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Embodying the Reader: Perspectives on Fiction, Cognition, and the Body

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1. Introduction

"The trouble with him was that he was without imagination. He was quick and alert in the things of life, but only in the things, and not in the significances". (London, 1998) (p. 342)

To read narrative, and especially fictional narrative, we must be unlike the unnamed protagonist of Jack London's ([1908] 1998) famous short story "To Build a Fire." We must remain "quick and alert" to things that are not given in the here and now but evoked in fleeting acts of the imagination. We must be able to entertain "significances"—of words, to begin with, and of events, characters, and plots as well. While London's protagonist would not make a good reader, he—and the story in which he is the only human character—make an intriguing case study for a chapter on how the body affects the reading of fictional narrative in prose. Surely, the imaginative acts through which we translate texts into vivid mental experiences are intangible. If we observe a reader reading a novel, we won't see much going on in bodily terms: the repetitive gesture of turning the pages, shifts in posture and perhaps a few occasional changes in location are all the bodily movements we will see—and they seem hardly relevant to the novel's subject-matter. Yet there is more to reading than meets the eye—even with regard to embodiment. The human body, as Maurice Merleau-Ponty wrote in his seminal Phenomenology of Perception, is far more than what can be externally observed; it is a "center of potential action" (2002, p. 121). Perhaps reading narrative involves a number of potential actions—that is, actions that are not actualized and remain invisible from the outside. As scholars working in the field of cognitive literary studies are beginning to realize (see Caracciolo & Kukkonen, 2014), our responses to fiction are deeply shaped by our embodied make-up. In fiction, the reader has no perceptual access to actual bodies (as would be the case in film or drama) and draws exclusively on the resources of his or her own body to make sense of the text.

In the mind sciences, evidence for the embodiment of reading has been growing steadily over the last two decades, as part of a broader interest in embodied cognition: namely, the ways in which our cognitive processes are informed by our being biological creatures with a body of a certain size and shape (see Gibbs, 2005; Gallagher, 2005). We know, in other words, that literary reading involves a set of psychological schemata and past somatic experiences that we bring along as we cross the boundary between everyday reality and the imaginary domains of fiction. At the same time, prose narrative can also shape people's understanding and interpretation of the body, contributing to what this collection discusses under the heading of the "medial body." This is what I aim to show in the final part of this chapter, where I turn to how—via literary interpretation—characters' bodies can be reabsorbed into everyday experience; but before that, I must say more on how fiction can trigger embodied schemata at a more basic, cognitive level.

In fact, one of the goals of this chapter is to explore the interaction between cognitive and cultural perspectives on the body. I do so by drawing a heuristic distinction between four levels of analysis, or four levels at which the body matters in literary reading: language, story, discourse, and interpretation. These concepts have a long history in literary studies, but let me define them succinctly (and, no doubt, simplistically) here for the reader's benefit. By language, I mean the stylistic texture of literary narrative—the choices made by the author in terms of words, register, syntax, and so on. According to a basic distinction in narratology (Chatman, 1978), story is the "content" of narrative and can be expressed through wh-words: what happens to whom, where, and why. Discourse is the "how" of the story—that is, as theorized by Meir Sternberg (2001; more on this below), the way in which the author decides to present it, often by withholding information from the reader in order to create effects such as the suspense, curiosity, and surprise. Finally, interpretation is how readers make sense of a particular story by connecting it with their own interests and with questions circulating in their culture.

I will show that all these levels of narrative are impacted by the fact that we are biological, embodied beings and not, for example, AI programs running on silicon circuits. London's (1998) "To Build a Fire" will be my case study. Even though, as we will see, this short story places specific emphasis on the body—and is therefore well-suited to a body-oriented approach—many of the cognitive and experiential processes I will outline are so basic to narrative understanding that they are at work in engaging with *any* narrative text. "To Build a Fire" thus serves as a guide in my discussion, but the responses and levels of engagement I examine in what follows can be extrapolated to the medial environment created by prose fiction, or even by verbal narrative more generally. The continuity between fictional and nonfictional narrative practices, in terms of their embodied underpinnings, helps explain "faction" *qua* the convergence between fictional and nonfictional storytelling (as posited in the introduction of this volume).

