Project title: Towards co-creation of the urban built environment: using Participatory GIS to give an equal voice to women and other under-represented groups

Research Theme: Design

Key words: co-creation, design, social value, built environment, gender Participatory GIS

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Project Highlights:
- Towards community co-creation of social and sustainable values in the design of the urban built environment
- Investigating the use of Participatory Geographical Information Systems (PGIS) techniques
- Focus particularly on including the voices of women and other under-represented groups
- Evaluating the system across the developed and developing world, including formal planned urban environments and informal settlements.

Overview:
This research brings together the co-creation principles of effective inclusion of social values and sustainability, with recent advances in the use of PGIS in urban planning. It is particularly concerned with finding a way of empowering women to articulate their perceptions of value, risk and sustainability, and thus to influence the decisions which affect their habitat.

There is limited or non-existent meaningful participation of communities in Western-centric formal urban planning and design processes, which allow (professional) knowledge to have power over (lay) lived experiences. Meanwhile informal settlements have little or no formal planning or design process and are often entirely built by communities.

Post-colonial thought argues that the first top-down pattern is not only failing to provide the places people want to live in, but that the second bottom-up approach is now spreading from the developing to the developed world.

Both, however, affect women disproportionately. Women are most likely to be the primary care-givers for children and the elderly, to be responsible for daily provision of food and water, and are often at greater real and perceived risk to their personal safety. These factors have a direct relationship with the urban environment. Within the formal planning systems women are unrepresented within the decision-makers, making up only a small fraction of professionals, and even smaller of workers, and clustered at the lower levels within all occupations.

The rapid urban expansion and often informal settlements of the developing countries is accompanied by other causes of gender inequality, often exacerbated by other intersectionalities such as race, religion, social status, education and wealth.

Over twenty years since the Beijing declaration, women are still more likely to be in poverty and excluded from power than men in both the developing and developed world (UN 2015).

‘Co-creation’ was originally conceived as an economic strategy to strengthen markets in private goods, with a corresponding rhetoric in ‘creating value’. Increasingly the term is now also used to describe the participation of communities in the user-centred design of public goods, and the creation of social value.

PGIS is a method which has been used increasingly in the understanding and mitigation of risk from natural disasters. Peters-Guarin (2012, p3) argue that ‘Participatory mapping and PGIS elicit, represent and validate local spatial knowledge … [it] concerns local priorities, values and perceptions; the process itself is driven by local interests and priorities; it is socially inclusive, representative of the interests and values of communities as well as of individuals.’

This research incorporates Sustainable Development Goals 1: No poverty, 5: Gender equality, and 11: Sustainable cities and communities.
Methodology
This project will use action research to investigate the use of PGIS in the design of urban environments in both developed and developing world, including both formal and informal settlements.

Partners and collaboration:
Women’s Engineering Society
Arup Education Trust in South Africa
Cambridge Centre for Global Equality

Further reading:

Further details:
Students should have a strong background in any of community engagement, urban design, and the construction sector, and enthusiasm for social and gender equality. Experience of PGIS is desirable but not essential. The student will cross between well-established teams researching sustainable design in the built environment, gender and international development at the Open University.

Please contact Dr Alice Moncaster: alice.moncaster@open.ac.uk for further information.

Applications should include:
- A 1000 word cover letter outlining why the project is of interest to you and how your skills match those required
- an academic CV containing contact details of three academic references
- an Open University application form, downloadable from: http://www.open.ac.uk/students/research/sites/www.open.ac.uk.students.research/files/documents/Application%20form.docx
- SETS test scores where English is an additional language (Secure English Language Test)

Applications should be sent to STEM-EI-Research@open.ac.uk by 19 February 2018