

Transforming the Associate-to-Full Promotion System: Wrestling with Strategic Ambiguity and Gender Equity

Dr. Chrysanthé Demetry, Worcester Polytechnic Institute

Dr. Chrysanthé Demetry is Associate Professor of Mechanical Engineering and director of the Morgan Teaching & Learning Center at Worcester Polytechnic Institute. Her scholarship focuses on materials science education, K-12 engineering outreach for girls, women academics in STEM, project-based learning, and faculty development and mentoring. As director of the Morgan Center at WPI since 2006, Demetry coordinates programs and services fostering excellence and innovation in teaching and broader faculty development programs.

Prof. Elizabeth Long Lingo, Worcester Polytechnic Institute

Transforming the Associate-to-Full Promotion System: Wrestling with Strategic Ambiguity and Gender Equity

Abstract

Women faculty remain under-represented among all academic ranks within STEM fields, and especially at the rank of (full) Professor. While researchers have studied the underlying, systemic factors that contribute to these outcomes, and a range of possible interventions, *how* reform of the Associate-to-Full promotion system unfolds within a STEM-intensive university remains a black box. Drawing from in-depth longitudinal case study data, we find that reform involves an ongoing process of wrestling with strategic ambiguity. More specifically, we identify three inter-related micro-processes that inform efforts at reform: 1) negotiations over the *what* of promotion criteria and systems; 2) struggles over *who* controls the formulation of promotion policy and interpretation of criteria; and 3) decisions over *how* the change process itself should unfold (externally or internally aligned). This paper makes several new contributions to the field: 1) we introduce the idea of strategic ambiguity as something that is negotiated and navigated rather than something to be eliminated; 2) we provide a more nuanced understanding of the micro-processes that unfold throughout the promotion reform process, and 3) we show how contests over control between low- and high-power individuals and groups are inextricably intertwined with promotion system reform.

Introduction

While women faculty in many STEM fields remain under-represented among all academic ranks, the gender gap is especially wide at the rank of (full) Professor. In 2017, women holding doctorate degrees in engineering comprised only 12% of full professors in U.S. universities and 4-year colleges [1]. Across all fields, women are less likely to ever be promoted to full professor, and on average it takes women longer to advance [2]. Under-representation of women at this senior rank is particularly problematic because academic leadership positions and personnel (T&P) committees are usually filled by Professors.

Some discourse continues to suggest that the underrepresentation of women at the highest rank is due to their voluntary career choices. In contrast, Bird [3] theorizes university promotion systems as “incongruous, gendered structures” with institutional barriers that limit the advancement of women or systematically advantage men. While many studies have investigated these problems and interventions to address them [4], fewer have addressed promotion policy reform and the *processes* by which institutions have attempted to transform incongruous, gendered systems to more equitable systems where rewards are aligned with institutional mission and values.

Scholars have also examined the problem of ambiguity and “foggy climate” in promotion systems [5] [6], wherein ambiguous work conditions trigger implicit biases and gender norms that become a barrier to advancement for many women. An assumption of this work is that clarity is achievable and should be the goal. Historically, promotion policy language has been dominated by what organizational scholars call *strategic ambiguity* [7]. Eisenberg explains that ambiguity may be used strategically and positively in organizations “to foster agreement on abstractions without limiting specific interpretations” [7, p. 231]. Such ambiguity allows for

increased flexibility, creativity, and individual freedom but also has the potential to reinforce privileged positions for those in power. Research is needed that examines how strategic ambiguity is navigated or negotiated in the course of promotion reform, and especially when gendered power differentials are in play.

In this paper, we address this gap by investigating the process by which reform of the Associate-to-Full promotion system unfolds within a STEM-intensive university. Drawing from in-depth longitudinal case study data, we find that reform involves management of strategic ambiguity using three inter-related micro-processes: 1) negotiations over the *what* of promotion criteria and systems; 2) struggles over *who* controls the formulation of promotion policy and interpretation of criteria; and 3) decisions over *how* the change process itself should unfold (externally or internally aligned). This work makes several new contributions to literature in this field. First, we introduce the idea of strategic ambiguity as something that is negotiated and navigated rather than eliminated. Second, we provide a more nuanced understanding of the micro-processes that unfold as strategic ambiguity is negotiated, and how these micro-processes build as the reform process unfolds. Third, we show how contests over control between low- and high-power individuals and groups are inextricably intertwined with promotion system reform.

In the following pages, we first provide a brief overview of related literature, followed by a description of our case setting and methods. We then present our findings and discuss implications for research, practice, and policy implementation to achieve more congruous, less gendered promotion systems.

Literature Review

Incongruous Gendered Promotion Systems

Many higher education scholars and practitioners have long recognized inconsistencies in rhetoric about the value of teaching and public service as compared to reward systems that privilege and favor research [3] [8] [9]. Moreover, formal statements that high quality teaching is expected and valued may be incongruous with informal systems for allocating and rewarding work and with more formal evaluation practices.

Bird [3] explains that institutions with these incongruous reward systems are “gendered,” as they disproportionately value the activities dominated by men and undervalue activities typically undertaken by women. According to Bird, more value and rewards are placed on instrumental versus nurturing tasks, financial welfare versus community welfare, and theory over practice. Many studies have shown that in comparison to women, men devote less time to teaching and service and more time to research [10]-[12]. Misra and colleagues found that gender differences in the amount of time spent on research, service, and mentoring were especially pronounced among Associate Professors in the STEM disciplines [2]. Numerous studies have also shown that women and faculty of color disproportionately engage in “service scholarship” [9], [13]-[15]. Additionally, Umbach found that women faculty and faculty of color were significantly more likely than their male colleagues and white faculty to have higher levels of interaction with students, to use active and collaborative learning practices known to foster student success, and to engage students in higher-order cognitive activities and diversity-related activities [16].

