



## Chapter 6: Conclusion – Reorienting to the Realities of Mobile Composing

I am struck by how transient are the images of myself as a writer when compared to the seemingly immutable picture of the author limned by the scene in the garret.

–Linda Brodkey, 1984, p. 396

Student practices like those I have traced in this book challenge educators to reposition ourselves beyond the vantage point typically afforded to university instructors: to pay attention to and care about the unfamiliar pathways that students take through even the simplest writing tasks. Most students chart their own course through writing assignments, inventing their own processes of composing just as much as their own products. Those processes are heavily influenced by the materials that surround students—those that have been taken up into their habitual routines for writing, as well as those that they encounter as the result of making decisions about where and when to write.

Electronic mobile composing devices do not create this situation. By contrast, composing has long been transient and transitory; pens and pencils and notebooks supported writing along life's pathways long before smartphones and laptops were integrated into many people's everyday lives. However, the presence of networked devices expands the surroundings composers can easily reach in transient locations. In addition to co-present people and materials, composers have proximity to the expanse of the internet. Mixing this abundant information into the social and material context of local places has direct effects on composing, in part by shaping agencies such as sociability and attention that are constructed by interacting materials.

Rather than focusing attention only on screens or on movements through space, understanding composing under these conditions requires looking across geographical and informational orientations to the multiple materials that anchor composing choices. I argue that doing so will require us to interrogate normative models of both attention and sociability as they intersect with composing processes and conditions. Instead of positioning interactions among co-present people as a “general good,” we will need to see them instead as “means to aid particular kinds of work” (Heerwagen et al., 2004, p. 525). Furthermore, we will need to look beyond the concepts of “distraction” and

“multitasking” in order to develop new language for describing the practices of writing with and in the presence of burgeoning information. We will need to think about when and how strategic detachment from mobile devices can support moments of relative “social quiet” for contemplation, as well as understanding when abundant sociability can expand the potential for composing connections. Users of networked mobile technologies are invited into new forms of collaboration that will benefit from strategic reflection and habit-building.

With the goal of supporting future research and teaching practices, this concluding chapter connects what I have learned about composing with networked mobile technologies to a broader framework for composing. After reviewing key insights from research participants, I momentarily step back from the focus on mobile networked technologies by arguing for a conception of composing based in bodily rather than cognitive intention, where embodiment is understood as contingent and interconnected with time, space, and technology and where movement, location, and positioning matter to composing experience. I argue that this way of approaching composing demands that we look beyond the classroom, decentering school environments from the central place we often assume they have in composing practice or indeed composing learning. I introduce this idea in order to argue for a model of composing learning or development that is more aware of bodily habit and routine across contexts. From this perspective, writing learning becomes more than a cognitive practice of metacognition or a social practice of apprenticeship. In addition to social and cognitive dimensions, composing learning has a physical, spatial dimension that relates directly to how composers develop relations of familiarity and habit with places, materials, and information. These relationships become participants in composing, such that learning to write differently often means explicitly changing habits of movement, location, and proximity. While Nedra Reynolds (2004) and Terese Monberg (2009) have made similar arguments about writing development, I want to reposition the spatial proximities that matter to learning as always existing as hybrid spaces experienced across multiple social and informational domains. The information domains that accompany mobile device use can no longer be positioned as distractions from the real movements that take place in physical space, but instead should be understood as integrated with physical materials in composing practice.

To illustrate, I weave my ideas about composing with a final research narrative about a student named Ray. Ray, an African-American male health sciences major, used campus social spaces for gaming as well as writing for his composition course. I anchor this concluding chapter to *Transient Literacies in Action* with Ray’s case because I ended my analysis convinced that Ray’s

activity in the Technology Commons epitomizes the complexities and contradictions of habits, routines, sociability, attention, and interactions among information domains and resources that are enmeshed in transient literacies. Those of us who encounter students in higher education institutions often glimpse only a limited view of these practices that can be clouded by our positions of power in classroom settings and assumptions about when and what kinds of sociability and attention are appropriate to writing learning. After reading Ray's experience of movement across university spaces, the chapter draws on this narrative to broaden the scene of where transient literacies matter. I conclude with a closer look at how transient literacies intersect with contemporary academic, workplace, and community literacy domains.

## The Conditions of Networked Mobile Composing

To begin, I want to review some key insights from research participants. First, and most simply, paying close attention to networked mobile composing reveals the ways in which composing relies upon dynamic, shared resources experienced across physical and online environments. Composing with a laptop is always a cross-domain experience. It means moving within densely interconnected physical and information space, and it means invoking personal repertoires alongside materials, attitudes, and values that emerge from elsewhere. This is a relatively simple idea on the surface; however, the way that we discuss composing tasks and situations frequently highlights the material dimension of composing that describes where and how writing will eventually circulate. For example, we tend to think of social media posts as “digital writing” or as research papers as “academic writing,” failing to account for the way that social media posts are composed in physical places that are impacted by how attention has been redirected to online spaces through phones or laptops or how research papers are composed with technologies that place their production in close proximity to online information and platforms. These kinds of categorizations are useful, but obscure the realities of the conditions of their production.

Participants in this research situated a range of “academic” and “digital” genres into hybrid spaces, though they frequently discussed physical and online spaces as separate rather than interconnected. Take, for example, Kim in Chapter 3 who chose *Gone Wired* as a workspace for academic composing purposefully as an alternative to her home and campus office because of its ambiance, as well as its ability to create temporary privacy. She had an intuitive sense of what each physical place offered and could position herself in ways that enabled positive interactions. Things became more complicated for Kim and others, however, as they began to position shared social spaces as

layered with information spaces. Planning composing as an activity invoking both online and offline materials was more complicated for the students in this study. Ed, for instance, noted that he came to *Gone Wired* to study but frequently found himself surfing the internet instead.

Students also struggled to find ways to work across physical and online environments when composing as groups. For example, recall that the business students Charlotte, Owen, and Gabriel discussed in Chapter 2 had a difficult time bringing their multiple individual habits and assumptions into alignment when composing a business plan together. As we know from Amanda Bemer, Ryan Moeller, and Cheryl Ball (2009), students composing in flexible shared social places of the university often do not configure their environments in ways that might best support their needs. This case study suggested that they likewise may be less well prepared to reconfigure the interpersonal dynamics of collaboration, as layered in physical and information spaces. As I argue through their case, students are often unprepared for how bringing the wide-ranging materials of composing into alignment requires methods of negotiation that are more complex than a frame for collaboration based in shared presence or simply “showing up in the same place.”

