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# The Consequential Agency of Faculty Seeking to Make Departmental Change

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#### **Background and purpose**

Over the past decade, much attention has focused on change-making efforts, especially those funded by the NSF Revolutionizing Engineering Departments program. Studies on such efforts point to the importance of change teams having sufficient authority to bring about the change they envision [1-12], as well as the capacity to recognize and contend with ways that structural and normative power relations tend to be reproduced [13-16]. In this paper, we investigate a research question:

• How and over what/whom do faculty engaged in departmental change efforts express agency in this process, with attention to structural, cultural, normative, and interpersonal power relations?

Our aim is to characterize hallmarks of consequential agency in change-makers' talk. This study brings together efforts from three NSF EEC-funded projects representing five grants, drawing together methods and theories across these projects.

#### **Theoretical framework**

We bring together theory on framing agency and intersectional power to support our study aims. First, an intersectional approach to understanding power relations suggests that power is distributed across situations, systems, structures and individuals in complex, dynamic ways. To understand this distribution, we pay attention to structures, cultures, disciplinary norms, and interpersonal factors [13]. We intersect this notion of power with theory about agency. Classical agency theory proposes a dialectic in which human choice is consistently limited by structures [17-19]. More recent theory suggests that agency is situated, and that some decisions are consequential [20, 21], and that agency may be considered as distributed and negotiated across humans and structures, rather than as in opposition [22].

#### Methods

We draw upon recordings of faculty meetings and interviews with faculty across multiple change teams to characterize consequential change agency. Specifically, we selected data from a large corpus (more than 80 hours of transcribed audio recordings of interviews and faculty meetings and workshops, involving 20 faculty) collected over six years from a single institution, and from a smaller corpus (15 30-70 minute interviews) of cross-site interviews with change teams that were two to four years into their projects. We selected data with attention to contentiousness and disagreement, as contentiousness and disagreement seem to be markers of power differentials as experienced by the participants. Across all of the data, we drew stories that expressed contention, and where possible, also drew others' accounts of these same events, even if not described as contentious. In the results we do not indicate which dataset the data came from (large or smaller corpus) as a way to help protect the confidentiality of the participants.

We analyzed transcribed data using the framing agency coding toolkit [20-23], a discourse analytic approach adapted from past studies of how agency shows up in talk [24]. This approach focuses on how forms of speech, especially the subject and verb, express or mitigate agency. First person subjects show higher agency than third person. Verbs may suggest no, potential, or full control. As a sociocultural approach [25], we considered what and whom individuals expressed agency over or assigned agency to as they considered contentious changes.

#### **Results and discussion**

We first share analysis of interviews with two different faculty, Diana and Evan (all names are pseudonyms), about the same two specific events. We foreground these data for their capacity to shed light from two perspectives on the same event.

The first event, which involved tensions around resources, was clearly contentious for Diana. She described a denied request, using verbs that showed a lack of control ("I can't even get"), but followed up with high, individual agency responses ("And I called him out on that"). She also shared agency with others on her team in recounting a moment when they found out some resources had been given to someone outside the team ("we had no idea"). In contrast, in referencing disagreements about resources, Evan consistently distanced himself ("there is, uh, um, skepticism of the way others are using resources"), and mitigated his agency with hedges ("I think," "kind of"). Evan also offered a less detailed account.

The second event, a retreat, was contentious in part because of issues related to a risk-averse leader. Diana grouped the leader with Evan, noting they were both kind but ineffectual ("This is what we're trying to disrupt in our unit, but it plays out in our small faculty [team]"). Evan used low-agency verbs ("We need") to describe the leader and again distanced himself from the issues ("One of the team members had been frustrated... that- that- that was a difficult day.").

Collectively, these two accounts of the same situations suggest different levels and forms of agency that intersect with structural and disciplinary power. Evan, as a full professor and a man, occupies a more powerful position than Diana in terms of rank and gender, but by mitigating and offloading his agency, he did not display change agency.

We contrast this with interactional data to highlight what change agency, as it plays out, might look like (Figure 1). This vignette, from near the beginning of a RED team's change effort, involves members of a change team who, at that point, did not share a common understanding of the strategies. Lin, in the role of engineering education researcher, had developed the curricular approach with Arun. Specifically, the change team planned to thread design challenges through core engineering courses, with teams of faculty, students, the engineering education researcher, and other partners collaborating to develop the design challenges. Park supported the effort when Arun was occupied during planning, meeting with students on the team.

