Talking to Foucault:
Examining Marginalization and Exclusion in Academic Science

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> Although we usually think about writing as a mode of "telling" about the social world, writing is not just a moping-up activity at the end of a research project. Writing is also a way of "knowing"—a method of discovery and analysis. By writing in different ways, we discover new aspects of our topic and our relationship to it. Form and content are inseparable.
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> <div align="right">—Laurel Richardson</div>

In this article, I invite you to join me as I follow Laurel Richardson's advice to use writing as a method of inquiry.[1] To do so, I engage in a fictional conversation with Michel Foucault—later joined by actor-network theorist Michel Callon—in which I talk through and construct understanding(s) of and from my research on the under-representation and marginalization of women in academic science. I have chosen to talk through possible meanings with Foucault and Callon not only because of the applicability of their theorizing, but also because their work has inspired me to resist normative discourses in social research. By writing through meaning(s) in conversation—albeit fictitious—in this way and inviting you to join me, I hope we will both, indeed, discover new aspects of this topic and our relationship to it.[2]

Before we begin however, let me share a few important details about this research. It is a narrative ethnography[3] in which I have spent nearly 50 hours in conversations with five male and female doctoral candidates and junior faculty members in natural science departments. Amanda, Aaron, Sylvia, Peter and Greta each shared up to 10 hours talking with me in their offices, coffee shops and local restaurants about the ways in which they understand and develop some sense of 'fit' or belonging within academic science. Amanda, Aaron and Sylvia are all doctoral candidates in chemistry, microbiology and ecology while Peter and Greta are assistant professors in chemistry and earth science departments.

In the writing and the reading of the text that follows, I hope to create opportunities in which multiple understandings of and new possibilities for disrupt-

ing marginalization and exclusion can emerge from the intersections of our experiences of the world and our interpretations of the words.

Co-Constructing Understanding(s)

With the assistance of some imaginative time travel the year is 1983 and I am sitting in the office of Michel Foucault. My lap is filled with folders containing the stories, conversations, vignettes and diagrams that came from initial analyses of 2500 pages of transcribed conversations with my co-participants. My backpack is filled with books written by and about Dr. Foucault, as well as pages and pages of notes taken from these texts for easy reference. Just moments before, a delightful young graduate student escorted me into this voluminous office, offered me a seat at a round table that appears to be a place for taking meetings, and assured me that Dr. Foucault would arrive shortly. Nervously, I organize my folders, notes, and books on the table in front of me. While I am looking forward to talking about the findings and implications of my research with one of the people who inspired it, I just hope that I can keep from being immobilized by the process of down shifting into my lizard brain the minute he walks in the door.

Sitting at his table, looking around at his shelves filled with books written by famous philosophers and social scientists like Kant, Chomsky, Weber, and Nietzsche, I begin to tremble with the fear of having nothing meaningful to say. I've spent nineteen months completely absorbed by this project and all of the sudden I'm terrorized by the notion of wrapping it up and putting it in the hands of readers. As that fear begins to take hold in the pit of my stomach, I feel compelled to grab my things and leave. Before I can get my body to move, however, Michel Foucault walks in the door. With that, a new form of paralysis kicks in. Reminding myself to breath slowly and consciously, I take in all of his characteristic features. When I see his familiar bald head and scholarly glasses, I am reminded of the cover of my *Foucault Reader*.[4] I can't help but reflect on all of the books on which I have seen the face that stands before me now. Mercifully, there is something in the kindness of his greeting and the warmth of his expression that releases me from my fearful paralysis.

I feel myself relaxing even more when he smiles and welcomes me. "Sherie, how good of you to come. I understand you have risked traveling across considerable distance as well as time."

"Indeed I have," I offer.

Sitting in a chair to my right, Michel gestures for me to take my seat.

"Welcome to Paris!" he says with pride. "Now… Let's talk about your research."

"I'm happy to be here," I reply. "But I'm not exactly sure where to begin. I have been so close to my data for so long; I fear that I may have lost some perspective."

"As we are all inclined to do," he assures me. "Why don't you start by reminding me of the problem that motivated you to spend nineteen months of your life designing, conducting, and writing about this research project."

"The problem is pretty simple," I respond. "Like many others, I am troubled by the under-representation and marginalization of women and people of color in academic science departments. Science in these departments appears to be an especially exclusive club."

"Ah…" he replies with a look of intensity. "If I were a polemicist, I might be brazen enough to ask you why this under-representation and marginalization is so troubling?"

"Because," I explain, "I think it is bad for science and it is bad for those populations who are under-represented and marginalized. I think it is bad for science because without diversity of representation, there is bound to be homogeneity of ideas and perspectives. My understanding of feminist critiques of science tells me that because so few women are participating, science remains androcentric.[5] So independent of whether you take essentialist or social constructionist views of differences between men and women, I think you would agree that if science is homogeneously white males and relatively impenetrable to other points of view, the richness, creativity, and some would argue even the objectivity of the thoughts and ideas produced will suffer.[6] Countless feminists, multiculturalists, critical theorists, and poststructuralists have written persuasively about ways in which people and ultimately science suffers from its homogeneity."[7]

"Yes," he confirms. "I'm familiar with this literature."

I continue, "Similar to the critique that feminists have offered of science as an androcentric endeavor, multiculturalists level a similar critique of the Eurocentric or Western nature of science. I believe the same argument can be made for the limitations science suffers in the hands of its ethnic and cultural homogeneity. Thousands of pages have been written on both sides of these criticisms. While I think this larger conversation is important to consider when framing the motivation behind my research, it has never been my intention to contribute to the specifics of this debate."

Dr. Foucault nods his head. "I understand that this discussion is beyond the scope of your research Sherie, but you have helped me understand how you are positioned in that conversation and how it has motivated the research you are doing. Before we move on to the specifics of your project, I am most curious about why you think under-representation in science is bad for women and people of color? Perhaps they are making thoughtful choices about whether or not they want to participate in academic science. You would agree, wouldn't you, that it is not for everyone?"

"True," I answer. "I would agree that many thoughtful, well informed people have examined the workings of academic science and made conscious decisions not to participate. While that may be true, if we find that the preponderance of people making that choice fit into particular categories like female and non-white, it seems to me that through conscious decision making or not, there is a degree of systematic exclusion going on. In the end, they are removed from the economic, intellectual, and influential benefits the life of an academic scientist can bring. I also worry a lot about the decisions that we consider to be conscious decisions. For example, it is true that one of my participants, Amanda, has consciously decided not to participate in

academic science, but I am concerned that she is making that decision because she fears that she is incapable of doing science in the academy. Or, perhaps more subtly, I worry that she is choosing not to join the academy because she feels like she doesn't belong or 'fit'. It seems as though she has consciously concluded that the way that she thinks about and does science doesn't fit with her well-informed, perception of what science is and how it is done in the academy. If this is the case, I worry that Amanda is experiencing science as hegemonic."

