Undoing gender in academia: Personal reflections on equal opportunity schemes

Susanne Täuber

Susanne Täuber, Department of Human Resource Management & Organizational Behavior, University of Groningen, The Netherlands.

Correspondence concerning this article should be addressed to: Susanne Täuber, University of Groningen, Department of Human Resource Management & Organizational Behavior, Nettelbosje 2, 9712 TS Groningen, The Netherlands. Tel: +31 (0)50 363 63 41; Fax: +31 (0)50 363 45 81; Email: s.taubers@rug.nl.

Undoing gender in academia: Personal reflections on equal opportunity schemes

I have always considered myself privileged to be working for my university, an institution bustling with innovativeness and committed to gender equality and diversity. The past years strained this feeling of privilege as I grew aware of the immense discrepancy between the university’s gender equality policy on paper, and my actual experiences at work.

This discrepancy is not a purely subjective experience, as countless reports and figures show.

This article has been accepted for publication and undergone full peer review but has not been through the copyediting, typesetting, pagination and proofreading process, which may lead to differences between this version and the Version of Record. Please cite this article as doi: 10.1111/joms.12516

This article is protected by copyright. All rights reserved.
But being a fellow of an equal opportunity program, the prestigious EU-funded Rosalind Franklin Fellowship program (RFF) of the University of Groningen, I think that sharing my subjective experiences might offer some surprising answers to the question of why strong commitment to gender equality does not necessarily translate into the expected progress. In particular, while the RFF scheme was specifically designed to close the gender gap at all career stages by facilitating the flow-through of women to the higher functions in the university, I came to believe that initiatives deliberately set up to promote gender equality might inadvertently work against women. In my years as a fellow, I have experienced and observed a number of mechanisms that work particularly to the disadvantage of women academics in the equal opportunity scheme. Many of those mechanisms seem negligible in isolation, but accumulate to form substantial disadvantages over time. Intriguingly, rather than simply being unsuccessful in combatting these mechanisms, the RFF scheme seems to actually cause or reinforce them. My experiences of unintended backlash of equal opportunity schemes revolve around three key issues. First, they are designed in ways that inadvertently facilitate the structural discrimination they purportedly seek to challenge and moderate. Second, equal opportunity schemes can be seen as undermining meritocratic principles, thereby lending legitimization to senior (male) academics’ active reduction of any perceived or real benefits of the schemes. Third, the common top-down practice of imposing diversity on organizations hurts both the minority and the majority group.

**Equal opportunity schemes facilitate structural discrimination**

Paradoxically, schemes designed to promote gender diversity might facilitate structural discrimination due to specific selection criteria and hiring traditions. The RFF scheme, for instance, aims to attract “the best researchers from all over the world”, targeting primarily non-Dutch female scientists who, upon appointment, are on average 5 years older.
than the common tenure trackers. Due to the longer work experience and the highly competitive selection process, fellows of the RFF scheme typically outperform their colleagues at the same entry level. Nonetheless, the standing practice is to hire fellows at the lowest assistant professor level. This seems to reflect a gendered evaluation of ostensibly objective measures of scientific output, such as number and quality of publications and working experience. In essence, the appointment criterion of “excellent performance” translates into an entry level that is equal to that of every other tenure tracker. In doing so, the university effectively institutionalizes one aspect of gender inequality that has been repeatedly observed, namely that men are hired and promoted based on ascribed potential, while women are hired and promoted based on their actual scientific output. An awkward side effect of this practice is that fellows of the RFF scheme often already fulfil the criteria for a higher level within the tenure track upon being hired and make the promotion to the next level faster than their colleagues. While this is a logical consequence of the ill-matching occurring at entry level, it is often interpreted as preferential treatment of the scheme’s fellows and thus as undermining meritocratic principles, which I am elaborating in more detail below.

