

WRITING ON THE FACTORY FLOOR

By

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## ABSTRACT

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By

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The study of writing within industrial workplaces has been taken up by many disciplines and focuses of study, such as technical writing, engineering, management, literacy studies, and literacy education, to name a few. Industrial workplaces are highly complex—with machinery, robots, floor workers, engineers, and managers all working together—making them fantastic locations for studies of power, authority, labor, and text. In addition, industrial workplaces like factories represent labor histories as well as the changing economic environment of the U.S., often making them a locus for both research and nostalgia. My own interest in conducting writing study research in factories is this locus of scholarship and nostalgic memory, for factory work is part of my family's identity. I explored existing literature on factory workplaces and the writing that is done there, with the goal to merge an interest in writing with working-class upbringing. I found a gap in the literature that troubled me—where was the research that focused on the shop floor workers and their writing? Where were the studies that viewed such individuals not as people who do not and cannot write but as important knowledge makers (the way I view my dad)? Then I wondered, in the complex physical and social environment of factories, what kinds of texts do shop floor workers write and how do they develop those texts?

This dissertation grew out of my desire to answer the questions of what and how factory workers write. I developed a research approach that I call “case-study with a phenomenological sensibility” to help me, and through this research methodology I was able to

learn about the writing experiences of two factory machine operators at a Post Cereals plant in Battle Creek, Michigan.

Through the interviews I conducted I learned that, in the cases of the two particular machine operators I worked with, their workplace writing practices and processes were shaped almost entirely by the time and resource regulations of the factory. I also discovered that because both operators were highly invested in their work already, they felt pride and a sense of being valued when they shared their knowledge through writing.

What this dissertation offers, then, is a glimpse into the workplace writing lives of two factory machine operators. Turning the research gaze to writing that these operators did on the factory floor reveals how the changing nature of industry—a national and global issue—has influenced the everyday working activities of factory floor laborers. More specifically, my own research gaze has revealed the growing importance for collaboration in writing in traditionally hierarchical factories, benefits gained through writing about work practices, and the significance of personal investment in the workplace lives of two factory workers. Though the claims made in this work are narrow in focus, they provide strong evidence for a need to focus industrial workplace writing research on all hierarchical levels, including the blue-collar laborer.

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This one is for Dad.  
You've always been there for me.

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The path I've taken to get to this point in my academic career—finishing my PhD and preparing to start my first post-graduate-school job—has been full of twists and turns, plans that went awry, and careers that didn't work out. Throughout I've been lucky to be emotionally and academically supported by wonderful people. I need to acknowledge just a few of those special people who helped me specifically through the dissertation process.

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## CHAPTER 1

### INTRODUCTION: RESEARCHING AT AN INTERSECTION TO MAKE ROOM FOR SHOP FLOOR STORIES

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#### **Introduction**

When I was a kid I often heard my dad talk about work with my mom or other adults, but I never really understood what he left us to do every day. I knew he worked a lot more hours than people normally worked, and I knew that he went to work at weird times (working 9-5? Not in our home). I also knew that my dad got hurt at work, breaking fingers or burning his arms, a physical toil has left him with a bad back, carpal tunnel, one incredibly crooked pinkie finger, and a number of other pains and aches.

It wasn't until I began my PhD that I started to explore my dad's work with more depth. One experience, above all others previous working on this dissertation, stands out in my mind as the reason why I have chosen to focus one strand of my research on factory spaces: presenting with my dad at the 2010 Writing Across the Curriculum conference.

In a rare phone conversation with my dad that winter, between my classes and work and homework and meetings, we talked about what I was studying in my classes, what I thought about all the new information I was learning, and what was going on with his work. Somehow the conversation turned to the WAC proposal call, and I was struck by a great proposal idea: to give a presentation about factory writing. Throughout the years we had talked about writing here and there, but mostly in context of my teaching. On a few occasions, though, we focused on dad and his writing, but since he claimed he doesn't really write and that when

he does it is a mess, he almost always shut down that part of the conversation. But we talked about his writing that day.

A few days later, my dad and I talked again about submitting a proposal to the WAC conference, and we decided to approach my brother to join us—he's an electrical engineer who works in an automotive metal forging plant and writes a variety of texts in a variety of spaces. This would make for a well-rounded panel presentation with me from academia, my brother as a professional who is responsible for composing a variety of genres every day, and my dad who is a machine operator who has chosen to write help guides for trainees in his own time.

Our proposal was accepted; preparation for the conference involved a few conversations with each my brother and my dad as they sought to give me "good" information while I just wanted to hear about their experiences. I wanted to make sure I didn't guide their statements much, knowing that others would be almost enthusiastic as me when they heard my dad and brother talk about their experiences.

Unfortunately, it turned out that on the weekend of our presentation my brother had to work; since he was the top controls engineer, he was needed to help install some new equipment. We decided to set up an audio-recorded interview so he could still be part of the presentation. My list of questions was short, with such statements as "tell me about what you write when you're working" and "talk to me about how you write a document, from beginning to end," and questions like "where do you write" and "what tools/resources do you use when you write?" I knew I was getting some great material, and I was incredibly sad that he wouldn't be able to share his practices in person. He talked about his audience and contextual awareness when he writes, knowing how to be flexible with his approaches. He talked about the

physicality of his work, that even though he is an engineer, a position that is generally associated with mental labor, his body plays a large part in how he writes. Not only did he walk five miles a day through the factory, he wrote at the machines as well as in his cubicle. He wrote collaboratively with other engineers, machine operators, and managers, and he composed genres from small internal memos to large presentations for regional vice-presidents.<sup>1</sup>

Contrasting my brother's interview segments with my dad's statements in the actual presentation gave way to a wonderful discussion session about what it means to teach writing in a cross-curricular or disciplinary context, what the study of factory writing can add to our understandings of workplace writing, and how workplaces might support more effective writing practices for employees. But all this great conversation aside, I was most thrilled about presenting with my dad in an academic conference. My brother and dad's stories and experiences were so compelling that I tried to play the role of conversation facilitator, providing context and transitions. I had great admiration for my dad in that moment. He had made a dangerous move into a foreign world, and he stepped up to that challenge with grace and confidence (even though he admitted on the 3.5 hour drive home from the conference that he had been really nervous about presenting in front of an academic audience). I don't hesitate to say that that conference weekend is one of the best experiences I've had with my dad, and it will stand out in my mind for the rest of my life.

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<sup>1</sup> Interestingly, at the actual presentation, I was asked whether I had "coached" my brother in terms to use or how to discuss his writing activities. That audience member was rather surprised when I explained that I had provided very few guidelines to how I would like him to talk about his writing, and that I, too, was pleasantly surprised at the language he used to describe his work. I wanted to exclaim: "Isn't my brother awesome!"

Telling this story about presenting at the 2010 WAC conference isn't simply a moment to share how amazing I think my dad is; it was a moment during which my academic work took on a new trajectory. After talking to my dad and brother about their writing experiences and after hearing from the audience in our session, I realized that there is a space for me to do work at the intersections of writing, workplaces, and the shop floor. Both my brother and my dad talked about writing in the loud and complex environments of factory spaces, and how their writing practices were shaped by that environment. I see this dissertation as the first big step along a research trajectory that is both personally and academically meaningful, and will span the length of my academic career.

#### *My Dad's Role in this Research Project*

My dad has worked at Post Cereals in Battle Creek, Michigan, for about 37 years. Previous to this research project I had only visited the factory once, as far as I remember. It was Family Day at Post and the company had made one of the rarest moves in manufacturing: they opened the plant to the visiting public. I remember bright lights and huge machines (which were not running) and that's about it.

I was excited, then, when my dad called me one evening a couple years ago and gave me the email address of a Post regional vice president. Maybe I would be able to revisit Post and gain a much better understanding of where my dad works.

With that phone call my dad became my research partner. He opened up initial access to the high-level administrators at Post Cereals. Though I discuss his role as my research partner in greater detail in Chapter 2, it is important here to explain that involvement in my work helped me take a second tour of Post Cereals in Battle Creek. I take time now in this

introduction to walk readers briefly through my own experience visiting Post. This description helps to understand the environment in which Julio, Fullamena, and Michael worked as well as providing some information about my own research experiences, which influence my presentation of the Post Cereals shop floor throughout the rest of this dissertation.

### *A Tour of Post Cereals*

I drove to Post on a morning scheduled for me to become familiar with the plant and to observe a meeting regarding their Job Skills Management (JSM) operations manual development project, a writing project that involves factory floor machine operators. It was cool at 6:30am on that September morning and the sun had yet to rise, leaving the sky a dark blue that was just hinting at dawn. When I got out of my car in the visitor's parking lot, I was struck simultaneously by cool dampness and the delicious sugary-cinnamon smell of cereal, probably Honey Bunches of Oats. Other Battle Creek mornings have favored the sweet smell of Fruity Pebbles, and on very rare occasions, the amazing scent of chocolate from Cocoa Pebbles. I have never been to such a delicious-smelling city, and I've always believed that if one is to live in an industrial city, a cereal industry city is the best.

I couldn't just walk into the plant for my meeting; instead, I had to stop at the small security building and check in, obtaining a visitor's badge and waiting to be picked up. After leaving the security hut, this time on the other side of the fence that surrounds the Post facility, I was led to the 'White House.' This large, old, white house, which C.W. Post lived in when opening his cereal factory, has been converted to the main office building for the plant.

One of the purposes of my visit that morning was safety training—if I was going to be walking around the shop floor conducting research, I needed to be given safety equipment and

know where to walk. Though I had taken off all my jewelry and had worn appropriate clothes for the factory (no plastic buttons), I was criticized a bit for not wearing steel-toe shoes. Just a few years ago I got rid of an old pair of steel-toe boots that I'd been lugging around for 10 years, a last remnant of my engineering internship at a General Motors foundry. Unfortunately, once I finally received my new safety shoes after ordering them online, my access to the plant had been cut off (though I will keep these ones for future factory projects).

When I stepped outside, behind the White House, what lay before me was a plant massive in overall area, with multiple buildings, a set of train tracks, tall silos that hold grains that are going to be made into cereal, and a confusing road system that semi-trucks use to unload and load supplies. The Battle Creek Post plant covers 64 acres; it is about a dozen blocks in length and about three blocks deep. There are four main cereal production buildings, three massive and two smaller climate controlled storage warehouses, an engineering and research facility, a cafeteria building, a safety-gear storage building, and several other facilities. Because the Battle Creek Post factory is over 100-years-old, bits and pieces have been added as needed, explaining the hodge-podge nature of the plant. Though I was guided around the grounds and through the multi-level production buildings, I still felt completely lost.

When I walked inside the production buildings—with my red hardhat, safety glasses, hairnet, and earplugs—I had to first wash my hands before entering the chaotic space. Despite my earplugs, I was still overwhelmed by the volume in most of the production buildings; it's no wonder my dad has hearing problems. And when I was introduced to people, the difficulty of yelling over the clanging of metal against metal, the whirring of belts and conveyor systems,



and through the ear plugs was immense. I only understood about half of what people were trying to say to me.

I ran into my dad during this tour of the facilities, a slightly awkward moment when our work lives overlapped and neither of us quite knew how to engage with each other in that situation. I shouted my hello and told him I'd see him later at home and then he went back to operating his machine while I continued my sensory-overwhelming tour. Most of the machines I saw are not contained units, clearly identifiable and distinguished from each other; rather, they run in a multistory maze of machine components and transporting systems. I could never be sure where one system ended and another began. In addition, the walkways in some areas also serve as a roadway for fork-lift trucks delivering or picking up pallets and small automated vehicles that navigate by sensors embedded in the concrete floors. It's no wonder my everyday flat shoes wouldn't cut it in this environment.

When I finally left Post that day, thoroughly exhausted by the four hours of information, navigation, people, and machinery, I reflected on what it must be like to work there. In my car I took several deep breaths, enjoying the quiet and solitude, which was a stark contrast to the intensity of the shop floor. Having 'lived' in academia for the past decade, I forgot what it was like to work<sup>2</sup> and think and be productive in a factory environment.

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<sup>2</sup> When I first started college, I had intended to be an electrical engineer. The summer after my first year I had an internship at a General Motors metal-casting foundry. The factory floor was also incredibly loud, like at Post, but it was an incredibly hot, dirty space, with black iron dust everywhere that got onto my clothes and into my nose. The experience working in a factory, even though it was just for one summer (for I changed majors after the next school year), helped me to understand the work my dad does, and because my brother was hired full-time to work at that foundry, I was familiar with the environment he worked within for over ten years.

It is within this environment of noise and chaos, of doubt, change, tradition, and history that Fullamena and Julio Rodriguez wrote, and all of these situational aspects influence not only their writing practices but also their personal reactions and responses to those practices. In the next chapter I focus more narrowly on the Job Skills Management project, the operation procedures training and reference manual project that involved Fullamena in writing procedures for the rice rolling and drying machine, and that was supposed to involve Julio to write about the packaging machine.

### **Research Participants**

The main data chapters in this dissertation, and the arguments I make regarding writing in factory environments, are based on interviews I conducted with three individuals: Fullamena, Julio Rodriguez, and Michael.<sup>3</sup> Before I introduce these three research participants, though, it is important for me to acknowledge that they all already felt a high level of investment in their work and in the writing of operational guides when I began my work. They all take a great deal of pride in their work and are dedicated to doing that with quality and efficiency.

In addition, Julio, Fullamena, and Michael were all highly invested in my research project. Julio Rodriguez, as I touched on briefly above, was dedicated to helping me throughout my research process and worked hard to present my project to people who showed interest or could participate. Fullamena and Michael were two such people—in my first conversations to set up interview times and locations they seemed excited about my work and the opportunity to participate in it.

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<sup>3</sup> These names are the pseudonyms chosen by the three research participants. Julio Rodriguez is the name chosen by my dad.

Through their experiences writing operational procedures guides Julio, Fullamena, and Michael became convinced that the practice of involving machine operators in writing company documents is something important and exciting. Therefore, when I came along wanting to hear about their experiences, they were happy to share.

The personal investment, in their work and in this project, that Julio, Fullamena, and Michael brought with them contributed a great deal to the methodological approach I chose and the extent of the information they shared with me. I discuss these issues further in Chapter 2.

*Michael, JSM HR Training Development Manager*

At the time of our interview, Michael's position at Post was as manager of the Job Skills Management (JSM) operating procedures guide project. Michael has a background in business and engineering and spent quite a few years working as a shop floor supervisor. His experiences interacting with machine operators, both in his supervisory position and as the JSM manager seeking information to write the manuals, meant that Michael has worked closely with hourly laborers for years. This led, as I present in more detail in Chapter 3, to his decision to involve designated trainers—individuals who are accustomed to talking about the operation processes for their machine systems—in writing for the JSMs.

*Fullamena and Julio Rodriguez, Machine Operators and Designated Trainers*

Fullamena and Julio are both machine operators at the Post Cereals factory in Battle Creek, Michigan. Machine operators, and their assistants, make up a majority of the factory floor workers at Post. In each of the four production buildings, large, multi-story machine systems mix food ingredients, turn those mixtures into cereal, package that cereal in

appropriate boxes, and then wrap them up on pallets to be shipped around the world. The basics of machine operation involves inputting appropriate settings for the particular cereal being made or packaged, starting and stopping a portion of the system, solving problems with the system and doing minor maintenance, and figuring out ways to solve major problems by contacting and working with appropriate tradespeople and engineers.

The most experienced operator of each machine in the plant is also assigned to be designated trainer. Designated trainers are responsible for training all new employees for the machines on which they are the most senior operators. They are chosen based on seniority, as is the agreement between management and the union, which means that management cannot pick and choose individual people to be designated trainers or keep specific people from being assigned to that position. An operator, though, can turn down this role. My dad explained that the job of a designated trainer is quite stressful: the operator is given eight weeks to train a new employee—who might not have any factory operating experience—and if that trainer does not believe the trainee can effectively operate the machine, that trainer has to inform management who then fires the trainee (see Chapter 5 for more information). Given the responsibility of the position and the intense teaching that occurs over the eight week period, it is not surprising that the job is turned down by some operators.

### **Julio and Fullamena are Craft Knowledge Experts**

One of the primary assumptions I hold throughout this dissertation is that Fullamena and Julio Rodriguez possess expert-level craft knowledge as machine operators. I admit that I came into this project holding such an assumption regarding my dad, for we have had conversations about his machine operating processes: he doesn't just push buttons but rather

utilizes experience, skill, and embodied knowledge to run his machine well. Despite my own existing assumptions regarding my dad's workplace knowledge, my research has helped to support and legitimize these assumptions. Because the perspective from which I developed and conducted this research is entrenched in my own beliefs about my father's craft knowledge expertise, I realize a need to provide support for that belief. I present a brief review of literature to situate my understandings of craft knowledge before specifically explaining why I consider Julio and Fullamena to be craft knowledge experts.

### *What is Craft Knowledge?*

My own assumptions of factory-floor labor, at least regarding veteran workers, run contrary to many popular representations of shop floor labor. An image I've often come across regarding factory labor is that of a line worker who stands in one place all day, say, putting caps on bottles or moving product from one conveyor belt to another. Such images are accurate regarding some factory work—my younger brother has a fairly tedious job in a Toyota plant—and line work can certainly be “noisy, repetitive, and taxing” (Rose 129). However, over time, workers tend to find the “most efficient way to use one's body,” thus “developing a set of routines to work quickly and preserve energy” (Rose 129). Specific skills are developed through the daily activities that determine the abilities required to do a job well and because of the expectations of a workplace (Darrah).

Experienced and successful factory floor workers necessarily develop embodied knowledge and strategies for efficiency of work energy, but I don't automatically consider them to be examples of craft knowledge. Important to see as valid, as intelligence in use—yes. Craft knowledge—not always. Gamble writes: “the contention is that while craft knowledge is

embedded in ongoing practices, and therefore displays all the features of a tacit pedagogy, with practical mastery as its function, it is at the same time a specialised knowledge form that transcends a particular context” (186). Essentially, even though craft knowledge is specific learning related to a particular task, it is knowledge that can be used in other work as well. Opposite to the idea of craft is the not uncommon factory image of what is often called unskilled labor—of bodies that are mere extensions of the machines that do most of the difficult work, completely controlled by their tasks and their management. A craftsperson, in contrast, possesses “manual mastery” and though much of what used to be hand-done work has been replaced by machines, the machine remains an extension of the human hand. Use of machines reduces physical effort and speeds up production time, but the process is still under the control of the master craftsman [sic]” (Gamble 186). It is easy to view a high-quality furniture maker or a decorative tile-floor designer and installer or a guitar maker as being craft masters. Julio and Fullamena, as factory machine operators, on the other hand, require more explanation regarding why and how they are masters at their crafts.

#### *Julio and Fullamena’s Brand of Craft Knowledge*

In *The Mind at Work*, Mike Rose presents factory work his own uncle did in order to display the intelligences utilized by an experienced, long-time factory worker. Rose states:

[E]ven in industrialized work settings where so much is automated and bureaucratized, where so much of the intimate knowledge of craft and machine is designed out of production apparatus and human interaction is channeled by work rules and protocol—that even such tightly regulated sociotechnical

systems, someone like my uncle could think his way through the day, taking on complex industrial and human problems. (133)

At Post Cereals, the machine operators do not work directly with the products being made, but they do run complex machine systems every day, often the same machine for years, solving problems and making improvements. The machine might do the manufacturing work, but the operators work the machines. Above I presented Gamble's claim that today's master craftspeople use machines as extensions of themselves, and I claim here that Julio and Fullamena do the same.

In consideration of Fullamena as a master craftsperson I would comfortably claim, based on our interview, that she is transitioning into this identity. When Fullamena trained to operate her primary machine over 20 years ago—a rice rolling and drying system—she was curious about its intricacies but her questions were consistently shot down by her trainers. Throughout the JSM project, as I describe with significant detail in Chapter 3, Michael sought information that extended beyond basic machine operations to how the components of the larger machine systems work and what their function is in relation to overall processes. Because Michael wanted this information, Fullamena, as a designated trainer and a resource for JSM information, participated in meetings with engineers during which they talked through how her machine functions, and she was shown diagrams illustrating such systems as the flow of hot air that dries the rice food mixture as it is rolled flat.

When Fullamena was asked to write for the JSMs regarding the rice rolling and drying machine, she used the opportunity to learn even more about her machine. As I present in Chapter 4, Fullamena didn't want the operational procedures she wrote to be limited in the

way her training was. Rather, she wanted to provide information regarding why certain procedures are done and what the effects are upon the cereal, information that would help future employees at Post better understand their jobs. This goal motivated her to seek information that wasn't previously provided to her, even when it took her over a month just to figure out the exact safety procedures an operator needs to follow in case there is a fire or other malfunctions. Given her experiences, as she informed me, she pays more attention now to her operations and feels confident enough to start fine-tuning her own procedures in search for more efficient cereal production. In my opinion, the transition Fullamena has undergone has moved her from an extension of the machine that is the primary actor upon the cereal and into the role of craftsperson, an individual who utilizes machines to make products and displays power over how that machine functions.

Fullamena has been at Post for approximately 20 years, and the rice rolling and drying machine was an established system when she was hired and trained. These two factors limited the speed with which she transitioned into being a master craftsperson. Julio, on the other hand, has been at Post for 36 years now. In addition, the machine for which he is a designated trainer—the packaging machine—was new when he was trained to use it. Therefore, he was trained by the installation engineer, a man who had been involved in the machine's development and creation, an expert in his own right. With such a resource available to him, when Julio was training he took the opportunity to ask many complex questions regarding how the machine works and why it functions that way. As he encountered problems during this early training period, he demanded to work side-by-side with the engineer while they figured out what the issues were (for more information about his early training experiences, see Chapter



4). Gaining such detailed knowledge early on provided the base for his later development into a master operator for that machine.

Today, Julio Rodriguez is the best packaging machine operator in the plant, according to the numerous Post employees and administrators I met. He is the best at his job. The packaging machine involves a highly complex system of measurement indicators, which have to be changed every time the line starts running a different size box and different product. Though all packaging machine operators know how to “change over” the machine when a size-change is required, they generally take a full eight-hour shift to do so while Julio can do a change over in an hour. In addition, no matter what product is being run, Julio knows how to make smaller adjustments to the machine settings in order to account for such environmental aspects as humidity and heat that can affect the efficiency of packaging. Julio utilizes all he knows about his machine--how it sounds when it is running best and when the noises made indicate a potential problem, the density of cereal in relation to its weight and how to account for that in the machine’s settings, the thickness of the cardboard in the boxes being packaged—when he makes operations decisions. When he runs the packaging machine, *he* is making the decisions and using the tool at his disposal, a massive three-story system, to run efficiently and to put out more well-packaged product than anyone else in the plant. Given all of this information regarding Julio’s operating practices, I have no hesitation to claim he is a master craftsman.

Now that I have introduced Michael, Julio Rodriguez, and Fullamena, I shift my focus to discuss where I situate my research in relation to existing composition and writing studies scholarship. I present writing process and post-process theories, workplace and technical writing, and working-class studies in a brief review of literature before explaining how I drew

from all of these threads of scholarship to develop the particular focus and approach I am taking in this project.

### **Situating This Research Project**

#### *Studying Academic and Professional Writers*

My discussion throughout this document of Fullamena and Julio Rodriguez's writing processes and practices has been influenced by my own composition and writing studies disciplinary experiences. The study of writing process has been, for several decades, one of the primary scholarly focuses of composition. Though there has been a great deal of composition and writing studies scholarship that does not study writing process (which I will present later in this section), it seems that the process movement maintains a firm and dominant hold on composition scholarship and pedagogy, and thus it provides one grounding point for the arguments I make later in the text. I draw briefly from the collection *Landmark Studies on Writing Process* to point out the primary links I make to this tradition as well as how I diverge from it. This collection of essays represents some of the most influential texts on writing process, spanning across several decades. The process movement that the book presents shows that most of the work on writing process that has occurred in composition and English Education has emphasized students and classrooms, or has looked to understand the processes of highly accomplished writers. Both emphases perpetuate an image of the writer as sitting stationary at a desk or table, often working alone. Many of the scholars represented in this book are trying to understand what is happening in the minds of writers as they compose.

There are several key themes that arise within *Landmark Studies on Writing Process* regarding the study of writing processes. One such theme is that the study of writing should

look to learn about the natural activities of writing without researcher interference (Graves; Perl). What I think is most telling of these studies is that the goal was to examine what is “natural” about writing activities, yet the Donald Graves and Sondra Perl projects in particular asked participants to sit in quiet, classroom-like spaces while writing. School is a constructed space, full of social cues and norms that tell even seven-year-old children (Graves) what the writing expectations are. In addition, the spaces were specifically chosen because they were free from possible disruptions while participants were writing, which only shows the kinds of activities that are possible in fairly sterile environments.

Another theme that arises is that researchers need to study existing effective writers to learn what “good” writing practices are, which can then be compared with the activities student writers are engaging in (Rose; Flynn; Sommers; Berkencotter; Perl) . Such comparisons are believed to illuminate the ineffective practices of struggling writers in particular, and can then aid writing teachers to develop approaches that can lead to good writing behaviors.

