## Part Two

## Models and Interpretations

The purpose of the analyzes presented in the book's first part was to understand attitudes to gender and equality among students and employees at the Faculty of Mathematics and Natural Sciences in the University of Oslo, as well as the significance of gender in the organization. The chapters document a considerable divide between the institution's meritocratic ideals and students' and employees' actual experiences, particularly in relation to gender. Female students and employees report problems and disadvantages more often than their male colleagues. This creates a statistical pattern reflected in a number of variables such as career, work environment and academic culture. The "gender gap" remains also when controlling other variables relating to career, such as position level, age, social background and ethnicity (see Chapter 6). This pattern is particularly visible in the statistics gathered from the questionnaires. However, the interview material also demonstrates a significant element of skewed selection and uneven distribution of disadvantages among women and men in the organization.

These results came somewhat as a surprise. We did not anticipate them. How, then, should this be interpreted? In the book's second part, we use the findings from the first part as a point of departure, and examine how we may connect these results to models attempting to explain both what causes the gender gap in the organization, and how to understand the problems related to this gap.

The primary purpose of the three models, the Bøygen model (sometimes spelled the Boyg in English), the Janus model and the Triview model, is to shed light on various factors that affect gender imbalance. The Bøygen model shows how accumulated disadvantages for women influence their career patterns. The Janus model explains why women experience obstacles and disadvantages through a blend of gender differentiation and gender stratification. Lastly, the Triview model describes various perceptions of gender imbalance and related topics at the faculty, and how these affect academic culture and career development.

The three models may be seen in connection with each other, but they represent different perspectives. The Bøygen model has a partly social psychological perspective, whereas the Janus model focuses on social structures or institutional processes. The Triview model, on the other hand, deals with culture and discourse within the faculty, that is various prevailing views on gender and gender balance.

The models' theoretical background involves theories on gender and equality within various disciplines, including theories on gender role structures, gender and power, social inequality, organization theory, and discourse theory. This is described in more detail in the various chapters. We wanted to avoid "locking" the models to one specific theoretical tradition. Instead, the models are made to be interpreted and developed further based on various disciplines and academic traditions. In other words, they are intended as a "meeting place". Consequently, the models do not require taking a stance in the debate on nature and culture in relation to gender, what is most important, and so on. They require only an agreement that gender includes essential cultural and social elements. Our strategy was to develop models that may be applied across disciplines, rather than polarizing the debate, in which case gender becomes either "purely social", an exclusively cultural construction – or "primarily biological".

## **Development of the Models**

The three models were developed as part of the FRONT project to obtain an overview of the comprehensive data material, and further develop academic discourse both within the project and at the faculty. They are, in other words, unique to the project, although they are in part based upon models and findings from other research, as referred to in the relevant chapters. The intention behind the models is to describe dominant patterns found in the material and how these patterns may be connected. Each model has a metaphor, a keyword, characterizing the process or the pattern it is meant to describe – Bøygen, Janus and Triview. The models are intended as working tools to better understand the results, rather than as a final conclusion.

As part of the project, the three models were presented and debated at seminars for employees at the faculty. The intended purpose was that employees would assess the models and their validity themselves, and generate a dialogue between the project's researchers and its participants. For instance, the Bøygen model shows how external resistance may cause inner doubt on the individual level. Is this a relevant perspective? Are there other types of responses as well? The Janus model assumes that women (and men) face a combination of horizontal and vertical discrimination – is this a helpful perspective? Is it true, or not, that the centre of gravity shifts somewhere during the course of a life and a career, from horizontal differentiation to a more vertical and apparently genderneutral ranking?

The Triview model describes how various views on gender balance lead to different types of both strategies of change and resistance to change. However, is it true that the perception of a lack of gender balance is characterized by three principal views, namely that it is not a problem, that it is a women's problem, or that it is a systemic problem? These were questions that each individual could explore within their own research community or academic culture. The models were then further developed based on discussions at the faculty. The Janus model, for instance, was first introduced in a simple, introductory form before it was presented again in an empirically revised form. This approach functioned as food for thought and created curiosity about the FRONT project's initiatives, such as management development and PhD supervisor seminars (see part three of the book). The project's action research has shown that these models are "useful to think with", particularly when formulated openly.

## **About the Chapters**

Each chapter presents a model based on our analysis of the empirical results in the first part, in light of other relevant research and theory.

Chapter 7 on the Bøygen model summarizes research on the gender gap (from Chapter 5) in view of international research. Moreover, the chapter describes the hypothesis of the accumulation of disadvantages, and sketches a "Bøygen model" from this, in which several obstacles or disadvantages contribute to skewed selection. Bøygen creates inner doubt within the individual, who faces an invisible adversary.

Chapter 8 on the Janus model addresses the structural conditions contributing to Bøygen's significance. It describes how equal discrimination based on gender exists alongside an indirect gender ranking. What may be regarded as "different" early in a career, in practice often means "inferior" later. The accumulation of disadvantages for vulnerable groups – in this case women – is not only about random incidents. They follow a dominant pattern from legitimate differentiation on a lower level to concealed and illegitimate gender ranking on a higher level. The model demonstrates the impact of gender role structures, even at a faculty where most people want gender equality.

Chapter 9, on the Triview model, addresses discourse and culture viewed from the three most common perspectives on gender balance reflected in the FRONT material: that the imbalance is not a problem or merely a small problem, that it is a women's problem, or that it must be regarded as a systemic problem. Divided discourse on gender balance is linked to academic culture and organizational sensemaking. The chapter also includes a summary of connections between the three models.