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Citation: Taylor, A. (2017). What lines, rats, and sheep can tell us. *Design Issues*, 33(3), pp. 25-36. doi: 10.1162/DESI_a_00449

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What Lines, Rats, and Sheep Can Tell Us

Alex S. Taylor

For Salim—our dear family companion who, lying before me, tells me through his breathing, slow movements, and how he folds himself that he is readying to leave us.

“...baboons are not seen to inhabit a world of non-baboons, or ants to inhabit a world of non-ants. Apparently only humans inhabit a world of nonhumans, which makes it seem to me to be a very anthropometric formulation.”¹ Tim Ingold

Introduction

In “Designs Along a Length of String,” Tim Ingold generously invites his audience into his thoughts on lines and meshworks.² In a lecture theater crisscrossed with a “mesh” of string—real string!—we are literally and figuratively asked to feel how lines feel. Through Ingold’s eyes, his pacing, touching, writing, and wording, and through the string around us, we see how lines thread, join, loop, knot, turn back on themselves, and hang loose and open..., offering the space for more, much more.

For me, Ingold’s talk of flourishing lines and emergent relations speaks to his longstanding ideas on “the processional.” With his lines and their processional becomings, he is giving us the space to think, a “tool for thinking,” as philosopher Isabelle Stengers uses the phrase.³ In this article, I want to think with Ingold’s ideas and try to work with them in just this fashion, as a tool. To begin, I draw out some of the key concepts that Ingold introduced in his closing plenary at Research Through Design (RTD) in 2015 and weave these concepts into the ideas he has developed in his writings. I then thread a new line of questions into this thinking by drawing in Vinciane Despret’s beautiful accounts of animal–human relations. For many, this might seem an unexpected turn, but my intention is to use the coupling of works from Ingold and Despret to complicate how design researchers and practitioners think and work *through design*. By turning our attention to what Ingold refers to as the *sympathy* that we build up with things and, at the same time, to how these *active attunements*, as

1 Tim Ingold, *Designs Along a Length of String—Closing Provocation*, Research Through Design 2015, Cambridge, UK, March 25–27, 2015.

2 Ibid.

3 Isabelle Stengers, “Introductory Notes on an Ecology of Practices,” *Cultural Studies Review* 11 (2013): 185.

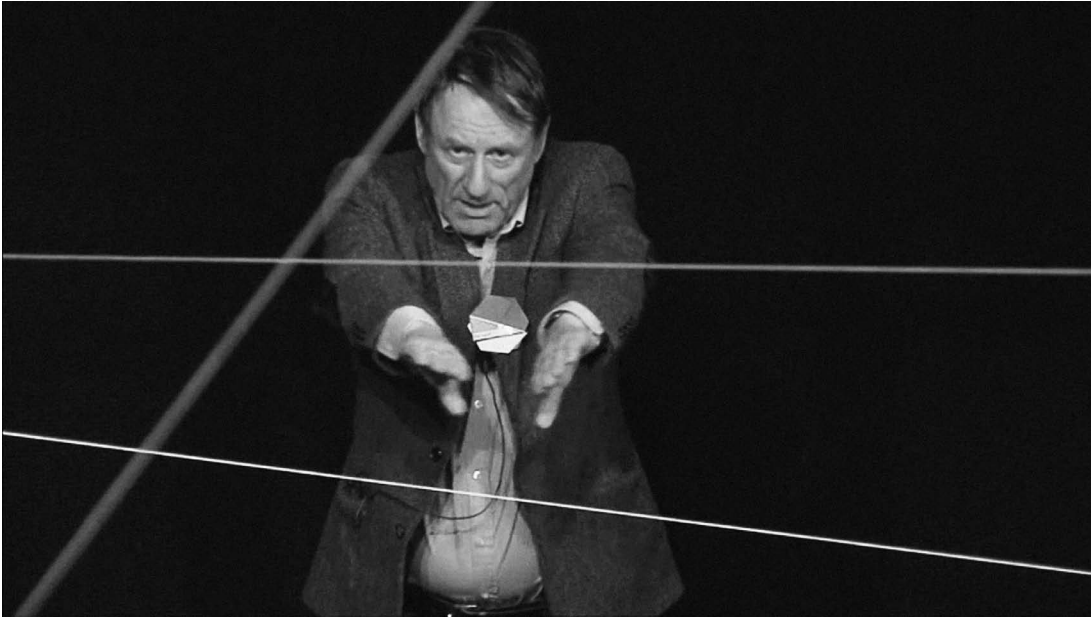


Figure 1

Tim Ingold, enmeshed in string, in “Designs Along a Length of String—Closing Provocation,” RTD 2015, March 27, 2015. Video Still. Image copyright: Microsoft Research Cambridge, UK. Image © Research Through Design Conference.

