

Flocking Together: Embodiment and Fictional Engagements with Collective Animal Minds

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Abstract

The remarkable coordination displayed by animal groups—such as ants or birds in flights—is not just a behavioral feat. For ethologist Iain Couzin, these behavioral patterns reflect a full-fledged form of collective cognition. In this article, I build on work in philosophy, cognitive approaches to literature, and animal studies to explore how contemporary fiction can implement strategies to capture the collective minds of herds, flocks, and packs. I focus on three novels that explore different aspects of animal assemblages: animals that function as a collective agent (in Richard Powers’s *The Echo Maker*); animals that communicate a shared mind through dance-like movements (in Lydia Davis’s *The Cows*); and animals that embrace a collective “we” to critique the individualism of contemporary society (in Peter Verhelst’s *The Man I Became*). I argue that, when individuality drops out of the picture of human-animal encounters in fiction, empathy becomes more abstract: a matter of quasi-geometrical patterns that are experienced by readers through a mechanism of embodied or kinesthetic resonance.

Introduction

It is easy to be mesmerized by the patterns traced by a large flock of birds in flight.¹ The animals’ coordination is remarkable and seemingly spontaneous; it would take weeks of training and multiple rehearsals for humans to engage in such highly synchronized behavior. The patterns drawn by the

birds call for a mode of spectatorship that focuses on the collective: as we follow the birds' involutions, we are thinking with the flock—and our thinking has a distinctly embodied element. The technical term for this resonance is kinesthetic empathy: we are enacting, or inwardly performing, the flock's motion with our bodies, as in watching a dance performance. But the object of our empathetic resonance is the group, not the individual animal. Now consider this passage from James Joyce's *A Portrait of the Artist as a Young Man*:

[Stephen] watched [the birds'] flight; bird after bird: a dark flash, a swerve, a flash again, a dart aside, a curve, a flutter of wings. He tried to count them before all their darting quivering bodies passed: six, ten, eleven: and wondered were they odd or even in number. Twelve, thirteen: for two came wheeling down from the upper sky. (234)

Via stylistic cues such as the fragmented syntax and punctuation, Joyce renders the perceptual dynamics with which Stephen takes in the rapid motion of the birds. The passage thus evokes, with remarkable vividness, an animal assemblage without any direct description of the flock. The birds' flight is condensed into kinetic patterns that readers are invited to trace in their imagination, kinesthetically, as they follow Stephen's attempt to count the animals.

This article looks at how such embodied responses to nonhuman assemblages are central to fictional narrative engaging with animals; how the social minds of herds, flocks, and packs can be expressed through verbal patterns that, like their visual counterpart, build on readers' embodied experience. My examples are drawn from contemporary fiction, but as shown by the Joyce passage (which I will examine in more detail below) this interest in animal groups is not exclusive to the contemporary. Nevertheless, animal assemblages occupy a crucial position in times like ours, with the ecological crisis blurring the boundary between our collective future as a species and the nonhuman life forms with which we are ecologically interrelated. If, as philosopher Dale Jamieson puts it, climate change "can be seen as presenting us with the largest collective action problem that

humanity has ever faced” (61), we need to develop new ways of thinking about, and experiencing, collectivity. Fictional engagements with animal assemblages in contemporary fiction can participate in this broader project by capturing collectivity in deeply affective and embodied terms.

J. M. Coetzee’s novella *The Lives of Animals*, a widely discussed work in animal studies, emphasizes the embodied quality of human-animal encounters. The protagonist, Elizabeth Costello, comments on “The Jaguar,” a poem by Ted Hughes. She argues that when “we read the jaguar poem, when we recollect it afterwards in tranquillity, we are for a brief while the jaguar. He ripples within us, he takes over our body, he is us” (51). The “rippling within us” is a kinesthetic response, a form of bodily attunement or mimicry that evokes an empathetic feeling of *becoming* the jaguar (or, as Costello puts it, of the jaguar becoming us). This experience is similar to engaging with the complex motion of flying birds; but it is a single jaguar, not a group, whose literary representation captures Costello’s (and Coetzee’s) imagination. This focus on the singular reflects a well-known bias towards individuality, in narrative practices (including literary fiction) as well as in empathetic modes of engagement: it is much easier to empathize with a single, well-delineated agent—a narrative protagonist—than with a group of relatively undifferentiated agents. Because of evolutionary biases, our cognitive cards are stacked in favor of empathy for specific individuals, not for large and anonymous groups (see Decety and Cowell 9–10).