I look to see if Dr. Foucault is following me and I am relieved to see a nodding head and a knowing expression on his face. His only response however is, "Hmm," which encourages me to go on.

"Now," I continue, "it may also be possible that Amanda has looked at the life and practices of academic scientists and has concluded that she wants no part of it. It is possible that she has come to that conscious conclusion without any damage to her self or, in other words, without suffering from science as hegemony. However, after spending nearly twelve hours talking with her about this subject, I couldn't tell you whether or not this is the case. I think it is possible that Amanda's interactions with academic science may very well be producing negative or damaging effects in terms of hegemony. If so, I think this is bad for Amanda. And I also think it is possible that losing Amanda's contributions could very well be bad for science." As these arguments tumble out, I feel my ears flush and my hear rate quicken.

"I can tell that you feel strongly about this topic," he offers sympathetically. "As you said, the suffering of the discipline and the under-represented at the hands of science are two subjects about which much has been written and we won't take more of our valuable time together rehashing these arguments. But you, Sherie, have given me a very clear understanding of where you currently fit within that discourse. Thank you for indulging me."

With a sigh of relief, I say, "I'm happy that you asked. It was helpful for me to remind myself of why I'm doing what I'm doing. As I said earlier, I've been so close to the data, I was afraid of losing perspective."

Michel places his hand on top of and gazes at a stack of labeled folders on the table in front of him. I see that these are the folders filled with copies of my prospectus, conversation transcripts, stories and vignettes that I sent before I my arrival.

Looking back at me, he says, "Thank you for sending me these pieces of information ahead of time Sherie. It has been useful to familiarize myself with your data before our conversation. From what I have read, I understand your research is focused on the roles that the material or representational objects associated with being an academic scientist—things you call inscriptions—might be playing in the production and reproduction of under-representation and marginalization of women in academic science. Do I have it right?"

"Yes, that sounds exactly like what I'm doing."

Scratching his chin, Michel says, "Good, then let's talk about how my work might help shed some light on the stories and conversations you've collected and shared

with me. Before you begin, however, perhaps it would be helpful to remind me of how you came to believe my work would be useful to you in the first place."

Taking a deep breath, I begin. "I became particularly interested in your work when I read an article in the *Journal of Research in Science Teaching* by Wolff-Michael Roth and Michelle McGinn.[8] In this article, Roth and McGinn talked about the effects of grades and grading practices on high school physics students that they interviewed. Their discussion of these effects resonated deeply with concerns that I have long held about grades and grading practices. In their critical examination of how these physics students shaped and were shaped by grades, I was particularly captivated by the idea that grades, as representational artifacts, can act as powerful resources for students who are constructing identities with regard to science. It made complete sense to me, when they suggested that students use grades to construct understandings of 'self' and 'other' with regard to their capabilities and, perhaps more importantly, their 'fit' within the discipline of science."[9]

Looking slightly confused, Michel interrupts me. "That sounds like something I would say."

"It should," I respond, "Roth and McGinn explained that they were using your conceptions of knowledge and power combined with actor-network theory in their examination.[10] That's how I came to explore your work."

"Oh, okay," he says with a hint of relief. "Go on."

"They talked about how grades, as apparatuses of comparison, can be used for estimating differences between individuals, between individuals and the norm, and for producing distributions of individuals in populations.[11] As such, grades can act simultaneously to create and position individual learners within social orderings that constitute success, aptitude or belonging in science. They suggested that as referents for shaping relationships of people to each other and to their settings, grades are active elements in the social construction of knowledge and power. Having studied your work for nineteen months now, I would add, grades are active elements in the social construction of self or subjectivity."

"From what I am hearing," he interjects. "I would agree."

"So, I think Roth and McGinn are saying that as representations of what is required to be successful within the context of doing science in school, grades shape students' knowledge of science as a discipline.[12] Student use grades to construct understandings of what it means to know and do science. As representations of capabilities that can and will be judged, grades shape students' knowledge of acceptable or successful behavior with regard to studying and doing science. Based on this knowledge students' behavior is shaped—disciplined—by the normalizing function that grades perform. And finally as representations of position within distributions of relative success or failure, grades shape students' knowledge of themselves in relation to science as a way of thinking and being. Grades influence students' thinking about themselves as scientists."

Leaning back in his chair and interlocking both hands behind his head, Michel

looks at the ceiling with an expression of deep thought. We sit in silence for a moment. I notice that my breathing is much more even, and that I'm beginning to relax and feel more comfortable.

Breaking our silence, Michel says, "I think I'm starting to see where you are going Sherie. When I analyzed sexuality as a historically singular form of experience, I treated it 'as a correlation of a domain of knowledge, a type of normativity, and a mode of relation to the self.'[13] Are you suggesting that science or academic science could be similarly analyzed as a form of experience and could also be treated as a correlation of a domain of knowledge, a type of normativity, and a mode of relation to the self?"

"Yes, I think I am," I confirm. "But, where your analyses of madness, criminality, and sexuality looked at the much larger picture, as histories of thought, Roth and McGinn looked more narrowly at the specific role grades played in students' construction of knowledge, normativity, and relation to self with regard to science or being a scientist.[14] I think Roth and McGinn attempted to show specifically and locally—within the context of one physics class—how grades can act as resources for students who are constructing understandings, disciplines, and identities with regard to science; students who are consciously or unconsciously asking, 'What is science? How should I behave if I am a scientist? And how do I know myself as a scientist?'"

I look at Michel's face hoping to see some glimmer of understanding and resonance.

"Exactly," he says excitedly. "And you believe, or you are saying that Roth and McGinn believe, the answers that students construct to those questions can make the difference between someone who believes they can and want to be a scientist, and someone who believes they can't or chooses not to be."

"Right!" I affirm.

He asks, "Would my leap be too great if I were to conclude that, upon reading this article, you began to think about how the academy's equivalent of grades—representational objects (inscriptions) associated with tenure and promotion—are acting in people's construction of knowledge, normativity, and relation to self with regard to academic science?"