Despret calls them, afford the conditions for “new existences,”⁴ I want to suggest that design is much more than a mere augmenting of human ability. What especially interests me are the conditions made possible *through-design* and the *more-than-human* capacities that are given a chance in the lively relations between humans and nonhumans. Thus, in this knotting together of ideas, what I am keen to do is engage in a widening of *research through design*—that is, to offer a different way of engaging with the conference series’ short history and put forward a generative alternative that might be enacted through design.

Lines

The line is Ingold’s *magnum opus*; his own thread of stories of walking, cutting, drawing, sawing, weaving, and dwelling draw us back to the ways in which lines are processionally brought into the world—how what comes before and what is to follow gives form to a present *movement*.⁵ The line is Ingold’s answer to the network, with its “timeless, motionless, inert” assemblages of nodes and connections. For Ingold, the assemblage “will not help... It is too static, and it fails to answer the question of how the entities of which it is composed actually fasten to each other.” Yet the line, he contrasts, “allows us to bring the social back to life. In the life of lines, parts are not components; they are movements.”⁶ The line is then in motion, never static, always leading to something or somewhere else. This is, provocatively, a “world without objects.”⁷

The meshwork is a corollary to the line, for there are many lines that thread through and between the lives of humans and nonhumans. Here, we don’t have to limit ourselves to “blobs,” as

4 Vinciane Despret, *What Would Animals Say If We Asked the Right Questions*, trans. Brett Buchanan (Minneapolis: University of Minnesota Press, 2016).

5 Tim Ingold, “Walking the Plank: Meditations on a Process of Skill,” in *Defining Technological Literacy: Towards an Epistemological Framework*, ed. John Dakers (London: Palgrave Macmillan, 2006), 65–80.

6 Tim Ingold, *The Life of Lines* (Abingdon, UK: Routledge, 2015), 15.

7 *Ibid.*, 13–16.

Ingold calls them, but lines, loops, and knots that thread together the lively connections. Again, we are directed away from the static, lifeless point—the thing—and led to see the always becoming, the “goings-on.” As Ingold puts it, “[t]he thing about things... is that they *occur*—that is, they carry on along their lines.”⁸ For precisely this reason, Ingold draws our attention to the generative and emergent qualities of lines, and their twists and knottings in meshworks.

The meshwork of lines also puts relations center stage. Ingold’s fascination is with the ways our own lines crisscross with sentient and less than sentient others and with how the lines that surround us afford a becoming in the world. Here, we find the back and forth of sawing a plank is shaped by the cut before, and the one to come, but so too by the wood with its grain, and the weight of hands and bodies. All work together. Not only does the maker cut into the plank; the making also exerts a force back on the maker.⁹ Ingold extends this conceptualization further with his *growing-in-making* or *anthropogenesis*, where the making is wound together with the being, and where what we are and what we become is actively threaded into the practices of making. In knitting, “the shape of the clothing might map onto the bodily form of the wearer,” but the shape of the garment and the way the body is held to wear it “arises from countless micro-gestures of threading and looping that turn a continuous thread of yarn into a surface.”¹⁰

Ingold’s concepts and images, then, give us a distinctive way to talk about how to approach design; how, piece by piece, iteratively, and along a continuous line, transformations are made and remade. The ways that we cut, draw, sketch, stitch, mold, and weave are movements—made in and along a line of string—that knot, shift and flow into others. We might say, as Ingold does, that design is forever in an unfolding “attunement” and that all manner of things are in continual emergence through a rhythm of relations:

The task of the builder is... to bring one way of life and growth (of the tree in the forest) to a close in preparation for the launching of another (of the craft in the ocean).¹¹

In Ingold’s lines we might see a similar thread to Donald Schön’s *reflective practice*¹²—though perhaps one that is more grounded in the material experience. Ingold sheds light on how we string ourselves together with others in practice and use such material enactments to *reflect-in-action*—to move, shift, and adjust, as we saw through the plank of wood. Similarly, Ingold speaks to the mesh of interconnecting lines, or conversations as Manzini refers to them, through which design emerges: “the tangle of conversations occurring during design activities... and the conversations that take place in various *design arenas*” (emphasis in original).¹³ Yet Ingold

