

NOT-EQUAL

EPSRC NetworkPlus: Social Justice through the Digital Economy Project Final Review Form

Please submit this form within one month of completing your project to notequal@ncl.ac.uk.

GENERAL INFORMATION

Lead Applicant (PI): Sara Heitlinger
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Job Title: Lecturer in Computer Science
Department: Computer Science
Organisation: City, University of London

Co-Investigators (names and organisations):
Alex Taylor, City University of London
Lara Houston (now Sussex University)
Supporting Partner(s):
Spitalfields City Farm
Furtherfield
Gaia Foundation
Project Title: Co-designing a sustainable food justice system with blockchain futures
Project Reference Number: NE20

1. SUMMARY

Please outline the research challenge and question your project aimed to address, in less than 100 words.

This project explores how new algorithmic technologies could be used to create a fairer and more sustainable food system.

How can food be locally produced and managed more equitably and sustainably for collective benefit? Our project explores this question by working with small-scale urban community growers, including city farms.

To grow food successfully, humans require the help of other organisms – for example bees, or soil micro-



organisms. How can we use new technologies to recognise and value their contributions, to help avoid problems like soil degradation and bee extinction that threaten life on earth?

2. APPROACH

Please provide a summary of the approach of your research project, including any deviations from your work plan, the reasons for this and how you addressed any issues.

This project explored an algorithmic approach to creating a sustainable food justice system through co-designing blockchain futures with urban agricultural communities in London.

We used a speculative participatory design (SPD) approach to explore futures that are grounded in the values, needs and challenges of real communities. We drew on the expertise of Furtherfield, a London-based arts organisation, who have developed an award-winning programme of engaging non-technical participants in blockchain futures. The approach is interdisciplinary, drawing on methods from art and design, STS, and computer science, in order to ensure that the project generates futures that have been examined both practically and critically. The activities included a multispecies Live Action Role Play (LARP), and paper prototyping of new blockchain-based systems.

The project was curtailed when the pandemic hit. We did not conclude the project with a final event as a result.

One unplanned output is a series of videos that capture the methods and outputs of the workshops.

3. ACTIVITIES & OUTPUTS

Please list any outputs from your project to be entered in the Not-Equal Researchfish submission. These include events, publications, workshops, webinars, invited talks, media coverage and tools (please include links to open source, git-hubs if relevant) that have resulted from your project.

Please include the following for each entry:

Title: Mapping the Future Farm

Date: 30/9/2019

Type of Event: Workshop

Number of People Reached: 30



Primary Audience: Academics, food growers, technicians, activists, artists, community organisers, entrepreneurs

Key Outcomes/Impact: Brought diverse people together to map the stakeholders of the city farm now and in the future

URL: <http://algorithmicfoodjustice.net/first-workshop-mapping-the-future-farm>

Title: Now London is a City Farm

Date: 28/10/2019

Type of Event: Workshop

Number of People Reached: 30

Primary Audience: Academics, food growers, technicians, activists, artists, community organisers, entrepreneurs

Key Outcomes/Impact: Brought diverse people together to roleplay 2 assembly meetings from human and non-human perspectives, to imagine all of London as a city farm and reconfigure values in the food system.

URL: <http://algorithmicfoodjustice.net/second-workshop-now-london-is-a-city-farm>

Title: Prototyping the Food commons

Date: 9/12/2019

Type of Event: Workshop

Number of People Reached: 30

Primary Audience: Academics, food growers, technicians, activists, artists, community organisers, entrepreneurs

Key Outcomes/Impact: Brought diverse people together to design new prototypes for blockchain-based systems for a more-than-human food commons of the future, and to critically investigate these.