If my research reveals that online and physical information realms are complexly interconnected in composing, an implication of this idea is that “presence” in composing is also complicated. Presence, by which I mean the condition of being in a place, cannot be defined only by co-location in physical space when we experience life across online and physical spaces. The participants in this study reveal the ways in which being in a place for writing is a complex exercise of negotiating multiple social channels. While writing with laptops, participants such as Micah and Sal in Chapter 4 gesture to how presence continually shifts as composers sense and monitor physical and online places simultaneously. Recall that an important part of Sal and Micah’s basic negotiations in Chapter 4 when using mobile devices involved practices to prioritize when to foreground each of the multiple, overlapping social platforms that existed around them simultaneously. Ann, discussed in Chapter 5, demonstrates how this passive social contact made coursework present during moments when she was socializing. Thus, “presence” looks different when we carry networked mobile devices: the same ties that scholars such as Sherry Turkle (2011) identified as responsible for social disconnection and isolation in face-to-face presence are simultaneously creating the potential for online connection.

Participants in this study further illustrate how the experience of being in time compounds for composers alongside the experience of being in space. Participants in the research were consumed by strategies to manipulate time by making it thick and dense with interaction. Much in the same way that

social learning theories emphasize what Colin Lankshear and Michel Knobel (2011) called “innovation and productiveness,” the students in this book use layered spaces in time to expand the scene of their learning. Rather than thinking in linear paths, they were constantly looking for ways to get there faster by expanding the horizon of possibility in a moment. For example, in Chapter 5, I discussed how Ann, Dean, and Carly sought to make time “thicker” by multiplying the channels and potential resources that participated in their composing in a given moment. The presence and potential of mobile technologies enabled ways of orienting to coursework that would be unlikely to happen without them: the continual monitoring of class content for Ann, and the expansion of a learning scene through the dual laptop setup for Dean and Carly. As these spatial and temporal practices become second nature, composers may find themselves overwhelmed by layering more materials or interactions than can be fully engaged. In addition to cultivating social potential, networked mobile device users also need to be prepared to make overt decisions about when to disengage from one or more of the multiple channels through which they interact with others. For students in this research, planning to disengage from people they knew or from co-present others appeared to be easier than disengaging from online contacts.

## **Resituating Composing Learning Through a Focus on Bodily Intention**

These lessons about the temporal, spatial, and informational experience have implications for composing that extend beyond an interest in networked mobile devices. Participants’ practices emphasize how what writers do when they compose is a matter that depends upon material participants in dialogue with their own orientations and tendencies. Composing movements are often habitual—the ways that we move can be carefully calculated, but often emerge from more pragmatic lived realities connected to convenience, access, schedules, comfort, and perceptions and realities of acceptance. While this issue has been of interest to writing researchers and educators as it relates to how to keep attention in the classroom when students use mobile devices, we have not done enough to think outside that context to the problem (and opportunity) of understanding composing’s materiality outside of it. As dimensions of materiality beyond the classroom become entangled in composing, we are seeing arrangements that create new interpersonal and attentional contexts. At the same time, people are constantly adjusting and changing as they move through the world with technologies, developing with and alongside them.

These conditions point to the need for a conception of writing learning that is more engaged with how experiences of navigating information-rich

spaces leave legacies of prior experience and tendency written onto composing bodies. Because people's composing processes are continually in a slow process of becoming with technologies and the infrastructures that support them, we need ways to understand the slow bodily learning that participates alongside cognitive changes and social apprenticeship in how composers develop. This necessarily will mean decentering the classroom as central to our inquiries into writing development. Classrooms are sometimes meaningful and memorable to our becoming as writers, but they represent only slivers in the expanses of experience that add up to inform a moment of action in the present. Caring about composing from this perspective means that we need a better understanding of how composers become with technologies, as devices, platforms, and their social positioning likewise change and enable new possibilities. In short, I am arguing for an approach to composing that situates composers as more fully embodied, where embodiment is not separate from space, time, and technology. To explain what I mean, I now turn to a final narrative from a research participant named Ray, emphasizing a process of material apprenticeship in his transient literacy practices where his movement in information-rich spaces outside the classroom provide a metaphor for the act of becoming with technology-rich environments.

### **Ray's Story: Habits of Movement, and Building Transient Literacies**

Ray squinted through thin, silver-rimmed glasses as he leaned back and adjusted positions in the chair he had been sitting in for hours. His battle was set to begin. Crossing one leg over the other, he waited for the opening screen that would soon display the text, "Injustice: Gods Among Us," over the top of a city skyline, gray streets set off by purple sky.<sup>10</sup> As the title screen trailed away, two arch-enemies entered the screen: Superman and Lex Luthor. This clash, just one confrontation in a long history between the two characters, transpired on a flat panel display screen supported by an X-box game system in the Technology Commons. Normally the screens set into the walls of the learning commons displayed weather conditions, hours of operation, and brief instructional programming; however, on this day space administrators had connected an X-Box game system to this screen. According to a yellow post-it note affixed to the console, the game system was open for public use

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10 Injustice: Gods Among Us is a video game developed by NetherRealm Studios and copyrighted by Warner Brother Entertainment Inc. Released by the creators of Mortal Kombat, this "fighting game" used legendary DC Comics characters like Batman and Wonder Woman to populate battle scenes. Players could maneuver a character through the game's storyline or play a battle mode that entailed one-on-one fights between characters in "arenas" or story environments.

until 3 p.m., when the Commons reached peak usage hours. And, so at noon on a Tuesday, Ray sat in a small chair usually paired with the café-style tables across the room. Someone had placed the chair in front of the display screen about three feet away—close enough for the relatively short cable on his wired personal game controller to reach the game system. Although the room was full of other students, Ray was playing *Injustice* alone, his focus intense on the screen as he gripped the game controller.

