Chapter 1

A Reflexive Approach to Structural Change

Angela Wroblewski and Rachel Palmén

Abstract

Gender equality plans (GEPs) are currently the preferred approach to initiate structural change towards gender equality in research organisations. In order to achieve structural change, GEPs have to be more than just a formally adopted institutional policy. Effective GEPs lead to a transformation of gendered practices and thus to structural change. This chapter presents the innovative approach developed for an H2020 structural change project and its theoretical background. We argue that due to the dual logic, which characterises academic organisations, the organisational logic and the academic logic, change is a complex endeavour. To deal with this complexity, one of the main functions of a GEP is to provide space and initiate reflexivity at an individual as well as at an institutional level. A theory of change approach supports reflexivity in all stages of a GEP as it ensures that basic assumptions of the institutional change process are questioned and reflected on by the different stakeholder groups involved in the implementation.

Keywords: Gender equality in research and innovation; institutional transformation; gender equality plan; structural change; reflexivity; resistance; theory of change

Introduction

Academia is characterised by persistent gender inequalities like the under-representation of women in top positions (management or full professoriate). In several European countries, academia is divided into male-dominated and female-dominated subjects. Furthermore, the gender dimension in research and innovation (R&I) is often neglected, which leads to gender-biased results or products. To tackle these inequalities, European (Council of the European Union, 2015; European Research Area and Innovation Council (ERAC), 2015) as well as national gender equality policies address a multidimensional gender equality objective that aims at (1) equal participation of women and men in all fields and hierarchical levels, (2) abolishing barriers for women's careers and (3) integrating the gender dimension into research and teaching. To achieve these objectives, research-performing organisations (RPOs) need to commit themselves to an institutional change process that aims at adapting gendered practices and structures (European Commission (EC), 2012).

In Europe, the use of gender equality plans (GEPs) is currently the preferred method to promote gender equality through structural change (EC, 2012). Over 200 organisations have been supported in developing GEPs through 30 structural change projects funded in the 7th Framework Programme and Horizon 2020. In the upcoming Horizon Europe programme, GEPs will become an eligibility criterion for applicants.

Numerous institutions throughout Europe have therefore developed and implemented GEPs in order to initiate structural change. However, gender inequalities still persist. Research explains this paradox in several ways: commitment to gender equality remains merely rhetoric, support by top management is lacking (EC, 2012), problems with the implementation process (Bergqvist, Bjarnegård, & Zetterberg, 2013; Palmén & Kalpazidou Schmidt, 2019;) or a lack of gender competence (Wroblewski, 2016). These reasons for the ineffective implementation of gender equality policies share an underlying common aspect. RPOs are embedded in two conflicting institutional logics – the academic and the organisational logic. Successful GEPs have to address both these logics.

The aim of a GEP is to initiate institutional transformation through change in gendered organisational practices. The approach developed in the context of the TARGET project is based on feminist institutionalism (Kenny, 2014; Krook & Mackay, 2011; Mackay, Kenny, & Chappell, 2010) as well as on practice theory (Schatzki, 1996, 2003) as a conceptual framework. This chapter describes the approach that supports research organisations in developing and implementing a targeted and reflexive GEP. In the following, we describe the theoretical background to the approach, which defines reflexivity as a precondition to change gendered practices. We argue that due in part to the dual logic which characterises academic organisations, change is a complex endeavour. Based on this argument, we outline our concept of reflexivity, which links it at the individual and institutional levels. We argue that one of the main functions of a GEP is to provide space for and to initiate reflexivity at individual as well as at institutional level. A theory of change approach supports reflexivity in all stages of GEP development and

implementation and can provide a space to facilitate an organisational reflexive process for GEP implementation. In the concluding section, we discuss how taking a community of practice (CoP) approach can (a) provide an arena where the dual academic and organisational logics (and subsequent practices) can be mediated, (b) enable a space where gender competence and gender expertise can be combined and reconfigured and (c) provide a potential arena where resistance to gender equality interventions can be successfully tackled (Verloo, 2018).

Universities as Gendered Organisations Involving Dual Logics

Universities can be described as highly gendered organisations (Acker, 1990). Structural barriers for women are a consequence of practices that developed at a time when women were explicitly excluded from universities. These practices are oriented towards scientific merit and define success on the basis of a typical male career. Accordingly, their point of reference is an excellent scientist who is free of any obligations outside university and able to devote his/her entire life to science (see also Max Weber's essay on science as a profession; Weber, 1919). This ideal not only dominates the perception of excellence and related selection criteria but also defines the practices and procedures that constitute this profession. These practices rest on the assumption that good science is gender neutral, although women are clearly less likely to be able to fulfil the requirements. It was not until a significant number of women entered this male-dominated domain that practices which had previously been taken for granted were exposed as gendered in their effects (e.g. European Commission (EC), 2004; van den Brink, 2010).

Gender equality polices in universities tackle such gendered practices by formulating regulations that increase transparency in procedures and reduce the relevance of informal networks on selection decisions. These attempts follow an organisational logic but do not focus on the academic logic of universities.

Institutional logics are socially constructed sets of material practices, assumptions, values and beliefs that shape cognition and behaviour (Besharaov & Smith, 2014). Each distinct institutional logic provides a coherent set of organising principles that define the 'rules of the game'. Universities are prototypical examples of hybrid organisations (Jongbloed, 2015), which are based on multiple institutional logics. As a consequence, they are confronted with a multitude of logics and face the challenges of balancing different missions and dealing with seemingly incompatible demands – a phenomenon that leads to a hybridisation of universities. Jongbloed (2015) argues that in the context of neoliberal reforms the economic logic gains significance when universities become entrepreneurial universities.

