Chapter 1: Introducing Transient Literacies in Action

When everything is all at once, what do we do?

–Anne Wysocki & Johndan Johnson-Eilola, 1999, p. 365

Educators today are concerned not only with how students form sentences and paragraphs but also with how they live among information, technologies, and the material world. That's because many of us who regularly work with students have a felt sense that students' writing, speaking, and learning practices are shifting as a result of changes in what surrounds them. Take for example the educator voices documented in *Digital Nation* (2010), the FRONTLINE documentary on digital culture. As I have discussed in a publication focused on the film's portrayal of student bodies (Pigg, 2015), *Digital Nation* opens with a chapter called "Distracted by Everything" focused on the wired lives of bright, young MIT students. Its beginning scenes depict a student group collaborating together with laptops around a café table. They work in open commons areas among other students, using language that emerges from digital spaces while simultaneously typing on laptops and phones. The professors who provide interview footage for the documentary are depicted much differently, addressing the camera in front of teeming bookcases or university lecterns. Guiding viewers' interpretation, MIT Professor David Jones emphasizes the role he understands students' surroundings to play in their classroom performance: "It's not that the students are dumb, it's not that they're not trying, it's that they aren't trying in a way that's as effective as it could be because they are distracted by everything else." Digital Nation thus positions the places, technologies, and information that comprise "everything else" around students as substantially impacting their academic practices and performances.

There has been no shortage of negative press and water cooler talk about the effects of mobile phones, IM conversations, text messages, social media, and the internet on contemporary students' ways of being in the world. Many of us notice downturned faces toward technologies when students walk through public campus spaces imagined for interaction, and we feel the impact of students' limited attention when we interact in classrooms. Educators might be tempted to ignore the negative connections often drawn among the information environments surrounding students and their learning poten-

tial. After all, history shows that crisis claims stemming from the integration of new technologies into everyday life are more complicated than they seem on the surface. Public discourse on literacy crises has often signaled shifting power dynamics around access to literacy or its definitions (Lewis, 2015; Trimbur, 1991). Furthermore, historical arguments blaming new technologies for downturns in intelligence have often relied on determinist assumptions that downplay how humans are capable of regulating their technology use (Rheingold, 2012). To assume that changes enacted by the presence of new technologies in students' worlds are ultimately negative or inescapable is reductive. And, yet, educators also cannot ignore how technologies, information, and locations shape students' learning practices. "Everything else," as Jones referred to it in the quotation above, does matter to how students write, interact, collaborate, and solve problems. In short, surroundings shape how students move and think.

This book will suggest that scholarship in rhetoric and composition can usefully inform the transdisciplinary and public conversations that have developed around how technologies, information, and locations shape students' potential for learning and literacy. Through a recent focus on the relationship between materiality and composing, rhetoric and composition scholars have offered useful concepts and methods for tracing the relationship among students' practices and "everything else" beyond their brains and bodies. By the term "composing" here, I refer to communicative practices that create, curate, or arrange meaning based on the use of "communicative/compositional modes, materials, and practices that may include, but are certainly not limited to, writing or the production of written texts" (Shipka, 2016, p. 254). Rhetoric and composition scholars have long argued that composing practices emerge from more than the cognitive inner workings of a lone writer or even the impact of social influences in communities or societies where composers live and interact. Through inquiries focused on environments, materialities, and infrastructures, rhetoric and composition scholars have illustrated how composing is shaped by forces external to brains and bodies, as technologies, information, and other materials exist as more than simply containers of or backdrops for composing practices. The interplay among composing and "everything else" that surrounds it provides important context for this book, and so I begin with a brief discussion of environments, materialities, and infrastructures to describe the links between composers and their worlds.

Environments, Materialities, and Infrastructures

First, the concept of *environment* has enabled rhetoric and composition scholars to describe how social, man-made, or natural surroundings are in-

tertwined with human activities such as composing. For example, the term "environment" frequently played a role in theories that highlighted the social contexts for writing practice (Cooper, 1986). In this case, "environments" often referred to the totality of situated social factors such as interpersonal, ideological, and organizational relationships that created a context for rhetorical decisions. In this sense, "environments" described social realities that are not immediately visible when writers put pen to paper or fingers to keys but that inform their possibilities for action (Goswami & Odell, 1986). Environments for composing in ecocomposition have also included natural and manmade structures intertwined with locations for writing (e.g., Dobrin & Weisser, 2002; Owens, 2001; Weisser & Dobrin, 2001). For instance, Sid Dobrin and Christian Weisser (2002) described ecocomposition approaches as the "study of the relationships between environments (and by that we mean natural, constructed, and even imagined places) and discourse (speaking, writing, and thinking)" (p. 572). This use of the term "environment" opened the door to exploring the impact of the physical and designed world, in addition to the social world, on the possibilities and realities for discourse.

An intersecting line of inquiry has taken up how *materiality* affects composing practices. Studying composing's materiality has highlighted how reading, writing, and other literate activities take place "in coexistence with ordinary and complex matter" (Micciche, 2014, p. 490). For digital rhetoric scholars, materiality helped explain what Jay David Bolter (2001) called the "writing space," or the historical media systems that constrain and afford written practices and products. A focus on materiality also offered vocabulary for describing characteristics of new media texts themselves (Wysocki, 2004), as well as for describing how the arrangement and presence of information shaped literacy practices (Brooke & Rickert, 2012). As Pamela Takayoshi and Derek Van Ittersum (2018) described, a focus on materiality in studying technologically mediated composing arrived hand-in-hand with a focus on places and embodied experience of them. Importantly, the materials that impact a given digital rhetorical interaction extend beyond media, texts, or other technologies of literacy (Haas, 1996) and into desks, walls, and architectures (Ackerman & Oates, 1996). Places orient people and shape their movements because they "gather things in their midst—where 'things' connote various animate and inanimate entities" and thus perform "'a holding together' of things in particular configurations" (Casey, 1996, pp. 24-25).[1] To put it another way,

1 The terms "place" and "space" have complicated theoretical histories. I use "place" to mean localities that act as experiential interfaces to broader networks of social space (Casey, 2009). I am distinguishing place from space drawing on Henri Lefebrve's (1991) theory of space as an ongoing relational network that reflects and transmits power, as economic histories collide with ongoing human activity. Describing the agentive force of place, philosopher

environments and materials work together to influence how humans move through the world. For example, discussing places such as family homes, Nedra Reynolds (2004) emphasized that "places and their built-in constraints" affect the embodied practices of literacy by encouraging "adjustments and compromises" that take place during "the process of accommodating to a place" (p. 14). My own research has built on this foundation to analyze how shared social locations gather materials that shape composing processes, and other scholars have taken up the materiality of composing through a focus on rooms (Rule, 2018) and habitats (Alexis, 2016). Materials and environments that shape composing can exist in ambient realms shaping and enabling practice but transparent to immediate human perception (Rickert, 2013).

