opened the book and started to read . . . I COULD NOT READ. It was like my eyes would not cooperate . . . All the words ran together. I was so scared that I said, ‘Oh my God, I can’t read.’ I must have said it louder than I thought because my waiting was over.” Jean—a special education teacher for over twenty-five years supporting students with reading and writing and an avid reader and writer herself—writes these words four years after a stroke sent her to the emergency room and she found her “normal” literate practices completely overturned. Jean’s memory marks her first realization that she had acquired aphasia, a disability affecting the production and comprehension of language, caused by stroke or other brain injury and creating a variety of challenges in speaking, writing, and reading. Although Jean received the medical attention she needed in these alarming moments, she found that her literacy practices had been permanently changed. While by force of habit she expected it to, her body—her eyes—could no longer make sense of the book, a material of literacy used by Jean throughout her life and career. Aphasia presented to Jean what I am calling a “literate misfit”—a conflict between her body, mind, and the materials of literacy. That conflict sheds light on how the relationship between the embodied, material, and social aspects of literacy operates on all writers, disabled and normatively abled.

To make this argument, I draw from a larger study to focus in on the accounts of eight people with aphasia who are grappling with reading and writing after experiencing a significant change to their access to language. Like Jean,
others also experienced losing control over body, mind, and materials. After aphasia, everyday literate practices that seemed “just normal” or automatic, such as reading a book in a waiting room, are uncomfortably disrupted. Dense newspaper text runs together, obscuring words and meaning; handwriting no longer looks like the writer’s own; ideas feel “squashed”; reading requires re-reading. And an individual’s sense of her or his literate identity alters as well. “I did, I tried to, [mimes reading] I can’t do it. I can’t read it,” former pharmacist Bob explains. “Frustrating. Absolutely, positively frustrating,” says former grocery store manager Robert of reading and writing after aphasia. “I don’t have a flair to do it,” former high school English teacher Judy says of writing after aphasia—explaining that she has “left the writing behind.” What does this misfit between body, materials, and social expectations around literacy mean for the writing of people with aphasia? And what does it mean for understandings of literacy more broadly?

In addressing these questions, this project contributes to a recent move in writing studies to bring the social and material aspects of literacy into closer conversation. A social understanding of literacy foregrounds how within economic systems, power relations, and everyday experiences literacies are valued or devalued and how literate subjects are differentially able to acquire, use, and mobilize those literacies (Street; Heath; Gee). Material approaches to literacy direct attention to how literacy is facilitated by tools or technologies such as pencils, paper, keyboards (Haas; Baron; Syverson; Prior and Shipka; Pahl), and, as I will underscore, the body (Haas and Witte; Fleckenstein; Purcell-Gates et al.; Lindgren; Owens and Van Ittersum). Literacy activity theory, particularly as developed by Prior and Shipka, aptly encapsulates this materiality as “the dispersed, fluid chains of place, time, people, and artifacts that come to be tied together in trajectories of literate action” (180).

Theorizing literacy as “sociomaterial” exposes how social values, expectations, and trends are imbricated in the very materials of literacy and how the two “interanimate each other” (Vieira, “Writing” 423). The “familiarity of ‘the social’” in writing studies has often prevented researchers from articulating how the social nature of writing is, in fact, deeply material, argues Laura Micciche in a recent issue of *College English* on “Reimagining the Social” in composition studies (498). Failing to account for how writing is enabled by a range of material realities keeps us from fully articulating the social nature of literacy (Micciche 498; see also Brandt and Clinton; Prior; Shipka; Syverson). Of course, the materials of literacy are themselves socially constructed, weighted with assumptions about texts and the tools necessary to produce them (Haas 229). The social and material aspects of literacy are inseparable.
The crucial takeaway for my purposes here is that while the social and material aspects of literacy come together to facilitate literate practice, learning, and identity, they just as often exclude, hinder, and block. For instance, scholars studying the radically different contexts of the colony (Canagarajah) or the slave quarters (Cornelius) illustrate the uneven allocation of material resources, including papers, pens, light, and time. Without paying attention to the socio-material dynamics of literacy, we, too, are less able to account for differential consequences and benefits—why some individuals are able to gain economic and physical mobility, why some are able to claim a literate identity, and why others cannot (Vieira, “American”; Cornelius; Brandt, *Literacy*). To account for the social dynamics and consequences of literacy, we must attend to the material.

I contribute to this discussion of literacy as sociomaterial the concept of literate misfitting—or the conflicts readers and writers encounter when their bodies and minds do not fit with the materials and expectations of “normal” literate practice. Misfitting, explains disability theorist Rosemarie Garland-Thomson, “occurs when the environment does not sustain the shape and function of the body that enters it” (594). For people with disabilities, these moments of misfitting occur when their bodies and minds conflict with materials built for the “able-bodied.” I contend that disability studies, with its commitment to articulating the interdependence of the social and the material aspects of lived experience, helps writing studies to sharpen its understanding of how writers’ bodies matter (Haas and Witte; Owens and Ittersum) specifically by drawing our attention to embodied experience as a way of knowing—as theory in and of itself (Siebers 14). Disabled writers, in particular, through embodied literate practices, “challeng[e] our assumptions about literacy and cal[l] attention to the physicality of literate acts” (Lindgren 99).