"No, I'd say that is pretty accurate. I don't think the leap that I took was as neat and clean as yours, but looking at it from this vantage point—with the perspective that only looking back can give—I would say that is exactly what I began to wonder. For example, I started thinking about how science faculty members are required to publish a certain number of papers in certain kinds of journals in order to continue working in the academy—which means getting tenure. It seemed to me that the numbers of publications and the names of journals in which they are publishing were inscribing their success as researchers. These numbers and journal titles become two dimensional, representational artifacts—inscriptions—when they get published in a CV, an annual review or in tenure and promotion applications. With that in mind I began wondering if these inscriptions could be acting with natural science faculty members in the same way that Roth and McGinn were proposing that grades acted

with high school physics students.[15] These thoughts led me to consider other ways in which science faculty members are inscribed by representational artifacts and how those inscriptions might act as resources for constructing identities with regard to science in the academy. As I grew familiar with your work, I broadened my questioning to include how inscriptions act in doctoral students' and junior faculties' construction of what it means to be an academic scientist—a domain of knowledge—what is and isn't acceptable behavior for an academic scientist—types of normativity—and how they see themselves as academic scientists—a mode of relation to self."

"Before we go any further," Michel interrupts, "tell me about this term you are using so freely, 'inscription.' I know I have suggested that exams and examination rituals act as technologies of inscription through which knowledge is simultaneously tested and produced.[16] Are you using this term in a similar fashion?"

"Yes, I am," I reply. "The Roth and McGinn's article also introduced me to the work of Bruno Latour and Michael Callon.[17] As French scholars, you may be familiar with their work."

"I am," he confirms. "Go on."

"Roth and McGinn explained that Bruno Latour first used the term inscription to talk about two dimensional, semiotic devices that are designed to represent a 'real' phenomenon. Latour used the term inscription in his discussion of the photographs, spectral images, graphs, diagrams and drawings used by scientists to represent natural phenomena that are too small, too big, or temporally impossible to see."[18]

"This is fascinating… tell me more."

Feeling the need to lean on a quote, I pull out my copy of the Roth and McGinn article and read, "Inscriptions afford scientists access to phenomena but the phenomena exist only because of the inscription. In a similar way, grades from students… are frequently used to construct gender differences in achievement."[19]

"Oh, you're saying that grades, as inscriptions, afford us access to a phenomena we call achievement, but the phenomena of achievement only exists because of grades."

"That is exactly what I'm saying."

"And this," he continues, "is not unlike the way that I proposed madness and sexuality to be phenomena constituted by the technologies of inscription that we use to define and access them."

While my mind is straining to maintain its grip on the slippery understanding that is coming into view, I am reminded of my colleague Brian telling me that trying to understand postmodern/post-structural thought is like trying to hold a wet bar of soap between your thumb and fingers.

Excited by what feels like a fairly firm grip, I respond. "That is exactly what I'm thinking! And I want to talk about academic science in the same way you talked about sexuality. When I say academic science, I'm referring to a method or doctrine regarded as characteristic of an academic scientist. In the context of my research, I am defining an academic scientist as a tenured or tenure track faculty member in a natural science

department. Framed in this way, I am treating academic science as a phenomenon constituted by the inscriptions used to define what it means to be a scientist in the academy. In most institutions of higher education in the United States, I would argue that those are the same inscriptions used for making decisions about tenure and promotions in natural science departments."

"I think I understand where you're going Sherie, but wouldn't some people say that you have simply stated that tenure defines the standards, or requirements for becoming an academic scientist."

"Yes, I suspect they could say that in the same way that they might say the definitions used to characterize sexuality are simply the words we use to describe a naturally occurring phenomenon. But what your work has said to me is that sexuality is a construct invented and made real through the words—which can be viewed as inscriptions—used to define it. More importantly, it is a construct that has come to define what is normal and what is abnormal sexual behavior. And this is where I believe the damage gets done. Deconstructing sexuality in this way has made all of the difference in my ability to stop and to some extent reverse the damage that resulted from my relationship with the construct of sexuality. Without this construct as an internalized referent, my erotic and emotional attraction to women would never have been seen by myself or anyone else as abnormal. And I would have been spared the suffering that occurred as I shaped and was shaped by my understanding of sexuality, as I disciplined and was punished for my erotic desires, and as I grew to know myself as deviant, abnormal, or other." I flush slightly with this disclosure.

"This is good Sherie, tell me more about the connection you are trying to make between sexuality and academic science."

"Well, I think the very point you were trying to make by deconstructing sexuality, was to demonstrate how it came to be thought of as a real or natural phenomena. By examining its historicity, you were able to show us that it exists as a phenomenon only because of the words—inscriptions—we use to access it. And as such, the correlation of our understanding of it, the ways in which we are disciplined by it, and our knowledge of our selves and others in relation to it acts as a means for sorting people. It becomes a naturalized way of thinking about self and others. In other words, it is a way of positioning some in the center and others at the margins or on the outside. I fear that academic science, like sexuality can be a naturalized way of thinking about self and others. It can be an embodied referent that defines some as scientists and others as non-scientists."

"And you have seen this effect?" he asks.

"Absolutely," I reply. "I can't tell you how many times I have heard people say with deep conviction, 'I'm not a scientist,' and they weren't referring to their profession. They were talking about some perceived inherent properties that precluded them from characterizing themselves as a scientist. While you and I may see academic science as a construct that exists as a phenomenon only because of

the inscriptions used to access it, I'm afraid that countless others have internalized it as a real thing that someone is or isn't."

"Is that your fear with Amanda and Sylvia?"

"Yes, I think it is," I reply. "Remember the conversation in which I asked Amanda what she would do if she could create a doctoral student experience in natural science that didn't cause so much insecurity?"

"I do remember this story," he confirms as he taps on the stack of folders in front of him. "And I remember that Amanda's response was to go back in time and reinvent the way science journals are written."

"Right," I say. "And the reason she gives is because the science she reads about in journal articles doesn't feel like the science she experiences. According to Amanda, the science that she experiences as a doctoral student is messy, filled with mistakes, dead ends, and uncertainty about findings and their meaning. In contrast, the science she reads about in academic journals is neat and clean, following a linear progression from hypothesis to certain conclusion. I feel as though the difference between Amanda's own experience of science and what she reads in journals leads her to question her own capabilities as a scientist. And I'm afraid that Sylvia might be doing the same thing."

"Yes," he interjects, "I remember Sylvia saying something like, 'if I was a real scientist, my work would be more hypothesis driven.' I remember this because of the sadness I felt upon reading it."