A third theme that emerged was the focus on writing as primarily a cognitive act, for example, Linda Flower and John Hayes’s development of a model for “The Rhetorical Problem” and their subsequent attempt to identify six parts of the model that writers fall into. They take the abstract concept of “discovery” and quantify and parse out its components. Here writing is viewed as only cognitive act only, with the mechanics of writing or typing being a necessary side-effect required to communicate the insights that are developed.

Though these works span several decades and are diverse in their methods and focuses, they tend to share one commonality: they conjure the image of writers who sit at tables or desks, scratching or typing words onto paper or screen, composing in a way that is visible,

material, cognitive, and in large part stationary. It is not hard to imagine rows of students silently at their desks furiously producing word after word. The cognitivist approach that shows through these studies might be currently regarded as inappropriate for writing research, but its legacy remains. The writing desk still reigns as the dominant image of composing.

### *Writing Process Theory*

The early, landmark work on writing process presented above played a key role in the development of the writing process movement. Perhaps most importantly, the movement brought about the beliefs that “writing should be taught as a process that writing can generate as well as record thought, that students write best when they care about and choose their topics, that good writing is strongly voiced, that a premature emphasis on correctness can be counterproductive, and so on” (Tobin 7). Lad Tobin, in his discussion of the writing process movement in the 1990s also explains that writing process “has come to mean a critique (or even an outright rejection) of traditional, product-driven, rules-based, correctness-obsessed writing instruction” (5). The steps of composing generally attributed to the process movement are: brainstorm/pre-write → draft → revise → edit → submit. However, these steps simplify the ideological outcomes of the movement, such as the belief that writing is not linear but recursive, that writing is not an isolated activity but a social activity, and that writing is not only an expression of existing knowledge but a tool that can be utilized for learning. In addition, the now-common composition grading moves that require students to compose multiple drafts that are reviewed and responded to by peers and teachers were developed because of the writing process movement (Olson 7; Pullman 19).

The critiques of the process movement are prevalent, despite the enormous influence it still has on writing pedagogy. Some claim that writing process classrooms lack rigor, that students talk and write about their feelings as if the classroom is a sensitivity group (Tobin 8). Others argue that there is a “need to restore real content” (Tobin 6) because focusing on the self is insufficient. Despite claims that the writing process classroom doesn’t help students become engaged, audience-aware, critical academic writers, it is the basic writing process perception that “we can somehow make statements about the process that would apply to all or most writing situations” that has caused some of the strongest academic backlash. The counterargument to writing process theory, that it is impossible to develop a single best process that all writers should use, led to post-process theory development.

#### *Post-Process Theory*

The goal of post-process theory is to explicitly contradict the belief that “good” writing can be studied, described, whittled down to its core practices, and then taught. Rather, “post-process theorists hold that the writing is public, thoroughly hermeneutic, and always situated and therefore cannot be reduced to a generalizable process” (Kent 5). The primary argument utilized by post-process theorists holds that nearly every aspect of writing—genre, situation, purpose, medium, composing environment—varies from moment to moment. In addition, “several processes might lead to essentially the same document. It is even possible that circumstances might require a process that directly obstructs the production of the most useful document” (Pullman 26-7). Post-process theory, in its focus to complicate writing process theory, doesn’t necessarily suggest a new approach to studying and teaching writing. Though some post-process scholars make their own arguments for approaches to teaching and studying

writing (Couture; Blyler; Russell, for example), there doesn't seem to be cohesiveness or widely shared strategies.

### *Writing at Work and Technical Writing*

Not all writing research in English, Rhetoric, and Composition is limited to academic writing locations. Some scholars have ventured beyond the classroom to gain a better understanding of writing, with one of the primary focuses being the discovery of different approaches, strategies, and perspectives that can be utilized to improve classroom writing instruction. Jack Selzer, for example, studied intertextuality in non-academic locations. He found that in a corporate workplace the writing practices used to develop specific texts are more visible than those occurring within academia—anything that is easier to see is easier to study. Selzer shows the value of moving beyond our traditional classroom locations to theorize and how such a move can significantly add depth to more academic, abstract concepts. Glynda Hull and Katherine Schultz, in their important review of Literacy Studies literature, also focus on out-of-school research. The ultimate conclusions of this work relate directly back to schooling, as to how the views on literacy presented by the theorists and scholars could alter school-based perceptions of literacy and language.

I, too, agree that workplace literacy and writing studies can inform school teaching practices; however, workplace studies can also inform workplace writing practices themselves. In a study of factory floor line supervisors, for example, Mark Mabrito focuses on the technological changes in workplaces and how those changes impact the literacy practices of workers. He explains that “more documentation is needed [now], and the responsibility for producing such documents increasingly falls on the shoulders of front-line supervisors and

workers” (59). The supervisors in Mabrito’s study, while experienced workers in the plant, were relatively inexperienced in communicating through writing when they moved into their supervisory positions. Though none of the supervisors in the study reported receiving any explicit training (Mabrito 60), they were asked to write to two very different audiences: the workers they supervised and the managers in charge of projects.

Sue Folinsbee demonstrates that the complexity of workplaces require a deeper understanding of workplace literacy practices. Folinsbee accomplishes this task by “showing how literacy practices or ‘paperwork’ are inextricably interwoven into all aspects of workplace life” (64) and how the different understandings of “meanings in use” rather than worker illiteracy cause problems in completing required workplace documentation. Mary Ellen Belfiore shares conversations with and observations of several workers to show how the ever-increasing requirements for documentation represent extra work and that writing reports that detail mistakes and delays is an extremely risky activity. Because many of the floor workers in her study are not proficient speaking, reading, or writing in English, these increases in written documentation led to increased stress and anxiety, in large part because writing education was not added alongside the additional writing requirements.

The workplace changes that as Folinsbee and Belfiore describe can lead to complete alterations in the literacy abilities expected from workers, and the implementation of more team-oriented workplaces often leads to literacy tasks being “essential for performing...production work” (Hart-Landsberg and Reder 372). In Sylvia Hart-Landsberg and Stephen Reder’s study of a manufacturing plant they call Hardy Industries, they observe that workers “referred to, and/or created, documents” (37) together in meetings. Participants in

such meetings had to gather and produce vast arrays of text and visual documents in order to develop procedures for accomplishing the tasks required throughout the plant, procedures that could be understood across work positions (in accordance with a Pay-For-Knowledge program that encouraged and demanded workers to extend their literacy knowledge beyond their specific jobs). These meetings were created to foster teamwork, and so “written communications about the design and production steps were often the main subject of meetings” (Hart-Landsberg and Reder 372-3).

Some workers, of course, are still silenced by the literacy practices of workplaces, especially in technology-rich industrial workplaces. These workers, as Dorothy Winsor shows, are often seen as being extensions of machines, and they inhabit a place in the hierarchy that silences their voices. Winsor’s study of workers at Pacific Equipment (an automotive research and development site) in *Writing Power* shows how hierarchy is reified through the development of company documents, with the more valued workers put in charge of writing official texts. The technicians in Winsor’s study do not produce any such texts; instead, they provide engineers with data and test results. This leads many workers in the organization to see the technicians as tools rather than as producers of knowledge. Winsor argues, in her concluding chapter, that organizations like Pacific Equipment should value the technicians more. Her observations and conversations with technicians reveal that they have a great deal of knowledge and experience that isn’t shared or listened to because they do not hold a hierarchical position as knowledge makers. Thus, whether literacy practices are engaged in or not allowed to be engaged in, the ways workers relate to text shows a great deal about their value in the workplace.



Sheryl Greenwood Gowen also conducted a study that highlights the issues of power and hierarchy in workplace writing. In Gowen's study of hospital employees who participated in literacy education classes, a belief was presented by hospital management and program leaders that literacy has the power to transform workers, and if people can just realize their literate potential they can be productive and successful workers (31). Literacy, in the program Gowen participated in, was viewed as "value neutral set of abilities having little to do with what [one literacy consultant] calls the 'social stuff'" (Gowen 33). The curriculum of this literacy education program was based on literacy audits of the workers, which were studies conducted by two consultants who sought from the employees a systematic, step-by-step description of the workers' daily tasks. The workers were asked to put well-practiced physical activities into linear language their every day work processes. Many of the workers, as Gowen explains, saw little value in outlining their work processes because the linear, written version of their work did not allow for the complexities of the actual tasks to be revealed. Thus, a false construction of tasks formed the base of the curriculum rather than the workers' more accurate explanations of their activities (Gowen 39).

### *Working-Class Studies*

The study of power in relation to work is not limited to workplace environments. Actually, in my own exploration of scholarship that focuses on physical laborers, blue-collar workers, much of the research studies working-class culture. Julie Lindquist's *A Place to Stand*, for example, discusses the rhetorical-argument strategies of working-class regulars at the bar where she once worked, and Aaron Fox's *Real Country* presents the role country music inhabits within the working-class cultural fabric of one southern town. Working-class cultural identity is

also emphasized by the “new working-class studies,” an approach to studying those who characterize themselves, or are characterized by others, as working-class (Russo and Linkon). In support of the new working-class studies’ approach, Portelli states that “whatever we think of the historical role of workers as a class today, workers as individual people are still very much in existence” (58). The approaches utilized and argued for by the above scholars value “the lived experience and voices of working-class people” as well as “critical engagement with the complex intersections that link class with race, gender, ethnicity, and place” (Russo and Linkon 15). In addition, Russo and Linkon state that “rather than embracing any single view of class, new working-class studies is committed to ongoing debates about what class is and how it works” (15). Perhaps the emphasis on the cultural, outside-of-work aspects of working class life is due to the constantly shifting structure of blue-collar work and the ever-present move in the U.S. economy toward deindustrialization; despite changes in work, working-class people and culture remain.

The role of work in working-class life remains the focus for other scholars. Mike Rose states that “though identified with another era, work of body and hand continues to create the material web of daily life. As with any human achievement, such work merits our understanding; the way we talk about it matters” (Rose xx). Zandy adds that “working-class life is hard, dominated by work or the lack of it. Often that work is unsafe, unreliable, oppressive, and exhausting” (4). Farrell argues that “when identities, relationships and institutions are challenged in the work place, the ramifications extend well beyond the workplace, reconfiguring social relationships and social institutions in the rest of people’s lives” (195).

What the above statements emphasize is that studying the workplaces and work lives of the working-class is an important component to this field of scholarship.

### **Working at an Intersection**

My work in this dissertation draws from all of the above areas of scholarly focus: writing process and post-process theories, workplace writing, and working-class studies. Writing process theory, because it predominantly focuses on writing pedagogy and learning about what “good” writing is and how it is done, remains most distant from the actual discussions that take place in the rest of this study. However, I do draw from it an awareness that there are processes that take place when one writes, that writing doesn’t simply happen. My own writing and pedagogy are also shaped by writing process theory, so the ways I look at writing come from this tradition. In my focus on machine operators’ writing processes, though, I do not take a writing process approach to their activities. Rather, I draw from post-process theory’s emphasis on the many influences that can determine how a writer completes a document. In particular, the claims I make regarding Julio Rodriguez and Fullamena’s different writing processes and practices draw on the importance of considering how situational influences act upon writers.

The work of my dissertation is also closely aligned with other research on workplace writing, work that argues for the importance of studying writing practices beyond the classroom. In workplace writing studies, primary emphases are placed upon literacy practices and literacy education; the documents that are produced by workers and their influence on workplace practices and culture; and how workplace documents also create, enforce, or reinforce power dynamics implicit in workplace hierarchy. My work here, though, does not

address these emphases. Instead, I have decided to study how workers write as well as their own beliefs regarding the meaning those writing activities and written documents hold. By narrowly focusing on writing activities and personal reactions, I can reveal uniquely situated and regulated composing processes.

My decision to interview factory floor, blue-collar, manual labor workers also draws from working-class cultural studies. I am inspired by Russo and Linkon's statement that working-class studies is interested in the "lived experience of working-class people" and so it is "influenced by representations that provide access to working-class voices and perspectives." For them, "this means collecting and studying representations that capture the voices of working-class people" (11). I, too, desire to capture the voices of working-class people, which is why I have chosen to base the major claims I make in this dissertation on the stories and reflections Fullamena and Julio share. As Russo and Linkon advocate, in this dissertation work I also involve "working-class people as full participants" (15). I desire in my own research to always enact my philosophy of valuing the experiences and stories of those I ask to participate in my work; therefore, new working-class studies provides an important base of support for the approaches I already embrace. I diverge from a cultural-studies focus, though, in my research because the work of the working-class so heavily influences working-class culture, because there are other scholars already doing exciting research in regards to working-class culture, and because of my own academic interests in writing, I chose to study workplace writing as done by working-class people.

Researching at this intersection between process theories, workplace and technical writing, and working-class cultural studies opened up a space for me to analyze the writing

experiences of factory floor machine operators. Overlapping the key emphases of these research focuses helps me to reveal the small, and thus far hidden, stories Julio, Fullamena, and Michael had to share. In particular, by researching at this intersection, I have been able to gain insights into the personal investment these individuals have in their work, investment that is effectively understood through their dedication to composing procedural guides at Post.

### **Overview of Dissertation Structure and Chapter Descriptions**

To conclude this introductory chapter, I provide an overview of the next five chapters. In this overview I also explain how I have chosen to structure the overall dissertation. I started this text with a focus on the people who shared their workplace writing experiences and where I situate my work in relation to existing scholarship. I continue the discussion of research participant investment and its influence on the design of this research project in the second chapter, “A Phenomenological Sensibility as Influenced by Issues of Access.” I discuss how the personal investment Julio, especially, as well as Fullamena and Michael felt regarding their own work and mine shaped the initial access I was able to gain to Post Cereals as a research site and the later agreement of all three to participate in off-site interviews. Because gaining access to factory spaces is a difficult undertaking, the efforts made by these three research participants significantly influenced and shaped my research approaches. I then explain the methodology I used to conduct my research—what I call case-study with a phenomenological sensibility—and how it was shaped, in part, by the access issues I faced. I explain how I have drawn upon phenomenology to develop the phenomenological sensibility with which I approach my interviews and interview transcript analysis. As a methodology, phenomenology is most concerned with seeing the everyday in new ways, making the familiar strange while attempting

to minimize the influence of preconceived notions, theories, and biases. I have chosen to study the phenomenon of writing.

I follow my discussion of access and methodology with “The Development of Job Skill Management Manuals Required Involvement from the Shop Floor.” In this third chapter I present the recent history of operations procedural guides at Post to before moving on to describing the four-year JSM project. The history provides important context for understanding the rather unique desire for the JSMs to aid operators in learning about the intricacies of their machines. Detailing the changes in the JSM project over the course of four years illustrates the organic nature of this kind of large-scale project. It also provides the backdrop to the more important discussion of how and why Michael came to involve designated trainer machine operators in writing official company documents and his reactions to such involvement. Finally, I draw readers’ attention to the benefits gained through finally including machine operators in the JSM development and writing process.

The fourth and fifth chapters are the primary data chapters in which I present the information shared with me by Julio and Fullamena. In chapter four, “Machine Operators Compose Right on the Floor, Right Next to the Machine,” I present the writing processes and practices that Fullamena and Julio utilized in order to articulate the operating procedures for each of their machines. I compare and contrast Fullamena and Julio’s writing practices and processes in order to reveal that massive differences between their practices were due to the different situations in which they composed texts. Though they both wrote operations procedural guides meant to be used by operator trainees, Fullamena received support through her official work on the JSM project while Julio wrote on his own outside the JSM project. I

show how the composing situations, as constructed by Post's many regulations regarding time and resources, shaped and even determined the writing practices and processes the two operators utilized while writing.

In chapter five, "Machine Operators' Personal Reactions to Writing Reveal their Shop Floor Craft Knowledge," the last body chapter, I explore the two machine operators' personal reactions to their writing activities. These personal reactions provide important discussions of writing in factory environments, especially since much of the existing scholarship on this topic choose to emphasize issues of hierarchy and power. The two machine operators certainly hold high seniority positions for hourly laborers, but their positions in the overall factory hierarchy is rather low. Yet, these two operators engaged in important corporate document creation, allowing them a space in which they could fully examine their machine operation craft knowledge and then realize that the knowledge they hold is valuable to others.

I conclude my discussion of Julio and Fullamena's writing experiences in "What I Learned About Writing on the Factory Floor." Through the body of this work I consider their writing practices and processes and their personal reactions to workplace writing separately. In the conclusion, I consider these two threads together in order to reveal two primary outcomes this work reveals. First, writing operational procedure guides allowed Julio and Fullamena to reveal their craft knowledge expertise to themselves, to other machine operators, and to the Post management. This revelation led Julio and Fullamena, despite their highly different writing practices, to both embrace their expert identities and feel those identities are valued. I situate this first outcome within discussions of rapidly changing industrial technologies and its impact

of shop floor labor, particularly addressing how such changes demand a change in perceptions of shop floor workers.

The second outcome I focus on within the conclusion is that for Fullamena and Julio the differences in their composing situations were the primary influence on their composing practices. Specifically, Post's regulations regarding workers' time, resources, and tools shaped when, where, and how they each drafted and revised their texts. I situate this second outcome within academic conversations regarding considerations made when composing; I present a heuristic called M.A.P.S. (Mode. Audience. Purpose. Situation.) introduced to me through the Writing Center at Michigan State University to emphasize how little attention situation receives in conversations on writing. By drawing on the processes and practices Fullamena and Julio described, in conjunction with their personal reactions to those writing activities, I explain why situational diversity was such an important consideration that had to be made when understanding Fullamena and Julio's writing experiences.



## CHAPTER 2

### A PHENOMENOLOGICAL SENSIBILITY AS INFLUENCED BY ISSUES OF ACCESS

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#### **Introduction**

The purpose of a dissertation methodology chapter is to explain the theoretical lens through which data is collected and analyzed as well as to articulate how the research methods used align with that theoretical foundation. While I certainly meet this traditional purpose in my methodology chapter, I also take this moment as an opportunity to share the story of my research. Describing what led me to choose a specific methodology and specific data collection methods is just as important as the research theories and practices themselves because my research experiences and relationships necessarily influenced my choice to draw upon phenomenology and case-study approaches. Therefore, I begin here with a story that situates my work on this project within my life.

#### *A Researcher's Story*

My first visit to Post Cereals for this dissertation research project was on a sunny late summer afternoon. I arrived 30-minutes early for my meeting with the regional manager—a meeting I had only because my dad had presented my project to the manager and obtained his email address. I tend to run late most of the time, but this was super important and I was super nervous. Arriving early, though, meant I had nothing to do with my nervous energy once I checked in at the security station, and I couldn't help but dwell on the upcoming meeting. Would they think my project was a good idea, I wondered. Would I explain it clearly? Would they even care or were they just humoring Julio? Would they like me and think I'm smart? And

so the self-conscious little-girl-Elena revealed herself, the part of me who still felt like a student and a daughter desperate to make her dad proud.

The plant secretary, a very nice and outgoing woman who seemed to think very well of my dad, finally arrived at the small security building to retrieve me. It wouldn't be the last time I felt like an excited puppy on a leash, yipping anxiously at my temporary caretaker.

When we walked into the office building, a large, white house complete with gardens and foregrounding the sprawling factory, I was immediately lost. Because it was an actual house in the early 1900s when the company started, its conversion into an office space large enough for a major food production company underwent multiple transformations and additions. There were three levels of narrow hallways full of closed doors hiding offices, and opening up into rooms with cubicles and various office machinery. Steep and narrow stairways connected these mazes of hallways and rooms.

I was finally deposited into an office and told to "sit anywhere" at a six person rectangular table. The regional manager arrived several minutes later (he was, indeed, a very nice guy) followed by the plant manager and the director of human resources. I was not expecting to speak to a panel, and this meeting started to feel eerily like a job interview, with me on one side of the table and the three head honchos on the other side, facing me. Once brief introductions were through, the regional manager launched directly into specific questions, completely disrupting the project overview explanation I had practiced over and over in my mind as I waited in the security building. I tried to explain to the trio that I wanted to observe several machine operators engaged in writing, paying special attention to how they wrote. Unsurprisingly, unfortunately, my explanation of my research focus received a "that's it?"

That would be interesting?” from the human resources director. She couldn’t imagine why studying writing in the factory simply to find out how different operators write, without some other purpose, could be the goal of a dissertation.

The committee in front of me seemed to want specifics, though. They wanted a plan. But I didn’t have nearly enough knowledge of the day-to-day work of the plant to provide that information. I needed their help to figure out what to do. It was a vulnerable position, like when a teacher asks me a question for which I have no answer. And so began a process of meetings and emails and proposal revisions that lasted several months. In the end, though, I could not conduct my research at Post. The union had shut down the Job Skills Management writing project (see Chapter 4), so not only was there no more JSM writing that I could observe, I couldn’t do any research related to those documents within the confines of the plant. Now what, I asked myself.

### *Chapter Overview*

I separate this chapter into two key discussions: my experiences trying to gain access to Post Cereals as a research site and the presentation of methodology and methods. I address access first through a description of the rather complex negotiations and adjustments I had to make to my research plan before I ever started collecting data. I specifically argue that having a research participant who might be called an “invested insider” can be an important component to conducting research in factories. I then draw upon my discussion of the investment Julio, Fullamena, and Michael had in my research to describe why conducting case-study with a phenomenological sensibility is an appropriate methodological approach for this work.

## Issues of Access

### *Seeking Guidance from Other Researchers*

My primary concern when shaping my research project was how to gain access to Post's factory floor. Unfortunately, I could not find many guides for how to approach my negotiations with Post's administration. I found it interesting that many of the studies I read about either did not describe how the researchers gained access to the sites at which they conducted their work (Winsor; Mabrito; Selzer), or the researcher already had access to the spaces in which they conducted their studies because they were doing other work there (Zuboff; Gowen). Given the limited information available to me, I believe it is necessary to address the difficulties associated with gaining access to workplaces with the goal of conducting writing research.

In this brief discussion of access, I predominately draw upon the work of Beatrice Smith, who addressed issues of researcher positionality and access when conducting workplace studies. Smith's statements regarding her own workplace research resonates with my experiences attempting to conduct my study at Post Cereals. Smith explains that:

Negotiating access is a tricky business....Companies are fairly suspicious of the intentions of academic researchers, and it may take considerable effort on the part of the researcher to help companies and their representatives come to terms with their presence. As in all field work, the beginning may be bumpy and even uncomfortable, but researchers have to accept that discomfort and work through it. (147)

Smith's statement highlights the struggles researchers can face when attempting to gain access to a space generally closed off to outsiders. She points out three major blockades a researcher

has to traverse in order for workplace research to actually begin: 1. Convincing a company to allow the academic researcher into their space; 2. Getting to know the workers in the company so they feel comfortable with the researcher's presence; and 3. Working through one's own discomfort so that the work can move forward.

The three blockades listed above also need to be considered, though, in relation to the researcher's own goals for work. Smith points out that the best way to do this is to remain open to previously unconsidered research focuses and possibilities, explaining that "with my rather limited knowledge about the sites...I wanted to seek as vague an entry as I could negotiate while also leaving open the possibility of renegotiating access to the people, places, and spaces as the research evolved" (141). For an outside researcher, gaining initial access is only the beginning of the negotiation process. Smith suggests that a researcher should enter these negotiations with a minimally articulated project and a willingness to flexibly adjust initial ideas of a project in order to meet the demands put in place by the company. It seems then that if access to a particular research site is the primary concern of a research project, then the other aspects of that project need to be open to change.

According to Smith, it isn't just the project dimensions that have to remain flexible; the "researcher stance is also affected by the conditions upon which access is provided" (147). How the researcher approaches company employees, how the researcher positions herself in relation to the company and its employees, the questions the researcher chooses to ask, and the overall positionality the researcher inhabits must be open to adjustment (Smith 142). My own researcher stance was highly influenced by the position of "daughter" that I brought with me to my negotiations with Post. I was brought in for meetings and the managers at Post

attempted to involve me in their existing JSM project primarily because I am “Julio’s daughter,” and yet it was this identity that also positioned me not completely as an expert academic coming in to conduct a serious research project. I had to take all of the conditions of my identity and Post’s company practices into account when I sought access.

Smith’s recommendations regarding how a researcher can consider and also gain access to company workplaces provides an effective introduction to the following discussion that articulates the specific issues of access I experienced with my own research. I present my experiences working in a factory environment and specifically address how corporate priorities to maintain privacy influence research access. I then discuss the role my dad played in my attempts to gain access to Post, arguing that an invested insider is important to have when seeking access. Finally, I address researcher flexibility, much as Smith does, explaining how I had to be incredibly flexible with the original focus and methods I planned, finally adjusting them a great deal because of the influence that Post had upon my work.