Bettina Heintz (2018) identifies two distinct logics that characterise a university in her discussion of the implementation of gender equality policies: the university as an organisation and the university as part of the scientific field. Both functional systems of a university are based on specific logics in which gender

plays a different role. While the relevance of gender is denied in the scientific field, it might be accepted in the organisational logic (e.g. when positive action measures are taken to promote qualified women). These two different logics also entail different power structures. While decision-making powers regarding strategy and resources are exercised by top management in a research organisation (e.g. the rectorate in the case of a university), decision-making in academic contexts is assigned to the highest scientific positions (e.g. full professors). These power structures exist in parallel and remain in most cases unconnected. If they are not coordinated and work against each other, a change in gendered practices is unlikely to happen. Referring to the concept of stealth power (O'Connor et al., 2019; Webb, 2008;), we argue that it is necessary to include not only top management in GEP development and implementation but also stakeholders representing the academic logic who are able to resist change.

Research has identified how gender equality initiatives and policies in R&I often fail during the implementation phase (Palmén & Kalpazidou Schmidt, 2019), thereby resulting in an absence of deep-seated change and the failure to effectively challenge gender norms (Powell, Ah-King, & Hussénius, 2018). Resistance in the implementation phase has been identified as one of the main reasons why gender equality initiatives in R&I may fail to create and sustain effective change. We argue that resistance is more pronounced when the academic logic is addressed especially when gender equality is seen as a threat to excellence. But what is resistance? In the context of the implementation of gender mainstreaming in European Union (EU) research policy, Mergaert and Lombardo (2014, p. 3) describe it as follows:

> Resistance generally means the refusal to accept or comply with something….it specifically means opposition to the change that gender mainstreaming promotes (Benschop & Verloo, 2011; Lombardo & Mergaert, 2013). Resistance is thus meant here as a phenomenon aiming to preserve the status quo rather than question a particular dominant social order.

Resistance to change can be intentional and 'explicit' or subtle and 'implicit'. The latter is often difficult to detect as it can be deeply embedded and ingrained within the gendered organisational structures and stem from gender-blind organisational bureaucracies, processes and procedures (Acker, 1990). Resistance can therefore take the form of 'non-action', thereby reinforcing the status quo simply by doing nothing to further gender equality. It may manifest itself in a failure to allocate sufficient resources to enable real change, in other issues being deemed more important and gender equality slipping down the list of priorities, disappearing altogether from the institutional agenda or being trivialised as an unimportant topic (Verge, Ferrer-Fons & González, 2018).

Hence, the coexistence of these two different logics in RPO practices generates the necessity to address them both simultaneously when developing and implementing GEPs and tackling resistance. In concrete terms, it requires involving all relevant stakeholders (including top management and full professors) in the

process (Pellert, 1999). The exact configuration and materialisation of these two logics is also mediated by the myriad of contexts within which the institution is embedded. How these logics are combined in GEP implementation and the exact composition of the stakeholders involved in the process will vary according to the context.

Reflexivity

As far as the concept of gendered organisations (Acker, 1990) is concerned, there is no doubt that academic practices contain a gender bias, especially those related to excellence (Bell Crawford & Mills, 2011). Despite concrete interventions to tackle this bias, sustainable change remains the exception. Gender bias can be a result of a lack of procedural guidelines, for example, when there are no standardised procedures in place or 'old boys networks' play an important role in appointment procedures (Pasero & Priddat, 2003; van den Brink, 2010). However, even in cases where standardised guidelines do exist, gender bias can still occur (Wroblewski, 2015).

Theodore Schatzki's approach enables the deconstruction of complex university practices. Schatzki's (1996, 2003) concept of social practices allows us to take a differentiated perspective on complex practices such as recruitment practices in academia. According to Schatzki (1996, p. 89), practices are defined as a 'nexus of doings and sayings', which are linked in a certain way. With regard to these links, he (2003, pp. 191–192) describes practices as

> […] organized human activities. […] Each is an open-ended set of actions linked by pools of understandings (pertaining to action), a collection of rules (explicit formulations) and a 'teleoaffective structure' (a range of normativized, hierarchically ordered ends, projects, and tasks, to varying degrees allied with normativized emotions).

This requires that actors involved in practices know the regulations to be obeyed, accept them and are committed to following them. Bearing the dual logics of university practices in mind, this requires that members of appointment committees are committed to regulations both as members of the organisation and as representatives of their discipline (academic logic).

We assume that relevant practices have to contain all three of Schatzki's components (understanding, rules and teleoaffective structure) for both logics. GEPs often include guidelines for procedures that are aimed at increasing the share of women in top positions or decision-making bodies. A study focusing on guidelines for appointment procedures at Austrian universities showed that stakeholders involved in such procedures are familiar with and adhere to these regulations (Wroblewski, 2015). For instance, appointments have to be publicly advertised, and appointment committees have to actively search for qualified women in the event that women are underrepresented among applicants. This active search is conducted by sending the advertisement to the mailing lists of relevant women's

associations. However, such an implementation of gender equality regulations can also be interpreted as a 'tick box exercise'. Furthermore, procedural regulations leave the core element of appointment procedures – the assessment of candidates and related criteria – in a black box. Regulations like the one described earlier do not necessarily accommodate the selection of the best-qualified candidate from a disciplinary perspective. It becomes evident that the procedural guidelines refer to the university as an organisation, while the assessment of candidates to find the best-qualified person refers to the academic logic. When procedural guidelines are known and followed, the teleoaffective structure is not necessarily apparent. Even if stakeholders know the guidelines and follow the regulations, this does not mean that they support the underlying goal (gender equality) or will act in a way that ensures the expected outcome is achieved. It is also possible to interpret the guideline as a bureaucratic requirement that has to be followed in the organisational logic of the RPO. And, most importantly, the regulation does not address the academic logic because the criteria that identify the best-qualified candidate are defined by the discipline.