2. Language

"To Build a Fire" is the story of a man who ventures out in the frozen landscape of the Yukon Territories, accompanied only by a husky. The man's stated purpose is to "take a look at the possibilities of getting out logs in the spring from the islands in the Yukon" (London, 1998, p. 342). With a temperature of -75 F (-59 C), this environment is so inhospitable that it poses a constant threat to the man's survival. Hence, the story reads like a record of an increasingly deadly struggle between the character and his surroundings. Eventually, the man dies from hypothermia after failing repeatedly to kindle a fire. The animal plays an important role in the man's confrontation with nature: the narrator subtly calls attention to the foolishness of the man's decision to set out without a human companion; the husky is a creature whose body has been shaped by evolution to survive in this harsh climate. Both the narrator's implicit critique of the man and the husky's endurance underscore what the man, because of his lack of imagination, does not realize: namely, the frailty of the human species and of human bodies in particular. In fact, we read that the man's flawed understanding of his situation "did not lead him to meditate upon his frailty as a creature of temperature, and upon man's frailty in general, able only to live within certain narrow limits of heat and cold; and from there on it did not lead him to the conjectural field of immortality and man's place in the universe" (ibid.).

The story translates this insight into a concrete situation, focusing on the character's body and how it attempts—and, ultimately, fails—to cope with an extremely dangerous environment. The reader is no mere spectator of this struggle, however, since London's prose involves her in the protagonist's predicament through a large number of embodied cues. By "embodied cues" I mean any textual device capable of eliciting a bodily response in readers, whether this response is unconscious (i.e., not felt subjectively but detectable in psychological studies) or fully conscious. (I will return to this distinction between unconscious and conscious responses in a moment.)

Consider, for example, the following passage. Halfway through his hike, the man decides to stop to eat:

He unbuttoned his jacket and shirt and drew forth his lunch. The action consumed no more than a quarter of a minute, yet in that brief moment the numbness laid hold of the exposed fingers. He did not put the mitten on, but, instead, struck the fingers a dozen sharp smashes against his leg. (ibid., p. 346)

This passage relates a number of bodily actions: unbuttoning the jacket, taking out the food, striking the fingers against the leg to stimulate the blood circulation. None of these gestures is described in detail; yet, according to psycholinguistic

and neuroscientific evidence, even these sketchy verbs will trigger an embodied response in readers—via a phenomenon known as "embodied simulation." For instance, Glenberg and Kaschak (2002) asked participants to read sentences that contained verbs implying movement either *away from* or *towards* the body (e.g., respectively, "Put your finger under the faucet" and "Put your finger under your nose"). The participants were instructed to judge whether the sentences made sense or not; in order to answer, they had to make a movement that was either similar to the verbally represented movement or opposite to it.

Glenberg and Kaschak found that response times were higher-i.e., participants were less responsive—when the action they were asked to perform was inconsistent with the action they had just read about (e.g., they read a sentence representing a movement away from the body and were expected to respond by moving their hand towards their own body). This can be interpreted as an interference effect: "when the implied direction of the sentence contrasts with the actual response direction, there is interference" (2002, p. 561). What exactly is causing this interference? Glenberg and Kaschak's theory is that "language understanding taps into an action-based system" (ibid.). The cognitive process activated by reading these sentences shares some of the neural underpinnings of the relevant actions (in this case, movement away from or movement towards the body). Hence, after a movement away from the body had been mentally triggered by the verbal stimulus (even if it hadn't been actually carried out), participants took a longer time to make the opposite movement because they had to switch from the "away" to the "towards" system. This finding ties in with neuroimaging evidence showing that when we read action verbs implying (for instance) hand motion the brain areas associated with actual hand motion light up (Hauk, Johnsrude, & Pulvermüller, 2004). To explain these results, mind scientists posit that language understanding involves a form of embodied simulation—a mental enactment of the bodily action that we would perform if this were a real-world situation, not just a linguistic representation. Here is, again, Merleau-Ponty's concept of the body as a "center of potential action" (2002).

Arguably, all the actions performed by the character in London's short story—unbuttoning, drawing forth, striking—will be understood, via embodied simulation, as potentialities of our own body. London's text focuses on concrete actions such as moving through space, interacting with human-scale objects (when the character attempts to build a fire), and so on. This phenomenon is, of course, not limited to this passage: in fact, embodied simulations are implicated in any kind of language processing, in fiction but also in everyday, factual communication. In London's story, as in other narratives, such simulations are unlikely to emerge in readers' consciousness: like a musical accompaniment, they set an embodied tone while remaining far from the center of our attention. To understand why this story is so rich in bodily effects, we need to turn to other dimensions of embodiment.