### **The Difficulty of Conducting Factory Research**

I spent the summer following my freshman year of college as a paid engineering intern for a General Motors foundry that makes engine blocks and heads for GM vehicles. It was then that I learned of the extreme care factories take in maintaining production secrets. Nothing of consequence could leave the factory site—no blueprints, no maps of the factory floor, no notes on machines, nothing. Every day workers have to enter and exit the site through key-card opened gates, including all the interns. Our key cards also opened up spaces within the factory site itself, with access to certain offices and to the plant floor electronically guarded to ensure that only vetted employees could enter. Technologies, products, and systems were carefully

maintained secrets, for the world of industry is competitive and any edge over other manufacturers could earn millions of dollars, if not more.

I understood this emphasis on secrecy; my work involved a brand new metal-casting system that used Styrofoam and aluminum to create highly intricate and very light-weight engine blocks. My job was to calculate the overall cost of each piece of machinery and to explain the process of the entire system so that other engineers unfamiliar with it could still understand how it works. The information I had access to was incredibly valuable, as the plant was hoping this new “lost-foam” system could make and save lots of money as long as they were the only ones using that kind of process.

At Post, as at GM, maintaining industrial secrets is essential. That is why readers will not see images of the factory floor in this dissertation, why there are no examples of what JSMs look like or the content they contain—I do not have that information, and even if I did, I would not be allowed to publish it. Secrecy is one of the reasons why factories are not often opened up to public tours, not to maintain secrecy from consumers, but secrecy from competitors. And, also as at GM, workers have to enter and exit through key-card activated gates, and they cannot take notes or other work home with them.

When the JSM project was shut down, I no longer had any access to the plant. Julio couldn't just sneak me in because all visitors have to sign in at the security station and obtain a visitor's pass. I had to be called in by the security officer who would then know that I wasn't supposed to be there. The issue of access, then, was the first problem that had to be dealt with before I could move forward with my project.

Another concern with access is that even if the JSM project hadn't been shut down, even if I had been able to conduct my research within the factory walls, my work would still be incredibly limited. Through modifying my dissertation focus after each meeting, my work kept becoming closer to something that would be useful to the factory, almost more so than it would be useful for me. Access isn't just about being let in the physical space, it's also about what research can be conducted. The administrators at Post had no reason to let me conduct my research in their factory, they had no stake in a project that focused exclusively on observing machine operators writing and then discussing the writing activities engaged in. I would have to offer the plant something in return for them granting permission to do my work. So I was asked to adjust the focus of my research, from writing activities to how the JSMs were being used by trainees. This is what really mattered to them—were the documents that had taken four years to develop being used effectively and were they as beneficial for training as Michael and others hoped? If I had conducted this research on the factory floor, I would have ended up with a very different project than the one I present in this dissertation.

### *Insider Access*

One of the most important lessons I learned in my negotiations with Post, with the fall-through of the project I'd originally envisioned and the eventual interviews I conducted, is that an invested insider is essential to completing an academic writing study in a factory. Most factories have groups of researchers coming in all the time, but based on what I've learned from multiple factory workers, these research groups are usually brought in by the factory administration for a very specific goal. Other research is done in-house by people like engineers



or technical writers or accountants. The only purpose for such research is to eventually increase profits. My research fell into none of those categories; I was an outsider and I had no way in.

That is, I had no way in on my own. I was, however, lucky enough to have a dad who has worked in the same cereal production factory for almost forty years, a machine operator who is well-respected by the administration because of his hard work and because he can do in an hour what takes other operators a day to complete. He knows almost everyone, and his advice has been sought from high-ranking managers for ways to better work with shop-floor employees. If he'd had the desire, he could have probably worked his way up from machine operator and into management. While I did not have access, he had access to everyone.

It was my dad who obtained the email address from the regional vice president for me so I could set up my first meeting with Post. It was my dad who encouraged the head of human resources to continue working with me on the project, not only to help me but because my research had potential to reveal interesting and important information. And when my access to the factory was denied, it was my dad who sought out Michael and other machine operators, like Fullamena, and encouraged them to volunteer for an interview.

I am aware that gaining access to research participants who are already motivated to participate in my project, for whatever reason, can undermine any objectivity, on my part and theirs. Smith addresses this issue as well, stating that, "researchers who have some relationship to the community under study have to be self-conscious about how that relationship may affect judgment about what is deemed important and thereby affect how decisions about what information to value are made" (142). However, I do not claim objectivity in this project. Instead, I acknowledge that my dad, as one of my interview participants, might have been

motivated to provide me with information he thought I wanted. I acknowledge that Fullamena and Michael only agreed to be interviewed because they like my dad and were interested in my work. All of our motivations for this project were personal. One of the early realizations I had while crafting this project and recruiting participants is that the participants were highly invested in their writing and in my work (as I briefly mentioned in Chapter 1 and discuss further in Chapter 5). Because I ended up being denied research access to Post Cereals, I had to rely on research participants' willingness to meet with me on their own time; thus, Julio, Michael, and Fullamena became involved in this research project.

Based on my own experience, I here present an argument for greater emphasis in factory research on the role of what I am calling the invested insider. I cannot believe that I am the only researcher who has gained access (though limited in my own case) to a factory floor by relying on personal connections. Glossing over the importance of such a person minimizes the impact of an invested insider, leaving new factory researchers, like me, struggling to figure out how to do the work that excites us. I was hesitant to rely on my dad. I had yet to read (granted, I haven't read everything out there) about a researcher who gained access to a factory because of their father or mother, sister or brother, cousin or friend. I had no idea how to conduct my research without relying on the relationships I have with people who work in factories.

### *The Importance of Flexibility*

When I realized I would not be able to conduct the research project I had envisioned, I faced the requisite moment of doubt followed by a real fear that I would have to write an entire dissertation using second-choice research. Studying writing at Post, studying my dad's writing, was personally important to me and I didn't want to let it go. Plus, it was too late for

me to develop another plan; I needed to start collecting data. Instead of changing the focus of my research, then, I decided to change my research methods. I might not have been able to do observations and study documents, but I still had my dad and he still had friends.

I might not have had access to the factory floor any longer, but I could, of course, talk to people outside of the plant. I focused all of my attention on developing interview questions (see Appendix A) that would get at the information I was most excited about—how machine operators write and what their personal reactions are to those activities. I developed recruitment scripts that my dad could give out to other designated trainer machine operators who could then contact me if they were interested (see Appendix A). And then I waited for phone calls and emails while my dad talked up my project to specific people. Finally, I was contacted by Fullamena and Michael, a machine operator and the manager in charge of the JSM project, who seemed excited though uncertain that the information they could provide would be useful for me. Thus, data collection for this dissertation project involved three separate interviews, all outside of the context of work, and emphasized reflection and personal reaction. In the end, the information shared with me was rich and detailed, which I believe was possible because the research participants had the space—outside of the factory—and the time to recount their experiences honestly, time to think back on their writing and explore what that writing meant professionally and personally.

### **Presentation of Methodology**

At its most basic, this dissertation is a study of specific writing activities as they are perceived by two writers. Because I focus on the stories Fullamena and Julio Rodriguez had to tell regarding their writing experiences, rather than studying the texts they developed or

observing writing-in-progress, I chose to approach this research as case-study with a phenomenological sensibility. In this section I provide an overview of phenomenology as a research methodology, which provides the foundation upon which I articulate what I mean by a “phenomenological sensibility.” I then present my actual research activities to address how they enact this phenomenological sensibility approach I have developed. Finally, I end this methodological discussion by explaining how my particular methodological approach has shaped the structures of the upcoming data chapters (Chapters 3-6).

### *An Overview of Phenomenology*

As a philosophical methodology, phenomenology is most concerned with seeing the everyday in new ways, making the familiar strange and then familiar again, all while attempting to minimize the influence of preconceived notions, theories, and biases. The core of phenomenology, at least according to some scholars (Carroll, Tafoya, and Nagel; Merleau-Ponty), is a focus on “essences;” Merleau-Ponty explains, “phenomenology is the study of essences; and according to it, all problems amount to finding definitions of essences: the essence of perception, or the essence of consciousness, for example....it also offers an account of space, time and the world as we ‘live’ them. It tries to give a direct description of our experience as it is.” He goes on to explain that “to ‘understand’ is to take in the total intention;” thus, rather than looking at some aspect of a thing, analyzing it, synthesizing meaning with other things, phenomenology looks at an object, a belief, a practice from all possible angles. The history of the practice or the object, the surrounding explanations of it and beliefs about it, need to be taken into consideration. Merleau-Ponty, in particular, argues that phenomenology is about presenting a thing as it is.

Making the familiar strange in order to gain deeper understanding is the goal of much work that focuses on the mundane, the every day. This is the primary concern of the phenomenological approach I utilize in this dissertation, for to understand what is before us we need to “suspend for a moment our recognition of them” (Merleau-Ponty). When anyone examines an object or activity, we bring with us our own histories, beliefs, and experiences, making our perspectives subjective and localized within each individual. However, if we attempt to re-see, to put aside our desire to analyze and synthesize so we can “return to the ‘things themselves’” (Merleau-Ponty), we have a better chance of seeing what is real. In addition, by focusing our attention of the ‘things themselves’ rather than the outcomes of our analyses, we might be able to see what was before hidden, blocked by our existing perspectives. The attitude required to conduct effective phenomenological research is a “kind of suspension of belief” called “bracketing” (Carroll, Tafoya, and Nagel). The act of bracketing requires researchers, rather than eliminate or ignore their existing biases, to make them as visible and transparent as possible and to analyze how they might influence the view of the phenomenon in question.

One way that phenomenology can be utilized for its desire to re-see is by attempting to understand a phenomenon through the experiences of people. Phenomenology, according to Trixie Smith, can be thought of as “a way of understanding human experience by listening to people’s stories” (49). When a researcher is not involved in the activities or experiences being studied, she must take a direct approach to phenomenological study, in which the researcher “shines a light on the foreground of the phenomenon to engage in a systematic study of participants’ mental representations of the phenomenon as they experience it” (Titchen and

Hobson 121). By looking to people who have experience with the phenomenon in question, a researcher can learn not only about the phenomenon itself but also how that phenomenon is perceived by others. When phenomenology involves the stories and experiences of people, it does not look to examine what was, what could have been, what should have been, or what could be. Rather, it examines what is, now, in the thoughts and actions of people.

A last important component of phenomenological research to consider is its demand for direct description. According to Merleau-Ponty, the presentation of phenomenological research is “a matter of describing, not explaining or analyzing.” Such description “evokes this experience of something and guides others to it. The validity of the description is to be found in experience, in ‘the things themselves’” (Carroll, Tafoya, and Nagel 7). Description is so integral to phenomenology because of the emphasis on the real; “the real has to be described, not constructed or formed” (Merleau-Ponty). The researcher, then, must be incredibly diligent in the descriptions written to present the self without allowing that self to be the only lens through which we view a phenomenon. Or, much more simply, we researchers have to make ourselves visible in our phenomenological writing without getting in the way of it.

### **Case-Study Approached through a Phenomenological Sensibility**

First and foremost, I would characterize my dissertation research as a case study of two machine operators involved in writing procedural operations documents. According to Stark and Torrance, case study is “an ‘approach’ to research” that “seeks to engage with and report the complexity of social activity in order to represent the meanings that individual social actors bring to those settings and manufacture in them” (33). However, it is difficult to draw boundaries around what one means by ‘a case’ because numerous influences are involved in

particular meaning-making activities. Therefore, when utilizing a case-study approach to research, one needs to “pay attention to the social and historical context of the action, as well as the action itself” (Stark and Torrance 34). The benefits of case study for a researcher is that one can present a rich, detailed account of a person, event, or phenomenon.

Because of the flexibility of case study and its narrow and deep focus, it is well suited as an approach to combine with phenomenology. In both, the researcher must consider the entire context in which a phenomenon occurs and should present the gathered information from a balance of subjectivity and objectivity, which, as Merleau-Ponty explains, “find their unity when I either take up my past experiences in those of the present, or other people’s in my own.” Also, in both, the researcher is able to study people’s perceptions of their own experiences, which are inherently incomplete, because their goal is to reveal, not to explain or answer. Research questions are inevitably broad and outcomes are uncertain, and to bring into either approach a clear hypothesis, a clear bias regarding what will be found, is to undermine the validity of the intended work.

I decided to apply a phenomenological sensibility to case study because it helped me to narrow down how to approach case study for this research project. As I discussed earlier in this chapter, I could not observe JSM writing in practice due to the constraints of my access to Post Cereals, so this limited the methods I could employ in my case study research. When conducting case study research, several research methods—such as interview, documentary analysis, and observation (Stark and Torrance)—are generally employed to gain as full an understanding of the case as possible. Limiting case study to using just one of these methods is often critiqued, for the information gathered will therefore be limited. So, though I wanted to

do case study research, I had to approach it a bit differently than I would have if I'd had greater access.

Phenomenology offers the possibility for an incredibly narrow focus on a particular experience and often utilizes people's stories to make meaning. By bringing a phenomenological sensibility—this goal to see the everyday in new ways by listening to and then describing people's experiences—to case study, I was able to effectively utilize interview as my only field research method. One might wonder, then, why I do not call my methodology phenomenology, why I insist on stating it is a phenomenological sensibility. Like case study, phenomenology had its limitations in my work. Because I want my work to stay focused on the people involved in the research rather than only on the phenomenon of writing, for example, and because I never intended my work to be only a philosophical description of experience, it would go against some of the traditions of phenomenology to give that name to my work.

A case study approach utilizing a phenomenological sensibility, for me, means that I was able to narrow the focus of my research to that which most interested me: Fullamena and Julio's reflections on and reactions to their writing activities.

#### *Interview Allows Stories to be Told*

For this dissertation I chose to focus explicitly on interviews to learn about factory floor writing. Though my decision was made under mitigating circumstances, I also made this decision because, in the end, I believed interviews would be the best way to approach the participants who volunteered to work with me on this project and because interview as a data collection method can value the stories people have to tell. I conducted three interviews, one with Michael, the manager of the JSM project, and one each with Julio and Fullamena, two



machine operators. I recognized when I decided upon three interviews as pretty much the only data I gathered that I would be limiting the conclusions I can make regarding factory floor writing. However, I knew that if I could effectively conduct my interviews, the data I gathered could be rich and exciting.

I have learned through this dissertation research project that developing a valid and informative final product can only happen when the methods used to gather information and the methodological lens used to understand that information are sound. Just as important, though, is the research participants' trust in the researcher and comfort with the project. Trust and comfort to me are the most important considerations a researcher must focus on when beginning the interview process with research participants. With the goals of trust and comfort in mind, I began a two-pronged approach to finding interview volunteers. First I developed a recruitment script (see Appendix B) that briefly explained my research project and the role each participant would have in that research. I tried to present myself in that script as friendly and as a "normal" person rather than as a scary academic who might judge someone like a machine operator. The second prong in my approach was word-of-mouth descriptions of my work by my dad. He was able, through talking to people and giving them my contact information, to put potential interview participants at ease about my project while encouraging them to consider participating. Once I was contacted by interested Post employees, my dad was able to help me deliver my recruitment scripts. Though my dad played the role of "middle-man" in my recruitment process, he did not coerce participation in any way I am aware of. The floor workers at Post trust him and so they trusted that his statements about my project were true.

Those who were interested then felt comfortable and enthusiastic enough about my project that they volunteered their time and their stories to this dissertation work.

When I was ready to start conducting interviews, I started with my dad. I paid very close attention to the research questions I crafted (see Appendix A) because most of all I wanted to hear stories. I wanted my research partners to take me down multiple paths of reflection as they recollected their experiences and considered them in the light of a writing study.

Therefore, before I hit the record button on my audio-recorder, I explained to my dad that there could be no wrong answers to my questions and that I would keep the interview on track, hoping that he would feel free to talk without overly monitoring or questioning the usefulness of what he was saying. I also explained that I wasn't looking for any responses in particular, so he should respond to my questions in any way that struck him in that moment; I most wanted to hear what *he* had to say. When I listened to our recorded interview after the fact, I knew that the information he shared with me was exciting and would help me develop a project I love.

Interviewing my dad first was a low-risk choice for me. Irving Seidman explains that “interviewers—like good teachers in a classroom—must listen while remaining aware of the process as well as the substance....They must be conscious of time during the interview; they must be sensitive to the participants’ energy level and nonverbal cues” (as quoted in Halbritter and Lindquist). As a researcher I certainly need to become accustomed to being uncomfortable, and talking to people I’d never met, in person, and leading them through an interview is very disconcerting for me. In addition, given that I had never actually conducted a data-collecting interview prior to that moment I sat down with my dad, I figured I could use a little practice in reading the small cues presented to me. My dad wouldn’t mind a bit of fumbling on my part.

Talking with my dad first helped me feel more comfortable in my interviewer role and also helped me to realize that interview questions I had developed were solid.

When I conducted my interviews with Fullamena and Michael, additional benefits of their personal investment in this work became clear. One of the difficulties of conducting interviews is developing a comfortable relationship with participants so they feel confident in revealing details about their experiences. Often the development of such relationships takes time and multiple conversations. In my own case, though, the friendships Fullamena and Michael had with my dad helped us to bypass much of the “getting to know you” time. They’d heard my dad talk about our family for years, had heard my name and about my life. In a small sense, they already knew me. Therefore, when we met for our interviews both Fullamena and Michael were open and friendly with me. In our pre-interview conversations we talked a bit about my dad (and how much I looked like him), about Battle Creek, about working at Post, and about what a dissertation is and what it means in my academic career. All three interviews, then, were comfortable and casual conversations. The personal connections between us and the high investment we felt in each other’s work are two key components that made a case-study approach with a phenomenological sensibility, with interviews as the data-collection method, such a successful methodology for this project.

I characterize my interviews as semi-structured in that I had a number of questions available for me to ask while also leaving the questions open-ended so Julio and Fullamena, in particular, could determine their own way to answer them. I was provided with narrative data by the three research participants, which is “good for understanding something as socially meaningful, and as socially contingent” (Halbritter and Lindquist 175). I also did my best to

develop a sequence of questions and an interview approach that could lead the research participants to engage in the “practice of invention” (Halbritter and Lindquist 175) as they shared their stories. Through storytelling and reflection, I fully believe that the three people who agreed to share their experiences with me were also inventing new knowledge about themselves.

### *Valuing Stories and Voices While Analyzing Interview Data*

If I could have done this research in exactly the way I wanted, I would have co-authored the piece with all three of the research participants I interviewed. In such a collaborative project, Fullamena, Julio Rodriguez, and Michael would have been full researcher partners, with the four of us making meaning about factory floor writing together. The dissertation is a very particular academic moment, though, with such collaboration being inappropriate. In addition, I couldn’t imagine asking the three of them to get involved in such a lengthy and difficult project. I have chosen an academic career and expect to do this kind of hard work; Fullamena, Julio, and Michael have other jobs and do hard work of their own. Therefore, despite what would make me most comfortable and most happy, I needed to analyze the interview data I recorded.

When I looked over the three transcribed interviews I immediately knew I would be separating Michael’s from Julio and Fullamena’s. His experiences were very different, and the detailed information he provided about the development of the JSM project would be essential to setting up the existing experiences of the two machine operators. Therefore, when I analyzed the transcript of my interview with Michael, I began by separating his statements and stories into small discourse units—little pieces of text that can stand alone because they each have a specific focus as well as a perceived beginning and end.

After I identified and separated the transcript into smaller pieces, I went about organizing them into a clearer chronology. I knew I would have to rely almost exclusively on the information Michael shared to explain the JSM project, and from him I learned how the JSMs developed and changed over the course of four years. Our interview, though, was not structured as a chronological narrative; so, I relied on the time-clues Michael provided to develop a narrative structure that would best present the JSM project to readers (see Chapter 3).

Aside from imposing a chronological structure upon Michael's interview information, I also impose my own narrative upon the data. In telling the story of the JSMs as I understand it, I tried very hard to describe and present information (as a phenomenological approach demands) rather than interpreting it. In the few places where I diverge from what Michael told me and into own interpretations and analyses I make the move clear and obvious. I wanted to value what Michael was sharing with me by remaining as true to his voice and stories as much as possible.

I carried this goal, of course, to my analyses of the stories Fullamena and Julio Rodriguez shared with me about their writing. As I did with the transcript of my interview with Michael, I first separated the transcripts of my interviews with Julio and Fullamena into small, manageable discourse units. Themes and commonalities in their experiences quickly emerged and I went about grouping the discourse units. Any structuring of their information would always already impose my ideas and interpretations upon the data. By taking a great deal of time and care for similarities and structure to (I guess I will say) emerge from the data, I believe I respected Fullamena and Julio's stories as best I could. I grouped and regrouped the small bits of data,

outlined and reoutlined the themes I interpreted, and finally decided on ways I could tell their stories and experiences with respect.

### *A Phenomenological Sensibility in Writing*

Phenomenology and case study both care most about presenting the real, and in my research this means presenting the reflections and reactions as explained by the research participants. And because both approaches also care greatly about how research is presented through writing, I have paid particular attention to the crafting of my two primary data chapters, chapters five and six. In both I first provide detailed descriptions of the responses I received during my interviews, narrating them while refraining from analyzing them. Such a descriptive approach is aligned with the tenets of phenomenology and also provides readers with a contextualized view of writing activities and reactions as the two operators explained them. I have chosen in the data chapters that follow to focus on Julio and Fullamena's experiences (Chapters 4 and 5), to place upon the stories told to me a narrative structure that I believe will help readers best understand the "truth" behind the stories through choices I have made in my interpretations. Though I would much prefer it if Julio and Fullamena could always speak for themselves in this dissertation, that is not possible here. However, I feel that the veil of interpretation that lays over their stories does not change the invention behind those stories.

Only after I present the stories I was told do I move into a space of analysis and discussion. My analyses at the ends of Chapters 4 and 5 are moments when I share my own reactions to the information shared with me by Julio and Fullamena. I am very excited about what I learned throughout this research project, and I am eager to share my ideas. Rather than temper my eagerness in order to respect Julio and Fullamena's voices, I chose to separate my

own ideas, my own stories, from those I was told. By separating each chapter into two sections I was able to accomplish what could have been conflicting goals: describing a phenomenon appropriately and analyzing that phenomenon to learn from it. These two conflicting goals lead to a tension within this entire dissertation that I've had to navigate carefully in order to avoid (hopefully) doing injustice to either.

## CHAPTER 3

### THE DEVELOPMENT OF THE JOB SKILL MANAGEMENT MANUALS REQUIRED INVOLVEMENT FROM THE SHOP FLOOR

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#### **Introduction**

##### *Tell Your Mom I'm Working Over*

For my entire life my Dad has worked lots of overtime. At times he would go one, two, even three months without a single day off, often working 16 hour days during those time spans. When I was young, he worked as much overtime as he could because any hours worked beyond 40 a week earned him overtime pay, time-and-a-half on the weekdays and Saturdays, double-time on Sundays, double-time on holidays, and if he worked on a Sunday holiday (like Easter) he made three times his hourly pay. With the yearly winters laid off from work, this overtime pay helped us survive each year.

Now, nearing his late 50s, after working for 36 years, he has reached a seniority and pay level at which he could afford to not work as much overtime. Yet, he still goes weeks of putting in more 16 hour days than eight hour days, going into work at 3am or staying at work until 11pm. I can visit my parents for a day and maybe, if I'm lucky, I'll see him for an hour or two, just like when I was a kid. Sometimes he chooses to work all this overtime—my parents like to help us out when they can and they like being able to spend money fixing up their house or taking care of their cars. However, not all of Julio's overtime is voluntary. When many workers desire overtime, he is still required to work long days because his level of expertise makes him one of the few people, if not the only person, who can fix certain machines or make them operate at optimal levels. As I write this dissertation, in fact, I have heard him talk about having



to go to work to clean and repair one machine and being forced to stay late to help someone else problem-solve the machine they are working at.

Julio Rodriguez isn't retiring just yet, but he will be looking to do so soon. It doesn't make sense to either he or I that he is so heavily relied upon, but that the company hasn't done much to ensure that his knowledge is shared with other workers before he leaves the company. This is a problem with a lot of workplaces, especially those that ask employees to go about their days working alone. Julio does not collaborate much while working and the only ways he has learned to share his knowledge is to write operating and trouble-shooting guides of his own to share with trainees. When these trainees have to work on their own, they use the guides Julio gave them, and often return to him to thank him for the reference materials.

### *Chapter Overview*

Many industrial manuals are developed by management and engineers, created to ensure optimal production rates. At Post Cereals in Battle Creek, several iterations of operating instructions have been used in the 36 years my father has worked there, with the most recent version being the JSMs—Job Skill Management manuals. This dissertation chapter describes what these JSMs are by outlining the process by which the manuals developed and changed over a span of four years. In this chapter I also present how machine operators became involved in writing these official company documents.

### **JSM Basics**

The JSMs are reference and training manuals developed by the Post Cereals factory in Battle Creek for all of the process systems (which excludes such plant work sites as packaging and delivery). They were developed by a business engineer named Michael, who has history of

working in factory environments. Overall, the JSM development project took a span of four years and involved many different writers. Michael began his work on the JSMs as the only person directly involved with the development of these manuals, seeking out information from individuals around the plant and organizing that information into working reference documents. He ended his work on the project managing multiple writers for approximately 60 different manuals.