We assume that reflexivity is crucial to addressing the teleoaffective structure in both logics and linking the two different logics. The call for reflexivity is directed at both the individual and the institutional levels. Martin (2003) deals with reflexivity at the individual level and argues that a lack of reflection and reflexivity is a main explanation for the persistence of traditional – and seemingly gender neutral – practices. She defines reflexivity as 'a special kind of awareness. To be reflexive means to meditate or engage in careful consideration; it also means to ruminate, deliberate, cogitate, study, or think carefully about something' (Martin, 2003, p. 356). She argues that changing gendered practices needs reflexivity, intention and awareness. This includes the consideration of likely gendered effects of actions before they are set (Martin, 2006).

Elisabeth Prügl (2016) highlights how a 'reflexive attitude can help foster democratic deliberation in a context of bureaucratic rationality by self-consciously and critically interrogating both organisational processes and epistemic commitments'. In doing so, she calls for a consideration of both logics and for a combination of individual and institutional reflexivity. According to Manfred Moldaschl (2010), institutional reflexivity refers to organisational rules and practices that include incentives for organisational actors to question institutional routines, criticise established procedures, enable new ideas to thrive and thus overcome barriers to progress and innovation. Hallensleben, Wörlen, and Moldaschl (2015, p. 191) define institutional reflexivity as an analytical concept that means evaluating management practices according to the extent

> to which they generally, i.e., depending on opportunity, promote absorptive capacity for knowledge that may contribute to the revision, e.g., innovation of previous perspectives and practices. Organizational bodies of rules or practices that do precisely that can therefore be characterized as reflexive institutions or as institutionalized reflexivity.

Thus, institutional reflexivity defines the innovation capability of an organisation.

> On an institutional level, reflexivity can be observed in procedures and management tools that (might) contribute to the revision of previous rules, models, assumptions and practices, e.g., by analysing the consequences of one's own action, contentious criticism of unquestioned routines, or sensitising decision makers to path-dependent processes. (Hallensleben et al., 2015, p. 192)

Hence, the application of institutional reflexivity tools assumes reflexivity at individual level.

Sabine Kuhlmann and Joerg Bogumil (2018) apply the concept of institutional reflexivity to public sector innovation and organisational learning. They assume that organisational innovation needs reflexivity at the individual level even if it is not explicitly referred to as such.

> Innovation capacity thus refers to the ability and willingness of organizational actors to systematically generate and internalize knowledge aimed at revising or changing existing organizational rules and routines. […] Reflexive institutions sharpen the organizational actors' awareness about their institutional embeddedness, their standard-operating procedures and the consequences of their actions. (Kuhlmann & Bogumil, 2018, p. 545)

Kuhlmann and Bogumil (2018) argue that performance management and benchmarking make administrative actors 'reflect' on their activities, functioning and performance.

In the following, we will illustrate these theoretical considerations using examples of individual and institutional reflexivity in academia.[1] The first example is taken from an interview on the situation of women in appointment procedures for full professorships with a male professor in a STEM field. The professor began the interview by stating that he was not a gender expert. When asked about the challenges women face in appointment procedures, he mentioned gender-specific differences in the teaching experience of candidates. While men and women had the same general level of teaching experience, fewer women had experience with 'big lectures' like introductory or basic courses. He concluded that professors or mentors must tend to assign women to specialised courses to support them and provide them with their own 'niche'. However, he realised that this also put them at a disadvantage in appointment procedures for full professors. After recognising this, he altered the traditional practice in his department and now changes the person assigned to introductory courses each term – switching alternately between male and female assistant professors. He insists on this, even though his assistants would prefer otherwise (for synergy effects). This example demonstrates

---

[1] The examples are taken from Wroblewski (2015).

reflexivity on gendered practices. Even though he did not class himself as a gender expert, this professor showed a great deal of gender competence as he had recognised a structural difference that affected the future career prospects of men and women, assumed responsibility, developed an alternative practice, implemented the alternative (changing the established practice in the process) and dealt with the resistance from his assistants.

The second example came up in an interview with a female history professor. The central theme in this interview was that there was problem with women's representation in the history discipline. Female representation among students is about 80 percent, and about 50 percent of staff at all levels are women. When asked where relevant gender differences exist in her subject and how they should be dealt with, the professor described the following situation: She had recognised at one stage that the share of male participants in one of her seminars was above average and spent some time figuring out why this situation had occurred. It turned out that the title of the seminar was formulated in a way that inspired more interest among male than female students. Having recognised this, she started to 'play' with different seminar titles to ensure they addressed men and women to an equal extent. Similar to the previous example, this professor had recognised a gender difference and analysed its origins. She felt responsible for tackling this gender difference and developed and implemented an alternative approach. In her case, this alternative did not meet with any resistance.

These examples were found in universities where gender equality objectives are integrated into steering instruments and developments are discussed between the rectorate and faculties based on a related monitoring. For example, in one university, parts of the budget are distributed between faculties depending on the extent to which gender equality objectives have been achieved. The annual reflection on the developments regarding gender equality and discussion of reasons for success and failure lead to a climate where all faculty members know about gender equality objectives and their relevance and are aware that they are expected to contribute to their achievement. This occurred because the discussion of monitoring results and the related reflection took place not only between the rectorate and the deans but also within the faculties.

