



# CoP Facilitator Training Series

## Participatory Modeling

### Gender Inequalities in Research Organisations

Delivered by: **Dr Inge Bleijenbergh**

Participatory Modeling or Group Model Building involves all stakeholders coming together to (1) understand gender/intersectional inequalities in their institutions and (2) identify levers for change in a collaborative way. The co-created causal loop diagrams reveal the dynamic structure underlying inequality and discrimination and show the feedback processes at play. This helps to visualise how potential changes and interventions in the system can be implemented. Causal loop diagram software packages are available to download from various sources with free options (e.g. Vensim PLE for educational use).

#### Aims

To integrate diffused knowledge, evaluate existing policies, spot problems, and work together to solve them. It consists of three phases: (1) producing different ideas and interpretations; (2) clustering ideas and interpretations in a dynamic structure; (3) evaluating different solutions to address the problems.

#### Procedure

- Groups of 8-12 participants seated in semi-circle representing various perspectives (various stakeholders); can also be done in online / hybrid format
- Facilitator and experienced modeler required to run the workshop
- 2 x 4 hours or 3 x 3 hours sessions
- Active contribution of participants is required both during sessions and in between for feedback on the outputs

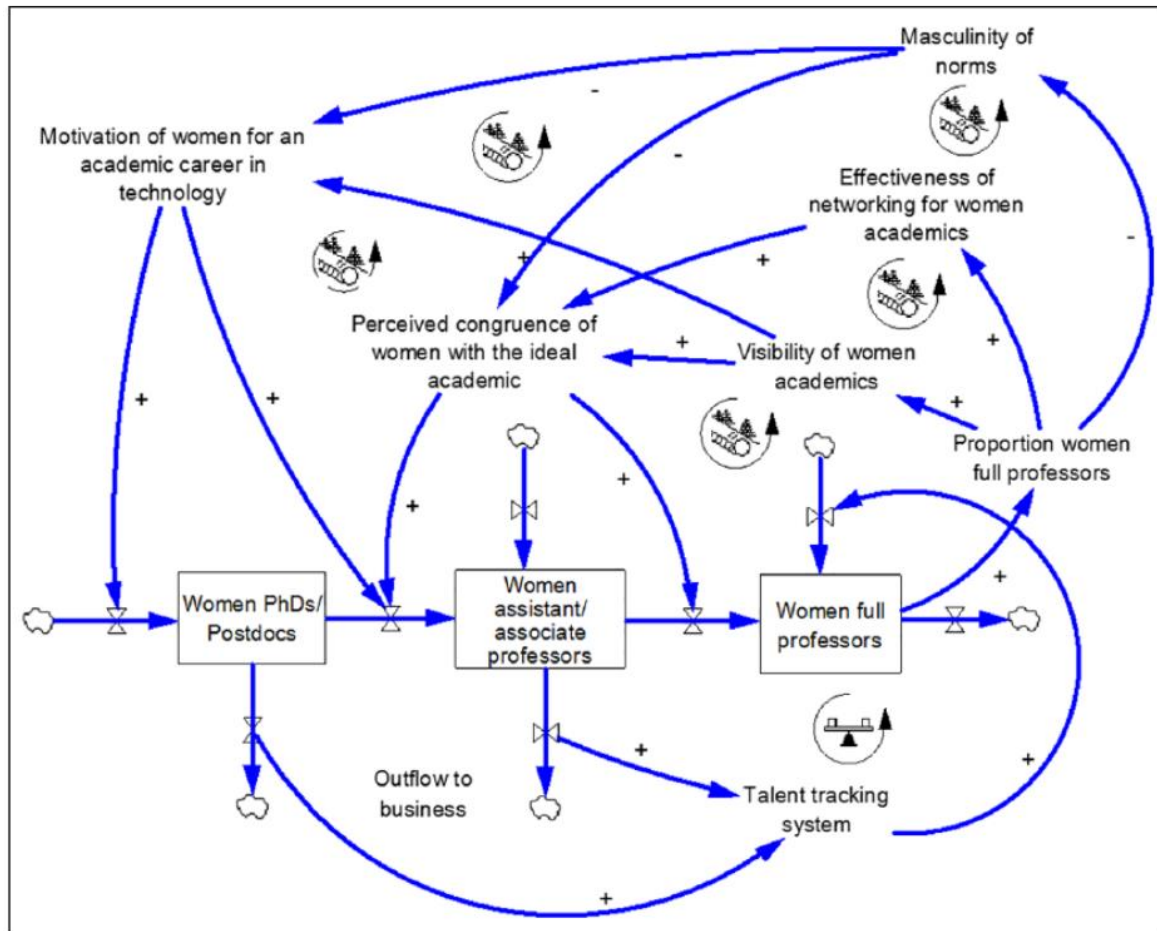
#### Outputs

To design gender equality interventions that produce change we need basic knowledge of system dynamics so we can understand the behaviour of complex systems over time. Causal loop diagrams are produced (see figure) to show the structure of the system, its elements or variables and many relationships between them.



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*Stocks, flows, and feedback loops* are used to illustrate the context and possible problems. For example, in an academic career system, *stocks* represent the relative representation of people at different levels, *flows* represent the relative promotion rates from one level in the hierarchy to the next, and *feedback loops* represent self-reinforcing positive or negative feedback processes in the diagram. By ‘seeing’ the system it is easier to identify and design effective long-term change interventions.



Source: Bleijenbergh & van Engen (2015), reprinted with permission in Vinckenburg (2017)

## Further Reading

- Bleijenbergh, I. & van Engen, M. (2015). <https://doi.org/10.1108/EDI-06-2013-0045>
- Hovmand, P. S., et al. (2012). <https://doi.org/10.1002/sres.2105>
- Lansu, M., Bleijenbergh, I. & Benschop, Y. (2019). <https://doi.org/10.1111/gwao.12384>
- Lansu, M., Bleijenbergh, I. & Benschop, Y. (2020). <https://doi.org/10.1016/j.scaman.2020.101110>
- Vinckenburg, C., J. (2017). <https://doi.org/10.1177%2F0021886317703292>



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