8 Ibid., 16.

9 For a wonderfully detailed description of sawing a plank of wood, see Ingold, “Walking the Plank,” 65–80.

10 Ingold, *The Life of Lines*, 122–24.

11 Ibid., 121.

12 Donald A. Schön, *The Reflective Practitioner: How Professionals Think in Action* (New York: Basic Books, 1983).

13 Ezio Manzini, “Design Culture and Dialogic Design,” *Design Issues* 32, no. 1 (Winter 2016): 54.

brings our attention again to the hands, to the physical relations we thread together in making. Through a processional language of practice, we see “the form of a thing does not stand over it or lie behind it but emerges from this mutual shaping, within a gathering of forces, both tensile and frictional, established through the engagement of the practitioner with materials that have their own inclinations and vitality.”¹⁴

But, for me at least, the processional qualities and relational unfoldings that Ingold surfaces have a deeper resonance for design. What seizes me in his ideas is a view of design that is always working toward what can be—whether it imagines itself to be doing so or not—rather than being stuck in the realm of what is (or is not), or what limits exist. As Ingold repeatedly recounts it, design is materially embedded or entangled in the endless threading together of preceding and present lines, always laying the foundations for what is to come: “You begin to think of design actually as a correspondence of lines that are twisting around one another...”¹⁵ And correspondence, for Ingold, is about much more than the subject and object, than human agency and its mastery over the thing; instead, correspondence accounts for active trajectories and transformations that occur between human and non-human lives.¹⁶

This, I suggest, offers us an expansive view of design, where “things are continually coming into being through processes of growth and movement.”¹⁷ This view not only places design in an exploratory mode,¹⁸ but also poses a lot of hard questions to those who want to draw tidy lines between ourselves as autonomous actors and the tools used to design, and indeed what is produced through design. Thus, in surfacing the many connections and distributions of human agencies, we are forced to ask what we mean when we talk about a design that is human-centered and that places the human as part of but still somehow separate from material practice. Ingold tells us that making, in its broadest sense, can’t be simply bracketed off from being, and neither can being be separated from making. We are in an unending thread of becoming as we make: “Humans are not just the producers of objects to consume. They too are transformed in the process; what they achieve is achieved in them.”¹⁹

In the remainder of this article, I use this as an inflection point, asking what it means to design and research *through design*. What effects and affects are we seeking to enliven? In what ways are we hoping to make an impression in worlds? And ultimately, what relations do we hope to afford between ourselves and the things we are aspiring to live with and through? Taking Ingold’s invitation to heart, I make the case that it no longer seems good enough to see the things we design as tools or instruments that

14 Ingold, *The Life of Lines*, 24.

15 Ingold, “Designs Along a Length of String.”

16 In articulating his idea of correspondence, Ingold seeks to put the active human back into the world and among things. He counters anthropomorphic or human-centric “capacities of conscious intentionality and agency” by replacing intention with attention, subject with verb, and human agency with “doing-in-undergoing of humanifying.” See Ingold, *The Life of Lines*, 152.

17 *Ibid.*, 13.

18 The reference is to Daniel Fallman’s use of “exploratory.” Fallman offers us a language to expand ideas of “through design,” pointing to an investigative or exploratory purpose to designing and making. See Daniel Fallman, “The Interaction Design Research Triangle of Design Practice, Design Studies, and Design Exploration,” *Design Issues* 24, no. 3 (Summer 2008): 4–18.

19 Ingold, *The Life of Lines*, 155.

merely augment our capacities. These “tools” or “instruments” do not merely offer, in a very limited sense, materials that overcome our intrinsic human limits, so that we might see, hear, reach, grasp, draw, and make better. Again, we find in Ingold an attunement with the world of things, where we emerge as “more-than-human” through our unfolding relations.²⁰ Unbounded through our relations and rapport with things, we are enabled to do *and* be so much more than autonomous actors; we extend ourselves through mutual forces (impressions and sensations)—the twists and knots binding lines of string give form to and shape movement.