O'Meara [17] noted that interventions to address problematic reward systems are more often aimed at managing and promoting success within existing systems rather than truly transforming those systems. Indeed, the most common interventions and strategies utilized in many NSF ADVANCE institutional transformation projects for mid-career faculty have focused on institutional supports for the career advancement of women, such as individualized mentoring and leadership development programs [18]. Far fewer STEM-intensive institutions have seemed to undertake reforms that aim to reexamine and transform what is valued and who is valued for promotion. An exception may be the efforts of dozens of institutions in the last several decades to broaden the definition of scholarship to include certain contributions to teaching and learning and to community engagement. Higher education scholars have documented challenges with the implementation of these promotion systems [19], but not how these problems arose. This study seeks to address this gap by asking: How does the process of negotiating a new promotion system unfold in practice?

The Opportunity and Problem of Strategic Ambiguity

Numerous scholars have identified the problem of ambiguity in promotion systems—ambiguity in what is valued, what counts, the timeline, how work should be documented, and the standards by which quality is assessed. From interviews with STEM faculty who had received tenure or their first promotion, Banerjee and Pawley [5] found that women do not get enough information about policies and application requirements. In this “foggy climate,” they must develop their own “fog lights” of formal and informal resources. While ambiguity is often cited as a problem within the assistant-to-associate promotion system, ambiguity seems especially pronounced for promotion from associate to full [20]. In interviews with science and engineering academics at a research university, Fox and Colatrella [20] found that women were less certain than men about which contributions, activities, and achievements would count for promotion from associate to full.

Ambiguity and clarity have long been studied by scholars of organizational communication. Eisenberg notes that “clarity (and conversely, ambiguity) is not an attribute of messages; it is a relational variable which arises through a combination of source, message, and receiver factors” [7, p. 229]. This phenomenon begins to explain how it is that many women, compared to men, may interpret the same messages about promotion to be less clear. Historically, promotion policy language is dominated by what organizational scholars call *strategic ambiguity* [7]. Often there is tension between the desire for clarity—which may be seen as rigid or constraining—and the use of strategic ambiguity to foster “unified diversity.” In effect, it is rational and strategic for organizations to enable flexibility, creativity, and individual agency as long as it all contributes to a coherent if abstract organizational mission. This tension results in a paradox, when individuals within an organization simultaneously seek self-determination and security, or “maximum individuality within maximum community” [7, p. 231].

Nevertheless, use of strategic ambiguity within organizational communication and policies also has the potential to reinforce privileged positions for those in power [7]. Power differentials can be maintained by strategic use of ambiguous language by elites. In addition, a homogeneous group of people may interpret messages in ways that are specific to their sub-community, such that the ideal of “unified diversity” is not achieved. To the best of our knowledge, the paradox of strategic ambiguity has not been made visible in promotion reform. This study seeks to address

that gap, asking the following two questions. First, how does the process of negotiating transformation of the Associate-to-Full promotion unfold in an incongruous, gendered system? Second, how do faculty groups and the organization wrestle with strategic ambiguity— seeking both flexibility and clarity in a promotion system?

Case Context

The case of Middle University (MU) offers a unique opportunity to study a promotion system in the process of transformation and how issues of strategic ambiguity and gender equity are navigated over time. This university is a STEM-intensive private institution in the United States with a strong commitment to both teaching and its growing research enterprise. Over the past decade during a period of significant growth, MU has brought on a broader mix of faculty to deliver innovative educational programs and to conduct engaged scholarship in addition to traditional and applied research. The faculty includes roughly 250 tenured and tenure-track faculty members, 150 full-time non-tenure track faculty (most of whom primarily teach), and about 50 part-time non-tenure track faculty (full-time equivalent). While there are Deans who oversee their respective schools, formal tenure and promotion policies and processes are uniform across the institution.

MU has a faculty governance system characterized by a “town hall” model, where each tenured and tenure-track faculty member may vote on all matters presented at monthly, campus-wide faculty meetings. Proposals and motions for changes in tenure and promotion policies and other matters of policy and operations emerge from faculty committees. Three elected faculty committees are involved in tenure and promotion matters at MU. First, the Tenure Committee, comprising both associate and full professors, focuses on assistant-to-associate tenure decisions. Second, the Promotions Committee (PC), consisting solely of full Professors from different departments, is charged with making recommendations to the Provost on promotion cases from Associate Professor to Professor. Historically, the PC was the only body formally charged with formulating proposals for changes in the criteria for academic ranks, although this role was challenged during our case study. Third, the Governing Committee (GC), composed of tenured and tenure-track faculty members of any rank, oversees the faculty Constitution and Bylaws, committee elections, and matters that cut across committees. The Provost has an ex-officio position on the GC.

At MU, any faculty member may nominate a colleague for promotion to the rank of (full) professor, but Department Heads almost always serve as the nominator. There is no formal promotion review or vote at the department level. Each case is reviewed first by the PC, which makes a unitary recommendation to the Provost, who then makes the final recommendation to the President and Board of Trustees.