"I remember talking with Sylvia about those feelings and feeling a similar sadness," I confess. "And if you remember," I continue, "when I asked Sylvia how she gained that impression, she told me it came from reading scientific papers in her field, seeing which papers are assigned for readings in her classes, and hearing which scientific papers and talks were revered by faculty members in her department. Like Amanda, I think Sylvia may be using these inscriptions to construct herself as an inadequate scientist."

"Wouldn't you say, however, that Sylvia's reading of her interactions with inscriptions like grant proposals and post doctorate applications have had quite the opposite effect?"

"I think that's true. Maybe that's why, through our conversations, Sylvia and I concluded that she was conflicted in the ways in which she constructs herself as an academic scientist. Her experiences with all of these inscriptions have constituted a conflicted or confused understanding of academic science, the rules she would have to live by if she became a scientist, and of her own scientific subjectivity."

"If I remember correctly," he says, pausing for a moment and rubbing his head, "Greta does not appear to be affected in the same way by her interactions with inscriptions like academic science journals."

"No, I don't think she is," I reply. "She seems pretty clear about not having a problem with or not feeling any dissonance with scientific papers as inscriptions of academic science. But, do you remember in that very same conversation Greta talked

about feeling like she needed to be bilingual in order to switch between her 'science self' and her 'own self?'"

"I remember that as well," Michel asserts, "because I was so taken by what she said." Pulling his copy of my draft chapter on Greta from the pile of papers in front of him, Michel opens it to the last two pages and reads Greta's words. "When I first started grad school, I would often think that being in the world of science was like being in a male world… I really had a hard time with that. It's like being bilingual; you have your normal way of talking and interacting and then there's the white, male science way of talking and the two don't go together. So there's myself and then there's my science self. And I can't be my own self in the science world or I'm screwed. I was real conscious of keeping those things separate."

"Exactly," I reply excitedly. "And don't you think it was interesting that while Greta described talking and interacting in the white, male, science way as hard or troubling, she found learning to write scientifically—a skill she equated with learning another language—to be unproblematic."

"I did find that interesting," he says, with a smile that seems to indicate his pleasure with my excitement. "What do you make of the difference?"

"I'm not sure exactly," I answer. "But it feels like there is a lot going on there. One of the first things grabbing my attention is Greta equating the world of science with a male world. I find myself asking, does this mean Greta's construction of academic science shares all or most of the properties or characteristics of her construction of maleness or masculinity?"

As soon as those words fall from my consciousness, I begin to see gender—in this case maleness—as a construct, like sexuality and academic science, that exists only through the inscriptions we use to define and access it. All of the sudden I start to see layers upon layers of constructs in which we operate—and then I realize that I may be understanding deconstructionism—or maybe that's poststructuralism—for the first time, which is a rather embarrassing revelation to have while sitting in front of one of the world's preeminent deconstructionists.

Michel jumps in. "And it seems to me that if this is what Greta is doing, it would explain her feelings of having to separate herself—and we can only speculate as to whether or not she was referring to herself as female—from her science self, which we know she has constructed as commensurate with maleness. What do you make of the fact that she is troubled by having to separate her own self from the science self when she is talking and interacting with her white male colleagues, but seems untroubled by having to learn to write scientifically as one would have to learn another language?"

"I'm not sure, but it feels consistent with other things that Greta said when it came to distinguishing between the inscriptions of science and the social context of science in the academy. Unlike Amanda and Sylvia, Greta doesn't appear to feel any discord between the way academic science is represented through scientific papers and presentations and the way that she constructs herself as a scientist. So maybe

she doesn't feel like she has to give anything up or change in order to be the scientist she sees as represented—inscribed—in scientific papers and presentation. On the other hand, it sounds like she does feel like she has to set aside her 'real' self in order to talk and interact in the social context of science in the academy."

Michel flips through the pages of 'Greta's' chapter and says, "This is fascinating. I see what you are saying about the distinction Greta makes between the inscriptions of science and the social context in which she is forced to operate. In fact, in her story 'The relationships are the scary part,' she speaks most eloquently about how she has to use inscriptions of her success in academic science—in the form of publications and presentations—to gain credibility, or to inscribe herself as credible when she is interacting in the social contexts of science."

"Right," I say, noticing how much fun I'm having. "Like in her stories about trying to interact with male colleagues during conferences. This is why I would say that Greta is using inscriptions to 'write' herself into a form of experience in which she would otherwise feel like an outsider."

We sit quietly with this idea for a moment. My mind turns to Peter and Aaron, and I begin to think about their stories in the context of this conversation.

"You know," I say, breaking our silence. "When I think about my interpretation of Peter's construction of academic science in relation to his construction of self, two words come to mind."

"And what words are those?" he asks.

"Perfect fit," I reply

"Hmm," he says, "why do you say that?"

"Because I never heard Peter express any disconnect between his understanding of academic science and his construction of himself. He never talked about reading inscriptions of academic science as indications of his inadequacy or otherness. Instead, he talked about how he uses papers, grants, and presentations to inscribe his position in the scientific community. Peter spoke pragmatically and strategically about how he uses inscriptions to develop and promulgate a positive reputation in his field. And, I believe, for the most part he trusts that those inscriptions could and would speak for the quality of his science."

Michel's expression encourages me to keep going.

"It is interesting," I continue, "about half way through my data collection, I talked to Margaret—my advisor—about the impressions I was developing about my co-participants and their interactions with inscriptions. Based on my early reading of your conceptions of technologies of the self, I began thinking about things in terms of how co-participants use inscriptions to 'read' and/or 'write' themselves as insiders, outsiders, or conflicted with regard to academic science.[20] With a very underdeveloped understanding of how to apply these terms, I told Margaret that it seemed like Peter was the quintessential insider. His construction of academic science seems to be perfectly commensurate with his construction of himself, and he is completely comfortable using inscriptions to strategically and competitively

position himself as insider. In fact, on more than one occasion, he talked about using those same inscriptions to leave his 'mark' on science."

Michel asks, "Would you say that Greta is similarly strategic in her use of inscriptions to 'write' herself as insider?"

"I think she is," I reply. "As I think Aaron is to some extent. But with Greta, as we have already discussed, I would say her reading of the social milieu in which science takes place positions her as outsider, but when it comes to her construction of academic science, she uses papers, grants, and presentations to inscribe herself as insider. In a similar fashion to Peter's desire to leave his mark on science, Greta also talked about wanting to be known as one of the top scientists in her field."