3. Story

Under the heading of "story," I focus on the characters of a narrative, the spaces they inhabit, and the actions they perform. Narrative needs a cast of characters, who are typically humans or animate beings (such as London's husky). In most scenarios, readers will take these characters to possess bodies analogous to the bodies we encounter in everyday life. While seemingly trivial, this fact is not without consequences in a medium like prose narrative, where everything about characters—including their bodies—has to be imagined by readers: in film or theater, for example, we can directly perceive the actors' bodies on the screen or on stage; in prose, where there is no such perceptual directness, we have to embody the characters ourselves—that is, we have to provide them with a body through constant imaginative acts. Not all these acts are the same, however, depending largely on the kind of textual information we receive. For instance, in an episode of London's story the dog steps on a pool covered only by a thin layer of ice, which cracks under the animal's weight:

It had wet its fore-feet and legs, and almost immediately the water that clung to it turned to ice. It made quick efforts to lick the ice off its legs, then dropped down in the snow and began to bite out the ice that had formed between the toes. (1998, p. 346)

Not only does understanding these lines trigger embodied simulations of actions, such as licking, dropping down, and biting, but it encourages us to form a sketchy mental image of the dog's body. Note, however, that there is nothing in this passage that requires taking the dog's perspective on its own body: these gestures could be easily observed by a bystander, and in fact, we're led to think that the protagonist of London's story did watch the dog's movements in this way.

Contrast the description of the dog with the following passage, which occurs after the man has himself fallen into the frozen water and decides to build a fire to dry his clothes. The man knows that, at this outside temperature, wet clothes can be deadly:

[It] was surprising, the rapidity with which his cheeks and nose were freezing. And he had not thought his fingers could go lifeless in so short a time. Lifeless they were, for he could scarcely make them move together to grip a twig, and they seemed remote from his body and from him. When he touched a twig, he had to look and see whether or not he had hold of it. The wires were pretty well down between him and his finger-ends. (ibid., pp. 349–350)

This can be no external description of the man's body. For one thing, the "surprise" mentioned at the beginning of the passage is the man's own surprise at seeing the cold spread through his face and hands so quickly. The numbness and remoteness described by the third sentence are, again, not sensations that an observer could easily infer on the basis of perceptual cues. The fourth sentence ("When he touched a twig") makes this perfectly clear: the fact that the man does *not* know without looking whether he has the twig or not signals a breakdown in his sense of touch which, in turn, implies that as readers we're experiencing this scene from the man's perspective, not from a bystander's. In narrative theory, this phenomenon is known as "internal focalization" (see Jahn, 1996): the text focuses on experiences and sensations that are by definition private, or that are apprehended at such a level of detail that they seem to emanate directly from the character's consciousness. We thus become privy to the character's experience of his own body, in ways that are fundamentally unlike the account of the dog's attempts to remove the ice from his paws.

Why is this point relevant to our discussion of the *reader*'s embodiment? Because, as the story explores a character's bodily sensations in internal focalization, readers may develop a sense of "taking on" his or her body: in reading texts such as London's, they may not just imagine the protagonist's body into existence, but they may imagine what it would be like *for them* to be in his shoes. This effect can be conceptualized as a form of bodily perspective-taking or empathy that creatively reutilizes readers' past experiences (for instance, of extreme cold or numb limbs). Philosophers such as Berys Gaut (1999) and Amy Coplan (2004) have studied this kind of empathy for characters, though they do not focus specifically on its bodily underpinnings. Building on Gaut's and Coplan's work, I define empathy as a form of mental simulation whereby we imagine what it would be like to be in a certain situation or mental state. Yet, unlike what I've called "embodied simulation" in the previous section, empathy is a *conscious* form of simulation insofar as it emerges in readers' consciousness.