This tendency is evident in work in animal studies that probes the embodied dimension of our encounters with animals. Traci Warkentin foregrounds the role of gesture in establishing pathways for communication with marine mammals. Intriguingly, the centerpiece of her account of fieldwork at a zoo in Canada is a narrative in which a single animal, a young orca named Athena, enters the domain of individuality by leaving her group and making eye contact with two children: “To the children’s delight, Athena, the one-year-old female calf, broke away from her repetitive circling of the pool alongside her mother and made a beeline for the children” (135). Likewise, a book chapter by Kenneth J. Shapiro—a key figure in the phenomenology of human-animal interactions—begins as follows: “The phenomenological method presented here uses kinesthetic

empathy, social construction, and individual history to understand a dog, Sabaka" (277). Kinesthetic empathy helps these researchers relate to nonhuman ways of being, but the focus remains on "individual history" and on the subjectivities that flow from it. The same emphasis on individual protagonists defines engagements with animal consciousness in well-known fictional texts: Jack London's *White Fang* and Virginia Woolf's *Flush* come to mind.² Yet the example of the coordinated motion of birds in flight suggests that kinesthetic empathy can extricate itself from individual subjectivity and target an animal assemblage. Fictional narrative that, like the passage from Joyce's *Portrait*, engages with animal groups can aim at this kinesthetic effect through the mediation of verbal language.

It will be helpful, at this point, to introduce recent narratological discussions on the role of groups in fictional and nonfictional narrative. For Monika Fludernik, who offers an overview of work in this area, the collective is an important, if overlooked, category of narrative theory. Fludernik argues that the "collective can be traced in three narratological dimensions—that of: (1) action (groups that do things on the plot level); (2) thought or attitude (groups that have a common viewpoint and express a common attitude); and (3) narration (groups that engage in collective storytelling as co-authors and co-narrators)" (141). These strategies allow narrative to overcome, or at least relieve, the demands of individuality—typically, by distancing the plot from an individual protagonist. My approach goes beyond the current narratological focus on *human* groups. Fictional engagements with animal assemblages participate in a critique of the dualistic distinction between humans and animals, pointing to a specifically embodied and kinesthetic route to this critique. In *Vibrant Matter*, Jane Bennett employs a choreographic metaphor to capture what she characterizes as the "interfolding network of humanity and nonhumanity" (31): humans and nonhumans, for Bennett, "have always performed an intricate dance with each other" (31). The fictional texts I will analyze literalize this choreographic metaphor: they unsettle a dualistic notion of human subjectivity as distinct from the animal world through readers' resonance with the bodily patterning of animal groups. In the next section, I explore the challenges of embodied collectivity against the backdrop of

broader discussions in both animal studies and cognitive ethology. I then draw on work in psycholinguistics and cognitive literary studies to substantiate the claim that readers respond to the literary representation of animal assemblages in kinesthetic, embodied terms. Finally, I turn to three case studies organized around Fludernik's narratological distinction, choosing a contemporary work for each of Fludernik's dimensions. I will first discuss a novel, Richard Powers's *The Echo Maker*, in which herds of cranes shape the narrative at the level of both story and discourse. Powers's exploration of animal collective mentality is pursued, and deepened, by Lydia Davis in her novella *The Cows*. Finally, *The Man I Became* by Belgian novelist Peter Verhelst adds to the picture collective, "we" narration.

Embodiment and Animal Assemblages

Cary Wolfe and Richard Grusin discuss animality under the rubric of—respectively—"posthumanism" and the "nonhuman turn," suggesting that thinking about and with animals is crucial to destabilizing an entrenched notion of the liberal, autonomous, and masterful human subject. In animal studies, this critique of anthropocentric assumptions has led to work exploring the disruptive possibilities of nonhuman agency. Scholars have argued that literary (and, more generally, cultural) representations of animals can, in Susan McHugh's words, portray "animals as agents of an order different from that of human subjectivity—more precisely, as actors operating in accordance with a logic different from that of intentionality or psychological interiority" (491; see also McFarland and Hediger). Yet even that logic is not entirely beyond the human grasp: for many commentators, embodied affect offers the possibility of bridging the gap between animal and human subjectivity. In Melissa Gregg and Gregory Seigworth's oft-cited definition, affect refers to "intensities that pass body to body (human, nonhuman, part-body, and otherwise), in those resonances that circulate about, between, and sometimes stick to bodies" (1). These resonances are distinct from emotions, which have a well-defined intentional object (fear *of something*, attachment *to someone*), although emotions often do tap into a background of affective intensities.³ Embodied resonance is central to (inter)subjectivity,

as researchers not just in affect theory but also in the mind sciences (see, e.g., Sheets-Johnston; Colombetti) are beginning to acknowledge. Importantly for my purposes here, these resonances are not limited to human bodies. In literary studies, Anat Pick’s “creaturely poetics,” for instance, is built on the recognition of a fundamental bodily vulnerability that humans share with nonhuman animals—a vulnerability shot through with affect. Likewise, in a social science discussion of the role of embodiment in ethology, Vinciane Despret concludes that “scientists and animals are fleshy creatures which are enacted and enacting through their embodied choreography” (69).

However, as indicated in the introduction, the tendency in the field of animal studies has been to move *away* from groups: by and large, scholars and writers have pointed to affect arising in embodied confrontations with *individual* animals.⁴ In his comprehensive *Animals Studies: An Introduction*, for example, Paul Waldau repeatedly calls attention to “the personal dimensions of our responses to other living beings” (x), where “personal” involves a fundamental acknowledgment of the nonhuman other’s individuality. There are good reasons for shying away from groups: after all, categorical thinking carries the inherent risk of depersonalizing animals. Yet thinking with the collective doesn’t have to be depersonalizing. On the contrary, we have to recognize the group—in nonhuman animals as well as humans—as a unit of embodied subjectivity that complements and extends the individual.