Until the time of the case study, no formal changes in the Associate-to-Full promotion policy for tenured faculty had been made for decades. In contrast, over those same decades, more than six motions to update and improve policies and procedures related to tenure and promotion to the Associate rank were brought forward and approved. The original criteria for promotion to the rank of tenured (full) Professor were as follows:

The candidate for promotion to professor should have recent accomplishments of high quality in both teaching and scholarship/creativity and should have demonstrated leadership in one of those areas. The leadership must be recognized by peers within MU and by knowledgeable people outside MU. In addition, all candidates for promotion should have participated to some appropriate degree in activities of service to MU. While these criteria serve as general guidelines, outstanding candidates should not be deprived of promotion because of the uniqueness of their contribution.

At face value, these criteria embody strategic ambiguity: they seem flexible in that they allow for two paths to promotion (leadership in teaching or scholarship), and they also leave open the possibility that unique contributions could be recognized with promotion. Additional language in the promotion policy gave examples of activities in teaching, scholarship and/or creativity, and service. For instance, examples of service included “industrial or government liaison leading to support of MU... establishing project centers, and writing proposals.”

Over the past 20 years, very few faculty with leadership in teaching were promoted to the rank of full professor, and some who engaged primarily in applied research with industry had difficulty as well. Recently, MU participated in the Collaborative on Academic Careers in Higher Education (COACHE) faculty satisfaction survey for the first time in its history. While the tenure system was identified as an institutional strength, promotion to full professor was identified as a weakness. Moreover, satisfaction with the Associate-to-Full promotion system differed across rank and gender, with Associate Professors and women reporting much lower levels of satisfaction. One of the lowest means was for clarity of promotion standards. Satisfaction ratings for other issues of clarity (e.g., timeframe, whether I will be promoted, criteria, body of evidence) were also quite low. The COACHE data laid bare the limits of the strategic ambiguity in promotion criteria that had persisted even as the institution had grown and changed significantly over the past two decades. In turn, the COACHE data triggered an effort towards promotion reform that involved actions of the PC, GC, Provost, and the faculty at large.

Methods

In order to examine how the transformation of the Associate-to-Full promotion was negotiated and navigated over time, we utilize an in-depth single-case study design [21] and a process perspective [22]. More specifically, our case study comprises multiple data sources, including archival, interview, and observation data, and considers the voices of the array of actors involved. The case study spans three years—from the release of the COACHE faculty satisfaction data to the approval of new criteria for the associate-to-full promotion. During this time period, we collected and examined minutes of committee meetings and faculty meetings that occurred during the span of the case, all of which were available in university archives, and committee and task force reports. While we conducted observations and engaged in informal interviews with various case participants, our case study only presents publicly-held archival information. We acknowledge that the story would be even more nuanced with the inclusion of privately-held details. Our presentation of the case study data disguises the university in order to protect the privacy of individuals who were key players in promotion reform.

We used a two-fold analytical method. First, we utilized a process perspective [22] that enabled us to pay attention to the unfolding nature of the promotion reform process over time, and

allowed us to see how dynamics earlier in the reform process shape those occurring later on. Second, we utilized an inductive approach to analyze the case study data, which allowed us to be sensitive to themes emerging from the data while also engaging existing theory.

Step 1. Mapping the timeline of promotion reform. To understand the unfolding process, we first mapped out the timeline of promotion policy reform. This involved examining the following archival documents issued by key groups: the report from a promotion task force; reports, draft proposals, and presentations from the promotion committee (PC); minutes of governing committee (GC) meetings; and minutes of faculty meetings. We then identified key events and actions and divided the transformation process into three phases based on clear distinctions in the substance and tone of the reform and interactions among the parties involved. A summary of this timeline is presented in Table 1. We also gathered information and analyzed the composition of each committee during each academic year of the promotion reform process: the number of members by gender, rank, and type of appointment (tenure-track or non-tenure track). These demographic dimensions reflect underlying power differentials among institutional members and may also reflect a variety of professional interests and strengths.

Step 2. Inductively generating categories and micro-processes. We then analyzed our case study data to identify key categories of action and interaction within the reform process. We paid close attention to how these actions and interactions were experienced by participants, and the relationship among these different categories of action. We abstracted from these categories to identify three inter-related micro-processes that inform efforts at reform: 1) negotiations over the what of promotion criteria and systems; 2) struggles over who controls the formulation of promotion policy and interpretation of criteria; and 3) decisions over how the change process itself should unfold (externally or internally aligned). Our process approach enabled us to examine how these three micro-processes dynamically unfolded over time. In the next section, we bring to life these findings, and detail how efforts to address strategic ambiguity unfolded.

Findings

Over several decades, MU leadership has been very clear in its messaging about balancing institutional strengths in teaching, research, and engaged scholarship, but how this translated into actual policies, systems, and decisions regarding promotion was strategically left ambiguous to allow for flexibility in interpretation over time. Strategic ambiguity had enabled MU to maintain growth without doing the difficult work of exploring whether the existing promotion system was working to support and recognize faculty members' diverse strengths in teaching, research, and community-engaged work. The COACHE survey data, however, pointed to weaknesses in this approach and ushered in an intense period of negotiation.