At the intersection of environments and materiality, digital rhetoric scholars have further suggested that a focus on *infrastructure* can uncover how arranged structures of materials and values affect conditions for composing. Dànielle DeVoss, Ellen Cushman, and Jeff Grabill (2005) argued that students' rhetorical choices invoke embedded and often transparent organizations of materials and values that include but extend beyond their visible environments. Drawing on Susan Star and Leigh Ruhleder's (1996) theory of infrastructure, DeVoss, Cushman, and Grabill argued that infrastructures are ubiquitous but also dynamic and relational. That is, infrastructures are hailed by activity: writers experience these meaningful and constraining foundations relative to where they are, who they are, and what they are doing. Star and Ruhleder offered the example of a city water system to describe how infrastructures are multiple. For the cook at home, a water system is experienced as something useful for making dinner (often with little thought to its structure), while for the city planner it is "a variable in a complex equation" that can be manipulated and is subject to deterioration (Star & Ruhleder, 1996, p. 113). This relational reading of infrastructure is important for emphasizing how different communities and individuals approach and access material conditions differently (Star & Ruhleder, 1996).

These lines of inquiry focused on environments, materialities, and infrastructures emphasize how "everything else" beyond students' brains and bodies play a significant role in practices like reading and writing, suggesting that human activity cannot be fully understood apart from materials and places that shape it. However, as Van Ittersum and Takayoshi suggest, while the field has generally understood that materiality matters to composing, this

---

Edward S. Casey highlights how places and the experience of lived bodies are intertwined or "interanimate each other" (Casey, 1996, p. 24). Importantly, for Casey, places create environments where bodies and materials coevolve through mutual influence—an understanding that resonates with ecological theories that emphasize how technologies are given meaning in particular contexts of use (Hawk et al., 2007; Nardi & O'Day, 1999).

theoretical work has not fully transformed the composing research that attempts to understand writing practices. Furthermore, however useful these foundations are, they do not offer easy explanations for the influence of the technologies I referenced in the opening paragraphs. Networked mobile technologies (laptops, phones, tablets) complicate environments, materials, and infrastructures. By "mobile" here, I am referring to devices that can be easily carried from one place to another, and by "networked" I am referencing the capacity of these technologies to connect and exchange information and resources via either Wi-Fi or cellular networks. These technological systems impact environments where they are used, open the door to new material intrusions and resources, and shift infrastructure uptake in any place where they are switched on. Making sense of how mobile networked devices affect everyday learning and literacy is a complex and transdisciplinary problem being taken up by scholars in information studies, youth and K-12 literacy studies, rhetoric and composition, and beyond. These conversations extend beyond academic journals, as well. As the example that opens this chapter suggests, public media and even small talk among strangers frequently communicate a sense of wonder and dread about what is happening to the generations of children, teens, and younger adults who have grown up with mobile devices.

The Environments for Networked Mobile Computing

Mobile technologies are pervasive among college students, even though we must not make the mistake of thinking that they are integrated equally into all students' lives. With each study released by the Pew Research Center's Internet and American Life Project, we learn about increasing access to smartphones, tablet PCs, and laptops in North America. As of 2013, 91 percent of American adults owned a cell phone and used these handheld devices for information gathering and exchange (Duggan, 2013). Over 50 percent of Americans reported owning a smartphone, and one third of Americans owned a tablet computer, which represented a sharp rise from 3 percent in May 2010 (Zickuhr). Aimee Mapes and Amy Kimme Hea's (2018) longitudinal research at the University of Arizona named laptops as the dominant writing technology supporting students' literacy work and noted the ubiquitous and emotionally fraught use of cell phones for reading and analysis. My research with the Revisualizing Composition workgroup has similarly shown that university students across different institution types, geographical regions, races, and genders report text messaging done on cell phones as their most frequent and valued writing practice, though with reservations about how this writing is valuable (Moore et al., 2016; Pigg et al., 2014). The writing done on mobile technologies often takes place in short incremental bursts throughout a day,

often momentarily interrupting other activities (including listening to classroom lectures). As Mapes and Kimme Hea (2018) suggested, many students do not even perceive these brief inscriptions to count as writing.

My particular interest is in how networked, mobile devices complicate the relationship between writers and the environments, materials, and infrastructures that support composing activities. Importantly, students' mobile composing practices often resist categorization by disciplinary or place-based boundaries. As mobile learning scholar Mark Pegrum (2013) noted, "In the desktop era, the internet seemed like a separate place partitioned off from everyday life by monitor screens. Mobile devices, especially our multiplying smart devices, integrate the virtual and the real as we carry the net with us" (p. 3). With networked mobile devices, students not only compose across different subject domains but also perform mobile composing as a holistic mode of being that pulls together intimate, social, and professional practices. To draw on the vocabulary I introduced previously, when used with an active Wi-Fi or cellular connection, mobile phones, tablet PCs, and laptops introduce materials that have the possibility to transform environments in which they are carried. At the same time, they hail infrastructures in ways that can upset the typical conventions of places where students use them. Mobile computing infuses environments where students read, write, and research with new potential through information and social access. As a result, many environments are either being redesigned to support the use of mobile technologies, or technology users are retrofitting environments to meet their computing needs, thereby shifting social norms and behaviors frequently practiced within them. This emerging interconnection among mobile device use and the built and natural environments in which people dwell is an influential part of "everything else" that affects students' learning and literacy potential. Although professors often notice these shifting dynamic changes from the front of their classrooms, mobile devices go everywhere, altering all environments into which they are carried or worn.

Networked mobile computing devices fundamentally impact environments in at least two senses that can shift what composing means and how it is practiced. First, networked mobile devices create the opportunity to use online resources to annotate and transform places in ways that shape how, when, and where people are likely to meet and interact (Rice, 2012; de Souza e Silva, 2006). Think, for example, of how we might plan the vacation route for a cross-state road trip differently if using an online map system that supports social annotations than if using a paper atlas. Observing the links to shops, restaurants, and attractions that line the route and having access to ratings and photos of what we might encounter could be enough to shift our movements in directions that we would be unlikely to choose if looking only at a printed

map. For instance, we might make an extra turn to stop for a bite to eat at a restaurant that our friends have recommended through a social account instead of at the place most visible on our most direct route. Importantly, digital rhetoric scholars have argued that creating and solidifying new connections among people and materials is a form of writing, influential because of how it shapes others' future action. An action as seemingly insignificant as using a phone and digital networked application to add a "star rating" to a hole-in-the-wall restaurant can shift future participation and movements.

