CHAPTER 5

Reading the Animal Pulse

The previous chapters explained how animal vocalizations are processed by contemporary listeners and writers in a time of threatened biodiversity, and how such sounds are regularly represented in terms of cross-species sympathy and/or other-than-human music and language. Chapters 5 and 6 shift the focus slightly and spotlight a topic we have encountered multiple times already: the fact that sonic ties between human and nonhuman animals are mediated via particular devices and technologies. As my preceding analyses of novels and scenes featuring headphones, cellphones, and spectrograms indicated, this book is not exclusively concerned with animal sounds or with human listening but with the shifting interfaces between human and nonhuman lives, which involve particular ideas and cultural practices but distinct media technologies too, even when they seem absent, the human ear being not a direct portal to a supposedly natural soundscape but yet another medium that filters our sonic environment in certain ways. Complementing my earlier remarks on the devices that connect as well as disconnect us from nonhuman creatures, the following chapters single out two media that merit further attention in an analysis of the modern multispecies soundscape, namely stethoscopes and sonar technology.

This chapter scrutinizes the role of the stethoscope, a technological device that is important for the purposes of this book, as it plays a pivotal role in the history of modern auditory culture (and the related history of sound studies) and permits us to rethink sound beyond the narrow

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parameters defined by the human ear. In what follows, I first review relevant research on sound, media, and nonhuman animals and then proceed to examine an overlooked creaturely dimension of the novel's soundscape, namely the noises of the vulnerable body. Unearthing the 'stethoscopic logic' and 'culture of the heart' in novels by authors as diverse as Glory Ralston, Bram Stoker, Cormac McCarthy, and Don DeLillo, the following sections specify how modern novels have incorporated as well as resisted this quintessential medical medium, providing detailed sonic records and unusual focalizations related to the inner bodies of humans and other creatures. A comparison of these narratives also uncovers divergent responses to conventional species boundaries, as they alternately emphasize or minimize the condition of creaturely vulnerability shared by living beings—even encouraging a mode of physiological response that I propose calling 'visceral reading'. In an age where apps and art transform medical monitoring into an amateur pastime, the literary archive illuminates the prehistory of such cultural practices and their lingering anthropocentric presuppositions, not to mention their implicit celebration of touch and manual labor.

As I mentioned, this chapter claims that the modern novel amplifies the sounds of the vulnerable body, offering its own, textual version of the enhanced auditory perception made possible by the stethoscope. It might seem odd to argue for the contemporary relevance of this diagnostic device. For even though laypeople continue to associate doctors and stethoscopes, the emergence of newer medical tools and practices entails that these instruments are increasingly viewed in a nostalgic light, as part of a cultural fear in which '[t]echnologies are viewed as *replacing* the senses in contemporary medicine, with blood pressure machines, ultrasounds, echocardiograms, X-rays and other investigations argued to replace practices involving touch, listening and more embodied approaches to care', as Anna Harris has observed (33, emphasis in original). This perceived shift away from the traditional stethoscope leaves its traces in the cultural archive too; if the narrator of George Eliot's *Middlemarch* (1871–2) could refer to the device's cutting-edge character by stating that the use of René Laennec's 1816 invention still 'had not become a matter of course in practice at that time' (314), thinking of the early 1830s, the protagonist of Don DeLillo's *Cosmopolis* (2003) rather underlines its archaic nature at the start of the twenty-first century: 'He didn't know why stethoscopes were still in use. They were lost tools of antiquity, quaint as blood-sucking worms' (43). The incarnation of innovative disease management in the first novel,

stethoscopes seem to signal a relapse into premodern and pre-professional (indeed, not fully humanized) quackery in the second.

We should nevertheless consider the stethoscope if we want to grasp the soundscape of the modern novel, its impact on the reader's senses, and its representation of medical care and vulnerable bodies. This project should not limit itself to human medicine and human patients, moreover, but take into account that vets handle stethoscopes too, and that nonhuman creatures inhabit bodies that, while different in multiple respects, are composed of equally noisy and fragile organs—a fact that has not escaped modern writers. If read closely, certain novels anticipate art installations like Rafael Lozano-Hemmer's *Pulse Room* (2006) and Christian Boltanski's *Les Archives du Coeur* (2008–) as well as apps like *Heartkick*, all of which record and/or respond to the real-time heart rates of users (see Jones). But these literary works also task readers with rethinking the anthropocentric presuppositions behind these cultural practices, by appealing to a form of sonic curiosity and creaturely sympathy that are similar to if not the same as the ones we identified in Chaps. 2 and 3. An analysis of the species and stethoscopes in novels by writers like Ralston, Stoker, and McCarthy also advances existing research at the intersection of sound studies, animal studies, and media studies—not to mention the medical humanities, which have largely ignored nonhuman animals in the past (Cassidy et al.), prompting calls for 'more entangled investigation of the bio-psycho-social-physical events that underpin the life, and death, of any organism' (Viney et al. 3). For all of these reasons, the present chapter investigates this particular medical medium, the acoustic contact zones it helps to establish, and the role of bodily, medicalized listening in literary history.

Existing work in sound studies already points us in the direction of the stethoscope, even if it has not canvassed the more-than-human dimensions of bodily sound in detail. In his landmark publication *The Audible Past* (2003), which we have encountered before, Jonathan Sterne claims that the history of sound reproduction technologies does not begin with the well-known phonograph or telephone but with the earlier stethoscope, and recounts how Laennec's invention marked an important step not just in nineteenth-century medicine but in modern auditory culture too. In medical terms, the stethoscope provided access to the invisible 'insides of living human bodies' and enabled medical professionals to interpret the undistorted sounds of the body rather than the potentially untrustworthy statements of their patients (99), turning 'an intersubjective exchange between doctor and patient' into the 'sonorous clarity of reason' delivered

by mechanical objectivity (136). The stethoscope also laid the foundation for the attentive listening protocols associated with later media like the phonograph. For Laennec's device and its earphones already isolated sounds from other perceptual data—remember the headphone writing of Chap. 2—and placed listeners in a 'private acoustic space' where they could apply new technical listening skills (87)—which Sterne groups under the rubric 'audile technique' (90)—to interpret minute but meaningful vibrations, like the 'barely audible details of a patient's breathing or heartbeat' (115). Like later sound technologies, moreover, the stethoscope appeared to 'eras[e] itself' as an intervening medium as this process became second nature for modern listeners, and the novelty of bodily sound wore off (112).

This insightful analysis has shaped the work of literary scholars, including my own, but it offers few clues for research on nonhuman animals, as Sterne holds that 'human beings reside at the center of any meaningful definition of sound' because it refers to that set of vibrations that can be picked up by a human ear (11). Granted, he hints at a more capacious view of sound: 'the boundary between sound and not-sound is based on the understood possibilities of the faculty of hearing—whether we are talking about a person or a squirrel' (12). Yet Sterne mainly has 'the human body' in mind (51), despite the fact that 'human and animal bodies' share the crucial tympanic mechanism, for instance (34). At the precise moment when the stethoscope is introduced in sound studies, in other words, nonhuman sounds and bodies are excluded. This is unfortunate, as stethoscopes disclose the importance of soft, humanly inaudible sounds, and can be applied to other animal bodies too—as Laennec himself recognized. Although his 'researches on auscultation in the diseases of animals have been very limited', he is confident that his invention 'will be found very useful in [certain] cases' relevant to 'veterinary medicine' (720). The anatomy of other creatures complicates things, to be sure; listening to a horse's heart is arduous, he concedes, as its 'respiration is very indistinct … even when the animal has just ceased running' (720). Still in the nineteenth century, British veterinary surgeon William Youatt writes that this instrument has convinced him of the importance of sound and diagnostic listening, recommending 'the application of the ear to the chest and belly of various animals' (533). This procedure allows acute listeners to discern a cow's pregnancy sooner, for example, for '[t]he beating of the heart of the calf will be distinctly heard' as will 'the audible rushing of the blood through the vessels of the placenta' (533). Although we should not lose

sight of different anatomies and the unequal power relations between human and nonhuman animals, especially in a medical context, such observations hint at the cross-species state of vulnerability I addressed in Chap. 3 with reference to passionate vocalizations rather than noisy anatomies. If the stethoscope makes lungs, hearts, and other organs newly audible and amenable to medical management, as Sterne says, it simultaneously raises awareness of a condition of embodied fragility that bleeds across species lines—or at least extends to creatures with similar organs suffering from comparable medical conditions, a significant nuance. Companion species in particular, we will see, are repeatedly described as medical emergencies in waiting, with bodies that require constant human care and professional monitoring.