To fully understand this point, we need to factor in the central role of mental imagery in reading literary narrative, vis-à-vis narrative media such as film, in which audience members have direct perceptual access to characters' bodies (and the storyworld more generally). A mental image is a conscious experience that is perception-like in character, despite the *absence* of the appropriate perceptual stimulus (see Thompson 2007). For instance, we can visualize a husky even if there is no husky in our visual field. While mental imagery is mostly associated with visual perception (as in the husky example), we can experience imagery in all other sensory modalities as well: we can imagine a sound or a smell or, closer to our focus here, we can imagine bodily sensations such as coldness, numbness, or pain. This is a relatively common experience: when a friend shows us a swollen finger after he accidentally crushed it with a hammer, we may well experience an

imaginary twitch of pain. Language can have a similar effect, and *literary* language is known for its power to evoke vivid imagery, as shown by Elaine Scarry (2001) and Ellen Esrock (2004), among others. Sometimes this imagery may be triggered by the linguistic representation of bodily states, such as pain or proprioception (awareness of one's own position in space) or other feelings located in the body. The embodiment of this kind of imagery is straightforward. But even scenes relying mainly on vision are not disembodied, insofar as the bodily movements that accompany visual perception will normally be implicated—through mental imagery—in these passages (Caracciolo, 2013). When the imagery formed by the reader is an approximation of a character's bodily experience, as portrayed by the text, we have what I am calling bodily empathy for the character.

London's short story takes full advantage of this tendency towards bodily empathy for characters. In the narrative's climactic scene, the fire the man has built to dry his clothes burns itself out, and the man realizes that he has very little time to make another fire before the extreme cold kills him. At this point, however, he has lost any sensitivity in (and control of) his hands, so that striking a match proves exceedingly difficult:

Next he brought out his bunch of sulphur matches. But the tremendous cold had already driven the life out of his fingers. In his effort to separate one match from the others, the whole bunch fell in the snow. He tried to pick it out of the snow, but failed. The dead fingers could neither touch nor clutch [...] He watched, using the sense of vision in place of that of touch, and when he saw his fingers on each side the bunch, he closed them—that is, he willed to close them, for the wires were down, and the fingers did not obey. He pulled the mitten on the right hand, and beat it fiercely against his knee. Then, with both mittened hands, he scooped the bunch of matches, along with much snow, into his lap. Yet he was no better off. (1998, p. 352)

The protagonist's ordinary embodiment breaks down—a fact symbolized by the metaphor "the wires were down," in the sense that motor control is lost as if any communication between the brain and the hand had been cut off. As readers, we are likely to feel sympathy for the protagonist's predicament: his survival depends on a single, and usually unproblematic, gesture (striking a match); we experience something akin to the protagonist's dismay as he finds his fingers unresponsive. But this emotional response is likely to be accompanied by bodily empathy: London's narrative encourages us to take on the character's perspective by enacting his fumbling gestures as he tries (and fails) to light a match, or as he looks at his own fingers, which he cannot feel. This kind of empathy involves what Anežka Kuzmičová (2014) calls "enactment imagination," which she distinguishes from other kinds of mental imagery whereby we experience a story's events and charac-

ters from an external viewpoint: in enactment imagination, readers imaginatively enact or perform the inner experience they are ascribing to a character.

Whether enactment imagination develops or not depends on both textual factors and readers' predispositions. Certainly, a story like London's "To Build a Fire" is especially conducive to this kind of response, because of the constant attention being paid to the protagonist's bodily experience. The narrative constructs a space that is centered on the man's body: if it is so effective at conveying what the Yukon is like—its "sense of place," as geographers would say (Foote & Azaryahu, 2009)—it is largely because we're given the chance to experience this frozen land-scape through the (embodied) mediation of the protagonist. Readers' experience is made to coincide, in their imagination, with the body they attribute to the character. The way in which the space of the story discloses itself to readers is thus closely bound up with bodily patterns; it builds on low-level, automatic embodied simulations of the kind we have explored in the previous section in order to give rise to a fully conscious experience of taking on the character's body.