In this section, we will show how the process of negotiation involved three inextricably intertwined micro-processes. First, as has been elucidated in prior research, one micro-process related to negotiating *what* changes should be made to the promotion system, including redefining and clarifying promotion criteria, re-examining systems for mentoring and professional development, and supporting faculty in developing and submitting their promotion packages. The second micro-process comprised negotiations over *who* should control the clarifying process, and who would ultimately interpret criteria going forward. The third involved negotiations over *how* a new promotion system should be aligned—internally, consistent with

Table 1: Timeline of Key Events and Actions by Phase***Phase 1: An initial period of mutual respect and discovery, collaboration and diversity: everything's in play*****Actors:**

- Promotion committee (PC): 6 Full Professors; 5 men and 1 woman
- Governing committee (GC): 5 Full and 2 Associate Professors; 5 men and 2 women
- Promotion task force (PTF): 4 Full Professors, 2 Associate Professors, and 2 full-time non-tenure track faculty; equal men and women

Date	Event or Action	Themes and Micro-Processes
Year 1: Sep Phase trigger	<ul style="list-style-type: none"> • PC issues review of COACHE data, calls attention to stark differences by rank and by gender • PC recommends formation of diverse promotion task force (PTF) • GC says PC should have main responsibility for ultimately suggesting changes 	<ul style="list-style-type: none"> • Collaboration and deference between PC and GC • Valuing of diversity and inclusion in reform process • Seeking alignment between work that's valued for promotion and full range of work to deliver on university mission, distinctiveness, and strengths
Year 1: Nov-Dec	<ul style="list-style-type: none"> • GC and PC work collaboratively to charge and appoint PTF • GC and PC call for volunteers to serve on PTF, specifically including Associate Professors, women, non-tenure-track faculty in addition to those with experience on PC, GC, and tenure committee. 	
Year 1: Spring	<ul style="list-style-type: none"> • Search for new Provost concludes with selection of an external candidate 	
Year 1-2: Jan-Oct	<ul style="list-style-type: none"> • PTF engages in fact-finding in five areas: 1) Assoc-Full promotion criteria and; 2) promotion procedures for tenured faculty; 3) dissatisfaction of Associate Professors; 4) dissatisfaction of women; 5) issues with promotion for full-time non-tenure track faculty • PTF issues report to GC and PC with findings from focus groups with women, Associate Professors, and non-tenure track faculty • PTF report includes recommendation for broadening of promotion criteria to include promotion to Full based on outstanding accomplishment in teaching, scholarship, OR service 	
Year 2: Dec	<ul style="list-style-type: none"> • GC and PC release PTF report to whole community and invite feedback 	

Table 1: Timeline of Key Events and Actions by Phase (cont'd)

Phase 2: Fractures begin to appear

Actors:

- Promotion committee (PC): 6 Full Professors; 5 men and 1 woman
- Governing committee (GC): 5 Associate and 2 Full Professors; 4 women and 3 men
- New Provost

Date	Event or Action	Themes and Micro-Processes
Year 2: Jan Phase trigger	<ul style="list-style-type: none">• At faculty meeting, PC rejects idea of broadening promotion criteria to include service, believes problem lies with interpretation of existing criteria and lack of mentoring for APs	<ul style="list-style-type: none">• Debate redirected from focus on institutional values to clarification of current standards• Implication that better mentoring would help women faculty do less service, understand criteria, meet standards• Undercurrent of concern about how existing criteria are being interpreted
Year 2: Jan-Mar	<ul style="list-style-type: none">• New Provost makes final recommendations about promotion cases• Three of five women Associate Professors nominated for promotion to Full are denied promotion. All three male candidates are promoted.	
Year 2: Mar	<ul style="list-style-type: none">• PC issues draft proposal for change in Associate-to-Full promotion criteria. No change except to define leadership as external impact. Proposal includes lists of activities classified as teaching, scholarship, and service.• Draft proposal from PC includes department-based professional development committees for Associate Professors	

Table 1: Timeline of Key Events and Actions by Phase (cont'd)***Phase 3: Conflict for control and internal vs. external alignment***

Date	Event or Action	Themes and Micro-Processes
Actors: <ul style="list-style-type: none"> • Promotion committee (PC): 6 Full Professors; all men • Governing committee (GC): 4 Associate and 3 Full Professors; 4 women and 3 men • Faculty at the grass-roots 		
Year 2: Mar (Phase trigger)	<ul style="list-style-type: none"> • At joint meeting of two committees, GC members express concern about PC proposal for departmental Professional Development Advisory Committees, begin to develop alternatives 	<ul style="list-style-type: none"> • “Getting to why” and “what counts” comes to the fore again, valuing overall contributions to institution • Negotiation about how promotion system should be aligned: with internal values or by importing external models • Who gets to formulate proposals becomes contested: concerns about implicit bias and lack of diversity on PC enter the debate • Negotiation over who’s in control, who should formulate proposals, who interprets
Year 2: Apr	<ul style="list-style-type: none"> • GC receives request from several faculty members for broader discussion of criteria • GC does not support PC motion that focuses just on procedures, asks for delay until criteria and mentorship are resolved. 	
Year 3: Sep	<ul style="list-style-type: none"> • GC floats an internally-aligned alternative framework for promotion criteria • PC tells GC it does not need GC approval to move forward on promotion criteria • Two open meetings, originally to be jointly held by PC and GC, are hosted only by PC • After open meetings, GC minutes report receiving messages of concern about lack of diversity on PC and need for broader perspectives 	
Year 3: Oct	<ul style="list-style-type: none"> • PC proceeds on its own, presents modified proposal for promotion criteria using Boyer’s framework to broaden definition of scholarship 	
Year 3: Jan	<ul style="list-style-type: none"> • Motion requiring future recommendations about promotion for non-tenure track and tenured faculty to be made collaboratively between PC and GC in order to broaden input beyond full professors is presented by GC, opposed by PC, and passes at faculty meeting. 	
Year 3: Feb	<ul style="list-style-type: none"> • PC motion for new Associate-to-Full promotion criteria for tenured faculty is approved at faculty meeting. 	

the unique values and culture of the institution, or externally, in ways already recognized as credible in the academy. We present the case story in terms of three primary phases, and illustrate how the three micro-processes manifest in each.