A return to the stethoscope also advances debates in the environmental humanities on the body, vulnerability, and nonhuman sound. The following argument furthers existing cultural research on the ties between environmentalism, modern medicine, and embodiment, first of all. The leading example here is Stacy Alaimo's *Bodily Natures* (2010), as her analysis of literature in the age of invisible toxicants introduces a conception of the body that is vulnerable and permeable rather than safely enclosed—in which 'all creatures exis[t] as part of their own corporeal crossroads of body and place' (111)—and it explores similar exchanges between medicine and environmental literature. Especially interesting here is that she mentions technologies that enable us to monitor the interior body and trace toxic effects on what used to be our 'nice insides', in the words of a fictional character (75). Alaimo even suggests that literary texts can function in ways analogous to such medical media, rendering invisible things visible 'like an X-ray' (52), and that bodies are media too, quietly registering toxicity like 'a scientific instrument' (24). Developing these insights, Heather Houser addresses related themes in her *Ecosickness in Contemporary US Fiction* (2014) by calling attention to images of abject, boundless bodies that incite an uncomfortable but ecologically useful form of disgust (156–7). Yet despite their focus on the porous body and pronounced interest in environmental issues, these studies remain primarily concerned with 'human illness', as Houser puts it (2). By contrast, human-animal relations occupy center stage in Anat Pick's analysis of creaturely vulnerability. In *Creaturely Poetics* (2011) Pick considers works of film and literature that explore 'the corporeal reality of living bodies' (3), the 'logic of flesh' (6) she characterizes at one point as 'the anonymity of perishable matter' (183). Adopting this 'creaturely' perspective

entails that we do not focus on the interiority of selves but the exteriority of bodies, not on self-made historical actors but transient 'creatures of history' (74), and not on a conceptual strategy of supposed extension ('all animals are humans too') but one of contraction instead ('all humans are creatures too'). These three accounts of fragile bodies devote more attention to sight and visual media, but they occasionally refer to sound too, as in Pick's analysis of a film scene where human and canine voices mix, in a moment of 'creaturely longing'—remember Chap. 3—in which '[s]omething needy and mammalian calls out' (118).

Often overlooked, the cultural meanings of such sounds have received more attention in the last few years, as I mentioned in the introduction and the previous chapters. For many of these studies, the crucial question is whether we are able and willing to retool our conception of 'voice', seen as a sign of legally and politically meaningful personhood, so as to include other life forms and sounds formerly consigned to the cultural background. As I have explained in Chap. 3 especially, this is a crucial connotation of nonhuman sound whenever it crops up in cultural artifacts. Yet another reason why stethoscopes are interesting at this juncture is because they provide access to organic sounds that are not vocalizations part of a conscious semiotic process and that are neither fully natural nor truly old, seeing that they only become properly available to human listeners after the emergence of a particular modern technology and mindset, as Sterne has demonstrated. Returning to Dominic Pettman's *Sonic Intimacy* (2017), we should certainly interrogate how the secure possession of an individual 'human' voice is premised on the exclusion of sounds assumed to be (merely) machinic, feminine, or creaturely. As I stated in the introduction, Pettman is absolutely right in saying that '[e]xpanding the conceptual spectrum of what counts as a voice is one way to better understand—and thus challenge—the technical foundation and legacy of taxonomy (gender, class, race, species)' (92). What is more, he astutely notes that we should not interpret the voice in terms of real-time presence and an individual signature alone but also need to consider its indirect, impersonal, and acousmatic dimensions, and trace how sounds that circulate among humans, animals, and machines establish shifting forms of intimacy. Yet if we want to explore scenes of sonic intimacy and grasp how sounds that are both personal and impersonal travel between living bodies and other media, an analysis of stethoscopic listening and the veterinary ear promises to yield compelling results, seeing that the sounds of fragile bodies and organs permit us to bracket the conventional focus on voice,

communication, and subjectivity even more radically. Pettman takes into account divergent sound sources so as to arrive at a more elastic view of voice: '[w]hether it is a mother listening to her daughter's voice on the telephone, a dog listening to His Master's Voice on a gramophone, a lamp listening for the clap of a hand, or a microphone listening for specific shapes determined by an algorithm, there is a subjectively inflected object or operation "paying heed" to its environment' (74). The sounds I examine in this chapter could likewise be integrated into this expansive view of 'voice' and 'subjectively inflected' operations, assuming that we are willing to ascribe some measure of agency and individuality to organs and bodily processes (and why not?). But that strategy should take cognizance of the fact that these bodily sounds have acquired connotations rooted, precisely, in the fact that they are ordinarily deemed to be impersonal, non-subjective, anonymous. Even if we decide to include this bodily acoustics into an all-encompassing 'vox mundi', in other words, it would be wise to bracket the category of voice initially and analyze these sounds, their literary representations, and their cultural meanings more neutrally first. Formulated more strongly, it could be argued that these usually imperceptible vibrations demand a different strategy and force us to think of the more-than-human soundscape in ways that do not privilege individualizing, humanizing notions like voice. Whatever our views on the matter, it cannot be denied that this form of sonority has received little sustained attention in existing publications on animal sounds. I should also add that the present chapter underlines the specialized nature of medical listening; whereas the ethical appeal of the animal voice is theoretically accessible to all auditors, as we saw in Chap. 3, monitoring the body's noises requires skills and equipment that are unevenly distributed among human listeners. If the debate on modern auditory culture can be enriched by factoring in nonhuman animals, in short, a closer look at stethoscopic culture extends our view of the body, of creaturely life, and of nonhuman acoustics.

Finally, an analysis of the stethoscope and its nonhuman dimensions improves our understanding of the interaction between literary texts and other media. As I mentioned at the start of this book, literary scholars interested in historical recording technologies initially kept returning to the impact of the gramophone on literary practice, but scholars like Paul Saint-Amour have started overturning this '*gramophonocentrism*' (16, emphasis in original) by studying how other media competed with 'the recording, storage, and playback technology we call the novel' (17). One of these rival regimes involves the stethoscope. Following Jonathan Sterne, literary scholar John Picker maintains that

'modern aurality begins with the stethoscope', this device that 'represented the rational conquest of previously undetected sound and led to the rise of the clinically skilled listener' (603). The sounds made available by modern media prompted new anxieties concerning Victorian identity, Picker relates, and they shaped the writing of George Eliot and Edgar Allan Poe, among others, whose fiction is 'full of hidden hearts beating for those perceptive men and women who would hear them', inviting 'the kind of stethoscopic perception that permits the attentive individual to access the invisible lives of others' (605). Working on Victorian poetry, Kirstie Blair has reached similar conclusions. The advent of the stethoscope implied, she notes, that the conventional image of the 'feeling heart … bec[a]m[e] subject to technology, its beatings classified and reduced to medical symptoms as the possibility of affective communication between doctor and patient [wa]s denied' (24). At the same time, people became newly attentive to 'the irregular and affective pulse' (24), and this resulted in literary works in which the heart resists its modern management, and authors and readers perform 'a kind of stethoscopic reading', with a pulse speaking 'at amplified volume' (26). Whereas these accounts firmly focus on human bodies and identities, Pearl Brilmyer has claimed that an author like Eliot uses 'literature not only as a medium for intersubjective understanding but also as an amplificatory technology' (36), meaning that a famous passage from *Middlemarch* can be read literally, in terms of more-than-human perception: 'What would it feel like … to look on the world with an extrahuman range of faculties? "[I]t would be like hearing the grass grow and the squirrel's heart beat, and we should die of that roar which lies on the other side of silence"' (35–6). As the close observations of her realist fiction aim to surpass the limits of human perception, Brilmyer argues, Eliot ultimately regards literature as 'a kind of nonhuman extension of the human body' (45), like the 'microscope' (40) or the 'microphone' (45). Or, I would add, bearing in mind that squirrel's heart, the stethoscope. As these insights imply, 'stethoscopic perception' should not be limited to the human, neither in reality nor in writing. That is why I now turn to three sets of novels that explicitly contemplate sounds, species, and that quaint prosthetic tool, the stethoscope.

Humane Vets

Before inspecting the novels of famous writers like Stoker and McCarthy, I will compare two contemporary novels that describe the activities of veterinary practitioners in detail, Sid Gustafson's *Swift Dam* (2016) and Glory Ralston's *While the Music Played* (2016)—contemporary iterations of the type of narrative popularized by James Herriot in the 1970s. The stories by Gustafson and Ralston might not stand the test of time, seeing that neither of them was written by a professional author or published by a high-profile press. Yet in their potential ephemerality these novels are representative of the early twenty-first-century literary scene, arguably, which thrives on expressions of 'amateur creativity' (Vadde 29) and the often unpaid labor of 'indie writers' (McGurl 460) and 'literary volunteers' (Hungerford 2016, 6). These novels repay closer scrutiny, moreover, as they provide insight into the meanings of physical labor and human-animal partnerships, not unlike the narratives analyzed in Susan McHugh's *Animal Stories* (2011). More specifically, they shed a powerful light on the life of modern vets and the cultural meanings of the stethoscope.