4. Discourse

The forms of bodily involvement we have discussed so far are directed at characters and at the actions they perform and may lead readers to develop an illusion of presence in the spatial setting of the narrative. These are all aspects of the "story" in the narrow sense. Narratologists have long distinguished the story proper from the formal strategies through which it is presented, with the latter being referred to as "discourse" (see, e.g., Chatman, 1978). The distinction between story and discourse can be further illustrated through the widely used "storyworld" metaphor: the story is the world-like domain in which we understand the events recounted by the narrative (involving what characters, for what reasons, and in what locations, etc.); the discourse, by contrast, is the verbal or at least semiotic presentation of that storyworld. Could it be that readers' engagement with discourse is also based on bodily experience? Answering this question is less intuitive than it was for the story, whose elements all bear a clear relationship to the body (since characters have a body, space is normally apprehended through our bodies, etc.). Discourse is by definition more conceptual: it is the logic of the telling, the order and manner in which the events and actions of the story have been arranged by the storyteller in order to bring about certain effects on the audience. Yet there are ways of showing that even readers' understanding of discourse is shaped by the body: in previous work (Caracciolo, 2014b), I identified two strategies for closing this gap, calling them the "experiential" and "cognitive-linguistic" approach.

Let us start with the former. I will build on the account offered by two scholars, Meir Sternberg and David Velleman, whose work on narrative discourse an-

ticipates my experiential approach, although they have not spelled out fully its implications from an embodied perspective. According to Meir Sternberg (2001), narrative is defined by a double temporality: the temporality of the story, which is the inferred chronology of the events told by the narrative; and the temporality of discourse, which is the order of presentation of those events (and may deviate significantly from the order in which the events happened). The discrepancy between story and discourse time is responsible for three emotional effects of narrative—effects so widespread that Sternberg calls them "narrative universals": they are suspense, curiosity, and surprise. In suspense, we wonder about the outcome of an action sequence that is located in the future of story time (e.g., will character X die?). In curiosity, we wonder about a piece of information that has been omitted by the discourse but is located in the past of story time (character Y was killed, but who is the murderer?). Finally, in surprise, we're forced to revise our understanding of the story because of the delayed revelation of a fact or a past event (if character Z was already dead at the time of the murder, then he couldn't have killed Y). Like all emotions, suspense, curiosity, and surprise may have an affective (and therefore embodied) component: they may—and indeed typically do lead to distinct bodily feelings. Suspense, for instance, has something in common with holding one's breath, curiosity may be experienced as a tingling sensation, surprise as a sharp jolt. While the exact nature of these feelings may vary from reader to reader, and from case to case, these examples demonstrate how the ways in which we respond to the progression of narrative—to its discourse—are more embodied than we may think at first. Philosopher David Velleman puts this point as follows: "The cadence that makes for a story is that of the arousal and resolution of affect, a pattern that is biologically programmed. Hence we understand stories viscerally, with our bodies" (2003, p. 13). Sternberg's suspense, curiosity, and surprise are emotional effects that complicate and enrich the "cadence" posited by Velleman.

Consider London's "To Build a Fire": the first pages of the short story create certain expectations in readers, who quickly grasp the danger in which the reckless protagonist finds himself. These expectations are affective as well as conceptual: not only do we mentally entertain the scenario of the protagonist's death, but we experience a sense of apprehension arising from that scenario; this bodily feeling drives our interest in the story. When the protagonist falls into a pool of icy water, the danger becomes more concrete and our apprehension turns into full-fledged suspense and dread at the man's seemingly inevitable demise. The long, painstaking descriptions of the man trying (calmly at first, desperately after his initial attempts fail) to build a fire only exacerbate the suspense by delaying the outcome of the story. The man's eventual death is the "resolution," to use Velleman's term. Therefore, the narrative progression can be described as a series of gradual shifts in bodily affect: from the vague sense of foreboding created by the

opening pages to the suspense rising as the protagonist's situation deteriorates; this feeling plateaus out when we witness the man's failure to overcome the main obstacle to his survival (the wet clothes); finally, it dwindles to a core of wistful interest in the man's fate after his death. London's story is clearly quite linear in its progression—hence its illustrative value—but longer and more sophisticated narratives can greatly complicate these embodied dynamics. Through this experiential approach, even something as apparently abstract as discourse can be connected to the body: like music, narrative gives rise to a certain rhythm that is felt in bodily terms.