Second, using networked mobile devices shapes environments by combining disparate domains and life spheres onto single screens and then extending those screens into already occupied social places (Levinson, 2006). Mobile technologies create new convergences and overlaps among social communities and domains. This quality of mobile device use means that phones and laptops are often experienced as interruptions to places; they usher in potential connections that might or might not be welcome by the inhabitants of a place (Katz, 2006; de Souza e Silva & Frith, 2012). Consider, for example, how social media and other participatory online sites accessed through mobile devices change the social makeup of a place like a classroom. People using mobile devices operate in social atmospheres that vibrate with the hum of near and distant others available at the push of a button on platforms ranging from Facebook and Twitter to Reddit and 4chan to Tinder and Bumble. Most of us have experienced annoyance when mobile devices lead to converging social spheres, whether it is because a friend cannot turn away from a bleeping cell phone or a restaurant stranger ruins an adjacent table's lunch by loudly broadcasting a private conversation. As mobile computing devices become more pervasive, our "digital reserves," or potential stores of online interaction and information (Knox et. al., 2008), haunt us even when we try to ignore them. Social lives are always burdens of a sort, and wearing or carrying them through space can become heavy. Proliferating information, uneven access, cognitive overload, and the burden of being "always on" are changing the contexts for attention, interaction, and the use of shared places (Hayles, 2008, 2012; McCullough, 2013; Rheingold, 2012; Stone, 2007). When we carry mobile devices, our daily activities take place amidst burgeoning social potential, which can shift even the most traditional learning environments (such as lecture halls) into hubs of far-flung social networks.

The world has always been a complicated place for composing, but the constellation of materials and values invoked by networked mobile device use has invited new participants into composing processes. Networked mobile devices bring worlds that intersect in various ways with the everyday work, academic, and civic demands that are a part of a writing life. It is worth emphasizing that Mapes and Kimme Hea indicate that laptops (presumably net-

worked) are by far the most dominant technology that contemporary students use for academic composing. Thus, the technological assemblages that Mapes and Kimme Hea (2018) described as "mobile device ecologies" are not just foundational to forms of writing traditionally associated with digital composing: social media writing, texting, blogging, or creating profiles for dating apps. Instead, these technological assemblages shape the material foundation for many students' academic and workplace composing as well. When networked mobile devices are used for literacy work, their users must build local knowledge that makes these devices useful technically and socially: places for charging or locations for establishing privacy, just to name a few needs (Erickson et al., 2014; Mark & Su, 2010). At the same time, while writers need practical knowledge to effectively use devices for literacy, networked mobile technologies are not easily contained. That is, completing a school assignment or arguing with family members or getting informed about global, national, and local news are changed not only when they are enacted using mobile technologies and networked access but also when they are enacted *in the presence of* rhetorical ecologies that have been shaped by networked mobile devices. We need to give voice to the composing experiences and collaborations that result from these intersections.

The anxieties that lurk behind statements made about student learning in *Digital Nation* and other public venues suggest that many educators, parents, administrators, and employers worry about how students navigate the literacy environments assembled when they hold these powerful computing devices in their hands. The worries that educators voice about students today resonate with a longer history of questions that digital rhetoric scholars have asked about how to manage the demands of networked, screen-based interaction. For example, Anne Wysocki and Johndan Johnson-Eilola (1999) raised similar issues when they positioned technological literacy as a "spatial relation to information," emphasizing how information exists "not as something that we send from place to place, in books or on paper, over time, but as something we move (and hence think) within" (p. 363). By conceiving of technological literacy as a way of moving inside information, Wysocki and Johnson-Eilola extended technological literacy beyond the traditional skills associated with effectively using devices and interfaces to produce and interpret particular written products. The increasing ubiquity of mobile computing, and the use of mobile media for locative social networking, wayfinding, and identity construction (Frith, 2015; Rice, 2012) has only heightened this sense of information as navigated spatially.

This conception of technological literacy positions what Johnson-Eilola (2005) called the *datacloud* as an immersive surround through which composers move. Questions about how to move through information that feels pervasive, then, are not new in digital rhetoric. I used Wysocki and John-

son-Eilola's quotation from over twenty years ago to open this chapter: "when everything is all at once, what do we do?" (1999, p. 365). Cast in terms of how networked mobile devices are amplifying this feeling of all-at-once-ness and bringing together unexpected locations, activities, and information, newer versions of this enduring question might be phrased in this way: how is composing experienced when it is surrounded by overlapping mediated social environments assembled on and off networked mobile screens? How do these new materialities affect shared social environments where networked mobile devices are used? What are the effects of these changed environments on students' social interaction and attention practices? As interdisciplinary educators, scholars, parents, and employers concerned about students' literacy and learning practices, what should *we* do to support students learning in landscapes affected by mobile networked technologies?

Introducing Transient Literacies

Transient Literacies in Action joins transdisciplinary and public conversations about the impact of mobile technologies on student life by offering answers to the questions above that are informed by digital rhetoric fieldwork. My approach to digital rhetoric scholarship resituates digital practices (i.e., interactions with applications, platforms, or interfaces) in the context of experienced space, time, and surrounding physical materials. My approach arose from a sense that we needed to better account for the practical, embodied knowledge required to negotiate the information we encounter when composing with mobile, networked technologies in shared social environments. In order to further explain how this book approaches this knowledge, I now introduce *transient literacies*, a term I use to describe a practical knowledge that supports composing with networked mobile devices in everyday life. I follow this definitional work with two short examples from fieldwork that further illustrate the practices I discuss.

Defining Transient Literacies

I use the term transient literacies to describe the arrangement and movement practices that take place when composing with or in the midst of networked mobile devices. The term echoes a phrase that predates the focus on technologically supported mobility that shapes this book. Composition scholar Linda Brodkey (1984) used the term *transient* to shift discourse about composing away from the most common perceptions of solitary, quiet people in confined scenes. Thinking about her own everyday practices, she wrote, "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" (1984, p. 396). Imagine Brodkey's garret of composing further expanded by the immediate availability of social connections ushered in by networked mobile devices. Writers who compose with these technologies are open to a range of possibilities for where to navigate both online and offline. *Transience* is further important because the conditions and contexts that surround mobile composers are impermanent and continually reassembled. Thus, composing with networked mobile technologies means interacting with surroundings that are constantly refigured as composers' embodied movements on and off-screen bring them in contact with new architectures, devices, digital and informational reserves, values, attitudes, and social norms. When composing with networked mobile technologies, people absorb the impact of these ever-changing environments and infrastructures. They move while constrained by disparate materials, find and connect information in saturated environments, and negotiate messy, blurred social spheres.

