

## CHAPTER 9

# The Triview Model: Three Views of a Problem

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**Abstract:** Everyone knows that the top levels of academia are still often imbalanced, with more men than women. This is commonly described as an absence of women, or a “leaky pipeline” towards the top. But how is this imbalance understood and reflected upon? And what does the understanding of the problem of gender imbalance mean for the overall culture of the organization? This chapter looks at how gender and gendered differences are described and discussed at the University of Oslo’s Faculty of Mathematics and Natural Sciences, extending the social analysis (Chapter 7) and the structural analysis (Chapter 8) in the direction of discourse and cultural analysis, based on the very concrete main issue of the FRONT project: the top-level imbalance. Why is it there? What do faculty staff and students say, about this? Three typical views appear in the FRONT material, and are presented and discussed: first, that the gender imbalance is *not a problem*, or only a small problem; second, that it is a problem, but mainly a *women’s problem*, and third, that it is a *systemic problem*. The chapter includes a historical profile of how these three views have developed and a discussion of how they work to hinder or help gender equality change in the organization.

**Keywords:** gender imbalance, explanatory models, work for equality, organizational change, academia

## Introduction

It is an objective fact that there exists a gender imbalance in positions and disciplines at the Faculty of Mathematics and Natural Sciences at the University of Oslo, yet it is nevertheless possible to describe and interpret this in various ways. This is already evident in the way gender imbalance is often discussed: There is an “absence of women” or “women drop out”. The imbalance thus becomes something that primarily concerns women. When 78 of 100 professors at the faculty are men, one might imagine that men’s “presence” would be a topic for discussion, but this is usually not the case.

In this chapter, we take a closer look at how gender and gender differences are referred to and discussed at the Faculty of Mathematics and Natural Sciences. Our point of departure is how gender imbalance is interpreted in different ways by staff and students at the faculty. We describe three typical points of view: 1) the gender imbalance is not a problem; 2) it is a women’s problem; or 3) it is a systemic problem, and we connect these to sensemaking within the organization. In this way, we complete the empirical picture of the Bøygen (the Boyg) model from Chapter 7, and the structural picture of the Janus model from Chapter 8, by adding a more cultural and discursive model. We have called this the *Triview* model.

The chapter is organized in the following way. In the first part, we present the Triview model based on our material. We then look at the model from a historical perspective, above all related to material on the recruitment of women at the University of Oslo. In the next part, we discuss how the three views affect both equality work and daily life in the organization, and what significance these views may have for working to create change. We also consider the model in light of theoretical developments and organizational change and innovation, which is the topic of the third part of this book.

## The Triview Model: Three Views of Gender Balance

Early on in the FRONT project, we became aware that staff and students perceived gender imbalance in very different ways. This became particularly obvious through interviews and action research, where we

participated in a number of seminars and workshops. The descriptions could be classified into three main types in which gender imbalance was considered as:

- Not a problem
- A women's problem
- A systemic problem

A slightly dramatic metaphor for the three views is the one-eyed cyclops of Greek mythology. The three oldest cyclopes (in Hesiod) were known as Thunder, Lightning and Light. Each sees with only one eye and often causes trouble for humans. The model presumes that each view has a certain metaphorical resemblance to such a cyclops.<sup>1</sup>



**Image 9.1.** Painting of the cyclops Polyfemos by the German artist Johann Heinrich Wilhelm Tischbein, 1802 (Landesmuseum Oldenburg).

The point is to emphasize that each view can be somewhat one-eyed. They are one-eyed because they each provide one specific interpretative framework having significance both directly regarding the problem of gender balance, and indirectly in terms of other features of academic culture and work organization. If “the eye that sees” does not recognize the lack of gender balance and gender equality, it will affect the organization.

## First View: Not a Problem

In the first view, “not a problem”, the interviewees emphasize that the situation is fine as it is. It will adjust itself in due time, and an absence of women is not a problem within these disciplines in academia.

Traditionally, the harder sciences have been considered more masculine, and men have that is traditionally, I don't know if there is something about the male brain, that it is more ... [I] think that such abstract, mathematical problems are more interesting than the more practical.

(Professor, male)

Historically speaking, this view can be traced back to the period when the door to academia was closed to women, without that being considered a problem (for men). This is described further below.

In the FRONT material, the view, “not a problem”, is more common among men than women. In the interviews, the reasons why imbalance is not a problem are primarily connected to women's family responsibilities and preferences. According to this view, the imbalance is usually interpreted as a result of women's (and men's) own choices, and it is therefore not a problem, at least not a major problem. For example, if women and men choose that women take more responsibility for children and family, they should be allowed to do so – even if it means that academia is gender imbalanced in the higher positions. Another important characteristic among those holding this view is a strong faith in meritocracy. “Here the only thing that matters to us is qualifications,” one of the interviewees stated. The idea is that gender is insignificant in assessment and recruitment processes – and that the lack of women in academia is caused by prevailing circumstances and attitudes in society at large and, therefore, not something that academia can change.

## Second View: A Women's Problem

The other view, that the imbalance is a “women's problem”, is based on the premise that the absence of women in top positions is a real problem that should be taken seriously, and that academia needs more women. Again, the reasons for the imbalance are often explained by women

choosing family before career. The solution is that women should prioritize their careers. According to this view, the gender imbalance is a problem that should be addressed and dealt with, and the perspective is that this first and foremost relates to women. It is the responsibility of women and linked to women's problems. "Yes, we need to do something." But in practice, "we" means women, not men. Why women "choose" family over career is usually unclear, but it is considered to be a well-known fact.

A "women's problem" is not necessarily considered unfavourable for women. It is just something "different".

Whether it is caused by stagnant gender roles or simply that women are more interested in, in that part of life, I can't tell, but I believe that, that simply – women choose otherwise.

(Professor, male)

Some of the interviewed men in top positions also claimed that women not choosing academia are "smart". They choose to leave academia in favour of better-paid jobs and better working conditions in the private sector, or a more protected position in the public sector, a job they can combine with collecting children in kindergarten at four o'clock. They prioritize a "reproductive advantage" over an academic career.<sup>2</sup>

The idea of imbalance as a women's problem appears in various ways in the interviews. Women may be considered weak, as victims, or as underestimated and strong. Common to these ideas is that women are considered to be special, whereas men become the general or neutral. These points of view are thus clearly focused on women.