Other Beings

Yet, I develop my thinking not with Ingold’s lines alone, but with the introduction of what might seem an unusual and admittedly peculiar companion—namely, a view into ethology, and specifically the view of Vinciane Despret and her profoundly uplifting and intellectually arousing examination of the lives we humans share with other living animals. This move, as I’ve said, may seem a peculiar disjuncture, but my guess is that Ingold might appreciate the connection. In the quote that opens this article, Ingold is in the midst of reminding his audience that, in a contemporary philosophy obsessed with the relations between humans and nonhumans, we find a peculiar lack of interest in animals. In his RTD 2015 talk, we might hear an invitation to speculate on such matters.²⁰

What’s more, Despret, I feel, responds with a reasonable rapprochement to Ingold’s worries about the term “assemblage.” Referring to the frequent translation of Gilles Deleuze’s *agencement* to “assemblage,” she writes:

I would rather opt for keeping the French word: *agencement*. First, this term renders perceptible the intimate link between “*agencement*” and “agency,” and second, it insists upon an active process of attunement that is never fixed once and for all. An *agencement* is a rapport of forces that makes some beings capable of making other beings capable, in a plurivocal manner, in such a way that the *agencement* resists being dismembered, resists clear-cut distribution.²²

Despret at one level, then, is dealing with matters much like Ingold. She troubles assemblage in much the same way and points, like him, to the “active process[es] of attunement” that resist a separation from the *rapports and plurivocality of the agencement*. Agencement for Despret is, thus, a relationality between multiple forces—a rapport—that sounds very much like the many entwined threads or lines of the meshwork.

20 Hannah Pitt has used Ingold directly to develop such a view of “more-than-human.” See Hannah Pitt, “On Showing and Being Shown Plants: A Guide to Methods for More-than-Human Geography,” *Area* 47 (2015): 48–55. On “more-than-human,” also see Sarah Whatmore’s inspirational article: “Materialist Returns: Practising Cultural Geography in and for a More-than-Human World,” *Cultural Geographies* 13 (2006): 600–09.

21 Ingold also has written at this intersection of animals and humans. See Tim Ingold, “Introduction,” in *What Is an Animal?*, ed. Tim Ingold (London: Routledge, 1994), 1–16.

22 Vinciane Despret, “From Secret Agents to Interagency,” *History and Theory* 52 (2013): 38.

Despret's unique reading of animals and their manifold relations seems to me to equip us with a way to further work through the kind of thinking that Ingold invites. To be specific, what matters here—that is deeply relevant for design and the particular thread of thinking we are following—is Despret's vividly expressed open-mindedness to an expansion of agential capabilities.²³ By paying close attention to Despret's work (and the many scholars she recognizes in her writings), we find not only much in common with Ingold's ideas of the processional, but a catalogue of detailed examples of how mutual relations can be thought of as extending or expanding capability. In celebrating her achievements, Buchanan, Chrulew, and Busso write of Despret's work as "the practical study of what humans or animals can do." Her view onto multi-specied relations, they explain, is "not of what they are, of their essence, but of what they're capable, of what they're doing, of the powers that are theirs..."²⁴

In reading her catalogue of stories, it is difficult not to be compelled by Despret's sensitivity to how connections are made and relations unfold to produce something *more-than*—something only possible through precisely the activities of a woman feeding her sheep, a breeder talking with his cows, or a parrot talking with an ethologist. In more than 20 years of thinking and writing about these matters, Despret has strung together far too many wonderful and generative stories to repeat here. However, I want to touch on just two areas of her work that can help us develop a sense of what her ideas offer.

I turn first to a seemingly straightforward case. Despret has put a good deal of thought into the behavioral experiments to which rats (and other animals) are subjected, and specifically into the use of the manufactured maze as an artifact of experimentation.²⁵ We know the drill: A rat is deprived of something—for example, food, senses, or body parts—or "provided" with something—drugs, alcohol, or nicotine. She or he is then judged for her or his capacity to learn and navigate a maze (usually to find food). So on its face, the test would seem to be whether the rat has an instinctive capacity for navigation and spatial learning. This test also operates on the premise that everything else can be controlled so that rats only navigate a maze when they are hungry and to obtain food. (Crucially, this biological register forms the basis for claiming that any observable capacity can be generalized to other animals, including humans.) Yet, with Despret's guidance, we immediately run into a question about these sorts of experiments that is never seriously asked, but would appear to be quite fundamental to what is at stake: "How can this experimental arrangement possibly interest an animal?" Or to phrase it slightly differently, as perhaps the animal might, "what could they (the humans) possibly be interested in?"²⁶

23 I'm mindful of the concern for capabilities shown in design, such as that from Ilse Oosterlaken. See Ilse Oosterlaken, "Design for Development: A Capability Approach," *Design Issues* 25, no. 4 (Autumn 2009): 91–102. Although I'm not unsympathetic to Oosterlaken's call to be led by human capabilities, rather than the more limiting options of income, resource provisioning, and utility, among others, the point I put forward is more focused on how capability is enacted through human–nonhuman relations, that we might be open to how more than human capabilities come into being.