The best way to contextualize these novels is to recapitulate the history of the veterinary profession in twentieth-century America. According to Susan D. Jones, this history can be divided into four rough phases: animal doctors initially offered their services in cities, treating horses that provided transport or signaled social status; the rise of motorized vehicles necessitated a subsequent shift toward work related to farms, food animals like cows, and the systematic inspection of meat and milk; as wars created a need for cheap food in great quantities, vets also started developing vaccines and preventive protocols that created the necessary conditions for large-scale factory farms composed of chickens and other animals who were only valued in large quantities; and alongside these developments vets started reorienting their labor in function of reindividualized companion animals like dogs and cats, who were valued for sentimental rather than commercial reasons. As this historical trajectory indicates, vets have had to renegotiate their place in society several times, adjusting themselves to changing ideas of which animals are valuable and why. This account further shows that veterinarians are not simply 'a great humane society' (128), as professional leaders like to declare, but have played a pivotal role in creating the ambiguous social status of nonhuman animals, in which some creatures are valued and others are not, and in reconciling desires for

profit and sentiment, even though the latter motive seemed initially hard to reconcile with the traditionally masculine, unsentimental ethos of the animal doctor. This history makes its presence felt in the novels by Ralston and Gustafson; gender inequality is crucial to both stories, for instance, and they both allude to historical changes in the veterinary profession, like the shift toward companion animals and the increasing use of medication. While they do not idealize stressful working conditions, moreover, both novels present a highly positive take on the veterinary life, accentuating compassionate care and individualized patients rather than morally ambivalent situations involving large-scale factory farms and vets as 'herd health experts', as Jones phrases it (113). In representing rough but rewarding labor in the countryside, both novels also plumb the life of the family and the traumas of the Vietnam War and Manifest Destiny, respectively, meaning that they share a commitment to regional identities, cultural memory, and intergenerational ties. But my main concern here is that they feature several scenes in which a vet examines an animal patient, using his or her stethoscope—scenes that task readers with imagining the body's interior acoustics.

Set in northern California in 1985, Glory Ralston's *While the Music Played* (2016) is a self-published novel about three female characters and their interlinked stories: seventeen-year old Jenna has lived with her grandmother and aunts ever since her mother left her when she was three; her mother's letters uncover how she became an alcoholic after her husband disappeared in Vietnam and how she is now trying to reconnect with her estranged daughter; and Jenna's aunt Marge is a self-taught, unlicensed veterinary assistant who tends to local animals with Jenna and fears her job is disappearing now that people have begun to prefer the services of licensed vets (see 68). Alternating between these storylines, the narrative features many examination scenes, three of which mention stethoscopes explicitly. The first scene is an early, positively charged passage in which the intervention of Marge and Jenna ends up saving the pregnant patient. Because a profit-seeking farmer has bred a 'sweet little heifer' to a big Angus bull, the male calf is simply too big to leave the mother's body, requiring the skillful intervention of Jenna's small hands to help move the animal into the right position (22). As the text stresses, this is arduous work involving bodily fluids, life-and-death tension, and the threat of physical harm. Yet in contrast to the cursing male farmer, who only cares about the valuable calf, Marge and Jenna never lose sight of their animal patient and keep talking to the mother in soothing tones—recalling Bev's

behavior in the scene from *Disgrace* I discussed in Chap. 3. Even more important than this comforting interspecies dialogue are the medically relevant sounds of the body; as the calf is not breathing when it eventually emerges, Marge applies a 'stethoscope' to listen for a heartbeat, in a textbook example of audile technique—'Her face tightens in concentration. "It's there, not very strong but there"' (19)—and those barely audible sounds elicit a set of chest compressions that end up saving the calf. More crucial to the narrative is that this successful intervention produces an overwhelming sense of 'pride' (21) in the human protagonist and confirms Jenna's desire to become a vet, a life-changing sequence of events that essentially replays a similar scene from Marge's life, integrating the protagonist's individual aspirations into a longer family history of animal care (see 23). In Jenna's words: 'I know now, beyond all doubt, that this is what I want to do with my life' (28). Given this promising start, we should not be surprised to learn that the novel's climax, in which Jenna finally meets her mother, underlines her status as a vet-to-be, seeing that she watches the car approach 'with the stethoscope dangling from [her] hand' and finally embraces her mother with 'the stethoscope in [her] hand' (276). Emphasizing the magical quality of this reunion as well as the quasi-coincidence of doctor and instrument, the character even forgets she is holding it: '[t]hat's when I notice that I'm still holding Ben's stethoscope' (277). Though it miraculously provides access to inner bodies, and Jenna does not know how to use it properly yet, the stethoscope has already become invisible, an unobtrusive extension of the vet-to-be's body.

If read closely, the other scenes that mention stethoscopes reinforce the anthropocentric connotations of Jenna's heroic delivery at the start of the novel. In the middle section a barn fire has injured two horses, one of whom is again not breathing. Coaxing this animal back to life proves more difficult, but Jenna is undeterred by anatomical differences like the fact that this is 'a thousand-pound animal', encouraging her aunt to do CPR with their 'combined weight', a form of teamwork that is interspersed with multiple instances of audile technique (82): 'Aunt Marge listens intently, moving the stethoscope over Dolly's ribcage … She keeps her head down and moves the stethoscope over Dolly's chest for several minutes … She closes her eyes and cocks her head, listening' (82–3). The animal cannot be saved, but this apparent failure seems to be offset by the facts that this fatal scene is set in a landscape of 'breathtaking' natural beauty (81) and that an autopsy is able to explain why this seemingly unhurt animal perished, medical knowledge about scorched lungs providing reassuring insight even if it 'isn't exactly

good news' for the animal patient (112). The reason why Jenna is holding a stethoscope in the third scene at the novel's end, finally, is because she comes across an injured deer on the highway as she drives past with a young vet (274). Once more, Jenna is forced to admit that this particular animal cannot be helped, and the male vet uses his stethoscope after euthanizing the deer to make sure it has passed away in a so-called humane fashion. Lending further weight to this climactic scene is the fact that the deer has a fawn who is hiding in the woods nearby. The presence of this animal child has an emotional impact on the protagonist, but the fact that this nonhuman mother and daughter are violently separated by human actions—apart from the actual accident, the vet ends up taking the euthanized body with him—at the precise moment when the novel's central human mother and daughter are reunited nonetheless proves that animals and humans occupy asymmetrical positions in this fictional world and experience their vulnerability in uneven ways (the novel evokes a particular, binary 'creature-system', to use the phrase I introduced in Chap. 3). Admittedly, the novel systematically underlines the ties between equally fragile and caring humans and animals, by discussing the medical condition of one of Jenna's aunts in detail (26–7); by comparing an injured animal to a 'man on [a] stretcher' (83); by remarking that Jenna, despite initial doubts, is 'getting used to the idea of a four-hundred-pound pig as a house pet' (194); and by relating how another animal mother 'even looked to be smiling' when she recognizes her pup after their forced separation, in another proudly anthropomorphic moment (247). Furthermore, Jenna wonders what it must be like to be one of her patients, the horse trapped in the burning barn: 'I try to picture what it must have been like for Dolly in the fire' (86). But the species divide remains in place, as the ending already implied (not to mention the protagonists' systematic and untroubled consumption of meat throughout the novel), and not just because the idea that we can easily inhabit another animal's mind overlooks its alterity by presupposing its 'essential humanity', as scholars like Cary Wolfe have pointed out. Because if we inspect the novel as a whole, the crucial, recurring challenge of imaginative identification is rooted in human rather than nonhuman trauma: 'Was that what it was like for my mother after my father went missing?' (76).

Though it shares many features with *While the Music Played*, *Swift Dam* is different too. Instead of concentrating on the homely teamwork of semi-professional women treating various species of animals, the second novel revolves around a rugged male veterinarian who works on his own and is primarily interested in horses. *Swift Dam* also wears its literary

ambition on its sleeve; apart from references to 'Jekyll and Hyde' (45), James Herriot (71) and 'a Richard Ford novel' (53), all of which display the writer's awareness of particular literary coordinates, the plot involves a vet who dabbles in writing, convinces a literary agent of his talent, and manages to publish a successful novel. This character is suspiciously similar to the novel's author, Sid Gustafson, who is not just a journalist for the *New York Times*, as the cover informs us, but also 'a longtime practicing veterinarian in Montana and equine behavior educator'. Drawing on Gustafson's experience, *Swift Dam* switches back and forth between the story of a Pondera County sheriff with Native American roots, Bird Oberly, and that of the aforementioned vet-turned-novelist, Doctor Alphonse 'Fingers' Vallerone. The lives of these characters reveal the impact of two disasters: the real-life flood of 1964 that destroyed the titular dam and killed many Native Americans from the nearby Blackfeet Reservation as well as the larger trauma of Manifest Destiny and its aftereffects. Not unlike Ralston's novel, *Swift Dam* follows established models of how to narrate trauma, as it tells its story in a fragmentary, reverse-chronological fashion, slowly piecing together dreams, memories, and conversations to disclose the precise link between Bird and Fingers. Apart from these broader themes of identity and memory, Gustafson's novel again contemplates the state of the veterinary profession; Fingers repeatedly criticizes the 'drugs-for-all ideology' (95), and his nickname accentuates his low-tech, hands-on take on veterinary medicine and the contrast with its more comfortable human counterpart: 'Vallerone had relied on his fingers all his life to diagnose what burdened animals. He had no radiographic capabilities in the field, no ultrasound, no blood scans, no digital imagery; nothing other than his namesake digits abetted by his eyes and nose, a feel doctor all around' (93). Yet despite this anti-technological stance, Gustafson's story, like Ralston's novel, includes several examination scenes involving stethoscopes and the human-animal boundary. The scenes from *Swift Dam* are more technical, however, underlining the expertise of the fictional vet as well as the book's writer, who does not have to add a note at the end, like Ralston, to thank a 'DVM' or doctor of veterinary medicine for 'sorting out the possible from the impossible in all the animal scenes' (279). We are in the hands of a male professional now, not a female amateur.