### Third View: A Systemic Problem

The third view, that gender imbalance is a "systemic problem", allows greater insight into the fact that the problem is everyone's responsibility, and (implicitly at least) also men's responsibility. Gender imbalance is tied to the work organization, the institution's and the organization's mode of operation, environment and culture.

"Systemic problem" is a point of view that most clearly emerges in the project's interviews of those experienced in the academic system

and gender equality efforts at the university, and those well acquainted with the Norwegian gender equality debate. These interviewees summarize their own experiences to a lesser degree as individual cases, and rather more in light of common characteristics of the institution. At the same time, they are more used to thinking in terms of “the system” as an explanatory variable. Employees on lower levels may indeed be more critical, yet at the same time they tell more “individual” stories – they are not sure what belongs to the systemic level and think that their stories might be exceptions.

These tendencies in the interview material correspond to results from the surveys and the action research. For instance, we see that the willingness to regard gender imbalance as a systemic problem is closely connected to gender equality efforts of the faculty’s leadership (see Chapter 10, “From Biology to Strategy”).

## Different Gender, Different View

Considering the three views together, it becomes clear that they vary in terms of where you are on the career ladder, as well as to which gender you belong. Men at the top are less inclined to criticize the system than women farther down in the organization. They have a more optimistic view of how the work organization operates and are more concerned with defending meritocracy. In interviews, they often talk about a work organization under pressure, related to competition and internationalization. Men, less often than women and juniors, agree that the system is characterized by male dominance even though they often agree that an academic career in their field, especially internationally, is “masculinely” designed.<sup>3</sup>

This resembles a rule formulated in Nordic research on men back in the 1980s by Lars Jalmert: Men are more willing to talk about male dominance at a distance than at close range and in relation to themselves. Jalmert (1984) described this as an “in principle” type of man – a man who supports gender equality in principle. We find some of this tendency in our material also. However some men mention what they have done themselves to reduce discrimination against women. Many of the women also mention supportive actions (not just attitudes) by men. In fact, men

who discriminate are often described as exceptions – most men are not like that.

Women, minorities and younger researchers are generally more critical of the system's mode of operation than men are. For example, we ask whether the work environment is not really meritocratic – that is, if the respondent experiences having to work harder than colleagues in order to be recognized. Here, the proportion of affirmative answers is considerably larger among women than among men, and larger among ethnic minorities than among the majority (see also chapters 5 and 6).

At the same time, these groups are less familiar with how the system works and do not, to the same degree, see the system from within. The results of this skewed selection become clear from below, but the actual system that creates this skewed outcome is often vaguer for those on lower levels.

## The Historical Dimension

The views in the Triview model have an important historical dimension. Insight into this dimension is key to understanding how traditional perspectives on gender can be maintained, and still be part of the framework for discourse at the university.

Many believe that academia has long been open to women and men on roughly equal terms. They are not aware of how recent many of the changes related to gender have been, historically speaking. This needs to be included in the picture in order to understand the situation today.

In Norway, women were gradually accepted into a purely male academy from the late nineteenth century. But this was a slow process. It has been 140 years since the “artium law”<sup>4</sup> was introduced (1882), and the first female candidate was admitted to the University of Oslo (Danielsen et al., 2013). However, it took a long time before positions in the academic system were open to women.

For example, Helga Eng was the third Norwegian woman to receive a doctoral degree (in 1913), and she later became the first female professor of pedagogy (1938) – after 25 years. The University of Oslo did not get its first female professor of medicine until 1972, psychology in 1973, law in 1987, and political science as recently as in 2000. It was sarcastically

commented that the political scientists had finally “manned up” to hire a woman (Nickelsen, 2000).

Medicine and the natural sciences were among the few disciplines to admit women initially, and the Faculty of Mathematics and Natural Sciences at the University of Oslo were early in hiring their first female professor, Kristine Bonnevie, who became a professor of biology in 1912. But afterwards the proportion of women changed very slowly. A Norwegian study of women in medicine demonstrates how strongly the male role model persisted (Arentz-Hansen, 2018). For a long time, a female medical practitioner was itself a contradiction in terms.

In many disciplines, there were still only men in professor positions until the 1970s – or even later. The imbalance continued in many fields, such as theology, which still had only a marginal proportion of female professors in the 2010s.<sup>5</sup>

As late as around 1970, women amounted to only approximately 20 per cent of graduated students in the faculties at the University of Oslo, with the exception of the humanities, where the proportion of women had risen to approximately 40 per cent (NOS Undervisningsstatistikk, 1973). The natural sciences saw an increase to around 40 per cent women on the BA and MA levels in the 1990s (DBH statistics from 1996 and onwards), but the proportion has not changed much since then, and the proportion of women on higher position levels is still low.

Christina Franzén, head of the Business Leadership Academy in Stockholm, summarizes how “gender difference” has been interpreted:

Those who know their history know that women, for a very long time, have not been considered suitable for holding positions of power in society due to their biology. This has been the case throughout our Western history. For instance, Aristotle believed women to be unreliable because they were more developed in the lower parts of the body than in the upper ones. For a long time, even in the twentieth century, it was considered dangerous for women to think. Too much thinking could result in women’s wombs wandering around their bodies, negatively affecting their reproductive ability. This could, in turn, lead to hysteria, a term deriving from the Greek term *hysteria*, meaning uterus. In other words, being hysterical was connected to women’s reproductive organs. (Franzén, 2018, translated from the Swedish)



When Franzén acted as secretary for a Swedish official report on the lack of women in leading positions in the private sector in the 1990s, the perception of women's shortcomings due to their biology was still common. She interviewed business leaders who explained the underrepresentation of women in positions of power in terms of biological disabilities (Franzén, 2018). Conditions in today's academia are different from the private sector in the 1990s, but our material also refers to "women's shortcomings", whether they are explained in terms of biology, family, women's own choices or other factors. A large proportion of the respondents emphasize that women and men are different, and in many cases, this difference becomes a deduction, an inadequacy in women.