Ray typically played video games alone, located among other students dotted on couches and café tables across the large room. These were other students mostly tuned into collaborative projects or their own technologies. While he sometimes met people in the Technology Commons who wanted to join him, Ray shared that his participation in gaming was less motivated by any desire to interact socially and more connected to his love for the game: for his desire to *practice*, in the sense that the term means enacting an activity repeatedly with the goal of honing an ability or craft. At first I was unsure about whether to include activities like Ray's in my analysis. After all, Ray was not using a laptop. However, gamers were a ubiquitous presence in the Technology Commons whenever space administrators hooked up the X-Box and left it connected for students to use during open hours. The gamers' presence also invoked tensions I have referenced throughout this book: Was this an appropriate use of a shared university commons space, one that university and space administrators should support? Or just a waste of time?

## Cultivating Habits of Movement

I decided to look more closely at what Ray was doing while he played *Injustice* through the lens of my interest in transient literacies. I'm not a game studies scholar and do not have much experience playing video games, so my observation came from the perspective of an outsider. However, what I noticed immediately was the game involved routine sequences of interaction that involved engaging with materials in the game world to build the potential for new forms of movement. While *Injustice* was far from a "learning game," it engaged Ray in what James Paul Gee (2003) in *What Video Games Have to Teach Us About Learning and Literacy* referred to as the "active learning" of gameplay.

Let me explain. The gist of *Injustice* is that it is a fighting game in which users battle an opponent by controlling a character or avatar of their choice. To locate fights, players also choose an arena in which to conduct their battles, a meaningful task because different environments for fighting create the possibility of interacting with different possible materials gathered in the varied places. Each arena contained a different set of "interactables" or materials in a scene that could be manipulated to one's advantage (e.g., cars, robots, and

a plane rudder in the Metropolis arena) and thus shaped the possibilities for how to gain advantage in a given battle. Furthermore, each environment also included different “stage transitions” that moved a battle from one place to another internal to the environment.

Watching Ray for over an hour of gameplay was interesting because he often replayed battles in which he had previously failed, now armed with new knowledge about the possible interactions of the environment. If Ray lost a battle within a particular environment, he would enter the game scenario again with the new memory of how the skills and materials in this particular arrangement might intersect in practice the next time. Of course, things were not exactly the same when he entered an environment for a second time, but there were certainly overlapping dimensions of the experience that could inform what he understood about sequencing interactions. For example, when he re-played a battle among Wonder Woman and Solomon Grundy for the second time, Ray did not precisely retread the steps of his prior fight. Instead of maneuvering to the right side of the Hall of Justice and using the stage transition to relocate characters, he pushed Wonder Woman to the left toward two statues that could be used as props. This time he won, which meant he’d proceed on to a different battle next time.

Intuitively, Ray went about orienting his avatar to each battle’s arena’s chosen environment by moving in ways that enabled him to continually test each form of knowledge, to sometimes succeed and sometimes fail, and then to return to the scene again with a clearer sense of the potential for materials, movements, and interactions. Ray picked up new knowledge about each battle setting and environment through practice and, in so doing, began to orient to each environment in new ways. He honed his movements (through an avatar in this case) through training as he repeated sequences of interaction with small differences (Hawhee, 2004). When he became bored, succeeded repeatedly, or found himself continually failing, he changed up the combination and tried out something else.

In the same way that I learned something about how students negotiate face-to-face interactions with strangers by paying attention to their social media use, I found myself reflecting on how the knowledge that students develop about places and materials of composing could be described in terms that are similar to the way that Ray proceeded through the game. Ray negotiated the potential of constructed material objects and architectures, invoking and mobilizing their potential as just one part of what it meant to play. Kurt Squire’s (2007) learning heuristics for fighter games helped me understand more about the kinds of practical skill building that are associated with becoming an expert at this kind of game: someone who practices the game as an art rather than as a “buttonmasher.” While I admit to reading this activity

through my own uninitiated lenses, I began to see in Ray's game play an illustration of how we build the practical knowledges of navigation and location that I have described in this book as transient literacies.

## Learning to Move

By enacting the repeated strategy for gameplay that I have just described, Ray *learned to move* within the game through an intricate but implicit trial and error system. By continually interacting in similar but slightly different ways, he built many kinds of knowledge that helped him begin to predict the sorts of interactions that were likely to take place when he engaged elements of the game. As he played, he was first building knowledge about the capacity of the avatar he had chosen. Each character was associated with different strengths and weaknesses and playing within a particular embodiment meant taking on the material constraints of that avatar. Likewise, all opponents in the fight were embodied differently and also worked within their individual constraints. Turning outward, Ray was also gaining a knowledge of what materials each environment offered that could be taken up and used by those in the fight. He was learning about the arrangement of the setting and its rooms, the interactables that were included within them, and where to find them. In order to be an expert fighter, one needed to understand the capacity of those materials relative to the strengths and constraints of one's own avatar and the opponent's. Interacting with those materials also sometimes changed the environment itself in meaningful ways, and so it was important to understand how those reactions might alter the fight. Finally, Ray learned how to position one's avatar within the time and space of the setting in order to access interactions, as well as to avoid potential danger.

It is possible that I have stretched the metaphor of Ray's gameplay too far, but my point is not to reflect on *Injustice* as a game. Instead, I would like to shift to a more speculative mode in order to suggest that we think about students' acquisition of transient literacies through a model that works a bit like Ray's gameplay. That is, students often develop routines of spatial and informational navigation and location through informal trial and error. In this model, they internalize the capacity of places and their materials as they intersect with their own strengths and weaknesses, picking up bits of knowledge about where they can plug in laptops or whether they can find the quiet sections in a large, open room. This learning is rarely articulated, but instead is picked up implicitly. Students develop and carry embodied knowledge about the relationship between their own practices, the capacity of environments and materials, and specific ways of positioning themselves that lead to interactions with materials that support their goals.

Of course, there are significant differences between the stakes of the trial-and-error approach to learning that Ray enacts to build embodied knowledge as he plays a fighter game and the realities of learning about the capacity of materials, environments, and one's own resources as a composer. For one, the video game allows for failure in ways that composing choices often do not. When Ray realizes that a given strategy is not working in the game, he loses a battle and starts that game over. However, when students fail to gain access to needed materials or mobilize materials that do not perform in expected ways, the stakes associated with failure in writing are much higher. As the previous chapters have illustrated, different kinds of danger are associated with testing out the capacity of ourselves and our surroundings when composing. For students who work with(in) the mediated attentional, social, and spatial dynamics this book describes, strategies for planning and orchestrating practices cannot be positioned an avoidable "add-on" to the important cognitive work of literacy. Without these coordinative practices that might easily be dismissed as lower-level skills (i.e., "time management," or "getting organized"), students cannot achieve literacy practices.