In this essay I draw from literacy history interviews I conducted with people with aphasia to show how, in everyday literate activities, people with aphasia 1) draw on the materials of literacy to take on various uses or aspects of their bodies and minds, and 2) use their bodies and minds to take on various uses and aspects of the materials of literacy. For writing studies, these strategies deepen our understanding of the integral role of the body in the practice of reading and writing—pointing to the body itself as a technology of literacy. These strategies reveal an overlap between bodies and materials of literacy as the two share work and supplement one another in literate practice. However, I also show how, despite these productive strategies to read and write in the face of literate misfitting, social pressures from what individuals understand as “real” reading and writing push back on and sometimes limit individuals’ new strategies and, in turn, their literate potential. The accounts of literate misfitting and the innovative strategies of people with aphasia to address that exclusion show how
the imbrication of the social and the material aspects of literacy both enable and constrain literate practices and identities. Literate misfitting, then, reveals both how people with disabilities are often excluded from normative conceptions of literacy and how their experiences adapting and innovating in the face of literate misfits offer vital insights into the social and material aspects of literacy.

**Studying the Social and Material in the Literate Practices of People with Aphasia**

The argument I present in this essay is based on an analysis of seventeen in-depth literacy history interviews conducted with people with aphasia in a midsize Midwestern city and the surrounding rural area. While aphasia more commonly affects people in middle- to upper-adulthood, my participants range in age from twenty-four to eighty-two, and interviewees were split across gender: six men and eleven women. I initially recruited participants from an aphasia self-help group and multimodal composing groups for people with aphasia that I had been facilitating as part of a public humanities program. I then used snowball sampling—receiving recommendations from participants for other individuals to interview. The participants are predominantly white monolingual English speakers. About half of the interviewees come from rural backgrounds, and most participants have middle- to working-class roots. It is important to note that many live below the poverty line after aphasia and other stroke or brain injury related disabilities have created barriers to employment. And the participants have also been living with aphasia for a varying number of years: from one year to fifteen years.

The individuals I feature in this essay are a focal group of eight interviewees who discussed strategies for reading and writing after aphasia at length. All of these individuals experienced strokes, aneurysms, brain tumors, or other traumatic brain injuries that caused aphasia and, for some, weakness on the right side of the body. Among them, Jean, Sandy, and Judy are former teachers responsible for instructing about aspects of reading and writing. Jean was a special education teacher for over twenty-five years in elementary to middle school. Sandy taught first grade for over twenty-five years, and Judy taught high school English for twenty-five years and then worked as an alternative education instructor. Margie was a keypunch operator and data specialist at a manufacturing plant until the 1990s, then retired and now works part-time as a theatre usher. She is a voracious reader. Rose’s career path shifted from computer programmer to chef to, after her stroke, tai chi and yoga instructor for senior citizens and stroke survivors. Robert worked up from grocery bagger to regional supermarket manager and now offers presentations encouraging aphasia awareness around the region. Bob
was a pharmacist. John became a marine, worked overseas interpreting Morse code transmissions of international intelligence—then worked domestically to manage security needs for a couple of corporations.

In order to understand how aphasia affects everyday reading and writing practices on material, embodied, and social levels, I asked participants to describe reading and writing before aphasia, soon after acquiring aphasia, and at the time of their interviews. Participants recounted childhood reading and writing struggles and successes. They recalled the role of reading and writing in their work and in hobbies. They also explained differences in reading and writing after aphasia, what makes reading and writing more or less difficult, and bodily and material strategies for navigating challenges and changes with reading and writing post-aphasia. Life history interviewing, with its commitment to gathering underacknowledged perspectives, matches my research goal to explore how the social, material, and embodied components of literacy intertwine and conflict in everyday literacy practices for people with aphasia (Brandt, The Rise; Duffy). The method forwards my commitment, in spite of communication barriers, to including the perspectives of people with communicative disabilities, who are often excluded from interviewing (O’Day and Killeen; Lloyd et al.; Carlsson et al.).

Influenced by feminist and disability studies research (Royster and Kirsch; Price, “Disability”), I sought to make our interviews as communicatively accessible as possible. To do so, I designed data collection and analysis with the various abilities and disabilities of participants as a guiding factor. I designed an illustrated consent form; provided concise large-print interview questions in advance; invited participants to bring a communication partner to our interview if they preferred to; encouraged participants to use speaking, writing, drawing, and gesturing in interviews; and videotaped interviews so I could consider non-verbal communication in my coding. Using grounded theory to analyze these interviews, I coded for practices; tools, materials, and resources; and motivations (Charmaz). Through several rounds of coding, myriad themes emerged, one of which I will discuss in this essay: people with aphasia experience a conflict between their bodies, minds, and the normative materials and expectations of literacy—or literate misfitting.

**Literate Misfitting: A Disability Theory for Writing Studies**

One of the primary contributions of disability studies has been to advance a social model of disability, revealing how disability is not a matter of individual impairment but is caused by environments built for “able” or “normal” bodies. The very existence of stairs, for instance, assumes, by their very design,
bodies that can climb them and excludes people in wheelchairs from entering various spaces. Many disability scholars have argued, however, that the social model “erases the lived realities of impairment” and, therefore, disregards the embodied experiences of people with disabilities (Kafer 7; see also Shakespeare; Davis; Siebers; Snyder and Mitchell; Wendell). The disability studies concept of “misfit” or “misfitting” responds to those critiques by foregrounding the body as a simultaneously social and material source of meaning-making. It is the fit or misfit between bodies and materials that highlights how both are weighted with expectations. A misfit, says Garland-Thomson, is “an incongruent relationship between two things: a square peg in a round hole. The problem with a misfit, then, inheres not in either of the two things but rather in their juxtaposition, the awkward attempt to fit them together” (592–3). Bodies and materials, which are both socially constructed and material, affect that fit or misfit.