The earlier examples show that individual and institutional reflexivities are mutually dependent. Tools supporting institutional reflexivity require relevant stakeholders to be gender competent in order to be able to reflect on practices from a gender equality point of view. Based on the concept of competence used in pedagogy and the gender mainstreaming approach, we define gender competence as a minimum requirement for all actors (see also BMBWF (Federal Ministry of Education, Science and Research), 2018). Gender competence requires recognition of the relevance of gender attributes for one's own field of work and responsibility. This recognition is combined with the willingness and ability to deal with these gender attributes in one's own work context – if necessary with the support of gender experts. Gender competence also requires the ability to act on the basis of this reflection and to set actions that tackle these gender attributes and their gendered consequences. Hence, gender competence requires constant reflection on the gender dimension in one's own field of work and is a basic competence

that all stakeholders should have. Consequently, structural change also requires that university teachers, researchers, administrative staff, managers and students are all gender competent.

Theory of Change

A theory of change approach enables individual and institutional reflexivity to be integrated into the GEP process. This has to be tailored to the context and needs of the specific institution and may focus on the development of the GEP itself or on specific interventions or measures within the GEP.

According to Isabel Vogel (2012, p. 3), a theory of change is 'an outcomes-based approach which applies critical thinking to the design, implementation and evaluation of initiatives and programmes intended to support change in their contexts'. When developing a theory of change, an institutional audit may first be carried out to map the relevant context for the initiative (including the social, political and environmental conditions), the current state of the problem that the intervention aims to tackle (e.g. human resources data, staff perceptions, existence of gender equality policies) as well as the relevant institutional actors and stakeholders. Based on this audit, the long-term change that the initiative seeks to foster is defined though the development of visions, objectives and targets. Actions, expected outcomes and impacts are then specified. The theory of change approach requires the elaboration of a process or sequence of change that spells out the path to the desired long-term outcome as well as explicitly formulated assumptions about how this change might be brought about. This includes a check of whether the planned activities and the resources provided are appropriate and sufficient to initiate the expected change in the given context. Usually, the results of this process are summarised in a narrative account and a graphical representation.

There are two main elements to a theory of change. First, it can be seen as a tool or methodology that explicitly maps out the logical sequence of an initiative from its activities to the change to which it contributes (Vogel, 2012, p. 9). Second, it encompasses a deeper reflexive process where assumptions of change linked to the programme are made explicit. Mayne and Johnson (2015, p. 419f) state that theories of change

> set out the framework for telling a credible performance story of an intervention. As such, a verified or partially verified theory of change can be used as the basis for reporting on what contribution the intervention has made.

The process of developing the theory of change therefore includes various stakeholders (e.g., programme managers need to be asked to validate, or at least confirm, that developed configurations accurately explain impact, while practitioners must be consulted on assumptions linked to the implementation process).

Articulating assumptions constitutes the main part of the development of a theory of change. Assumptions are those premises upon which programme

interventions are implicitly based yet have not been proven by evidence. Using evidence to identify, check and challenge these key assumptions and map the implicit and explicit linkages of the intervention (input/resource, throughput, output, outcome/result, impact and context) also forms part of the development process (Vogel, 2012, p. 40). This approach depicts the specific components and context of each programme or initiative and its interaction with contextual variables. Funnell and Rogers (2011) stress that each programme is unique and that its development process needs to respond to the local and contextual conditions. As a consequence, each theory of change is also unique. Vogel (2012) emphasises that the quality of a theory of change process rests on 'making assumptions explicit' and making strategic thinking realistic and transparent. In this process, critical thinking is crosschecked with evidence from research (qualitative and quantitative) and wider learning that brings other analytical perspectives drawn from the contextual knowledge of stakeholders, partners and beneficiaries into play.

The theory of change – and sometimes the simplified version of the logic model[2] (W.K. Kellogg Foundation, 2004) – may also represent the starting point for the evaluation strategy (Brisolara, Seigart, & SenGupta, 2014; Funnel & Rogers, 2011; Rogers, 2008; Rogers, Petrosino, Huebner, & Hasci, 2000). This is in keeping with a growing line of research that values the contributions, the theory of change can make to evaluating interventions (Vogel, 2012). Developing a theory of change is an iterative process that requires time to revisit, validate and refine initial configurations.

The TARGET Approach to GEP Development and Implementation

The approach to GEP development used in the TARGET project refers to the concepts discussed earlier: dual logics of academic organisations, reflexivity and theory of change. The TARGET GEP development and implementation process follows a complete policy cycle (May & Wildavsky, 1978). It starts with an empirical analysis of the status quo regarding gender equality and the institutional context (audit). Based on the results of this audit, gender equality priorities and objectives are formulated. Concrete measures to pursue these objectives are then developed, implemented and monitored. Ideally, the process is completed by an external evaluation of the GEP. Based on the monitoring and an evaluation, the GEP or individual measures are adapted as required.