Throughout the history of women in academia, we see a tendency in which their absence (and men's presence) is explained by way of statements rather than empirical arguments. The discourse on gender balance began with a "thunderous speech" in the nineteenth century. One did not precisely *argue* that women were not admitted to academia. It was preached. Later, fictitious scientific "evidence" maintained more or less what religious authority had previously preached. Women were not entitled to vote and were considered incapable of practising the hard sciences (Danielsen et al., 2013).

Another version of the view "a women's problem" is not about the absence of women as a problem, but that their *presence* is a problem. The problem with women is not that they are too few, but that they are too many. Historically, it was considered a problem if women were admitted to science – among other things because women are more "hysterical". This view is outdated. No one says such things in our interviews, but the attitude is perhaps still present, for example, in the idea that women are more social than men, and in complaints from some men that clever girls from upper secondary school surpass the lazier (but still so wise) boys.<sup>6</sup>

The views in the Triview model make more sense in light of such longstanding male-dominated traditions in which women, until relatively recently, historically speaking, have been considered special or "divergent" compared to a "male normal".<sup>7</sup>

The three views in the Triview model have a basic historical foundation, a period in which they were most dominant as explanations for

gender imbalance, interpreted as the absence of women. The first, “not a problem”, was connected to the situation before women were admitted on a broad basis, and was common in the early period, approximately between 1880 and 1960. The second, “a women’s problem”, became more dominant in the latter part of the twentieth century, particularly from the 1980s, when the proportion of women students greatly increased. The third view, “a systemic problem”, is more recent, and is not yet dominant, although it has gained more acceptance since the 2000s.<sup>8</sup>

Note that the model relates to the academy’s dominant self-understanding of gender and gender imbalance – rather than, for instance, how feminist or critical researchers understand these issues. These researchers have criticized gender imbalance as a systemic problem for a long time. It should also be noted that there were counter-arguments and alternative views in each historical phase. Triview deals only with the main rule or the main view.

Although each view in the model has its historical background, an essential feature of the model is that the three can be *combined*, with varying emphasis on each, in today’s situation. To a certain extent, they can be chosen based on what seems to be the most correct or intuitive explanation. One and the same interviewee may therefore talk about imbalance as a non-problem, a women’s problem and a systemic problem, depending on the context.

## How Is the Problem Presented?

Do the three views have any practical implications for the Faculty of Mathematics and Natural Sciences? Do they affect only the willingness to work for gender equality, or also how the work for change is organized? According to Bacchi (2012), all organizational work aimed at change is based on a perception of what seems to be the problem. The way the organization works is determined not only by objective facts and conditions, but also by the subjective positioning, sensemaking and resilience of the individuals within the organization. This also applies (perhaps even more) to a knowledge enterprise or a university. Therefore, an “objective” fact, such as women’s (relative) absence at the top and thus

a lack of gender balance, will be understood and interpreted in various ways. Symbolic negotiations concerning gender are a crucial element, where gender is just hinted at without being mentioned. For example, it may have to do with who is considered “competent” or “central” within the discipline (Solheim, 2002). Based on the Janus model (described in Chapter 8), gender is often hidden behind other considerations that appear gender neutral (such as competence), usually resulting in women and gender equality having to “yield” (Teigen, 2014).

A general characteristic in research on gender in academia and other high-status professions is that ideology and discourse play an important role, not just structures or actions (see e.g., Dockweiler et al., 2018; Lyng, 2017; Orning, 2016; Snickare & Holter, 2018; Thun 2019; Vabø et al., 2012). Obstacles and disadvantages affecting women in particular include both actions and attitudes. Actions are connected to certain interpretations and understandings. We also see this in the material from our project. For instance, we see that publication points are rarely “purely objective”. They are rather subject to social negotiation and unequal attributions of prestige (see Chapter 4), and negative attitudes and actions are often connected (see Chapter 5). Academic prestige is primarily a discursive phenomenon – a result of ongoing discourse and negotiation within the discipline – which is well known, among other things, from Kuhn’s (1996/1962) theory of scientific paradigms, and later research on paradigm shifts and innovation (Fagerberg et al., 2004; Ø. Holter, 2007).<sup>9</sup>

Thus the Triview model describes three views that may also be referred to as paradigms, and are connected to different ways of understanding and different types of discourse on gender. The three become particularly clear in questions about the lack of gender balance. The three may be used individually or in combination, and the effect may be that changes are put on hold or terminated.

At the same time, it is important to delimit the model from ideology or myths. The cyclops as a metaphor is only valid to a certain extent. Each view is *also* used as a framework for empirical interpretation – whenever this perspective seems right. This applies to both “bottom-up” hypotheses by researchers within the natural sciences, and leaders assessing different

subject matter in various ways. The view may indeed be narrow or one-eyed, but the arguments applied through the perspective are nevertheless not always misleading. Thus the Triview model does not produce a black and white image, a discourse of *either* “facts” or “alternative facts”, but a more complex pattern. However the basis for knowledge, the potential for further investigation and for measures and initiatives are different in the three views.

This potential for further investigation and change is usually (not always) weakest in the non-problem view (the cyclops Thunder), somewhat more prominent in the women’s problem view (the cyclops Lightning), and strongest in the understanding of a systemic problem (the cyclops Light). Generally speaking, the systemic problem perspective is clearly the perspective that, to the greatest extent, allows increased knowledge, thematization and the possibility for change. At the same time, here and now, the chance of gaining support for gender equality measures may increase if they are presented from a more traditional perspective, such as solving a women’s problem.<sup>10</sup>

A final important, empirical point is that the triview of gender imbalance is not a peripheral or isolated element. It is strongly linked to views on other important issues and topics. The view of “meritocracy” in particular is clearly connected in the material. The greater the willingness to problematize gender imbalance, the greater the chance to take a stance in contrast to a “relentless” or purely objectivist interpretation of meritocracy. Ideas relating to competition and internationalization are also clearly connected.