Let me explain why I identify these foundational practices as literacies. My use of the term transient literacies parallels how Douglas Eyman (2015) defined the relationship between digital rhetoric and digital literacies, where digital literacies involve knowledges and skills that are a requirement for digital rhetorical practice. In a similar way, I understand transient literacies as practical and often invisible knowledge that is foundational to composing with mobile device ecologies. Navigating the immersive material and information spaces assembled by networked mobile devices brings along cognitive, social, and spatial challenges. By focusing on literacies, I align this knowledge-in-practice with social approaches that position everyday literacy practices as socially embedded, value laden, and situated rather than cognitively autonomous. Recent rhetoric and composition scholarship on mobile literacies emphasizes the complicated interplay between writers' movements and its systematic regulation through mobility systems that regulate movement. While my work differs from this line of research because of my primary focus on technologies, it shares an interest in how discursive-material constraints affect mobile composing experiences. For example, Wendy Hesford (2006) reviewed how the global turn in composition studies alerted scholars to the differential experience of mobility. Rebecca Lorimer Leonard (2013) extended this idea, offering the oft-cited idea of "the paradox of mobility" to describe how the freedom of movement implied by mobility is always accompanied by restrictions that arise as a result of social context. Brice Nordquist (2017) similarly examined the common assumptions that problematically divorce students' literacy practices from issues of everyday travel and position student learning spaces as bounded and separate from the rest of their lives. By contrast, we know that students compose across context, platforms, and

symbol systems working together to constrain their performances, which require fluidity and constant adaptation (Stornaiuolo et al., 2017).

Guided by this scholarship, I discuss transient literacies as practices of everyday analysis and positioning that are foundational to composing with networked mobile technologies and that integrate interactions with materials across screens and physical spaces. Transient literacies involve navigating, generating, and eventually participating in temporary infrastructures that become foundations for composing activities that range from extended academic projects to quick IM texts on the go. Importantly, as I will describe in more detail, the materials that composers encounter are themselves agents in composing and thus transient literacies involve collaboration on multiple levels: negotiating, evolving, and co-constructing surroundings with humans and nonhumans in which it is possible to learn, work, argue, debate, cooperate, and collaborate.

Examples of Transient Literacies

Since I opened this chapter by contrasting the example of *Digital Nation* students' behavior in the open-style common settings of their university with their professors' office and lecture-classroom style environments, it may be helpful to further discuss how students' composing practices in shared social environments depend on and are enacted through transient literacies. The freedom of movement afforded by mobile technologies means that they are often used in environments that people inhabit for only a short time. Even for complex composing projects such as extended academic essays, composing processes are often "dispersed" through multiple places and times (Prior, 1998; Prior & Shipka, 2003). In these situations, networked mobile technologies become a hub of potential that is constantly carried to and relocated among new settings and materials. For example, students may use a laptop to compose a single project across locations such as a desk at home, an office space, a library carrel, a classroom, on the bus, using a laptop at the doctor's or dentist's office, and in a coffee shop, restaurant, or café. Simpler, less time-consuming composing events that often happen on cell phones (for example, posting on a social media feed, composing a text message, or responding to a tweet) likewise take place in unexpected locations. Whether acting as writers or audiences for these texts, students use networked mobile technologies to bring them in contact with literacy work in places that were not designed to support it. Both complex and simple (in terms of time required) composing practices have a spatial-temporal contingency, then, that require people to navigate complex environments on the fly. I'll start with two stories to introduce some concrete examples of what I mean.

Ed & Kathryn's Stories

With finals week looming, a J.D./Ph.D. student named Ed was working on one of the most important academic milestones he would accomplish during law school: a researched law review article that was a requirement for graduation. He was also sitting in a coffee shop. Ed occupied one seat in a line of back-to-back booths along the upper floor of the Gone Wired Café in Lansing, Michigan.[2] Rumored to have been purchased from the set of Pulp Fiction, each booth was large enough to seat four or more; however, Ed was alone with his laptop. His face was lit by his screen and a mural painting of a green monster kept guard from the wall above him. While the green monster itself might not be so important, the mural marked an important location: this particular booth was located within a power cord's distance to an electrical outlet. Enough people used Gone Wired for studying and working that the prime real estate he occupied around power outlets was often snapped up by café customers who arrived early, sat for hours, and left late. Finding the green monster meant working for several hours without interruption. It is also worth noting that downstairs beneath him, Ed's friend Kathryn sat at a similar booth facing Gone Wired's coffee bar—removed enough from Ed that she couldn't see where he sat. Like Ed, Kathryn was also completing an academic paper that was important to her that night: reading and reviewing primary and secondary scholarship she would later reference in a philosophy seminar paper. Like Ed, she also sat alone at a large, round booth that could accommodate four to six people comfortably, but she had made use of the materials around her in different ways. For example, she had stacked journal articles and book chapters she was reviewing into a fortress around her laptop, the stacks of paper warning people passing by that she was here for work and not for fun. Both Ed and Kathryn made distinct choices to create distance between themselves and other people, which enabled them to complete writing tasks.

Ed and Kathryn sat in places that created some social distance, and they agreed that there was something satisfying about the immediate social context created by sitting, reading, and writing in Gone Wired. The café enabled them to balance the demands of their respective graduate programs with the pulls of different professional and personal social interactions. They differentiated this environment's potential with that of other places they often wrote, such as their campus offices or carrels. Kathryn shared her office with oth-

2 The Gone Wired Café has changed name, ownership, and purpose since I conducted the research study that inspired this book. I have retained the café's older name and identity to reflect the experiences of café patrons during that time. It is noteworthy that the café's name announced that digital, networked technologies were central to its identity.

er graduate teaching assistants in the Philosophy Department and Ed had a carrel in the law library. Both locales positioned them in social proximity to other graduate students, whereas the coffee shop provided social distance without isolation. Kathryn mentioned that her office was "shared with too many people [and was] too small to do good work there," adding that she "socialize[s] more in [her] office, or on the philosophy floor." Ed echoed her sentiment when describing the law library: "I find myself getting caught up in talking to people a lot more and I feel a little bit guilty about that." While working at home was a possibility, it had problems as well. Kathryn described how working at home was often a good idea "if there's a deadline." But even though Kathryn's house supported her work during some moments, she did not enjoy it. Working away from home helped her "feel less lonely." Ed, who lived with several roommates, said his house was always too distracting to get much done.