24 Brett Buchanan, Matthew Chrulew, and Jeffrey Busso, "On Asking the Right Questions," *Angelaki* 20 (2015): 116.

25 See Vinciane Despret, "Thinking Like a Rat," *Angelaki* 20 (2015): 121–34; and Vinciane Despret, "L Is for Laboratory: What Are Rats Interested in During Experiments?" in *Would Animals Say*, 88–96.

26 Despret, "Thinking Like a Rat."

If we think through these experiments and follow what happens “back stage,” as Despret does, we find that animals of all kinds (e.g., cats, rats, parrots) often fail to be “conditioned” for the particular purposes of the controlled experiment—put simply, food doesn’t seem to be the only imperative, and the wider experimental conditions, no matter how restrictive the controls, confound the efforts to determine general accounts of animal/human behavior. After being deprived of food, cats refuse to eat; subjected to repeated recordings of human speech paired with food rewards, myna birds show disinterest in talking; in carefully controlled environments, rats are better at learning routes if the experimenters think they are intelligent; and so on. However, “off stage,” these animals show in a multitude of ways capabilities that exceed the narrow view presented by these (null) results: Cats show a curiosity in the lives of their experimenters; myna birds talk when their experimenters take them home; and rats, among other accomplishments, reportedly run faster when observed by humans. These “results” are never reported because they contravene the motives of the experiment and fail to correctly respond to what the experiment and experimenters have set out to answer:

If an animal responds according to his own habits, in the register of what interests him, the researchers would consider this a kind of “ruse”—he admittedly did what was asked of him, but he did so for the “wrong reasons.”²⁷

Experimental research of this kind does everything in its power to compartmentalize and purify the conditions, but in so doing, it strips the experiments of precisely those things that make the world meaningful. Rats are literally stripped of their senses, mazes are stripped of their discernable features, and experimenters are persuaded to leave the details of the relations with animals “off stage.” Sort after is a primitive, innate stimulus–response pair, which might somehow exist outside the meanings and relevances of the animals being examined. What is left bears little to no relationship to the world that the experimenter is hoping to produce some relevant effect. The situation is nothing more than perverse. Despret can’t help but see the funny side:

The humor of the situation is too nice not to be underlined: The researchers compartmentalize the research; the animals do not stop prompting them to decompartmentalize it.²⁸

For Despret, much of the trouble comes down to asking the right questions. And for her, the right questions are not whether animals can be duped into responding this way or that to some stimulus that has little or no relevance to them, but instead whether we can ask questions that give animals the chance to convey their own interests and ways of doing things, and that give them the opportunity to communicate these to us humans.

27 Despret, “L Is for Laboratory,” 92.

28 Despret, “Thinking Like a Rat,” 130.

We might seem to be a long way from the design of things, and from what we might want to do through design, but there is a point here, I feel, that should be important to us. In short, we might understand that a good deal of work done through design compartmentalizes in a similar way. Yes, we grapple with being sensitive to the contexts in which actions and activities occur—and indeed to a wider culture.²⁹ But we have very few if any tools (or a register) for working with everything, altogether. By viewing things in terms of affordances, human actions, and system outputs, we do not seem all that far from that innate stimulus–response pair. We reduce things to a sequence of defined steps—a tool’s design, input, interaction, output—and neglect the world that is being lived in and how living brings things together so that they have meaning and relevance to us. That is, to determine some general principles about a design, through design, we have diverted our attention away from the very things we do to make the world personally meaningful. We have failed to develop ways to think and talk in terms of the dialogue we build up with the surroundings: with other humans and nonhumans and with the ways these relations unfold over time.³⁰ And we too easily forget to recognize that our experiences with the artifacts we design cannot be bracketed off or compartmentalized from what is meaningful, and how that meaning is brought, actively, into the world.³¹ For Ingold, lines speak directly to how this oversight might be overcome:

You [can] begin to think of design actually as a correspondence of lines that are twisting around one another.... And instead of thinking about articulation—articulation means the coupling of rigid elements—we actually [can] talk about sympathy, which is about the way in which things are continually responding to one another. So I’m thinking we should think about design in terms of sympathetic relationships, or what I call correspondence, rather than in terms of the articulation of elements.³²

I feel, though, that Despret provides us with a grounding for what we might actually wish to research through design. Finding inspiration in Despret’s work, design might concern itself—dare I say—with the unfolding dialogue targeted at answering that question: “In what are *you* interested?” Research through design would be a starting place for speculating on how we begin such a dialogue that doesn’t compartmentalize and that accounts for the richer, emerging set of relations: “... this has to do with beings who negotiate the conditions of research, who mutually affect one another, who exchange judgments and opinions, who reciprocally modify one another and who know that they do it.”³³ So design might offer up the space not to enforce (from the outside) what should interest

29 A sensitivity to context is the hackneyed lesson we’ve taken from Lucy Suchman, among others. See Lucy Suchman, *Human–Machine Reconfigurations: Plans and Situated Actions, 2nd Ed.* (Cambridge: Cambridge University Press, 2006). For attempts to articulate a wider sensitivity, see Manzini, “Design Culture and Dialogic Design.”

30 Note the parallel here with Grant Kester’s idea of *dialogical interaction*. Kester builds on Habermas’s theory of discourse to suggest a dialogical aesthetic, in which meaning is not intrinsic in a piece, or definitively controlled by the artist, but something provisional, actively built up between an artwork and a collective of onlookers or co-participants. See Grant Kester, *Conversation Pieces: Community and Communication in Modern Art* (Berkeley, CA: University of California Press, 2004).

31 Annemarie Mol’s *ontological politics* and *ontonorms* add a complementary perspective to this active becoming. Mol writes of the hope to “sensitize us to materialities and issues of good and bad at the same time.” In this work, she draws and holds matter, meaning, and value together, laying the basis for a register for everything altogether. See Annemarie Mol, “Mind Your Plate! The Ontonorms of Dutch Dieting,” *Social Studies of Science* 43 (2013): 381.

32 Ingold, “Designs Along a Length of String.”

33 Despret, “Thinking Like a Rat,” 131.

us, but to begin wondering how we might be open to the possibilities of what could *become* interesting—of how to develop, twist, and cultivate these possibilities between an artifact and its user. We can then take seriously a design that is open to the question, “How could this possibly be *made* interesting?”

The second area of Despret’s work that I draw on is related to this openness. One of Despret’s stories considers sheep and the ways they organize themselves. The “classical” view in ethology, as Despret refers to it, is that sheep are most obviously characterized by their instinctive drive to eat (much like rats). The trouble is, this version of the collective behavior of sheep does nothing to overcome the strikingly superficial understanding we have of them, nor does it account for the vexing questions that arise if a bit more care is put into understanding the lives they live. For example, it fails to consider that the preoccupation with sheep and their food may be because eating is one of the easier things to find sheep doing, or that so much of what we observe sheep doing is dictated by the strict regimes of breeding to which they are subject. Any inventiveness in sheep is quickly selected out of a flock. Small wonder, then, that we know so little about what sheep are interested in, other than grass. Despret writes:

[The sheep] have never been able to testify to what interests them since whatever it is that might interest them has been offered no affordance, no possibility of articulation with what interests those who attest on their behalf.³⁴

One recurrent trope that has been spun from this impoverished version of sheep life is that of the hierarchy—and specifically the way the competition for food is said to play a central role in determining the organization of sheep.³⁵ Sheep flocks are repeatedly characterized as led by long-horned, dominant males that fight for control, “corresponding to theories of hierarchy (they obtain the right to push their way around with their horns, the males in front and the females behind).”³⁶ However, through the work of Thelma Rowell (a primatologist who has turned her attention to sheep), Despret suggests another version of events that is equally plausible and, it must be said, seems to be considerably more attentive to the situations in which sheep find themselves. Challenging what she calls the “scandal” of the hierarchy, Rowell makes the claim that a concern for predators, rather than food alone, is what occupies sheep and dictates their social organization. A possible reason for their seemingly obvious concern for food might be that the human observer is in fact a deterrent for predators. Much of the effort and organization invested in managing predation is mitigated by the presence of human observers (e.g., ethologists) so that observers simply witness the sheep getting on with the business of eating. Perversely, by observing them and reducing their apparent

34 Vinciane Despret, “Sheep Do Have Opinions,” in *Making Things Public: Atmospheres of Democracy*, eds. Bruno Latour and Peter Weibel (Cambridge, MA: MIT Press, 2006): 363.