Furthermore, the metaphor is limited in a different way. Game players often do not rely on their embodied movements alone to build a practical knowledge of how to move through a game space. Instead, they conduct meta-play moves: they read guides, they talk to friends, they watch others, they check Wikis. In short, they enter into a vast online and physical information expanse that enables them to get new perspective on the possibilities of gameplay. In other words, their movements do not have to be isolated from alternative co-existing experiences and perspectives that can alter their own understandings in ways that create interventions into habits and routines. We are not stuck in habits forever. Composers learn through bodily habit and intention, but also need the opportunity to gain alternative perspectives on their orientations and proximities—to learn what other people do, to understand alternative technological platforms, to get outside their prior experience of the game.

## Getting Outside the Game

This is where we can turn back to the embodied material approaches that I cited in Chapter 3. Recall that Paula Moya (2002) argued that interpretation of experience can become an object that participates in our ongoing becoming, shaping who we are and how we operate. In addition to learning transient literacies through a trial and error experience of interaction with places and technologies, composers can also get outside the game so to speak, through reflections on their own orientations and/or experiences with alternative po-

sitionings. In classroom learning, study projects that ask students to explicitly focus on mapping their use of time, space, or materials create the possibility for making interpretations of experience agentive objects in our ongoing development as composers. Outside the classroom, our networked mobile devices can help with these self studies. Both Apple and Android mobile phones, for instance, offer time tracking capabilities that can help composers better understand their use of their phone in general and applications in particular. Furthermore, the vast range of available productivity software can push composers into new kinds of habits and orientations to their technological platforms in ways that encourage reflection. As we talk through these ways of interpreting experience and potentially ask students to use them in classes, it is important not to resort to normative conceptions of how time should be spent while writing. Instead, these tools should be positioned as ways to gain new perspective on experience. Furthermore, it is important to talk with students about the data, privacy, and surveillance implications of these tools.

As for Ray's ability to get outside the game, I learned much from our conversation about his transient literacies outside the game and, in particular, his movement through campus spaces. In particular, his academic writing coursework was mediated across a range of shared university social environments that were likely invisible from the perspective of his instructor and that were both physical and online at once. At the level of his movement through campus, completing his academic writing coursework enacted an uptake of multiple shared social environments and materialities afforded by the university: not only the university library where he put fingers to laptop keys but also the Technology Commons where he prepared himself to focus. The environments and materialities that mattered to his composition course extended beyond those we might expect from the vantage point of an instructor (i.e., in his case, the library). During the summer I met him, Ray set up shop in the Technology Commons three or four times a week for a couple of hours at a time to play video games like *Injustice*. He was enrolled in two courses during that summer session and understood his video game moments (or hours) in the Technology Commons as directly related to what would come next in his day: heading over to the library next door to do homework on his laptop. In particular, Ray said he used the Technology Commons for "relaxation" directly after his two-hour-a-day, five-day-a-week, six-week summer first-year composition course. He had made a habit of stopping in the Technology Commons after his class. He would play on the X-Box when available, or socialize on his laptop when it was not. Afterward, he would head to the library to complete the work due for the next day. On the day I had videoed him, he said that he had "just wanted to take a little break before I started working on my essay." Places like the Technology Commons were important

to his routines for completing academic coursework even if no visible materials connected to his essays were present there. Although he did not elaborate about why and I did not push him on the point, Ray told me that he did not keep a game system in his campus dorm room. The Technology Commons served as a location where he could play within limits imposed by the commons rules and the general public accountability associated with shared and not owned resources. He also mentioned that his current summer course was his second attempt at first-year composition, and that he felt that he would be more successful this time around.

Ray had just finished his first year as a student at UCF. Had his current orientations developed out of a trial and error of his first year spent attempting to navigate the demands of coursework in different ways? Had he initially kept a game console in his dorm room? Had he initially struggled with how to integrate academic coursework with the interests and the activities that felt most comfortable and “relaxing” (in his words) to him? What did it look like when Ray used his laptop now for writing his essays for first year composition? Had he similarly cultivated habits of mind and body that enabled him to focus when moving within the space of the device screen? If so, could we have better supported his experience in transitioning to university-level academic writing? And what can we better do to support students of color like Ray who may face invisible barriers to entry to some academic spaces? How do we better support students whose bodies orient differently from the norms assumed by contemporary space designers?

Intervening in the mundane ways of operating that are developed and ingrained through personal orientations is rather unusual territory for composing pedagogies. As I’ve already suggested, instructors can engage with transient literacies by helping students better understand the important role that materials play in their own composing habits and repertoires, with the understanding that learning outside the classroom affects what happens within it. This kind of engagement takes the step of helping students alter their own personal settings and repertoires for transient literacies through processes that ask them to think more deeply and consciously about the kinds of knowledge like those listed above, as well as to practice the kind of ongoing negotiation and adjustment that Ray illustrates.

While engaging with students’ personal repertoires is important for literacy educators and researchers, this is not the only important site for intervention. If we broaden the lens, another way to change Ray’s performance would be to take on the role of game designer (or space designer) and to change the kinds of materials he can access and how they function. Thus, it is also important to think about transient literacies from the perspective of space design. The impacts of learning spaces were long underresearched (Temple,

2008); however, increased attention to the changing learning needs and social demands of contemporary students has meant a burgeoning transdisciplinary literature on learning space design, as well as increased interest on how places beyond the classroom impact composing (Carpenter et al., 2015; Kim & Carpenter, 2017). Literacy and writing researchers and educators increasingly have a responsibility to become involved with campus, workplace, and community space design choices, as the arrangement and elements of these places participate directly in composing learning.