This is the picture that emerges from recent work in cognitive ethology. For Iain Couzin, one of the leading specialists in animal groups, the coordination of a flock of starlings (to return to my initial example) is not just a behavioral feat but reflects full-fledged “collective cognition.” In fact, in many cases, and certainly in the case of birds, group behavior is not fixed or pre-scripted, but an emergent phenomenon of collective decision-making. In Couzin’s words, by “adjusting their motion in response to that of near neighbours, individuals in groups both generate, and are influenced by, their social context—there is no centralized controller” (“Collective Minds” 715). Couzin traces back this idea to the work of a British ornithologist, Edmund Selous, who in the 1920s explained the remarkable synchronization of bird flocks as a form of telepathic thinking. Selous writes: “They must

think collectively, all at the same time, or at least in streaks or patches—a square yard or so of an idea, a flash out of so many brains” (quoted in Couzin, “Collective Minds” 715).

Even without reference to telepathy, we can regard group coordination in animals as a radical form of embodied cognition. In the study of the human mind, advocates of embodied cognition—for instance, Alva Noë—argue for the tight integration of perception and bodily action: perceiving the world is an explorative activity that builds on so-called “sensorimotor patterns”—the coordination between perceptual stimuli and bodily movement. But the key difference, and what makes animal group behavior so striking, is that their sensorimotor coordination involves a multiplicity of brains and bodies. This kind of coordination is, for Couzin, fully cognitive because it enables animal groups to extend their “capacity to detect and respond to salient features of the environment. Interactions with others can enable individuals to circumvent their own cognitive limitations, giving them access to context-dependent and spatially and temporally integrated information” (“Collective Cognition” 41).

Behavioral ethology is not the only field to have paid attention to animal groups. Consider Gilles Deleuze and Félix Guattari’s well-known account of “becoming-animal” in *A Thousand Plateaus*.⁵ This notoriously elusive concept feeds into Deleuze and Guattari’s attempt to destabilize distinctions between the human self and nonhuman realities. The image of the animal group is central to this destabilization: Deleuze and Guattari write that “becoming-animal always involves a pack, a band, a population, a peopling, in short, a multiplicity” (38). Moreover, Deleuze and Guattari’s pack is affective in nature: “Schools, bands, herds, populations are not inferior social forms; they are affects and powers, involutions that grip every animal in a becoming just as powerful as that of the human being with the animal” (40–41). Our surprise at the literal “involutions” of a flock of birds, for example, is a manifestation of the affective and embodied nature of becoming-animal: as we take in the flock’s sinuous motion, we resonate with it through our bodies. Thus, the point of convergence between Couzin’s scientific theory of collective cognition and Deleuze and Guattari’s philosophical account is their foregrounding of the body as a mode of thought: both the

flock's movement and our responses to it reveal a deep connection between thinking, feeling, and engaging with the world (and with other living beings) at a bodily level. This idea is consistent with the embodied approach to the mind. It resonates, in particular, with the argument developed by philosopher Maxine Sheets-Johnston about the "primacy of movement"—how the perception of movement is central to the recognition of mentalistic behavior in humans as well as nonhuman animals. In Sheets-Johnston's words, a "common kinetic thematic suffuses improvisational dance, human developmental life, and the lives of animate forms. In each case, a non-separation of thinking and doing is evident; so also is a non-separation of sensing and moving" (447).

In *Unthought*, Katherine Hayles has begun to explore this remarkable convergence between embodied cognition and poststructuralist theory in the wake of Deleuze and Guattari's work. Hayles raises the question of "cognitive assemblages" (in her terminology) that involve technological agents; such assemblages (for instance, drone swarms and computer networks in high frequency trading) are capable of collective thinking and decision-making that dramatically surpass the cognitive abilities of individual human subjects. Animal collectives, and their representation in fictional narrative, can be equally unsettling for models of subjectivity that frontload the (human) individual. In resonating with animal groups through kinesthetic empathy, we come to acknowledge the fundamental continuity between individual and collective experience, as well as the complex entanglement of human and nonhuman lifeworlds. In the next section, I will take a closer look at kinesthetic empathy and how it can be triggered in the context of verbal narrative.

Empathy Beyond Projection

First theorized by German philosopher Theodor Lipps as "Einfühlung" (literally "feeling-into") at the end of the 19th century, empathy has had a tangled conceptual history. In recent philosophical discussions, empathy has entered the orbit of so-called "simulation theory" (see Goldman), where it is defined as the mental simulation of another subject's perspective on the world. This simulative account of empathy has been linked to the activation of so-called mirror neurons, which are thought

to fire both when we perform a physical action and when we observe another individual performing an action (see, e.g., Gallese). However, it is the phenomenological dimension of empathy that interests me here—the dimension explored by philosophers such as Shaun Gallagher and Dan Zahavi. Kinesthetic empathy, as distinct from cognitive or emotional empathy, consists in an experienced sense of involvement in another person's bodily movements; this experience does not require full-fledged simulation, but only affective resonance and attunement between bodies. As argued by Dee Reynolds, such empathetic responses are central to the experience of dance; Reynolds introduces the concept of the “body of the dance” to account for the kinesthetic interaction between the dancers' bodies on stage and the spectators' embodied and affective responses. This body “belongs neither to the dancer nor the spectator” (90); it is a liminal body that challenges—for the duration of the dance experience—the separation between self and other.