Further clarifying the literary role of stethoscopes, the rest of my reading again analyzes three scenes that establish ties between animals, sounds, and medical care. The first scene depicts Vallerone's natural ability in

treating his injured patient, a dog who has been impaled with the quills of a porcupine and is owned by a 'murder-mystery novelist' who stumbles out of the exam after seeing his injured pet 'to barf in the waiting room garbage can'—a scene which suggests that popular writers cannot stomach the hard-nosed realities of the veterinary life as described in what must therefore be a more serious novel (49):

> [Vallerone] checked the hydration, pinching the skin over the shoulder-blades, over the eyelid. Fingers listened to the wispy heart and struggling lungs with his ancient black-rubber stethoscope, his Littman. … He tightened a … tourniquet and deftly slipped a catheter into the foreleg vein, seemingly all in one fluid motion that … hypnotized the usually high-strung hunting dog. … Once the fluid had dripped its magic, relaxing the dog and providing metabolic relief, the dog came to appreciate Dr. Vallerone. … Mardo watched the doctor come into a rhythm with his patient [and noticed] Fingers's constant monitoring of vital signs, his intuitive quill extractions, the care so as not to … overlook even one. (48, 51)

In line with its setting, the meticulous, step-by-step description of this scene in Vallerone's clinic is more technical than the passages in Ralston's novel (via references to hydration, the Littman brand, catheters, metabolic relief). Focalized at the end through the admiring eyes of Mardo, the mystery novelist's female assistant, the passage also celebrates the professional skill of this individual male doctor (no teamwork or female vet assistants here), who does not miss a single quill, as well as the healing and hypnotic effect of medical expertise more generally (though Fingers considers them problematic, drugs can apparently do wonders too). Not unlike Jenna, moreover, the extradiegetic narrator imagines herself to be able to inhabit the canine patient's perspective, confidently noting that the dog 'came to appreciate' the doctor.

Gustafson's novel intimates that animal and human medicine differ, yet it also recognizes certain similarities, a move that unsettles the border between humans and other animals but also serves to enhance the status of animal doctors by likening their life-saving mission to that of their more prestigious human counterparts. These similarities are made explicit in a passage where the vet applies the stethoscope to his own aging body, in which the text represents the sounds of the body and the vet's audile technique while gesturing toward the vulnerability of all creatures—or at least those creatures with lungs, hearts, and livers:

> He fished the stethoscope off the exam tray and auscultated his chest … His heart sounded fine. Lub-dub, lub-lub, lub-dub, lub-ub, lub-dub. Fairly steady, save that up and down arrythmia that corresponded with his breathing. He listened on. His endocrine system reacted to scrutiny, increasing his heart rate. Maybe just a half beat missed now and then. He was not so sure about his lung sounds. Light rales, perhaps a heaviness. He dropped the bell down to his abdomen and listened to the light bubbling of his intestines. … He tried to palpate his liver under his ribcage, but couldn't get a feel of the hepatic margin under the ribs like he could a cat's. (91–2)

This scene of self-monitoring replicates the sounds heard through a stethoscope, even using onomatopoeia. It also points to the similarities between human and animal bodies (if not, how could a vet understand the state of his own organs?) as well as their anatomical differences (a cat is nonetheless different from a human). Furthermore, the language records the uncertainty inherent in medical listening ('fairly', 'maybe', 'not so sure', 'perhaps', 'tried'), implying both that doctors are fallible and that bodies remain opaque, problems made urgent by the fact that so much could be amiss with its vulnerable mechanism (that missing half-beat, those worrisome lungs and liver), a mechanism that responds automatically, disturbingly independently, to its medical monitoring.

The comparison between human and animal medicine returns in the final scene that mentions stethoscopes, which places Fingers in an even more passive position and increases the tension by subjecting him to the medical gaze and ear of a young attractive woman. As all of the previous points converge in this passage, I quote at length:

> [S]ignaling him to stay put with a gesture of his chart, like one might signal a dog to remain sitting [the young female doctor] massaged his neck, … much like Vallerone might unwind a tense horse. … The she-doctor percussed his ribcage with piano fingers. She auscultated while gently tapping, she the raven, his torso the window [and used] a Littman stethoscope similar [to] the one he used to hear inside animals. … The exam was changing him, something about the doctor's touch. She pressured his jugular groove with an index finger while auscultating his heart, assessing how the heart beat matched up to the carotid pulse. She spotted the head of her stethoscope on various parts of his chest, listening carefully at each stop … Fingers came fully awake, examined for the first time in his life. … Her needle fell into his vein; the sensation sexual, a whimsical penetration of his doctorness by hers. (97–100)

Awkwardly phrased, this passage attests to literary ambition (the image of 'piano fingers', the allusion to Poe's raven) and technical knowledge concerning instruments and anatomy (the doctor's chart, the bell of her stethoscope, Fingers's jugular groove). It also aligns human and animal patients (Vallerone is like a dog and a horse, the stethoscope is like that of a vet) and stresses the quasi-magical effect of physical exams and medical treatments, not unlike the scene with the quilled dog, or the delivery scene in Ralston's novel (the doctor's quasi-musical touch changes Vallerone, makes him feel reborn). And gender is once more crucial, seeing that Fingers imagines a form of sexual tension to be at play, one that culminates in an image whose true purpose might be less physical wish-fulfilment than professional fantasy, as if to say that vets and other doctors, male practitioners and female colleagues share a fundamental mission that overrules differences related to species, gender, and social prestige. But given the procedure's emasculating impact, Fingers's fantasy also indexes a fundamental sense of helplessness, which turns this male expert into a dog, a horse, a piano, a penetrated body, a *passive entity* that is no longer able to listen to his own body and decide on the proper treatment, despite his shared expertise—an old patient rather than a young doctor. All of which suggests that, the novel's strong endorsement of veterinary practice notwithstanding, human doctors and concerns finally remain in charge. Not to mention that *Swift Dam*, like *While the Music Played*, relates a human story about parents and their children, in which nonhuman characters function mainly as charismatic extras rather than truly independent agents. Yet in doing so these novels alert us to the role of sound in the treatment of vulnerable creatures, suggest that the inner body and animal mind are ultimately knowable and manageable, and that the stethoscope is a powerful, almost invisible instrument, which is exempt from the criticism leveled at modern medicine, and which natural vets carry in their hands unknowingly.

Monitoring the Species Boundary

The previous sections have documented how certain contemporary novels incorporate specialized knowledge related to the veterinary life alongside detailed descriptions of bodily sounds. But these novels are not the only or first literary works to explore the meanings of the body, of medical procedures, and of modern media like the stethoscope. Similar themes make an appearance in Mary Shelley's *Frankenstein* (1818), to give but one

example, which refers both to the anatomy of the monster—his skin 'scarcely covered the work of muscles and arteries beneath' (58)—and that of his creator—'[s]ometimes my pulse beat so quickly … that I felt the palpitation of every artery' (59). But this early novel's treatment of the inner body remains largely symbolical, the seat of unruly passions rather than leaking organs, and that changes when medical technology evolves.

As Kirstie Blair has argued, the Victorian period marks a crucial transition, as new anatomical insights and inventions like the stethoscope in combination with the contemporary 'culture of doubt' led to a reinterpretation of the heart, transforming it from a literary symbol to a literal organ, meaning that it turned elusive as well as knowable, pathological as well as healthy, negative as well as positive. As heart disease served 'almost as cancer does today, in terms of being the most feared yet most readily assumed interpretation of any set of symptoms' (30), moreover, there were multiple reasons for monitoring heartbeats, like the fear that cardiac disease was related to intellectual labor, to hereditary influence, or to sexual desire and female sensitivity, impelling 'pregnant women to regulate their feelings and carefully monitor their pulse', for instance (106–7). This shift in the 'culture of the heart', Blair finds, has left its traces in literary works that respond to these cultural fears via cosmic and mechanical metaphors, unusual metrical patterns, and, more rarely, 'image[s] of vampirism' (209). Turning to fiction, Meegan Kennedy has pointed out that sensation novels provide an even more literal record of bodily data by capturing 'precisely the kinds of physiological rhythms that a registering apparatus might be expected to record, in particular the standard triad in medical case histories: temperature, pulse, respiration' (452). These novels are therefore similar to the sphygmograph, she asserts, a medical instrument invented in the 1850s that recorded the pulse on paper, tracking 'physiological changes that took place, hidden inside the body, and that were too subtle … for accurate perception using human senses' (453). To explain the simultaneous rise of these two 'body graphs' Kennedy turns to Victorian scientific discoveries and concomitant questions of natural history and 'the individual's status as an animal body' (457), for she believes that the sphygmograph and sensation novel ultimately 'succeed[ed] in re-placing the human form as a mindful, feeling body at the center of that endless history' (458). Like Blair, moreover, Kennedy proposes that such texts not only track the sensations of fictional characters but provide a model for the bodily sensations of their readers. We can refine such arguments by rereading Bram Stoker's *Dracula* (1897), I will argue, taking a first step in the

direction of a longer literary history of creaturely bodies and more-than-human listening.