I draw upon this work to offer the concept of literate misfitting, which makes two primary contributions to a sociomaterial perspective of literacy. First, it reveals that, due to ideologies about able bodies built into the technologies of composing, the very materials of reading and writing may misfit with and, therefore, exclude individuals with various kinds of bodies and minds. Unequal access to literate practices and identities, thus, is perpetuated by “material configurations misfitting with bodies” (Garland-Thomson 602). For instance, the material design of keyboards assumes hands and fingers that type; pens and pencils presume a grasping hand; the printed page aligns with eyes that take in the visual, brains that process and produce language—without pain, without delay. In the terms of a sociomaterial perspective of literacy, literate misfitting makes clear how assumptions about “normal” bodies and minds inhere in the very materials of literacy, sometimes constraining individuals’ literate practice. This relationship between “body and world” (594) can be understood as a dynamic “choreography” as bodies and materials “come together in time and space” alternately fitting and misfitting, enabling and constraining literate action and identity (595).

Second, literate misfitting develops embodied situated knowledge for individuals who experience it—vital perspectives that can inform literacy studies. The “productive power of misfitting” arises from what Jay Dolmage terms “metis”—a distinctly bodily intelligence” (233) and its ability to “yield innovative perspectives” about bodies, materials, and the ideologies that suffuse and constrain them (Garland-Thomson 604). In this way, the embodied experience of disability produces “theory” by exposing the “dominant ideologies of society,” rendering them “open to criticism” (Siebers 14), and pushing toward more just “politics and praxis” (Garland-Thomson 597). By studying how individuals experience, respond to, and develop new strategies from literate misfitting—such
as the people with aphasia in this essay—writing studies stands to gain new perspectives regarding how the embodied, material, and social intertwine and come into conflict for readers and writers of all abilities. Specifically, we see how individuals draw on the materials of literacy to function as prosthetics for the body and on their bodies themselves as technologies of literacy. While social conceptions about “normal” literacy often keep individuals from valuing the new literate practices they have developed, the experience of literate misfitting also sometimes incites individuals to critique and revise normative practices and expectations of literacy.

Literate Misfitting: Negotiating Materials and Bodies

In this section, I analyze the experiences of literate misfitting that arise for readers and writers with aphasia in everyday literate practices as the needs of their bodies clash with the affordances of the materials/technologies of literacy they encounter. I track both the exclusionary nature of these embodied and material conflicts and the knowledges, insights, and new perspectives people with aphasia develop as they address literate misfitting. I am especially interested in the many creative strategies readers and writers use after aphasia to comport their bodies and materials/technologies beyond their “normal” uses. In each strategy, the enmeshment between bodies and material/technology is apparent as individuals alternately attempt to adapt the materials of literacy and their bodies to take up various functions of one another. That is, in individuals’ strategies, the body takes on various uses or aspects of the materials of literacy, and the materials/technologies of literacy take on various uses or aspects of the body. These strategies are adaptive and inventive, emphasizing the interdependence of body and literate materials/technologies. In what follows, I examine the exclusionary experience of literate misfitting and its productive insights for people with aphasia in two sections: the materials of literacy as prosthetic and the body as a technology of literacy.

Materials as Prosthetic

After aphasia, in response to literate misfitting, individuals draw on various technologies or materials of literacy to suit the needs of their bodies and minds. In this way, materials of literacy serve as prosthetics, or supplements, to individuals’ bodies. Analyzing these responses to literate misfitting reveals how intertwined technologies of literacy are with individuals’ bodies: how the body—as material with particular affordances and as socially constructed—inherits in the design and use of the materials of literacy. I detail, then, various uses of materials to take on functions of what the body can no longer do, including using writing itself as a material technology to aid in other literate practice.
Adapting with Materials. People with aphasia draw on adaptable materials of literacy—including electronic books and readers—to meet their bodies’ needs. Jean explains that, after aphasia, a misfit occurs between densely printed text and her body and mind’s ability to separate words and decode language. “I can’t separate the letters from one letter to letter,” she says. To mitigate the misfit, Jean uses literate materials as prosthetics for her bodily needs. Using a Kindle or an iPad, she meets the needs of her body: “I have to have it big. I have to have it bold.” Having text read aloud to her by her iPad also enables Jean to meet the needs of her body. “I’m really bad at nonfiction like an article or something,” Jean explains, “and I was doing some research this week, and I read it and I was like, ‘Okay, my brain didn’t understand it, so I highlighted it and it read it to me and I was like ‘Ah, now I get it!’” In this scenario, Jean identifies both the material realities of her body (“my brain didn’t understand it” from reading with her eyes) while welcoming, making use of, and negotiating technologies that provide access to an otherwise inaccessible reading experience. These material strategies help Jean manage literate misfitting and reflect her acknowledgment of her agency around own literate practice. “I don’t get as many words on a page, but who cares,” Jean says, noting, but rejecting social norms built into the materials of texts.

Electronic tools also help individuals address certain physical needs. Margie explains,

I use my Nook now. I like it. I can put it on top of a little pillow and I put it on my knee. I don’t have to hold it. Because my hands sometimes, especially now that I’m getting arthritis in my hand, it’s hard to hold a book for very long. So I find it’s easier to do that. And I can adjust the print. I can make it bigger if I need . . . and put more space between the lines.

Indeed, the design of books assumes much about what a reading body can and should do: they must be held open to particular pages, pages that must be turned; unadjustable print must be held at a certain distance from one’s eyes. An e-reader enables Margie to more closely fit her body’s needs. These strategies for altering the materials of literacy to fit the needs of bodies and minds should remind literacy scholars and everyday readers and writers that no materials of literacy are neutral; built into all materials are expectations for what bodies and minds should do.