35 Despret offers a provocative critique of hierarchy. See Vinciane Despret, “H is for Hierarchy: Might the Dominance of Males Be a Myth?” in *What Would Animals Say*, 53–60.

36 Despret, “Sheep Do Have Opinions,” 354.

capacities through our limited register, we have, quite possibly, also given them the opportunity to widen their repertoire—allowing them to use the safety that human observers afford to arrange and organize themselves differently.

Further complicating matters, and showing a sophistication not accounted for by the hierarchy model, Rowell shows that the fighting between rams for leadership is largely limited to the one month of mating each year; that fights are highly ritualized and performative, with few signs of all-out battles for a blunt idea of supremacy; that older females often lead flocks outside of mating season; and that relationships other than the usually fleeting fights between males demand study—including the “friendships” between males and the lasting companionships between ewes and their daughters.³⁷

This string of alternative accounts, offering different versions of sheep’s lives, led Rowell to design an inventive kind of device for observing sheep. As Despret recounts, Rowell’s device—devised during a time in which she followed her primatology training and effectively lived among the sheep—was an additional food bowl. She fed her 22 companions from 23 bowls. This device was a strikingly small and simple one and was designed to offer the sheep the chance to display an alternative to the orthodoxy in ethology—to reveal that a hierarchical configuration organized for the purposes of food consumption might not be all that matters to sheep. Just as the human observer might afford a new repertoire, the additional bowl of food was Rowell’s invitation to the sheep to reveal something they had not been given the chance to do before: to show themselves to be socially sophisticated.

As an example, this device is relevant to design because it moves us closer to what being open through design might look like. What Despret refers to as *versions* is helpful here.³⁸ Like Ingold’s lines and their corresponding meshworks, these versions speak to the multiple threads that bring the world into being; Despret’s “versions draw a web.”³⁹ Despret uses the idea to suggest not just a plurality of worlds that affect us, but an openness to worlds coexisting, and from this step an openness to the possibility of other worlds, other versions. For Despret, then, they amount to a device that affords hesitation—a chance to ask questions about what might just be possible, how differences might flourish and allow “many more entities to be active.”⁴⁰ This perspective amounts to an *additive empiricism*, according to Bruno Latour—one that is “interested in objective facts and grounded claims” but seeks to “complicate, to specify, and, whenever possible, to slow down and, above all, hesitate so as to multiply the voices that can be heard.”⁴¹

So, through design, the question of openness is the question of how we might allow other possibilities to emerge, and how these possibilities might be “additive”—how they might be devices

37 For a helpful overview of the complications, see Vinciane Despret, “Culture and Gender Do Not Dissolve into How Scientists ‘Read’ Nature: Thelma Rowell’s Herodoxy,” in *Rebels, Mavericks, and Heretics in Biology*, ed. Oren Harman (New Haven, CT: Yale University Press, 2008): 338–55. Examples of Rowell’s work on sheep include Thelma Rowell and C. A. Rowell, “The Organization of Feral Ovis Aries Ram Groups in the Pre-Rut Period,” *Ethology* 95 (1993): 213–32; and Thelma Rowell, “Till Death Do Us Part: Long-Lasting Bonds Between Ewes and Their Daughters,” *Animal Behavior* 42 (1991): 681–82.