A related implication of these realities is that literacy educators must pay closer attention to how places, and the materials, technologies, and information that gather in them, become associated with values and subtle “standards” of use that impact students’ literacy practices (Lampland & Star, 2009; Star & Ruhleder, 1996). While this project was limited in that it did not explicitly focus on LGBTQ people, disabled people or people of color, it did allow students to disclose identity categories if they desired and these aspects of personhood did impact what spaces were available, useful, or usable to them. The standards that develop in places create unexpected divides—particularly for students who lack access to the latest mobile technologies or to knowledge needed to effectively negotiate the so-called freedoms enabled by the potential for movement. The designers who arrange literacy environments and/or who imbue materials with potential for interaction play an important role in shaping the potential for how transient literacies take place. Thus, supporting transient literacies also involves working directly to design better environments and materials for supporting mobile work, learning, and organizing, as well as better environments and materials for learning about how to practice transient literacies. As we design spaces for work and learning, creating designs that help enact more awareness and better trajectories will require designers to address some common challenges for the design and use of social places.

## Adjusting Our Frames of Reference

I have argued that caring about transient literacies means decentering the classroom as the center of our composing worlds. Thus, I want to move forward by discussing a larger set of domains for transient literacies. The intertwining of physical and information space in composing practice is not just an issue for composition classrooms. As mobile networked technologies such as laptops complexify composing, composers will need to create processes for composing in contexts where practices will always be in tension with other “modes of ordering” that conflict with their goals (Knox et al., 2008; Law 1994; Law & Mol 2002). Transient literacies will be important to students across the

domains of academic, workplace, and community life. For this reason, it is important to understand how the experiences of effectively negotiating spaces and information are crucial across university, workplace, and civic spaces.

## University Space Design and Use

Academic writing educators, researchers, and administrators increasingly must pay attention to varied environments where academic literacies take place: not only classrooms but also in the offline and online social locations where students dwell. As students traverse the university, physical and virtual classrooms anchor student social networks held together by course rosters, but the writing required to participate in classrooms takes place beyond them in dorm rooms, apartment buildings, common areas, student unions, libraries, and other flexible, temporary workspaces. Though we know that students use these common places in a variety of ways, relatively little research has focused on how students move across the university through shared, technologically rich common spaces for completing school tasks (Rossitto & Eklundh, 2007). Increasingly, the strategy for contemporary academic institutions, libraries, and university writing programs has been to decrease investment in hardwired desktop computer labs and increase the investment in “BYOT,” or bring your own technology labs (Hochman & Palmquist, 2009; Miller-Cochran & Gierdowski, 2013). Furthermore, as universities have become more aware that students seek flexible space for the informal learning that accompanies coursework (and that such spaces are important for university financial concerns related to student recruitment and retention), many have advocated for student commons areas or learning spaces that have been designed to be occupied temporarily for study, projects, and extracurricular activities (Temple, 2008). Many university libraries, in particular, have been redesigned as information commons centers where students work individually and collectively while located with others (Forrest & Halbert, 2009). Other relevant campus design trends include a move toward active learning classrooms, where traditional lecture halls are transformed into decentered spaces that lack front lecterns and support active student reading, writing, and speaking during courses (Oblinger, 2005).

These university environments invite students to use mobile technologies for literacy practice and by definition require students to organize mobile literacy environments that will support their goals. In so doing, they also invite the movement across online and offline spaces that is central to students’ uses of these devices. To support students who practice academic writing in these spaces, educators need to become more aware of their opportunities and challenges. Furthermore, designers and administrators of such spaces need more

insight into actual practices within them that extend beyond student satisfaction surveys. Research has already shown that responses to these remediations range from ignoring them to actively taking advantage of one or more of their affordances, while downplaying others (Bilandzic & Foth, 2014). Transient literacies require better investment in ambient social media, signage, and other resources that lower barriers to collaboration among peers and increase the chances that students will connect with resources (Hemmig et al., 2012). Given the influence of environments, materials, and infrastructures on literacy practices, the design of and experiences of social places should become the direct concern of academic writing educators and administrators, not just library and university facilities committees.

As the previous sections suggest, transient literacies redirect academic writing teachers, researchers, and administrators to how literacy is shaped by the materials, locations, and technologies that are accessible to students, given their unique social and cultural positioning. Teaching students academic composing means cultivating a new sensitivity to and investment in the environments that surround students when they produce academic coursework outside the classroom. Paying more attention to embodied habits or bodily intentions, as well as their constructions and constraints, should rank alongside the new focus on issues such as the importance of “dispositions” on literacy learning (Yancey et al., 2014). The possibilities for how students experience place depend upon what is accessible to individuals as they approach them (i.e., based on race, gender, sexuality, employment status, abilities, and so forth), as well as how they have oriented to the places of their literate lives. Furthermore, possibilities for places shift and change as locations are shaped and reshaped by the social networks and institutions that assign them meaning.

In addition to thinking more about where students complete academic writing and what technologies support them, it will be important to consider how students access social resources that shape composing in online spaces, as well as how they disconnect from social spaces when they are dangerous, lead to fractured thinking, or surface-level engagement with tasks. Many students are learning these skills through practice and without explicit training, and in doing so, are also shifting the way that they interact with other students. As Charles Crook and Gemma Mitchell (2012) describe, many students seek opportunities to complete coursework alone in atmospheres where other students are also working separately. The need to find “blank space” fuels many individuals’ movements into commons spaces; however, the same ideas apply to interactions in online spaces. To simply identify students as “distracted” by online spaces can downplay how important these social dimensions are to students’ experiences.

The particular tools and assignments that can support students in this way could vary significantly. For example, like many instructors, I have designed and taught a first-year writing class that is organized around places of the university. In this course, students read about the impact of place on a range of practices and then conduct original research within the place that focuses on describing the impact of materials in that place on the literacy interactions there. If I were teaching this course again, I would not only ask students to focus on articulating the social interactions, meaningful materialities, and hidden infrastructures associated with campus places but also focus on how the assemblies of online places work hand-in-hand with these places in everyday experience. My goal would be to hone students' attention not only to developing a knowledge of places and their capacities, but also to thinking in more complex ways about the intersections between online and physical space.

## Workplace Design and Use

While it might seem strange to think of college students in this way, many students share something important in common with professional and technical communicators: a lack of official sanctioned place for completing composing tasks that are essential to their roles. Professional and technical communication educators, researchers, and administrators need to understand transient literacies, as more and more professional writing takes place outside traditional office environments, on the move or in redesigned social open offices that require actively cultivating temporary foundations to ground literacy practices. Dave's case in Chapter 2 highlights how many professionals bear a burden of assembling the social contexts that will ultimately lead to their career advancement or sustainment. In his case, this means both cultivating social potential by maintaining contacts with those who will potentially read and sponsor his writing (see Pigg, 2014a for a more detailed discussion) and cultivating enough privacy and social distance from others to arrange a production setting that means that achieving writing is possible. Both of these moves are coordinative, existing often invisibly alongside the important work of composing the texts that will eventually be taken up as the valued products of his knowledge work. Workplace researchers have long understood that professionals do not only work in personal offices anymore (Büscher, 2014; Costas, 2013; Czarniawska, 2014; Fealstead et al., 2005), but we need more focus not only on how these professionals navigate their lack of office space but also with how they use online spaces in tandem to anchor their careers.