Using materials prosthetically to meet her body and mind’s needs has caused Judy—a former English teacher—to completely rework her understanding of what embodied and material practices are involved in reading. Describing a “year and a half crying” after her stroke, Judy recalls “trying to read” and finding “it wasn’t favor.” The “unfavorableness” that Judy describes regarding her reading
practices soon after aphasia stems from the misfit between normative materials of literacy and the needs of her body after aphasia. She recounts the “the real small writing” of novels she attempted to read. They were “very tiny, and I couldn’t remember, you know,” she says of encountering small text and having difficulty comprehending the words. That experience of literate misfitting caused Judy to stop “reading at all.” It was not until ten years after her stroke that Judy found technology to make reading possible again. She heard about the Kindle Fire electronic book reader. “It’s got words and [points to eyes and ears, respectively] words and listening. And that’s very good. Very good,” she explains. Judy uses the features that highlight words as it reads aloud and slows the speed of the read-aloud feature. “Listening [points to ear] and reading [points to mouth]. Oh boy. I love that book,” Judy says. By offering multiple modes to the process of reading, the technology of Judy’s Kindle reader acts prosthetically to fit her body’s needs—in this case, as Judy points out, both her eyes and ears, combining listening and reading. When asked, “What is different about reading after aphasia?” Judy answers with her Kindle reading practices thoroughly assimilated into her “normal” reading. “I have to make the printing big. I can listen, and I can read, and um, [shrugs] you know.” Judy’s matter-of-fact response is telling: the practice of reading/listening using her Kindle is a quotidian one after four years of using the technology. The materials of reading have been reorganized here to include orality and, moreover, to fit Judy’s body and also her definition of being a literate, reading person.

Reorganizing materials of literacy to adapt materials/technologies to bodies was Jean’s full-time job as a special education teacher for almost thirty years. When asked about teaching strategies she used for supporting students with reading, Jean responds by grabbing a piece of paper and using it to cover up and reveal one line at a time: “We take a little thing about the size of a book and put it on there [all but one line at a time], and they could read one sentence and then cover the top and do one sentence at a time.” The materials of literacy, indeed, simply do not always fit individuals’ bodies and minds. As Jean recounts, sometimes viewing multiple lines of text on a page simultaneously or working to comprehend lines of text printed close to one another can overwhelm or confuse readers. Jean explains that strategies for modifying the materials of literacy to fit vary based on the students’ needs—ranging from using colored paper to recognizing that “some people read better with different lights.” Ultimately, says Jean, “you do everything you can.” In the dynamic “choreography” of misfitting (Garland-Thomson 595), material strategies operate as prostheses for the body in literate practice—varying depending on individuals’ needs and on the particular affordances of the material technologies.

And as Jean’s work with colored paper and blocking off text demonstrates,
adapting materials to meet the needs of individuals’ bodies in reading needn’t draw on digital or electronic technologies. Instead, adaptation calls most fundamentally for careful attention and openness, doing everything you can—or “attuning” oneself to the particular needs of the situation (Lorimer Leonard). Rose, for instance, is attuned to even the minutest of details about the technologies of writing instruments and how they fit or misfit with her body. When asked what makes writing harder or easier, she answers, “The pen makes a big difference. To have a good grip on it.” Out of a container full of dozens of pens, she points to one with a “nice grip,” “nice fine point on it,” and “good weight at the top.” While Rose says she has always been aware of these details in writing implements, she also says she is even more attentive after aphasia “because if I’m going to write something out, I want to be able to read it. That’s an issue.” This “issue” of understanding, getting meaning across to self or others, motivates Rose, Judy, and other aphasic individuals drawing on technologies of literacy to address the needs of their bodies and minds in literate practice.

This commitment to fitting the needs of bodies and minds by adapting materials/technologies continues for Jean after aphasia as she designs an “aphasia-friendly” website featuring resources to support aphasic individuals. Jean is inspired to create this website from a particularly vivid experience of literate misfitting that occurs for her when she tries to find information about aphasia online. Jean soon realizes that most online texts about aphasia are inaccessible or no longer fit the needs of her body and mind after aphasia: they are full of dense blocks of text and complex sentences. “I went on the website to the National Aphasia Association,” Jean says. “I couldn’t read it. There’s no cues—nothing to tell me. So I went through some others. Nothing. […] And so after all I went through, I couldn’t find anybody to help me.” The material design of the website, then, misfits with Jean’s body and mind, and excludes Jean and other people with aphasia from accessing the information most relevant to their experience. Expectations about how individuals’ bodies process language are built into the website’s design, ironically and painfully, in a way that misfits with the bodies and minds of Jean and other people with aphasia.

Such misfits, stemming from the materiality of a website designed for individuals with certain kinds of bodies and minds, have tangible social consequences that exclude and isolate individuals. As a result, Jean feels not only frustrated, alone, and excluded, she also feels compelled to critique the theory of an autonomous literate person inherent in the website’s material design:

There’s nothing that a person that has aphasia can read. You’re supposed to have a caretaker; well my caretaker was very busy . . . I had to do it myself, and there’s many people like me. What if I was single and had a stroke and no one was around, you know?
Jean’s experience of misfit offers insight into the normative assumptions about literacy built into this particular website: that a reader is autonomously decoding language or has the support of an autonomous, able-bodied reader. And access to literate support, Jean observes, is disproportionately available. Jean’s partner works full-time on a dairy farm and is not available to care for her full-time. What’s more, before aphasia Jean supported her partner, who has dyslexia, in his own literacy. Such a diversity of bodies, minds, and their literate needs misfits with the material design of the website. This experience of literate misfitting stimulated Jean’s “awareness of social injustice” as Garland-Thomson suggests (597). Responding to the exclusion of people with aphasia from online information regarding their own experiences, Jean co-designed her own “aphasia-friendly” website. “I wanted to do my thing so that anybody could read it,” Jean explains. Together with a master’s student in communicative disorders who works with a stroke support group Jean attends, Jean created content in short sentences, recorded and accessible orally. Jean’s experience of being excluded from accessing information online developed her situated knowledge about creating accessible websites for people with aphasia, and she turned that knowledge into action by designing her own site.