That kinesthetic responses should play a role in the perception of dance is, perhaps, not entirely surprising. Far more surprising is that kinesthetic empathy may emerge in the more mediated context of verbal expression, where no bodies or bodily movements can be directly perceived. Yet there is growing evidence from neuroscience and psycholinguistics suggesting that our bodies are deeply implicated in language comprehension. Friedemann Pulvermüller, for instance, reviews fMRI studies indicating that “a common neural substrate is involved in the processing of actions and the meaning of action words” (578). This means that understanding a concrete sentence such as “the boy kicked the ball” activates some of the same neural processes that underlie the bodily action of kicking. Behavioral studies by, for instance, Arthur Glenberg and Michael Kaschak or Rolf Zwaan and Lawrence Taylor point to a similar conclusion: readers' bodies actively participate in language understanding. Glenberg and Kaschak asked participants to read simple sentences that implied movement either towards or away from the body (e.g., respectively, “open the drawer” and “put your finger under the faucet”). While reading these sentences, participants had to perform a physical action whose direction could be either identical or opposite to the verbally represented action. The experiment showed that, in case of incongruence between

physical and verbally represented action, the participants' response times increased dramatically: "when the implied direction of the sentence contrasts with the actual response direction, there is interference" (Glenberg and Kaschak 561). The interference suggests that action and language comprehension are not independent cognitive systems but share resources.

Certainly, these responses to language are far more basic than the kinesthetic empathy involved in spectating dance performances; but they constitute a background of embodied engagement in language comprehension, from which more sophisticated responses—such as empathy itself—may arise. In an important contribution to the field of cognitive literary studies, Guillemette Bolens has built an account of such kinesthetic responses in reading literary narrative. She argues that the "perceptual simulations generated by the text are of central importance to our readerly ingress to the narrative and our access to the style of its general body" (26). Bolens's emphasis is on the gestural dimension of fictional narrative and how it can create opportunities for "readerly ingress" and involvement. This mechanism of kinesthetic empathy builds on the low-level, embodied resonance with language I described above. Literary style, Bolens suggests, can amplify the baseline embodiment of language comprehension, eliciting bodily feelings in readers and using such feelings to draw readers into the narrated situation.⁶ However, Bolens's account remains bound to singular gestures and the individual characters performing them. The texts I analyze below take a different tack: they adopt stylistic and narrative strategies that evoke empathy for the collective embodiment of animal groups. Consider again the passage from Joyce's *Portrait* quoted at the beginning of the article:

[Stephen] watched [the birds'] flight; bird after bird: a dark flash, a swerve, a flash again, a dart aside, a curve, a flutter of wings. He tried to count them before all their darting quivering bodies passed: six, ten, eleven: and wondered were they odd or even in number. Twelve, thirteen: for two came wheeling down from the upper sky. (234)

Joyce's passage conveys the protagonist's experience of the birds as a collective entity defined by rapid and unpredictable motion. At first, the animals' bodies are broken down—by way of discontinuous syntax and punctuation—into a series of nouns derived from kinetic verbs ("flash," "swerve," "dart," "curve," "flutter"). While a sequence of verbs would suggest more seamless motion, these nominal phrases express Stephen's repeated attempts to get perceptual grip on the birds' bodies. In the second part of the quotation, the numbers perform a similar function: their rhythmic succession conveys the discontinuity of the character's perception as he tries to count the birds and fails to form a stable image of their collective body. The essence of Joyce's stylistic operation is not representational (describing a flock of birds in flight); it is kinesthetic (describing the *sensation* of taking in the birds' collective embodiment). The effect is that the birds' movement is abstracted and formalized: it traces a subtle yet vivid pattern, which readers are invited to experience in kinesthetic terms.

This kind of kinesthetic empathy for abstract forms will be central to my reading of animal assemblages in fiction. It should be noted that this particular route to empathy avoids the problems associated with a *projective* understanding of empathetic engagements. Suzanne Keen explores this projective model of empathy in an article on Thomas Hardy's fiction; drawing on Lipps's theory of *Einfühlung*, she argues that such empathy "does not require an animate target for emotional projection" (356). In the poem "Rain on a Grave," for instance, Hardy "projects himself into the burial place of his dead wife" (356), and into his wife's inanimate body. This kind of projective empathy comes close to anthropomorphization—the ascription of human feelings to a nonhuman entity. Especially when dealing with animal ways of being in the world, projective empathy always carries a risk of imposing anthropocentric assumptions on otherness. If I understand a nonhuman other by attributing feelings based on my own human experiences, am I really learning anything new about the other subject? Of course, not all anthropomorphic projections are obviously anthropocentric, as Alexa Weik von Mossner's (113) discussion of "critical anthropomorphism" shows: in some cases, anthropomorphism may be a heuristic device that invites "viewers [and

readers] to care about nonhuman others” (Weik von Mossner 132) while remaining aware of their own epistemological limitations. Despite this strategic use of anthropomorphism, the risk of reaffirming human-centric ideas is present whenever empathy involves an ascription of feelings. As philosopher Thomas Nagel puts it in his influential essay “What Is It Like to Be a Bat?”, our “own experience provides the basic material for our imagination, whose range is therefore limited” (439).