URL: <http://algorithmicfoodjustice.net/final-workshop-prototyping-the-food-commons>

Title: Algorithmic Food Justice: Co-designing More-than-human blockchain futures for the food commons

Date: May 2021

Type of Event: Conference proceedings publication

Number of People Reached:

Primary Audience:

Key Outcomes/Impact: publication in CHI conference proceedings, and presentation at online conference

URL: <https://dl.acm.org/doi/abs/10.1145/3411764.3445655>

Title: Ecological Reparation: Blockchain Food Imaginaries



<https://not-equal.tech/>
[@notequaltech](https://twitter.com/notequaltech)

Date: 27 October 2021

Type of Event: Video

Number of People Reached: 119

Primary Audience: Academics

Key Outcomes/Impact: part of a series of videos around ecological reparation, in conversation with Maria Puig de la Bellacasa & Dimitris Papadopoulos

URL: <https://www.youtube.com/watch?v=1VPaU1SWjq8>

Title: “Algorithmic Food Justice”, in Ecological Reparation, edited by Maddalena Tacchetti, Dimitris Papadopoulos and Maria Puig de la Bellacasa. Bristol University Press

Date: Forthcoming (2021)

Type of Event: Book chapter

Number of People Reached:

Primary Audience: Academics

Key Outcomes/Impact:

URL:

Title: Nature 3.0, in Radical Friends The Chronicles of Decentralised Autonomous Organisations in the Arts Book Outline, edited by Penny Rafferty and Ruth Catlow. Goldsmiths University Press.

Date: Forthcoming (2022)

Type of Event: Book Chapter

Number of People Reached: 119

Primary Audience: Academics

Key Outcomes/Impact:

Title: Algorithmic Food Justice

Date: Forthcoming (2022)

Type of Event: Video

Number of People Reached:

Primary Audience: General public

Key Outcomes/Impact: A series of animated video vignettes that capture the workshop activities and outputs

Title: Co-designing multispecies urban commons on the blockchain

Date: 2021

Type of Event: Presentation



<https://not-equal.tech/>
[@notequaltech](https://twitter.com/notequaltech)

Number of People Reached: 10

Primary Audience: Academic and practitioner

Key Outcomes/Impact: presented a talk about the project at the workshop on The City as a License: Design, Rights and Civics in a Blockchain Society, at the Media Architecture Biennial. Has led to invitation to contribute to a special issue of journal Big Data and Society

Title: More-than-Human Computer Interaction for Urban Food Governance

Date: Forthcoming

Type of Event: Book chapter in, Handbook of Urban Food Governance. Routledge.

Number of People Reached:

Primary Audience: Academic and practitioner

Key Outcomes/Impact:

Title: Towards Governance for Open Urban Food Futures

Date: Forthcoming

Type of Event: Book chapter in, Handbook of Urban Food Governance. Routledge.

Number of People Reached:

Primary Audience: Academic and practitioner

Key Outcomes/Impact:

Title: Algorithmic Food Justice

Date: 22/8/2020

Type of Event: Presentation at 4S conference

Number of People Reached: 15

Primary Audience: Academic

Key Outcomes/Impact:

Title: Farm Lab: Ten years of participatory design research with Spitalfields City Farm

Date: Forthcoming

Type of Event: Publication in Interactions magazine

Number of People Reached:

Primary Audience: Academic and industry

Key Outcomes/Impact:

Title: Algorithmic Food Justice



Date: In preparation

Type of Event: Invited submission to special issue on City as License, for Big Data and Society

Number of People Reached:

Primary Audience: Academic

Key Outcomes/Impact:

4. INSIGHTS & IMPACT

Please describe the findings of your project and their significance in relation to potential or actual social impact.

The methods and approach developed in the project have been adopted and reused in the work of Furtherfield, as part of their programming and through their work on the EU-funded Creatures project. In this work they continue to engage with diverse citizens in issues of equality, participation, and ecology.

The perspectives around more-than-human governance in cities, creative speculation and role play have been developed in further funded projects, including the project More-than-Human Data Interactions in the Smart City, which Sara and Alex are investigators on (funded through an EPSRC HDI network plus grant). So the project has informed further community work and engagement in workshops held in 2021.

5. REFLECTIONS & FUTURE DIRECTIONS

Please list the key highlights from your project, summarize any lessons learned from this work and outline any future directions or plans to continue activities beyond this project.

The project was very inspiring for the people involved, both the team, partners, and participants. We continue to draw on the ideas around multispecies .

Future activities include finishing the paper for Big Data and Society. Sara is also co-editing a book on More-than-human smart cities, which draws on insights from this project.



Further Information

If you have any further questions regarding this form, please contact notequal@ncl.ac.uk



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