Adapting with writing as a technology. The potential of writing as a technology to move language and meaning across time and space is well established (Olson 137). Although social practice theories of literacy rightly check claims for writing as a technology that increases intelligence and builds complex societies, writing indeed technologizes language, making it material, and often aiding memory through listing and recording (Goody). That use for writing spans across most participants in this study: making grocery lists, planning for complex tasks, or simply trying not to forget ideas. Robert’s speech therapist convinces him to “write down the day’s activities” to “help me with my memory.” And John uses a binder with a day planner, address book, and space for notes. He calls this resource his “auxiliary brain,” an external kind of “brain” composed of literate acts and materials to support all daily activities.

Writing, though, for people with aphasia, acts as a technology to more than memory; it also operates as a technology to help support additional literate tasks. In addition to using various materials and technologies—from electronic readers to colored paper to block out sentences—individuals with aphasia also take up writing itself, whether it’s a few letters, words, sentences, or more, as a technology. Almost all of the individuals in this study use writing as a way of working through ideas or as a preliminary draft for other writing—from using text as a template to recopy to drafting in handwriting. Some engage in a process of copying or transcribing writing from example texts. Bob explains that he sometimes copies thank-you notes that his wife Patty has originally written
into his own handwriting “word by word. Copy, copy, copy. Even I don’t read it.” The social practice of writing thank-you notes, says Patty, is a “tradition” in her family and one that both want to fully participate in. Others write out rough drafts. Jean describes always writing before typing because she “like[s] the feel of actually writing. It’s more calming.” Also, she handwrites preliminary drafts because she doesn’t “want to commit it to my laptop until I’ve got it—what I want to say.” Writing on a computer seems to have a sense of permanence for Jean, and certainly the idea that there is a distinct “feel” to writing by hand shows the close ties between bodily, social, and material practices of handwriting and, broadly, literacy.

In the same way that Jean likes to work out drafts of her sentences in handwriting before transferring them to her computer, Judy explains that she always handwrites (rather than going directly to typing). Before aphasia, she would often type first, but now handwriting allows Judy to work through many of the sentence-level concerns that arise in writing. Handwriting acts as a kind of technology for literacy, much like a pen holds ink and supports inscription. Judy offers an example of this process, explaining that she will write down, for instance, a series of sentences: “I play the games. um. I will play the games. um. I played the games.” Judy changes tense and pronouns in this process—or identifies missing words. “Tense is the most common,” she explains, “played or play or played you know . . . I cannot remember that, you know?” Judy also talks and reads aloud while writing down and changing the sentence. Even with these strategies, Judy says she doesn’t always catch errors. This process is a long, laborious one. Like Jean explains, writing simply takes more time, but writing itself aids writing.

Whether using a sheet of paper to block out all the lines of text but one, having a Kindle read aloud, or using the very materiality of written text to develop more writing, people with aphasia address literate misfitting by adapting the materials of literacy to the needs of their bodies. These overlaps between bodies and materials point to the interconnection between, and, constant need for negotiation of, the varied aspects of literacy.

The Body as a Technology of Literacy

While people with aphasia address literate misfits by using materials prosthetically to take on roles of the body, they also use their bodies to take on the roles often fulfilled by material technologies of literacy. Individuals use their bodies in new and innovative ways to make the materials of literacy work for them. As Owens notes in a discussion of the affordances and constraints of writing with voice recognition, or speech-to-text, software, “Any type of writing, regardless of the technology through which it is mediated, requires the body.” I argue that
the embodied literate practices of people with aphasia go one step further: the body acts as a technology, performing the functions of materials and taking a central role in literate practice. In this section, I track instances of literate misfitting that reveal the clash between people with aphasia’s bodies and the “normal” practice and expectations of literacy. The sociomaterial concept of the body as a technology of literacy arises from the situated knowledge of literate misfitting and informs literacy theory of both how bodies and technologies overlap and how bodies are central in all literate action.

An avid lifelong reader, Margie explains, “I loved reading and I still love reading. I read every day.” While reading after aphasia, however, Margie finds that the literate materials and technologies she previously used are now built for bodies and minds other than her own. She explains a vivid memory of reading soon after acquiring aphasia that highlights the misfit between her body and materials of literacy:

I remember trying to read like a TV Guide or a TV listing in the paper. I couldn’t understand what it was saying. . . . And then I realized that they wrote the words together. That they didn’t leave spaces between the words because they didn’t have enough room or something. And then, when I realized that, I put my finger on the words, and each one separate, and I could read it [demonstrates].

The reading material Margie encounters is clearly designed for a body and mind to visually and cognitively separate words out of tightly spaced lines of text, creating a misfit for Margie and preventing her from accessing the information she seeks. As Margie ruminates on the newspaper designers’ desire to save space, it is clear that the assumptions of a “fit” or “normal” body and mind are also bound up with economic interests and built into the materials of literacy. Newspaper producers minimize resources, keeping costs down and pushing on individuals’ bodies to bear the labor of literacy. One of the greatest challenges in reading and writing that individuals encounter after aphasia is the need for more time to do the encoding and decoding work of reading and writing. That need slams against the fundamental expectations of neoliberal literate subjects: that they quickly and efficiently do the work of reading and writing. Conflicting economic interests and ableist views of the body are imbricated in the very materials of literacy—an insight offered by literate misfitting.

In response to the layout of the text, Margie uses her body to take on or interact with the material of the text. She puts a finger on each word to help her navigate it. In this way, Margie addresses the misfit between her body and the materials of literacy by employing her body in atypical but effective ways to navigate the newspaper. More than just using her finger to guide herself through the text, Margie uses her body to temporarily alter the material characteristics
of the text, creating more spacing by covering the words with her finger. In this way, the body takes on a technological role. Even these relatively everyday moments of literate practice importantly remind literacy theorists and teachers that materials of literacy are not ideologically neutral, but are designed for certain kinds of bodies and minds under economic constraints and interests. And those social structures push back on the individuals who use them, necessitating Margie’s bodily action.