I discovered that the scheme’s aim to attract female scientists from outside The Netherlands also contributes to a potentiation of fellows’ otherness: as a fellow, I occupy both the non-prototypical sex and the non-prototypical cultural and national background. How alien fellows will be perceived depends on their respective field, of course. In the social sciences, fellows’ sex will contribute less to their otherness than in management and economics. While I usually have no problem finding commonalities with colleagues on the basis of our occupation of particular social categories, I experience that the equal opportunity scheme also undermines such shared categories. For instance, Dutch women might feel it unjust that the scheme supports non-Dutch women, but does not offer opportunities for them. The scheme thus divides the otherwise shared category of womanhood: now there are women

This article is protected by copyright. All rights reserved.
academics, and there are women academics supported by the scheme. This inadvertent establishment of otherness among women is accentuated by the fact that those supported by the scheme are non-Dutch. Coming from Germany, I experience substantial cultural differences that I was not expecting, and I can only start to imagine how debilitating such differences are for fellows from regions further away. An anecdote about childcare illustrates this.

Having been born 1980, my socialization experiences were decidedly East German. In East Germany, working mothers were the rule rather than the exception. That the childcare infrastructure was excellent became evident after the reunification, when the much less favorable childcare infrastructure in West Germany became obvious. The childcare facilities offered in the Netherlands thus impressed me. My four-year old could go to pre-school and after-school care, my one-year old could go to kindergarten; both children could, in theory, be taken care of until 6 pm. My enthusiasm was dampened when my colleagues told me to beware of openly discussing that my one-year old was going to kindergarten five days a week. Inquiring, surprised, about the nature of such advice, I learned that people relying on childcare five days a week are seen as rather uncaring parents. Dutch parents usually work part-time; sometimes both father and mother work a day less per week. This system requires less days of formal childcare, the number of which is often further decreased by invoking the help of the children’s grandparents. At first, I thought that the issue was returning to working fulltime after becoming parents. To my surprise, I learned that the majority of Dutch women never work fulltime at all, irrespective of their family status: Dutch women work the least hours in all of Europe. I was used to working full-time and grateful that there was sufficient childcare, but learned to stay away from the topic when meeting other parents.
Such cultural differences might seem trivial, but I felt that they undermined my prototypicality for certain categories that would otherwise serve as sources of support, such as shared womanhood or parenthood. Thus, by means of their specific selection criteria, equal opportunity initiatives like the RFF scheme inadvertently disrupt the basis of shared categories, undermining the support and solidarity needed to excel in one’s work environment.

**Equal opportunity schemes undermine meritocratic principles**

A second observation I made concerns divergent perspectives on meritocratic principles and justice. The mere existence of an equal opportunities scheme is often perceived as undermining meritocratic principles. Indeed, a sentence regularly directed towards me from my closest working environment is “I don’t think that women should be preferentially treated”. Senior academics concerned about justice issues at work might be motivated to correct for what they perceive as unjust preferential treatment of women by treating them unjustly. The dissonance resulting from being just to one group at the expense of the other is often dissolved by overstating the benefits that fellows of the scheme assumedly enjoy. Indeed, many colleagues entertain rather unrealistic ideas about the benefits of the fellowship. For instance, fellows are often envied for their assumedly luxurious research time. In reality, my research time is the same as that of everyone in the department. An experience I share with other fellows of the RFF scheme is that senior (male) academics chose not to correct such views, which allows them to “divide and rule”. They can construe their preferential treatment of male employees as a morally justifiable attempt to correct a system that unfairly favors female employees. Exaggerating the benefits of equal opportunity schemes is strategically used by senior academics to legitimize corrective measures which essentially undo any benefits that the equal opportunity scheme offers. One example is access to

This article is protected by copyright. All rights reserved.
resources such as PhD students. RFF fellows at my Faculty get one PhD student through the scheme, which is supportive because PhD supervision is an important criterion for promotion. Simultaneously, however, male academics have access to a much higher number of PhD students. This reflects a highly skewed resource distribution that might be aimed at correcting for fellows’ “undeserved benefit”.