From observing and talking with research participants such as Ed and Kathryn, I began to understand how environments like Gone Wired offered access to materials that helped manage affective concerns and the difficulties of finding privacy in places closer to the university. To draw on Laura Micciche's (2014) words, they drew actively and deliberately on how "materials" present within different kinds of environments "are themselves endowed with energy and agency, contributing to the final product in nontrivial ways" (p. 497). While laptops, phones, roads, cars and bus routes made it possible to locate themselves in these physical environments, other technologies created connections and established boundaries that balanced their emotional needs with the demands of efficiency that graduate students experienced. Through an analysis of Kathryn and Ed's time-use that night, I learned that they interacted with each other while in the café, while keeping established but unarticulated boundaries. They used their cell phones to cultivate a connected distance, for instance. Every hour or so, Ed reached for his phone to send a text message to Kathryn, or Kathryn sent one to Ed. Through these messages, they made plans to meet outside for a smoke break, where they enjoyed a few minutes away from their respective tasks to chat. This was a regular routine, and Ed's roommates occasionally joined them as well. While Ed and Kathryn came to Gone Wired to escape distracting social environments, they also used the social web extensively from their laptops. The social web created an unpredictability to their movements, but both found connecting in this way to be tangibly and socially necessary. When I asked Ed about social media use, he said that he "generally [came] to do work" but often found himself "surfing the internet and talking to my friends online." Kathryn, too, said that even when under a strict deadline during the night I've been describing, she would take a few minutes to break and monitor her social networks on Facebook.

For both Ed and Kathryn, using social media sometimes involved talking to people that they knew well offline but also meant branching out toward connections and information with and from people and organizations they did not already know. Writing the longer researched pieces that mattered to their academic performance did not happen in isolation from the shorter social composing acts that kept them connected to their families and peers.

For Ed and Kathryn, mobile devices not only inscribed their words but also invited them to take up new practices to manipulate the social and material environments that would participate in their composing. As a result of the potential held in their laptops, they made purposeful choices to shape the conditions for writing, while also enabling other kinds of communication and social access that mattered to their livelihood. While their time in Gone Wired was important to them, it was also fleeting: they spent short intervals of time there before moving on to other places and organizing their composing in other ways elsewhere. Building on this more concrete example of transient literacies, let's now turn to another case, which illustrates some of the complex relationships among mobile devices, literacies, and dynamic social places.

Rebecca's Story

In 2012 when I began studying the second research site discussed in this book, the Technology Commons at the University of Central Florida, students and staff members were excited for the possibilities this new campus commons offered them. A campus Instructional Designer named Rebecca, for instance, talked to me about the opportunities that a place like this would offer her for moving around campus to address some unique demands of her position. On a campus with one of the largest undergraduate student enrollments in the country and nearly 2,000 teaching faculty, instructional designers played a mediating role between IT support staff and faculty members teaching online and mixed-mode courses. This work involved balancing multiple tasks: mentoring faculty members new to online teaching; responding to a steady influx of email questions; keeping up with the inevitable quirks of a learning management system scaled to accommodate 60,000 students; and reading and conducting research necessary for staying aware of trends in online and mixed-mode learning. Many instructional designers (including Rebecca) held advanced degrees and were also committed to conducting academic research, working individually or with campus teams.

The instructional designers' central workspace was a large open space with a conference table and several computer stations. Many instructional designers worked together in the open office at any given time. As Rebecca described it, the shared office was well suited to cultivating collective knowledge

among the group, making it useful for problem solving or brainstorming new ideas. However, Rebecca recognized that she would need to move through campus to find alternative places for addressing some aspects of her job that could be difficult in an open office: for example, reading or writing extended prose among the ongoing talk could be difficult. The Technology Commons offered an alternative to the shared space of the office: it offered the opportunity to use a few moments to cultivate a focus that could be challenging in the presence of colleagues working out loud on projects that were too "close to home" not to pay attention. Furthermore, the Technology Commons represented a spatial "middle ground" that could be useful for meetings with faculty. Of course, the Technology Commons posed challenges as well. It was loud, students were everywhere, and finding a table required roaming around until something opened up. For Rebecca, as for many of the individuals I introduce over the next several chapters, it is important to understand that spatial movements through the university directly influenced composing practices and the usefulness of a given space was contingent on individual needs. The potential of social spaces to usefully support composing with mobile devices did not guarantee that those places would be inviting, accessible, or usable. The Technology Commons' feasibility as a workspace was intertwined not only with Rebecca's individual positionality and desires but also with how the place had been taken up and embedded within social and geographical networks of the campus, community, and city.

As with Ed and Kathryn, Rebecca's story similarly focuses on literacy practices enabled by mobile devices in a multi-use space to which the writer travels in or through for a short time. However, her example further emphasizes the contingency associated with transient literacies: the ways in which locating oneself in temporarily inhabited places designed for many uses brings individuals in contact with aspects of an environment that cannot easily be predicted or controlled.

Reflecting on Analyzing and Positioning

The two stories I have just told have transient literacies woven through them. People like Ed, Kathryn, and Rebecca take active, if not always conscious, roles in negotiating their surroundings when they compose with networked mobile technologies. Over time they build a sense of the capacity of materials and places and engage materials and infrastructures in ways that suit their needs. Sometimes they also experience misalignments among their goals and the potential of the materials that surround them. Ed, Kathryn, and Rebecca cultivated relationships of proximity and distance that oriented them in different ways to multiple shared social environments, and in so doing, they also

participated in the creation of spaces and identities. As I will explain further in Chapter 2, composing with mobile, networked technologies in social spaces engages a "commons," or a shared space from which composers access social resources that have historically been understood as central to creating ideas (Lessig, 2001; McCullough, 2013), produces collective social interactions, and engages attention habits. This book focuses on how networked laptops in particular enable composers new locative potential, while also complicating the sociability of shared spaces. Within the transdisciplinary and public conversations about mobile device use, researched accounts of how people are interacting with networked mobile technologies can complicate generalizations and lore that totalize these experiences. Much of the current discourse operates through sweeping claims that rely on generational narratives or assume a totalizing deterioration of collective spaces. This book represents one possible step toward a more nuanced perspective on how mobile technology use intersects with writing through a focus on transient literacies in action, using a fieldwork approach that treats composing as a complex sociotechnical practice that engages both humans and nonhumans.

Focusing on Fieldwork

Composing in shared places with mobile computing devices is common, from studying in a Starbucks to telecommuting from a public park to using a shared university learning space for a team meeting. In spite of how familiar these practices are, rhetoric and composition researchers have produced relatively few systematic, detailed studies that focus both on the use of networked mobile devices and the extracurricular surroundings that influence these practices. There are notable exceptions. For example, in the years since Anne Ruggles Gere (1994) drew attention to the "kitchen tables" and "rented rooms" where community writers meet to exchange texts and ideas, Clay Spinuzzi (2012) analyzed the role the coworking spaces play for professional writers, and Huatong Sun (2012) traced how students write with mobile phones in dorm rooms and during travel. More recently, John Wargo (2015) researched how platforms like Snapchat become entangled with both place and affect in youth digital literacies, and Ty Hollet and Christian Ehret (2014) focused on the "real virtualities" invoked when youth use mobile devices in classroom contexts.