Those who are concerned that gender balance is a systemic problem are also often of the opinion that a Norwegian university should not only “adjust” to increasingly challenging international competition – but also take the lead in developing alternative models. Such a model could, for instance, be based on Norwegian or Nordic advantages as welfare states with solid traditions for collaboration, both in research and in working life generally. At the same time, they often express scepticism towards what we might achieve in Norway – a more “welfare oriented” academia might not be able to assert itself in international competition. Academic culture, at least in the natural sciences, is to a great extent international,

and many believe that international guidelines will ultimately overshadow what is done in Norway anyway. Both the FRONT material and other research are characterized by the fact that such alternative developments in universities have hardly been discussed and concretized. One must simply “keep up”. International standards apply, even though one may personally be critical of parts of this system, including “the publication point system” (see Chapter 4 on publishing).

## Sensemaking in the Organization

Based on our material, the triview is linked to sensemaking in the organization. Gender may seem like a peripheral problem in many STEM disciplines, but it is connected to other important factors. Gender balance often *appears* as an isolated matter, particularly within a discourse emphasizing that imbalance is a small problem or a women’s problem. Our results indicate that, in reality, it is part of a much bigger, coherent complex of meanings. This gradually becomes more and more obvious as gender imbalance is addressed and problematized. It is similar to an iceberg, where you only see the top at first, when you only see gender imbalance as a non-problem or a women’s problem. All cyclopes are visually impaired, but in our interpretation, the systemic cyclops (Light) can illuminate better than the other cyclopes.

The view of gender balance reflected in our material is not only connected to views of other central academic issues, such as meritocracy, publication points, and prestige, but also to what makes sense in the organization. This perspective forms an underlying paradigm or is a part of this paradigm, to use Kuhn’s (1996) term. It is linked to fundamental questions, such as “Why do I work here? What am I good for?”. The results show that women have to be more assertive and “take their place”, assess themselves as top researchers in order to achieve results – not because they seek unreasonable advantages, but because the dominant discursive framework has categorized them as “special”, and thus also often slightly “inadequate”, something they have often internalized.

The FRONT material does not include a complete and detailed mapping of the three views and types of discourse we describe here, and it

must suffice to recount the main tendencies. However, the model is well anchored in areas on which we *have* detailed data. This applies particularly to material from the survey variables on the practice level, measuring experiences in one's career and similar concrete descriptions from the interview material. Here it is clearly visible how the different types of discourse manifest themselves.

For example, the non-problem view is more controversial now than it used to be, and those adhering to this view, for instance on the grounds of biology, often emphasize that they are no experts on gender. They say they “do not really know”, but they use biological gender difference as a hypothesis or working explanation. This especially applies to some of the male professors. Among the master's students, we see that men, in particular, emphasize the genders as “fundamentally different”.

We assume that the dominant interpretation within the Triview model will have a major impact on what is actually done in order to rectify the problems. Institutions characterized by a more “advanced” view will achieve greater changes compared to those characterized by a “medium” or “backward” view.

The Triview model is an extension of a division already well-known in international research on gender and organizational development. Should we solve the imbalance problem and the lack of gender equality by “fixing the women”, or should we rather “fix the system”? (Clayton, 2011). The systemic understanding – fix the system – has gained ground in the last decade due to research identifying systemic problems more clearly than before (cf. Chapters 5 and 7). Thus it is somewhat unfair to interpret it as a cyclops. The systemic perspective creates a departure from a situation in which the imbalance is explained away alternately as a non-problem or as a women's problem.

The material demonstrates how the interpretation of a lack of gender balance is essential not only in a concrete manner, when it comes to job appointments, but also more generally for the organization's culture. Gender often lurks in the background – it is not addressed but is nevertheless indirectly or implicitly part of an overall picture, as a crucial general condition, for instance in assessments of academic hierarchies and prestige (Henningsen & Liestøl, 2013).

## “Scope of Possibility” and “Scope of Impossibility”

An important distinction between the three views concerns what is possible and what is impossible. If a problem is not perceived as a problem, the chance of it being possible to do something about it is greatly reduced, or at least the motivation to investigate and possibly do something is reduced. If it is a women’s problem, perhaps the organization is held more accountable, even though it is first and foremost considered women’s responsibility to change the conditions. If it is a systemic problem, the scope of possibility increases even more. Doing something, creating change, becomes possible and relevant. This is in line with research on reorganization and restructuring in the workplace, and demonstrates the contrast between a “scope of possibility” and a “scope of impossibility” associated with hopelessness. Employees who are involved early in reorganization processes, informed along the way and activated as participants, develop a “scope of possibility” in their own understanding of the process, and are better at dealing with reorganization and staff reductions than employees who are left within the “scope of hopelessness”, for example because they lose their job.

“Hopelessness” does not, however, characterize the situation in academia, but rather “impossibility” – the idea that gender differences are what they are and impossible to change. In some ways, the scope of hopelessness and the scope of impossibility resemble each other, including the actual effects – both lead to passivity and a lack of proactive response (Holter et al., 1998).

As already mentioned, the scope of impossibility is often indicated through presumed biological barriers in the interviews. If gender imbalance is explained in terms of genetics, hormones or brain differences, one cannot and should not do anything.

Since I am in [the natural sciences], I must be allowed to say it, it is a larger, whether it is the gender environment or genetics, I believe it is genetics, but there is a larger variability in cognitive abilities among men than among women. The way I think, you know, it has to do with X and Y and things, it has to do with chromosomes, you know, and ... of course, this means that more men are not very smart, and also that more men are really smart. And if you

imagine, this is probably not certain, I think perhaps the professors at UiO are not necessarily so incredibly smart, but – but, if you imagine extreme selection based on some cognitive abilities, there will be more men.

(Male top researcher)

It says something about the debate climate that this man begins by saying, “I must be allowed to say it”. What was perhaps fine to say ten or twenty years ago is no longer acceptable. He *believes* that biology is a factor. But it does not necessarily favour men over women, it is just that the distribution and variation becomes larger among men. Consequently, within a system favouring the best, men will benefit. This interpretation illustrates a rupture in the mentality – first you have an external variable sorting the genders, and then you have “gender neutral” conditions turning this gender differentiation into de facto gender stratification.