Given the dual logic explained earlier, the GEP process is based on the competences and expertise needed for structural change as well as the different types of stakeholders and the knowledge they bring to the institutional change process. Gender experts (academics and scholars) may have academic knowledge about gender biases but lack more practical knowledge about how this is embedded in

---

[2]A logic model is a graphic depiction that sets out the relationships and assumptions between the resources and activities of a policy or programme and the changes it expects to deliver (outputs, outcomes).
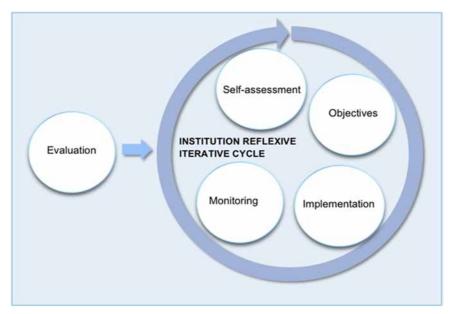
Fig. 1.1.   Cycle of GEP Development and Implementation.
Source: Author's representation

organisational processes and procedures (such as recruitment processes). Institutional stakeholders may have gender competence in their specific fields but do not necessarily have gender expertise, which calls for a collaboration with gender experts – for example, an information systems manager may have extensive knowledge of developing a sex-disaggregated information system but no knowledge of how to expand this information beyond binary gender notions. Therefore, he needs input from gender experts to develop non-binary categories. The different types of stakeholders and the different knowledge they intuitively bring to the table may operate on different levels and be difficult to reconcile: 'practitioners frequently feel that academically based approaches might not be realistic or practical, whereas academics tend to think that many practitioners are in danger of becoming technocratic and banal' (Bustelo, Ferguson, & Forest, 2016, p. 13). How these institutional change processes harness, reconfigure and remix these different types of expertise and competences is key to their success. Therefore, a central element in the TARGET approach is the establishment of a CoP, which provides a forum to build up gender competence and supports both individual and institutional reflexivity.

The notion of the CoP was coined by Wenger (1998) and is composed of three main elements: domain, community and practice. The domain refers to a 'shared domain of interest' and implies commitment to this domain as well as a shared competence or 'knowledge area' (in our case, the implementation of a GEP). The CoP is made up of those people who come together to pursue their interest in the domain, interact with each other through activities, discussions and meetings and engage in mutual learning. In our case, the CoP is the group of people who

come together to act as change agents (Callerstig, 2014; Meyerson & Tompkins, 2007) and support GEP development and implementation. The practice involves creating a shared repertoire of resources (such as stories, cases and tools) that helps practitioners to improve their practice (Wenger-Trayner & Wenger-Trayner, 2015). Bustelo et al. (2016) suggest that CoPs are especially suited to the case of gender knowledge and emphasise the synergies between this approach and the life-long learning process that draws on individual reflexivity – and upon which solid gender knowledge relies. The TARGET approach also aims at strengthening institutional reflexivity by linking the different stages of GEP development to discussions in the CoP. Empirical evidence like audit or monitoring results provide the basis for institutional reflexivity.

In the TARGET project, for example, the CoPs discussed the initial GEPs, which represented a first attempt to articulate the desired change(s). The initial GEPs stated the objectives, actions, targets and timeframe. The inclusion of the 'targets' meant that the GEPs articulated a first vision for the 'change' project, what the institution wanted to achieve. Since approval of the GEP required a discussion with relevant stakeholders (including top and middle management), this process also led to an agreement and common understanding of gender equality goals and interventions within the institution. This could be interpreted as a contribution to an internal gender equality discourse that supports reflexivity at both the individual and institutional levels. The subsequent monitoring stage continued to build on the theory of change approach. The indicators defined for the monitoring of GEP implementation focused on the expected outcome (e.g. share of women among newly appointed professors) and on the input level (e.g. number of participants in gender bias training activities or share of female applicants).

The types of CoPs established throughout the different implementing institutions in the TARGET project varied greatly. The majority developed a CoP that included different functional responsibilities and hierarchical levels yet was limited by institutional boundaries. However, some established a CoP that went beyond their institutional realm and included a wider range of stakeholders, including external collaborators. One implementing body, which is itself already a network of various institutions, introduced a CoP that specifically brought together people in its member institutions who were interested in gender equality issues (see also Palmén & Caprile as well as Zabaniotou et al. in this volume).

The TARGET project assumed that using a CoP approach would support GEP development and implementation within an institution for a whole range of reasons. It helps, for instance, to ensure that structural change does not depend on one person (e.g. a gender equality officer) and that the GEP becomes embedded in organisational processes and procedures, thereby making the whole process more sustainable. Discussions within the CoP also contribute to an institutional gender equality discourse by supporting a common understanding of gender equality issues and formulating common gender equality objectives. Beyond the formal adoption of a GEP, achieving actual change requires increased willingness and capacity on the part of the organisation to systematically identify, reflect on and address common gender problems. Hence, CoPs are also a vehicle for increasing

gender competence, that is, a recognition of gender attributes for one's own field of work and responsibility as well the ability to deal 'competently' with these gender attributes within one's own work context. While experience shows that GEP implementation with sustainable outcomes is generally difficult to achieve, adopting a CoP approach to implementing structural change can improve the effectiveness and sustainability of GEPs by embedding gender competences throughout institutional practices.

In the following section, we will examine our assumptions on how CoPs can create a space in which different logics, demands and practices can be mediated. More specifically, we will look at how CoPs can bring together gender competence development and gender expertise as well as how a CoP approach can be an effective strategy to pre-empt, or at least tackle, resistance. Since power relations play an intrinsic role in each of these processes, we will also reflect briefly on how power relations run through each of these themes.