A popular phenomenon known across the world, *Dracula* has received considerable academic attention too, especially in terms of cultural constructions of the other and literary responses to the modern media system. Unsurprisingly, this Gothic novel about a foreign count who invades England and preys on its young women has been interpreted in terms of several signature anxieties of Victorian culture, like antisemitism (Halberstam), fears of prostitution and the female body (May) as well as orientalism, imperial decline, and the 'anxiety of reverse colonization' (Arata). As these readings demonstrate, Stoker's novel is a story 'about the production of monstrosity, whether it be monstrous race, monstrous class, or monstrous sex' (Halberstam 334). Composed 'out of the traits which ideologies of race, class, gender, sexuality, and capital want to disavow' (345–6), Dracula's discursive function is 'to be all difference to all people' (349). Yet what critics have curiously overlooked, Mario Ortiz Robles adds, is the story's animal dimension, and that oversight fits into a pattern whereby the animality of Victorian monsters 'is acknowledged only to be dismissed as a mark of their radical alterity' (11). These existing readings stress different aspects of the count's otherness, but they all agree that Stoker's novel does not just evoke a threat to Victorian respectability but also contains that threat. In terms of the animal question, Robles writes that a work like *Dracula* 'spectacularly stag[es] the permeability … of the border that separates human and non-human, only to then restore that border with all the force of an overdetermined prohibition' because it appeared in an age 'in which biopower need[ed] to be reconfigured to take into account a new cultural awareness of human animality' (19). If these disparate forms of otherness are associated with a premodern condition, another strand of the secondary literature insists on the novel's modern quality instead, most obvious in its references to law, journalism, and medicine as well as a whole array of technical media. Masquerading as a composite of documents, *Dracula* integrates memos, telegrams, newspaper articles, and diary entries written in steno, recorded on a phonograph, and transcribed on a typewriter. Emphasizing this aspect of the novel, Friedrich Kittler holds that it relates 'the counterattack of a democratic empire' against the premodern world of the aristocratic vampire (72). In the end, he asserts, 'Stoker's Dracula is no vampire novel, but rather the written account of our bureaucratization', drily adding that '[a]nyone is free to call this a horror novel as well' (73). In an attempt to unite the

novel's modern and premodern strands, Jennifer Wicke has proposed that both aspects hint at a preoccupation with the underlying problem of 'consumption' (479), claiming that vampires and phonographs, monsters and media can both be interpreted in terms of a broader anxiety about mass culture—a synthesis that reduces the animal quality of the titular character to a mere metaphor, as Robles suggests.

Yet if critics are aware of the fact that Stoker's novel often alludes to the animal world and to modern media, they have not paid much attention to the stethoscope and a related mode of listening that chips away at the conventional boundary separating humans and nonhumans—even when they trace the influence of Thornley Stoker, an eminent brain surgeon whose work on cerebral localization and animal rights resonates in his brother's novel (Stiles). Critics have rightly noted that *Dracula* reflects on the phonograph and acts as if its text is an alternative wax cylinder, so to speak: '[Dr Seward] placed [Mina Harker] in a comfortable chair, and arranged the phonograph so that I could touch it without getting up … I put the forked metal to my ears and listened' (259–60). However, the argument of Jonathan Sterne's *The Audible Past* primes us to notice that Mina's attentive listening to the phonograph is anticipated by the use of another medium, which similarly isolates its users in a private acoustic space. As readers of the novel will remember, Dracula bites both Lucy and Mina, thereby endangering their lives and souls. The first patient is put in a hot bath after losing a large amount of blood, and afterward Dr. Van Helsing applies a particular instrument to her body: 'Lucy's heart beat a trifle more audibly to the stethoscope, and her lungs had a perceptible movement' (173). This treatment is the only moment *Dracula* explicitly mentions the stethoscope, but it features many similar scenes involving anxious listening, medical monitoring, and noisy bodies, suggesting that the text invites 'stethoscopic perception' even when the device is not explicitly represented. In response to gramophonocentric readings, it could even be argued that the novel's phonograph actually functions like the overlooked stethoscope; after calling the former a wonderful but cruel machine, Mina clarifies that the phonograph 'told me, in its very tones, the anguish of your heart. … I have copied out the words on my typewriter, and none other need now *hear your heart beat as I did*' (258, emphasis added). What is more, the text often registers the pulse of its characters, underlining the importance of continuous medical monitoring in the fight against the premodern vampire. It records, for instance, how Lucy is breathing 'not softly, as usual with her, but in long, heavy gasps, as

though striving to get her lungs full at every breath' (110), how Van Helsing 'bent over the bed, his head almost touching poor Lucy's breast [before giving] a quick turn of his head, as of one who listens' (172)—hinting at the potential breach in decorum caused by such intimate listening—and how the quirky doctor keeps track of Mina's pulse without her knowledge, using his touch to establish that it was '[s]eventy-two only' during a conversation, as he informs Dr. Seward afterward (395). Indeed, even Lucy hears her afflicted mother's 'poor dear heart … beating terribly' (168). Like the pregnant and excitable women mentioned by Blair, the bodies of the novel's female characters need to be watched—and listened to—closely. And that is because an animal aggressor threatens the nature and integrity of that body. As the novel explains, Lucy's poor condition is caused by Dracula's bite, which is akin to that 'of some animal' (227), and his assaults threaten to transform Lucy and Mina into beast-like vampires, forcing Dr. Seward to describe Lucy's illness not only in terms of a disturbed pulse but also in terms of a distorted anatomy, which is no longer reassuringly human: 'Lucy was breathing somewhat stertorously [and] by some trick of the light, the canine teeth looked longer and sharper than the rest' (185, see 187). The novel tracks a species boundary that appears to be breaking down, in other words, by recording the breaths and heartbeats of these precious female characters—stimulating a mode of stethoscopic perception in its characters as well as in its readers. Even when the novel asks us to listen to a phonograph, its textual wax cylinder captures information about pathological, barely human heartbeats first made available by that other sonic medium, the stethoscope.

In line with biopolitical fears and the changing 'culture of the heart', we have seen, Stoker's novel affirms the importance of a well-managed heartbeat via its narrative of systematic medical monitoring. This account can be enriched further if we consider the reader's body and the animal question in more detail. Bearing in mind the observations of Blair and Kennedy, the novel's attention to the heart may be responsible for the accelerated pulse of its characters but it also, potentially at least, speeds up that of its readers. Consider the suspense-generating description of a patient's death, a scene which foregrounds difficult breathing and loud heartbeats and even suggests that the characters are listening to something like a group stethoscope—in line with Sterne's discussion of instructional stethoscopes that 'attached a single chest piece to many listening tubes' from the 1840s onward (161)—as the text amplifies the bodily sounds of all the positive characters in the room:

> The poor man's breathing came in uncertain gasps. Each instant he seemed as though he would open his eyes … but then would follow a prolonged stertorous breath, and he would relapse into … insensibility. Inured as I was to sickbeds …, this suspense [nevertheless] grew and grew upon me. I could almost hear the beating of my own heart, and the blood surging through my temples sounded like blows from a hammer. … There was a nervous suspense over us all, as though overhead some dread bell would peal out powerfully when we should least expect it. … Then there came a breath so prolonged that it seemed as though it would tear open his chest. … I could fancy that I could hear the sound of our hearts beating … (320–1, 330)

This passage talks about accelerating heart rates but it also attempts to produce a similar effect in the reader's body, speeding up her pulse with alliterative descriptions ('beating', 'blood', 'blows', 'bell', 'peal', 'powerfully') of amplified and anticipated sounds that destabilize a medical professional, unnerve other listeners, and render the patient's fragile condition transparent, a becoming visible of the interior body that is almost literalized at the end. Even if this patient is not transforming into an animal-like vampire here, the description nonetheless points toward the creaturely vulnerability of his body, and of the bodies of those characters and readers whose pulses beat faster while witnessing this scene.