## Discourse or Demography?

Discourse theory is key to understanding the culture of the faculty under investigation. It focuses on communication, positioning and power. We use discourse theory in combination with other perspectives in this book, such as structural theory (Chapter 8), without claiming that discourse is definitive or that gender is a purely discursive issue. The Triview model’s point is that discourse plays an important and active role, and that words and actions *are*, in fact, often strongly connected. Bacchi (2012) points out that actions, for example the selection of women for a gender equality initiative, can in themselves be interpreted as a “women’s problem” without being explicitly stated. The practical position may itself state or at least strongly indicate the discursive position. The term *discursive practice* is relevant. In this extended meaning, “discourse” does not only concern what is said but also what is expressed in other ways, such as through body language. Gender may be interpreted as “structured action” (Messerschmidt, 2015). Discourse is about practice, not only about what is being said (Fairclough, 2010).

What, then, decides whether the organization adopts a systemic perspective and develops a greater degree of gender equality and gender balance? Research on the organizational level shows considerable variation,



in part across macro-trends in Europe (Puchert et al., 2005). Work-life research focusing on women addressed quite early the “active” significance of gender balance, or the demographics within the organization through, for example, Rosabeth Moss Kanter’s (1977) research on gender proportions in organizations from the 1970s onwards. The historical dimension is also important as an explanatory model. As long as women were excluded or a minority in academia, the dominant view was that the imbalance was a non-problem or a minor problem. As women gradually entered various educational programmes and disciplines, perceptions changed towards the idea of a women’s problem. Then with increased gender balance in recent decades, they have changed towards the idea of a systemic problem. Based on this, gender balance is in itself an important causal factor, dynamically affecting gender equality. Nevertheless, a certain “critical mass” is needed in order for underrepresented groups to make a difference.

At the same time, women may be well represented, or in the majority, in various disciplines without that fact automatically creating increased gender equality. The significance of gender proportion is clear, but many other conditions contribute to the situation, including discourse and academic debate, informal culture and prestige. Kanter’s (1977) model of “critical mass” and subsequent research on the significance of “the sex ratio” (e.g., Guttentag & Secord, 1983) were often based on the fundamental idea that we “are” genders. That we essentially “do” gender (and that there can be more than two of them) was not part of the picture. Acker’s (1990) model of gender as something we *do*, and not just *are*, is, therefore, an essential part of the approach in our project – further elaborated in the chapters in part three of this book. Analyses of gender that bear in mind how gender “is done” or performed, is a step forward.

A case study of the meaning of gender within a specific research tradition (action research) illustrates this point. The study demonstrates how both discourse and demography played a role, contributing to a devaluation of gender perspectives in the early development of action research (Holter, 2008). Gradually, more women researchers had an impact on their own. Other Norwegian research (Bergh, 2008) also emphasizes the importance of demography or gender proportion – proportion plays an “active part” affecting voters’ choices or attitudes in elections.<sup>11</sup>

## Imbalance as a Women's Problem

Regardless of which eye is used, the three cyclopes all have their faces turned approximately in the same direction – towards women. Although the view “women's problem” is the only view that makes this highly explicit and clear, the other views also have a women-focused understanding of the problem. This also occurs within the systemic view, for instance, when one uses the new term “systemic”, or “system problem”, yet one still thinks of the problem in traditional terms as a “women's problem”. What is the consequence of this? What happens when the problem is perceived as a women's problem? What happens when men “disappear”?

The problem revolves around women, although in slightly different ways. It is *not a problem* because “the smart (women) withdraw”, as one of the interviewed men stated. It is almost to their benefit since academia is so competitive towards the top.

In many people's opinion, it is a women's problem, be it in the natural sciences or society in general including women's responsibility for children and family, and this is the main issue that needs to be changed.

According to some respondents, it is a systemic problem, the idea being primarily that the system needs to change the conditions for women through special facilitation.

The consequences of thinking about the imbalance as a women's problem rather than a common problem, including a male problem, are not small or trivial. As a tendency, gender discourse is pushed back to the idea of the woman as gendered and the man as normal and neutral. *She* means gendered. *He* means neutral, non-gendered. The male *presence* at the top is only described in terms of a female *absence* – which is obviously not the entire story.

The imbalance is a ratio, and in order to understand that, both sides must be taken into account.<sup>12</sup> Moreover gender must be interpreted as a condition, and a relation, not only as a difference. We have emphasized this by addressing men and masculinity (Chapter 2), and by developing “interactional” models of discrimination (Chapters 7 and 8).

By revolving around gender as female, or something that primarily has to do with women, the debate also establishes a focus and “burden of proof”. Focus is directed at women, and as a tendency, the consequence

is that women need to change and prove themselves worthy. Relatively speaking, men are “exempt” from concerns related to gender. This is reflected in our material, for instance, in the highly asymmetrical accumulation of disadvantages in the questionnaires. Thus the *burden of creating change*, or the cost of innovation, is shoved over to the “weak” group within the system. In the next part of the book, we describe how this pattern may be broken, in order to promote innovation and positive organizational change connected to gender equality and gender balance.

## Triview, Class and Ethnicity

Finally, in this discussion, we will take a closer look at how the Triview model may be linked to diversity and the intersectional perspective that was presented earlier in the book (Chapter 6). We will also address how the model is connected to the two other models described in Part 2, the Bøygen and Janus models.

The Triview model was developed based on material on gender, but in our opinion, it is also relevant in terms of other dimensions of social inequality, such as social class and ethnicity. The point of departure is the relation between the “normal” and the “deviant”, a *discursive power relation*, in which unequal distribution and imbalance are first ignored or explained away and later reluctantly admitted, pushing the burden of rectifying the problem onto the “deviant”. It is, in other words, recognized as a problem, yet responsibility is thrown back onto the exposed groups. It is “their” problem. Later on as things develop, the dominant perceptions may, at best, change towards an interpretation of the problem as a broader systemic problem that everyone must solve together.