To elaborate, whether resulting from self-employment, the opportunity to telecommute, or the spatial reorganization of offices, many professionals organize their productivity in shared places that layer disparate social inter-

actions, technological and communication infrastructures, and rhetorical demands. For telecommuters and other mobile workers, the locational coordination of completing work practices will be an ongoing struggle in coming years. As research participants who took part in Clay Spinuzzi's (2012) study of co-working suggested, coffee shops may not be the most conducive location for professionals to maintain this balance, particularly for knowledge workers who live in urban areas and can financially invest in the co-working environments he describes. Furthermore, while the cubicle may still be the prototypical in-office workspace, organizations are redesigning offices to support and provoke new kinds of movement. Across recent innovations in office design, places increasingly must support worker flexibility by providing temporary dwellings for a user population whose needs shift with the task to which they are attending at the moment. Thousands of organizations are thus realizing changes to physical office space that were planned, predicted, and theorized with the first signs of large-scale ubiquitous computing.<sup>11</sup> In 1999, Norbert A. Streitz and his colleagues worked from a framework in the field of Computer Supported Collaborative Work (CSCW) to describe the impact of having desktop computers become the primary (and often the only) information source in an office space. In order to relieve some of the problems of centralizing all information in this way, Streitz et al. suggested augmenting physical space so that it provides more spatial flexibility and mobility, while offering technological configurations that "go beyond desktops" (1999, p. 122).

Google's offices may be the most famous example. The 1.1-million-square-foot GooglePlex in Mountain View, California, has no private offices and combines a mix of semi-private and communal workspaces with cafés, courtyards, and green roofs (Goldberger, 2013). In a similar vein, the *Washington Post* online (2013) documented the new Washington, D.C., offices of Accenture, a consulting, technology, and outsourcing firm that designed new offices "with the millennial worker in mind." Accenture uses *hot desking* or *hoteling*. Employees reserve temporary office spaces that fit temporary needs; their available choices range from large conference rooms to smaller collaboration suites with café tables. When working "alone," Accenture's employees might sit on opposite sides of a long conference-style table wearing headphones and attending to separate projects. According to the managing director of the firm's Washington-area office, Accenture settled on this flexible, social office space as a result of the demands of "20-something workers."

Both examples align with a broader movement toward designing collaborative workplaces to support organizational team processes, while offering the

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11 Office Snapshots, available at <http://officesnapshots.com>, offers an archive of these emerging office space designs. The archive offers a glimpse into how offices are responding to the needs of mobile, distributed work.

potential for more personal flexibility. Scholarship in ubiquitous computing from the 1990s imagined that workplaces of the future would come stocked full of technologies built into the environment (such as smart desks and smart walls). While research and design to augment workspace continues, personal mobile devices largely support professional writing that takes place across hotdesks, open offices, and remote workspaces. The public health crisis of 2020, for example, shifted the use of mobile workspaces from a situation experienced by few to one that was suddenly the reality for workers who had long depended on offices to structure their workflows and practices. Mobile devices enable individuals to transform settings typically associated with one kind of activity into one that's appropriate for others—even when those places do not intuitively support their use (e.g., Laurier's 2004 example of "doing office work" while driving). As many new converts to working at home have experienced, redesigning a workspace around mobile technologies also implies new demands on employees. For example, Accenture's office does not include desk phones because "employees are set up to do all of their phone communication over the Web." The reconfigurations also mean that employees must actively seek privacy when they need to devote focused attention to tasks without interruption. Although offices are trending to emphasize collaboration, open office setups in which colleagues work side-by-side in large, undivided rooms can be detrimental to worker productivity and satisfaction. Large-scale survey research ( $N = 10,500$ ) commissioned by the design firm Steelcase found that 98 percent of the most highly satisfied surveyed workers were able to concentrate easily in their workspaces and 95 percent could find distraction-free places to work with teams; however, 31 percent of workers overall had to leave their offices to find adequate space to complete work tasks (Congdon et al., 2014). While the movement in office design has been toward designing toward access to other people, design for collaboration also has had the unintended effect of pushing workers and their work outside the office.

Professional and technical communicators have the opportunity to contribute knowledge about the demands of networked mobile composing that can shape the design and administration of workspaces. Furthermore, students preparing to enter contemporary workplaces need to understand these dynamics and to prepare for composing within them after graduation. Within organizational office design, John Peponis et al. (2007) argued that workplace design for knowledge-intensive work must support users' access to two kinds of cognitive resources: people with diverse expertise and needs and the "material inscriptions" that are constructed, circulated, and accessed as part of knowledge work. They suggest that users of space need to be able to intuitively interpret the relationships among space designs and work processes, and these relate to co-presence, co-awareness, and interaction patterns. Two mod-

els are often used to attempt to support this access: 1) a flow model in which offices mirror the flow of communication and information associated with a task or 2) a “serendipitous communication model” in which informal spaces for interaction are highlighted in ways that encourage individuals to interact without plans. Peponis et al. advocate strongly for the first of these two choices; that is, tailoring spatial designs to activities rather than expecting that informal space will in of itself generate the kinds of communication necessary.

With this in mind, professional writing courses at the undergraduate level are another important site for having students think through how the kinds of materials that become participants in their composing will be central to the possibilities for what and how they read, write, think, and communicate. As a grounding for professional writing pedagogy, teaching future professionals to prepare to compose with environments that continually change represents a full turn from professional and technical communication pedagogies based on a twentieth century industrial production model, which needed students prepared to enter and fit into highly organized and controlled hierarchies where they responded to knowable situations and executed predetermined protocols (Henry, 2000; Spinuzzi, 2015). In this context, the closed and unambiguous network that Jim Henry called the “hermetic environment of a classroom” provided a spatial academic training ground that disciplined students for the grammar and correctness that mattered most to success. The paradigms for success associated with twenty-first century knowledge work differ significantly from this emphasis on correctness, and coordination is central to creating the conditions through which successful workplace writing can take place.