38 Vinciane Despret, “The Body We Care For: Figures of Anthro-Zoo-Genesis,” *Body & Society* 10 (2004): 111–34.

39 Despret, “V for Versions: Do Chimpanzees Die Like We Do?,” in *What Would Animals Say?*, 169–76.

40 Despret, “The Body We Care For,” 123.

41 Bruno Latour, “Foreword,” in Vinciane Despret, *What Would Animals Say?*, ix.

that allow for “many more entities” to be active. As Despret herself conveys, this openness stands in stark contrast to the *vision*, which is so often found in design. The vision implies a position to be taken, some predisposition to one version over others; it is more of a personal opinion. Meanwhile, version speaks to the “plurality and mutual transformability” of worlds.⁴² These versions are lines of becoming, lines open to transformations. As both Ingold and Despret suggest, the transformations in our being occur in and through the interminglings. As Ingold asks so astutely: “Is not the workman, too, a being among others, including non-human others, whose mastery only follows what they have granted him...? Are we not always *with* things before we do anything to them?”⁴³ Despret’s concern for these non-human others offers a stronger sense of what forms the underpinnings of this being “granted” and being “with”; the possibility is given, through new articulations and co-figurings, for things to transgress what is assumed to be their essence, to actively undergo *metamorphosis* by attunement or “becoming-with.”⁴⁴

Moreover, Despret’s understanding of *authorizing* adds a further depth to these versions; she invites us to think of “expectations in terms of ‘who authorizes,’” from which she suggests that “we can see that everything is shifting, articulating many more things, giving chances to many more entities to belong to the real world.”⁴⁵ The crux of the matter for Despret seems to turn on trust and faith—of trusting and having faith in worlds that could be more open to different ways of being. In this realm, we might not think of designed artifacts as only *affording* actions or behaviors. In countering the repertoire of limitations and “redistributing the influence,” we might also come to think of them (and the conditions they are used in) as authorizing other possibilities, other versions. How a thing (in particular conditions) can authorize, through design, becomes a strategy to invite more versions, to give more versions a chance: “It allows us to transform a cascade of bad faith into its opposite, into a cascade of new existences raising new questions.”⁴⁶

Going-On

To be clear, my suggestion here is to set the openings in motion, and to offer a little bit more faith and trust in things, is not simply based on making a superficial case for likening animals, such as rats and sheep, to the artifacts we design. Such a suggestion would be wrong in too many ways! For me, the relevance for design here is a deeper and more profound one: It is concerned with animating the relations we have with things in the world (and the relations they have to us) and finding ways to extend the mutual capacities, the mutual becomings. This perspective directs our attention not only toward the product, service, or, indeed, experience we design.

42 Buchanan offers a helpful precis of Despret’s use of versions. See Brett Buchanan, “The Metamorphoses of Vinciane Despret,” *Angelaki* 20 (2015): 24.

43 Ingold, *The Life of Lines*, 128.

44 Yet again, Ingold and Despret draw many parallels here. Both write of the active processes of “becoming together” and use the language of attunement and metamorphosis to capture the mutual, ongoing relations. See Vinciane Despret, “Responding Bodies and Partial Affinities in Human-Animal Worlds,” *Theory, Culture & Society* 30 (2013): 51–76; and Ingold, *The Life of Lines*.”

45 Despret, “The Body We Care For,” 120.

46 *Ibid.*, 120–21.

Instead, it urges us to expand the capacities our endlessly unfolding relations have for creating and extending ourselves-with-others. The opportunity arises to understand “through-design” not as a way to sketch out a vector space for research, but to speculate on “becoming-with”: becoming with the world, and becoming with the conditions and capabilities design might make possible.

Ingold’s invitation to consider design beyond what he calls articulation is a helpful one: “So I’m thinking we should think about design in terms of sympathetic relationships or what I call correspondence rather than in terms of the articulation of elements.”⁴⁷ Too easily, through design, we can feel the impulse to be responsive to our capacities, seeing them as a set of primitive or primordial needs to be accommodated; this view seems to lead us into the language of articulation or augmentation. We see tools as a way to somehow work with and within our limits, and thus the need to couple, as Ingold refers to them, to “rigid elements.” What we find in Despret’s stories with animals, as well as Ingold’s strings and lines, are lessons for how we might begin to treat the relations—the correspondences—as openings and as opportunities and possibilities for more sympathetic, richer, and more expansive ways of becoming together. We then face the possibility of getting past the limiting language of human-centeredness that cannot do anything but overestimate our mastery and agency in the world. Our entangled lines and lives with animals give us the possibility to dream for new entities and, through design, to begin to give these entities the chance:

If one is designing along a length of string, then it’s about hopes and dreams and not about the plans and predictions. It’s where the hopes and dreams always exceed, overstep any kinds of ends you might place for them. So designers’ longing is something like breaking a trail; it’s open-ended, it deals with hopes and dreams rather than plans and predictions....⁴⁸

47 Ingold, “Designs Along a Length of String.”

48 Ibid.

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