Phase 1: An initial period of mutual respect and discovery: everything's in play

In this first phase, mutual respect and cooperation between the Promotion Committee (PC) and the Governance Committee (GC) drove early efforts. There was general agreement on how to move forward: the goal was to dig into the reasons behind the COACHE data that indicated that strategic ambiguity was no longer working, and then to overhaul the system.

Shortly after the COACHE data were received and the Associate-to-Full promotion was identified as an institutional weakness, the PC made public a more granular review of the data and encouraged formation of a task force to further investigate problems and make recommendations. The GC and PC collaborated to charge the Task Force, and together appointed a diverse eight-member group that included an equal number of men and women, among them two full-time non-tenure track faculty, four tenured faculty at the rank of Full, and two tenured faculty at the rank of Associate. During this time, the GC endorsed the idea that the PC ultimately should have the main responsibility for suggesting changes to the promotion system, consistent with its charge in the Faculty Constitution and Bylaws.

The task force examined literature about mid-career challenges and used a combination of focus groups, interviews, and surveys with department heads, Associate Professors, women faculty, and full-time non-tenure track faculty to investigate perceptions of the promotion system. After about nine months, the task force issued its findings and recommendations to the GC and PC. The report identified the following themes among Associate Professors: *“unnecessary uncertainty regarding criteria, mentoring, and timing”* and a skewed emphasis on scholarship with *“lack of recognition for people who spend time on activities that are essential to MU’s mission.”* Themes among women faculty included the impression that they were *not promoted at the same rate as men*, that *service and teaching were not valued as highly as traditional research*, and that women often have a higher service load and may value teaching more. The task force reported that both Associate Professors and women faculty called for broadening the criteria for promotion and expressed concern about a variety of procedural matters and inadequate mentorship and professional development for those at the Associate rank.

In response to their findings, the Task Force made three core recommendations. First was to broaden the criteria for promotion from Associate to Full, specifically by inviting candidates to demonstrate an outstanding record of accomplishment in teaching, scholarship, *or service*, with expectations of high-quality contributions in each area. Another recommendation would require departments to create an elected professional development and promotion committee that would guide Associate Professors and non-tenure track faculty toward promotion with a clear timeline. The third recommendation suggested a set of procedural changes involving the election process for PC members, recusal mechanisms, feedback for unsuccessful candidates, and more.

After the GC and PC received the task force report, they came to a loose agreement about a division of labor and how to move forward. About two months after receiving the task force report, they jointly released it without comment to the whole community and asked for feedback.

They also agreed that, consistent with the formal purview of each committee, the GC would work on changes related to committee composition and election process, with the PC taking the lead on changes to the promotion criteria as well as a system for mentoring and professional development.

Thus, this first phase marked interactions squarely in the domain of clarifying *what* promotion policies, mechanisms, and procedures should look like. A wide range of voices were brought to the table, and the two faculty committees sought to respect each other's ability to address the findings and recommendations of the Task Force.

Phase 2: Fractures begin to appear

In Phase 2, negotiations over the *what* of the promotion criteria and system expanded beyond the task force and committees to the full faculty. Further, a second micro-process emerged regarding *who* should have a say in shaping the Associate-to-Full promotion system.

Fractures began to appear at a faculty meeting in the spring semester of the second year. A member of the PC who had also served on the Task Force presented a summary of the task force findings and recommendations and indicated broad agreement by the PC on most matters. However, whereas the Task Force recommended that the basis for promotion be broadened to include outstanding teaching, scholarship, or service, the PC believed the promotion criteria should continue to be based on outstanding contributions in either teaching or scholarship, asserting that those two activities are the core of the institutional mission. A wide range of comments followed from Associate and Full professors and from women and men. Some called for wider discussion of broadening the criteria in the manner described by the Task Force, others argued for decreasing the service load of women faculty rather than diminishing the role of scholarship, another called for an explicit statement that external funding is not a requirement for promotion, and others described the potential for some teaching and service activities to be pursued as scholarship. Whereas the Chair of the PC explained the committee's interpretation that "leadership" means external recognition, others referred back to some Task Force members who believed that what should matter most is a candidate's overall contributions to MU.

The PC's decision not to pursue broadening of the promotion criteria brought the second micro-process to the fore: Who gets to control the refinement of promotion criteria, and who interprets those criteria? A committee comprised solely of Full Professors and dominated by men had set aside the recommendation of a broader group of faculty.