That justice resides in the eye of the beholder is also evident in the lack of support and guidance by senior academics, an experience I share with many RFF fellows. Much has been said about the exclusionary effect of the patriarchal support systems in place in academia. This more subtle way of exclusion works by denying women access to knowledge about the implicit rules of the game, making them strive for fulfilling criteria that are explicited in official documents, but are irrelevant unofficially. Here again, the disadvantage for fellows of the RFF scheme is potentiated: they are often excluded by male academic elites who nurture mostly other men. Non-Dutch academics are also oblivious to the widespread practice of influence peddling that is considered normative in the Dutch culture. Influence peddling means using one’s influence and connections to obtain preferential treatment for another person and is historically entrenched in the Dutch culture: it represents the operation of elites ensuring that tensions in society were peacefully solved in a country with limited space to avoid the other. Peddling in power and influence is often associated with an implicit expectation of a reciprocal service to be received in the future. By helping the male protégée up the organizational ladder today, the senior academic can expect generosity later, when he needs, say, less demanding teaching duties.

Because influence peddling is considered illegal and corrupt in most other countries, fellows of the RFF scheme, being non-Dutch, will typically be completely naïve about the practice. Over the years, many foreign fellows notice that their Dutch superiors’ way of doing things is only vaguely related to what is specified on paper. As with the concern for a just
workplace considered above, I can see how the practice of influence peddling can be construed as being moral. By providing male employees with tacit knowledge about the organization and its unofficial criteria, the senior academic demonstrates his loyalty to the network. The normativeness of influence peddling in the Dutch culture accentuates the exclusiveness of male academic cycles characterizing academia. But its elitist character implies also that many male Dutch academics are excluded from such networks, while some female Dutch academics benefit from being part of such networks. The group most likely to be and remain excluded from such networks is the group that the equal opportunity scheme explicitly seeks to hire: non-Dutch women academics.

Stating ambiguous and unclear performance criteria facilitates influence peddling at universities. Here, again, the equal opportunity scheme itself appears to cause some of the backlash. Due to the exceptional track record typifying fellows of the RFF scheme upon appointment, they are expected and encouraged to apply for prestigious research grants. This requires substantial amounts of time and energy, which impair publishing. At the same time, the competitiveness of the Dutch funding system renders chances of success minimal and structurally lower for women academics. Even if successful, grant money is not seen as compensating for the almost inevitable dip in publications resulting from the procedure. This system disproportionally punishes fellows of the scheme: the exclusion from tacit organizational knowledge does not allow them to prioritize activities that are unofficially incentivized over activities that are only officially valued. Together, the tightly knit networks, exclusion from tacit organizational knowledge, and ambiguous performance criteria create a perfect environment for gender bias, which is corroborated by numbers: at the author’s faculty, a crucial step in the promotion process is characterized by vague and ambiguous evaluation criteria, as well as by an exclusive dependency on the advice of the respective senior academic leader. The percentage of female full professors is 12%. At a neighboring
faculty that uses clear and unambiguous evaluation criteria, and relies on advice from an
external commission, the percentage of female full professors is 24%.

**Diversity without inclusion hurts both parties**

All things considered, should we get rid of equal opportunity programs? Certainly not. But I think we should forsake the collective delusion that *having* an equal opportunity program is equivalent to *being* an equal opportunity employer. The discrepancy between public commitment and actual progress seems to stem largely from the conviction that, if put on paper, diversity will magically result in inclusiveness. But such inclusiveness does not manifest without explicit efforts. The past decade has seen an almost religious faith in the benefits of diversity, leading many organizations to impose diversity policies on their long-standing employees in a top-down manner. In my view, universities and other organizations greatly underestimate the covert resistance against the perceived imposition of diversity policies. In other words: organizations have failed to prepare their managers and the workforce for “doing” diversity by acting in an inclusive manner. This has resulted in paper tigers hardly affecting actual behavior in organizations. This is frustrating for both sides, as illustrated in the heated discussion following a recent online article of our university’s newspaper, in which “diverse” academics criticized the lack of inclusion at the university.