Currently, the JSMs are housed on the Battle Creek Post factory's company intranet. This intranet is accessible at any office computer in the company, whether in the "white house" office building or in small offices located in the processing buildings. Michael showed me what Post's employee site looks like, though because this information is proprietary, I do not actually possess copies of the information, nor can I share it in this dissertation. However, in general, the front page of the "site" has several links to different kinds of documents and information; one such link takes workers to all of the JSM digital documents. From here, a series of links allows workers to find the specific JSM needed.

Because JSMs are housed in the intranet system, and anyone granted access can update the documents from any linked computer in the plant (though who has access is an issue still being sorted out at Post). Michael emphasized the importance of dating all changes to the JSMs so that people who seek out the guides can use the most recent versions. When workers seek out a JSM, the ultimate goal is to print that document so that it can be used as a resource while on the factory floor because, as I will describe later, most of the factory floor workers do not have access to the intranet system at their machines. However, there is a slight problem with printing in that the JSMs contain color-coded sections and full-color, highly-detailed images that

help to explain the processes being outlined and described, but there are not very many high quality color printers at Post.

The system in place for storing, organizing, updating, and using the JSMs developed over time, just as the JSMs themselves did. Michael and the rest of Post's management were primarily concerned with sustainability, standardization, and creating documents that would actually be used by workers. The Post corporation, and its parent companies (which was Kraft when the JSM project was first proposed), have little experience with the creation of such extensive manuals, which means there were very few effective models available. Given the new territory of the JSMs, the manuals grew organically, influenced by requirements put in place, grants that were awarded, and the resources available to the writers. Detailing this extensive process reveals the obvious and the subtle influences that work upon factory writing practices.

### **Previous Operating Procedure Guides**

Before the JSMs, or manual's predecessor—Detailed Process Sheets (DPSs)—Post's management utilized, and still utilizes, Standard Operating Procedures (SOPs). The design of the SOPs makes it so that a single sheet of paper can be printed and displayed on the floor. And while they can be useful to walk through a system's processes and provide "refresher" information for operators returning to a system after being gone for a while, they are limited. According to Michael, sometimes SOP placards can be hung up on the factory floor for several years. Because of the amount of time the SOPs stay put up, on the bottom of each page is written the disclaimer: this is not a controlled document. A controlled document provides the official, most recent, details regarding a procedure or processes. The amount of time between

SOP update and use makes them fairly unreliable and means there is a lack of consistency in operation, despite their helpfulness.

In order to standardize operating procedures, Post began developing and using the DPSs. However, these Detail Process Sheets ended up being highly problematic for several key reasons. First, the DPSs were overly detailed, or as Michael said, “too mechanical.” He explained:

I wrote a DPS with an operator seven days a week and it took me seven months to do it, and I worked every day. That’s Monday through Sunday... the document ended up being 1100 pages and it was from start to finish of making cereal. And they did refer to it a lot in engineering, a lot in R&D, but they really didn’t use it much in the process of actually making [cereal] because it was so mechanical, so wordy and everything, that it was like going to the library and trying to find the information

When Michael says “mechanical,” he means that the listing of details is like how one might program a machine to work, step-by-step. Fullamena’s description of the DPSs as overly detailed and simplistic shows that they were actually insulting the workers rather than helping them. Fullamena explained it as follows:

Walk into the fourth floor office, located on the fourth floor, 32 building, east side...you know? Open door. Walk into office and sit down on computer. I mean, they would actually tell that to pick up your right index finger if you are right handed and touch the key F9 to turn the screen on. You know, it would actually tell you to go out to the hall on the left side of the north wall and pick up a

broom off the rack and to start sweeping the hall from there. Yeah, it's like, ok, whatever.

The DPSs were created to provide a specific and highly detailed document that could explain every aspect of work that needed to be done, but the details ended up being far too extensive to be useful on the floor. If Michael's concern was the length and mechanical-like language, then Fullamena's concern is that the DPSs were dumbed down. The skills-focused language of the DPSs has been a frequent subject of workplace literacy studies, especially in regards to blue-collar work (Darrah; Mabrito; Folinsbee; Belfiore; Hart-Landsberg and Reder; Winsor; Ziv; Gee, Hull, and Lankshear). Fullamena and Michael's comments regarding the DPS simplicity echoes Darrah's research, which shows that a skills focus is ineffective for worker learning and productivity because it often breaks down actual work into a series of work processes, or skills, that are articulated on paper without taking the time to study how the work is really done. Darrah argues that "the exclusion of actual workplaces from analyses of skills has important consequences for understanding work. It explains outcomes in the workplace by analyzing the skills workers do or do not possess, thereby excluding from analysis how the workplace structures the learning and action that occurs there" (252). Darrah then argues that "we must abandon the tidy world of skill requirements and plunge into the exigencies of daily life in an actual workplace" (253). The DPSs told the employees exactly what to do, no more. However, these procedural documents never ended up serving their purpose because the workers didn't find them useful—they were too detailed—"if you're in the real world shop floor, you don't want to have to read three or four pages just to activate a switch" (Michael), and they were also overly simplistic and thus insulting. Probably in part due to the DPS let

down, the Post management went to Michael to develop the JSMs as a more effective alternative.

Michael believes that part of the problem with the DPSs is due to the fact that this type of process was developed by the auto industry, or at least that's where Post learned about the DPS type of process description system. However, Michael believes that one industry isn't just like another industry and that each specific plant has unique needs. At Post, there was a need to have a more complete system awareness because Post has condensed and eliminated many jobs over the past several years. Supervisors and managers are now in charge of large systems within the plant and many employees, which requires they rely upon the machine operators a great deal to run their systems effectively. So if the DPSs only ask a machine operator to take a pail weight and record that information in the system, the operator does just that and nothing else. There was the need, though, for machine operators to communicate such information down the line because the systems aren't separate. Understanding what information needs to be communicated, though, requires a greater understanding of the system and how a particular process and its operator fit into it.

The JSMs were developed as an alternative to the ineffective DPSs and the need Post had for an operations manual that encourages greater awareness of the overall process. This was four years ago. Now, Michael is seeing that there is a small but positive culture change occurring at Post, and employees who have only been working for a few years are talking with long time, employees of twenty and thirty years, about such things as damper controls and moisture levels. But the transition from the DPS approach to the JSMs was not quick and easy and seamless.

## **Michael's JSM Development Process**

By the end of the four year span of time spent developing the JSMs, they were fairly standardized in template and content, with designated trainers composing sections based on their own expertise and needs they have seen regarding their trainees. It grew organically into this kind of project, showing interesting potential for similar projects in other industrial settings. Michael headed the project from the beginning, having been approached by management to take on the job of HR Training Development Manager. Kraft, which used to own Post Cereals, had several of its approximately 70 food plants starting to develop “this culture of JSM,” one of which was in Chicago. Using the Chicago plant’s materials as a starting point, Michael started calibrating the information and structure to be useful for the Post plant. The most important considerations they determined for the JSMs were standardization, sustainability, conceptualized explanations regarding operations, and quality in composing.

Michael mostly worked alone on the JSM project, talking to machine operators and engineers to gather most of his information. However, such projects take a lot of time and energy, especially for someone who doesn’t have operation experience. According to Michael, it took about six months to completely develop a JSM manual for a single process, working every day. Eventually engineering interns were recruited to do some of the writing, but since these are temporary hires and not all were effective at composing the documents, the progress remained slow. What Michael found out through working on the JSMs—and what the company didn’t anticipate ahead of time—was that not only did time need to be spent creating the initial drafts for the JSMs, but that major revisions would need to be made to those drafts. Despite the extensive amount of time Michael took, he saw dedication from the management to

continue with his work and to stay on the project. The Plant Manager, who later became the Vice President, saw value in the JSMs at other Kraft factories and wanted to make sure they didn't end up like the DPSs. He, too, wanted them to be of high, sustainable quality.

Certainly, though, six months to develop a fairly usable draft for just one process wasn't very efficient. Therefore, management gave Michael a list of the important processes that needed JSMs. They eliminated the packing room, any material handling processes, and others that weren't involved in the more profitable end of the business—the making of the cereal. Unfortunately, this meant that the boxing up of the cereal, the system Julio is most expert in, was at the bottom of the list because it doesn't influence profit levels as much as the early systems do.

During the JSM development project, there was a Kraft merger, and the making of the Post cereal Trail Mix Crunch was moved from a plant in Canada to Battle Creek. This move ended up being incredibly important for the JSMs because it meant that the Battle Creek Post plant now qualified for grant monies designated for companies that bring jobs into the U.S. One of the primary stipulations for the grant was that the local community college would manage the grant money and that the money had to be used to hire a contracted technical writing firm. The firm chosen was called the Bishop Group. Michael saw this requirement as an opportunity for outside readers to come into the plant, look through what Michael and those who worked with him had already developed, and as Michael said, "fine tune our process." In addition, these outside readers were able to identify where there might be gaps in information or where there was too much information and then work with Michael to determine the best balance of content and brevity. Michael commented that "for every hundred pages, they could probably



do it in about 80.” The Bishop Group technical writers didn’t just revise existing documents, they worked toward Michael and Post’s major concerns about building a sustainable JSM system that could be continuously updated and easily accessed, and developed a hyperlinked computer-based manual. A digitally-based manual was not only effective for long term sustainability for the JSM, it also allowed individuals in need of what was already developed to access the JSMs throughout the four years during which content was being developed and revised; anyone who needed to print or review the JSMs at any stage of completion simply went to one of the non-machine computer terminals (generally located in small offices in each production building and in numerous locations in the main office building) to print out the most recent version, and when revisions were made they could be done so and uploaded directly into the JSM system. This allowed for the most recent version to always be available to employees.

Working with the Bishop Group also led to the use of photos in the JSMs. If the text was discussing air flow, then images with graphics depicting how a specific component of a machine moved the air would help to communicate what was actually happening. Michael stated that this was when “the light came on with me, and I thought this is my audience [meaning the workers] and this is what will drive [the JSMs]...this is where I grew as an individual.” When the photos started showing up in the documents, it was clear to Michael that his desire for the workers to understand their machines, not just what they do but why and how, could be aided greatly by these images. According to Fullamena, Michael’s interpretation of the usefulness of images was spot on; she said:

Even though I worked the job for 17 years, I still didn't really know exactly how the air thing blowed in and came out and recirculated until I actually saw that picture (which was a 3-D picture) and read the article [a mechanical engineer gave me]. So it actually showed you in detail how that 'consumer sharing' worked. The average guy off the street wouldn't care, probably, but if you're working on that piece of equipment every day, it's nice to know that.

Fullamena was quite opposed to the previous DPSs because the information it provided was task-based only and didn't help her learn anything except which buttons to push and when, but she read the JSMs as valuing, or at least allowing her to value, her desire to learn about the machine she worked at for so long.

The downfall of having to rely so heavily on an outside consulting and technical writing firm was that the writers were, as Michael explains it, "more 'English' driven," which for Michael means they weren't really able to understand the specific needs of the company and weren't able to distinguish what information was necessary to include. Michael calls this being "novelists" because they wanted to write the "story" of the process, in a way, and would write down everything that was told to them by the workers. When Michael noticed this, he thought it was a negative aspect, because he "wanted more manufacturing expertise." During our conversation, though, he explained that what he originally perceived as a drawback to efficiency of writing was actually a good thing, for he added:

But if you think about it, it educated me. Let's say that I did get somebody that was in the food business—like well, you gave me someone that's been in the pie business forever, and we're into cereal and it's totally different. What if they ran

with information that we gave them, that they were talking about? So the more we thought about this, we realized that we do need a designated trainer to help drive this process because they truly know what we need to disseminate out to the people.

Recognizing the need for audience—machine operator—input during the composing process led to what I think is the most interesting aspect of this JSM project: the inclusion of machine operators to write portions of highly important official company documents. Michael saw that he and the technical writers were going to the operators for information and then struggling to put down into a cohesive and clear process what needs to be done, “roughing through it” as Michael described this aspect of the writing. Meanwhile, the operators were able to easily walk a person through the process.

### **Designated Trainers are Brought In**

Michael relied upon one worker in particular during the initial stages of integrating designated trainers—the experienced machine operators involved in training new employees—while they were developing the JSMs and its subsequent safety procedures and protocols for a gun puffing machine. There had been an explosion with this machine in recent years, so it was incredibly important that all the information be accurate and detailed. It took several of the outsourced writers approximately 90 days, working seven days a week up to 12 hours a day, to complete a draft of a single process. At some point, though, Michael started talking with one specific operator, who Michael describes as “probably the best writer at the plant site” and someone who “knows what he’s doing.” This particular operator, and a partner, helped Michael

fill in the gaps of information in the JSM, convincing Michael that collaborative partnerships between the JSM technical writers and the machine operators was an effective practice.

When Julio and Fullamena were recruited to be the designated trainers helping to write the JSMs, it had gotten to the point that it was “a general type of document, and then you get somebody to put in specialized stuff for it” (Julio Rodriguez). A general template had been created to help guide the trainers with the information they should include. This template that was developed and the general guide for how to work with the designated trainers took an incredibly long time, and Michael was being rushed by some of the managers. Michael explained, though, that “they don’t realize what a gold mine it is once you’ve got down the whole standardization and templates.” He demonstrated this “gold mine” as follows:

We have a bran process [JSM] that we just did earlier this year. A sister plant at Ralston had one very similar, so the guy had the right idea, but he’s not integrating it with shop floor and designated training. So he wrote it himself; I sent him what we did and ours had more in-depth detail and everything. He was close and he told me that it took him six months to do that. It took me two weeks to do the one that’s now better than his.

Once the JSM composing process was figured out and established, it worked well, and Michael credits that smoothness with the standardization of the JSMs and establishing a sustainable document.

### **Standardization and Sustainability**

Michael told me that the ultimate goal of the JSMs is “that your optimization of productivity would truly be more on the capital side.” The way he saw the JSMs was that the

machine operators would be able to read through the process and might be able to figure out ways to make small adjustments that could save a few thousand dollars a shift. Michael wants the JSMs to help build a culture in the plant that encourages problem-solving and the search for improvements that can be made to productivity. Just figuring out how to run five percent better in an already effectively running line, he explained, could save \$20,000 a shift. When multiplied by three shifts, seven days a week, that adds up to \$420,000 a week. And that's from one operator understanding exactly how a particular machine works at the mechanical level. However, if the JSM isn't written and structured well or isn't completely up to date, such capital improvements aren't as likely, Michael indicated. Thus, standardization and sustainability weren't important just for the short term, the development and implementation of the JSMs, they remain important to the long-term shifts in responsibility and understanding that Michael seeks.

Standardization for the JSMs primarily means, for Michael, that each section has the same format and general content. He explained that because of the differences between systems, one JSM section could be 70 pages but that another could be 130 pages. Therefore, navigation of the texts had to be standardized so that workers could find the information they need in the same kind of section in any JSM across the plant. And this consistent content had to be easily navigated so that information could be found quickly. Michael had to make sure that throughout the entirety of the JSM, from every building, that there were no problems with such information as section names, that they were used throughout when referring a reader to another area of the manual, as opposed to page numbers, which could become inaccurate after a single document change. This kind of consistency revision would take a lot of work, but it was

important for a digital document. Michael didn't want to go back through and change every page number in the manual if new content was added or if a section was moved from one page to another. Another issue Michael mentioned in reference to standardization is that, at Post, workers are often moved from one job to another, generally with training only occurring the first time they work in a new area of the plant. If workers need a refresher review of the JSM for a building or machine but can't find the information needed, Michael says that it sends the wrong message. The whole point of the JSMs is to be effective operation training and reference manuals—being effective means being consistent.

The issue of sustainability is perhaps an even greater concern to Michael than standardization. Though standardization was important during the development of the JSMs, it won't matter after a few years if the manuals are not easy to manage and update. This issue was still being sorted out when I did the research for this dissertation; decisions had yet to be made regarding how the JSM materials would continue to be revised as more specific information needs to be added or as processes change. Michael believes that what is needed is a "keeper of the website information, otherwise this is going to grind to a screeching halt. You have all this information but people don't know how to access it, it's not user friendly, and all that sort of thing."

Michael did consider whether designated trainers could continue to add to and revise the JSMs as needed at their machines. Every machine on the shop floor uses a PLC operating system. Michael realized that these systems are incredibly sensitive to viruses, in that if they sense a virus, they have "ways of trapping it down" and eliminating the threat. The concern, then, is that these highly attuned computer systems would register the JSM documents as a

virus because the systems are not supposed to be uploaded with additional documents or programs. Michael explained that if the system continues to sense a virus then it shuts its process down, it then costs thousands of dollars to start it back up. No one at Post wants to see at the end of a week the process shut down three times because the JSMs caused virus alerts.

At the moment, the JSMs are housed on desktops in the offices located in each production building. The problem, though, which Julio explains in more depth in the next chapter, is that once the machine operators are not specifically given the time to work on the JSMs, they do not have any time to go into an office, access the system, open the appropriate JSM, make a change they noticed was necessary, and update the intranet-accessible version of that JSM. If the goal is to always have a recently updated JSM available for anyone in the plant to print on demand, then someone has to be responsible for those updates.

### **JSMs Represent an Attempt at Changing Post's Shop Floor Culture**

Research has shown that written documents play an important role in developing and maintaining practices and values, essentially reinforcing the views of people who have hierarchical power and helping to enforce or change the culture of an organization. In Hunter's study of an urban Toronto hotel, she explains that as textual practices change and new tasks are implemented, the texts themselves start to influence worker behaviors and workplace discourses. Hunter observes that, in addition to the dominant company discourse, each work-position can have its own local culture and discourse, demonstrated through particularities of appearance and "distinct style of interacting" and in the various and multiple literacy practices engaged in to complete the work of the position. Literacy practices in The Urban Hotel overall serve two functions, and ways and meanings of texts vary given these functions (149). Hunter

explains that the first function of text in the hotel is a means for “the hotel managers to officially manage employees, to bring them into line with hotel culture” (149). The second function of texts is as “work documents [that] enabled employees to keep track of work and communicate” to other workers in the hotel (149). Thus, as workplaces change and the literacy practices demanded of employees change, what is being communicated to workers extends beyond the explicit information being written or read in texts. These changes in workplace dynamics and functions provide space for exciting research to occur that can explicitly see the impact that texts can have.

In manufacturing-oriented workplaces, the new workplace is seen as one in which “workers, staff, supervisors and managers experience the move from a traditional manufacturing operation based in oral communication into the first stages of print-driven” communication (Belfiore 22). Diverse, and for many workers, new literacy abilities are required. Mabrito’s study of line supervisors emphasizes the argument that the new workplace asks workers at all levels for more writing production, showing that these line supervisors write just as much as degreed professionals, demonstrating the need and importance of studying the writing practices of similar workers in other locations.

The decision to develop the JSMs is part of a changing industrial culture looking to place greater expectations and accountability upon hourly laborers. There is a continuous elimination of specific and specialized jobs, with the tasks of those jobs being integrated into other positions. When Michael worked as a shop floor manager, he developed an approach of thought that new employees shouldn’t be “touching stuff” or “making critical adjustments.” However, at Post now, there are “people are coming off of the street and they’re going straight



into these critical, multi-task, critical thinking jobs.” The materials these workers use needed to change to reflect the kind of work they are being expected to do, particularly so that the workers also know what they are *not* supposed to do.

Some of the difficulty of holding workers accountable is knowing who is expected to do what. The floor supervisors manage a lot of workers, and holding people accountable means knowing what each of these workers are supposed to be doing throughout their entire shift. The JSMs are a way to accomplish such a task. Michael explained, “if you have the whole kitchen sink in there, and now you go and little Suzy is not running the process right, and you have that JSM bible there, well now you can hold Suzy accountable.” However, Michael added that “the interesting part, and this is just being brutally honest, is that I am finding that the shop floor management are just as much not wanting accountability because now they have to address all that.” Michael is finding that holding operators and other floor employees responsible for their activities means holding their managers responsible as well.

Of course, Post’s primary goal is to make profit, as with any company. The Battle Creek plant has been facing issues of ownership, not being owned by Kraft or Ralston’s anymore. Therefore, part of the JSM rationale is putting more responsibility in the hands of the workers. For example, Michael explained to me that food density is a major concern at Post, with too-dense food leading to customer dissatisfaction for underfilled boxes and too-light food leading to underweight boxes of cereal, which is an FDA violation. The JSM provides hints and troubleshooting guides regarding “how to manage to that discrepancy, that variation. And now these folks can make the appropriate adjustments. In addition, they’re also communicating, like, ‘hey, I’ve got a glutton of food, it’s gonna get to you in about an hour and a half, but don’t over

compensate because I've fixed it. So, if you can make minimal adjustments....” The JSM presents situations and options for the workers so they can understand what needs to be communicated when there is a food discrepancy and to whom.

### **Workplace Hierarchy and Union Concerns**

No matter what kind of document is developed or who writes it, workplace hierarchy is always a force at play. The conflicts between the management and the union have strongly influenced the JSM project's process. Regarding the JSMs, there are two primary conflicts between the union and the management at Post. These conflicts not only influenced the JSM writing process, they interfered with the completion of the project.

After four years of work on the JSM project, with only a few processes left to be written, the union decided to shut down all work in November, 2011. I was personally confused by this sudden stop, especially because this was the decision that changed my approach to this dissertation project. It didn't make sense to me that the union would wait until the project was almost finished to shut it down. Michael explained that those of us not within a union-based factory environment need to “remember that we are organized labor, so the organized labor piece plays a factor in this because there are certain rules that need to happen,” one of which is the procedures that need to be followed regarding seniority and who is allowed to fill particular roles, like the role of designated trainer or JSM writer. Seniority is a very important and key component of how Post functions, and the union ensures that those who deserve high-level jobs within the plant get them. However, when it comes to being designated trainers, not everyone wants the responsibility of that position, nor are they necessarily qualified to teach and train. And when it comes to the JSMs, those who have seniority are not always the most

qualified to write about their work processes. So Michael recruited workers based, in part, on who volunteered for the work and who seemed to be solid writers, ensuring that “stringent requirements” (Michael) were met.

Wanting the most qualified individuals participating in the JSM project makes sense—Michael had spent four years working hard to develop an effective manual. However, the union ended up disliking the designated trainer/JSM selection process because the management was “not selecting the senior designated trainers; they were going to whomever they wanted” (Julio). Despite the fact that many employees do not like the current designated trainer selection system, the established protocol still needs to be followed. Julio Rodriguez states:

The company, knowing that it’s a union shop, union company, should have followed protocol and not caused this issue to come up. If they had just followed protocol—I’m not saying kiss the union’s butt, I’m just saying follow protocol, just follow it all the way through, and you could get what you wanted. It would have been okay. We all know that. As soon as you skip the one person who gets insulted, who puts in a complaint, and then he starts talking to other people and they say, “you know, you’re right, they didn’t ask me, dammit. I know better than so and so.” Whether they know it or not don’t matter. It’s a union shop, that’s how it works.

The JSM project was shut down because protocols of seniority were violated. Though Julio doesn’t agree with the union about shutting down the project, he clearly agrees that management shouldn’t have violated those protocols.

There was a second concern regarding the development of the JSMs: the union believes that the JSMs are dangerous for job security. Fullamena described the union's concerns: "They just figure it would be easier for the company to lay us all off and get outside help." It seems to be a fairly common belief around the planet that if the JSMs are highly detailed and fully explain operating processes, the company can fire the experienced operators who are higher paid and then hire lower paid workers to do their jobs. This assumption on the union's part, though, indicates they believe that anyone newly hired 'off the street' can operate one of the machines at the same level as someone who has been working on that machine for decades. The union doesn't seem to recognize that it actually requires a great deal of knowledge to operate one of the plant's major machines effectively every day. Julio explains what it takes to become a high-level machine operator: "Eventually, you have to learn and you only learn that by being taught by another person or personal experience with that machine." Fullamena concurs, adding, "you're still going to have to have somebody there to train them. Because there's little things that words or pictures are not going to teach them." I address these issues of experience and expertise, in detail, in the next two chapters.

Here, it is important to state that because of their beliefs about the level of expertise required to operate machinery at Post, the union put pressure on designated trainers writing for the JSMs to limit what they wrote. Julio explained that many of the JSM writers had "pressure from the union telling you, 'don't put too much in there.'" In addition, there was pressure from the company to write a complete and detailed document, one that would be more useful than the existing guidebooks. "It was something they had to write a fine line with," Julio said; "And the people who write them, I commend them because they tried their best to

write a document that people could learn from, but yet not include everything that people needed to know.”

Fullamena, as a designated trainer who had to negotiate the union’s concerns for including too much information in the JSMs, explained:

If [new trainees] still don’t have the experience of doing it day in, day out, without all the little things that can go wrong...because no matter how much I write, I’m never going to be able to write down everything. You’re going to need somebody there to help train them or they’re going to have to learn over time, just like I have. You can’t replace that kind of experience.