By mid-semester, the PC had drafted a motion, shared with the GC, which aimed to clarify the existing promotion criteria in the following way: "*continuing high quality contributions in teaching, scholarship/creativity, and service, with a record of demonstrated leadership in either teaching or scholarship/creativity.... Leadership is defined as a record of excellence that demonstrates an impact beyond MU as appropriate to the candidate's field.*" The proposal went on to provide long lists of example activities classified as teaching, scholarship, or service. Some activities at the heart of institutional strengths remained classified as service (e.g., community-engaged work and program development). The PC placed more emphasis on its proposal to establish elected departmental committees for mentoring and professional development of mid-career faculty and non-tenure track faculty.

In a joint meeting between the GC and PC, however, some GC members expressed concerns about elected full professors serving as mentors for all Associate Professors and non-tenure track faculty. The GC, which had a mix of associate and full professors as well as women and men, put forth alternative ideas that would empower faculty to identify their own mentors. At this meeting, several PC members also discussed their concerns about the wide range of interpretations of existing promotion criteria.

Around the same time, the annual cycle of promotion announcements had been made. While three men and two women with traditional scholarship had been promoted, word spread that three women in STEM disciplines, with a broad range of contributions, had been denied promotion from Associate to Full. Although there were no references to these cases in official documents, negative reaction to these decisions seemed to galvanize efforts to put brakes on the PC's proposals. In its April minutes, the GC reported receiving a letter from several faculty asking for broader input and community discussion about promotion criteria. Whereas the PC had planned to bring its motions to the faculty for approval by the end of the academic year, the GC countered that the proposals for changing the promotion criteria and mentoring system "should be informed by a broader campus understanding of these issues." At the final faculty meeting of the year, members of the GC explained that the issues should receive more extensive discussion at open meetings and faculty meetings in the next academic year, and noted that more time was needed to develop proposals that reflected broad campus input.

Thus, this second phase was marked by growing fractures between a relatively homogeneous group of full Professors on the Promotion Committee and the more diverse Governing Committee and faculty-at-large. These groups had significantly different ideas about the "what" of promotion reform. Their communications were polite yet veiled, with the GC making clear that the PC proposals did not reflect sufficiently broad input. *Who* should control the reform process? In effect, the GC decided that the full Professors should not solely own the process of creating and interpreting promotion criteria, and they successfully extended the process so that broader input would be considered.

Phase 3: Conflict for control and internal vs. external alignment

In Phase 3, all three micro-processes were in play as faculty worked through strategic ambiguity along three dimensions. As discussions about promotion criteria and mentoring continued, issues of diversity and *who* escalated and became overt: who should control the reform process, who should interpret the criteria, and who is disadvantaged? A third micro-process also came to the fore: the GC and PC parted ways in *how* they approached their work. As will be detailed below, the GC turned to internal wisdom in an effort to propose a unique promotion system aligned strategically with the breadth of the institution's distinctive mission and programs, whereas the PC attached legitimacy to external models, ultimately importing ideas from Ernest Boyer and other higher education scholars.

The third year opened with the GC focused on responding to the recommendations of the PC for clarified criteria and a mentoring system. In addition, two open meetings held jointly by the two committees were scheduled for mid-September. Differences in diversity of the GC and PC were particularly stark this year. The PC was comprised of six male full Professors, whereas the GC

was comprised of one male full Professor, two female full Professors, two male Associate Professors, and two female Associate Professors.

Notably, the GC began to develop their own criteria, grounded in internally-held wisdom of MU's unique culture and distinctive programs. In GC minutes, the Chair was quoted as follows: *"...revising the promotion criteria offers an opportunity to think about promotion in new and creative ways. MU prides itself on its uniqueness and should not shy away from exploring innovative approaches to promotions."* During a meeting early in September, some members of the GC tried to get at the "why" of promotion—the importance of students (not just scholars) to reputation, and the necessity of a wide range of contributions beyond research for institutional operations, distinctiveness, and success. The GC floated a framework of two promotion criteria "in the spirit of the Task Force recommendation": 1) distinctive contribution to the core mission of MU, through such activities as teaching, committee work, and administrative tasks; and 2) creative contributions to the innovative mission of MU, through such activities as new curricula, program building, grants and publications. The GC planned to discuss this framework with the PC at a joint meeting of the two committees.

Instead, the outcome of the joint meeting between the GC and PC was a significantly intensified struggle for power and control. The PC made clear that it did not need the approval of the GC to move forward with its motion about promotion criteria and that it intended to hold the open meetings without a formal role for the GC. No minutes were published from the open meetings, but people recall several women faculty sharing research about gender bias and implicit bias in faculty evaluation. In addition, at least one attendee suggested Ernest Boyer's model of multiple forms of scholarship as a mechanism for broadening the promotion criteria. Following the open meetings, the GC minutes reported receipt of numerous emails expressing concerns about diversity, quoting one of them anonymously and with permission: *"...The promotion process belongs to all of the Faculty, not just full professors. And while all of us have our particular blind spots and implicit biases regardless of gender, the collective blind spots and implicit biases of a group of males who have succeeded in the system that we're trying to improve and in a system that is especially dissatisfying to women is problematic."*

After the open meetings, the GC and PC continued to work independently. Seeking a resolution to struggles over ambiguity in the criteria, the PC prioritized the legitimacy of external sources of wisdom. In an effort to respond to concerns expressed at the open meetings, the chair of the PC engaged in a comprehensive analysis and synthesis of extant literature about promotion and scholarship and significantly modified the proposal. The modified proposal cited Boyer's and others' work to define multiple forms of scholarship that would more clearly support multiple paths to promotion and a wider range of scholarly contributions. It also drew on recommendations for promotion reform published by higher education scholars, including language that directly recognizes implicit biases in faculty evaluation.