This research has been foundational; however, we still lack a qualitative study focused primarily on how college students create space for networked mobile devices outside dorms and classrooms. *Transient Literacies in Action* builds from a systematic, qualitative, IRB-approved study that observed how several individuals and groups across two research sites composed in and

with mobile surroundings and learned more from how these composers discussed the practical knowledge that enabled mobile composing. In the vein of the research cited above, I have approached this task by researching the use of networked, mobile devices *in action*. The term "action" in literacy or writing research has typically signaled a focus on agentive potential. For example, Charles Bazerman's (2013a, b) recent two-volume rhetoric and theory of literate action theorizes how composers induce cooperation and achieve results. "Rhetoric is built for action," Bazerman suggests, and "it ha[s] to do with how to accomplish things" (2013a, p. 15).

This book interprets composing action as a collaboration among materials. That is, the arguments in this book rely on sustained observation of two shared social spaces over two periods of several weeks of normal everyday use, videotaped observations of networked mobile device use in practice in these places, and interviews with consenting research participants. These interviews enabled me to contextualize my observations, as well as share participants' voices. My grounding in qualitative fieldwork helps me understand how interactions with networked mobile devices unfold in the present moment. This focus on unfolding action has provided a way to describe the complexities of these practices, while attending to multiple materials that participate in that complexity.

Embodied Materialist Grounding

My fieldwork is informed by a materialist perspective that emphasizes mobile device use as embodied, emplaced situated action and that explores the bodily experience of that action in non-representative snapshots. As shorthand, I refer to this approach to fieldwork as an embodied materialist grounding. Rather than attempting to trace macro influences on micro practices, the embodied materialist research that grounds this project emphasizes the importance of relations and interactions as continually recreating composing agencies and experiences. In Chapter 3, I will discuss in more detail how the intersection of materiality and embodiment is unique within studies of digital rhetoric and literacy. To provide an initial foundation for that discussion, this introduction explains how I understand my fieldwork's concern with materiality and embodiment, before discussing an important methodological precursor to my approach in Lucy Suchman's situated human-machine interaction research.

My approach to fieldwork is *materialist* in that it assumes my phenomenon of interest (i.e., composing with networked mobile devices) to be a fundamentally collaborative practice involving humans and nonhumans together. My assumption is that mobile computing engages surroundings, which

become generative participants in composing rather than backdrops for the real action. In so doing, it positions the agency of composing as a distributed enactment that is only possible at the intersection of bodies (human and nonhuman) and their surroundings. Importantly, when I suggest that materials are generative, I mean that they have capacity for shaping what rhetorical action is possible and how it takes place in a given situation. I do not mean that their capacity will lead to positive ends, or be helpful toward achieving human goals. Just as frequently, the collaborations lead to small and large failures, as several of my case examples will illustrate.

As I have argued, networked mobile devices complicate any sense of a pure, bounded domain for writing practices. Instead, these devices lend themselves to the continual production of densely layered spaces where information, values, and social actors conflict. As a result, I am further concerned with ensuring that my focus on the agentive nature of surroundings and materials does not oversimplify or "fix" the environments that I understand to shape networked mobile device use. Christopher Keller (2004) argued that a historical problem for ethnographic approaches in composition studies has involved the ways that research studies "imagine, minimalize, and construct our conceptions of spaces and places" (p. 206). Using the classroom as his primary example, Keller argued that research studies often position these places as "a simple microcosm of the larger social and cultural formations, as reflections or shadows of what's going on in the 'outside' world, therein erasing the classroom's status as a place where meanings, conflicts, and discourses are made" (2004, p. 209). The same can hold true for spaces beyond the classroom as well. Places are not generic, fixed containers that reflect overarching structures, and my fieldwork approach attempts to understand environments as continually shaped through interactions.

At the same time, my approach to fieldwork is *embodied* in that it locates an important form of composing knowledge in bodies and their spatial, relational, and time commitments to materials. I learn from humans' bodily intentions and perspectives when participating in enactments of agency with environments, materials, and infrastructures. In this sense, the bent of my approach is phenomenological in its concern for what Dorothea Olkowski (2006) described as "things as they appear to our experience, as well as to the meanings things have in our experience" (p. 3). In other words, my approach positions bodies as providing both a perspective and perceptual location for humans' experiences of practice, where bodily action is purposeful and yet not necessarily premeditated or controlled by conscious thought. Traditional phenomenological methods often generalize about human experience based on limited cases (often of white men); however, as I will further explain in Chapter 3, I approach the experience of lived bodies through what I have learned from ac-

counts of the perspectives and practices of othered bodies and their embodied orientations (Ahmed, 2004; Anzaldúa, 2002; Young, 1980). Situating the experiences of networked mobile composers in this way is crucial for countering an assumed privileged, white, able-bodied subject as the general norm.

In the same way that my fieldwork pushes for a complex and agential reading of place, this approach also attempts to avoid an oversimplification of participants' experiences. Queer, gendered, and raced phenomenological research emphasizes that experiences cannot be reduced to normative bodily experiences. Further, I draw from Keller's further insights about the traditional positioning of students within qualitative studies of composing practice. In line with Keller's critique of traditional composing ethnographies, I do not position students' experiences as representative of their writing realities, nor as reflecting their experience as members of any particular bounded culture or subjectivity. Instead, I am interested in creating new situated accounts from what Michel de Certeau (1984) referred to as the space "down below" the "threshold at which visibility begins" where "bodies follow the thicks and thins of an urban 'text' they write without being able to read it" (p. 93). At this point one can see not only consciously employed "strategies," but also the ephemeral "tactics" of practice that put environments, materials, and infrastructures to use toward the ends of desires not articulated in systems.

One important methodological forerunner for my approach is Lucy A. Suchman's (2007) *Human-Machine Reconfigurations: Plans and Situated Actions*, which introduced an interactional approach to understanding how people work with technologies. Based on an earlier study of how employees used Xerox machines in a workplace setting, Suchman conceptualized human-computer interaction (HCI) by de-emphasizing human intention and refocusing attention on how interactions among people and technologies continually co-construct the potential for future action. Responding to a field that had previously positioned human plans as deterministic, Suchman contributed a method for tracing how practices emerge and evolve in situated moments. In this model, human plans, intentions, and perspectives are indeed one important kind of resource that shapes technology use, but they are always positioned as one resource among many.

