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Editorial

In the previous GST editorial, we drew attention to the debate that was gaining momentum in the UK around the issue of open access publishing, including the so-called 'academic spring' stimulated by the actions of the Wellcome Trust which stipulated that the results of all research funded by their grants should be made publicly available. For independent open access journals like GST, which currently have no financial support at all, producing a quality journal means a great deal of unpaid effort by those of us on the editorial team doing every job from copy editing to publicity.

So we have been keenly following the debates of the UK Working Group on Expanding Access to Published Research Findings which in June produced a report and recommendations. The Report 'Accessibility, sustainability, excellence: how to expand access to research publications' is also known as the Finch Report. The model they promote is that known as the 'author pays' model, sometimes called the 'gold' model. The argument for this model is that governments, universities and research councils have provided funding for the research that underpins academic publishing. The logic is that this research has effectively been publically funded and its results should therefore be publically available free of charge. However, commercial publishers need to pay their staff and fund the technical systems that underpin their publications. They can only continue to do this if someone pays. If readers should get free access then it follows that authors must pay. There are debates about alternative models [for example 'green' – which allows the author to publish on an institutional website at the same time as a subscription version is commercially published]. The 'gold' model is one that is already in use for many science publications and it was not a surprise that this was the business model adopted.

The GST Editorial Board have debated the 'author pays' model for some time but are reluctant to adopt this. We know that many of our authors are not writing up funded research projects and therefore have no easy access to institutional funds to pay for publication. And we would like to publish more from the global South, where money is even harder to come by. The Finch report suggests that a) university departments should fund their staff to publish, and b) for some years there will need to be 'hybrid' journals with some papers open access because authors have

paid and other papers only accessible for a fee, because authors have not. Some commercial journals already offer this option to their authors when papers are accepted. Finch recommends that UK universities adopt policies which support their staff to publish ONLY in open access and hybrid journals. The cost of doing this has been estimated at an additional £60 million for UK universities and research funding bodies. The Finch report is only a commitment for UK institutions, but it is a very expensive one if no other countries follow suit.

At first sight it looks as if the Finch Report has little to say to a journal such as GST. It offers no new business model that will solve our funding problem and we are still resisting adopting an author pays system. But perhaps there are side effects for us that could be beneficial.

- If UK academics can expect to draw on funds to publish their paper, then perhaps we can ask UK authors publishing in GST to pay. However this sounds pretty inequitable with respect to global treatment of authors, and would mean that UK authors would be subsidizing authors from elsewhere.

- As more journals adopt the 'gold' author pays model, it may be that more authors who cannot access funds to pay for publication will choose to publish with us and this would be a very welcome side effect!

- If universities advise their staff to publish only in open access or hybrid models then journals like GST could become preferred publication outlets.

So far we have been focusing only on the possible impacts on GST. The impact on those of us who publish in the field of gender is likely to be less welcome. Many of us would find it hard to get access to funds to pay to have our papers published. If there are scarce resources in an institution our experience tells us that the challenging interdisciplinary field of gender scholarship and research does not usually get first call on those funds. They go first to traditional high status areas.

The field of academic publishing is certainly in a state of radical change at the moment. Journals like GST have been partly responsible for provoking this change. But it is not clear yet how much we will benefit from it. We would welcome comments/letters/email from our readers and our authors about your experience of such debates or the possible impact of such policies in your own institutions and your areas of the world.

We now turn from looking at the wider research publication environment to the content of this issue of the journal. In this issue of GST we start with an exploration of why women are more likely to leave the engineering workforce than men. The paper 'Gender and Career Outcomes of U.S. Engineers' by Lisa Frehill is based on US national workforce data but the findings are of relevance in other contexts and provide an important addition to the global literature on gender and engineering. It considers both work life balance and career progression, especially the move from technical into managerial work.

Frehill concludes that while U.S. engineering women are more likely than men to indicate that family-related reasons were part of the reason for leaving the sector, this reason was less important than were “changes in career or professional interests” and that men are more likely to leave engineering for “pay, promotion opportunities.”

In ‘”You must be *very* intelligent?”: Gender and Science Subject Uptake’, Louise Ryan explores the reasons that fewer girls than boys choose to study physics, looking at how ‘common-sense’ ideas about subject choice are gendered and are based on notions of ‘natural’ interest and ‘natural’ abilities of boys and girls. Using ethnomethodology and Bourdieu’s framework for the analysis of modes of knowledge production, the paper argues that ‘common-sense’ reasoning produces and reproduces gendered understandings about ‘appropriate’ and ‘natural’ male and female interests and abilities

While Ryan’s paper extends the debate on girls and STEM, Eugene Judson and Pamela Hodges Kulinna provide an interesting comparison between STEM education and another area where girls are often under represented, namely physical and sports education. In their paper ‘Recruiting and Retaining Girls and Women to Pursue STEM Careers and Play Sports: Comparing Challenges and Lessons Learned’ the authors examine the similar reasons for non participation in both subject areas in terms of exposure and image, instruction/coaching, and socio-cultural factors.

Two papers from Finland look at gender and ICT issues. Inaro Aaltojärvi in ‘"That Mystic Device Only Women Can Use" - Ascribing Gender to Domestic Technologies’ explores what kind of gendered identities people ascribe to domestic technologies and how these gender divisions are constituted. This is explored through the theoretical concepts of technology, gender, script, and material culture, based on online survey data from 405 respondents. The author shows how gendered meanings are constructed with three types of thematic discourses: expertise, appearance and sound, and routine activities and concludes this should be understood in a wider context of other technologies and surrounding culture.

From their perspective as female cultural anthropologists, Tiina Suopajärvi, Johanna Ylipulli, and Taina Kinnunen focus on user involvement throughout the innovation process in their paper ‘“Realities behind ICT Dreams” Designing a Ubiquitous City in a Living Lab Environment’. Using a feminist technology studies lens, they analyse how the sociomaterial practices of ICT design are articulated by designers, and discuss how power relations are negotiated, and how users of new technology are constructed in the design process.

Our two book reviews continue the focus on issues of gender and ICT. Waltraud Ernst reviews 'Technologies of Inclusion. Gender in the Information Society' edited by Knut Sørensen, Wendy Faulkner and Els Rommes which provides case studies of a number of inclusion initiatives identified in the 'Strategies of Inclusion: Gender in the Information Society' (SIGIS) project . This involved 23 researchers across Ireland, Italy, the Netherlands, Norway and the UK between 2003 and 2005 and

resulted in 48 studies of inclusion strategies. This book, suggests Ernst, “offers systematic advice on how to contribute to change through multifaceted efforts of theories of gender and technologies of inclusion.”

Finally, Juliet Webster in her review of ‘Age, Gender and Work: Small Information Technology Firms in the New Economy’ edited by Julie Ann McMullin, highlights the importance of considering age as well as gender in order to understand inequality in IT employment and commends the book for its use of case studies. As Webster concludes, “All that remains now, having extensively analysed this state of affairs, is to change it”. All of us at GST would certainly endorse that advice!

Clem Herman, on behalf of the editorial executive: Helen Donelan, Barbara Hodgson, Gill Kirkup, Elizabeth Whitelegg