Another possibility for embodying narrative discourse builds on the notion of "image schemata," which is one of the cornerstones of cognitive linguistics—a field that has emerged in the wake of Lakoff and Johnson's (1980) influential work on metaphor. In this tradition, an image schema is a pattern deriving from perceptual and bodily experience (for discussion, see Hampe, 2005). A classic example is the idea of a "path," which arises from our experience of moving through space. Lakoff and Johnson's intuition was that patterns like a path are typically used to structure abstract concepts, for instance in the following sentence from an online magazine: "the path for Palestinian freedom and statehood has been obstructed by Israel's continuing policy of occupying and colonizing Palestinian territory" (Shaath, 2010). These words combine two image schemata—path (to Palestinian freedom) and obstacle (Israel's policy)—in a way that translates relatively abstract concepts and intangible entities into a concrete scenario: a goal-directed movement is halted by a physical obstacle. Other examples of image schemata are "up-down," "equilibrium," "superimposition," or "cycle" (for a more extensive inventory, see Evans & Green, 2006, p. 190). These are all perceptual patterns that underlie human conceptualization in a wide variety of contexts.

Narrative structure itself can be seen as building on such image schemata. Cognitive literary scholar Michael Kimmel (2005; 2009) makes a convincing case for this idea, though his hypotheses would have to be tested in experimental studies. For instance, Kimmel (2005) analyzes the plot of Joseph Conrad's Heart of Darkness in terms of an image-schematic opposition between Western culture and Africa; within this structure Kimmel identifies a number of other image schemata, including the "path" (the protagonist's journey into the heart of darkness), the "attraction" exerted by Africa, and the "barrier" the protagonist has to overcome. As Kimmel suggests, image schemata are at the root of the affective contours that accompany our experience of narrative discourse: "Such image schemas can be sensed by readers, often in their bodies, as an arc of FORCE tension or denouement as reinstated BALANCE schema (Johnson, 1993), as electromyography of readers suggests (Malmo 1975)" (Kimmel, 2009, p. 173). This is made particularly evident in London's short story by the fact that the progression of the narrative largely coincides with the protagonist's path-like movement in space: when the

man has to stop after falling into a pond of icy water, the extreme cold becomes an almost physical obstacle to his journey (and to the larger journey that is his life). Discourse structures can thus be analyzed as an array of dynamic tensions and oppositions that are linked, experientially and/or conceptually, with embodied modes of interaction with the world. Of course, the relationship between image schemata and embodiment is looser and more metaphorical than readers' empathetic engagement with characters' bodies; but this cognitive-linguistic approach is still important in that it shows how narrative structure, even understood at an abstract level, can be grounded in schemata that are experientially derived.

5. Interpretation

So far, I have discussed readers' embodied involvement in terms of simulative responses to action verbs, empathy for characters, and bodily feelings and image-schematic structures emerging from narrative discourse. These are relatively basic and universal responses, but we should not forget that our body is an extremely complex machine, whose workings are regulated by culture as well as by biological factors and cognitive predispositions: as Mark Johnson puts it,

our bodies are constituted [...] by cultural artifacts, practices, institutions, rituals, and modes of interaction that transcend and shape any particular body and any particular bodily action. These cultural dimensions include gender, race, class (socioeconomic status), aesthetic values, and various modes of bodily posture and movement. (2008, p. 175–76)

A principled account of embodiment in reading should take this cultural dimension into account, insofar as socio-cultural conceptions of the body are likely to significantly affect the ways in which readers interpret narrative. These conceptions may reflect the author's and reader's culture as well as personal experiences. Daniel Punday's work yields a number of insights into this level of embodiment, resulting in a "corporeal hermeneutics—a theory of how the text can be meaningfully articulated through the body" (2003, p. 5).

London's "To Build a Fire" can, once again, help illustrate this idea. The title is a quintessential example of a bodily action. As soon as it becomes clear that the story's outcome depends on the man's *inability* to build a fire, the title takes on ironic overtones. In turn, this irony ties in with the narrator's already quoted reflection on "man's frailty in general, able only to live within certain narrow limits of heat and cold" (London, 1998, p. 342). The protagonist meets his demise because, in his foolishness, he oversteps these limits, entering a territory where the human body

does not work as we would expect it to: even the basic embodied action of building a fire becomes impossible.