Such changes, which are not only limited to gender, require that institutions address diversity and social inequality on a broad scale. Taking gender balance seriously can be a “door opener” for this. But it is also important to learn from the problems related to the “systemic perspective” in other types of diversity work. The term “system”, for example, is very broad and can easily become vague, and the idea that “everyone” should rectify it may, in practice, mean that little is done, and no one takes responsibility. “Everyone’s responsibility” may also mean “nobody’s job”

(NOU 2011: 18; NOU 2012: 15). However, such tendencies can be counteracted if the leadership assumes definitive responsibility, as we describe in part three of this book.

## Connections Between the Models: Bøygen, Janus and Triview

The Bøygen model (described in Chapter 7) is relevant with regard to other types of social inequality, not just gender. The model describes how devaluation and obstacles drain self-confidence and motivation, and contribute to the exposed group being shut out and/or withdrawing from the most intense competition. The main features of the model probably apply to all “special” groups subject to devaluation. Likewise, in the case of the Triview model, we believe that the model’s main features have general relevance – even if the concrete circumstances and modes of operation differ within each dimension of social inequality.

The Janus model (described in Chapter 8) is different and is probably more specific in regard to gender than the other two. Here, we are less certain of its general relevance. The background for this is that gender division is much more visible than division based on other dimensions such as class, ethnicity, sexuality, etc. In our view, it is broader, more prolonged, and more internalized within the higher education system and academic sector.<sup>13</sup> However, the Janus model can be helpful as one of the starting points for mapping other types of skewed selection. It is possible that similar structural mechanisms may be identified in other areas. Actual discrimination may be hidden behind division, first a friendly face and then a thank you and goodbye.<sup>14</sup>

How may we interpret the three models in connection to each other?

In light of discourse and culture, the Triview model may be seen as a continuation of Bøygen. Both models describe how the vulnerable group is not only overexposed to obstacles but also responsible for correcting them. The connection is clear.<sup>15</sup> The tendency to turn the imbalance into a minority problem or a women’s problem is probably strengthened by the tendency to think that “there is something wrong with me” as described in the Bøygen model.

But what about Janus and connections between discourse and structure? How are the different views in the Triview model localized with regard to the structural discrimination in the Janus model? These are topics for further research, and what follows here is just an outline.

As a point of departure, one could imagine that the three views (non-problem, women's problem, and systemic problem) were more or less evenly distributed along the diagonal in the Janus model (see Chapter 8). The significance of gender differentiation is high on the student level, whereas gender stratification becomes more visible on the higher levels. Also, employees with more experience in academia think more often in "systemic" ways about problems. But it is not that simple. The inadequate recruitment of girls and women to important natural science disciplines has long been recognized as a problem, regardless of whether it has to do with the women or with the system's mode of operation. And although higher-level employees often have a greater awareness of the system, criticism of the system is not necessarily greater here – it is often rather the opposite, since the notion of a "pure meritocracy" is strong, as we have demonstrated in previous chapters.<sup>16</sup>

Students often perceive gender differentiation as a natural result of inherent gender differences (see Chapter 5). In the middle-levels with young researchers, where competition is often fiercest, many "external" considerations come into play, such as family and care responsibilities. Here, men's careers often still have priority, without that necessarily being perceived as a systemic problem.

At the highest level, permanent academic employees in top positions, we find more awareness of the fact that the system, and how the university is organized, may have something to do with the issue. Although we also find more of a "story with a happy ending" emphasizing gender-neutral assessment in a well-functioning meritocracy. This may be linked to the hypothesis of accumulated effects, and the Janus model discussed previously.

## Weak System Criticism?

As previously described, the material in the FRONT project reveals a major gender gap in terms of experiences, with women experiencing

considerably more obstacles and disadvantages than men. One might expect this to be met with correspondingly strong system criticism. That is, however, only partially the case. The questionnaires document additional disadvantages for women, and many women talk about obstacles in the interviews as well, yet this is only marginally formulated as a critique of the system itself.

The three models can contribute to an understanding of these patterns. According to the Bøygen model, criticism tends to be individualized and turned inwards – “there is something wrong with *me*”. The Janus model predicts that parts of the unequal treatment will be hidden, with a split between two mechanisms each of which seem irreproachable. The Triview model contributes to this situation by pushing the discourse back towards a “women’s problem”.

## Conclusion

The Triview model describes how the problem of gender imbalance is perceived and discussed at the faculty. It is characterized by three typical views – the problem is small or non-existent, or it is a women’s problem, or a systemic problem. There are two persistent features, especially in the first two views. They both focus on women, and men are barely given any consideration. Moreover, the problems are only to a small degree understood as symptoms of ongoing gender discrimination. Everybody “wants” the best. Both the faculty and the university prioritize gender equality. As a male top researcher and leader expressed in one of the interviews, leaders farther down in the system are “expected” to take gender equality into account. The Triview model, especially the two first and most common views, reveal a situation characterized by relatively little knowledge about the actual situation. The FRONT material shows other features. We see that additional burdens for women are greater than first assumed (Chapter 5), that they constitute a coherent pattern of accumulated disadvantages (Chapter 7), and that a combination of gender difference and ranking creates a structural mechanism working in women’s disfavour (Chapter 8). The Triview model helps shed more light on discourse and debate relating to this. It demonstrates a division

in the understanding that easily *becomes* ideological and creates barriers and “defence mechanisms” against organizational change and gender equality. However, as a point of departure, this is perhaps only intended as a purely empirical assessment. In other words – it *was* probably not intended as an academic devaluation of women, yet it *is* mostly women who experience devaluation, linked to this discourse and its underlying attitudes.

We see clear signs that the Triview discourse, which most often still revolves around the non-problem and the women’s problem, contributes to *silence*. Women, more than men, find it difficult to raise their issues and viewpoints, and they feel more isolated professionally. Also, ethnic minorities report problems of academic devaluation connected to problems of raising their own issues (Chapter 6).