Thus, where many cognitive approaches to studying technological interaction focused on human agents as guiding and shaping device use, Suchman's situated action research honed in on "how it is that actors use the resources that a particular occasion provides (including, but crucially not reducible to, formulations such as plans) to construct their action's developing purpose and intelligibility" (2007, p. 31). By treating action as an achievement depending on materials and interactions that are never predetermined, Suchman urged HCI scholars to pay attention to how all participants in a given work

event were made mutually intelligible to one another, finding ways to "cooperate" in order that work could be accomplished. As a result she built on the tradition of how ethnomethodology[3] and conversational analysis positions meaning as emergent structures built through, in Harold Garfinkel's terms, the "contingent ongoing accomplishments of organized artful practices of daily life" (1967, p. 11). By paying attention to situated actions rather than their stated plans, it became possible to see how many resources and representations contributed to action, while none fully determined it. The portraits of technological interactions that emerged from these approaches offered new ways of understanding the complexity of how people used and struggled with technological interfaces. This approach allows for deep description of interaction from a perspective that assumes distributed and enacted agency. However, it also allows for a focus on the micro-level embodied movements of lived human bodies in a composing scene. It brings materialist and embodied concerns into dialogue through new storied performances.

Using embodied materialist fieldwork to study networked mobile devices use offers the opportunity to see the relationships between people and the materials of their surroundings differently. As a researcher who tells the stories generated from this research approach, it is also important for me to account for how my own positionality, perspectives, and limitations shape the stories that can be told from fieldwork. To value the idea of agencies as co-produced and performed, it is important to position researchers not as privileged interpreters of action but rather as additional participants in what Karen Barad (2007) would call the entanglements that enact agencies. Thus, it is important for me to acknowledge how my own surroundings of "matter and embodiment come to matter in the process of research itself," becoming materials that participate in the accounts that form this book. The accounts that ground the knowledge in this book should be understood as "enactments rather than descriptions" (Jackson & Mazzei, 2012, p. 127).

3 Ethnomethodology is a helpful but complex approach to thinking about how social life is generated through everyday practices. Ethnomethodology was first championed by sociologist Harold Garfinkel (1967), who theorized that everyday actions provide a means for understanding how social worlds are produced and reproduced in the interactions of everyday life. Ethnomethodological approaches have been used in writing research that attempts to reconcile cultural/cognitive or structure/agency binaries (Brandt, 1992; Schneider, 2002), or that traces how semiotic practices such as talk, drawing, gesture, and/or inscription shape the processes of literate activity (Godbee, 2012; Prior, 2013; Olinger, 2014). While most ethnomethodological research studies analyze talk, these approaches have also been adapted to analyze interactions among people and elements of their surroundings. Although Suchman's situated action research has disadvantages for technology interface design research (Kaptelinin & Nardi, 2006; Nardi, 1996), applying ethnomethodologically inspired research has enabled closer tracing of human-machine interactions that are useful toward other goals.

Case Examples as Performances

When applied to the use of networked mobile devices in the Gone Wired Café and the Technology Commons, embodied materialist fieldwork shows how participants collaborated with phones, desks, emails, calendars, lights, and their own routines, mobilizing materials in ways unique to their situations and motivated by conflicting personal, academic, and professional habits and goals. While these cases emerge from my position as a scholar in rhetoric and composition and professional communication, the student mobile experiences discussed in this book relate to the broad interest of public and academic conversations about the impact of mobile devices, as well as to the questions raised by scholars across mobile literacy, learning, and information studies.

The experiences that I discuss come from people using laptops (and, secondarily, phones) in two shared social places that I introduced in prior examples. These two places are as much participants in the research as the humans who used networked mobile devices within them. The first location, the Gone Wired Café in Lansing, Michigan, was a coffeehouse heavily frequented by students, professionals, and people who lived in the local community. The second location, the Technology Commons at the University of Central Florida in Orlando, Florida, had been explicitly designed to support mobile study and work for students, staff, and faculty of the large metropolitan university where it was located. These places provided access to different kinds of assembled values and materials, while gathering different students, tasks, and activities. Although the two research sites were geographically far from one another and attracted different people, they shared similarities. Both were located on highly traveled pathways and were used for activities that varied from study to professional collaboration. Both invited interactions among teams with shared tasks, groups spending time together because of social relationships, and individuals connecting with others even when they appeared to be alone. As such, Gone Wired and the Technology Commons shared a relationship to social, technological, cultural, and organizational arrangements for learning, working, and socializing that have become commonplace in the United States and beyond. While I was familiar with both of these places from my time using laptops within them, I devoted six weeks in each location solely to observing everyday uses of mobile devices. The Appendix shares additional detail about this phase of observation.

As I have already suggested, my fieldwork further focused deeply on a limited number of cases of networked mobile device use. While my observations included many kinds of mobile devices in practice, I have focused my attention in this book primarily on the use of laptops in commons spaces.

Case research is often critiqued from positivist perspectives for its lack of generalizability; however, I do not intend the stories in this book to be generalizable. Instead, the case examples presented should be read as performances generated in a particular time and space. For example, although Ed and Kathryn experienced the coffee shop as a useful respite for cultivating the privacy they needed to write, it is not reasonable to suggest that this experience would be the norm among all graduate students, law students, or even students who share their race, class, gender, and/or age. Further, is also not reasonable to assume that Ed and Kathryn would feel the same way today, several years after their participation in this research project. The accounts in this book begin with small, fleeting moments in the lives of moving and changing people. The students in this book cannot be reduced to their practices, and each of them has already moved on to new devices, new practices, and new places.

Instead of generalizations, these case accounts serve the purpose of "respecification" (Hindmarsh & Heath, 2007). That is, they offer ways to concretely interact with phenomena that are often unproductively generalized. The goal of making oft-generalized actions specific is to provoke questions that challenge common stereotypes and that provoke new possibilities for moving forward. Commonplaces such as the distracted student, the isolated student, or the aloof student unaware of her shared social surroundings are often the norm in both public and insider lore regarding contemporary university students and their networked mobile device use. While there are inklings of truth in many stereotypes, respecification is necessary for better understanding how composing comes to be in the face of information saturation and constant movement. Paying attention to the action of transient literacies enables educators to rethink these commonplaces, which often position university students as universally connected, "always on," gadget-bound, and distracted. Such generalizations disregard issues of uneven access (Grabill, 1998; Moran, 1999) and ignore how relationships to space and technology are differentially experienced based on race, class, gender, ability, and a host of other influences.

It is furthermore important to position the performances of case examples in this text as informed by my own writing of them. Reclaiming attention to diverse embodiments and ephemeral practices while resisting positivist generalizations can prepare instructors and administrators for what Barad (2007) called a "diffractive reading," a way of interacting with data that reinserts those who encounter a story back into its frame. It is important for teachers and researchers to reflectively consider our own response to networked mobile devices and acknowledge how our assumptions play a role in the ongoing production of the social worlds in which students compose.