These two machine operators, Julio Rodriguez and Fullamena, are certainly concerned about their jobs, but they fully believe that the JSM is only a reference guide, something to help spark an operator’s memory or to double check the specific requirements for a particular machine setting. They know that their work is much more complicated and involved than can ever be written in a manual, or, as I claimed in the Introduction (Chapter 1), they have developed craft knowledge regarding machine operation. Julio used the metaphor of having a math book on hand to help explain why he is not concerned about the JSMs being used to fire him and hire new workers to take his place: “I bought the teacher’s version of a math book when I was in school,” he told me, “and it had all of the answers in the back of the book, but that book still couldn’t teach me how to do algebra. Nowhere can any book actually teach you. It doesn’t make sense to me.”

Julio didn’t have the chance to write for the JSMs specifically, so he did not feel this actual pressure regarding content divulged by designated trainers; rather, when he was on the

other side of the JSMs—as a trainee—he clearly saw the impact the union had on the writers. As an individual looking to train on a new system, and as an experienced machine operator himself, Julio wanted as much information as possible from the designated trainer regarding the machine he was being asked to operate. He found that the JSM he was given “was just general crap I could pick up from a pamphlet,” and that it wasn’t until later that he was given actual useful information. His designated trainer “was afraid” to write in more explicit detail “because the union and all the contradiction and fearing that somebody, anybody, could come and run the machine, run the process. She (Julio’s Trainer) was caught in the middle of things. And that is a stress on writing. Yet, she was writing. She was trying her best.”

Despite their disagreement with the union regarding shutting down the JSM project and the beliefs regarding the level of expertise required to effectively operate the plant, Julio and Fullamena didn’t seem to have any animosity toward the union. Julio Rodriguez, it seems, is particularly concerned with how his union is viewed. He said, “I think that some of your readers might say unions suck. They can be petty if their members are petty. They are a good thing because there’s nobody taken into account by their looks, their personality, by anything. It’s all strictly by seniority level and rights to a certain situation.” The job of the union at Post is to protect workers, in total, and they make any moves necessary to do that. Even when Julio and Fullamena disagree with the decision made about the JSMs and certainly believe that some workers complained to the union because they felt slighted, the union’s presence, over all is a good thing for the company and the workers.

## **Looking Forward**

Up to this point in the dissertation I have provided contextualizing background information about my scholarly footholds, the theoretical lenses through which I read the interview data I collected and the four-year JSM project. In the next two chapters I transition from providing background to presenting the specific writing practices and personal reflections Julio and Fullamena shared with me regarding their procedural operations guide composing experiences.

## CHAPTER 4

### MACHINE OPERATORS COMPOSE RIGHT ON THE FLOOR, RIGHT NEXT TO THE MACHINE

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#### Introduction

##### *I Never Knew My Dad was a Writer*

Text surrounded me while I was growing up, though much of this came in the form of books. My dad always had, and has, books with him, and more than once I swiped from his room novels I probably shouldn't have been reading (my favorites were Stephen King and Dean Koontz, a bit intense for a fifth grader). My mom took us to the library as often as possible while we were kids so we always had new books to read and splurged one year to buy a full set of *World Book Encyclopedias*. Reading became a refuge for me, and both my parents fully supported me.

Like reading, writing was prevalent in my home, but it was being done by my siblings and me. I wrote silly poems as a kid that I shared with my parents, and my brothers wrote goofy micro-stories that they shared to get some laughs (and were always accompanied by pictures, usually of animals pooping on people). And, though my parents, especially my mom, enthusiastically supported our writing, we rarely saw either of them write. What writing did happen was usually done by my mom—notes for teachers, notes left for my dad, holiday and birthday cards, the “to” and “from” names on our Christmas presents, and other small texts. We knew, I should say my younger sister knew, it was her handwriting we had to imitate to forge notes and signatures for school.



In stark contrast, the only memory I have of seeing my dad write, until I was in my teens, was when I was six- or seven-years-old. I wanted to learn Spanish, so he tried to teach me by writing Spanish words and their English translations on a small chalkboard we had hanging on a wall. These lessons didn't last long, unfortunately, because his intense work schedule got in the way. It seemed my dad was always working.

Later, when I was in my early teens, what I saw my dad write were long lists of names and some sketched out plays that he needed for coaching football. Then, when I was a sophomore in high school, he and my mom started taking community college classes together.<sup>4</sup> I knew they took a writing class, and I knew he got pretty good grades, but I never saw him doing his work nor did I ever read it. Then, after finishing two semesters, he stopped taking classes (my mom, on the other hand, continued to get an associate's degree. She is now, a decade later, working on her second associate's, and I have helped her with her research and writing assignments).

I didn't see much of my dad's writing, then, until the spring of 2009 when I was in the second semester of my PhD and taking a Working-Class Cultural Rhetorics course. After several conversations with my dad about the course readings, during which we compared what scholars were claiming about the working class with his own experiences and thoughts (and after a conversation with my professor), my dad and I decided to co-author my end-of-semester seminar paper. I finally saw my dad's writing in full: a series of handwritten notes spanning

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<sup>4</sup> That year my brother started school at the University of Michigan, and at that time students received more financial aid if there were multiple family members in college. So my parents enrolled in our local community college. When the financial aid at U of M no longer offered this perk, my dad stopped taking classes.

multiple topics without clear breaks between thoughts. He apologized profusely for the state of his writing, seeming to feel bad for being a poor writer and hoping he wouldn't bring my class grade down; I, of course, told him (truthfully) he was being silly and that he was going to help me get an A.

What fascinated me about his writing—aside from the great content—was how he wrote the text he gave me. He told me that he wrote most of it while he was at work, jotting down a few notes here and there when an idea came to him and he had a chance to get away from his machine. Rather than what I am doing right now—sitting somewhere comfortable and giving myself an uninterrupted block of time to work—my dad wrote in starts and stops, an idea here and an idea there; it was no wonder his writing came out as a series of disparate thoughts. The processes he used to develop text were completely different than mine, and these processes *had* to be different. Learning about my dad's writing practices began a series of experiences that eventually led to the writing process focus of this dissertation chapter. Through my dissertation research, I have learned that my dad, who worried about ruining my academic work with his writing, has actually been writing at work for many years.

#### *Examining the How of Factory Floor Writing*

When I first imagined what my dissertation would be, I saw myself on the factory floor watching my dad, and perhaps others, walking around their machines, examining how well those machines were working, changing settings and inputting data, occasionally writing notes to themselves regarding their activities. When I learned about the JSM project on my first tour of Post, I was excited to watch designated trainers writing at computers, getting up to walk around the machines they were writing about, collaboratively revising their texts with technical

writers, and negotiating the conflicting desires of the company and the union. However, I didn't get the chance to observe these activities, reasons for which I detail in my methodology chapter (see Chapter 2). I still wanted to learn about writing processes, though. As a writing instructor and scholar, the act of writing in a factory intrigues me. To my delight, the environment of the interviews—outside of the scope of the participants' every day work—allowed for free and casual conversation. In addition, talking outside of the work environment opened up the opportunity for reflection, which has provided the basis of this entire dissertation project.

### *Chapter Overview*

As I presented in Chapter 3, the JSMs were initially written by one person, Michael, a business engineer who has factory floor supervisory experience, but by the end of the JSM project, machine operators were requested to write portions of these official company documents. In this chapter I present the writing experiences of two such designated trainer machine operators as they developed their operation procedural guides. One of the operators, Fullamena, was requested by the JSM project manager, Michael, to write about her rice rolling and drying machine. She was provided with time and an office space with a computer, in addition to being able to work with a technical writer while revising her section of the JSMs. In contrast, the second operator, Julio Rodriguez, had not been requested to write for the JSMs before the project was shut down. However, Julio Rodriguez had been writing procedural guides for many years to give to his trainees; because he was not writing officially for the JSMs, he was not provided with the same time and resources, and so the process he describes is quite different from hers. In this chapter I will present the two operators' different writing processes,

explaining how they differed not due to the individuals' writing preferences or activities, but rather due to their differing composing situations.

### **Fullamena Writes for the JSM Manual**

#### *A Description of Fullamena's Writing Process*

Fullamena was approached by Michael to write a portion of the JSMs that focused on the rice rolling and drying machine, for which she is the designated trainer. Probably because the JSMs are training and reference manuals, Fullamena reflected on her own training experiences to contextualize her writing efforts. I wasn't very surprised when she shared with me that she was trained to just hit particular buttons in a particular order, stating that her trainers told her: "you hit A, and then you go over here and you hit B." When she questioned the reasoning behind these button pushes, she claims that she was told, "because that's the way it runs best." The men who trained her did not bother to explain the way the system works, to help her see her work as more than knowing the right button to hit at the right time.

Fullamena, however, wanted to do more in the JSMs than just explain which buttons to push. Because her own training experiences did not provide her with the kind of knowledge she wanted, she felt motivated to do right by the new workers coming in:

I wanted to explain how [the air flow of the dryer] worked because—because being a girl coming fresh off the street—I mean, back in [my youth] you didn't know mechanical stuff. So it was fascinating to me. I wanted to know more about that because I was thinking: in today's age you've got girls who are into that. And I wanted to make sure if there was somebody who was into it, they wouldn't think I was just being too blasé with what I was writing. And then if

there was somebody like me who didn't know anything, that they could actually learn.

Though Fullamena was simply asked to detail her operating procedures in writing, the task brought up a number of other concerns than just the writing. Fullamena's audience considerations were the primary forces that drove her writing. She not only wanted to provide sufficient information for future workers (particularly future female workers<sup>5</sup>), she also wanted those future workers to think well of her. Even though her name doesn't ever appear in the actual documents, she feels a responsibility to herself and the other workers to develop the best text possible (I go into far more detail regarding such personal reactions in Chapter 5).

Another audience consideration Fullamena made was in relation to the Post employee union. Because the JSM project spanned four years, most people in the plant knew about it. I have previously written about the relationship between the management and the union at Post (see Chapter 3), but to reiterate in relation to Fullamena's writing experience, the union strongly influenced the content she chose to include. Fullamena specifically stated: "It is [hard to decide what to write]. That it is. 'Specially in our case because of it being a union shop. You don't want to put everything into it because, you know, you don't want some stranger off the street coming in doing your job.'" Union officials pressured many of the designated trainers

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<sup>5</sup> Though this dissertation does not currently focus on gendered issues in factory spaces (which is far too large and complex to tackle in a dissertation like this one), Fullamena certainly hits on an interesting gendered identity point. Whether or not she was told as a trainee to just push button A and then button B because she is a woman, or if all workers are trained that way, I don't know and Fullamena didn't say. But what Fullamena did say is that she wants her work to encourage other women to learn about their machines, how they work and why they work that way, and that in a time when it is more acceptable and common for women to be interested in complex machinery, she also wants her work to be seen as mechanically rigorous. She does not want these potential future women to think she didn't care about her work or her machine.

involved in writing the JSMs to limit the information written. These officials, and many other shop floor workers, in fact, consistently fear that the management of Post will take any opportunity to cut costs by firing the more experienced, higher paid workers. Limiting access to operating knowledge is one way these workers try to maintain some control over their own jobs.

Fullamena's worry about the union reflects four interacting issues: first, the union plays a strong role in the ways workers engage with management, especially in the development of official company documents; second, there is a strong belief held by the union and management that workers are easily replaced; third, Fullamena had to consider her own alliances as she made choices regarding the content to include in the JSMs; and fourth, Fullamena had to consider multiple audiences as she developed her portion of the JSMs.

When Fullamena started writing, she was given the choice to write at a computer in the main office building or to write at one of the office computers in the production building where the rice rolling machine is located. Fullamena told me that she chose to write at one of her own building's computers because "if I had a thought it was easy for me to run upstairs and go through my processes and say, 'hey, okay, this is what I do here, so let me write that down,' and then I can jot it down on paper, get downstairs, bring it up on the computer and just type it up." Fullamena needed to be able to refer to the machine easily in order to write out the process of running it. And so, even though she works at that machine every day, much of her knowledge has been internalized and has become automatic, or as Fullamena says: "even though you do it every day, you forget."

While Fullamena had several considerations to make regarding the content she developed, the part of the process that was most difficult for her was the writing. She admits that, “Actually I was intimidated [by the writing] at first. I was a little scared.” However, Fullamena began writing her part of the JSMs after Michael had already been working on them for several years. He had gone through the tasks of developing the structure and content needs of the manuals, relying on the work of many others to help him do so. When Michael approached Fullamena, asking her to create JSM content, he was able to provide her with an outline to follow, an outline that was general and flexible enough to be tailored to the understandings of the designated trainers regarding how to best present information about their work. When Fullamena’s writing didn’t quite match the structure she was provided, she met with a technical writer to collaborate and work through the differences. Fullamena seemed to greatly appreciate this help, for the technical writer she worked with “never made a change without asking.” Rather, they went through the material together, figuring out how the writing could be reworked to better align with the overall structure while also maintaining the accuracy in regards to a particular machine.

Though Fullamena had initially been quite intimidated by the writing, since she hadn’t really considered herself to be much of a writer throughout her entire life (in fact, in the next chapter, she discusses how she doesn’t do any of the household writing at home), she told me that once she started getting a handle on the writing and received help figuring it out she “loved it.” In fact, she said, “I didn’t want to quit.”

### *A Description of Fullamena's Experiences Researching Safety Procedures*

One of Fullamena's primary considerations as she wrote her portion of the JSMs was regarding safety. The rice rolling and drying machine that she works on is quite dangerous. The high temperatures and the drying cereal are a combination that can start fires, which can get so intense as to cause small explosions;<sup>6</sup> therefore, accuracy in the safety procedures she wrote was incredibly important. When Fullamena first trained on the machine, she was told directly what to do without being told why those actions were best—"it runs good that way, just do it" is the standard response Fullamena received to any of her 'why' questions. And though these explanations didn't satisfy her curiosity, she admits that "when you're doing it yourself you don't really think about it day in and day out." However, when she was asked to put into words the operating process and the safety protocol for her machine, she started to feel responsible for what she put down on paper and what she was leaving out; and it was the safety protocol, specifically, that Fullamena was most concerned about. She said, "I don't want to hurt somebody. And I didn't want to put my life on the line. Because that was my handwriting and I didn't want somebody to say, 'I did it because this is the way we got it written down on the JSM.'" When Fullamena was only responsible for operating her machine and was not responsible for understanding all of the functions and protocols, she didn't recognize the gaps in her knowledge about the safety regulations for her machine. But putting her knowledge into

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<sup>6</sup> I have long been aware of the dangers of industrial work sites. From my dad's stories to my own experiences in factories, I know that the machinery in place can cause serious injury. However, I have also been under the impression that if a worker is safe and responsible, injury is almost impossible in the modern workplace. However, my conversations with workers at Post has revealed otherwise. Despite all of the safety regulations and procedures in place, industrial work can still cause severe injury and workers can still die in industrial accidents.



words that would be relied on by others made her feel responsible for the gaps in her expertise and motivated her to seek information to fill these knowledge gaps.

Specifically, Fullamena wanted to know more about the drying machine's "snuffer," since this is the piece of safety equipment that is supposed to be used when there is a fire. According to Fullamena, the snuffer forces "steam into the dryer to snuff out the flames." The major problem Fullamena faced in detailing how to use the snuffer for the safety protocol was explaining when the snuffer should be used and how it specifically works—she has never seen the snuffer in action because if it is used, the steam that puts out the fire also causes condensation that warps and ruins the dryer bed, a \$3 million piece of equipment.

As Fullamena explained, operators are encouraged to put fires out with the fire extinguishers; however, what she didn't know is when the extinguishers are not enough to put out a fire and so the snuffer should be used: "So I wanted to know, okay, do I have the right protocol?" Having the right protocol was essential to Fullamena because, as she continued to explain, "I wanted to make sure I'm not going to hang my butt out there on the line, yeah. I don't want to be the cause of anybody dying, either." Given the danger of her machine, Fullamena wanted to make sure she put down the most accurate safety protocol possible, particularly when and how the snuffer should be used.

Interestingly, while Fullamena was attempting to write about the fire safety protocol, her realization that she didn't actually know the protocol herself was jarring. She dedicated a lot of time to seeking answers. Fullamena explained: "it took quite a while to get this procedure because safety directors themselves said that the company didn't have a very good—I don't know how to say, outline for what their safety procedures should have been." Fullamena

couldn't just check the snuffer herself because of the high cost of a new bed, so she had to talk to supervisors and other personnel to get the proper information. She explains:

It was a big run around for like a month and a half: 'This guy should know the information' [one supervisor said]. I was like, "well, could you get it for me?" "Well, no, he's on vacation." Guy came back [from vacation, so when I talk to him] he says, "well, so and so has the information." And I'm like, "but he said you did." "Well, he should have it, and I think it was checked on this date." But nobody had any documentation of it.

It seems that no one really knew what the proper procedures were, and Fullamena's dedication to finding the most accurate information possible revealed this lack of knowledge.

After the one and a half month search for safety information, Fullamena got to writing down the protocol. It was then that she realized: "nobody knew when my snuffers had been tested last because I wanted to put that in there. Like, how do you know it's working? Because as an operator, you should know." It was the act of writing itself that revealed these needs to Fullamena because she had to think about all the little things a new operator might want to know. Right now, if she were training a new operator on her machine, she would be able to explain some of this information in person; however, when she considered future workers she might never meet, workers who might rely heavily on the JSM portion she wrote, Fullamena felt a greater responsibility to finding the answers to all of her previously dismissed 'why' questions.

Finally, regarding her search for accurate safety information, Fullamena was proud of her dedication to finding answers. Because of her questions, everyone whose work pertains to the safety of the dryer machine now know there are uncertainties regarding the protocols. As

Fullamena told me, “I found flaws in their system. So hopefully they learn that they need to change on their stuff, too, a set of specific protocols.” Her concern revealed an important safety issue, and her concern might lead to increased safety regarding a very dangerous machine.

### **Julio Rodriguez Writes for His Trainees**

Fullamena’s writing experience, outlined above, was brief and quite specifically focused in comparison to my dad’s experiences writing guides for trainees. He has spent years handwriting tips and shortcuts, processes and problem-solving guides, without the kind of assistance Fullamena received, such as working with a technical writer, having time to work on a computer during the regular work day, or having an outline to help structure the content. He started writing his help guides before the JSM project was even underway. Therefore, the writing process he described to me is complex and occurs in starts and stops, woven into the brief moments when he is able to move away from his machine.

### *Learning Operation Procedures through Immersion*

Years ago my dad was charged with working on a new packaging machine. An engineer from the machine manufacturing company spent time at Post installing the machine system that pours cereal into bags and puts those bags of cereal into the appropriate boxes. This engineer spent time at Post installing the machine, making it run, and ensuring that it was effectively doing the work it needed to do: package cereal. Julio explained that no one wanted to work that machine because they were scared of it since it was brand new. Apparently, the engineer, even, was having some trouble making it run, and this was the man Julio was supposed to learn from. He explained to me that “I basically told him, ‘hey, I’m here. I’m going to follow you wherever you go. You don’t like it, tough.’ So that’s how I learned—I immersed

myself in it by asking continuous questions.” He added that “personally, I just said ‘heck with it, I’m immersing myself in it.’ And that’s how I prepared myself to be able to teach others how to run this particular machine, which is the machine that is most difficult to run in the whole plant because of the size changes.” The immersion was an important part of my dad’s process in learning how to run the machine. Apparently, there are 36 different size changes that can be made on the packaging machine, for both American and metric measurement systems. So, it is an incredibly complex machine that is difficult to run and especially difficult to master.

By the point my dad started working on the specific machine he is describing here, he had already been working packaging machines for 25 years, and this experience helped him to pick up the complexities of the machine rather quickly. But this experience was only a small part of his overall learning process. He explicitly credits his “immersion” in the machine with his ability to understand its operations:

I immersed myself in a machine, and it was a new packaging machine, so I immersed myself in it, and I figured, “this is where everybody is going to have trouble” because I was having trouble in those areas. Now you figure 25 years to eight weeks experience and I’m having trouble in these areas, I know they’re going to. So I immersed myself in those areas where I found I that I was having difficulties. I decided to start there as far as writing what I was doing, what I was going to use to teach people.

The first stage of his writing, at least when it came to writing guides for other workers to use, was to try to understand his machine as much as possible. He laughed during the interview about how much he bothered the engineer with his constant questions and demands for

explanations about the what's and how's of the machine's operating processes. But it was this demand for information that helped him to understand the machine to the point that he does today, the point at which he is considered to be the best operator on that machine. That he can change over the machine in preparation for a different packaging size in one hour whereas the other operators take an entire day to make the same changes clearly shows his mastery.

From the beginning of working on the new packaging machine, over ten years ago, my dad has dedicated himself to learning as much as possible and trying to communicate that knowledge to those he trains. It seemed that when the JSM development was underway, he would be provided with resources to help him do what he is already doing; but even more so, it would give him the chance to put what he knows into a living, sustainable document that he could give to trainees and that they could take with them. However,

Our department had been listed last, and I believe it's because we were—or we still are—the least profitable. We make money, but not as much as other departments, so our product isn't selling as much as the other departments, so we were listed last on the JSM list. But there were people coming in to train and we had no JSM. I took it on myself to write these things for [trainees].

Having immersed himself in the machine and understanding the difficulties of managing all the size changes and operations, Julio knew his trainees needed a guide they could use until he was officially able to write for the JSMs.

New trainees on any machine undergo an eight-week training session, and then they are expected to be able to do everything necessary to keep that machine running efficiently. However, the complexity of the packaging machine and the extent to which Julio Rodriguez had

to immerse himself in learning it means he understands why new workers can't simply operate that machine on their own with only eight weeks of training. And so, despite the promise of an upcoming JSM section dedicated to the packaging machine and its changeover procedures, Julio Rodriguez continued to make sure all new trainees had "something they could refer back to." If the company charges him with training these people, he feels it is his responsibility to provide the best training possible. His recognition for the need for such reference guides has fueled his desire to write.

### *Considering the Needs of Trainees*

After learning how to operate the new packaging machine and after learning that all new trainees need a reference guide to take with them once their eight-week training period is over, Julio had to start figuring out what to write in these guides. There is so much that goes on with the operation of the complex machinery that he could be constantly writing. In contrast, too, he had started to learn the operations of the machine so well that it was difficult for him to determine where he should focus his attention. Thus, he sought a way to figure out what to write. He explained:

I know what they needed to focus on, but their questions added more to what I thought was needed. I had to go back and rewrite some of the things that I took for granted that they would know, a different explanation so it became simple. I had to put things in a simpler way so people would know what I was talking about.

In considering the content he should focus on, it was essential for Julio Rodriguez to not only think about where he struggled when he was first learning, or remembering what his original

questions were, he really needed to get feedback from trainees themselves in order to make his composing decisions.

Julio explained that he learned from trainees regarding what to write and how he explained procedures; he stated: “when I started training people on it, some of their questions led me to write things down, so the next person, I would be prepared to write down things I took for granted.” He continued by telling me: “I learned from my first couple of people what they wanted. And that’s where I started my writing.” The first few people he trained after he started working on his reference guides helped him to develop some initial content, and each trainee after helped him fine-tune his guides. This continuous feedback led him to better explain the machine’s operations. Clarity and detail in describing the operations was most important when he was expected to train brand new employees who didn’t have factory experience, because he then had to not only identify proper operations, he found it was important to describe the machine, what it was, how it worked.

#### *Developing Unofficial Procedure and Trouble-Shooting Guides*

Both Fullamena and Julio Rodriguez have worked many different jobs and operate many different machines, but each of them has a machine they operate that they consider their “baby.” These are the machines they know best, where they have spent the most time and feel the most comfortable and confident. For Julio, that machine is the highly complex packaging machine I’ve been describing. He has developed a bond with the machine over a number of years and through a lengthy and intense learning period.

When pre-JSM operating procedures for the packaging machine were being written, an engineer showed up at Julio’s machine to take pictures of the settings and write down a rough

set of steps to follow. Julio's job was then to "change sizes completely. So we have his pictures, and I'd use his pictures to write down simplified explanations on how to move things." Julio Rodriguez's first procedure guide work, then, was to check the engineer's photos and explanations, then to clarify and simplify those explanations. At the same time he kept notes for himself, which he later developed into trouble-shooting guides for trainees. He then developed these short trouble-shooting guides into longer operating procedures that he has added to and revised over the years. His initial writing work provided him with a base text from which he can disseminate specifically tailored information to others operating the same machine.

When Michael integrated designated trainers into the composing process of JSM development, Julio was set to write out two sections: the basic changeovers process and an official trouble-shooting guide. Julio explains, about the basic changeovers:

My part was to take the machine and go step by step. For this size, this piece of equipment has to be changed to this on the increment rulers. You turned this knob or this wheel or this bolt to make that fit. To make it work so you can get it to that. On this certain machine, everything was numbered. It went from 1 to 36. My job was to write down the correct numbers for every size, so that other people could go back and do that.