CoPs can provide a space in which the different demands and practices related to the distinct organisational and academic logics can be mediated. In an ideal scenario, CoPs in the pursuit of implementing a GEP engage different functional roles in the institution (gender equality practitioners, researchers, academics, administrators, human resource managers, information system designers). They therefore transcend institutional hierarchies and functional boundaries, providing an arena where diverse actors and agendas with shared visions and aims can come together on a continued basis. In this way, CoPs provide an attractive approach for GEP implementation, which takes the complex reality of academic organisations into account and creates a forum in which the tensions generated by dual organisational and academic logics and the subsequent processes and procedures can be mediated. For example, a CoP might work on a less-gendered bias recruitment process by bringing together deans – who represent the academic logic yet can have hiring power – with members of the human resources department – who represent the organisational logic – to redefine recruitment processes (e.g. by training search committees, defining the wording for job adverts and pushing for transparent hiring and selection processes). This example is, however, based on a CoP approach of engaged stakeholders committed to change. Of course, a CoP approach that stresses peer-to-peer learning on an equal basis regardless of institutional hierarchical power relations (and how these are embedded into practice) may idealise the willingness of the dean to surrender his/her 'academic freedom' to choose the 'excellent' candidate while enthusiastically engaging in cumbersome processes for gender proofing recruitment. Nevertheless, it is important to stress how CoPs can provide a shared space in which different stakeholders come together to learn about each other's practices and reflect on and improve their own practice.

CoPs for GEP implementation also provide a forum to bring together gender competence and gender expertise. Literature has shown that *how* gender expertise is incorporated into gender equality interventions has a crucial effect on their outcomes – with better outcomes for those with more centrally placed gender experts (Palmén & Kalpazidou Schmidt, 2019). It is not only the 'place' of gender expertise in interventions that matters – how different knowledge and practices

are combined, reconfigured and re-mixed can be crucial for achieving structural change. Furthermore, a CoP can provide a forum where stakeholders with gender competence (in their particular area of work) come together with gender experts to improve their practice and have a greater impact in challenging gender-biased processes and procedures.

Taking a CoP approach to gender equality and structural change in R&I can also be an effective strategy to tackle resistance – primarily through its emphasis on community engagement and participation. There is a general recognition in the literature that change is more effective if those it affects have been involved and engaged in processes and negotiations that result in the new understandings, practices, procedures and relations the change process seeks to embed. Participation, engagement and consensual decision-making are therefore often portrayed as effective strategies that are able to minimise resistance. This has been criticised by some as a strategy of 'co-option' – where key decisions have been taken elsewhere, and participatory processes are developed to bring dissenters on board and thwart resistance (Rahman, 1995). A CoP approach is, however, congruent with a co-creation approach to meaning which can provide a solid basis and shared understanding, two elements that are much needed in a change process (Karner, Thaler, & Wicher, 2017). Resistance can, in some instances, mean that the change process needs to be better articulated, defended and justified. In some cases, this can in fact lead to a better quality and more solid change process (Thomas & Hardy, 2011), and CoPs can provide the forum for this discussion.

Conclusions

Structural change in research organisations is a challenging endeavour for several reasons. GEPs aiming at structural change have to address the dual logics to which research organisations are exposed (as institutions following an organisational logic and part of academia following an academic logic). As the mechanisms that yield to gender imbalances are complex and not easy to detect, structural change is the result of a process that starts with the identification of the problem and leads to the development of targeted policies. However, such a process is doomed to failure if it is not supported throughout the organisation. It is very unlikely that an isolated expert will successfully pursue such a process. Hence, sustainable structural change also requires raising awareness and building up gender competences within the organisation as well as bringing together relevant stakeholders who are interested in gender equality issues or who are responsible for processes which are key to gender equality (e.g. recruitment of staff).

To address this complexity adequately, the TARGET project proposed an evidence-based and reflexive process for GEP development and implementation, which is targeted to the needs of the organisation and embedded in a CoP. The following chapters discuss two key elements of the TARGET approach – namely the role of empirical evidence for a reflexive gender equality policy and the significance of a CoP for the development of an institutional gender equality – in more detail and demonstrate their relevance for building up gender competence as well as for reflexivity.

Acknowledgment

References

Acker, Joan (1990). Hierarchies, jobs, bodies: A theory of gendered organisations. *Gender and Society*, *4*(2), 139–158. doi:10.1177/089124390004002002

Bell Crawford, Janet, & Mills, Albert J. (2011). The formative context of organizational hierarchies and discourse: Implications for organizational change and gender relations. *Gender, Work and Organization*, *18*(s1), e88–e109. doi:10.1111/j.1468-0432.2009.00470.x

Benschop, Yvonne, & Verloo, Mieke (2011). Gender change, organizational change, and gender equality strategies. In Emma L. Jeanes, David Knights, & Patricia Yancey-Martin (Eds.), *Handbook of gender, work and organization* (pp. 277–290). Chichester: Wiley.

Bergqvist, Christina, Bjarnegård, Elin, & Zetterberg, Pär (2013). Analysing failure, understanding success: A research strategy for explaining gender equality policy adoption. *NORA – Nordic Journal of Feminist and Gender Research*, *21*(4), 280–295. doi:10.1080/08038740.2013.855661

Besharaov, Marya L., & Smith, Wendy K. (2014). Multiple institutional logics in organizations: Explaining their varied nature and implications. *Academy of Management Review*, *39*(3), 364–381. doi:10.5465/amr.2011.0431

BMBWF [Federal Ministry of Education, Science and Research]. (2018). *Verbreiterung von Genderkompetenz in hochschulischen Prozessen. Empfehlungen der Hochschulkonferenz* [*Broadening gender competence in higher education processes. Recommendations from the Austrian University Conference*.] Vienna. Retrieved from http://www.hochschulplan.at/wp-content/uploads/2018/11/HSK_Endb._Verbreiterung-von.._07_11_2018_Lang.pdf. Accessed on August 12, 2021.

Brisolara, Sharon, Seigart, Denise, & SenGupta, Saumitra (Eds.). (2014). *Feminist evaluation and research: Theory and practice*. New York, NY: Guilford Press.

Bustelo, María, Ferguson, Lucy & Forest, Maxime (Eds.). (2016). *The politics of feminist knowledge transfer: Gender training and gender expertise*. Basingstoke: Palgrave Macmillan UK.

