

Fig 1: Women Reclaiming AI Logo, Designed by Intercity (Aga, Manton 2018)

'Women Reclaiming AI' (WRAI) is an expanding piece of design activism, presented as a feminist AI voice assistant, programmed through participatory workshops by a growing community of women. Through creating a platform for collective writing and editing, participants co-create an AI personality that challenges gender roles. The project aims to rewrite and reimagine the 'man-made' cultural myths of artificial intelligence (AI) and robotics by developing a feminist AI voice assistant. Research indicates that only 13.5% of people working in machine learning are female (Wallach, 2016). AI voice assistants like Google Home, Alexa, Siri, Cortana and Bixby all use female names, identities and voices. Studies reveal that both men and women respond more favourably to female speech and want their AI assistant to be 'obedient and assisting' (Corat, 2019). In response, and critiquing the commercial pursuit of humanising AI technologies – challenging the bias and stereotypes embedded within – 'Women Reclaiming AI' explores what it means for gender diversity to be at the forefront in the development of AI systems. The resulting output is an AI voice assistant that reflects female identity, using the words and speech from the community and inspirational women that participants admired.

WRAI reclaims female voices in the development of AI systems by empowering women to harness conversational AI for protest. Critical to this activist approach is educating women about AI - demystifying the processes - engaging them in the tools - and encouraging them to take up roles within the field.

'Women Reclaiming AI' reveals the extent to which, culturally, we do not want voice assistants to say 'no' to us, and the implications of hearing so many female voices in subordinate/service roles. Most existing female AIs are programmed to deflect comments, while others respond with flirtatious comebacks, this project instead sought creative responses by women exploring gender identity in the future of AI, establishing a data set through which progressive feminist machine learning research can be developed. Through this project we are developing an original, community owned dataset reflecting a collective intelligence on what it means to be a woman. This feminist dataset is critical to reimaging our future relationships with conversational AI and asks critical questions about the limitations of men writing female-gendered AI personalities.

Methodologically, the project employs collaborative workshops with self-identifying women, which was designed to initiate thinking about the possibilities for female-led technology workspaces. In terms of technology, the project (mis)uses Google's DialogFlow API as a shared platform for writing and editing the AI voice assistant. Those who took part signed a community agreement and received a developer log-in to enable future collaboration.



Fig 2: Women Reclaiming AI Workshop, The Barbican *AI:More than Human,* (Aga, Manton 2019)

## **Evaluation:**

Women Reclaiming Ai (WRAI) has delivered beyond expectations, both in terms of outputs and engagement. It has claimed a space and made opportunities for women (trans, nonbinary, gender queer, and cis), who are largely left of technology development, to reclaim female identity, challenge under representation and stereotyping in AI development and apply these technologies for artistic practice and protest. By securing partnerships with Mozfest (Mozilla Foundation),i-DAT, Near Now, BOM, KWMC, KARST, Feminist Library, The British Library, Kaleider, The Cell, The Eden Project, The Barbican, Leeds International Festival, Random String and ARS Electronica, the first phase of the project increased the number of workshops we planned from an expected 5 to an actual 17 - increasing the projected number of participants from 50 to 95, and exhibition days from 30 to 52 days (live) and 6 months (online). WRAI was exhibited for 45 days at BOM, and at KWMC for 2 days, to align with the workshops there. It also exhibited 3 days at ARS Electronica. Through these partnerships we also extended the engagement of audiences from an expected 1000 (live) to 7750 and from 2000 (broadcast, online, in writing) to an estimated 15,000.

Through this art and activism project WRAI has created a community of over 100 women (+) who have been given the confidence and tools to better understand conversational AI and its potential as a medium for artistic practice and protest. The community is collectively credited as co-authors of the WRAI installation each time it is exhibited and continues to advocate and grow the community and continue to have access to co-author the WRAI conversational AI art work. This co-authored art work has also invited its audiences to talk to the feminist AI voice assistant (online or in the exhibition) which is neither subservient, serving or submissive, and encouraged them to think and discuss their desired relationships with future AI tech.

Through this project, the artist and activist duo Birgitte Aga and Coral Manton, have established a collaborative community of women (+), grown the corpus of female speech, increasing participation with a diverse range of female communities. WRAI has developed into a collaborative online and offline installation which has been exhibited in the UK and internationally, and opened up extensive arts and cultural networks and opportunities.

WRAI has successfully contributed to our core objective to support more women to take part in developing AI for artistic, cultural and commercial developments. In doing so it has enabled us to further develop our artistic ambition to increase the range of authentic, high quality, creative technology and arts opportunities for self-identifying women (both those who are already established artists, but also those who have never had the opportunity to play with these technologies). It has also demonstrated the demand for this type of artistic practice which apply emergent technologies but through an inclusive, community engaged, mass participation and high quality arts project. We have an extensive list of organisations that would like to partner and locations that would like us to run a WRAI workshop and exhibit the WRAI installation for 2020 (in the UK and Europe).

The project has been vital for the development of an artistic practise as female artists working with AI and technology, and enabled Birgitte and Coral to carve a space for themselves and other women (+) who are largely missing from AI development and from artists working with AI. This activity has enabled the community to collectively 'claim' and apply these technologies for collaborative innovation in art form, engagement and social impact, and through doing so generate an inclusive network of women (+). As well as being invited to exhibit at ARS Electronica in Linz, Austria, WRAI has also been presented to the annual ITU Telecom UN Technology United Nations specialised agency conference in Budapest, been included in the Barbican (London) programme AI more than Human at Mozilla's cultural festival, Mozfest in London.