This reading can be further complicated by factoring in the other body that appears in this short story—namely, the nonhuman body of the husky. Jack London was deeply influenced by Darwin's theory of evolution by natural selection (see Berkove, 2004): throughout his work, he explored the ruthless individualism and struggle for survival that—in London's view—underlie human societies as well as animal life. Thus, in the passage quoted at the beginning of this chapter the narrator of "To Build a Fire" emphasizes that the man's death is caused by his lack of imagination, which compounds the evolutionary unfitness of his body to withstand this extreme cold. By contrast, huskies are well-adapted to this weather and know instinctually how to survive in it (by burrowing under the snow, we are told repeatedly). A few instants before dying, the man even feels "a great surge of envy as he regarded the creature [the dog] that was warm and secure in its natural covering" (London, 1998, p. 351). The dog does not know how to build a fire: it appreciates the fire's warmth but does not appear to need it in order to survive. After the man's death, the focalization switches to the husky. Initially puzzled by the man's decision to lie down and "sleep," the dog eventually smells "the scent of death" and understands what happened. The story's last sentence reads: "[the husky] turned and trotted up the trail in the direction of the camp it knew, where were the other food-providers and fire-providers" (ibid. p. 357). The animal's nonchalant "trot" is an ironic comment on the man's foolishness. In this way, the short story employs the animal's body—which is governed by simple but effective instincts—as a foil to the man's hubris: even humans' reliance on technology (of which fire is an archetype) cannot protect them from their own frail bodies and lack of judgment.

As this brief discussion only begins to show, the body serves in narrative as an interpretive hotspot: the representation of characters' bodies is bound up with a wide array of cultural evaluations and judgments, which readers negotiate in dialogue with the author's creative choices and with their own (partly personal, partly culturally derived) interests and predispositions. The bodies represented by narrative—in the case of London's short story, the human body of the man and the nonhuman body of the husky—thus participate in readers' construction of interpretive meanings, which in turn may shape and deepen their understanding of various forms of embodiment (human and nonhuman) outside of narrative. The cognitive-level responses I have discussed in the first part of the article are always already entangled with cultural meanings at this level, and in fact, embodied involvement in prose narrative (through empathy for characters or absorption in the plot) may encourage readers to engage with cultural representations and evaluations of the body. For instance, work on "narrative persuasion" by psychologists Melanie Green and Timothy Brock (2000) suggests that empathy and immersion correlate with the extent to which readers' beliefs are changed by narrative. This

process feeds into what this collection refers to as the "medial body"—that is, the way in which our ordinary forms of embodiment are shaped and constituted by mediated practices.

6. Conclusion

Reading may seem removed from the domain of the everyday, embodied action and interaction; it may have been conceptualized in Western culture as the intellectual pursuit par excellence, but it still involves our bodies in ways that can no longer be ignored. Our imagination of, and engagement with, the storyworlds of fiction build on our embodiment through the mechanisms examined in this chapter: embodied simulations, bodily empathy, somatic feelings, body-oriented readings, and evaluations. Thus, the conception of embodiment articulated in this chapter spans a wide spectrum, from relatively basic responses to language, up to sophisticated cultural evaluations (for more on this spectrum, see Caracciolo, 2014a). In literary reading—as in any other human practice—embodiment operates at multiple levels, which can be probed only through careful interdisciplinary work. Not only that: literature can encourage us to adopt, in our imagination, bodies different from our own. When London's short story switches, at the end of the narrative, from the man's to the dog's consciousness, this shift in internal focalization invites us to engage with the animal's embodied perspective on the storyworld. In "To Build a Fire" this is just a local effect, too short-lived to create a strong feeling of identification with the animal's body, but fiction can do much more than this. As we read in J. M. Coetzee's novella The Lives of Animals, some kinds of literature ask us to "imagine our way into [the animal's] way of moving, to inhabit [its] body" (1999, p. 51). Nor is this effect limited to animal narratives: in reading, we can come to inhabit a disabled body, or a body of a different gender or sexual orientation. This illusion—which may well have an effect on our real-world beliefs and attitudes—depends on the author's skillful use of embodied cues, which draw our real bodies into the narrative even as they effect a number of subtle changes in our imagination of the body.

This dynamic is made possible by the fact that the body is not a fixed entity but a bundle of potentialities. While grounded in our biological body, our "medial body"—the concept at the center of this collection—can be reshaped by culture and by imaginative acts, such as those we perform when engaging with narrative in prose and other media. The body thus becomes an infinitely complex membrane between biology, cognition, and culture. Fiction is valuable because it can hold a mirror up to this complexity, yielding insight into the multidimensional nature of embodiment.

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