is notably evident in feminized anthropomorphic AI systems like Personal Intelligent Assistants and chatbots, perpetuating stereotypes and conventional gender norms. Encouraging women's involvement in AI design, demonstrated by female media artists and designers, this article offers crucial feminist and critical approaches to envision inclusive, ethical and unbiased futures for anthropomorphic AIs.

Gabriela Aceves Sepúlveda (2023) describes how, in the past two decades, research-creation has emerged as an interdisciplinary academic field globally, particularly in Canada, driven by a growing interest in critical making, technological innovation and feminist critiques of power dynamics in knowledge production within academia. This article examines interactive projects aimed at highlighting Latin American women's contributions to art, science and technology and their connection to feminist legacies in research-creation. These projects, grounded in re-mediation, re-activation and re-enactment, form a collaborative feminist research-creation method- ology, activating political memory through revisiting the past via repetition, iteration and intergenerational encounters among humans, non-humans, and various media and technologies, thereby challenging dominant knowledge production modes that have obscured Latin American women's contributions.

Hussein Boon (2023) examines the pioneering work of Suzanne Ciani in composition, performance and media, a field that has traditionally been male-dominated. Ciani's groundbreaking 1976 National Endowment for the Arts report outlines her innovative composition and performance techniques using synthesizers, drawing parallels with serialism and emphasizing live improvisation with machines, while also utilizing quadraphonic spatialization. The article mentions her achievements, such as becoming the first woman to score a major Hollywood film in 1981, shedding light on an often-overlooked space where women have historically worked in media and technology, and underscoring her enduring resilience in the face of bias and frequent questioning of her credentials and legitimacy while challenging gender assumptions in her work.

Styliani Anna Klimatsaki and Dalila Honorato (2023) focus on the cinematic portrayal of three female protagonists engaged in incestuous relationships. The article seeks to comprehensively analyze and compare their dynamics, considering factors such as ethnicity, gender, social background and family characteristics. In exploring the representation of incest, one of society's most profound taboos, the article raises critical questions about the role and agency of women in these relationships, addressing whether incest is depicted as a choice for women or primarily a male-driven act. The article also investigates potential disparities between male and female depictions of incestuous desire and actions and how factors like social status, class, ethnicity and gender stereotypes influence the characters involved, shedding light on the motivations driving female participation in such relationships.

Lucie Ketelsen (2023) focuses on her practice examining the role of aesthetics in microscopy, addressing its dual nature of being marginalized yet deployed. The article explores the interplay between the visual and notational aspects in modern microscopy, revealing complex relationships and conflicts in the field. Through the case of bacterial iridescence imaging, it highlights microscopy's role in supporting explanatory claims about biological life while also contributing to the generation of novel phenomena, offering insights into alternative microscopy practices and their resulting images.

Louise Mackenzie and Kaajal Modi (2023) describe their 'BioDwelling' project merging feminist technosciences' ethical concerns with culture, gender and multispecies relationships within the emerging field of biotechnological architecture (bio-architecture). Operating within a multidisciplinary bio-architecture research group, the research establishes a practice-led methodology for exploring the complexities of engineering dwelling spaces for more-than-human entities. The article introduces the Hub for Biotechnology in the Built Environment (HBBE), outlines the Responsible Interactions research theme, presents the 'BioDwelling' methodology, and discusses three arts-led interventions informed by feminist science and cultural theory to provoke ethical considerations when working with living materials to construct spaces for human habitation, concluding with reflections on methods and future directions.

Allie E. S. Wist (2023) supports that the traditional archive provides a linear representation of time, reassuring us of our existence through a reliable past, but the Anthropocene disrupts this linear notion as it involves uncontained material changes and unexpected temporal shifts. In this article, Wist proposes an artistic research practice that resists static representation in favour of material, sensory artefacts known as 'anarchives', which embrace material idiosyncrasies, ephemerality and decay, emphasizing process over objects. By focusing on waste as an analytical category, this approach addresses the breakdown of life in the Anthropocene and offers a means to disrupt materiality and unorder systems.

Lisa Schonberg et al. (2023) bring awareness to insect sounds, which often exist beyond the range of typical human hearing, and this separation is exacerbated by societal narratives of fear and avoidance of insects. Using audio technologies to extend human sensory perception, the authors explore the sensory and communicative world of insects. Through ecological sound art, which aims to raise environmental awareness, they introduce the Built Hidden Soundscapes series, featuring compositions that exclusively comprise sounds beyond human hearing. These compositions provide a temporary expansion of auditory senses, fostering an appreciation for the hidden world of cryptic insect existences and ecosystems, ultimately encouraging listeners to aurally imagine insect sounds in the future.

CONTRIBUTOR DETAILS

Dr Dalila Honorato is a facilitator of safe spaces for hosting the interaction of ideas around liminal issues in the frame of Art&Sci. Her research focus is on embodiment, monstrosity, the uncanny and the acrobatic balance between phobia and paraphilia. She is a collaborator at the Center of Philosophy of Sciences, University of Lisbon and co-founding member of the Interactive Arts Lab at the Ionian University. She is the head of the conference series *Taboo – Transgression – Transcendence in Art & Science* and, with Marta de Menezes, co-developer of the project 'FEMeeting: Women in Art, Science and Technology'.
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