This quickly escalated to a full-blown intergroup conflict, illustrating that the pain is on both sides: the Dutch pride themselves for being open and tolerant, and they want to be the best in everything they do. The criticism is unexpected because they thought they were doing just fine (“We even have two diversity officers!”). On the other hand, employees coming into the university, for instance through equal opportunity programs, expect to be included. My own realization that I contributed to a diverse workforce while not actually being included,
can best be described as an epiphany of sorts. It was a sincerely horrible insight that put into question everything I thought I knew about my organization, its procedural and distributive justice, and the trustworthiness of the senior academics I was working with. Kuhn’s description of paradigm shifts probably comes closest to what I felt. Luckily, I am the resilient type, and after fuming, rumbling, and pitying myself for a couple of months, the complexity of the problem simply fascinated me from an analytic point of view.

So where do we go from here? I think a number of concrete measures are warranted. First, senior academics’ knowledge about discrimination should not be considered a given. Being lectured in all earnestness by male colleagues about the positive discrimination of women academics never ceases to surprise me, certainly in light of figures testifying to the opposite. The university needs to make sure that the knowledge base about the lack of equal opportunity is solid among managers. If this is not the case, resistance to any equal opportunity measure is unavoidable and top-down diversity policy will simply trickle away in the realities of the work floor. Covert resistance, in turn, reinforces the informal hierarchies in place, where silently defeating university policy can be construed as heroic act of resistance for the greater good (e.g., one’s network, male academics). Because policy is in place and resistance is covert, failure to climb the organizational ladder will be attributed entirely to women academics. After all, the organization did everything to support them, so if they still can't pull it off, this really must be due to their insufficient capabilities and skills.

Further, I believe that much of the top-down imposing of policy leaves “old-timers” feeling coerced into public compliance for fear of being otherwise marked sexist. This is not very respectful given the large adaptation and adjustment efforts required from employees of organizations that are becoming more diverse. The university should foster debate and exchange between advocates and opponents of diversity policy through bottom-up initiatives. If opponents feel urged to take their dissent “underground”, resistance is difficult to address.
But faculties also need to be safe places for employees issuing worries about discriminatory or unfair practices. I know from personal experience that the one blowing the whistle is often denounced as an ungrateful complainer and faces backlash for daring to speak up. But senior academics should embrace their critics, since these are usually the employees most strongly committed to the organization’s well-being.

An important action point for the university concerns closing the escape routes that facilitate resistance from senior managers. Ambiguous evaluation criteria and the sole dependency on one person for decision making about promotions should be banned. Managers should, to a certain extent, be held accountable for the success of their employees. Why not ask managers to show that they distribute resources justly, or to justify why some colleagues have access to more resources than others? Such measures will foster reflection on decisions that are certainly often made without much consideration or ill-intention. Also, mandatory leadership trainings sensitizing managers for diversity and inclusion issues might work miracles. We do not allow academics to give lectures without having acquired the necessary knowledge and skills – why do we allow academics to manage a diverse workforce without having acquired the necessary knowledge and skills?

Of the roughly 100 fellows appointed to the RFF scheme, approximately one third has left the university again. Many went out of frustration with the slow progress, lack of support, the impenetrable Dutch networks, and the large discrepancy between expectations aroused and actual practices at the coal face. The realization that diversity policy does not miraculously lead to a more inclusive work place is slowly beginning to dawn on the university, and many people are working very hard to close the gap between policy and progress. In order for all these people’s efforts not to be in vain, the university has to act on the realization that “undoing gender” requires “doing diversity”.