The Triview model identifies a pattern of views and a discourse that tend to create passivity and lack of real change, since – among other things – it still revolves mainly around women as a gender, yet it is not static. In order to understand the model’s relevance, and conditions in academia more generally, it is, as mentioned, important to emphasize how *recent* some of the most crucial changes have been. The model is a situational image of the “ongoing door opening into academia” with regard to women. In other words, this is a historical process that has not yet ended.

In the first part of this book, we asked whether imbalance has to do with *ideals* of gender equality that are not implemented in practice. The chapters in part two discuss *why* these ideals are not so simple to pursue, although there are many attempts to do so. The system that creates skewed selection – through Bøygen, Janus and Triview – hides its traces. Gender discrimination is often indirect. Understanding the imbalance problem becomes unilaterally focused, making women (or other exposed groups) the bearers of the problem, with an implicit task – to correct it.

What happens when they try, now armed with new systemic understanding and support within the organization, is the topic for the next part of the book.

## References

- Acker, J. (1990). Hierarchies, jobs, bodies: A theory of gendered organization. *Gender and Society*, 4(2), 131–158.
- Arentz-Hansen, C. (2018). *Kvinder med Begavelse for Lægevirksomhed. Norges første kvinnelige leger, og tiden de virket i*. Cappelen Damm.
- Bacchi, C. (2012). Introducing the ‘What’s the problem represented to be?’ approach. In A. Bletsas & C. Beasley (Eds.), *Engaging with Carol Bacchi: Strategic interventions and exchanges*. University of Adelaide Press.
- Bergh, J. (2008). *Gender attitudes, new politics and modernization. Four studies of continuity and change in modern democracies* [Doctoral dissertation]. Universitetet i Oslo.
- Clayton, J. (2011, 21 January). Fix the system, not the women. *Science*. <https://www.sciencemag.org/features/2011/01/fix-system-not-women>
- Danielsen, H., Larsen, E. & Owesen, I. W. (2013). *Norsk likestillingshistorie 1814–2013*. Fagbokforlaget.
- Database for statistikk om høgre utdanning [DBH]. (2021). Statistikk om høyere utdanning. <https://dbh.nsd.uib.no>
- Dockweiler, M., Holter, Ø. G. & Snickare, L. (2018). Making sense of downsizing: Exploring masculinities in the Norwegian oil industry. In A. Bolsø, S. H. B. Svendsen & S. Ø. Sørensen (Eds.), *Bodies, symbols and organizational practises: The gendered dynamics of power* (Ch. 8). Routledge. <https://doi.org/10.4324/9781315308951>
- Fagerberg, J., Mowery, D. C. & Nelson, R. R. (Eds.). (2004). *The Oxford handbook of innovation*. Oxford University Press.
- Fairclough, N. (2010). *Critical discourse analysis. The critical study of language*. Longman Applied Linguistics.
- Franzen, C. (2018). *Historien upprepar sig – kvinnor görs till kroppar*. Ledarskapsakademien, Stockholm. <http://www.ledarskapsakademi.se/historien-upprepar-sig---kvinnor-gors-till-kroppar?lang=en>
- Futuyma, D. J. (2009). *Evolution* (2<sup>nd</sup>. ed.). Sinauer Associates.
- Guttentag, M. & Secord, P. F. (1983). *Too many women? The sex ratio question*. Sage.
- Henningsen, I. & Liestøl, K. (2013). Likestilling i akademia – er eksellense for menn og grand Challenges for kvinner? *Tidsskrift for kjønnsforskning*, 37(3–4), 348–361.
- Hirdman, Y. (1990). *The gender system: Theoretical reflections on the social subordination of women*. Maktutredningen.
- Holter, Ø. G. (Ed.). (2007). *Män i rörelse. Jämställdhet, förändring och social innovation i Norden*. Gidlunds forlag.
- Holter, Ø. G. (2008). Gender and action research. In A. M. Berg & O. Eikeland (Red.), *Action research and organization theory* (Ch. 7). Peter Lang.



- Holter, Ø. G., Karlsen, B. & Salomon, R. (1998). *Omstillinger i arbeidslivet* (Written with T. N. Larsen & T. Sørhaug). Arbeidsforskningsinstituttet.
- Jalmert, L. (1984). *Den svenska mannen*. Tiden.
- Kanter, R. M. (1977). Some effects of proportions in group life. *American Journal of Sociology*, 82(5), 965–990.
- Komité for kjønnsbalanse og mangfold i forskning, (2021). *Rapport om likestillings- og mangfoldsarbeid i UH-sektoren*.
- Kitterød, R. & Halrynjo, S. (2017). Mindre spesialisering med fedrekvote? *Tidsskrift for samfunnsforskning*, 58(3), 311–333. <https://doi.org/10.18261/issn.1504-291X-2017-03-03>
- Kuhn, T. (1996). *The structure of scientific revolutions*. (3<sup>rd</sup>. ed.). University of Chicago Press. (Originally published 1968)
- Lyng, S. T. (2017). *Fra likestilt til nytradisjonell. En prosessorientert studie av arbeid-familietilpasninger blant norske foreldre i konkurranseintensive karrierejobber* [Doctoral dissertation, Universitetet i Oslo]. DUO vitenarkiv. <http://urn.nb.no/URN:NBN:no-58391>
- Messerschmidt, J. W. (2015). *Masculinities in the making – from the local to the global*. Rowman & Littlefield.
- Nickelsen, T. (2000, 13 December). Første kvinnelige professor i statsvitenskap. *Uniforum*. <https://www.uniforum.uio.no/nyheter/2000/12/foerste-kvinnelige-professor-i-statsvitenskap.html>
- NOU 2011: 18. (2011). *Struktur for likestilling*. Barne- og familiedepartementet. <https://www.regjeringen.no/no/dokumenter/nou-2011-18/id663064/>
- NOU 2012: 15. (2012). *Politikk for likestilling*. Barne- og familiedepartementet. <https://www.regjeringen.no/no/dokumenter/nou-2012-15/id699800/>
- Orning, S. (2016). *Veiledning, kjønn og omsorgsansvar. En studie av hvordan stipendiater og veiledere opplever kombinasjonen av omsorgsansvar og akademisk karriere*. Senter for tverrfaglig kjønnsforskning, Universitetet i Oslo.
- Possing, B. (2021). *Argumenter imod kvinder – fra demokratiets barndom til idag*. Strandberg publishing.
- Puchert, R., Gärtner, M. & Höyng, S. (Eds.). (2005). *Work changes gender – men and equality in the transition of labour forms*. Barbara Budrich Publishers.
- Rosenbeck, B. (2014). *Har videnskapen køn? Kvinder i forskning*. Museum Tusulanums forlag.
- Snickare, L. & Holter, Ø. G. (2018). When office life becomes life – a study of investment banking. In A. Bolsø, S. H. B. Svendsen & S. Ø. Sørensen (Eds.). (2017). *Bodies, symbols and organizational practises: The gendered dynamics of power* (pp. 145–166). Routledge.
- Snickare, L. & Linghag, S. (2012). *It could be an effect of the ‘the high-performing girl syndrome’: Doing gender in teaching and learning at a Swedish university of*