Callerstig, Anne-Charlott (2014). *Making equality work: Ambiguities, conflicts and change agents in the implementation of equality policies in public sector organisations*. Linköping: Linköping University.

Council of the European Union. (2015). Council conclusions on the European research area roadmap 2015-2020 (9351/15). Retrieved from https://data.consilium.europa.eu/doc/document/ST-9351-2015-INIT/en/pdf. Accessed on August 12, 2021.

EC (European Commission). (2004). *Gender and excellence in the making*. Brussels: European Commission. Retrieved from https://op.europa.eu/en/publication-detail/-/publication/ce10dfeb-4e36-49ed-a9ec-b2182c8b986f. Accessed on August 12, 2021.

EC (European Commission). (2012). *Structural change in research institutions: Enhancing excellence, gender equality and efficiency in research and innovation*. Brussels: European Commission. Retrieved from http://stages.unimi.it/upload/documents/structural-changes-final-report_en.pdf. Accessed on August 12, 2021.

ERAC (European Research Area and Innovation Council). (2015). ERAC opinion on the European research area roadmap 2015-2020 (1208/15). Retrieved from https://era.gv.at/public/documents/2515/ERA_Roadmap_st01208_en15.pdf. Accessed on August 12, 2021.

Funnell, Sue C., & Rogers, Patricia J. (2011). *Purposeful program theory: Effective use of theories of change and logic models*. San Francisco, CA: Jossey-Bass.

Hallensleben, Tobias, Wörlen, Matthias, & Moldaschl, Manfred (2015). Institutional and personal reflexivity in processes of organisational learning. *International Journal of Work Innovation*, *1*(2), 185–207. doi:10.1504/IJWI.2015.071192

Heintz, Bettina (2018). Ohne Ansehen des Geschlechts? Bewertungsverfahren in Universität und Wissenschaft [Regardless of gender? Assessment procedures in university and science.] In Sabine Hark & Johanna Hofbauer (Eds.), *Vermessene Räume, gespannte Beziehungen. Unternehmerische Universitäten und Geschlechterdynamiken* [*Measured Spaces, tense relationships. Entrepreneurial universities and gender dynamics*.] (pp. 231–51). Berlin: Suhrkamp.

Jongbloed, Ben (2015). Universities as hybrid organizations. *International Studies of Management & Organization*, *45*(3), 207–225. doi:10.1080/00208825.2015.1006027

Karner, Sandra, Thaler, Anita, & Wicher, Magdalena (2017). Wie durch gemeinsame Wissensproduktion in der Gender-Forschung soziale Geschlechtergerechtigkeit in Wissenschaft und Forschung befördert werden kann [How co-production of knowledge can raise gender equality in science and research.] In Jennifer Dahmen, & Anita Thaler (Eds.), *Soziale Geschlechtergerechtigkeit in Wissenschaft und Forschung* [*Social gender justice in science and research*.] (pp. 127–141). Opladen, Berlin, Toronto: Verlag Barbara Budrich.

Kenny, Meryl (2014). A feminist institutionalist approach. *Politics & Gender*, *10*(4), 679–684. doi:10.1017/S1743923X14000488

Krook, Mona L., & Mackay, Fiona (Eds.). (2011). *Gender, politics and institutions: Towards a feminist institutionalism*. Basingstoke: Palgrave Macmillan UK.

Kuhlmann, Sabine, & Bogumil, Joerg (2018). Performance measurement and benchmarking as "reflexive institutions" for local governments: Germany, Sweden and England compared. *International Journal of Public Sector Management*, *31*(4), 543–562. doi:10.1108/IJPSM-01-2017-0004

Lombardo, Emanuela, & Mergaert, Lut (2013). Gender mainstreaming and resistance to gender training: A framework for studying implementation. *NORA Nordic Journal of Feminist and Gender Research*, *21*(4), 296–311. doi:10.1080/08038740.2013.851115

Mackay, Fiona, Kenny, Meryl, & Chappell, Louise (2010). New institutionalism through a gender lens: Towards a feminist institutionalism? *International Political Science Review*, *31*(5), 573–588. Retrieved from http://ips.sagepub.com/content/31/5/573.full.pdf+html. Accessed on 12, 2021.

Martin, Patricia Y. (2003). "Said and Done" versus "Saying and Doing": Gendering practices, practicing gender at work. *Gender & Society*, *17*(3), 342–366. doi:10.1177/0891243203017003002

Martin, Patricia Y. (2006). Practising gender at work: Further thoughts on reflexivity. *Gender, Work and Organization*, *13*(3), 254–276. doi:10.1111/j.1468-0432.2006.00307.x

May, Judith V., & Wildavsky, Aaron B. (Eds.). (1978). *The policy cycle*. Beverly Hills/London: Sage Publications.

Mayne, John, & Johnson, Nancy (2015). Using theories of change in the CGIAR research program on agriculture for nutrition and health. *Evaluation*, *21*(4), 407–428. doi:10.1177/1356389015605198

Mergaert, Lut, & Lombardo, Emanuela (2014). Resistance to implementing gender mainstreaming in EU research policy. *European Integration online Papers (EIoP)*, *1*(18), 1–21. doi:10.1695/201400

Meyerson, Debra, & Tompkins, Megan (2007). Tempered radicals as institutional change agents. *Harvard Journal of Law & Gender*, *30*(2), 303–322.