This article is protected by copyright. All rights reserved.
Given the potential backlash, I did not take the decision to expose myself through this essay lightly. Two main factors influenced my decision: First, many people within my university, including scientists, policy advisors, HR advisors, and members of the executive board, have dedicated years of their professional lives to achieve an equal opportunity organization. I would like to create an impetus for them to go on despite the slow progress, by pointing towards obstacles that have been overlooked so far. Second, there is a window of opportunity right now, with the university realizing that their diversity policy does not result in the desired changes. Joint efforts are now underway to change the tide, and I hope for my essay to offer some insights concerning the directions such efforts could take.

Research findings substantiating the essay “Undoing gender in academia” (S. Täuber)

The editors of JMS advised against using references in the essay. Below, I provide a selection of scientific articles I have used for my article, complemented with the most recent articles on unintended consequences of gender quotas (Tzanakou, 2019, in Nature).

The basics: Academia is a male-dominated field, and this domination is particularly strong in economics.


Teunissen and Hogendoorn (2018), https://esb.nu/esb/20038198/weinig-vrouwen-in-het-economisch-debat, show that in economics, women are stuck in the lower ranks. Forty percent of PhD students in economics are women, but only 10.4 percent of the professors within the field of economics were women in 2016. To get an indication of where the transfer of women to higher academic positions is stuck, the VSNU calculates the "glass ceiling index" (GPI). The GPI is calculated by dividing the percentage of women in a job category in a year by the percentage of women in the subsequent job category in the same year. The job categories are PhD student, assistant professor, associate professor and professor. An index greater than 1 indicates a relatively more limited transfer of women than men to a higher position. The GPI for all scientific fields is greater than 1 for every transfer step - from PhD student to assistant professor (UD), from UD to associate professor (UHD) and from UHD to professor (HGL) - since 2006, the GPI has fallen for all scientific areas, and to a lesser extent also for economics. This points to an improvement in the rate for women. However, in economics this improvement is lower than the average for all scientific fields for all steps, and this is most strongly true for the transfer to professorship. Female associate professors - representing 31 percent of the total number of associate professors within the economy - are nearly half as likely as their male counterparts to advance to the position of professors.
Within Europe, The Netherlands are doing particularly poor regarding gender equality in academia

The *She Figures* report commissioned by The European Commission, being the main source of pan-European, comparable statistics on gender balance in science, states that although the number of female researchers is slowly growing in Europe, “they remain significantly underrepresented, and their potential not fully recognised and valued” ([https://www.etag.ee/wp-content/uploads/2019/03/She-Figures-2018-1.pdf](https://www.etag.ee/wp-content/uploads/2019/03/She-Figures-2018-1.pdf)). The Netherlands has Europe’s lowest share of female researchers, lagging far behind the European average in particular with regard to the number of women appointed as directors, professors, or associate professors. Within Europe, only Belgium, Cyprus and Luxembourg have a lower percentage of female professors than the Netherlands ([https://monitor.lnvh.nl/](https://monitor.lnvh.nl/)).


On this website by the VSNU, you can see exact numbers and percentages of different functions, split by university, and also split by faculty: [https://www.vsnu.nl/en_GB/f_c_ontwikkeling_aandeel_vrouwen.html](https://www.vsnu.nl/en_GB/f_c_ontwikkeling_aandeel_vrouwen.html)

Equal opportunity programs help improving the numbers of women academics in economics, but can have unintended consequences

This was the point I made in my essay. In the meantime, Tzanakou published an article in *Nature* on June 20, 2019, that basically makes the same points, [https://www.nature.com/articles/d41586-019-01904-1](https://www.nature.com/articles/d41586-019-01904-1). Importantly, she broadens the analysis I offered to also include experiences of sexual, ethnic, and other minorities as well. She, too, warns that “achieving gender equality becomes a box-ticking exercise”. 

Implicit bias is alive and kicking

There is a huge body of research showing that implicit gender biases and stereotypes in the workplace – which were the reason why TU Eindhoven decided to only hire women academics for a while – lead to paradoxical effects in which women in male-dominated professions (such as economics), get penalized for being successful. This is because their success implies that they violated normative standards for what is considered appropriate behavior for women. Importantly, such penalties also apply to less prototypical men.