Yet Nagel discusses the limits of the human imagination vis-à-vis what can be construed as a form of conceptual ascription; he does not take into account the possibility of affective, embodied resonance.⁷ Anthropomorphic projection, which is fundamentally a form of ascription, is not the only way of relating to animals. In tracing the birds’ flight in the Joyce passage, we don’t engage in any attribution of mental states to the birds; we resonate with their bodies through literary style. This resonance creates a kinesthetic link between the reader and the birds, bypassing the need to fill in mental states, and thus avoiding the potential risks of anthropomorphism. We may compare this kinesthetic connection to anthropologist Rane Willerslev’s account of hunting behavior among the Yukaghir people in Siberia: for Willerslev, Yukaghir “hunters, when approaching reindeer or elk, attempt to deceive an animal by taking on its bodily appearance, movement, and smell” (635). This “mimetic empathy”—in Willerslev’s terminology—does not require any cognitive representation of the animal’s mind, but only an embodied attunement to its body, which may have unwanted consequences for the hunter: it may lead to a dramatic metamorphosis into the animal, a possibility foregrounded by many Yukaghir narratives. The passage from Joyce’s *Portrait* builds on this cognitive ability, but also displaces it from the individual prey to an assemblage of animals.

It is this lack of a specific *target* for the reader’s kinesthetic empathy that creates a sense of abstraction in our experience of the passage: the birds’ collective movement affects readers through the imagination of form—the stylistic form of the text, but also the experienced variable pattern of the birds’ embodiment—not mental contents of any kind. Abstract empathy thus offers an opportunity of engaging with the birds without projecting individuality—a process that potentially unsettles the reader’s own sense of self as dualistically distinct from the natural world. To this form

of engagement, along with its epistemological ramifications, I turn in my close reading of three contemporary novels that deal with animal assemblages.

A Flock as Actant

My first example is Richard Powers's novel *The Echo Maker*, originally published in 2006. The novel's plot is triggered by a car accident; a character named Mark loses control of his car, suffering brain injury and developing a psychiatric condition known as "Capgras syndrome": after waking up from a coma, Mark no longer recognizes his sister, Karin; he firmly believes that she is an impostor. This narrative takes place in Nebraska, in a rural area along the banks of the Platte river where, every year, thousands of sandhill cranes congregate, on their way to Canada and Alaska. Far from being just a part of the novel's spatial backdrop, the birds are entangled with Mark's human drama at the level of plot (thus reflecting the first category in Fludernik's account of groups in narrative): they are present on the night of Mark's accident, and they are the only, silent, witnesses of an event surrounded by mystery and uncertainty. At one point it is even suggested that Mark may have lost control of his car after seeing the ghostly outline of a sandhill crane on the road.

In fact, the novel repeatedly foregrounds the disorienting and hypnotic quality of the birds' bodies. Consider, for instance, this passage, which is remarkable in its attempt to defamiliarize the cranes' flight by erasing the dividing line between the animals, the landscape of the Platte river, and the sky: "Then thousands of them lift up in flood. The beating surface of the world rises, a spiral calling upward on invisible thermals. Sounds carry them all the way skyward, clacks and wooden rattles, rolling, booming, bugling, clouds of living sound. Slowly, the mass unfurls in ribbons and disperses into thin blue" (429). The focus on sound distances the readers' imagination from the birds' individual bodies. At the same time, Powers's densely metaphorical style exposes the abstract patterning of the birds' embedding in a material world: it brings together the cranes and natural events ("in flood"), abstract, geometric forms ("a spiral"), or material objects ("unfurls in ribbons").

This strategy creates a trail of subtle kinetic impressions (“lift up,” “beating,” “calling upward,” “carry,” “unfurling”), which readers experience in their bodies as they parse Powers’s language.

Moreover, the novel makes clear that the birds’ rhythmic movements are directly expressive of subjectivity. Their collective mentality is probed by lyrical passages that preface each of the novel’s five parts, in a register that interweaves scientific discourse with mythology—particularly, but not exclusively, that of the Native American tribes that called the cranes “echo makers.” Powers’s style engages with the cranes’ awesome ability to find their way to the same place, to the same river, in a ritual that has unfolded over countless generations, connecting the birds to the deep time of evolutionary history: “The calls collect and echo, a single splintering, tone-deaf chorus stretching miles in every direction, back into the Pleistocene” (422). “Stretching miles in every direction” is, of course, an embodied metaphor that implicates the reader’s body in the birds’ species history. This embodied element comes to the fore even more explicitly in a passage focusing on the physiological triggers of the birds’ migration:

Something happens to their late-summer brains, and this isolated family of three recovers a larger motion. They shed the solitary need. They feed with others, roosting together at night. They hear nearby families passing overhead, threading the great funnel of the Tanana Valley. One day they lift up and join a self-forming V. They lose themselves in the moving strand. Strands converge in kettles, kettles merge in sheets. Soon, fifty thousand birds a day mass down the startled valley, their prehistoric blasts brilliant and deafening, a sky-wide braided river of cranes, tributaries that run for days. There must be symbols in the birds’ heads, something that says again. They trace one single, continuous, repeating loop of plains, mountains, tundra, mountains, plains, desert, plains. (98)

The passage emphasizes loss of individuality, embodied fusion with a group of conspecifics and with the landscapes that surround them. But note that the narrator’s voice captures the flock’s mentality

from the outside, without attempting to project an anthropomorphic voice. The interspecies divide is never bridged in words; if it is bridged, partially, it is through the sheer rhythmicity of Powers's prose, which mimics—echoes—the cyclical nature of the birds' existence. Concrete metaphors, mostly of textile origin ("threading," "strands," and later the "braided river"), heighten the reader's imagination of pattern; their materiality keeps this more-than-human vision in touch with embodied experience.

Ultimately, what started out as an all-too-human drama of a singular, punctual event—Mark's accident—is reabsorbed into the millennia-long story of the birds' periodical migration. In a rare passage focalized by one of the cranes that had witnessed Mark's accident, we are told that a "grainy irritant in the . . . crane's mind is all that remains of what happened that night" (278). Even that irritant is bound to disappear soon. The cranes end up being, in the words of Dr. Weber, one of the protagonists, the "only story out there. Endless return" (435). The cranes thus become a collective actant shaping the narrative symbolically as well as diegetically. Crucial to Powers' rendering of the birds' way of being is the foregrounding of embodied pattern and coordination, which offers a point of entry into their flock mentality.

Cattle Minds

Lydia Davis's 2011 *The Cows* is a short, contemplative piece combining text and pictures; it would be an overstatement to say that the titular cows are a narrative actant here, because there is little in the way of a plot: the narrator, who lives on a farm, is at the kitchen window and watches a group of three cows closely as they graze and move around a field. The focus here is on collective mentality, which—as Fludernik suggests—can play an important role in narrative; yet the text remains on the *surface* of the cows' minds, with only rare and limited attempts to ascribe mental states to the animals. It is suggested, repeatedly, that the cows' minds exist across a divide that cannot be bridged by way of language or concepts, because they are cut off from the domain of verbal

interaction: “They do not know the words ‘person,’ ‘neighbor,’ ‘watch,’ or even ‘cow’” (37), the narrator states. The animals’ nonverbal minds resist a projective understanding of empathy.

Instead, it is the observation of the cows’ body language that brings to light the logic of the group. In the narrator’s own words: “In this, functioning as a single entity, they are not unlike the small flock of pigeons we sometimes see over the railway station, wheeling and turning in the sky continuously, making immediate small group decisions about where to go next” (15). The birds’ “wheeling and turning” evoke the kinesthetic dimension of collective animal minds, encouraging readers to engage in a similar way with the cows, even though their movements are far less dramatic than the pigeons’. The narrative here challenges, implicitly, a stereotype of the cow’s body as fleshy and ungainly. Certainly, at times the cows do look like an indistinct mass to the narrator. But at other times their movements are presented as extremely controlled and almost formalized in their precision. We read that the “position, or form, itself, of the grazing cow, when seen from the side, is graceful” (30). It is the formal aspect of the cows’ bodies and of their interactions that holds the narrator’s attention, and potentially the reader’s: the black-and-white photographs, restrained and repetitive, help establish a sense of rhythmicity in the reading experience—an orderly and contemplative pace.

To capture the coordinated nature of the cows’ movements, the narrator resorts to two metaphorical mappings. The first points to dance: “Two of them are standing close together: now they both move at the same moment, shifting into a different position in relation to each other, and then stand still again, as if following exactly the instructions of a choreographer” (17). The second metaphorical association is with mathematics and geometry: “They are often like a math problem: 2 cows lying down in the snow, plus 1 cow standing up looking at the hill, equals 3 cows. Or 1 cow lying down in the snow, plus 2 cows on their feet looking this way across the road, equals 3 cows” (28). Or, again emphasizing geometry: “Today, they are positioned exactly one behind the next in a line, head to tail, head to tail, as though coupled like the cars of a railway train, the first looking straight forward like the headlight of the locomotive” (20).

The first set of metaphors foregrounds the kinesthetic reading of the text, the second set brings out the abstract form of the cows' physical positioning. Together, these strategies explore the cows' multiple embodied configurations with the precision of a chess player analyzing a game, and at the same time savoring its complexity. Questions about the cows' motivations are raised: "If they finally move, is it because they are warm enough, or is it that they are stiff, or bored?" (25). But such questions are never answered; in a sense, they are never even taken seriously. The narrator sticks to the façade of the animals' behavior, but in a way that reveals the unexpected complexities of that façade. It is misleading, the text suggests, to embark on a mentalistic quest for "what it is like to be a cow," because the cows' bodies and the rhythms of their coordination are immediately expressive of a way of life. The narrative proffers an invitation to engage with animal assemblages through thoughtful, almost contemplative, observation, discovering the aesthetic value of their embodied interactions; this sensitivity, the text implies, is as close as we can get to an understanding of the mental life of a group of ruminants.