Such passages resonate with D.A. Miller's classic account of the sensation novel, which makes a number of observations that are pertinent here, namely that all the subgenre's characters 'sooner or later inhabit the "sensationalized" body where the blood curdles, the heart beats violently, the breath comes short and thick' (109); that such nervous bodies are correlated with a femininity that needs to be put under masculine control with the help of 'the doctor' (120); that the reader who starts to experience similar nervous effects is hence feminized—'his rib cage [now] houses a woman's quickened respiration, and his heart beats to her skittish rhythm' (111); and that these novels perform their ideological work by appealing to physical sensations that are allegedly immediate rather than 'part of a cultural, historical process of signification' (108). We can apply this account to *Dracula* not just because the novel participates in this project of gender stereotyping but also because the sensationalized body *animalizes* readers as well as feminizes them. In reading such scenes, we are summoned to experience faster heart rates and to become newly aware of our fragile bodies and their unruly organs, a potentially unnerving experience of the body's creaturely quality that nevertheless remains but a temporary

effect, seeing that the narrative moves toward a reassuring conclusion that restores control over our animal hearts. And like Miller suggests, the immediacy of this sensation reinforces the ideological function of a narrative that can underline human mastery even more effectively after its detour via the apparently transparent animal body, which briefly becomes audible here. Like the stethoscope to which it draws attention, Stoker's novel enables us to intimately experience bodily sounds that testify to our creaturely vulnerability while producing new opportunities and rationales for medical management and human control. It encourages, in short, a form of 'visceral reading', an experience that corresponds well with Heather Keenleyside's argument on behalf of a 'first-person form of life' in literary texts, a form that, while highly intimate, cannot be reduced to human biography but gestures instead toward the 'generic living body' of a more-than-human biology (117). To return to Pettman's account of sonic intimacy, what could be more intimate and individual and yet less uniquely human than the first-person experience of your own heartbeat?

Alongside the reader's body we need to examine the novel's representation of animals further. Even though the evil count is associated with a menagerie of wild animals that comprises rats, bats, wolves, lizards, leeches, vipers, and panthers, as critics have noted, Stoker's novel does not demonize all nonhuman animals. On the contrary, companion species like dogs and horses function as allies of the protagonists, who sensitively register the presence of the enemy even when poor human senses cannot, and suffer from the same fear that grips human bodies. In the presence of evil, vulnerable companion animals behave like frightened people, and elicit the cross-species sympathy I discussed in Chap. 3; a set of horses 'cowered lower and lower, and moaned in terror as men do in pain' (422), for example, and one dog 'fell all into a tremble [and] crouched down, quivering and cowering, and was in such a pitiable state of terror that I tried … to comfort it' (106). The implicit distinction between humanized animals like dogs and horses, and animalized animals like bats and vipers is a conventional use of what Cary Wolfe has called the 'species grid' (100). But it implies that the crucial distinction here is less that between humans and animals, and more that between natural and unnatural creatures. Perhaps the real danger is not that Lucy and Mina become 'animals' but that they join the 'new order of beings' Dracula is trying to father (349)—though it is no coincidence, obviously, that this unnatural species is portrayed with the help of animal imagery. Formulated in terms of the medicalized body, the danger is not a pathological but an absent heartbeat, seeing that these female characters will relinquish their pulse upon completing their

transition. As Jonathan observes upon finding Dracula in his coffin: 'He was either dead or asleep, I could not say which … But there was no sign of movement, no pulse, no breath, no beating of the heart' (61). The point of checking the pulses of these characters is therefore not only or even primarily to monitor the boundary separating humans from nonhumans but to patrol the one dividing natural from unnatural creatures. Consequently, even a heightened pulse is reassuring; although it animalizes you by revealing bodily frailty, it also confirms your status as a living being, a member of the divinely sanctioned order of creatures that is pitted against the unhallowed demons whose difference from this creaturely community is nonetheless made vivid via animal images. In amplifying the sound of these organic beats and struggling breaths, Stoker's work underlines the creaturely dimensions of the body and the reading process, and broadens stethoscopic perception beyond the human, even if it also subscribes to a religious conception of the world and its beings that can only be described as anthropocentric.

Weird Bodies

The previous paragraphs have detailed how two recent novels link stethoscopes with vets, unveil the ties between animal and human medicine, and stress the role of audile technique and the veterinary ear in treating all fragile bodies. An earlier novel like *Dracula* anticipates these concerns by reflecting on porous species boundaries, encouraging stethoscopic perception, and stimulating an adrenaline response on the part of readers that animalizes their bodies without truly destabilizing their identity. If these examples offer an ultimately reassuring take on medical care and the creaturely body, I now turn to more ambiguous representations of stethoscopes from a final set of novels, analyzing Cormac McCarthy's *The Crossing* (1994) in detail before mentioning two additional examples and returning, briefly, to Don DeLillo's *Cosmopolis*. As we will see, the novels by McCarthy and DeLillo direct our attention to an organic vulnerability that is shared by forms of life which nevertheless remain alien to one another. This pessimistic attention to the body's dark matter notwithstanding, both novels exhibit a trust in medical expertise which implies that, even though doctors are not considered infallible, they nevertheless command respect as figures who mediate between creaturely life as subjectively experienced and material life as represented by the indifference of organs and the broader nonhuman landscape. If the earlier sections of this

chapter highlighted sonic description, literary history, and the reading process, this concluding part adds the role of focalization to the mix.

A canonical writer whose novels have received prestigious awards and been adapted into high-profile movies, Cormac McCarthy is one of the most praised contemporary writers in English and is famous for his quasi-biblical treatment of stark subjects related to the violent pasts and futures of American society. As the secondary literature on his oeuvre is extensive, I limit myself here to three preliminary observations that frame my analysis of *The Crossing*, a novel about a young cowboy called Billy who escorts first a captured wolf and then his brother Boyd on a series of dangerous journeys across the US-Mexico border in the 1940s. According to Raymond Malewitz, who zooms in on the novel's first section, McCarthy's work illustrates how literary texts can represent the autonomous agency of nonhuman animals. As animals cannot be physically present in writing, 'the possibility of a literary animal agency comes into being when the limits of anthropocentric discourse are rendered visible' (558), in inevitably brief moments in which animal characters disrupt their human use values, as in scenes where the wolf fails to correspond to its stereotypical interpretations as an 'agent of economic sabotage' or a romantic 'symbol of wildness' (549). If this account illuminates the novel's animal theme, Kate Marshall identifies a more radically nonhuman strain in McCarthy's work. Unearthing 'the long history of American literary weirdness', she claims that certain novels have 'the capacity to engage critical questions about the nonhuman agencies, sentience, and points of view being presented so urgently in contemporary critical discourse' (633), singling out the materialist dimension of McCarthy's *Blood Meridian* (1985) especially. In such works, readers come across 'impossible focalizations' related to landscapes withdrawing from humans, to characters' non-experience of their elusive inner selves, or to a sense of predetermined fate (639), strategies that are more typically associated with horror fiction, and that disclose either the neutral or the actively malignant 'indifference' of the material world to human life (643). If these insights clarify McCarthy's representation of the vulnerable body, as I will show, a third critic has underlined the medical realism of *The Crossing*, *No Country for Old Men* (2005), and *The Road* (2006). Drawing on archival materials, Daniel King explains how McCarthy drew on medical textbooks to portray scenes of injury and treatment and enlisted the help of an orthopedic specialist to enhance the realism of the first two novels, revealing a pattern in which the doctor urged McCarthy to replace '"technically correct" medicine lifted from

source texts with more practical solutions familiar to practising physicians' (347), like choosing recognizable penicillin in favor of more specialized drugs or, in the case of *The Crossing*, changing several aspects of a central scene in which Boyd is treated for a gunshot wound. Because of this expert advice, the finished version features sterile techniques, omits a medically dubious scene involving an injection, and provides more details about the doctor's examination, suggestions that McCarthy at times copied 'almost verbatim' (344). Though King usefully identifies the role of medical knowledge in McCarthy's writing, I do not agree that these technical allusions function as mere descriptive details in *The Crossing* or that the novelist prizes the input of his medical advisor to quite the same extent as writers on medical TV shows, who publicly acknowledge that assistance (349), seeing that McCarthy never mentions the advisor in his novels, preferring to remain firmly in charge of his writing (recall my comparison of Ralston's hesitant and Gustafson's confident position vis-à-vis expert medical knowledge).