Women academics have to work harder for the same promotion and are not credited the same as men for the same performance

There are many works showing that women academics have to work harder to achieve the same results and recognition: “Higher standards burden women with an added time tax and probably contribute to academia’s “Publishing Paradox”. Consistent with this hypothesis, I find female-authored papers spend six months longer in peer review. More generally, tougher standards impose a quantity/quality tradeoff that characterises many instances of female output. They could resolve persistently lower—otherwise unexplained—female productivity in many high-skill occupations.” Hengel, E. (2017). Publishing while Female. Are women held to higher standards? Evidence from peer review. Cambridge Working Paper Economics. (https://www.repository.cam.ac.uk/bitstream/handle/1810/270621/cwpe1753.pdf?sequence=1)

Sarsons (2017) finds that women are penalized for co-authoring, while men are not: “How is credit for group work allocated when individual contributions are not observed? I use data on academics’ publication records to test whether demographic traits like gender influence how credit is allocated under such uncertainty. While solo-authored papers send a clear signal about ability, coauthored papers are noisy, providing no specific information about each contributor’s skills. I find that men are tenured at roughly the same rate regardless of coauthoring choices. Women, however, are less likely to receive tenure the more they coauthor. The result is much less pronounced among women who coauthor with other women.” Sarsons, H. (2017). Recognition for group work: Gender differences in academia. American Economic Review, 107(5), 141-45. https://www.aeaweb.org/articles?id=10.1257/aer.p20171126

Heilman et al. (2019) show that “Performance change differently affects evaluations of men and women in gendered fields. Women are rated less positively than men after improvement in a male-typed field. Women are rated more negatively than men after a decline in a male-typed field. Men are rated worse than women following performance changes in a female-typed field. People update their impressions in line with stereotype-based expectations.”


The Conversation published an article last year finding that “Women have up to one-and-a-half year's extra education, and nearly a full year's extra workforce experience, than what is required for their job, research finds. These figures, using stochastic frontier methodology, avoid the distortions arising from simpler statistical methods like averages. This technique allows us to test what factors are driving women's greater accumulation of credentials. Tellingly, this over-investment isn't directly connected to children and care responsibilities. Nor is it due to women's lower confidence, a hypothesis that I tested by including a variable called "achievement motivation". Existing evidence steers us towards implicit biases woven throughout workplace dynamics that create higher hurdles for women to clear along the career ladder. For instance, analysis using Australian Census data finds women earn less from their university degrees, even when comparing men and women within the same high-earning discipline such as law, economics, dentistry and medicine. Survey data also reveals that women, when they do ask for a promotion, do not receive the same outcomes as men.” (https://edition.cnn.com/2018/11/19/health/women-work-harder-gender-pay-gap-intl/index.html)

Women academics DO ask for promotion just as often as men do. However, they do not get it.


This was also shown in a recent report by the Dutch Network of Women Professors: https://www.lnvh.nl/a-3041/rapport-lnvh--verborgen-beloningsverschillen-in-de-wetenschap--vrouwelijke-wetenschappers-do-ask-but-dont-get

Academia: Not a meritocracy

Maybe still the best and most comprehensive analysis of how the academic system excludes minorities can be found in van den Brink's dissertation “Behind the scenes of science: Gender practices in the recruitment and selection of professors in the Netherlands” (https://repository.ubn.ru.nl/bitstream/handle/2066/82590/82590.pdf?sequence=1)

Information peddling: closed networks


Note that I am not referring to the Dutch polder model here, see https://www.knaw.nl/shared/resources/actueel/publicaties/pdf/20171004-the-dutch-polder-model-in-science-and-research

Gender bias in economics: Where do we go from here?