We Gorillas

Originally published in 2014, *The Man I Became* narrates a gorilla's progressive, and painful, socialization into human culture. Unlike my two previous case studies, an animal assemblage is here explored from the inside, by an animal who belongs (or, more precisely, *belonged*) to the group and narrates part of his story in the first-person plural (Fludernik's third way in which groups can impact narrative form). The set-up harks back to Franz Kafka's "A Report to an Academy," another influential fictional account of an ape transforming into a human being. But Verhelst's narrative has more overtly satirical overtones. The gorilla narrator is captured with other members of his group and forcefully taught how to speak and behave like a human. The purpose of this "humanization" program is to have the gorillas enter a place known as Dreamland, which is something in between a zoo and a circus. The highlight of Dreamland is a show—attended by large human audiences—that stages evolutionary history, obviously in a highly anthropocentric fashion: "After the break we saw

our future. How the gorillas turned into humans and how we changed the world. The triumph of mankind. Lots of oohs and aahs about the moon landing” (Kindle Locations 415-416). Indeed, the narrator is so skilled at behaving like a human that his trainer—whom he calls “his human”—offers him an administrative position at Dreamland. He starts working hard and uncritically, in pages that read like a satire of corporate hypocrisy: he learns how to run meetings and use “fashionable words that made people feel like they were part of something exceptional” (Kindle Location 476). The narrator is even given a cellphone—an important milestone in his process of humanization.

But, suddenly, things start going wrong: the lion of the Dreamland show acts up and kills several other animals, the police find out about the illegal wildlife trafficking behind the show, a fire breaks out and leaves Dreamland in ruins. The narrator is forced to rebuild his life after Dreamland and takes up a job as a harbor worker. He meets a girl, Lucia, the daughter of the former head of Dreamland, and moves into her house, where he becomes a gardener of sorts; he has to tend a “flowering mountain” (Kindle Location 857), which is featured in the novella’s Dutch title, *Geschiedenis van een berg* (“story of a mountain”).

What this summary does *not* capture is the way in which Verhelst’s work stages the opposition between the first-person plural and the singular, the “we” and the “I,” in starkly embodied terms. The novella begins with a statement in the first-person singular: “There was a time when I couldn’t even talk” (Kindle Location 16). Yet as soon as the narrator retrospects to his youth, before he was taken to Dreamland, the narrative switches to the plural “we”: “I don’t know exactly when—I still couldn’t think in terms of days and years, that’s how long ago it was—but the heat made us so drowsy that we nodded off and slept whole afternoons away in a heap, spread-eagled on top of each other” (Kindle Locations 24-26). These scenes from the narrator’s past are imbued in bodily affect, as when he describes the “colourful and intoxicating” African sunsets (Kindle Location 28), which become the stuff of collective experience—a group memory that continues to define the narrator’s identity even as he distances himself from his animal past. Consider, for instance, the following passage:

We who had known the shifting sky as our ceiling our entire life, our only master
the sun that set the red lake ablaze, the swarms of insects like tiny explosions
over the water, our salvos of lazy laughter causing a frigate bird to linger over the
crowns of the trees for a few seconds like a cloud of white feathers, the wall of
muscle and teeth we formed in a flash at the slightest sign of danger . . . we no
longer knew what the open air was. (Kindle Locations 163-166; ellipsis in the
original).

Verhelst's style combines subtle kinetic traces ("shifting," "explosions," "salvos," "flash") with imagery that abstracts from animal individuality ("cloud of white feathers," "wall of muscle and teeth"): the passage thus encourages readers to engage with the collective "we" through a kinesthetic and affective route. Not only does this "we" emerge whenever the narrator looks back on his past, but it also accompanies the sudden awakening of animal reflexes, as when a staged confrontation between a gorilla, a lion, and a leopard in the Dreamland performance stirs up the narrator's primordial fears, cast again in the first-person plural: "We felt it in the pits of our stomachs. In our heads. Together the animals roared our fears awake" (Kindle Locations 400-401).

The reading of this opposition between individual and collective should be straightforward: individual selfhood—the "I"—is presented as the result of a traumatic enculturation that obliterates shared values and experiences, and at the same time comments on the rampant individualism of the contemporary Western world. Becoming human involves a regimentation of the animal body: "We learned all the things our bodies didn't seem to have been made for and doing so gave us new bodies" (Kindle Locations 208-209). By contrast, the scenes set in the narrating I's past foreground the gorillas' embodied vitality: their being "spread-eagled on top of each other," or the "wall of muscle and teeth" they form, as in the passages quoted earlier.