The complexity of the packaging system is clear even in this brief explanation. There are rulers, knobs, wheels, bolts—all of which need to be adjusted when the size of the cereal boxes and bags change. Given the 36 different possible settings, having a trouble-shooting guide seems



essential, and this is one of the few machines that was determined to need an operating guide and a trouble-shooting guide in the JSMs.

The operations and trouble-shooting JSM sections were never officially integrated into the full JSM manual, but Julio has continued to develop them for himself and his trainees. Because Julio wasn't officially allowed to write for the JSMs he was not provided with the specific composing time and resources that Fullamena was, and so his writing process differs greatly from hers. Fullamena had an office, a computer, and time to write whereas Julio describes a very different experience: "I didn't have time [to write at a computer] because I had to be around the machine, so I would have to ask for special time to go on the computer. That would have meant time away from my machine, which I didn't have. That they couldn't give me." Without established writing time and space, Julio had to work his writing into his work operating his machine.

Julio Rodriguez explained to me that he keeps a manila envelope at his operating station, and that this envelope is thick with notes he jots down when he has a chance. When he has a chance to write, he grabs his lined, spiral-bound notebook and pen and writes "right on the floor, right next to the machine." This practice of writing at and around the machine is essential to how he composes. He explains:

In case I had—'what am I trying to think of...?'—I would go to the machine, stare at it, 'oh, this is what it is.' I was no further than maybe 30 or 40 feet away from the machine at all times, when I was writing things. And sometimes I was right on the machine when I was writing.

During a standard work day, when Julio is regularly monitoring and working at his machine, he doesn't have time to write large chunks of text in his notebook. Instead, he integrates his writing into his required work activities:

I would have a blank writing notebook, lined, open at my station where I had to go every so often to do weight checks. I would write down notes to myself as to what I had done during the past 15 minutes, 20 minutes, or an hour to fix something that came up, to correct a problem. I would sit there and write notes to myself on this paper.

When the line was running smoothly and no size changes needed to be made, Julio would take the five minutes, 10 minutes of available time, and he "would try to set these things in order, so that people could understand it." He quickly scribbled what he called "memo notes" while he was doing weight checks and making alterations to the machine's settings. These notes were only understandable to him, as if written in a unique shorthand or code. For these notes he was his only audience. But, since he was first and foremost writing to create guides for other workers to follow, his 'coded' notes needed to be translated, clarified, and revised. Piece by small piece he developed comprehensible texts.

Though he regularly worked to draft and then revise his notes, these remained small pieces of text describing disparate steps in the machine's operating process, without a discernable step-by-step arrangement. Therefore, if kept at this state, the notes would be only somewhat useful to trainees. Julio Rodriguez had to wait to organize these notes until he had "downtime jobs," during which he had a week to set up the machine and run through its processes without running actual product through it. During downtime jobs he goes through

the entire machine searching for things that need to be fixed or cleaned, and making sure the process is running correctly. Julio utilizes these downtime jobs to work through the arrangement of his notes. He explains:

I would take a few moments and I would write down things as I was doing them.

Then I would take the notes that I had taken prior to that and try to line it all up.

‘I’m doing this right now, but here’s the trouble I had. When you do this, this is what could happen’ by some of my notes. And I would write that down under that heading. That’s when I would do most of my detail writing.

A downtime week provides the opportunity to analyze the machine’s process from beginning to end and to set down on paper what the process entails, adding in the information he jotted down as memo notes in the appropriate steps. Again, though, the writing activities had to be worked into an existing job, which I see as a clear dedication to developing usable and useful guides for other workers.

In addition to using his downtime job weeks to set his memo notes into the overall operating process, Julio also used time when he was training new operators to order his information. The operator training time lasts eight weeks, the last week of which the trainees operate the machine on their own. While Julio has to be there, he serves a strictly monitoring capacity, making sure the trainee is doing things right but remaining hands-off. It is during these final training weeks that Julio develops a more personalized guide for each specific trainee, and he explains that process as follows:

What I would do is I would write down where they have an issue and then I would write the solutions to those issues, and then I tried to categorize that.

When this machine, if this bagger, or this and this, if this happens, this is what we did to fix it, this is what we did to fix this, this is what we did to fix that. That gave me a lot of time to write that down.

What is most obvious to me, after hearing about these different composing activities, is that Julio has no control over when he is able to write—he has to wait until he is told to engage in downtime job activities or has to wait until that final week of training in order to put an effective version of the operating process guide together.

### *Composing Tools and Resources Available to Julio Rodriguez*

Given Julio Rodriguez's limited composing options, I wondered about the tools and resources he has available to him for these writing tasks. When I think about my own writing, what aids me in addition to dedicated time are the resources I can use. From the materials and tools I use to help me think to the people who are available to respond to and advise me, much of my life is dedicated to providing me with the best composing space possible. Julio, on the other hand, has limits placed upon the tools he can use and people to help him, in addition to the existing restrictions of time. Because most of the writing Julio did was in his notebook, his revision processes required multiple paper drafts; he explains:

I wrote at least each one, rewrite, rewrite, rewrite. If you make a mistake you can't just draw arrows because people are going to read it. If you put something out of sequence, oh crap.... I probably handwrote each page a good 20 times. Each page that came to be finalized—I say it's finalized; I could probably go through it again, but it's the best—at that time—that I could do with the amount of writing I was doing.

What especially struck me about the tools he uses to write is that his pen and notebook are the only composing technologies available to him. While the rest of the JSM writers had access to computers, highly detailed images, a general outline, and other such resources, Julio did not.

Julio's process of writing reveals interesting difficulties that arise with a lack of writing technology and without time set aside for composing to happen. However, he shows the ways he found to compose. In minutes here and there. This kind of start stop process of writing is very different than how writing is taught in K-12 and college. His part of the factory, where I couldn't even hear myself yelling, is the kind of environment he composes in. But this is where he has to write.

Because of Julio's rewriting, rewriting, rewriting by hand, I asked about technologies that he might use to write more efficiently. When I asked about all this handwriting, Julio considered other options that might currently be available to him:

Could I have brought it home and maybe tried to do it in my computer? Yes, if I knew how the hell to do it. I'm sorry, I peck away. I can write quicker than I can type. I'm thinking if I could have that knowledge to where I could just enter all my crap into a computer, then use cut and paste and do whatever they do to get everything in line. Not only would it save me a lot of time, my hands would appreciate it from all the writing I did. Plus all the trees I killed because I had to rewrite the crap tons of times. 'Oh my god, I screwed that up, here goes another sheet of paper.' 'Oh shit! Here comes another piece of paper.'

Julio then added that he probably wouldn't bring this work home with him even if he did feel more comfortable on his home computer—he already works a lot of hours and spends very

little time at home, so he doesn't want to bring work with him when he leaves the factory. So Julio handwrites his notes and his guides, even though this activity causes him great physical pain—Julio has had carpal tunnel surgery on both wrists, and his fingers have been broken and mangled over his many factory years. He doesn't have to write, but he chooses to do it despite the pain because he wants to share what he has learned, hoping his knowledge helps other workers keep their jobs and run the bag-in-the-box machine effectively.

### **Conclusions: Writing Processes as Influenced by the Factory Environment**

Fullamena and Julio Rodriguez shared fascinating insights with me regarding the processes they worked through to write about their machines' operations. I am struck by the extent to which their writing was influenced by the situations facing them. The distinct differences between their writing practices and processes are due in large part to the different time, tools, and resources available to them.

### *Limitations Placed Upon Composing Technology Options*

When Julio talked to me about his process of writing his memo notes and then drafting, revising, and rewriting machine operations procedures, I wondered if this process could be easier. During our interview, Julio Rodriguez and I talked about options that weren't currently available to him that might aid in his composing. He first thought about whether or not he could have a usable computer regularly available to him, but he admits that he has never asked for this; given his previous statements about his discomfort with computers, it isn't very surprising that this technology wasn't strongly sought, either at his machine or having access to one of the few desktop computers in his building. However, I'm not sure that if he had asked for access to word processing technology at the computer that is designated to run his

machine's operations that he would have been given this access—Michael had explained to me that these computers are highly sensitive and shut down at the first hint of a virus. Thus, the programs these machine-designated computers run are strictly limited in terms of access, and only house machine schematics and operations settings. Julio is only allowed to monitor the systems displayed on the computer monitor and input specifically requested data.

During our interview, after Julio and I discussed his existing and potential computer access, we brainstormed other potential technologies that machine operators could use to not only help with such activities as his specific writing of operating processes but also with factory-wide communication. Julio speculated, “can they have something that would be stationary, bolted in, where somebody can just come and download stuff? Yeah, they could...take it to their office, type the shit up, and say, okay, here's the trouble—even if it's just for the shift guy: ‘Here's what they did, here's where he had the trouble.’” I learned, though, that the precautions taken regarding the production of food take precedence over everything, even more efficient and streamlined communication. In the following scenario, Julio talks through the reasons why small portable tools that would allow for his above-described communications are not allowed near the machines:

You bring in an audio recorder, some idiot is using it while he's fixing something in the food stream, he drops it, it goes into all the food. He don't want to tell nobody because he's going to get fired maybe, and then eventually he gets caught anyway because the parts start showing up. Some of the metal parts. By the time they find it, we already have thousands and thousands and thousands of dollars of stuff getting trucked out that we have to call back, that we have to

go through because that fool dropped his little recorder. And that's what the hard part is. With a food factory, you have to be careful where you take certain things, where you do certain things.

When I first developed and planned this research project, I didn't thoroughly consider that the product coming from the factory—cereal—plays a highly significant role in the decisions that are made regarding how work is done. Rather than first thinking of efficiency, in communication or other aspects of the work, the very first consideration is limiting negative influences upon the food. When I was being prepped by Post's management to conduct research within the factory, the most strongly pushed protocols I had to follow was in reference to my clothing, which included not wearing clothes with plastic buttons, not wearing jewelry, not having nail polish on, and not wearing any accessories in my hair. In addition, I had to wear the standard factory gear of hardhat and steel-toe shoes as well as a hairnet to protect the cereal. Maintaining high quality, safe cereal that meets national food regulations is the plant's top priority.

Talking through the possibilities and limitations of communicative tools led Julio Rodriguez to discuss one of the primary conflicts between the hourly workers and management: the union's primary concern is to protect workers from company policies, limiting negative consequences such as more intensive work loads, lower pay, fewer benefits, and downsizing. The management's primary concern is producing as much cereal as possible as inexpensively as possible and as fast as possible. The conflicts between these two interest groups can limit the effectiveness of work and communication. Julio speculated: "Here's what I thought they could do: film, videotape a person, put in on a DVD—for this size, this is what you



do, for that size, this is what you do.” He sees such media as providing clearer guides for machine operations because they would allow for the work to be demonstrated and explained at the same time. However, immediately after his excitement for such alternatives to the written JSMs, he reconsidered the medium of digital video in light of Post’s union: “That right there ain’t going to go no-frickin’-where because the union says ‘so and so’ could come in here and do it.” In “The Development of Job Skill Management Manuals Required Involvement from the Shop Floor” (Chapter 3) I describe the conflicts Michael, Fullamena, and Julio Rodriguez identify between management and the union regarding the JSMs. Essentially, they explain their union’s belief that if all of the production protocols are made as visible and easy to follow as a procedural video might allow for, then the company could fire all of the workers and hire new ones at lower wages,<sup>7</sup> since those new workers would just need to follow the video. Julio, from the standpoint of one of the workers whose job would be at risk if this were true, contradicts the idea that more informative guides would lead to a loss of jobs for experienced, higher paid workers. “That’s not true,” he told me; “could [a new worker] follow the same steps? Yes, he could. But you still have to run a product that has variables through a bag-making machine.” Even though a worker might be able to easily watch a video and do the work that is shown in it, the craft knowledge gained through every day work over the course of years, decades, can never be replaced.

The conversation Julio and I had about the kinds of tools he might have been able to use when writing out his procedures, as well as tools that might be made widely available in the

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<sup>7</sup> The history of conflict between the union and management at Post Cereals in Battle Creek is complex, and many of the ideas presented by Fullamena and Julio Rodriguez are based on personal experiences rather than explicitly stated union practices.

plant to aid communication between workers and shifts, are all limited by the need to limit potential for cereal contamination. In addition, the concerns of the union to protect its members also limits these tools. Effectiveness of writing and providing productive composing spaces for workers is rather low on the list of concerns for Post, which makes the job of composing that much more difficult for machine operators like Fullamena and Julio Rodriguez.

### *The Composing Situation Explains Differences in Writing Processes*

Examining Fullamena and Julio's writing processes for the JSMs also clearly reveals the importance of workplaces to provide writers with appropriate resources for developing effective texts. Julio is highly dedicated to writing, and such commitment is hard to come by in most work places, let alone from a factory machine operator. He has written many rough operations guides for his trainees without any support from the company, and he has physically suffered through much of this writing. If we look to Fullamena's experience, in contrast, what is revealed is an example of a worker receiving resources in support of her writing and responding with enthusiasm and motivation to produce a highly effective document.

I look at this information through the eyes of a writing teacher and writing scholar, and what I see is an example of a writing process that is well supported in contrast with one that is not. Though both workers have written useful and detailed texts, Fullamena was able to create a document that is cohesive and sustainable, while Julio has to constantly write and rewrite to create documents for individual workers. Based on the previous chapter (Chapter 3) detailing the JSM project at Post, I argue that complex workplaces that require workers at highly varying positions to communicate with each other should rely on the experts at each position to detail their work—at Post this meant bringing the machine operators into the writing of procedural

and safety manuals. Such a practice allows the knowledge accrued by individuals to be shared across the company and to be valued for its importance.

Considerations need to be made, though, when employees who are not typically accustomed to writing on a regular basis are suddenly asked to compose extensive and detailed documents. As Fullamena indicates in several chapters of this dissertation, she has never considered herself a writer and in fact doesn't even do the daily writing of her family. Yet, she was faced with the difficult task of writing for the JSM. Her experience ended up being very positive, with her comment "I didn't want to stop" as a powerful indicator of the potential of providing a supportive writing environment for an inexperienced writer. But Fullamena was given space to work on a computer and was shown how to operate it; she worked with a technical writer closely to revise her initial drafts, and she was allowed dedicated time away from her machine operating work to compose. On the other hand, Julio was not provided with any of these resources; and though he also developed texts useful to other operators, he had to write in stops and starts, finding a few minutes here and there to jot down a few notes. Fullamena was given a computer to work on, which allowed for easier and more efficient revision practices, Julio had to write multiple drafts by hand.

Finally, I want to draw a very brief comparison between the ways Michael set up the JSM writer support system that Fullamena was part of and best practices in academic writing instruction. In writing classrooms, a great deal of time and energy are spent helping student writers feel well-supported, comfortable, and confident when they compose. Fullamena's writing experiences show that Michael created a system that worked similarly—she was ultimately successful because the templates she was provided with and the collaboration with a

conscientious and skilled technical writer provided her with the support she needed to compose with confidence. Her experience provides compelling initial evidence that when companies make the move to ask factory workers to write about their daily practices, if they provide effective resources and support, the resulting documents are more likely to be useful and the workers' writing experiences are more likely to be positive.

## CHAPTER 5

### MACHINE OPERATORS' PERSONAL REACTIONS TO WRITING REVEAL THEIR FACTORY FLOOR CRAFT KNOWLEDGE

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#### Introduction

##### *Is Being a 'Factory Rat' a Good Thing or a Bad Thing?*

When I was growing up my dad often wore an old yellow t-shirt with black (or maybe dark blue) text and image outline. It said “Factory Rat” and displayed a rat in striped overalls, standing on two feet, and leaning nonchalantly against the side of a large machine. He was smoking a cigarette with one hand and had a can of beer in the other. I could imagine that if the boss told this factory rat to get back to work, he would grumble, “okay, okay,” and would then finish his cigarette before moving.

I remember specifically asking about it one day when I was maybe 10 or 11-years-old. I was sitting in the kitchen of the new house, he was getting ready to go to work (he still worked nights), and he wore the shirt. We moved several times during my childhood, always moving to a better home. We struggled financially for a long time because even though my dad was fully employed at Post, his low seniority in those early years meant months of him being laid off every winter. He would be home and my mom would find work. The pay was minimal for these few months every year and this is when we struggled most. Eventually, though, my dad stopped being laid off and worked the entire year.

I hardly remember those winters being taken care of by my dad while my mom worked—I was still pretty young. And when he was working, I hardly ever saw him. My dad worked third shift for probably 20 years, and even though this was hard on us as a family, it was

far better (I hear, because this is when I was much younger) than when he worked second shift. Second shift at any factory is a 3pm-11pm span of time, which cuts into prime family interaction—after school. But third shift at least allowed him to see us each evening, and when he woke up early he could actually make appearances at after-school events like our sports games and matches.

Night work is rather unique to working-class jobs. Factory work, 24-hour shopping centers, janitorial services—those are the jobs people have if they work nights. Whenever I heard about “working 9 to 5,” I never quite grasped the social significance of that statement. Why was it so interesting to talk about when people work? People work all day, any hour, why were those hours so important? My dad worked 11-7. My mom, when she did work, might have worked 9-noon or 1-5 for her part-time shifts.

But when I was finishing the fourth grade, all of his third shift pay (which was more than any of the other shifts) and all of his overtime work (I can remember not seeing him for weeks at a time when he was working 16-hour days) paid off, in a sense. We were finally able to move out of the lower class neighborhoods we’d been living in up to that point, neighborhoods where I could never go outside alone and could certainly never leave the back yard alone, neighborhoods that my parents wanted to get away from so they didn’t have to worry about the people around us quite so much. And so, when I was 10, we moved to the new house. It was a bit outside the city, in a quiet little neighborhood that had only one way in and out, so the only people who ever drove down the street lived there or were lost.

Eventually my dad had started to make enough money per hour—his pay went up based on his seniority level at the factory—that he could make a move to working first shift, 7am-

3pm. This meant he was always around when we were done with school; he made it to every single game or match or meet we had while the three of us youngest were in high school (I might have been in 10th or 11th grade when this change finally happened), so long as he wasn't working overtime. But when I was 10 or 11, I was at the kitchen counter, sitting on a barstool, reading a book (like always), when I saw him come up from his bedroom in the basement wearing that old, faded yellow t-shirt. I had seen it before; he often wore that shirt under his khaki work uniform—it was a shirt to sweat in, to get dirty if he was cleaning some machine that day. He wore it fixing the car or doing yard work or other dirty house-based work, too. The last time I saw that shirt it started showing worn-through holes, oil and various other stains, and was so thin you could almost see through it. I don't know if he still has it.

When I asked about the meaning of the shirt that evening, he said it was a joke that factory workers use, that they call themselves factory rats. I only half understood the meaning of the shirt, still wondering why factory workers would call themselves rats. Rats are filthy animals, right? I thought. They run around in sewers and the basements of old buildings, they carry disease. People hate rats.

As I have grown to understand the way bodily laborers are seen, however, I have come to understand why factory workers have been called “factory rats.” The image of the factory worker that often comes to mind is a gruff, rough around the edges man in overalls and covered in some kind of filth. They work in dirty, grimy environments, have dirty mouths and minds, and live dirty lives. And imagining looking down upon a factory floor from above, they might have looked as if they were scurrying about some dank basement.

### *The Need to Value the Craft Knowledge of the Factory Floor*

The image of the factory rat, though negative, was taken up by the workers who created and wore that yellow t-shirt, as if they took pride in their rough, hard edges. And while my father has been seen as a hard, rough man, he is also the smart and loving man I adore. Essentializing assumptions are always limited, and it is my hope in this chapter, especially, to show that “factory rats” are not just working bodies. They are people with minds that should also be valued.

I have noticed a gap in existing research regarding workplace writing, which I explained in greater detail in the introduction to this dissertation (see Chapter 1). This gap directly centers on the study of factory floor writers—or blue-collar workers as writers in general. Winsor’s research in *Writing Power* regarding hierarchy and written genres in workplaces addresses why such a gap exists. She explains that in her observations of the texts written by workers at several different hierarchical levels, the technicians (who work at a low hierarchical level) only produced data-displaying texts. As such, they tended to be viewed by other workers as resources for unbiased technical information rather than as workers who create knowledge and meaning. In essence, the technicians are often seen as extensions of machines, and they inhabit a place in the hierarchy that silences their voices. Winsor argues, in her concluding chapter, that organizations like Pacific Equipment should value the technicians more than they currently do, as there is a great deal of knowledge and experience that isn’t shared or listened to.

Mike Rose summarizes the social views regarding “silenced” workers, or workers who are seen as merely bodily extensions of their work, in *The Mind at Work*. He explains some reasons why bodied laborers, like factory workers, have immense stores of knowledge that



aren't socially valued as intelligence. He focuses the majority of the book presenting the intelligences of many different working-class individuals—such as a waitress, a hairstylist, a plumber and his students—in order to prove his point that such workers do have a great deal of work-based intelligence that is often best revealed in their embodied actions. In fact, he argues that the intelligence possessed by such workers is a combined mind-body intelligence. He also argues that it is the social nature of the work being done, and not the physical-mental nature of such work, that marks it as unimportant or lacking in intelligence.

What Winsor and Rose reveal most clearly to me is that there is a social devaluing of working-class or blue-collar jobs, and so there is a devaluing of the individuals who work those jobs. Such social views affect not only workplace leaders who decide what the workers are—and are not—allowed to do, they also affect the workers themselves. Fullamena and Julio Rodriguez have talked to me about their own writing, with Fullamena explicitly telling me that she absolutely never writes and Julio calling his writing “chicken scratch,” which he feels describes his handwriting and his content. They do not see themselves as writers and probably felt that once they got a job in the factory they wouldn't ever need to write. Yet, here they are, having written extensive and detailed texts at work.

### *Chapter Overview*

The previous chapter regarding writing practices clearly shows that factory workers are involved in official writing (though this is rare) and that they are highly capable of doing so effectively when provided with the necessary time and tools. In addition, sharing Fullamena and Julio Rodriguez's reflections on their writing practices reveals the depth of their thinking regarding their writing. In this chapter I will extend my arguments by showing that when these

machine operators wrote about their work, their experiences were positive. In fact, the writing Fullamena and Julio have done at Post has been personally fulfilling and has helped them embrace expert identities, which have, in turn, led them to feel their contributions have had value. Given that physical laborers do not generally write company documents, these two workers' personal experiences provide important insights not often explored in workplace writing studies.

In the sections that follow, Fullamena and Julio Rodriguez show that writing for the JSM's has been meaningful for them in several ways: 1. They show that they are already personally invested in operating their machines and that the writing they have done has served to increase that investment; 2. The act of writing has helped to make the expert knowledge possessed by Julio and Fullamena visible to others and themselves; 3. Being asked to write for the JSMs or being thanked by other workers for the writing they have done has shown Julio and Fullamena that they are valued as experts by their fellow workers and by Post; and 4. The act of writing led to unexpected learning on the part of the machine operators, which they thoroughly enjoyed.

### **“This is my baby”: Factory Work as Personally Meaningful Work**

Labor in a factory isn't seen as an activity that builds self-worth and personal satisfaction and gain. A factory is often portrayed as a soul-killing space, either incredibly dirty and dangerous or very sterile and dangerous. They are not considered good places to spend 8, 12, 16 hours a day. The work is seen as mind-dulling or mindless, the workers are often seen as disposable bodies. Rose describes the pervasiveness of such views of bodied laborers, explaining: “‘knowledge work’ represents emerging opportunity. It is associated with advanced

education...What concerns me, though, is the implication...that so-called other types of work, like manufacturing or service work, are, by and large, mindless, 'neck down' rather than 'neck up'" (Rose xix). As I presented in Chapter 4, the Post union put pressure on Fullamena to limit the detail she included in the JSM, showing that even the union believes that anyone could come in off the street and do the work. Perhaps these are exaggerations in relation to some factories, but the social stigma is still rather strong.

In my own experience, though, both work and education are highly valued. I saw my dad as a man who works hard to provide for his family. Yet, I often saw his work as self-sacrificing because I, like many others, held the popular view that factory labor is not personally fulfilling. However, I have recently come to see him and his work differently. Through my research I especially learned that my dad cares about his work. He would never try to shirk his duties or do just the bare minimum, not because he's out to impress anybody or "move up" in the factory, but because his work is important to him and because doing good work is what a person should do, no matter the job. When I interviewed Julio Rodriguez, I gained new insights into how he, and some other machine operators, see themselves and their work:

A lot of workers here are really—how do you put it? Involved, committed, invested—invested deeply in their jobs. I was training with this lady, and she was like, "this is my baby. I was here 20 years ago when we started, when they put the process in. I love it. I take responsibility for it. I wanted to do the best I can. I want to produce the best product I can out of it. I hate it when somebody comes in and just thinking it's not important, that it's just 'do this, this, and this, and don't worry about nothing else.' No, it's got to run like this." That's how I feel;

that is how I feel. I feel like that, that it's important. Yeah we take pride in it.

There's a lot of people that take pride in it, and they're the ones who are designated trainers. They take pride in what they are doing.