(Human) Participants

In order to understand these accounts, it is useful to know more about the participants in my research. As is the case with Ed and Kathryn, most writers I discuss as case examples in this book are students who used networked mobile devices in shared social places. As Table 1.1 shows, research participants in the Gone Wired Café and Technology Commons were diverse in terms of race, gender, and academic affiliations. In addition, they described themselves as traveling to Gone Wired or the Technology Commons for reasons ranging from homework to completing major writing projects to using social media to killing a few moments between classes. Given the openness of both locations and the tendency for mobile devices to blur personal, professional, and academic lives and contexts, it is hardly surprising that purposes for using these places spanned domains (i.e., personal, school, extracurricular), subject areas, and included both formal and informal writing.

The case examples that I have drawn out for discussion in this book are those where networked laptops are primary participants in composing. The people using these laptops reflect a diversity of embodiments and also have been grouped to reflect similarities in their composing purposes. The purposes for this writing align with broad-ranging academic, professional, and personal composing interests. For example, the cases covered in Chapters 1–6 highlight the following kinds of composing: writing alone to complete homework assignments, interacting with video media to complete homework assignments with others, interacting on the social web while "killing time" between classes, and research and writing for extended projects (i.e., a composition paper, a graduate-level research paper, a collaborative business plan). As such, the cases explore a range of academic, professional, and personal composing exigences faced by people who compose with networked mobile technologies.

Table 1.1. Research participants and demographics

Name	Location	Main Purpose	Subject Area	Gender[1]	Race[1]
Kim	GW	Homework	Rhetoric	F	White
Ed	GW	Major writing project	Law	M	White
Kathryn	GW	Major writing project	Philosophy	F	White
Dave	GW	Major writing project	Professional	M	White
Luna	TC	Homework	Calculus	F	Asian
Max	TC	Homework	Calculus	M	Asian and White

Name	Location	Main Purpose	Subject Area	Gender[1]	Race[1]
Ann	TC	Socializing & homework	Criminal Justice	F	White
Heijin	TC	Homework	Tourism	F	Asian
Dean	TC	Homework	Graphic Design	M	Asian
Carly	TC	Homework	Graphic Design	F	White
Sofia	TC	Test prep	Organic Chemistry	F	Hispanic
Nadia	TC	Test prep	Organic Chemistry	F	Asian
Micah	TC	Killing time	Game Development	M	White
Charlotte	TC	Major writing project	Business Management	F	White
Owen	TC	Major writing project	Business Management	M	White
Gabriel	TC	Major writing project	Business Management	M	Hispanic
Sal	TC	Killing time	Web Surfing	M	Preferred not to disclose
Tiffany	TC	Major writing project	Business Fraternity	F	Black
Nora	TC	Major writing project	Business Fraternity	F	Black
Nicholas	TC	Major writing project	Business Fraternity	M	White
Ray	TC	Killing time	Gaming	M	Black
Theodore	TC	Homework	Accounting	M	White

1. Self-reported

Conclusion: Looking Forward with Transient Literacies in Action

In this introduction, I have defined the scope of this book by introducing the transdisciplinary problem of better understanding how composing is experienced when it is surrounded by the overlapping social environments and

materialities that accompany networked mobile devices. I have introduced the idea of transient literacies to describe a practical knowledge of negotiating mobile composing environments, and I have positioned this project as one based in an embodied materialist approach to fieldwork. The following five chapters pick up on this foundation and further explore transient literacies by interacting with cases from research.

Chapter 2 begins the work of resituating mobile networked device use in space, time, and experience by exploring the intersection of shared social spaces and networked mobile device use. Shared social environments have long been important as inventive spaces for public or civic discourse when positioned as *public spaces*; however, networked mobile devices are used across places that are shared but not necessarily public in the sense that public sphere theorists have used that term. This chapter focuses on the Gone Wired Café and the Technology Commons as physical environments that become hubs for resources taken up in mobile device use. I argue that mobile device users frequently position these places as *commons* spaces rather than as public spaces. Framing shared social environments as a commons opens up the potential for exploring their role in providing resources that are adapted and shared to meet individual or collective needs. Focusing on shared places as arbiters of social resources brings new attention to the role that commons environments play in experiences of mobile, networked device use and also emphasizes the difficulties individuals experience when aligning individual needs to the capacities of shared environments.

Chapter 3 follows on this problem by offering an embodied materialist approach to understanding the intersections between individual experiences and mobile surroundings. This approach focuses on how surroundings are populated by materials that become co-participants in networked composing practices. The chapter offers a heuristic for understanding the mobile surround relative to composing as a cross-domain liminal space that combines materials from personal repertoires, productive settings, and eventual circulation networks. I further take up transient literacies as a form of knowledge performed in lived bodies' spatial, relational, and time commitments to these cross-domain materials. Finally, the chapter takes up Barad's (2007) idea of "intra-actions" to consider how the action of composing with networked mobile devices produces not only texts but also social contexts that matter to further composing potential. In particular, I focus on the feedback loops through which social relationships and attention are produced (and often troubled by) networked mobile device use.

Chapter 4 builds on this framework to explore the experience of *sociability* in the commons, asking how interpersonal interactions play a tangible role in composing with networked mobile technologies. This chapter looks

beyond the commonplace of students "alone together" to discuss forms of social proximity and distance constructed in students' interactions with networked mobile devices (Turkle, 2012). I offer the concept of *ambient sociability* to describe the contexts in which available and/or potential social interactions abound, creating a situation in which social potential always occupies a background amongst other foregrounded potential. The chapter takes up how ambient sociability may shift the social focus in composing from "contact" to "potential," and introduces monitoring, contributing, and disengaging as a linked cycle of engagement that affects how people interact across platforms.

Next, the book turns to the relationship among *attention* and transient literacies in Chapter 5. If composing with mobile, networked technologies invokes shared resources and takes place in scenes in which some social resources are continually pushed to the background of focus, how does this affect attention practices? Would attention have different implications if we positioned it as dynamically co-constructed between humans and environments, instead of an internal process? Rather than focusing on mobile composers' distraction, the chapter traces how attention is composed in sequences of interactions and proximities. Positioning attention as a thing composed opens the door to new understandings of how people, environments, and technologies construct this assembled agency together. Rather than replacing old commonplaces about attention with new ones, the chapter avoids generalizations about students in favor of questioning and gesturing toward new implications.

Finally, the book's conclusion in Chapter 6 builds on this framework to reiterate the importance of looking outside screens to understand how networked mobile devices intersect with composing practices. Given the importance of these issues to academic literacies, as well as the changing nature of professional work and community engagement, this chapter reiterates the stakes of the argument and gestures toward a framework for the use of mobile, networked devices that centers the role of attention, sociability, and the commons as a means for managing proliferating information and interaction in academic coursework, distributed workplaces, and community sites. Across the case studies and questions raised through them, this book reveals hidden social, material, temporal, and spatial constraints that accompany the "freedoms" of using mobile technologies, but also articulates new ways that students are relating to and working with them.