But unlike the alienated humans around him, the narrator never loses touch with the embodiment of collective experience. After the collapse of Dreamland he develops a keen eye for

how human interactions themselves involve an embodied dance similar to the one we've seen in nonhuman animals:

I love watching people: the way they revolve around each other like small, warm magnets. The looks they exchange. And how a split second is enough for the bodies of complete strangers to attract or repel each other. How quickly an argument can flare up—I feel it the same instant in my vertebrae. The physical brilliance of the pickpocket moving unseen through the crowd, or the boy on a skateboard gliding between other people, completely immersed in his own body: the way he lays a sugar cube on his tongue, closes his eyes and slaloms perfectly between all those bodies by just moving his hips. (Kindle Locations 876-880)

Kinetic traces in Verhelst's language also serve as "warm magnets," guiding the reading experience and drawing attention to the kinesthetic—and at the same time formal—dynamics that connect animate bodies to one another. In this way, the narrator exposes the shared embodied nature of our interactions, beyond the myth of human exceptionalism, and beyond the snares of neoliberal individualism. The ending of the novel, with the narrator meditatively taking care of a "flowering mountain," brings him back to the sense of communion with the nonhuman world that had characterized his collective experience as a young ape. The exploration of animal collective mentality thus reveals the continuity between humans and other animals in deeply affective and embodied terms. Ultimately, the grammatical opposition between "I" and "we" serves to resist another opposition—namely, that between "us" humans and "them" animals.

Conclusion

This article has explored contemporary fictional narratives that offer a model of human-animal relations alternative to anthropomorphic projection. This model builds on the spontaneous mimicry of kinetic experience, which has deep roots in the human cognitive make-up as well as in pre-modern societies (as Willerslev's account of Yukaghir hunting behavior suggests). Projection is,

fundamentally, a matter of ascribing mental states that are, as philosophers would put it, “contentful”: they have a certain content, typically expressed through the propositional language of beliefs and desires.⁸ This approach leads to the conceptual impasse famously discussed by Nagel in “What Is It Like to Be a Bat?”: we have no shared linguistic or language-like system that enables us to reliably communicate with nonhuman animals.⁹ But we do have our bodies. Kinesthetic empathy *qua* bodily attunement does not need the attribution of substantive mental contents: it is a process of bodily resonance, and it takes our bodies—their physical style and comportment—as a direct manifestation of affective experience. I have argued that literary strategies put readers in a position to develop kinesthetic empathy for verbally represented bodies, including the collective mind-body of animal assemblages. Literary style can thus foster a sense for the assemblage, marking a sharp departure from individually based notions of subjectivity. Crucially, when individuality drops out of the picture of human-animal encounters in fiction, empathy becomes more abstract: a matter of formal patterns of coordination that are experienced, first and foremost, through a mechanism of embodied resonance.

As Caroline Levine persuasively argues in *Forms*, frontloading the concept of form does not necessarily imply erecting a barrier between aesthetic expression and social experience, because social experience itself is formally patterned. In this article, I have shown that this formal approach can be extended beyond the human domain, opening up an embodied route to appreciating human-nonhuman entanglements and questioning the very separation between human and animal life. The abstraction of embodied pattern brings out the background of animacy that humans share with nonhuman animals—the fundamental connection between emotion, motion, and consciousness posited by Sheets-Johnston’s philosophy. In this way, my argument points to a significant convergence of animal studies, the affective turn, and cognitively inspired approaches to literary reading. Readers’ imagination follows the rhythmic flight of Powers’s birds, or the chess-like moves of Davis’s cows, or the affective proximity of Verhelst’s gorillas. The focus here is not the conceptual, which goes hand in hand with the separation of individual identities, but the preverbal affect that

can be shared by a group of animals, and can even reach—by way of a strange contagion—the reader outside the text.

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¹ See, for instance, a short film by Dutch filmmaker Jan van IJken, which captures a flock of starlings in flight: https://www.youtube.com/watch?v=V4f_1_r8ORY.

² See also a special issue of *Modern Fiction Studies*, edited by David Herman, on the representation of animal life worlds in fiction.

³ Many scholars in affect theory would resist the idea of continuity between emotion and affect. Here I take on board Ruth Leys's compelling critique of strong versions of this distinction. There are also major epistemological tensions between affect theory and cognitive science, which I won't be able to discuss in the context of this article.

⁴ An exception worth mentioning is Tora Holmberg's perceptive discussion of animal crowding in urban spaces. But animal assemblages remain undertheorized, especially in the context of an embodied, phenomenological account of human-animal interactions.

⁵ For a recent reappraisal of Deleuze and Guattari's concept, see also Bruns.

⁶ Preliminary experimental evidence can be found in Kuijpers and Miall.

⁷ This sidelining of embodied experience is the centerpiece of Elizabeth Costello's critique of Nagel's argument in *The Lives of Animals*: "Despite Thomas Nagel, who is probably a good man, despite Thomas Aquinas and René Descartes, with whom I have more difficulty in sympathizing, there is no limit to the extent to which we can think ourselves into the being of another. There are no bounds to the sympathetic imagination" (Coetzee 35).

⁸ For more on mental content and the possibility of developing an account of mind without content, see Hutto and Myin.

⁹ Marco Caracciolo explore the epistemological limitations of fictional accounts of animal experience in *Strange Narrators* (chap.5).