The article by Harzing et al. (2018) in ESB 103 (https://esb.nu/esb/20046299/how-to-make-career-advancement-in-economics-more-inclusive) offers a comprehensive table showing recent research on gender bias in academia. Their article is worth reading because they spell out specifically how these mechanisms operate in economics. They show, in short, that

- Gender bias and meritocratic beliefs explain men's over-representation in senior academic positions.
- Performance evaluation practices that appear to be meritocratic often result in unequal distributions of success.
- Several practical, evidence-based, interventions can mitigate bias and promote inclusion in academia.

Importantly, they offer very specific recommendations focusing on two main issues:

Performance evaluation and decision-making interventions

- **Ensure the use of objective and transparent metrics.** ‘Citizen bibliometrics’, facilitated by Google Scholar, Microsoft Academic, and Publish or Perish (Harzing, 2007) have made it easier for every academic to compare themselves to others in terms of both publications and citations, and to do so using a variety of data sources.

- **Use a variety of performance indicators.** In rankings of academics, different types of indicators favour different groups. For instance, citation-based rankings show different results from publication-based rankings, such as the ESB Economics Top 40. Two alternative Economics Top 40s (Harzing and Mijnhardt, 2015), based on authorship-corrected citation metrics rather than on publications, featured three and five women respectively, including two in the top 4 and the top 6 respectively, whereas in nearly four decades only six women ever made it to the publication-based ESB Economics Top 40.

- **Change principles of authorship ordering.** Economics is one of the few disciplines that favour alphabetical ordering over contribution-based ordering. As shown by Sarsons (2017), ordering by level of contribution will benefit women. Alphabetical order should thus be reserved for publications where contribution was truly equal.

- **Compensate for time to care in performance evaluation.** Managers and evaluators need to be attentive to the structural conditions affecting women’s and men’s publication rates and compensate for time to care. Given the propensity of temporary contracts, shared care responsibilities and part-time work for both women and men in Dutch academia, this type of compensation takes into account the realities of combining career and care, and sustains academic career ambitions (Vinkenburg et al., 2015). For example: Tilburg School of Economics and Management offers research resources (e.g. reduction of teaching load, research assistance, travel grants) covering for time lost because of compulsory pregnancy leave; VU SBE (VU School of Business and Economics) adapts publication criteria for employees working part-time (factoring in FTE).

- **Introduce more transparency and accountability** in both selection decisions and the performance evaluation process as a means to reduce gender bias (Castello, 2015). Limiting discretion in these processes can be supported by for instance developing algorithms for automatic promotion (Bosquet et al., 2018) or by using lottery thresholds for grant applications (Fang and Casadevall, 2016).

- **Introduce behavioural modification programmes** for selection and promotion of committee members that monitor and provide feedback over a longer time (Devine et al., 2017), such as *customised bias mitigation sessions* (Vinkenburg, 2017). These sessions focus on optimising the decision-making process through the operationalisation and application of criteria for performance and potential.

**Workplace interventions**

- **Engage in Participatory Modelling**, a system dynamics-based intervention in which senior decision makers (e.g. dean and department chairs) together identify issues in, and solutions for, the career advancement (or stock and flow) of women and men in their faculty. This method has been applied at Dutch and other European universities and has resulted in several evidence-based local interventions to promote gender equality (Bleijenbergh and Van Engen, 2015; Van Arensbergen et al., 2017).

- **Offer more flexibility and longer paid leave** (Goldin, 2014). In the Dutch context that would include longer mandatory paid paternity leave, to decouple the stereotypical notion that mothers care and fathers work, and to reduce ‘defaulting’ into part-time work.

- **Create women-only academic networks**. Although several universities in the Netherlands have institutional, cross-disciplinary networks for women, networks such as CYGNA (Harzing, 2014) that are cross-institutional, but within-discipline might provide a more fruitful platform for mutual support, learning and networking.

- **Ensure substantive representation in all spheres of academia**, i.e. decision-making boards including student associations, applicant pools, conference panels, internal and external communication, and even pictures on the (virtual and real) wall. A simple rule of thumb is 50/50, as having only one token woman simply makes her the exception to the rule and does not change stereotypes (King et al., 2010).