Although social workspaces are a matter of choice for some, they are a matter of necessity for others, particularly during moments of public health crisis or for technical and professional writers who work in contract positions and seek modular, flexible space to support multiple projects and tasks (Hart-Davidson, 2013; Spinuzzi, 2012). Between telecommuting, non-traditional offices, and independent careers, it is important that future professional writers understand the importance of transient literacies to everyday professional and technical writing practices that students are likely to experience at some point in their careers. As more professionals become responsible for coordinating their methods and practices, the domain of personal knowledge management may also become increasingly important. Personal knowledge management focuses on “helping individuals to be more effective in personal, organizational, and social environments” (Pauleen, 2009, p. 221). Frequently, personal knowledge management is associated with effectively using technological resources to facilitate productivity, which increasingly means individual and organizational attention management (Davenport & Völpel, 2001).

However, personal knowledge management also includes lifelong and social learning, as well as an interest in “the development of skills and attitudes that lead to more effective cognition, communication, collaboration, creativity, problem solving, lifelong learning, social networking, leadership, and the like” (Pauleen 2009, p. 222). These are the kinds of skills that will increasingly create a foundation for effective writing on the job. Having students map relevant networks and resources rather than focusing merely on the reproduction of genres introduces coordination in powerful ways for students, who can simultaneously become better connected to the materials that support workplace literacies in fields that matter to them.

## Community Space Design and Use

Finally, transient literacies directly impact community literacies. Mobile device use directly impacts civic and public spaces, which are increasingly commercial, personal, and atomized (Welch, 2008). Cafés, coffee shops, bookstores, and other kinds of socially shared spaces long associated with conversation and community gathering are often becoming more private and are inhabited for relatively long periods of time for personal or professional reasons. Thus, coffeehouses and other locations that may not be explicitly designed as workspaces are often mobilized for professional or academic activities because they can support moving people, mobile technologies, and their interactions. Community literacy educators, researchers, and administrators need to understand transient literacies in order to better support community exchange, given the shifting realities of how contemporary young people integrate civic and community concerns into their saturated lives and inhabit community environments that have shifted due to the impact of networked devices. These shifts are more complex than many of us have understood, as cell phones and internet networks support new positive forms of public and community interaction (Hampton et al., 2015; Jennings & Zeitner, 2003) but also have negative effects as well (Purdy, 2017).

On the one hand, it is not surprising that cafés, coffeehouses, and other traditional community locations often become crowded with readers, writers, and collaborators who are also workers or students: individuals huddled over laptops taking advantage of clean space, wireless networks, and available supplies of caffeine. The rise of telecommuting and *remote homeworking*, which I have already mentioned, has enabled workers to make use of such spaces while conducting their business by logging into organizational networks from remote locations of their choice (Fealstead et al., 2005; Halford 2005). Remote employees using coffeehouses for work have become so ubiquitous that mass media publications have begun to promote cafés as central to productivity

and efficiency. For example, Conor Friedersdorf's (2011) "Working Best in Coffee Shops" in the *Atlantic* not only links coffeehouses with the relatively recent rise of internet-based telecommuting via the web but also describes how coffeehouses offer writers a sense of deadline (they do close, after all) while also exposing them to being monitored by others in public. With others holding you accountable, it seems more important to "look busy," Friedersdorf suggests. Wesley Verhoeve's (2013) "Why You Should Work from a Coffee Shop, Even When You Have an Office" in the popular online business publication *Fast Company* cites a lack of distractions and the community that develops around coffeehouses as stimuli for creativity. For those who would rather not leave home to experience what makes coffeehouses so useful, mobile device applications such as Coffitivity and Hipstersound even transport the environmental factors of cafés into personal workspaces. These mobile apps simulate the ambient sounds of cafés in order to help individuals supplement any workspace with the perfect level of audio intensity, or what they call "enough noise to work."

Students are taking over coffeehouses for writing, as well. In addition to my own prior research in this area (Pigg, 2014a, 2014b), Katie Zabrowski and Nathaniel Rivers (2015) use multimodal autoethnography to depict coffeehouses as respites that stimulate academic thinking. As they state, "writers are nomads in search of a place, and coffeehouses are an oasis for such weary travelers." Michael J. Faris (2014) further describes the appeal of coffeehouses for academic writing in a narrative for the *College Composition and Communication* special issue on "Locations of Writing." He argues that coffeehouses "offer something that the isolation of an office cannot: a lively, social atmosphere with ambient sounds, movements around that serve not to distract but to help me focus, and my own ability to move" (2014, p. 22). Drawing on the social mapping service, FourSquare, Faris mapped his recent (impressive) composing practices across coffee shops spanning two countries and at least six U.S. states. Even when coffee shops have "regulars" who visit them often, they are continually inhabited by new people who become actors in continually changing scenes.

Transient literacies require new ways of encouraging civic and public dialogue in these shifting environments. Coffeehouses are different places in the morning, when patrons stop in to grab a quick cup of coffee (Laurier, 2008), than during evening hours, when others stop by to spend a few hours catching up with friends after work. Of course, cafés and coffeehouses differ from sanctioned offices or university social places because their informal hot desking system is grounded by a different economic imperative. Cafés generally do not have strong economic motivation to support individuals' productivity; these businesses succeed financially only insofar as they can support them-

selves through the “rent” they collect from individuals who buy their goods when they claim space within them. However, plenty of cafés and patrons are willing to comply with this unofficial contract. Thus, locations that are not officially institutionalized as domains of work become sites for workspace because they allow autonomy for individuals to enter, stay for a while, and use the place to their own ends. However, the freedom to take up new spaces for literacy, whether as a student or a professional, leads to challenges, as neighborhood spots once positioned as anchors for face-to-face conversation are increasingly re-envisioned as places for personal work or leisure.

For a small way of inviting students to think through these issues, I supported students in a rhetoric and civic engagement class in conducting research to trace, map, and visualize the places of the university that support civic rhetorical action. To frame this class-wide investigation, students read about contemporary challenges to public space and organizing, as well as the fears that civic engagement is declining among younger populations. This assignment challenged students to articulate the kinds of materials associated with supporting contemporary civic life so that they could identify relevant places on campus where these materials might be found. Students then proceeded to visit relevant places associated with civic engagement, to define how they were meaningful. Their final step was to share and map these places on a public online shared networked map that would articulate these linkages and connections.