Jean’s use of her body to help her read after aphasia further clarifies the role of the body itself as a tool or technology of literacy. After her stroke, Jean feels “really bothered” by the changes in her ability to decode language and symbols. In response, she describes taking control of her own relearning of reading: “So once I got home [from the hospital], I started reading word by word, pointing to it, and I couldn’t get most of it, but I kept reading, and so, it wasn’t until the fifth or sixth book that I started [to say] ‘Oh my God, I’m reading!’” In this scene of reading “word by word,” Jean draws her body further into the act of reading than she had prior to her stroke, pointing to each word as she moves her eyes across it. She explains the practice as coming both from her experience teaching students with diverse learning needs in special education programs and from her role as a parent reading with her young daughter, who insisted that Jean, “Follow the words!” with her finger. Rather than being bothered by the relationship between this bodily practice of pointing and its association with childhood literacy learning, Jean focuses on the necessity of engaging with the text through both her eyes and her fingers. In the first several months following her stroke, Jean fit this bodily reading practice between being overcome by fatigue. “I had about a fifteen-minute span when I could do anything. Then I went back to sleep, and then I would try again, but I couldn’t push myself past my point [of fatigue] because otherwise I couldn’t follow my finger,” she says. Jean characterizes the movement of her finger as essential to the act of reading; following her finger and following the ideas become inextricably bound. The practice of simultaneously putting her eyes on and physically pointing to words was necessary literate work for Jean. Using her finger to point to the words is reading. Jean’s body acts as a technology, linking her—with eyes, brain, and fingertips—to the material text.

Embodied knowledge about the body as a technology of literacy similarly arises from the strategies Sandy develops to address literate misfitting after aphasia. A former first-grade teacher intimately familiar with reading and writing development in children, Sandy describes her experience of those processes after aphasia. She reflects that “so many processes are involved with writing.” The processes—word retrieval, spelling, inscription of letters on the page, and more—that Sandy describes are understood in cognitive psychology to be natural
or normal for bodies and minds. Reading and writing is linked to development and acquisition of progressively challenging complex skills over time, leading to independent and relatively effortless encoding and decoding of written language, or “automaticity” (Purcell-Gates et al.). In this perspective, there is no literate misfitting—just learners with deficient bodies and minds who fail to master the discrete, “increasingly complex subskills” (Kliweer and Biklen 1) that form a “literacy ladder” (Kliweer et al. 175). The sociomaterial idea of literate misfitting contests this perspective.

Far from deficient, Sandy’s experience of literate misfitting generates an embodied knowledge of language, literacy, and materiality. Sandy exposes the role of the body as a technology of literacy as she describes the misfit between bodies and minds and the very materiality of language. The supposed “naturalness” of language and the processes of writing are denaturalized. Word retrieval is difficult; then pronunciation presents challenges—especially with multisyllabic words. Writing barriers, Sandy describes, arise at various points in the process. Specifically, she explains the value and challenge of creating a “mental picture” of words—the process of imagining the appearance or image of a word. However, many words are simply difficult to “picture.” She explains, “when you have to find the word, sometimes you can’t even picture [it].” And different parts of speech may be themselves more or less difficult to picture. She notes the challenge of picturing verbs, particularly “be” and “have,” for instance. Or picturing prepositions—how do you picture “after,” she asks? For the task of writing, Sandy explains, “You have to retrieve the word, then you had to if you can’t picture it, then you have to . . . spell it, then you had to remember how the letters.”

The role of mental visualization of words themselves is a key step to writing for Sandy. She describes using her body and mind to create an internal image of an object (what we might think of as technologizing an idea, or rendering it material). Pictures—or mental images—of words are part of the process of retrieving words and letters to put those words together. This strategy of mental visualization is central to reading and writing, and she consciously fosters this process to make writing work for the needs of her own body and mind, developing a rich sense of what kinds of words lend—and don’t lend—theirselves to visualization. For this reason, Sandy explains much of her own post-aphasia writing as primarily composed of nouns: “I didn’t have a lot of verbs. So I couldn’t refer them. And then prepositions. Oh my God, even the a, of, over, it was like, oh my God. Just one sentence would take a long time.” And she explains that she needed to work through each sentence completely and slowly: “I had to go one at a time. One word at a time.”

Through these steps of visualizing words and grappling with parts of speech, Sandy develops not only new practices but a deepened relationship to language
and writing. Her body, mind, and the materials of literacy blur together. Each word requires mental operations that make the language itself accessible and available for writing. Sandy draws on processes of visualizing, or making an image in her mind, as a kind of technology to make writing possible—a cognitive visualization strategy that operates in much the same way a material thesaurus might assist an individual in coming up with additional words. Taken together, Sandy, Jean, and Margie all recount how they have extended, repurposed, or reimagined technological uses for their bodies and minds to adapt the materials of literacy that they find no longer fitting their needs.

Literate Habits and Ideals: The Social Pushes Back

As we have seen, the material and embodied strategies individuals with aphasia employ to address literate misfitting are inventive and very often quite effective. Bodies act as technologies; materials act prosthetically: the body is imbricated in the materials of literacy and vice versa. As they work through literate misfits, individuals develop and share insights about the material and mental “processes” of writing; they rework literacy to include listening or pointing with the body. However, in spite of these insights and individuals’ effectiveness, many people with aphasia compare themselves to various ideals of literacy. That is, they often see themselves as irrevocably unable to read or write in the right way. I show in this final section that the weight and influence of the social aspect of literacy inheres in the materials and bodies of literacy, often creating a condition of literate misfitting that threatens to constrain the embodied and material strategies they are willing to develop and use. That is, nearly all of the people with aphasia I interviewed in this study describe a number of ideological attachments to literacy that push back on what they are willing to adapt or not adapt—or what they are willing to call reading and writing at all. And many of those attachments have to do with particular or routine ways of using their bodies to produce what they describe as standard or correct literate products. As Haas observes, as an embodied practice, writing “is habitual”: “bodily movements and interactions in which writers engage are repeated by individuals and across individuals over time; a habit is a kind of remembering in and by the body” (228). In this way, literate habits, felt and perpetuated through the body, are often sites for literate misfitting, contributing to conceptions of what it means to do the work of literacy and to be literate and constraining individuals’ literate potential. In other words, despite myriad effective, innovative strategies of bodies and materials, the social pushes back, sometimes limiting individuals’ literate potential.

