

# Post-automation? Exploring Democratic Alternatives to Industry 4.0

An international research Symposium  
Call for papers

When: 11-13 September 2019

Where: Science Policy Research Unit (SPRU), University of Sussex, Brighton, UK

Organisers: Adrian Smith (SPRU) and Mariano Fressoli (Fundación Cénit)

## **This Symposium will explore the idea and practice of post-automation for sustainability**

We are delighted to invite proposals for papers for the International Research Symposium on Post-Automation? Towards Democratic Alternatives to Industry 4.0, taking place at the Science Policy Research Unit, University of Sussex, 11-13 September 2019. The Symposium will explore the idea of post-automation, critically and constructively. Theoretically-informed and empirically-grounded papers are invited that address what a “post-automation” vantage point might bring to ongoing debates about how societies produce and consume, in light of social concern for sustainable developments, dignified work and social justice, and a business-led push for Industry 4.0 and circular economy.

Clues and hints about post-automation emerge in diverse places: hackerspaces, makerspaces and fablabs; citizen monitoring platforms and open science projects; open hardware platforms and grassroots innovation initiatives; new crafting practices; repair, repurposing and upcycling workshops; libraries and educational institutes opening technology to popular experimentation; citizen laboratories and DIY urbanism; workplace struggles for human-centred, democratic technology. Many of these places work through networks that cut across conventional categories; appearing simultaneously to constitute a movement and infrastructure for social relations with technology radically different to the depopulated visions of cyber-physical systems in Industry 4.0.

## **Looking beyond and beneath automating technologies**

Post-automation is a concept in the making. The idea is sparked by the observation that, globally, groups of people are appropriating and hacking digital technologies for design, prototyping, and manufacture that were implicated initially in successive waves of automation: code, sensors, actuators, computer numerically controlled machine tools, design software, microelectronics, internet platforms, 3D scanners/printers, video, etc. Yet, in place of logics typical in automation, such as enhanced labour productivity, managerial control, economic growth, people are subverting these technologies for other purposes - human creativity, dignified work, and sustainable production and consumption - and situating these activities in non-industrial and new-industrial spaces. The Symposium will interrogate these technological turnarounds: from their human-displacing and human-disciplining origins, through to the creative experiments and prototypes today. In short, exploring post-automation possibilities.

## The Symposium

The Symposium will run from 11th September to 13th September at the Science Policy Research Unit at the University of Sussex in Brighton, UK. No more than twelve papers will be selected in order to maximise discussion and interaction.

Selected participants will be required to produce a 4,000-5,000 word paper in advance of the Symposium (by 20 July 2019) and present it for discussion there. At the Symposium we will read and discuss all the papers, and there will be group activities that map and explore emerging themes. Collectively we will:

- analyse subversions of society-technology relations characteristic of post-automation;
- discuss how the idea of post-automation might contribute to future work, sustainable development, and technology politics; and
- map out critical issues in post-automation and develop an agenda for future research and action.
- develop new visions on how post-automation can foster more sustainable and democratic modes of production

Once papers are accepted, the organisers will negotiate **a special issue on post-automation** with a leading scientific journal. Participants will contribute revised versions of their paper to the issue, drawing upon insights arising in the Symposium. **Revised papers will be submitted to the journal.**

### Fees

The Symposium has no fees. Lunch, coffee breaks and the social dinner will be covered by the host organization. The organisers are able to cover the travel and accommodation costs for one author per paper only.

### Why a post-automation agenda and why this Symposium?

How are radical redistributions in prototyping capabilities, socially and geographically, enabling (or deluding) people to design collectively, to produce knowledge openly, to manufacture carefully and to consume differently? How might the myriad artefacts, practices, ideas and communities being assembled, simultaneously anticipate and bring forth something deeper: new ways of working, new forms of social relation across production and consumption, and an openness to more diverse ideas, assumptions and social values in technology development? How are deeper social, cultural, economic and geographical transformations reinforcing or inhibiting the wider circulation of these capabilities and possibilities? How does conceiving these initiatives and issues as “post-automation” alter the politics of technology? How might post-automation work to test and even shift current assumptions about economy and society, and what kinds of political economy emerge in these spaces and through the experiments?