"I understand what you're saying about Greta," Michel confirms, "but why do you say, 'To some extent' with Aaron?"

"I guess because I don't think Aaron cares so much about being an insider. While he appeared to be completely comfortable using inscriptions to demonstrate his competence or to make sure that he was able to progress to the next step on his quest to become an academic scientist, I never got the sense that he uses inscriptions to position himself in any perceived hierarchy or to compete for a particular status or reputation. Pragmatically, Aaron talked about needing to represent his work through inscriptions so that he can continue to get funding to do the work that he loves, but he never talked about leaving his mark on science in the same way that Peter and Greta did. By the same token, like with Peter, I never sensed any discord between Aaron's construction of academic science and his construction of himself. Again, there seems to be complete resonance."

"Do you think there is any correlation between the fact that Peter and Aaron seem to experience complete resonance with academic science and the fact that they are male?"

"Certainly it has been hard not to jump to that conclusion, but I think any correlation that we make needs to regard both academic science and gender as constructs whose existence is accessed only through the inscriptions we use to define them. I think by examining similarities and differences between the ways in which each co-participant relates—through their reading and writing of inscriptions—to those two constructs, we might be able to gain some understanding of how gender differences can be produced in academic science. Looking at it this way, I think it may be relevant that neither Peter nor Aaron expresses any dissonance between their construction of academic science and themselves as scientists when the opposite seems to be true for Amanda and Sylvia."

Michel takes off his glasses and rubs his eyes. Leaving his glasses on the table, he leans back and says, "So, are you saying that one way of understanding how gender differentiation can be produced is by looking at the degree of resonance between each person's construction of academic science and gender as domains of knowledge and their construction of themselves in relation to those domains?"

Smiling with the feeling of having that wet bar of soap firmly in my grasp, I say, "I think that's exactly what I'm saying."

Pushing my thinking, Michel asks, "How, if at all, do you think this idea is different from what cultural difference and critical theorists might suggest about the gendered or androcentric nature of the academy?"[21]

"Well…" I say stalling for time. "I think the difference lies in our conception of culture and social structures. My understanding of cultural difference theorists is that they tend to view culture as unified, bounded, and unchanging. Not unlike cultural difference theorists, I believe critical theorists would suggest that social structures like patriarchy are pre-existing norms and social hierarchies. Unlike these two conceptual orientations, I believe—influenced by your theorizing about knowledge, power, and the self as well as Michel Callon's actor-network theory[22]—the constructs of academic science and gender are historically influenced yet locally and contingently produced through the self-constituting activities of those engaged with the network of academic science. For example, the differences I observed between Amanda, Sylvia, and Greta's construction of self in relation to academic science makes it impossible for me to see gender and academic science as uniform, bounded, and/or static constructs. I have the sense that each of these women experiences academic science, gender, and the their intersection differently because each woman's construction of academic science, gender, and their intersection is different. I think you would say that while there is a shared genealogical history behind each construct, each woman's experience of that construct is locally and contingently produced."

"Right," he confirms, "which is the reason you and I would contend that we can't point to the gendered nature of the academy as the smoking gun behind the under-representation and marginalization of women in academic science."

"Exactly," I agree. "We can't point to the gendered nature of the academy, because we don't believe the academy has a singular, pre-existing nature. That is because we—along with actor-network theorists—see academic science as a self-constituting network of relations and intersecting constructions of domains of knowledge, modes of normativity, and understandings of the self."

After taking in what I have attempted to say, Michel offers, "It is indeed a complex phenomenon to try to understand." Then putting his glasses back on and looking at me, Michel wonders out loud if we shouldn't stretch our legs and find some refreshments. I agree with him as I stand to stretch. After asking for directions to the restroom I head out of his office. As I pass through the door, I can hear Michel on the phone asking his administrative assistant to run out for two bottles of wine, a nice baguette and a selection of cheeses. Laughing at the thought of sharing wine and cheese with Michel Foucault, I find my way to the restroom.

When I return, Michel is standing at his window looking out on the Paris cityscape sprawled before him. I join him at the window and take in the view. We both stand there in silence. I begin to think about where our conversation should take us next. We have talked a lot about how people construct some sense of 'fit' within academic science. Now I feel like we should talk about the role inscriptions might be

playing in producing the effect of discipline because after all, I am talking to the fellow who wrote *Discipline and Punish*.[23] But, rather than discussing discipline as an effect in and of itself, I'm beginning to see it in the context of actor-network theory or what Michel Callon refers to as 'A Sociology of Translation.'[24]

Still standing next to Michel at the window, I say, "I would like to talk more about academic science as a type of normativity."

"Why do you say that?" he enquires.

"Because, while I was talking with my co-participants, reflecting on my own experiences, and analyzing the transcriptions of our conversations, I feel like I heard about, read about, and experienced academic science as a type of normativity."

Michel turns and gestures for us to return to his round table. "Please Sherie, let's sit. Tell my why you think it will be useful for us to think about academic science in this way?"

Pausing to gather my thoughts, I answer, "Because, I think it might shed additional light on ways in which people relate to themselves as scientists. Combining Michel Callon and actor-network theorists' work with your own, I believe people's construction of academic science as a type of normativity, whose rules and regulations have been translated through inscriptions, serves as a definition of allowable identities with regard to academic science."[25]

"Hmm, I think you might be on to something, but I need to hear more."

As I am searching for what to say next, I find myself wishing Michel Callon were here to contribute to our conversation. Then, because this whole scene is driven by my imagination, I blink once to find him sitting in a chair to the left of me, directly opposite Michel Foucault who seems utterly un-phased by this sudden appearance. Michel F. offers Michel C. a polite, acknowledging nod and then returns his anticipating gaze to me.

"I guess it would be helpful to say a few words about my understanding and proposed use of Dr. Callon's sociology of translation, which, for many, is known as 'actor-network theory.'" Turning my attention to Michel Callon, I ask, "Would you agree with my interpretation of the sociology of translation as an approach to examining how it is that human and non-human (in this case inscriptions) actors come to constitutes themselves relationally?"[26]

Michel C. smiles approvingly and replies, "Yes, Sherie, I think that is a fine interpretation. I identified four elements or 'movements' of translation in which 'the identity of actors, the possibility of interaction, and the margins of maneuver are negotiated and delimited.'"[27]

Seizing the opportunity to articulate how I think the two Michel's theories can work together, I look at Michel F. and say, "This is where I think combining your conception of academic science as a type of normativity with Dr. Callon's conception of translation can be very useful."