The ideals of writing come through in individuals’ descriptions of reading and, especially, writing failures. Writing presents a particularly knotty problem for many people with aphasia. Individuals understand writing as typed or hand-
written language in correct, complete sentences for accepted, formal genres like letters or academic essays. Handwriting, in particular, is weighted with heavy social values. Strokes or other brain injuries that cause aphasia commonly affect movement on the right side of the body, including the arm and hand, which may interfere with handwriting and typing. Many people report this physical change causing major differences in their post-aphasia literate practice, creating a painful instance of literate misfit between their bodies, minds, and the material practice and social values of handwriting. When asked to explain what stops her from making lists after aphasia, Judy answers, “My right hand would stop me.” Some stop writing altogether rather than learning to handwrite with their left hand, but others—like Rose—discuss a complex and focused process of relearning to write with their right hand or learning to write for the first time with their left hand. Others remark that their handwriting no longer looks like their own, transformed to “hieroglyphics” or a child’s scrawl. “Now my writing looks like a third grader’s,” says Rose. Such comments reveal how handwriting is viewed as a skill to be mastered and committed to habit in childhood. Another man describes the smallness of his writing. “Look at my signature,” he says pointing to his consent form with a look of disgust. “Little.” “I hated my writing,” Jean similarly explains. “I mean it was different. It was small. I couldn’t read it most of the time, so I tried not to do it, you know. I made my lists and I guessed at them at the grocery store, and so all I did was like write lists.” The very loss of that habitual embodied skill and reliable product of script disgusts individuals and sometimes keeps them from writing.

For Judy, a literate misfit arises as the changes to her body after aphasia cause her to feel “panic” at the idea of writing because, she says, she has lost her “flair” for writing. As a result, she writes very little, explaining that she “didn’t keep any of the things I remember” and saying that, after her stroke, “I left the writing behind.” Judy finds herself unable to address the misfit between her body and writing. Though she writes short emails to her brother and others, Judy sees herself as unable to attain the literate achievements she had prior to aphasia. She explains her ideas are “squashed” and cites problems with spelling, word endings, and grammar as ongoing barriers. The social perception of writers having “flair,” ease, and talent pushes on and misfits with Judy’s post-aphasia writing. Her literate misfitting is deeply social in nature as she interprets her body and mind as failing to meet the standards of literate practice and identity, causing her to “leave the writing behind.”

Leaving struggling students behind was unthinkable for Jean as a special education teacher. But even though in her teaching Jean was committed to addressing literate misfitting with her students and to creating accessible reading materials—including her website—for aphasic people, her perceptions of her
own literate practice reveal how the social pressures on literate practice both undermine her identity as a literate person and limit her practice. Most tellingly, Jean distinguishes between the changes to materials and technologies that she is willing and unwilling to make. Changing the size and spacing of text is essential to Jean’s reading practices, and she welcomes and appreciates those ways of adapting the materials of literacy to fit the needs of her body and mind. She also uses her iPad’s talk-aloud feature to help decode difficult words in nonfiction articles. Jean is quick, however, to dispel the assumption that she uses the read-aloud feature consistently on her Kindle, as she reads fiction on an almost daily basis. When asked if she uses a Kindle, she responds:

Yes, but I don’t use the [read-aloud feature]. I only use that if I don’t understand, so if there’s a like, it’s a complicated thing sometimes like Ted Decker [an author she reads]. He writes weird stuff, and sometimes I can’t imagine it, so I go back, and they have to read it to me. So, yeah, I don’t usually use that because I’m too damn stubborn.

While Jean happily changes the size and spacing of the text, she insists on decoding—or reading—the words “herself.” That independent decoding using her eyes and mind—not listening to the words—constitutes “real” reading for Jean. Writing, similarly, has clear boundaries for Jean. She expresses dissatisfaction regarding her participation in a multimodal memoir group not focused solely on writing in alphabetic text but on composing in photographs, drawings, and more: “It [the multimodal group] wasn’t what I wanted,” she explains. “I wanted to write,” she says pointing to written text. To write is heavily weighted with expectations for bodies, minds, and materials. Further, to write and read independently, smoothly, relatively easily is an implicit goal, and for some individuals like Jean in this instance, there is no substitute for the alphabetic text encoded or decoded by a solitary individual visually and cognitively. In other words, the social values around what normal bodies and minds should do in reading and writing perpetuate literate misfitting and threaten to limit individuals’ literate potential. Literate misfitting, then, is as much about the social construction—or the expectations—of materiality and embodiment as about the physical or cognitive characteristics of readers and writers.

**Conclusion: How Bodies Matter**

As Jean first encounters sitting in the emergency room taking out a book “just like normal” and experiencing the words running together, literacy requires a negotiation, or fitting, between bodies and materials. Embodied change, brought on by aphasia, brings that negotiation into bright relief. As Garland-Thomson notes,
When we fit harmoniously and properly into the world, we forget the truth of contingency because the world sustains us. When we experience misfitting and recognize that disjunction for its political potential, we expose the relational component and the fragility of fitting. Any of us can fit here today and misfit there tomorrow. (597)

The fact is that bodily needs and abilities change over the lifespan—hands stiffen with arthritis, eyesight weakens, memory and access to language alters. Those changes inform our understanding of how literacy works across the lifespan, revealing in particular just how integral the body is in reading and writing. As bodies and minds change across the lifespan, literate fitting and misfitting, then, are essential lenses from which writing studies researchers and teachers can better theorize the sociomaterial nature of literacy, in its embodied, material, and social complexity, and following that understanding, more effectively support literacy learners of all abilities.