- technology* [Presentation]. 7th International Interdisciplinary Conference of Gender, Work and Organization.
- Solheim, J. (2002). Kjønn, kompetanse og hegemonisk makt. In A. L. Ellingsæter & J. Solheim (Eds.), *Den usynlige hånd? Makt-og demokratiutredningen* (pp. 110–140). Gyldendal Akademisk.
- Statistisk sentralbyrå. (1973). *NOS Undervisningsstatistikk, Avsluttet utdanning 1971–72*. [https://www.ssb.no/a/histstat/nos/nos\\_a576.pdf](https://www.ssb.no/a/histstat/nos/nos_a576.pdf)
- Teigen, M. (2014, 8 March). *Likestillingens vikeplikt* [Lecture]. Jobbes det egentlig systematisk med likestilling i utdanningssektoren? Seminar HIOA.
- Thun, C. (2019). Excellent and gender equal? Academic motherhood and ‘gender blindness’ in Norwegian academia. *Gender, Work and Organization*, 27(2), 166–180. <https://doi.org/10.1111/gwao.12368>
- Universitetet i Oslo. (2020). *Likestillingsrapport for 2020*. <https://www.uio.no/for-ansatte/arbeidsstotte/personal/likestillingsarbeid/rapporter/likestillingsrapport-2020.pdf>
- Vabø, A., Gunnes, H., Tømte, C., Bergene, A. C. & Egeland, C. (2012). *Kvinner og menns karriereløp i norsk forskning: En tilstandsrapport* (NIFU-rapport 2012:9). <https://www.nifu.no/publications/951891/>

## Notes

- 1 The cyclopes can be regarded as the natural scientists of their time – they were blacksmiths, a somewhat eerie and suspect occupation related to weapons, among other things. If we take the metaphor even further, one can imagine the non-problem as Thunder, the women’s problem as Lightning and the systemic problem as Light. This is very loose but not entirely misleading.
- 2 Such views are often based on an understanding of gender role differentiation as a “functional advantage” to society and/or families. For an updated overview of research on “comparative advantages” of gender division in families, see Kitterød & Halrynjo, 2017.
- 3 This analysis is based on the overall project material, including what women say about men, but with a relatively low number of direct interviews with men (see Appendix “Method”).
- 4 Artium equals the British General Certificate of Education and American High school diploma.
- 5 However, the proportion of female theology professors increased from 14 to 29 per cent in 2020 (UiO, 2020).
- 6 See e.g., Snickare & Linghag, 2012.
- 7 Or a “male norm” (Hirdman, 1990).
- 8 For a more detailed review of women’s gradual admittance into academia, see e.g., Possing, 2021, Danielsen et al., 2013 and also Chapter 7.
- 9 Kuhn’s analysis was, among other things, based on how the “wrong paradigm” could result in being burned at the stake in the later Middle Ages – early astronomy was denounced as the earth, not the sun, was considered the centre of the universe. The paradigm idea means that one can not only look at “pure facts” but also at how they are chosen, interpreted and presented. An evolutionary theorist notes: “Science is not a collection of facts, contrary to popular belief, but rather a *process* of acquiring understanding of natural phenomena. (...) Despite loose talk of ‘proving’ hypotheses (...) they cannot attain absolute guaranteed proof. (...) Rather, the hypothesis that currently best explains the data is *provisionally* accepted (Futuyma, 2009, p. 612).

- 10 This argument is based on experiences with gender equality work in Norway more generally (NOU 2011: 18; NOU 2012: 15, and in academia, cf. Committee for Gender Balance and Diversity in Research, 2021).
- 11 Bergh emphasizes that if you look at the development over time, it becomes clear that changes begin to occur around the same time as the feminist movement grows stronger. Advocates for gender equality fought within political parties to nominate women. Only after women are elected does general opinion begin to change. At the same time, the majority change their view when they start to see the results of what the minority has accomplished. The significance of gender proportions was also part of the Norwegian academic debate on “shrinking institutions” (with, e.g., Harriet Holter and Hege Skjeie), which we can only mention here.
- 12 Both – or more precisely – all genders must be taken into account. Here, we primarily note the absence of analyses of men.
- 13 This applies even though we also see tendencies of ethnic specialization, such as more non-ethnic Norwegians in vocational education, including technology, and few in the humanities. Selection with regard to social class is also relevant, although we cannot address that here.
- 14 We have examples of discursive power in relation to ethnic minorities and groups from a lower social class background in the FRONT material, but we do not have systematic data on this. For example, a minority might be seen as “exotic” but also “threatening”.
- 15 That is, the connection at the model level. We do not claim that it is empirically proven, although it is substantiated in our material.
- 16 Here we also need to consider that the system is strongly characterized by selection, and thus also by drop-out upwards in position levels. Unfortunately, we do not have systematic data on perceptions among those who have dropped out of the gradually more challenging competition towards the top. However, based on the indications we do have, they are characterized by both critical and personal elements (cf. “inner doubt” as a component in the Boygen model).