In this vignette, Park raised concerns about the students' capacity to contribute to the development of the design challenge. In voicing this concern, Park displayed a lack of control ("what needs to be emphasized"), offloading agency onto the course content. Lin and Arun, rather than forcefully countering Park, met Park's concern with verbs showing potential control. While Lin aimed to recast the role of the student to align it with the planned change strategy,

Arun met Park on more even ground, offering an assumption about the roles of students that Park might hold, and indeed, which Park did confirm. This apparent openness seems counter to models of change that emphasize the importance of forming shared vision [26]. Yet Arun's sharing of Park's concern (using "we,") is both counter to the specific strategy of engaging students for their perspectives and interest, and a form of change agency. By meeting Park where Park was, and feigning shared ownership of Park's concern, Arun acknowledged the realness of the concern, then invited other faculty to engage in the change effort.

Figure 1. A vignette from early in a change project. In the transcription, we used dashes to indicate pauses, all caps to indicate emphasis in the audio file, [...] when part of the transcript was removed for clarity, brackets to help clarify statements, and // to indicate overlapping talk.

High agency marker. First person singular subject Shared agency marker. First person plural subject Framing agency marker. Verbs show potential control Low agency marker. External person/object subject Low agency marker. Verb indicates lack of control

- Park: So, I express a couple of concerns about, so number one is the students that we are hiring to accomplish to develop these challenges. I- I- a particular student came into my office, [and] it seems he's essentially parroting what I told him to when it comes to the phase change and what needs to be emphasized, simply experiments that I suggested. And he had absolutely NO idea how to solve transient heat transport problems. um so not that we were expecting that from 101 students, uh, the student had no idea what their key problems were and if the students were actually helping them design, um, rather reducing the complexity of that problem to match the understanding of sophomores and freshman year students, I think there is, there's a lapse there's- I want to express that concern um.
- Lin: I will say that the student point of view is also very important, having the students on the team, because they're able to tell us what kinds of things they know, what kinds of things were hard for them in the classes they've taken very much like the peer learning facilitators. They're also going to tell us if something seems interesting to them, it's the kind of thing that's come up in classes. What other classes they might've taken that this would have been beneficial for. Um, and so that point of view, that expertise they bring was actually a really //.
- Arun: // I think what Park's concern is, I know what you're expecting is that the students who helped design this challenge should have a high level of understanding of the subject so that they know it fully. And then they'll simplify it down to//
- Park: // Distill it
- Arun: to freshmen level Right.

Park: yes

- Arun: That's what we'd like to see now we may not have been done have been successful in finding the right students in year 1. Well, you're going to develop the next one. This is a good point.
- Park: ALSO And then the second point that I was going to make is this will be much more appropriate for [a junior course] then perhaps even 101.
- Arun: Yeah. So we're going to scratch the surface. [...] This problem can be revisited with far more complexity in [junior courses] or later. So the idea is this is not the end of this challenge. This challenge could become far more sophisticated and we could build up or dispense with it and move on to something else. That's really up to each class. [...] Now we really throw it open to everybody to say, how can your research be integrated into undergraduate education?

#### Significance and implications

The analysis of Diana's and Evan's accounts of the same events reveal enduring power dynamics that, at the time of data collection, remained intact. Although we do not have interactional data to help us understand ways they aimed to overcome these issues, Evan's distancing and off-loading, if engaged interactionally, could in part account for their limited progress on their change efforts. In contrast, Arun's response to Park's concern is characteristic of change agency. While this single vignette of a contentious moment early in the project is not sufficient, on its own, to encapsulate the varied elements that contributed to what has become a very successful change effort, we argue that it does showcase key elements of change agency: as meeting others where they are, sharing agency with them ("we"), using potential control verbs (can, could, might, etc.), acknowledging their concerns, and inviting them into the effort in ways that suggest ownership.

We recognize these discursive markers as potentially necessary but not sufficient ingredients for change efforts. Likewise, there are limitations to bringing together interview and interactional data, and working with data from emic/etic stances. Yet, this first effort highlights possibility in attending closely to talk, both from research and practice stances.

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