We can refine these claims about nonhuman creatures, indifferent matter, and medical realism by investigating a topic that has not received attention so far, namely McCarthy's representation of the stethoscope and the creaturely mode of listening I have been outlining in this chapter. Two scenes from *The Crossing* represent the medium explicitly. When he returns to the US after losing track of Boyd, Billy learns that the country is at war and the army is recruiting soldiers for World War II. But there is no place for young Billy in this newly global world of violence, despite the fact that he is desperately looking for work and the army is hastily taking on large numbers of men, a process portrayed in dehumanizing terms, tellingly, by a friend of his father: '[t]hey run em through up there I reckon in wholesale lots' (657). The hard-pressed cowboy does not fit in, as this growing army may not even have a 'cavalry' anymore (657). Even worse, Billy cannot join the war effort because something is wrong with his heart, as three consecutive doctors at different recruiting offices notice, after applying their stethoscopes and listening skills:

> [The first doctor] put the cool cone of the stethoscope against the boy's chest and listened. He thumped his chest with the tips of his fingers. He put the stethoscope to his chest again and listened with his eyes closed. He sat up and took the tubes from his ears … You've got a heartmurmur, he said. … [The second doctor] put the stethoscope to his back and listened. Then he listened to his chest again. Then he … stamped Billy's form and … handed

> it to him. I cant pass you, he said. … You've got an irregularity in your heartbeat …. He'd asked the [third] doctor if there was any medicine he could take but the doctor said that there was not. … If I'm goin to die anyways why not use me? … Who told you you were going to die? … They never told me I wasnt goin to. Well, the doctor said. They couldnt very well tell you that even if you had a heart like a horse. Could they? (652–5)

It is, of course, highly ironic that military regulations consider Billy's body too fragile to be shipped to a front where that same body would be exposed to harm from the start. Nor is this the only reason young men can be turned down, as is shown by references to 'flat feet' (646) and to a boy whom they 'wanted to put … four-F too … [o]n account of his leg' (657). Far from heroic subjects, these men from the US-Mexico border appear to be vulnerable and wounded even before the war begins. In contrast to the more confident stories we encountered earlier, moreover, there is no medicine for this particular condition. Despite the bureaucratic efficiency and regularity of their diagnosis, these agents of modern biopolitics are unable to make Billy's body conform to government prescriptions. Like the wolf discussed by Malewitz, the human body does not always behave as people would like it to, revealing its own form of animality and independent agency. The upshot of these observations is that the story's central character is unable to participate in a world-defining historical event by the physical limitations of his own body, reducing him to a 'creature' of history, in Pick's terminology, rather than a more active, self-directed historical agent. If medical procedures actively bring into being the bodies of doctors and patients, as Anna Harris has argued, these emergent bodies are not just 'skilled', 'affected', and 'resonating', to use her terms, but frail and mortal too (31). As far as their hearts are concerned, the third doctor notes in a quasi-proverbial phrase, most humans are even less than horses.

If these scenes involve Billy's future health, an earlier section painstakingly records the urgent threat of Boyd's gunshot wound and its examination by a country doctor. In a similar vein to the scenes I analyzed earlier, this long diagnosis and treatment scene underscores the vulnerable status of the body and the doctor's expert listening skills while allowing lay listeners like Billy and the reader to monitor Boyd's condition at a distance via his audible breathing: '[Boyd's] breathing was shallow and labored. [The doctor] lifted the earpieces of the stethoscope into place and … placed the cone over Boyd's heart and listened … with his eyes closed. … Shh, said the doctor. … No habla' (616–7). What distinguishes this scene

from the previous examples is that it casts the doctor as an ancient healer as well as a modern professional. Driving a car rather than riding a horse, the country doctor is aware of germ theory and sterilization techniques, follows a step-by-step procedure not unlike that of Fingers Vallerone, and handles modern tools like stethoscopes, hemostats, and silver nitrate to identify the problem, clean the wound, and cauterize it shut. Yet the extradiegetic narrator also emphasizes the procedure's time-honored character:

> The brass catches [of his bag] were worn from eighty years of use for his father had carried it before him. … In the panes of his antique eyeglasses the thin and upright flame of the votive lamp stood centered. … Like the light of holy inquiry burning in his aging eyes. [Those present,] bent over the poor pallet where the boy lay [,] looked like ritual assassins. … When he had [finished the doctor] sat for a moment with both hands over Boyd's back as if exhorting him to heal. (618, 621, 625)

If the army doctors inhabit an official world of forms and regulations, the symbolical language of this scene depicts Boyd's treatment as a spiritual event—modern perhaps, yet venerable too. It hence exemplifies the fact that McCarthy, as Amy Hungerford has argued, writes 'a prose that sounds like scripture, tempts one to read (for metaphysical structures) as if one were reading scripture, and yet withholds all but the aesthetic and sentimental effect of scripture' (2010, 95). In line with the passage's premodern imagery, the scene features nonhuman life too. When the doctor pulls Boyd's blanket back, '[s]omething small scurried away over the muslin', as if incarnating the danger of infection the doctor is trying to avoid (616), and when the physician removes the poultice on Boyd's chest, we read that 'it came away unwillingly. Like something that had been feeding there' (622), revealing the malignant indifference of matter pinpointed by Kate Marshall. Yet the passage mentions a positive nonhuman presence too, as the doctor notices: 'Le interesa el perro, the doctor said. … The dog sat watching them. Git, [Billy] said. Está bien, the doctor said. No lo molesta. Es de su hermano, no? Sí. The doctor nodded' (624). Nor is this the only scene with kind dogs. In the final pages, a solitary Billy chases away a dog before changing his mind and calling for the animal, imitating the dog's earlier cries, but to no avail: '[The dog] tottered away … and as it went it howled again and again in its heart's despair until it was gone from all sight and all sound … It had ceased raining in the night and

[Billy] walked out … and called for the dog. He called and called. Standing in that inexplicable darkness. Where there was no sound anywhere save only the wind. … He sat there for a long time … and after a while the right and godmade sun did rise, once again, for all and without distinction' (739–41). This very last scene not only discloses a flat ontology in which humans and animals occupy the same, egalitarian plane but also stresses the creaturely nature of the 'old dog', an outcast with a frail body, much like Billy; an 'arthritic and illjoined thing', it is 'so scarred … that it might have been patched up out of parts of dogs by demented vivisectionists' (738). In the final analysis, *The Crossing* features faithful companion animals as well as life-threatening organisms feeding on people, a binary menagerie that recalls the basic 'creature-system' of *Dracula*. But humans and animals fail to sympathize properly in McCarthy's storyworld, perhaps because their divinely sanctioned bond has eroded in a world that still resounds with sacred language but no longer harbors a reliable God. In contrast to what Kennedy says about nineteenth-century sensation novels, this text and its soundscape disclose that the human body cannot be repositioned at the center of the world and its inhumanly long natural history.

Although there are no vets and no more stethoscopes in the rest of the novel, several other scenes portray related modes of treatment and listening, revealing a systematic interest in creaturely fragility. Billy's parallel failures to keep the wolf and his brother safe already imply that the problem of physical as well as symbolical care is at play across species boundaries. When a cow accidentally steps into a wolf trap, his father treats the injured animal, 'doctor[ing] the leg with Corona Salve' (336), and a Mexican farmhand deals with the injured wolf in a similar fashion: 'They finished their surgery in the last light of the sun. The Mexican had pulled the loose flap of skin into place and he sat patiently sewing it with a small curved needle clamped in a hemostat and when he was done he daubed it with Corona Salve and wrapped it in sheeting and tied it' (379). The irony of the situation is not lost on the American farmer watching the scene: 'People hear about me givin first aid to a damn wolf I wont be able to live in this country' (379). In line with the uneven exposure to vulnerability of distinct animal species, as described by Anat Pick (2018), this wild carnivore does not deserve a vet, however unprofessional. Nor are cows and wolves the only animals requiring medical care in this novel. Toward the end, an outlaw trying to rob Billy plunges a knife into his horse's chest, forcing the young cowboy to stop the bleeding by using an improvised cake of river mud. Another lay vet subsequently emerges to diagnose and

treat the wounded animal with medicinal leaves, checking the animal's eyes and examining the wound before pouring a concoction into the horse's mouth and placing some of the cooked leaves 'against the wound in a poultice', as if it were a human patient (726). And what is crucial here is not just that different species of animals receive medical care, despite their divergent statuses, but that the treatment of cows is similar to that of wolves (both involving Corona Salve), and that wolves and horses are treated much like Boyd is (wounded animals and humans both requiring hemostats and poultices)—parallels that are underlined by the fact that the horse is attacked while Billy is transporting Boyd's decaying remnants, further indexes of human vulnerability and animality; looking 'like some fragile being' (710), his brother's 'bones seemed held together only by the dry outer covering of hide' (713). If that is still not clear enough, Billy relates how Boyd was 'shot down in the street like a dog' (631) and the narrative clarifies that the doctor who successfully treated Boyd's first gunshot wound passed away not long after (645). Despite the apparent sanctity of medical and other forms of care, and entrenched human views of the relative worth of animal species, all living bodies turn out to be fragile and the material universe remains indifferent.