After the PC did not pursue the GC's novel ideas for internally-crafted criteria, the GC returned its energy to the second micro-process: *who* controls the promotion system. They focused on a motion that would revise the election procedures and composition of the PC in ways recommended by the initial Task Force. Significantly, the GC also proposed new language for the responsibilities of the PC, requiring that recommendations for changes in promotion criteria

be made in collaboration with the GC, *“in order to broaden the faculty governance input in these matters beyond full professors.”*

At the January faculty meeting in year three, the GC presented its motion to revise the PC’s composition and election procedures. Although the PC vigorously opposed the motion, the faculty at large approved it. Thus, negotiations focused on the micro-process of *who* shapes and interprets the promotion system moved toward an outcome of broader inclusion.

At the February faculty meeting, the PC presented its final proposal for a new Associate-to-Full promotion policy, including new criteria; definitions of multiple forms of scholarship including discovery, integration, application and practice, teaching and learning, and engagement; standards for quality, impact, and peer review, including a call to reviewers to be aware of potential for bias; and procedures for promotion nomination and review. Overall, much more guidance is provided, with the new policy occupying about six pages compared to the prior four. A key change in the criteria was to replace the “leadership” criterion with the following: *“a record of scholarly contributions that demonstrates a positive external impact beyond MU.... Contributions to MU may demonstrate an external impact if they are disseminated and recognized externally.”* This change makes it possible for internal teaching, programmatic, and service activities that are made public and externally disseminated to be recognized and rewarded as scholarship. Further, recognition of service seemed to increase somewhat in the new policy. Previously, the criterion was “participation to some appropriate degree in activities of service to MU,” whereas the new criterion states that *“service is a critical responsibility of all tenured faculty, and thus evidence of service at a level appropriate to the rank is expected.”* However, what an “appropriate level” might be, and why certain service may or may not be important given the values and mission of the university, remain ambiguous.

Debate at the February faculty meeting included requests for more clarity about the wide variety of mechanisms to demonstrate scholarly impact and an assertion that the new criteria could be interpreted narrowly or broadly, just like the old set. After discussion, however, the new policy was approved.

Thus, this phase of the promotion reform process ultimately returned to the micro-process of *what*, replacing one set of strategically ambiguous criteria and standards with another. The issues of the “why” behind the new criteria, how to adapt the Boyer model to fit the unique context of MU, and who would interpret the criteria and how were not fully engaged or resolved.

Discussion and Implications

This study adds to the literature by providing a detailed and nuanced window into an Associate-to-Full promotion reform process. The political struggles and conflict observed at MU over the three year period of policy reform are inherent in most organizational change [23] [24]. In the context of strategically ambiguous promotion systems, the study reveals intertwined negotiations about *what* is valued for promotion, contests for control over *who* is entitled to have a say in matters of promotion and to shape interpretation of criteria, and *how* to position a promotion system with respect to institutional strengths and mission and to external models in higher education. Anticipating and attending to these micro-processes may enable faculty and

institutions to be more deliberate when undertaking the complex, political process of promotion reform.

Over the course of approximately three years at MU, the criteria and process for promotion of tenured faculty from the rank of Associate to Full changed significantly, in ways that most agree were a big leap forward and might lessen barriers for women. The promotion reform process at MU is far from over, however. Although new criteria were approved, other important issues of “what” remained unresolved. There was still lack of clarity in the promotion criteria and process for non-tenure track faculty, among whom women are over-represented. Negotiations also continued about an appropriate system for mentoring and professional development of Associate Professors and non-tenure track faculty. Perhaps the biggest gap, however, was the work of internal alignment and policy enactment. By importing the Boyer definitions of scholarship, without undertaking the hard work of internally validating and adapting the criteria, it is not yet clear that the new promotion system is grounded in the unique vision, values, and culture of the institution. Indeed, O’Meara [9] cautions that changing policies to reward multiple forms of scholarship does not address assumptions and values about faculty work and scholarship that are deeply held by many decision-makers and evaluators and that conflict with the new reward structure. For example, graduate school socializes faculty to see their primary role as creating new knowledge for academic communities in their discipline, thus privileging and legitimizing the scholarship of discovery over other forms.

Thus, as Middle University moves from policy negotiations to policy enactment, strategic ambiguity will still be at play and will still have the potential to reinforce rather than disrupt systems of privilege. How can the promise of “unified diversity” and gender equity be achieved in a strategically ambiguous promotion system? This question suggests further avenues of research and practice as this case study proceeds longitudinally. We suggest that attending deliberately to micro-processes of *who* and *how* may be essential for success. How can a broad range of constituencies be engaged in interpreting the new policy and arriving at shared understanding, particularly with regard to multiple forms of scholarship? To what extent do various constituencies (e.g., mentors, department chairs, promotion committee members, Deans and Provost) become aware of possible ways to evaluate different forms of scholarship that may be very different from the type of work in which they engage? How will a mentoring system support diverse faculty to succeed with the new promotion criteria? Another area of work is to look at different biases (explicit and implicit) that exist at different levels in an institution (faculty, department heads/chairs, higher administration) to understand how the new criteria may be evaluated and how mentoring practices may be influenced by these natural preconceptions.