For literacy theory, the insights of people with aphasia experiencing literate misfitting reveal the deeply embodied nature of literacy. Bodies and materials are intertwined in literate practice, and the concept of literate misfitting helps to sharpen our field’s understanding of some of how bodies matter for writers. What this concept reveals is not just that bodies matter for literacy, not just that bodies are a part of the ecology of literacy, but that bodies change and vary and come into conflict with the stuff of reading and writing. There is no one kind of body with one set of needs. And diverse experiences of embodiment, as we have learned with literate misfitting, create new and vital knowledges about the social and material realities of the world and ways to make those realities more just. The concept of literate misfitting, then, exposes normative assumptions about bodies, minds, and materials. Above all, however, literate misfitting reveals the inevitable conflicts that occur between the varied aspects of literacy—embodied, material, and social. As I have shown here, the social pushes back. Deeply held values around what bodies and minds and materials should do, look like, accomplish, or mean may limit individuals’ literate practices.

For literacy educators, literate misfitting points to myriad opportunities to make literacy education more accessible. To design accessible literacy education, we must begin with, and proceed from, the recognition that bodies and minds are diverse. We must reject and denaturalize the idea of a neutral or normal literate practice, a neutral or normal body. Alternate, or nonnormative, ways of writing and reading—such as collaborating with communicative partners on compositions, using speech-to-text software, or reading aided by large-print or by audio from a tablet—must be introduced, supported, and normalized. But as my analysis of the literate experiences of people with aphasia reveals, it is not enough to develop new practices. Educators must also address learners’
relationships to the social value of literacy. Together, learners and educators must explore and address pressure, pain, and shame around what it means to be literate in the right or wrong way.

That process is not easy or simple. But the embodied knowledges of individuals with disabilities like the individuals with aphasia featured here are essential to this process. As Garland-Thomson asserts, “Acquiring or being born with the traits we call disabilities fosters an adaptability and resourcefulness that often is underdeveloped in those whose bodies fit smoothly into the prevailing, sustaining environment” (18). Those perspectives and “resourcefulness” are vital sources for people of all abilities to learn from. Interrogating the experience of literate misfitting and the innovative strategies of readers and writers with diverse bodies is an essential step toward mitigating that social stigma. Jean gestures to an alternative conception of literacy that stems from—even values—literate misfitting. Describing what it’s like to write after aphasia, she explains:

It’s a new normal because it’s not as easy. . . . You have to find ways around it, or you know, just go through it and make mistakes. So yeah, I think that would be helpful to anybody who has aphasia because you know you can hide and lots of people do. Or you can say, ‘Okay, I’m aphasic, and I have a right to live’ and go out, and that’s what I’m trying to do, to set an example.

Jean’s “new normal” for literacy rejects stigma, opens up our expectations about correctness or “right” ways of being literate and doing literacy. Her new normal values alternate paths, accounts for complexity, and insists that the situated knowledge of literate misfitting be owned, shared, and exemplary in its own right.

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Notes

1. All names are pseudonyms.

2. Aphasia advocates importantly distinguish between “intelligence” and “language.” That is, language causes barriers, but an individual’s ability to think, process ideas, and indeed communicate in a range of nonverbal modes, remains intact. See Parr et al.; Shadden.

3. Throughout, when I use the term “body,” I refer to the inextricable workings of body and mind, which are “not two distinct substances but somewhere in between those alternatives” (Grosz xii). In writing studies, I follow Haas and Witte’s assertion that, when discussing the practices of literacy, “the distinction between the body and mind is a specious one” (416). In this way, my use of “bodies and minds” and “bodies” is consistent with Margaret Price’s term “bodymind,” which
reflects “how mental and physical processes not only affect each other but also give rise to each other,” how they “act as one” (“The Bodymind,” 2).

4. Stemming from biographical sociology (Brandt, *The Rise*), life history interviews offer important insight into social, political, and cultural influences—putting them in the historical context of a lifespan couched in the “felt experience” of an individual (8).

5. As a communicative disability, aphasia often isolates individuals, making locating them a particular challenge. Often, individuals with aphasia and other physical complications after stroke live in long-term care facilities or nursing homes. For these reasons, gender and racial diversity was particularly difficult to accomplish.

6. To communicate as clearly as possible, I designed an illustrated consent form using images from Kagan et al.’s *Pictographic Communication Resources*, published by the Aphasia Centre. This strategy addresses the challenges of ethically gaining consent with people with aphasia, who often have an “unreliable yes/no,” use the wrong word at the wrong time, or experience substantial gaps in understanding of spoken or written language.

7. See Lorimer Leonard’s concept of “attunement” for a related take on writers navigating and rhetorically deploying their language repertoires, and see Prior and Shipka’s ESSPs (environment selecting and structuring practices) for parallel perspective on how writers navigate within, and adapt to, their environments.

8. See Prendergast; Prendergast and Licko; Mortensen; and Canagarajah for more on links between the materials of literacy and economic constraints.

9. It is worth noting that these perspectives about bodily and material practices that do and do not “count” as literacy persist for some writers despite the proliferation of new media technologies mediating individuals’ literacy experiences. See Sarah J. Sloane’s insightful essay, “The Haunting Story of J: Genealogy as a Critical Category in Understanding How a Writer Composes” for more on how communication practices and habits from older technologies “haunt” newer forms.

**WORKS CITED**