In spite of how we address these issues, it is clear that community and civic literacy practices will be affected by the changes to place and sociability associated with transient literacies. The question of how to keep places more conducive to civic and community concerns, while also enabling people to use the social potential of networked mobile technologies will be increasingly important to civic and community literacy. Already, scholars such as Nathaniel A. Rivers’ (2016) have argued for using geocaching and other locative media interactions as a means for engaging students in the complex relations among public rhetoric and place, and writing and literacy scholars will need to continue to teach ways to help students become more aware of how environments are intertwined with public and community literacies. Alongside this issue, community literacies will continue to contend with the challenges of organizing affiliations in contexts where personal desires drive many people’s turn to common places. Sociologist John Urry (2007) linked mobility to emerging “interspaces” where “groups come together, involving the use of phones, mobiles, laptops, SMS messaging, wireless communications and so on, often to make arrangements on the move” (p. 12). The social interactions that characterize the community commons are taking different forms, and often laptops are supporting face-to-face contact. Keith N. Hampton, Oren

Livio, and Lauren Sessions Goulet (2010), for example, stressed that Wi-Fi users in public parks often use their laptops intentionally for active participation in the public sphere. In order to both create new places that support face-to-face contact among community members and to help people make new social connections, community literacy researchers, educators, and administrators will need to directly address these blurred boundaries.

## Conclusion: New Collaborations

While new environments are being continually designed to support mobile technologies, the presence of shared social space oriented to mobile technologies does not guarantee accessibility or usefulness, much less collaboration, increased participation, or decentralization. However, just as clearly, the presence of a cell phone also automatically does not mean students' inattention or the inability to focus. Throughout the preceding chapters, *Transient Literacies in Action* has explored how students orchestrate literacy practices in educational and extracurricular landscapes affected by networked, technologies that move with them. The analysis has suggested that in order to understand the practices associated with these technologies, we must look beyond devices and their users into the complexly mediated mobile surround that shifts and is shifted by mobile practices. These environments matter. For example, it is qualitatively meaningful that students like those portrayed in the opening scenes of *Digital Nation* are using laptops (often for Facebook and online shopping, according to their professors) in classrooms, which shifts the building blocks for literacy in those environments in ways that affect the attention, sociability, and resource needs of the students composing with them. As soon as the students in the film open up those laptops, they are faced with negotiating potential from across social spheres, which might include information deemed interesting, amusing, or that has been programmed to appear in the scene based on prior choices. The environments cultivated around them are temporary and depend upon ongoing interactions that both construct and change the materials around them. These changing environments have implications for how students interact with academic, professional, and civic contexts.

While I was writing this book, my next-door neighbor opened a new coffee shop in a nearby part of town that was experiencing revival. Its location reminded me of the Gone Wired Café. He and his partner had rented a commercial space that had been vacant for some time along a well-traveled north-south corridor. I asked him whether he was seeing much mobile work there. "Everyone wants to work," he told me, obviously disappointed. "They're all mad that we don't have Wi-Fi. But just because it's a pretty space, doesn't

mean it's for your work" (personal communication, 2015). Only a few months after the café opened, he was still avoiding adding the Wi-Fi network, trying to preserve a hub for leisure and conversation. But he already realized his business was affected by the common use of cafés as a workspace. He navigated the design of the space realizing that both the livelihood and ambiance of his café depended upon it.

His experience resonated with what I have learned about how many of us position third places that traditionally have been so important to community life. On the one hand, we want them to be pure and free from the intrusions of our technologies, but on the other hand, to exclude the social potential that is enabled by those devices means another kind of void, in which we lack access to the tools that many of us use to get involved with and learn about our communities. To be sure, there are real problems associated with how people and information are blurred when so much social contact is mediated by mobile composing and its technologies. Even my own use of the term "materials" to include both people and technologies as participants or building blocks in literacy practices has the effect of blurring the differences among relationships with people and those with devices. As both human and textual social resources are increasingly blurred with and experienced as "information," it becomes easy to dehumanize people—to treat them as objects of information. For example, in Chapter 5, Micah and Sal often treated people around them almost identically to their technological feeds: an issue and potential problem that I want to suggest is actually more complex than mere "alone togetherness." John Seely Brown and Paul Duguid (2000) associated this attitude with what they call an infocentric approach to information design: the problem of conceiving of relational work merely as "information handling." When the importance of social interaction is underemphasized, the long-term success of projects can suffer. As they suggest, desks are useful for more than propping up laptops, offices create learning environments through social proximity, and work patterns are difficult to disrupt once in place. The environments around information processing tools shape capacity to use these tools. In this case, the attitudes that led to a difficulty in collaborating on a team writing task (Chapter 5) may arise from similarly blurred boundaries among people and information.

Across contexts for literacy practice, researchers and educators will increasingly need to account for how the digital reserves that follow us through life are more than backdrops behind the "real" activity of literacy. Social media and other online information platforms actively participate in literate action; they co-constitute it. Many students bring a seemingly infinite collection of virtual places into connection as they read, write, and collaborate. These places are accessible whenever they carry the appropriately charged hand-

held or wearable computing device in a place that offers connection to one of many types of wireless networking connections. It can be easier to imagine contemporary students exist on a completely different plane from their instructors, with different tendencies and maybe even different brains. The more challenging but richer way forward will be to perceive, care, and engage with composing habits and environments differently, knowing that none of us can predict the changes that we all face as we practice literacy in contingent worlds. Certainly, navigating the public health crises of 2020 has been a reminder that at any moment we may have to reform habits that support attention and sociability in composing in response to events beyond our control.

With the movement from the cubicle to the coffee shop and from the classroom to the commons, everything depends upon what happens to materials when and where they interact. Importantly, different bodies interact with places and the materials within them differently. There is no generalized distracted, isolated, or indifferent student body, just as there is no ideally and perfectly-positioned student consumer, fully packaged with the correct BYOT (bring-your-own-technologies) spirit and tools. The realities are much more complex. Ray and the other students I have chronicled represent new faces of academic, professional, and community literacies today. Luckily, we have every opportunity to learn with them.