I wonder how my dad can still feel this way after working for 36 years at the same place. As Fullamena explained in the previous chapter, an operator can go to work and just do the job without thinking about it. I'm sure that all workers do this on occasion, Julio included.

Generally, though, he does not disengage from the work he is doing, and so he has spent his 36 working years consistently improving. He is now considered one of the very best operators in the plant, and certainly the best in the packaging building.

Fullamena comments on the same kind of personal investment when it comes to her own work. She told me: "The more you know about [a machine], I think that's why you get that connection. It's sort of the difference between pushing a button and knowing what's going on." Though Fullamena does not feel a strong personal connection to all of the machines she has worked on, she feels ownership of the machine she knows best. With such personal ownership comes investment in the work. Though the processes of operating machines are developed to run every machine as efficiently as possible, experienced machine operators can figure out how to run them even better; when Fullamena and Julio are invested in their work, they try hard to get as much efficiency as possible out of their machines.

These two brief explanations show clearly that, first, Fullamena and Julio care about their work, and second, when they care about their work they work harder. However, I could imagine that if their extra effort is rarely valued, the effort they put in might stop. In the next section, I present that writing operational guides for others provided such a sense of value.

### **“It’s a little bit like showing off”: Writing Makes Existing Knowledge Visible to Others**

Often, the knowledge possessed by laborers is collected as raw data that as yet lacks interpretation or understanding (such as Winsor’s technicians). Operators at Post input and read numbers at their machine terminals, based on established guidelines, and report these numbers to supervisors, engineers, and others who make meaning regarding those numbers. In the following statement, Fullamena’s experiences show that Winsor’s observations about engineers and technicians, and the assumptions of knowledge between them, has been similar at Post. According to Fullamena:

There’s been so many times where [the engineers] asked us to help. Oh, you know, “we need your information on how to do this or how to do that; can you guys help us with this,” and, oh yeah, you can give them all kinds of information and it’ll work great for them, or whatever. And all they give us is “thanks.” Then they run off and they go talking with their guys with their suits on, and the next thing you know you’re hearing down the grapevine that it’s all their idea. But they couldn’t have done it without us. But they seem to forget that in the process.

For Fullamena, experience, engineers, managers, and others had often sought out her knowledge without valuing it. Prior to writing for the JSM, any knowledge Fullamena had was ‘collected’ by others. But when Fullamena was asked to write for the JSM’s, her knowledge and expertise was visibly recognized by the company—suddenly she was the person who knew what to write.

In our interview, Fullamena was clearly excited by the opportunity to be the person responsible for articulating knowledge that was going to be shared with others. She told me:

It actually was fascinating to me just to write it, I thought. There's something about writing that makes you feel like you actually are doing something. With writing something like this, the JSM, that was like, "wow, I'm actually putting some knowledge out there. You're going to be training on this," and when it's in writing that's your knowledge carried out, carried out through life.

At this point she does seem to feel authority over her writing. It isn't so much about management giving her credit but about sharing her expert knowledge with future workers, like her. She saw permanence in the writing she was producing and experienced what it is like to create something that will live beyond her. And she felt that there is something special, and definitely something unique, that people she will never know personally will read and use materials she wrote, and they will benefit from her work.

Julio Rodriguez articulated this same pride of developing a guide that will help other workers be successful. He explained, "I guess I would say it's a little bit like showing off, that I can sit there and put on paper and tell somebody how to do something." For Julio, because he did not have a chance to write for the official JSM, the pride he feels is in creating texts that other workers can rely on to do their jobs more effectively. He especially felt the push to provide written resources because the packaging machine at Post is very complex with a lot of variables to consider.<sup>8</sup> He wanted to provide trainees with a guide to reference for two

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<sup>8</sup> Julio explained: "In a packaging machine there's a lot of variables: food variables, temperature variables, outside, the weather variables. Even though people don't understand

primary reasons: 1. He knows that many workers he trains do not have experience running industrial machines, and might not have any factory experience at all; and 2. He wants to train those workers to the best of his ability because that's part of his job. That he can partially accomplish these two goals through writing helps him feel like a valued trainer and employee.

In addition to the pride Fullamena and Julio both felt about their writing—which was certainly based, at least in part, on the fact that the knowledge they expressed through writing helps other workers do their jobs better—they also felt comfortable to then embrace an identity of expert. Julio Rodriguez has been writing brief training and reference manuals for his trainees for years, so he has slowly grown into his identity as an expert. At this point in time, Julio feels confident stating:

Even though people say, "I don't do it that way," I would put my 25 years machine experience to say, "yes, it is the best way, and I don't care what you say," because there's always going to be detractors. I've got 25 years running this damn thing, I immersed myself on this machine when nobody else wanted to do it, and you all was scared of it. Now you're going to tell me that what I'm saying is the proper procedure is flawed? Sorry, I don't care. That's the gratification I got from it. It was a personal thing.

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how that works, it does affect what you're doing inside and how you're packaging. Also materials variables: thick cardboard, thin cardboard, stiff cardboard, bag liner, loose liner, all those things." In addition, "There's 36 different stations. There are size changes—they have tried to minimize them—but there's 16oz, 12 ½ oz, 11 ½ oz. Then there's Canadian, it's 595 grams, there's a kilo, 510 grams. So these sizes are the ones that always get people freaked out because they don't want to touch it—they have to touch it to change it over and get it running."

Julio knows that he has attained a level of expertise that others have not, and he knows he actively worked hard to achieve that level of expertise. His knowledge of the packaging machine he operates is at a master level, and the years he has invested to obtain that knowledge means he feels comfortable owning the identity of being the expert authority in regards to that machine. This feeling of expertise makes him proud and confident enough to say that the way he operates his machine is definitely the best way. And when he puts that into writing, he knows that he is giving other workers the best chance of also being successful operators with that machine.

Though Fullamena was not as confident in claiming her master operator identity, the process of writing for the JSMs helped her to see that she really does have specialized expert knowledge and that she could play an important role in helping others be successful in their own work. Fullamena explained:

[The contracted technical writers] actually made you feel like you were involved in it and that it was important to have you. And that's what really made—like I said, it changed my whole outlook. I don't even write Christmas cards out, but I did that. I enjoy it and if I could have sat there in my little office, and it made me feel good about myself, made me feel like I was contributing. Like I was really worth something. That, you know, made me feel good about myself.

A person can't just come in and do her job as well as she can, and managers and engineers can't just show up to her machine and expect to understand its daily operations as well as she does. She is certainly the expert. Though it is unfortunate that it was expressing such expertise specifically through writing that helped her feel like she is “worth something,” her reaction



does demonstrate some of the power writing holds. Fullamena's surprise at her feelings of self-worth also reveal an internalization of what Winsor and Rose articulate: she did not previously have such high feelings of self-worth, perhaps believing that she really was only a bodily extension of a machine. Writing helped to reveal the expertise she actually does possess.

### **“It's not just going in and pushing a button”: Feeling Valued as Experts with Important Knowledge**

Fullamena and Julio Rodriguez have been invested in their jobs since they started working, trying to understand their work and consistently seeking ways to do it better. But their knowledge and dedication have not been widely visible. A supervisor or a recently trained new employee might have seen and valued the vast store of knowledge these operators have, but acknowledgement beyond this limited scope has been rare. Being involved in writing training and reference materials showed Fullamena and Julio that their knowledge and expertise are valued and that they are seen as the experts when it comes to running their machines. Thus, not only does the company see their value, other workers are and will be able to see and value their knowledge, too.

In many factories, the hourly laborer is often seen as a body at work. They are seen as arms hauling materials or pushing brooms, hands pushing the right buttons and writing down the right numbers. They are not seen as mindful people exploring their work and constantly learning how to do it better. Mike Rose comments on this very issue:

A common theme in the social theory related to modern work concerns its detrimental effect on the consciousness of the worker... There is no doubt that a good deal of the work people do is repetitive, dumbed down, and, often,

dangerous, and this surely can affect one's mood and sense of prospects. There is also research that demonstrates the negative effects of certain kinds of work on intellectual flexibility.... But I think we need to be cautious in assuming extensive and necessary effects of particular kinds of work on the thinking ability of the people who do them. Such analysis can obscure the nuance and variation in individual people's experience of work as well as real differences in the physical and social environments of individual workplaces. (xxix)

Rose points to a concern that I, too, have regarding the stigma towards and treatment of bodied laborers. If workers are treated in ways that devalue the intellect and skill involved in their work, day after day, year after year, it is no wonder self-confidence gets questioned. Even Post's union, when they told Fullamena not to include too many specific details in the JSMs as a way to protect her job, shows that the work at Post is often perceived to be easy work, work that anyone with specific instructions can do.

Fullamena's experiences writing for the JSMs show the stark contrast between how she viewed herself and her work before and after writing. Fullamena explicitly spoke of writing for the JSM's as an experience that helped her to realize that she has knowledge and expertise to offer others, that she, out of all the possible people who do the same job, is seen as the top expert. Fullamena:

I don't know if [the writing] built my confidence up or made me feel like, "hey, I'm more than just a factory rat. I actually do have a brain; I can do something else." I think that was a lot of it...[It meant more] than just coming to work and

putting my eight hours in. I actually had something I was contributing to, which made me feel good about myself.

I previously discussed (see Chapter 4) Fullamena's lengthy process of searching for safety protocols for working the snuffer in case of a fire. There was factory folklore, certainly, but this folklore told Fullamena what not to do rather than what to do if she was in need. She spent months seeking information about a machine she had been working on for 17 years. If she didn't know the procedures by that point, there is no way for any new person off the street to figure them out, unless they, too, dedicate themselves to working and understanding that machine for 17 years. While writing the JSMs she learned that the work she was doing every day was complex and difficult, and that she still didn't know everything. There was more to her work than she had been realizing. She said: "I found it was kinda neat. It made me think like I was an investigator [as I searched for the safety protocols]. I need to find out myself. I was amazed at what I did know but yet what I didn't know. It made me feel like, 'well, okay, ya got to learn new stuff;' it's not just going in and pushing a button."

Fullamena was given time to write her portion of the JSM and was given the option to work in an office in her building at a computer. She explained to me that she never writes and really has no idea how to use computers, but that "I just pushed ahead with the job to keep going with it." She then added that

it makes you feel—something about working in an office—makes you feel like you have a little bit of power. There's something about being able to, you know, go down to your office... I had this computer set up, a printer set up, and what have you. Even if I wanted to take a cup of coffee in there, I could. And it just

made me feel like I was somebody. I didn't have to worry about, "oh, I can only take my break at this time, this time, and this time." And I get to walk around, and it just made me feel proud because somebody actually thought I knew enough to write one.<sup>9</sup>

Her expert knowledge gave her an opportunity, while brief, to do very different kind of work than she has done for so long. And even though she had to go back to her regimented schedule working at the machines, she was able to do something new that she had never thought she would have the chance to do. When she told me about working in the office, at a computer, and having that freedom, pride beamed on her face. She was a little hesitant to make a big deal out of this, perhaps because her husband was right next to her during our interview, but she gave the look someone has when they have done something they never thought their lives, or their brains, would allow. She felt smart and special. Fullamena had a chance to try on some new and very different work, and she liked it.

For years Julio Rodriguez has informally written procedures for how to run the packaging machine he has worked on most. He did not have the chance to write for the JSMs before the project was shut down, so there is not a clear delineation of before and after, as there is with Fullamena. However, by the time I interviewed him for this dissertation project, he had been writing small and individualized training and resource guides for many years. Over time, his texts have infiltrated the plant and have been used by a number of different employees. He had even heard that his materials have been passed from one worker to

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<sup>9</sup> Fullamena's statement here brings up a lot of important issues regarding power, hierarchy, access, and gender. Though these issues are incredibly important to consider, they are also very complex and are, therefore, beyond the scope of this chapter and this dissertation.

another. These guides are all focused on operating the packaging machine, the machine he is most expert at working and a machine that others struggle with operating. He worked hard to gain his expertise—immersing himself in its operation (see chapter 4)—so he wants to share his hard-won knowledge. It made him feel good, like he was contributing to the success of others. Julio said, “They all come and tell me ‘I use this constantly; thank you.’” Because Julio has to write these quick guides in whatever time he can spare at work (see Chapter 4 for specific details), they remain incomplete. Despite the shut-down of the JSM project, he intends to keep refining his operation guides. He explained his motivations as follows: “I’m about to retire. I’d hate to sit there and say—I don’t want to be the guy who says—‘aha! Yeah, with me gone, nobody knows what to do. I was the baddest dude there.’ I don’t’ want that kind of crap; I don’t need it.” He doesn’t want all his knowledge and learning to go to waste, so he finds ways to share what he knows.

### **“Look, I actually did this”: The Outcomes of Learning Through Writing**

When Julio Rodriguez trained on ‘his’ packaging machine, he immersed himself in learning how to operate the machine (see Chapter 4) as well as why it functions that way. He knows the importance of comprehending a machine’s functions and writes his training aids to emphasize such an understanding. Fullamena, in contrast, has described her training at Post as “do this and this because that’s how it’s done;” new employees are typically told exactly how to run a particular machine without being given additional information. When Fullamena asked why it was done that way, her curiosity was shut down by a gruff, “because that’s the way to do it.” It’s highly possible that the operators training her didn’t even know why certain procedures were good or not. But when Fullamena wrote about her work, new learning occurred.

Fullamena, especially because she had access to more resources, learned a great deal about her own work and about writing as an act itself. She was even able to learn a bit about how to use a computer. She told me that she doesn't even have a computer at home, but when she was writing for the JSMs, she had to produce some fairly complicated digital documents. She explained: "I learned about jpegs and everything, and I was really thrilled. It does make you feel like you're learning something new." It is certainly expected if Fullamena doesn't write or use a computer normally that she would learn a lot of new skills by writing for the JSMs. She also, though, learned more about her own work because of her close analysis and articulation of the rice rolling machine's operations. Fullamena told me that "Even being there for 17 years, I've learned new things, too, just by writing it."<sup>10</sup>

In addition, when Fullamena wrote for the JSM's, she sought explanations for why her machine functions like it does as she tried to include as much helpful information as possible for future workers. In doing so, she learned more about how her machine works, which led her to think about it in new and different ways than she had been for 17 years. She told me:

If you understand more in detail, then you understand why you're doing it. Then, sometimes, if you learn a little bit more than that, you can even say, "well, hey, it might actually do better if we do it this way," and sometimes you might be right because they might not have understood how it worked when they trained me.

Because Fullamena knows more about her machine, she feels more confident that if she has ideas about how to run it more effectively, she has a deep enough understanding of the

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<sup>10</sup> Fullamena's statement here corresponds to prevailing arguments regarding the benefits of writing-to-learn. I discuss this connection in the conclusion to this chapter.

machine to make solid arguments for her suggested changes. Rather than just accepting what she has been told because those tellers knew more than she did, she now sees herself as perhaps the one person in the plant who knows that machine best. She has started to see herself as the expert.

### **Conclusions: Revealing Unseen Expertise**

#### *A Sense of Value*

One of the two primary arguments I make in this chapter conclusion is that Julio and Fullamena felt their work was valued more when they were able to share their knowledge and expertise with other employees through their writing. This sense of value seems to be connected to the cultural authority associated with official written documents (Winsor; Hunter). Glynda Hull makes similar arguments regarding workplace literacy activities more broadly. After her literacy observations of a micro-chip manufacturing plant, Hull remarks that “high-prestige [literacy] functions such as those associated with exercising judgment and problem-solving... were most often associated with and available to those positions of authority, such as supervisors, managers, and engineers” (28). She continues by explaining that “low-prestige purposes, such as accomplishing simple, discrete tasks ...were most often the categories associated with and available to front-line workers” (28). The distribution of literacy activities throughout the factory hierarchy is based on “rights and opportunities” rather than a “question of ability or motivation” (28). At Post, a similar hierarchical distribution is in place, showing clearly which work is most valued.

The type of literacy tasks one does at work is often a reflection of one’s workplace value. When Michael, who was in charge of the JSM project, began to include machine

operators in writing the JSMs, he subverted the traditional literacy hierarchy. Though his primary intentions were to create the best manuals possible with the resources he had, his decision included the added benefit of showing operators he valued their knowledge and trusted their abilities to communicate that knowledge.

For Fullamena, being asked to write for the JSMs seems to have been an illuminating experience. She saw herself more positively than she did before her work on the project. Fullamena was explicitly asked to develop the JSM for her rice rolling and drying machine, she was provided with composing resources like a computer and office space, and she was given the opportunity to work closely with a technical writer to figure out the best ways to explain the processes she was trying to describe. She learned about how to write for an audience that is external to herself, and she had to anticipate and consider their needs. Such an experience starkly contrasts with the more familiar “data-gathering” approach described previously in this chapter. The investment of time and resources, then, communicated to Fullamena that she is an important and valuable employee whose knowledge and expertise should be shared with others.

Julio Rodriguez’s experiences writing operations resource guides, as presented throughout this dissertation, has been a long-term activity, and so he didn’t quite have the ‘moment of illumination’ that Fullamena had. Instead, Julio’s writing activities have helped him feel valued as the packaging machine expert because, as the informal, handwritten guides have proliferated in the plant, he has begun to view these guides as his ‘legacy.’ In chapter 5 Julio specifically discusses his immersion in the packaging machine and the demands he placed upon the installation engineer to explain every facet of the machine’s operations. Thus, learning for



Julio was an intense process, one he has not stopped. Due to his continued effort to figure out better operation procedures, he now has knowledge that doesn't exist in any of the official manuals. He doesn't want that hard-earned knowledge to be lost when he retires. He doesn't want to hoard his knowledge, he wants to share it.

One of Julio's primary motivations for sharing as much detailed operating information as he can is because he feels responsible for the workers he trains. The eight weeks of training new operators receive is not nearly enough time to teach them how to run the packaging machine.<sup>11</sup> He stated, "I felt bad for people. Plus, I also felt bad for the company. I knew they were going to suffer, and the company was going to suffer, during the learning curve." His efforts, then, might end up leaving the legacy he hopes for.

If Julio Rodriguez's legacy ends up being forgotten, or if Post ends up shutting down in the future (not a completely unlikely possibility), I hope my dad feels personally gratified that he's had a valued career at Post. When I walked through the many factory buildings on a safety tour of Post, I was introduced to workers as "Julio's daughter." When they heard who my father is, I was told time and again about how my dad is the best packaging operator they have, that

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<sup>11</sup> Julio explains the complexity of the packaging process as follows, demonstrating why it is so difficult for new trainees to learn how to effectively operate the system after only eight weeks of training: "The process takes up about three houses worth of space. It's huge. It's got big giant frickin' rollers crushing things. Figuring out where to stand and walk takes a week. 'Where's the beginning..?'" Julio explains that "if they want me to train these people, I want to do my best to train them, and even though eight weeks is a short amount of time for the knowledge that they need, I want to give them something that they don't say, 'well, yeah, you gave me frickin' eight weeks and kiss off.' I want to give them something they can take. Like I said, the JSM was not complete for our department. Not for the packaging lines. So I wanted to give them something to help them out. And to also say, 'you know what, [Julio] didn't completely—he might not have trained them as well as we would have liked, but he did give them all this information they can use to make them hopefully better later.'"

he is great at his job, and that he is a lovely and helpful person. Julio's efforts to learn and communicate what he has learned to others have led him to become a highly valued trainer, co-worker, and employee.

### *Affirming an Expert Identity*

Closely connected with Fullamena and Julio's sense of being valued because they were encouraged to communicate their expert knowledge to others is the belief they share that writing about their everyday work helped to affirm their identities as experts. As I explained in the Introduction to this dissertation (see Chapter 1), I see Julio Rodriguez and Fullamena as expert craftpeople who are able to create high quality products because they have a deeply embodied understanding of how to most effectively use their tools (their machines). Given existing presumptions regarding the supposedly 'unskilled' nature of factory labor, though, it's easy to understand why embracing an expert identity could be difficult. My claim here is that the act of writing aided Julio and Fullamena in accepting their expert identities.

In his current position as one of the most experienced machine operators in the plant (particularly now that it is a contract negotiating year and many other workers his age are retiring), Julio seems confident inhabiting his role as expert and even as mentor. Post's designated trainer system (see Chapter 1) asks someone like my dad to be completely responsible for training a new employee and determining whether that new employee should remain employed. Because he doesn't hire new workers, Julio Rodriguez doesn't want to be responsible for firing them. So, when he began to be faced with "somebody who had been a secretary somewhere or has been working in an office" who is then expected to operate the packaging machine, that's when he started putting more effort into his "memo notes" (see

Chapter 4) and creating clear and useful guides. To do so, though, required him to reconsider what he knew about operating the machine and how to best explain that information. He explained, “I had to relearn what had to be taught because their questions were, to me, surprising, but then it was also like, ok, I have to write it knowing that and think about it in a different way.” Thus, because he had to reconsider how he trained new employees and had to consider the needs of that audience while writing guides, he had to think objectively about his own knowledge. Such exploration and self-reflection inevitably led him to better understand the extent of his operating expertise.

Again, because Fullamena’s writing experience is clear and specific, the effect that writing had on helping her see the extent of her operating expertise is easier to see than Julio’s. The act of writing led Fullamena to resee much of her work. As I have explained at several points in this dissertation, when Fullamena was originally trained at Post, she was repeatedly told that she didn’t need to know more about a machine than its basic operations. However, as Michael explained (see Chapter 3), the JSMs represent what he hopes is a plant-wide shift in expectations for machine operators. Operators are starting to be expected to know the ‘why’ behind the ‘what’ and ‘how.’ They are being expected to understand building-wide systems rather than only knowing how to operate their one machine. All of this information needed to be included in the JSMs. Fullamena seemed most excited about this particular aspect of writing for the JSMs. She was finally able to figure out what was going on behind the basic operations she had previously learned. Exploring the ‘why’ behind her machine’s operations and then explaining that knowledge in writing helped her to realize that, 1., she already knows a great deal about her machine and is an expert operator, and 2., there is more she can learn.

The scholarship and research on writing to learn argues that writing can lead to better learning. The scholarship also draws from and adds to the idea that when a writing situation is clear, specific, has a purpose valued by the writer, and has a clear audience, then writing can happen authentically and the learning that occurs can be incredibly powerful (Andrews; Bangert-Drowns, Hurley, and Wilkinson; Bernadt Durfee; Herrington; Knipper and Duggan; Mitchell; Moore; Schumacher and Gradwohl Nash). Fullamena's experiences writing the JSMS shows this clearly: "I learned more in there than I did in school for writing for English or anything." Contrastingly, she explained the JSM writing experience in this way: "yeah, I was scared; I was frightened because, like I said, I don't normally write. But then once I got into it and realized, God, there's things that I'm learning—after doing it all this time. Then it became more interesting." Motivation and investment clearly encouraged her to learn how to write—she wanted to learn and was able to do so, in a context that made sense, that she was familiar with, and that she cared about. Fullamena had a problem to solve and she worked hard to solve it. Fullamena also realized that she can still learn new things at work—the act of writing specifically showed her this. Finally, she learned to see that she doesn't just "cook some flakes," she is an expert machine operator who plays an important role in a massive production system.

The pride Julio Rodriguez and Fullamena feel in their work and the doubts they have both felt regarding the value of their work are displayed in an interesting statement Fullamena made during our interview. I asked Fullamena what name she would like for me to use as her pseudonym, and I explained why a pseudonym was needed in the first place as a way to protect her identity. Fullamena said: "Oh hell, put [my name] in there. It'd be nice to be able to show my family something: 'look, I actually did this.'" She wanted to show her family that she was an

interesting enough person to participate in a research project and that she actually did some great work—it's almost as if she was saying "see, family, I am smart and my work is interesting."

### **Looking Forward**

Based on the personal reactions Julio and Fullamena shared regarding their workplace writing, in the next chapter, my conclusion, I make an argument that workplaces should involve workers at all hierarchical levels in the development of official company documents. For laborers who are not commonly involved in important literacy work in factories, writing official company documents that are useful for other workers and draw on their craft knowledge help them feel valued as experts. Companies would do well to consider such benefits because pride in one's work often leads to greater investment in that work.

## CHAPTER 6

### CONCLUSION: (RE)CONSIDERATIONS OF WRITING ON THE FACTORY FLOOR

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#### Introduction

##### *Carrying Working-Class Stories with Me*

Growing up as a factory worker's daughter has shaped the academic identity I have today, the identity I brought with me as I approached this dissertation research project. I remember watching my dad play softball with his co-workers, staying late after the game so they could all have some food and drink beer together. I also remember going to lots of summer parties hosted by some of those same friends, where everyone ate, danced, played yard games, and talked. I've been surrounded by working-class people my entire life, and I've listened to their conversations about work and money and bosses as well as politics, movies, the economy, education systems, and how to raise their children.

Listening to such conversations and then later participating in them led me to appreciate and respect the voices I heard and the identities they represented. I knew factory workers were intelligent people who were completely capable of doing many other kinds of work—but in Battle Creek, factory work was, and is, good work. The workers I knew as a kid often chose to work their factory floor jobs. In this dissertation I have looked to bring such factory worker voices into my academic world, as a way to connect myself with my working-class identity but also as a way to respect and share those voices I grew up hearing.