As a case of only one institution, the findings of this study of course cannot be generalized, yet we suspect that the micro-processes identified here may inform reform efforts at other institutions. Moreover, this study suggests an opportunity for future research— to investigate the extent to which the micro-processes seen here apply to others undertaking promotion reform. With more grounded theory about how negotiations over strategic ambiguity in promotion systems proceed and are intertwined with micro-processes of control and internal versus external alignment, leaders of reform efforts will be less likely to be blindsided by such negotiations and more likely to engage in ongoing processes that will truly transform promotion systems in ways that foster gender equity, inclusive excellence, and institutional distinctiveness.

References

- [1] National Center for Science and Engineering Statistics, "Women, Minorities, and Persons with Disabilities in Science and Engineering," National Science Foundation, 2017. [Online]. Available: <https://ncses.nsf.gov/pubs/nsf19304/data>. [Accessed 12 March 2019].
- [2] J. Misra, J. H. Lundquist, E. Holmes and S. Agiomavritis, "The ivory ceiling of service work," *Academe*, vol. 97, no. 1, pp. 22-26, 2011.
- [3] S. R. Bird, "Unsettling universities' incongruous, gendered bureaucratic structures: A case-study approach," *Gender, Work & Organization*, vol. 18, no. 2, pp. 202-230, 2011.
- [4] A. J. Stewart, J. E. Malley and D. LaVaque-Manty, *Transforming science and engineering: Advancing academic women.*, University of Michigan Press, 2007.
- [5] D. Banerjee and A. L. Pawley, "Gender and promotion: How do science, technology, engineering, and mathematics (STEM) faculty members survive a foggy climate?," *Journal of Women and Minorities in Science and Engineering*, vol. 19, no. 4, 2013.
- [6] K. O'Meara and C. Lennartz, "Navigating a Foggy Climate: Women Associate Professors' Sense of Agency and Work Environment Experiences," in *Success After Tenure: Supporting Mid-Career Faculty*, Stylus, 2019, pp. xx-yy.
- [7] E. Eisenberg, "Ambiguity as strategy in organizational communication," *Communication Monographs*, vol. 51, no. 3, pp. 227-242, 1984.
- [8] J. Fairweather, *Faculty work and public trust: Restoring the value of teaching and public service in American academic life*, Boston: Allyn and Bacon, 1996.
- [9] K. O'Meara, "Uncovering the values in faculty evaluation of service as scholarship," *The Review of Higher Education*, vol. 26, no. 1, pp. 57-80, 2002.
- [10] S. R. Bird, J. Litt and Y. Wang, "Creating a status of women report: Institutional housekeeping as women's work," *National Women's Studies Association Journal*, vol. 16, no. 1, pp. 194-206, 2004.
- [11] K. O'Meara, A. Kuvaeva, G. Nyung, C. Waugaman and R. Jackson, "Asked more often: Gender differences in faculty workload in research universities and the work interactions that shape them," *American Educational Research Journal*, vol. 54, no. 6, pp. 1154-1186, 2017.
- [12] S. Park, "Research, teaching, and service Why shouldn't women's work count?," *Journal of Higher Education*, vol. 42, no. 5, pp. 541-567, 1996.
- [13] A. L. Antonio, H. S. Astin and C. M. Cress, "Community service in higher education: A look at the nation's faculty," *The Review of Higher Education*, vol. 23, no. 4, pp. 373-397, 2000.
- [14] L. J. Sax, A. Astin, M. Arredondo and W. S. Korn, *The American college teacher: National norms for the 1995-96 HERI faculty survey*, Los Angeles: Higher Education Research Institute, University of California, 1996.
- [15] R. K. Toutkoushian and M. L. Bellas, "Faculty time allocations and research productivity: Gender, race and family effects," *The Review of Higher Education*, vol. 22, no. 4, pp. 367-390, 1999.
- [16] P. D. Umbach, "The contribution of faculty of color to undergraduate education," *Research in Higher Education*, vol. 47, no. 3, pp. 317-345, 2006.

- [17] K. O'Meara, "Rewarding multiple forms of scholarship: Promotion and tenure," *Handbook of engaged scholarship: Contemporary landscapes, future directions*, vol. 1, pp. 271-294, 2010.
- [18] S. L. Laursen and A. E. Austin, "Faculty development for mid-career women in STEM," in *Success After Tenure: Supporting Mid-Career Faculty*, Stylus Publishing, LLC, 2019, pp. 221-242.
- [19] K. O'Meara and R. E. Rice, *Faculty Priorities Reconsidered: Rewarding Multiple Forms of Scholarship*, San Francisco: Jossey-Bass, 2005.
- [20] M. F. Fox and C. Colatrella, "Participation, performance, and advancement of women in academic science and engineering: What is at issue and why," *The Journal of Technology Transfer*, vol. 31, no. 3, pp. 377-386, 2006.
- [21] R. Yin, *Case Study Research and Applications: Design and Methods (6th Ed.)*, Sage Publications, 2018.
- [22] A. Langley, "Studying processes in and around organizations," in *The Sage handbook of organizational research methods*, Thousand Oaks, CA, Sage Publications, 2009, pp. 409-429.
- [23] A. H. van de Ven and M. S. Poole, "Explaining development and change in organizations," *Academy of Management Review*, vol. 20, no. 3, pp. 510-540, 1995.
- [24] R. Thomas, L. D. Sargent and C. Hardy, "Managing organizational change: Negotiating meaning and power-resistance relations," *Organization Science*, vol. 22, no. 1, pp. 22-41, 2011.