I explain, "Jan Nespor—who is an American educational researcher—argues that translation is a useful concept for 'describing how identities and alliances are

forged through the self-constitutive activities of actor-networks.'[28] Applying this idea to my research, I am conceptualizing academic science, with all of its human and non-human entities, as an actor-network. And I am particularly interested in gaining an understanding of how that network constitutes itself through practices that shape and sort would-be participants.[29] I guess more specifically, I am most interested in understanding the role of inscriptions in the practices that shape and sort would-be participants."

I wait for that mouthful to sink in and try to maintain my grip on the slippery bar of soap.

"I think this relates to asking," I continue, "how my co-participants are disciplined through their construction of academic science as a type of normativity—or their understanding of acceptable and unacceptable desires and behaviors for themselves as academic scientists. These understandings define, for would-be participants, allowable identities and interests for successful integration—enrol-ment—into and participation within the actor-network. I believe it is through this process that potential participants—assistant professors and doctoral candidates—can be lost or marginalized. If the network is successful in enrolling potential participants, the definition of allowable identities and interests is further stabilized and reinforced. Those who can or will abide by, or feel no dissonance with their understanding of acceptable and unacceptable desires and behaviors are easily enrolled. Those who can't or won't abide by, or feel dissonance with these understandings, are not enrolled, or they feel marginalized in their participation."

Michel C. looks pleased when he turns and asks me, "What do you imagine is the difference between those who can or will and those who can't or won't?"

"I think applying the moment of translation you called 'problematization'[30] might help us understand part of this difference." Turning to Michel C. I ask, "Isn't problematization the moment in which potential enrollees come to see a network as indispensable?"[31] Isn't it a moment in which actors get hooked or come to believe that their desires cannot be satisfied in any other network?

"Yes," he asserts. "That's what I have suggested."

I go on. "I think I would put Aaron, Greta, and Peter in the category of being enrolled in the actor-network of academic scientists. I think I would put Amanda in the category of not being enrolled, and I would put Sylvia in the category of partially enrolled. I'm thinking that maybe part of the problematization for enrolling in the actor-network of academic science has to do with academic freedom. I say this because I noticed that Aaron, Greta and Peter—and to some extent Sylvia—all talked about a desire to do science for science's sake, or to pursue a line of research simply because it intrigues them."

"Yet," Michel C. interjects, "when I think about your conversations with Amanda—who shows no signs of enrolling—I have no recollection of her talking about wanting to be free to pursue her own research interests."

"Right!" I return. "Perhaps this is part of what distinguishes Amanda from the

others." Turning again to Michel C. for confirmation, I continue. "If I my understanding of the way your moments of translation work is correct, I would argue that if Amanda is not hooked, or does not see the network of academic science as indispensable for her desires, it is unlikely that she will be willing to fully engage with self-constituting network negotiations over acceptable behaviors and identities."

Nodding in agreement, Michel C. confirms, "That sounds like a perfectly reasonable application of my theory."

"But," Michel F. injects, "couldn't someone argue that scholars who desire freedom and independence are precisely what we need in academic science, so we're getting exactly what we want."

"This may be true," I reply, "but what if academic science as a construct defined by inscriptions of independent scholarship is in greater resonance or overlap with the construct of maleness or the construct of whiteness. Then, it would seem to me that peoples' experience of or relation to these intersecting constructs could hugely impact their potential enrolment, which would constitute a kind of 'systematicity' in the exclusion of certain groups of people."

We all sit quietly for a moment contemplating this possibility.

"This makes me ask," I continue. "Who says independent scholarship is the best and only representation of science for the academy?' How did it come to be constructed in that way? I guess that would be like asking, as you did Michel, how sexuality came to be constructed and experienced in the way that it has. I suspect that would require a different sort of dissertation."

"I think it would Sherie," Michel C. responds. "But what you have said is very important. Actor-network theorists like me argue that things could have been another way. Because we see an actor-network as a self-constituting nexus of translations and practices—as a construct rather than some naturally occurring phenomena—we believe that it could have been constructed in another way.[32] Academic science, like sexuality could have been constructed differently. The problem, then, lies in this process being self-constituting. That is, there is no evil puppeteer that could be eliminated with a single stroke. This is because, I would argue, as we become enrolled, we constitute ourselves to resist alternative constructions."

"Precisely," I respond, "And this conversation reminds me of what I find so troubling about the implications of actor-network theory."

"What is that?" asks Michel C.

"Well, I'm thinking about Jan Nespor suggesting that identities and alliances are forged through the self-constitutive activities of the actor-network."[33]

Michel C. asks, "Why is that so troubling Sherie?"

"Because," I answer, "it implies that by participating in the actor-network, we are contributing to the construction of allowable identities and the stabilization of a set of relations that position some as insiders and others as outsiders. And actor-network theory suggests this is true even if we don't think we want to participate in excluding or marginalizing. It's like the students in the Roth and McGinn's study who

discipline their behavior because it is in their self interest to act in such a way that they will be inscribed as insiders, or as successful in science.[34] They may not want to buy into the implications of reducing the complexities of learning into a two dimensional signifier, but if they are to be fully enrolled in the actor-network of successful science students they discipline their desires and behaviors accordingly. The whole system can be maintained and stabilized through actors' understanding of a domain of knowledge—like academic science—as a type of normativity and their relation to self within that normativity."

"Good Sherie!" Michel F. exclaims. "This is beginning to make sense. Let's talk about ways in which you feel you and/or your co-participants are disciplined by the inscriptions with which you interact. By talking through some examples, I think we might be able to get some sense of how inscriptions are acting in the relational production of power and power differentials."

"I can think of several examples," I respond. "One of the first to come to mind is Greta's discussion about having to discipline herself not to spend time analyzing the amazing specimens she and her students found on a dig not long ago. Believing that one of the inscriptions that will count most when she is evaluated for tenure is her total number of publications, she feels she has to put this project on the back burner until she is able to increase her publications by working on smaller projects that have a quicker turn-around time. While this is a conscious—and I suspect most would argue a wise—decision on her part, I believe that Greta is disciplined by her understanding of academic science as a type of normativity. She has an idea of how many publications will inscribe her as a successful academic scientist and she disciplines her desires and behaviors with regard to her research activities in order for that inscription—a number of publications—to be seen as well within the established norms for publishing. I also think Greta's interaction with numbers of publications is part of the process by which she becomes enrolled in the actor-network of academic scientists. Through these interactions, she has, in part, constructed an allowable identity for participation in that network. And by complying with her construction she participates in the stabilization of that network."