Some working-class academics have chosen to study working-class culture, and such work is important and exciting. Others have chosen to focus on the workplaces of the working

class, looking to reveal concerns about hierarchy and power. But there has seemed to be a gap in studying the work lives of the working-class with the goal of revealing skill, expertise, and knowledge that can be expressed through writing. I believe that the combination of my history, identity, and academic interest in writing make me a perfect person to engage in scholarship within that gap.

I can imagine that if projects like the JSM project at Post occur throughout industrial workplaces, that if the “culture of the JSM” does, indeed, start to pervade industrial workplaces, factory floor workers will be more engaged in writing company documents in the future. This future excites me; industrial workplaces, because they are so very different from academia, can reveal work and writing practices that had not been previously conceptualized by writing scholars. As a working-class academic with a passion for studying writing, I happily see myself building a career in which I study factory floor writing.

My work begins here, in this dissertation, in which I focus on the voices of two factory floor writers. Rather than allowing my class move into academia overtake my working-class history and identity, I bring the two together because I don’t want to forget where I came from and the stories I have heard.

### *Dissertation Summary*

In the Introduction chapter to this dissertation, “Researching at an Intersection to Make Room for Shop Floor Stories,” I provided readers with background information regarding my interview participants, why I claim that Julio and Fullamena are craft knowledge masters at machine operation, and where I see this study in relation to other scholarship that focuses on writing, workplaces, and/or working-class culture. More than providing an entrance into the

dissertation, the purpose of my first chapter is to explain, in part, my own personal and scholarly connections to factory floor writing.

My second chapter, “A Phenomenological Sensibility as Influenced by Issues of Access,” had two focuses: 1. To discuss issues of access to factory spaces, specifically addressing why gaining access to places like factories is a difficult undertaking; and 2. To explain the methodology I utilized to conduct my research—what I call case-study with a phenomenological sensibility—and how it was shaped, in part, by the research site access issues I faced. I presented my own experiences in attempting to gain access to the factory floor of Post Cereals as a way to provide concrete evidence of the process of doing workplace research. In addition, I made arguments regarding the effect access can have on research projects, claiming, in particular, that it is important to have or form a relationship with an invested insider in order to gain research access to workplaces that are usually quite secretive. I also explained the concept of phenomenological sensibility, the approach I developed to conduct my interviews and analyze interview transcripts.

In my third chapter, “The Development of Job Skill Management Manuals Required Involvement from the Shop Floor,” I narrowed my focus to describing the JSM project that the three interview participants were engaged in. The Job Skill Management (JSM) training and reference manual project spanned four years and underwent several highly different approaches, and I describe the changes to reveal the organic nature of this kind of large-scale project. By the time the JSM project was shut down by Post’s employee union, factory floor machine operators were composing most of the texts with assistance from technical writers, making the project an interesting and unique context for the study of workplace writing.



The fourth and fifth chapters are the primary data chapters in which I presented the information shared with me by Julio Rodriguez and Fullamena. In chapter four, “Machine Operators Compose Right on the Floor, Right Next to the Machine,” I presented the writing processes and practices that Fullamena and Julio utilized in order to articulate the operating procedures for each of their machines. My interviews with Fullamena and Julio revealed that the writing processes, practices, and tools they used were controlled by their writing environments rather than any personal writing process preferences.

In chapter five, “Machine Operators’ Personal Reactions to Writing Reveal Their Factory Floor Craft Knowledge,” I drew readers’ attention to the personal reactions Fullamena and Julio had to their writing experiences. Despite the two distinct sets of writing activities they engaged in, both operators spoke of the powerful impact writing had upon the ways they viewed their own work. In this chapter I specifically focus on how writing helped them feel valued as intelligent and highly skilled experts, which in turn led them to feel a great sense of workplace worth.

### **Writing for a Changing Shop Floor Environment**

While Michael was working on the JSM project, he saw that operators, particularly the experienced and dedicated workers who end up being designated trainers, are incredibly knowledgeable about their machines. He thus saw an opportunity during the JSM development project to draw upon that knowledge to create operation procedural manuals. The choice to bring shop floor workers into writing certainly helped the company, Michael’s primary concern, but there were also surprising and important outcomes for factory floor workers who wrote about their operating processes. In my analysis of the information shared with me by Fullamena

and Julio Rodriguez, I have determined two key benefits as outcomes of their writing activities:

1. Julio and Fullamena feel their work is more valued when they were able to share their knowledge and expertise, and 2. Writing about their work helped Julio and Fullamena embrace expert identities by providing the opportunity for a greater understanding of their work and knowledge.

I find it interesting and useful to examine Julio and Fullamena's experiences within the context of the broad workplace issue of the changing nature of industry. Increasing reliance on complex machinery, combined with a dwindling workforce at Post, is the situation that led Michael to invest so much time and energy into the JSM project in the first place. In 1984, Shoshana Zuboff wrote an extensive book regarding the changing environments of industrial workplaces, specifically focusing on the increasing prevalence of computerized and robotic technologies. Though nearly 30-years-old, the text's primary concerns still seem to be valid today. In the early 1980s, as computer technologies began to advance rapidly, Zuboff presented the following concern regarding the role of technology in manufacturing:

Technology represents intelligence systematically applied to the problem of the body. It functions to amplify and surpass the organic limits of the body; it compensates for the body's fragility and vulnerability... In diminishing the role of the worker's body in the labor process, industrial technology has also tended to diminish the importance of the worker. In creating jobs that require less human effort, industrial technology has also been used to create jobs that require less human talent. In creating jobs that require less of the human body, industrial

production has also tended to create jobs that give less to the human body, in terms of opportunities to accrue knowledge in the production process. (22)

The influence of technology is certainly evident in manufacturing plants today, and this is particularly true at Post Cereals. Post had previously employed over 1,200 workers while today that has been reduced by half. Now, as my dad described to me, the building in which he works is sparsely populated because it only takes a few people to keep entire systems running. This means, though, that the machine operators have a great deal of responsibility to ensure their machines work effectively so productivity levels don't go down. However, when there is such heavy reliance on computerized and robotic technology, malfunctions can lead to serious disruptions. Therefore, the work of machine operators is incredibly important.

When technologies and responsibilities change in workplaces, documentation of those work responsibilities should change, too. Yet, many workplaces hold the view that Michael did early on in his work at Post, that floor workers only concern themselves with basic machine operations without the freedom or responsibility to do more complex work. In addition, workplace literacy is often viewed narrowly and rigidly, perpetuating, as Gowen explains in her study of literacy education in a hospital, management's ideologies of literate understandings and intelligence. The evidence of similar perspectives lies in the Detailed Process Sheets that were used by Post before the JSMs were developed. Michael saw a need in the changed factory floor to better provide machine operators with information they could utilize to effectively work in their new environment.

### *Sharing Knowledge and Expertise*

Feeling valued is not common for factory floor workers, at least that is the way the work is generally perceived. I felt a responsibility in this dissertation to emphasize that Fullamena and Julio are factory workers who are personally and meaningfully invested in their work and take great pride in doing that work well. This pride and investment led them both to take their writing tasks very seriously, leading to such outcomes as Fullamena identifying problems with safety protocols and Julio developing and then sharing his tips and strategies with trainees for doing change-overs faster.

Despite the personal gains both experienced through writing, when they shared their hard-won knowledge they felt they were leaving behind a 'legacy.' Fullamena expressed a desire to write a detailed procedure complete with explanations of why the rolling and drying machine works the way it does so that future female workers who want to know about mechanical operations will have that information. She also wants those potential future women to think well of her, to see her as a dedicated and intelligent person who knew what she was talking about. Julio Rodriguez has spent his career, and the decade of operating the packaging machine in particular, learning and strategizing to increase productivity and efficiency. He is relied upon at Post to solve problems. He doesn't want all of his hard work and knowledge to leave the plant with him when he retires; he wants his work to matter beyond him. I don't think factory workers are often perceived as individuals who want and can contribute to the companies they work for beyond what their bodies offer, that they want their workplace to be better off because of them.

### *Embracing Expert Identities*

The act of writing their procedures led both Fullamena and Julio to see their work in important new ways. Both described that throughout their writing processes, they learned new things about the work they do every day, gaining deeper insights into their machines. One of the effects of writing out procedures for these two expert operators was that it helped reveal and articulate what they already knew about their machines, thus allowing them to see the extent of their expertise. I can imagine that when they started to explain the small details of their daily work, they realized they had a great deal to share. A second effect of writing out procedures for Julio and Fullamena is that they were able to reveal gaps in their own knowledge and the knowledge of the company. Knowing that these gaps existed prompted them both to find the information they were missing. Thus, after decades of work in the same place and with many of the same machines, Fullamena and Julio Rodriguez realized they still had opportunities to learn new things.

For dedicated and proud workers like Fullamena and Julio, the chance for new learning and growth was valued because it provided an opportunity for them to gain a greater understanding of their work and knowledge. Eventually, for both operators, writing about work led them to realize and then embrace identities as experts at their work. Though Michael had not been aware of such a personal outcome of involving operators in writing, the work done by Julio and Fullamena because of their personal sense of being experts can meet Michael's goals of fine-tuning operating procedures. When an operator feels like an expert, he or she might then feel more comfortable to initiate new procedures that will improve productivity. In contrast, when Fullamena didn't feel like an expert, for example, she did not believe she could

alter the processes she was taught, nor did she really have the desire to do so. However, once she started to embrace her identity as an expert, she started feeling more comfortable and confident in her ability to suggest changes.

#### *Benefits of Factory Floor Writing for Workers and the Company They Work For*

I think Fullamena clearly and directly demonstrates the value these two operators feel about sharing their expert knowledge with others: “I would advise anybody, any company, if they really wanted to move forward and teach their people, when you contribute, when your knowledge is valued, and when you understood stuff, you’re going to care more.” The act of writing, at least for Julio and Fullamena, led to an even greater sense of investment in their work, to care more. In addition, the level of care that Julio and Fullamena apply to their work extends beyond the questions asked in this study. I speculate that training might be more like mentoring, with the existing eight weeks that new employees currently receive could serve as time to teach basic operating and change-over procedures, and the written guides could provide continued assistance when new, unfamiliar problems and needs arise. Furthermore, if operators like Julio and Fullamena are made available for intervention teaching moments when complex problems occur and the manuals are not sufficient, the culture of the JSM that Michael wants to create and perpetuate (which I address in the next section) could be more successful.

#### **Company Culture and How it Limits the JSM Project’s Impact**

Despite the positive move Michael and the company made in recruiting designated trainers to write such important documents as the JSMs, the benefits are limited by the company culture. The JSM project was limited by the union’s suspicion of the management, management’s fluctuating dedication to allowing experienced machine operators compose for

the JSMs rather than running their machines, and the plant workers' inconsistent use of the JSMs as reference guides. Nearly a year after my initial visits to Post, Julio Rodriguez has to work a lot of overtime and help other workers because the culture of learning and knowledge that he, Fullamena, and Michael had hoped would grow isn't moving along very quickly.

While writing this dissertation, Julio talked to me about his frustration with other workers who do not utilize the resources available to them. He shares some of these stories with animosity because sometimes it is simply the lack of other workers' focus and thinking that makes him stay at work late. For example, he had to help another operator figure out why the packaging machine wasn't operating properly. It turned out that the other operator had not changed the machine's settings when the size of bag and boxes were changed. Frustratingly, Julio asked whether the operator had even referenced the operating guide for that machine to figure out what the problem was, and he hadn't. It doesn't matter how good an operating manual is if workers don't ever read it.

Michael, though, during our interview, commented that many workers have approached him explaining how effective and useful the JSMs are, and that when he finished the draft of his first JSM he was bombarded with requests from other areas of the plant for JSMs tailored to their processes. It is obvious, then, that there are some workers who highly value the JSMs and what the company is trying to accomplish through them, yet others still reject, or don't even think to use, such resources. The JSMs are new, though, and there is still a good chance that they will be more effectively used in the future.

## **Situational Influence on Writing Processes**

At this point I shift my focus from the Julio and Fullamena's reactions to the JSMs and the act of writing official company documents. I will now discuss what I am calling "situational influence," which is the impact a composing environment has upon writing practices and processes. Because, as I explained in Chapter 4, Fullamena and Julio's writing practices were so dramatically different, their experiences writing effectively reveal just how much situational influence can affect how writing is done.

### *An Academic Focus on Situation*

At the Writing Center at Michigan State University we use the heuristic M.A.P.S. to help client writers consider revision possibilities. M.A.P.S. stands for Mode (we ask writers to think about both the genre and medium through which they are presenting ideas), Audience (who are they writing for), Purpose (what they want to accomplish through their writing), and Situation (everything that surrounds the piece of writing and influences writing activities). Many Writing Center consultants find it easy to talk about the first three considerations—Mode, Audience, and Purpose—but struggle with what to say regarding Situation. After all, it seems to be the same for most student writers: the situation is the class the piece of writing is for, how much time the writers have before the final product is due, and environments the writer has to choose from to compose within. If we move beyond the classroom environment, even within academia, the influence of Situation becomes much stronger, and the impact it has upon writing processes becomes important to consider.



### *Processes Shaped by Available Resources*

By examining the differences between Julio and Fullamena's writing experiences, what is most evident is that *situation*—the company's regulations regarding time and resources—was the most dominant force in determining their writing practices and processes. Fullamena wrote linearly from an outline, Julio took notes and then arranged them into a linear order. Fullamena used a computer, and Julio wrote by hand. Fullamena's text will be maintained in the JSMs for as long as the manuals are used while Julio individually distributes his texts to trainees. Fullamena's knowledge and expertise, as displayed through her explanations of machine operations, are accessible to anyone who also works the rice rolling and drying machine, but Julio's expertise is only accessible to people who train with him (or if one of his past trainees keeps and then shares her or his own Julio-crafted guide). The differences between Fullamena and Julio's experiences reveal a key point of consideration: if workplaces want inexperienced writers to compose successfully, then those writers need to be well-supported by the company by being provided with time and resources.

More importantly to me and to this dissertation, though, is that despite the differences in their composing situations, Fullamena and Julio had the same audience—their fellow workers—and the same purpose—to share their knowledge about machine operations. Because of their investment in their work, they both found ways to express their knowledge and expertise through writing. What Julio's experiences reveal, in particular, is that sometimes a writer has to be incredibly flexible to work within the situational influences forced upon him. His flexibility developed through trial and error, for he figured out on his own how to negotiate his purpose with his situation.

### *Processes Shaped by the Union*

There were other situational influences at play as both operators sought to compose the best, most complete document they could. The Post union, with its goal to ensure the retention of the employees who are still left at the plant and a good, secure working environment for future employees, tried to convince all JSM writers to limit the quantity and detail of the content they included in the manuals because such limits would mean that only veteran employees hold the most important knowledge. The Post union explicitly approached Fullamena to discuss this issue, pressuring her to leave out some of the operating information; this pressure put Fullamena in a difficult situation where she was torn between developing a high quality, highly detailed, useful JSM section and maintaining her allegiance to the union and the employees that union represents. Julio Rodriguez, because he did not have the chance to officially write for the JSMs, was not directly approach by the union and “warned,” in a sense, to be careful about the amount of information he shared. However, he was still highly aware of the pervading union pressure regarding job protection, illustrating the intensity of the union and workers’ concerns for self-preservation.

Interestingly, though both Julio and Fullamena support their union and appreciate the power that union organization provides, they also both disagree with the union’s choice to shut down work on the JSMs. Neither operator believes that a new employee, even an experienced Post employee who is new to a machine, could ever just read about how to operate a particular piece of equipment and do that work effectively. Such an opinion that Post could fire the experienced operators once their knowledge was put on paper underestimates the extent of craft knowledge that such master operators possess. Given the machine operation expertise

that can only come with time running a machine, the union's belief that revealing the details of this work can lead to replacing experienced operators with inexperienced ones is actually rather insulting, despite well-meaning intentions. This differing of opinions reveals the level of misunderstanding that comes with factory floor labor.

### **Thinking About Future Studies of Situation**

When I began this work that seeks to know the writing processes and practices of two machine operators, I was primarily focused on the combined physical/mental activity that writing is for Julio Rodriguez and Fullamena. I was curious about how they write because I wanted to see processes that differ from what I generally see, teach, and practice in academic environments. I still want to observe writing practices in action in order to better understand embodied writing activities. However, what was more strongly revealed in Fullamena and Julio's writing practices and processes was the strength of influence that situation had upon composing work. Conducting research for this dissertation and analyzing the information shared with me has inspired me to envision future work that specifically focuses on the influences that situation has upon writing practices.

In close relation to the work I have already completed regarding the writing processes of factory machine operators, I plan to move my research into an actual factory environment. With all issues of access aside, in a perfect research scenario I would like to observe factory floor workers who engage in writing and note the varying influences that shape their practices. Essentially, I would take what I have learned during this dissertation research and extend it into actual observations of writing in action. I am curious about the tools that are used by floor workers who write, the resources that are or are not provided by the company, and how

individual workers negotiate their environment in order to produce texts. I see this future research as a far more extensive case study than the one I have already conducted, for it would include not only interviews but also observations and perhaps even documents. I, of course, would like to return to Post to do this work, but issues of access based on the shut-down of writing work might make it impossible.

I also see great potential for researching situational influences in academic environments. I have been inspired by Fullamena and Julio's writing practices and processes to consider how situational diversity can be integrated into writing pedagogy. I am currently in the process of developing such a pedagogy, for I believe that asking students to write in a variety of situations—different environments, tools, resources, practices—could aid in my primary goal of helping students develop flexible writing and thinking practices. The factory floor at Post, for example, is an incredibly loud, distracting, complex space; yet, Fullamena and my dad both wrote in such environments. In addition, they both had to negotiate the pressures of the union and figure out how to develop texts with the tools they had access to. I see such practices as helping them both develop flexible approaches to writing. Because the central concern of my own teaching philosophy is helping students develop flexibility, assignments and activities that ask them to adjust their writing processes based on highly different situations can effectively help them develop such flexibility. Once I implement a curriculum that requires students to practice at developing flexible writing practices, I plan to conduct a research project that analyzes my own teaching approach and the assignments I created alongside students' work and reflections regarding that work.

## Limitations of This Project

Despite my own excitement about the information shared with me by Fullamena, Julio Rodriguez, and Michael, I do recognize that there are several key limitations in this work. Some limitations were, of course, beyond my control and others were established through the aspects of the research I chose to focus on, leaving important considerations out.

I acknowledge that this research would have been richer and more substantial if I had been able to observe machine operators writing, conducting interviews soon after they engaged in writing activities. The information I gathered would have been much more specific and detailed. The lack of access I had to the factory floor, though, made that impossible. By the time I realized I wouldn't have factory floor access, it was too late for me to start my work over with a new factory. In addition, my dad was at Post, and as I discussed in Chapter 2, an invested insider might be essential to conducting workplace research when the researcher is an outsider. Therefore, because I had already started working on interview questions and recruitment handouts for Post, I readjusted my research methods and focus to accommodate the necessary change. However, as I also discussed in Chapter 2, it turned out that the change in research location and methods did not diminish the impact I sought to make with my work. I remain excited about what I learned and realize how much a research situation influences the information gathered.

A second limitation to this project is, of course, the fact that my findings are not broadly generalizable. I have made speculative statements in this conclusion regarding the benefits of including expert factory floor workers in the writing of official procedural guides, but the only findings I can state with any certainty are regarding Julio and Fullamena only. This is the

constant limitation of case study work. The lack of breadth is compensated by the depth of information Julio Rodriguez and Fullamena shared with me. Though I could have conducted several interviews with each of the three research participants, I believe the stories and descriptions shared with me in the single interview I had with each participant were sufficient for the scope of this project.

A third limitation also relates to scope, that I do not explicitly address the very clear issues of power, authority, hierarchy, ethnicity/race, and gender at play in the situation surrounding Julio Rodriguez and Fullamena's writing. I made a choice to avoid interview questions that asked about these issues of power and I made a choice to avoid lengthy discussions of any of these issues in this dissertation, even though there are several key areas where I could have made that move. I chose, instead, to focus on writing practices and processes and the personal reactions each machine operator had to their writing activities. I also chose, instead, to present information regarding the environment surrounding those activities and reactions—the city of Battle Creek, the history of cereal and of Post Cereals, and the JSM manual writing project. Providing this backdrop to the actual writing practices required the space and time that I could have otherwise dedicated to issues of power and authority and hierarchy and the influences they have on race/ethnicity identities and gender. I felt that there is a great deal of such work in the field of workplace writing and working-class studies, and I wanted to add something different to these existing conversations. Writing on the factory floor is an area of study that combines my interests in the working-class and my own experiences growing up in a working-class family with my educational history and interests in studying writing.

## **Concluding Thoughts**

Even though there are clear limitations to my work, I do offer in this dissertation an argument for increased scholarly attention on the writing that occurs in non-classroom spaces, like the factory floor. I especially offer in this dissertation a focus on individuals who are not often seen as writers: factory machine operators. Even the plant manager at Battle Creek Post Cereals was unaware of the extent to which these operators were writing, demonstrating how hidden those practices actually are. In addition, this dissertation also argues for a more explicit consideration of situation in relation to writing processes. Rather than the writing process movements focus on “good” writing practices and the ordering of those practices, I have chosen to focus on how situation influences writing practices. Looking at writing in this way, from the outside in rather than from the inside out can add an important dimension to existing writing pedagogies and practices.

## APPENDICES



APPENDIX A  
INTERVIEW QUESTIONS

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**Questions for Interview with Michael**

1. Describe the work you did for the company.
2. What was your role in the development of the JSMs?
3. What kinds of information were you given when you were asked to help develop the JSMs?
4. What kinds of help were available for you to use to develop the JSMs?
5. In what ways did you choose to use this help?
6. What tools/programs did you use to write the JSMs?
7. Did you do any of your JSM work on the factory floor?
  - a. Which work?
  - b. Why did you decide to do that work there?
8. When and how did you give the JSMs to the employees?
9. What was especially difficult about making this version of the JSMs?
  - a. Did you expect these things to be difficult?
  - b. What surprised you?
10. What was your thinking behind your formatting and organizational decisions?

**Questions for Interviews with Fullamena and Julio Rodriguez**

1. Describe the work you do.
2. How were you approached to help develop the JSMs?
3. What was your role in the development of the JSMs?
4. Talk me through the steps that you took to develop your part of the JSMs.
  - a. What were the decisions that went into your writing of the JSMs?
  - b. What decisions were easy for you to make?

- c. What decisions were hard for you to make?
  - d. Who was involved in helping you make decisions?
- 5. What kinds of help were available to you?
  - a. Were there forms of help you wanted but couldn't find?
  - b. Were there forms of help available to you that you didn't use?
- 6. Describe the places where you worked on the JSMs.
  - a. Did these places change over time or stay the same?
  - b. What work did you do in each of these places?
- 7. What kinds of writing tools—such as pen, paper, word processing programs—did you use to write?
- 8. What have been some of the barriers or limitations you have felt about writing the JSMs?
- 9. What do you think your participation helped make happen that couldn't have happened without you?
- 10. What individual gain(s) did you get out of your work on the JSMs?

APPENDIX B  
RECRUITMENT LETTER

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I am Elena Garcia and I am a PhD candidate affiliated with the Rhetoric & Writing program at Michigan State University. I am conducting research for my dissertation project. The information I collect will be used to write a large, book-length document that I will also look to publish as an actual book.

I am working on a project that will explore the experiences of individuals involved in the development of the JSM documents. By talking with these individuals, I will gain insights into issues regarding the overall goals and process of the project as well as how and where the materials were developed. In addition, I will seek reflections about the intentions of use for the manuals and whether there is belief that the manuals are being used as intended for training.

Since you have been involved in the development of the JSMs at Post Cereals, I am interested in talking with you about your experiences. Some of the key questions that will drive my observations and conversations with the designated trainers are as follows: How were the portions written by the designated trainers developed? What tools and resources were available to the designated trainers? What tools and resources did they decide to use and why? How did they determine what to write? Where did they write and why did they write there?

And some key questions that will drive my conversations with a project leader are as follows: What were the original goals for the JSM project? How was the JSM project structured? Why were the designated trainers sought to develop portions of the manuals? How was material gathered to be put into these manuals? What were the considerations involved with the determinations of the structure and content of the manuals?

I am currently negotiating to conduct my research during your normal work hours; however, if that doesn't work out, I am hoping you would be willing to meet with me outside of your work hours. I would like to conduct a 1-hour interview with each of the three participants who agree to work with me, with the potential for a 1-hour follow-up interview. When I refer to you in my written documents, I will be using a pseudonym of your choice to maintain confidentiality.

If you are interested in participating, please contact me at [elena.ma.garcia@gmail.com](mailto:elena.ma.garcia@gmail.com) and/or 269.967.2456. Or you could tell Lupe Garcia if you see him in person. Thank You!

Elena Garcia

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