The Crossing often revisits creaturely fragility, cosmic disregard, and the unruly agency of bodies as well as animals, but it also stresses sound and listening—and not just through its many untranslated phrases in Spanish, its references to radios and jukeboxes, or the interpolated story involving a blind character. At various points in the story, after all, McCarthy amplifies disturbed breaths and pulses, eliding distinctions between species and occasionally even taking the reader on a virtual tour inside living bodies. When Billy first sees the wolf, for instance, '[h]is heart was slamming inside his chest like something that wanted out' (359), a phrase that hints at the body's independent agency. The wolf responds similarly when she encounters dangerous humans: 'he could feel the wolf trembling electrically against him and her heart hammering' (372). When threatened or wounded, all animals are the same, as Billy discovers when he licks the wolf's blood, 'which tasted no different than his own' (434). In an example of impossible focalization—impossible, that is, without a stethoscope and related media like the modern novel—the reader is even allowed a glimpse of the body's dark, resonant interior when Billy gets into trouble:

> They did not move and there was no sound and he listened for something in the town that would tell him that it was not also listening for he had a

> sense that some part of his arrival in this place was … ordained and he listened … for any sound at all other than the dull thud of his heart dragging the blood through the small dark corridors of his corporeal life in its slow hydraulic tolling. (677)

Extending Marshall's observations by exploring the alien character of human bodies, this passage points toward a sense of fate as well as invisible, not necessarily human agencies, and toward the sounds and channels of Billy's interior organism. When other creatures are listened to closely, we find parallel representations of their 'corporeal lives'—which again suggests that the species border is porous. Consider another impossible glimpse of the inner body: 'He … buried [the wolf] in a high pass … The little wolves in her belly felt the cold draw all about them and they cried out mutely in the dark and he buried them all and piled the rocks over them' (437). As if heard through a stethoscope, this passage suggests that this is no country for young animals—be they human like Billy and Boyd or nonhuman like the wolf's cubs. Similar if less dramatic forms of stethoscopic perception crop up throughout the novel, from the pathological breathing of the horse at the novel's end—'its breathing had begun to suck and rattle and it sounded all wrong' (712)—to the reassuring sounds of Boyd's body at the start—'[Billy] would lie awake at night and listen to his brother's breathing in the dark' (309). In other words, *The Crossing* keeps circling back to the creaturely finitude that we encountered in Chap. 3, but modulates that lesson by the introduction of the stethoscope and modern protocols of medical monitoring, much like the other novels analyzed in this chapter. As McCarthy's narrative evokes a flat ontology and indifferent universe, however, it offers a much bleaker picture of care, sound, and the body, inviting readers to contract the category of the human to the frail creature, as Pick says, rather than to expand the category of the animal to that of the self-directed, expressive human subject. If we can identify a signature soundscape in McCarthy's writings, as Julius Greve and Markus Wierschem assert, this includes not just the regional, masculine, and violent 'rugged resonances' they have in mind, but also the fragile heartbeats of humans, horses, and other animals. More generally, this medical or even veterinary acoustics is a crucial ingredient of the novel's sonic texture, its multispecies soundscape.

Wild at Heart

The novels by Ralston, Gustafson, Stoker, and McCarthy have many properties in common, despite their different emphases, and despite the fact that they fit into distinct periods and genres. All of them task readers with stethoscopic perception while portraying creaturely bodies, implicitly undermining the anthropocentric and ocularcentric biases of earlier arguments about audile technique and animal vulnerability, respectively. Indeed, their repeated emphasis on disturbed breaths and pulses prompts readers to attend more closely to their own bodies, animalizing the reader's sensations in what you might call a form of 'visceral reading'. These narratives also attest to a strong if qualified trust in medicine and its media, the stethoscope and the body appearing at times as fully transparent conduits and immediately legible indexes of health and harm. In reading these works, we should bear in mind that the ideal of the transparent body is a cultural construct, as José van Dijck has shown; whenever new techniques for charting and visualizing the body have been introduced, this has 'been accompanied by the enthusiastic claim of increased transparency', she contends, '[b]ut in each case, the claim has proven to be illusory' (125). More recently, Richard Grusin has insisted that, in thinking about reality and representation, 'it is mediation all the way down' (146). We should take seriously 'the ubiquitous nature of mediation' (145), he claims, a process that is at work in phones, TVs, and laptops but equally in flowers, mammals, and digestion (remember my remarks on biosemiotics in the introduction)—and this means that '[t]he human body itself is a … nonhuman mediation among other … nonhuman mediations' (148). In further examining the weird bodies and sounds of human and nonhuman creatures, that process of multiscalar mediation deserves more systematic scrutiny.

This analysis can also be extended by attending to other narratives and cultural practices that involve bodily sound. I have barely scratched the surface as far as the literary archive is concerned, anti-vivisection discourse being an obvious place to start in developing my brief history of more-than-human medical listening in modern fiction. A more extensive comparison of contemporary examples would enrich my analysis too. A novel like Cynan Jones's *The Dig* (2014), for instance, does not mention stethoscopes—though it refers to vets (73, 117) and X-rays (22)—but this sound-sensitive novel again exhibits what we might call, tweaking a phrase by Ivan Kreilkamp, a 'stethoscopic logic', as it frequently alludes to the noisy anatomies of human as well as nonhuman characters, in a work that

reuses many of the topics and tropes of McCarthy's writing, including its preoccupation with violence, masculinity, and indifferent matter—most obviously in a gruesome delivery scene (115–20) that inverts the rosy picture we encountered in Ralston's novel. Inviting its readers to listen closely, this novel about farming and badger baiting hence confirms the picture I sketched earlier, in which human and animal voices mix with the sounds of organs and unruly heartbeats, revealing the blind agency of matter as well as the shared fragility of creaturely bodies. If Jones's work corroborates the previous account, a novel like J.M. Ledgard's *Giraffe* (2006) develops it in a slightly different direction, as it hints at the vulnerability of all creatures while celebrating the weird anatomy of the titular animal. Investigating the mysterious massacre of a group of giraffes in a Czechoslovakian zoo in the 1970s, Ledgard's novel features a vet with 'a stethoscope' (87) but also a hemodynamicist who utilizes 'sound waves' to map the complex network of the giraffe's blood vessels and arteries (28) and reflects extensively on the peculiar anatomies of gravity-defying bodies that are powerfully adapted to their peculiar way of life but remain as fragile as those of their human counterparts, as the narrative reveals: 'I feel [the giraffe] Sněhurka's legs behind me, through which veins run like vines, and I perform equations to represent the journey of blood through those veins to the ventricles of her heart, powerful as an elephant's heart, on into thick-walled arteries, up the neck against the hydrostatic pull of gravity to her head, pushed impossibly high on an "f"-shaped stick. I feel her pulse' (100). Other media could be scrutinized too, like movies and soundtracks featuring heartbeats, not to mention the apps and exhibitions I mentioned at the start, seeing that they invite similar forms of visceral reading. The preceding analysis implies, for instance, that an intriguing project like Boltanski's 'heart archive' may be problematic, not just because the exhibition exclusively records the heartbeats of its human visitors but because it does so in a way that stresses their irreducible individuality, disregarding the unsettling, generic character of a fragile pulse that is shared across at least some species. In mapping this anatomical imagination further, we should also bear in mind an important limitation of the cases mapped so far. As Alphonso Lingis has noted, we are only attached to certain aspects of our anatomy: 'We can see nothing of what is behind our skin. We do feel, vaguely, something of what is back there, in a mix of attachment and repugnance. *We are attached to the beating of our heart and to the filling up of our lungs with fresh air*. But we feel repugnance over substances expelled from our bodies [as well as over less 'noble' organs, as] in the brief thought of … the grisly kinks of our big intestine pushing

along chunks of mush turning brown with dead bacteria' (37, emphasis added). The same lesson applies to bodily sounds, in the sense that most novels privilege breaths and heartbeats over belches and farts, aspects of our bodies that are related to what Mikhail Bakhtin theorized as 'grotesque realism' (Delville 93). When do these ignoble sounds become audible in fiction, and what does that tell us about human-animal relations?

There is one additional similarity between the novels I have analyzed, finally, which can be clarified by returning to DeLillo's *Cosmopolis*. Although its protagonist rejects stethoscopes, as I mentioned, his observations are not necessarily reliable, as this unsympathetic character believes many staple features of contemporary life to be outdated in the context of cyber-capitalism, things such as skyscrapers, airports, ATMs, computers, and saxophones. More significantly, he actually considers medical monitoring to be indispensable, seeing that he has his body checked every day, 'the doctor listen[ing] to his heart valves open and close' (43). In addition, fantasies of public 'untouchability' (66) and of individual human existence 'on a disk, as data' (206) are subverted by a powerful experience at the novel's end, in which the protagonist joins a group of naked humans lying on the street for a movie scene that is being filmed: 'His body felt stupid here, a pearly froth of animal fat in some industrial waste. … Voices died … He felt the presence of the bodies, all of them, the body breath, the heat and running blood, people unlike each other who were now alike, … heaped in a way, alive and dead together' (174). As the silence enables sensitive listening, these bodies become audible in a way that unveils their generic animality and frailty. Even this protagonist is hence shown to be a vulnerable creature with a noisy body, 'a male mammal' (52), as the novel puts it, with a weaker heart than animals like 'gulls', with their 'large strong hearts … disproportionate to body size' (7). Even in this novel, in other words, we encounter comparative anatomy and a stethoscopic logic. On top of that, DeLillo's exploration of late capitalist culture allows us to identify a final similarity between these narratives. As the use of our hands is increasingly limited to keyboard use rather than messy labor, Nicole Shukin has observed, 'nostalgia for an earlier era of rural life and the authenticity of material labor it represents … conditions the appeal of a special petting section for children in many modern zoos' (493). A similar nostalgia related to tactile encounters is at play in these novels, which either question disembodied and dehumanized forms of labor, as in *Cosmopolis*, or celebrate the more intimate manual activities of vets and doctors, farmers and cowboys, not to mention the quasi-physical activity of readers engaged in visceral reading.

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