There are a variety of reasons for proposing post-automation and exploring it. “Post” because Industry 4.0 research, policy and practice are challenged by growing social pressures for sustainable development and related to contradictions in automated value creation. “Post”

because people are appropriating hitherto automating technologies into non-industrial and new-industrial spaces beyond conventional manufacturing circuits and logics. “Post” because groups are seeking creative human capabilities and sustainable livelihoods across diverse yet interconnected places, and thereby creating new ‘sociotechnical configurations’ based in assumptions and values that contrast with, and move beyond, conventional labour productivity and economic growth models. “Post” because appropriations today recall and resignify forgotten technological genealogies going back to earlier waves of struggle over automation in manufacturing, and whose subversions today echo criteria proposed by workers and others in the past. “Post” because new social theory is required that engages critically and constructively with these developments, their future possibilities and their limits.

Of course, one of the drawbacks with post-positions is what lies beyond and beneath. Whether we mean post- in a conceptual, non-foundational way, or post- in a temporal, sequential way, it is unclear precisely what emerges from such displacements. Designing globally, manufacturing locally? Commons-based peer-production? Technologies for degrowth? Or is post-automation helping to forge an economy of abundance and post-scarcity, but in what, and for whom? How can post-automation help to launch new models of sustainable production and consumption? Or perhaps post-automation simply serves the exploitative insertion of design entrepreneurialism and open innovation into the automated circuits of business-as-usual? Hip makerspaces or open science projects furnish novel (pre-automation) prototypes for Industry 4.0 automation produced at scale? What might post-automation really mean for work, labour processes, material culture, sustainability, technology politics and governance? Might post-automation open-up useful plurality in thinking and practice, or simply exacerbate confusion over the real issues? How might post-automation challenge universalising visions like Industry 4.0, and offer more variegated possibilities attuned to different places?

### **The Symposium**

This call is an invitation for diversity and plurality. Applicants from PhD students to senior Professors are welcome from science and technology studies, sociology of work, social anthropology, engineering, innovation studies, design, geography, sustainability studies, and other relevant areas. The key is to provide an explanation of how your proposed paper can contribute to an open, engaged and collaborative exploration of the idea of post-automation, and to see what work can and cannot be made of that idea. You can propose questions (and answers) that you think should be central to a post-automation research agenda. They can be critical and constructive. They might include, for example:

- How can post-automation alter perspectives, understandings and practices in technology-society relations?
- What methods can bring insight, facilitate dialogue, and assist developments in post-automation across the scales of projects, workshops, sectors and societies?
- How is post-automation manifesting in different places and circulating between places, for example across the global North and global South?

- How might social theory in post-automation reframe public debate and move policy beyond reactions to automation, and into proactive alternatives for sustainable technology-society relations?
- How post-automation might help to re-imagine an economy based on commons goods?

### **How to apply**

Please send a 500-word maximum paper abstract and 100-word bio for each author (including contact details and affiliation) as a single document. In both sections, please explain how you relate and contribute to the idea of post-automation. **Please email your abstracts as a Word file to [bsre@sussex.ac.uk](mailto:bsre@sussex.ac.uk)** stating the Symposium title in the subject area of the email. The **deadline for abstracts and bios is 20 March 2019**.

### **Timeline**

- January: Symposium announced and proposals called for
- 20 March: deadline for abstracts and review
- 15 April: people notified if their abstract has been accepted
- 20 July: papers submitted
- 11-13 September: Symposium
- December: revised papers submitted to journal for peer review

Many thanks. We look forward to hearing from you.

Adrian Smith  
SPRU

Mariano Fressoli  
Fundación Cenit