Moldaschl, Manfred (2010). *Was ist Reflexivität?* [*What is reflexivity?*.] Papers and Reprints of the Department of Innovation Research and Sustainable Resource Management, November 2010. Chemnitz: University of Technology. Retrieved from https://www.tu-chemnitz.de/wirtschaft/bwl9/forschung/fprojekte/reflex/kompReflex/ergebnisse/pdf/WP_2010_11_Reflexivitaet.pdf. Accessed on December 15, 2021.

O'Connor, Pat, Martin, Patricia Y., Carvalho, Teresa, O'Hagan, Clare, Veronesi, Liria, Mich, Ornella, … Caglayan, Hulya (2019). Leadership practices by senior position holders in higher educational research institutes: Stealth power in action? *Leadership*, *15*(6), 722–743. doi:10.1177/1742715019853200

Palmén, Rachel, & Kalpazidou Schmidt, Evanthia (2019). Analysing facilitating and hindering factors for implementing gender equality interventions in R&I: Structures and processes. *Evaluation and Program Planning*, *77*(4), 101726. doi:10.1016/j.evalprogplan.2019.101726

Pasero, Ursula, & Priddat, Birger (2003). *Neue Führungsstile und das Glass Ceiling Phänomen: Ein Vergleich zwischen Organisationssystemen in Wirtschaft und Wissenschaft* [*New leadership styles and the glass ceiling phenomenon: A comparison between organizational systems in business and science*.] Kiel: Kiel University.

Pellert, Ada (1999). *Universität als Organisation: Die Kunst Experten zu managen* [*University as an organization: The art of managing experts*.] Vienna: Böhlau.

Powell, Stina, Ah-King, Malin, & Hussénius, Anita (2018). "Are We to Become a Gender University?" Facets of resistance to a gender equality project. *Gender, Work & Organization*, *25*(2), 127–143. doi:10.1111/gwao.12204

Prügl, Elisabeth (2016). How to wield feminist power. In María Bustelo, Lucy Ferguson, & Maxime Forest (Eds.), *The politics of feminist knowledge transfer: Gender training and gender expertise* (pp. 25–42). London: Palgrave Macmillan UK. doi:10.1057/978-1-137-48685-1_2

Rahman, Muhammad Anisur (1995). Participatory development: Toward liberation or co-optation? In Gary Craig, & Marjorie Mayo (Eds.), *Community empowerment: A reader in participation and development* (pp. 24–32). London: Zed Books.

Rogers, Patricia J. (2008). Using programme theory to evaluate complicated and complex aspects of interventions. *Evaluation*, *14*(1), 29–48. doi:10.1177/1356389007084674

Rogers, Patricia J., Petrosino, Anthony, Huebner, Tracy A., & Hasci, Timothy A. (2000). Program theory evaluation: Practice, promise, and problems. *New Directions for Evaluation*, *87*(3), 5–13. doi:10.1002/ev.1177

Schatzki, Theodore R. (1996). *Social practices: A Wittgensteinian approach to human activity and the social*. Cambridge: Cambridge University Press.

Schatzki, Theodore R. (2003). A new societist social ontology. *Philosophy of the Social Sciences*, *33*(2), 174–202. doi:10.1177/0048393103033002002

Thomas, Robyn, & Hardy, Cynthia (2011). Reframing resistance to organizational change. *Scandinavian Journal of Management*, *27*(3), 322–331. doi:10.1016/j.scaman.2011.05.004

Van den Brink, Marieke (2010). *Behind the scenes of science: Gender practices in the recruitment and selection of professors in the Netherlands*. Amsterdam: Pallas Publications.

Verge, Tània, Ferrer-Fons, Mariona, & González, José M. (2018). Resistance to mainstreaming gender into the higher education curriculum. *European Journal of Women's Studies*, *25*(1), 86–101. doi:10.1177/1350506816688237

Verloo, Mieke (Ed.). (2018). *Varieties of opposition to gender equality in Europe*. New York, NY: Routledge. doi:10.1201/9781315625744

Vogel, Isabel (2012). *Review of the use of 'Theory of Change' in international development*. London: UK Department for International Development (DFID). Retrieved from

http://www.theoryofchange.org/pdf/DFID_ToC_Review_VogelV7.pdf. Accessed on August 12, 2021.

Webb, P. Taylor (2008). Re-mapping power in educational micropolitics. *Critical Studies in Education*, *49*(2), 127–142. doi:10.1080/17508480802040183

Weber, Max (1919). *Wissenschaft als Beruf* [*Science as a profession*.] Munich: Duncker & Humboldt.

Wenger, Etienne (1998). *Communities of practice: Learning, meaning, and identity*. Cambridge: Cambridge University Press.

Wenger-Trayner, Etienne, & Wenger-Trayner, Beverly (2015). Communities of practice a brief introduction. Retrieved from https://wenger-trayner.com/wp-content/uploads/2015/04/07-Brief-introduction-to-communities-of-practice.pdf. Accessed on 12, 2021.

W.K. Kellogg Foundation. (2004). *Logic model development guide: Using logic models to bring together planning, evaluation, and action*. Battle Creek, MI: W.K. Kellogg Foundation. Retrieved from https://www.aacu.org/sites/default/files/LogicModel.pdf. Accessed on 12, 2021.

Wroblewski, Angela (2015). Individual and institutional reflexivity – A mutual basis for reducing gender bias in unquestioned practices. *International Journal of Work Innovation*, *1*(2), 208–225. doi:10.1504/IJWI.2015.071190

Wroblewski, Angela (2016). Gender in research content: Experiences from an Austrian programme. In *9th European gender summit*, Brussels, Belgium. Retrieved from https://gender-summit.com/attachments/article/1346/Wroblewski_paper_GS9Eu.pdf. Accessed on 12, 2021.