As I think through this process, I am haunted by a vague sense of betrayal.

"I'm a little concerned," I confess, "about how Greta and anyone else who might read this will perceived what I have just said."

"Why are you worried about that Sherie?" asks Michel C.

"Because I don't want to sound like I'm victimizing the victim."

Michel F. says, "I'm not sure I understand what you mean."

"For example," I explain, "I'm afraid Greta could get the idea that I'm blaming her for any suffering she might be experiencing as a result of feeling like she has to comply with expected publication rates. This is where it all gets very slippery. I would say that she is not to blame nor should she be held accountable in any singular way for these expectations any more than a white male participating in the same actor-network should. But, both she and the white male, if they are disciplined by the normalizing

function that inscriptions like publication rates perform, are complicit in the stabilization of those norms."

As I say these words, I am reminded of a quote that I copied into my dissertation journal. Taking my journal from the table, I flip to the appropriate page and read the following quote from Wolf-Michael Roth to my new friends.

> I feel powerless facing institutional stability and simultaneously contribute to this stability. I feel powerless facing editors and simultaneously contribute to the performance of editorial power. I rage against institutional immobility and editorial power and I contribute to this immobility and power every time I submit a manuscript.[35]

Michel F. jumps in, "This is precisely what I've been trying to say about power. And while I know what you mean by slippery Sherie, I think we might be able to make it less so and ease some of your concern for victimizing the victim. I believe you are correct in saying that we can't hold Greta responsible for establishing norms regarding publication rates any more than we could hold Peter—a white male—responsible. But, I do believe we can say that both participate in the stabilization of academic science as a type of normativity by making sure they are inscribed by numbers that comply with that normativity. If we were trying to understand how academic science came, and continues, to be constructed as a type of normativity, examining Peter and Greta's interactions with inscriptions tells us only part—albeit an important part—of the story. There is a long history of self-constituting activities behind Greta and Peter's experience of academic science. Understanding their complicity in or contributions to the stabilization of this form of experience—which could be thought of as an actor-network—is not the same as holding them accountable for the ways people are disciplined or punished in their experience of academic science. This is part of what I have tried to show in my genealogies of madness, criminality, and sexuality.[36]

A quiet knock at the door startles all three of us. Michel's administrative assistant peeks through the door and asks, "Dr. Foucault, your wine and cheese are here. Shall I bring them in?"

Jumping up to meet him at the door, Michel F. says, "Yes, Franz, please do."

Michel C. and I quickly make room on the table in front of us. Taking the tray filled with a beautiful selection of cheeses, a variety of fresh fruits, a loaf of baguette, two bottles of red wine and three glasses, Michel F. returns to the table and places it in the space we have cleared. As the Michels are chatting in French, opening bottles, cutting slices of cheese, and pouring wine for each of us, I sit back and reflect on the work we have done here today. I certainly didn't know where this conversation was going to take us, but I am happy with the thinking I have done in the process.

Michel F. takes a long, slow sip of wine with an expression of pure bliss. I too take in the musky warmth of the well-aged cabernet and smile at the richness of my imagination. As the time of the day, the efforts of my thinking, and the effects of the

wine converge; I begin to feel very tired. Looking at Michel and Michel, I can tell that they too are beginning to wane.

"What do you make of our conversation here today Sherie?" asks Michel F. "Do you think we have helped?"

"I do think we've helped," I reply. "Only time will tell what those who read this conversation will make of and do with the understanding(s) they have constructed, but I can tell you that it has been a very fruitful exercise for me."

"Speaking of your readers," injects Michel C., "What are you hoping they will get from reading this conversation? Do you think you have accomplished what you set out to do?"

"I think so," I answer. "I set out to engage readers in a conversation about the problem under-representation in academic science, and I hope that I have done that. I set out to offer them some conceptual/theoretical lenses that they might use to examine this issue as well as, perhaps, to their own experiences of the academy. While I would say that, in a fashion I now understand as deconstruction, I tried to make invisible aspects of academic science—as a form of experience—visible, I did not set out to point my finger at root causes or universal explanation for under-representation and marginalization. In fact, given my poststructural epistemological and ontological questioning, I would resist this urge at all cost."

Both men offer me a wry smile.

"Fair enough," replies Michel F. "But do you think you have offered us anything that will make any difference when it comes to addressing under-representation and marginalization?"

"Perhaps," I respond, "but not in the form of targets or prescriptions."

"What do you mean?"

"Well, I guess the only way that I can think to explain what I mean is to go back to my disclosure of how useful it was for me to see sexuality as a form of experience that has been constructed rather than a naturally occurring phenomenon. Seeing it as an artificial construct that came to be a type of normativity in which I was arbitrarily positioned as other, helped me disrupt the damaging effects of having constructed myself that way in the past. With your help Michel, I was able to deconstruct sexuality in ways that no longer left me feeling abnormal or deviant; which, in turn disrupted the hegemonic effects my experience of sexuality once had. One of my greatest hopes would be to contribute in some small way to the disruption of the hegemonic effects that academic science, as a form of experience, can have. For example, I believe that as Greta, Amanda and Sylvia became aware of how inscriptions might be operating on and through them, they began to talk about complying with or resisting the arbitrary expectations that inscriptions defined without suffering from the same feelings of inadequacy that once came with believing these definitions to be inherently 'correct.'"

Pausing for a moment, I take a sip of wine and begin peeling a blood orange.

"I want people," I continue, "to question how academic science comes to be

constituted in the ways that it is. I want people to question their role in its stabilization as a domain of knowledge, type of normativity and mode of relation to self and other. And I want people to imagine resisting normative constructions of allowable identities and to visualize new and expansive constructions. Most importantly, by contributing to our understanding how inscriptions can play a role in arbitrarily defining and perpetuating a very narrow and limiting space for being an academic scientist, I hope that we can not only denaturalize these historically narrow definitions, we can also begin to think about ways to use inscriptions to create broader, more flexible and more inclusive spaces for being an academic scientist."

Topping off our glasses and raising his own, Michel F. offers, "There is no way to tell for certain Sherie, but I surely hope our conversation today has helped. I guess it will depend on what all of us (you and your co-participants as researchers, Michel and I as fictitious co-constructors of meaning and the people who read this) do as a result of our experiences with this research.[37] I understand qualitative researchers of your time are suggesting that the value of ethnographies like yours should be measured by what people do with what they have read.[38] With that in mind, I propose we toast to this the beginning rather than the end of a very important conversation."

Notes

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[2] Ibid.

[3] Barbara Tedlock, "From Participant Observation to the Observation of Participation: The Emergence of Narrative Ethnography," *Journal of Anthropological Research* 47 (1991), Lisa M. Tillmann-Healy, *Between Gay and Straight: Understanding Friendship across Sexual Orientation* (Walnut Creek, CA: Alta Mira Press, 2001).

[4] Paul Rabinow, "Introduction," in *Foucault Reader*, ed. Paul Rabinow (New York: Pantheon Books, 1984).

[5] Nancy W. Brickhouse, "Bringing in the Outsiders: Reshaping the Sciences of the Future," *Journal of Curriculum Studies* 26, no. 4 (1994), Brian Easlea, "The Masculine Image of Science with Special Reference to Physics: How Much Does Gender Really Matter?," in *Perspectives on Gender and Science*, ed. J. Harding (New York: Falmer Press, 1986), G. J. Kelly, W. S. Carlsen, and C. M. Cunningham, "Science Education in Sociocultural Context: A Perspectives from the Sociology of Science," *Science Education* 77, no. 2 (1993), Marion Namenwirth, "Chapter 2: Science Seen through a Feminist Prism," in *Feminist Approaches to Science*, ed. R. Bleier (New York: Teachers College Press, 1991), Sue V. Rosser, "Feminist Critiques of Science as Usual," in *Re-Engineering Female Friendly Science* (New York: Teachers College Press, 1997).

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[7] Glen S. Aikenhead, "Toward a First Nations Cross-Cultural Science and Technology Curriculum," *Science Education* 81 (1997), Brickhouse, "Bringing in the Outsiders: Reshaping the Sciences of the Future.", Southerland, "Acknowledging Students' Agency: Multiculturalism, Scientism, and Science Education."

[8] Wolf-Michael Roth and Michelle K. McGinn, "unDELETED science education:/Lives/work/voices," *Journal of Research in Science Teaching,* 35, No. 4, (1998).

[9] Ibid.

[10] Ibid.

[11] Ibid.

[12] Ibid.

[13] Michel Foucault, "Preface to the History of Sexuality Volume Ii," in *Foucault Reader*, ed. Paul Rabinow (New York: Pantheon Books, 1984).

[14] Ibid, Roth and McGinn, "Undeleted Science Education:/Lives/Work/Voices."

[15] Roth and McGinn, "Undeleted Science Education:/Lives/Work/Voices."

[16] Ibid.

[17] Michel Callon, "Actor-Network Theory—the Market Test," in *Actor Network Theory and After*, ed. John Law and John Hassard (Oxford, UK: The Editorial Board of the Sociological Review, 1999), Michel Callon, "Some Elements of the Sociology of Translation: Domestication of the Scallops and the Fisherman of St Brieuc Bay," in *Power, Action and Belief: A New Sociology of Knowledge*, ed. John Law (London, UK: Rutledge, 1986), Bruno Latour and Steve Woolgar, *Laboratory Life: The Construction of Scientific Facts*, Second ed. (Princeton, NJ: Princeton University Press, 1986).

[18] Roth and McGinn, "Undeleted Science Education:/Lives/Work/Voices."

[19] Ibid.: 402.

[20] Michel Foucault, "Technologies of the Self," in *Technologies of the Self*, ed. Huck Gutman Luther H. Martin, Patrick H. Hutton (Amherst, MA: University of Massachusetts Press, 1988), Margaret A. McLaren, *Feminism, Foucault and Embodied Subjectivity* (Albany, NY: State University of New York Press, 2002).

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[22] Callon, "Some Elements of the Sociology of Translation: Domestication of the Scallops and the Fisherman of St Brieuc Bay."

[23] Michele Foucault, *Discipline & Punish: The Birth of the Prison*, trans. Alan Sheridan, 2nd ed. (New York: Vintage Books, A Division of Random House, Inc., 1995).

[24] Callon, "Some Elements of the Sociology of Translation: Domestication of the Scallops and the Fisherman of St Brieuc Bay."

[25] Ibid, Foucault, *Discipline & Punish: The Birth of the Prison*.

[26] Callon, "Some Elements of the Sociology of Translation: Domestication of the Scallops and the Fisherman of St Brieuc Bay."

[27] Ibid., 68.

[28] Jan Nespor, *Knowledge in Motion: Space, Time and Curriculum in Undergraduate Physics and Management* (London, UK: The Falmer Press, 1994), 13.

[29] Ibid.

[30] Callon, "Some Elements of the Sociology of Translation: Domestication of the Scallops and the Fisherman of St Brieuc Bay."

[31] Ibid.

[32] Ibid, Michel Callon and Bruno Latour, "Unscrewing the Big Leviathan: How Actors Macro-Structure Reality and How Sociologists Help Them to Do So.," in *Advances in Social Theory and Methodology: Toward an Integration of Macro- and Micro-Sociologies.*, ed. K. Knorr-Cetina and A. V. Cicourel (Boston: Routledge & Kegan Paul, 1981), Latour and Woolgar, *Laboratory Life: The Construction of Scientific Facts,* John Law, "Editor's Introduction: Power/Knowledge and the Dissolution of the Sociology of Knowledge," in *Power, Action and Belief: The New Sociology of Knowledge*, ed. John Law (London, UK: Rutledge & Kegan Paul, 1986), John Law, *Notes on the Theory of the Actor Network: Ordering, Strategy and Heterogeneity.* (1992 [cited).

[33] Nespor, *Knowledge in Motion: Space, Time and Curriculum in Undergraduate Physics and Management*.

[34] Roth and McGinn, "Undeleted Science Educaiton:/Lives/Work/Vioces."

[35] Wolf-Michael Roth, "Editorial Power/Authorial Suffering," *Research in Science Education* 32, no. 2 (2002): 228.

[36] Foucault, "Preface to the History of Sexuality Volume Ii.", Michel Foucault, *The Use of Pleasure: Volume 2 of the History of Sexuality* (New York: Vintage Books A Division of Random House, Inc., 1990), Foucault, *Discipline & Punish: The Birth of the Prison*.

[37] Yvonna S. Lincoln and Norman K. Denzin, "The Seventh Moment: Out of the Past," in *Handbook of Qualitative Research*, ed. Norman K. Denzin and Yvonna S. Lincoln (Thousand Oaks, CA: Sage, 2000).

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