



FIGURE 4. Rafael Rachel Neis, *Birds Born of Humans*. Mixed media, photograph, 75 in. × 10 in., 2020.

Difference

*For the fate of the human and the fate of the animal is the same.
They share one fate.
As the one dies, so does the other:
and all share one breath.
The human is not superior to the animal,
for all are vapor.*

—ECCLESIASTES 3:19

A SURPRISING SET OF BEDFELLOWS invokes the image of God as grounds for their ideologies. From Augustine to Hitler, from Barack Obama to Mike Pence, the image of God has marshalled people under many banners: for eugenics and for universal healthcare; against abortion and for reproductive justice; for Nazism and against white supremacy. As we saw in the introduction, there are voices that castigate the so-called “Judeo-Christian” idea of the human as image of God. They view it as the root cause of our invidious assumption of human supremacy and the enduring negative consequences therein. Reckoning with the pervasive effects of this definition of humanness might press us to imagine alternate way of seeing ourselves (among other beings).

The human as “image of God” first emerges in the layers of the Hebrew Bible generated by the group we call the Priestly authors, likely writing sometime in the sixth century BCE. After taking us through a brief history of the image of God in the Priestly strata of the Bible, this chapter will introduce a different way of thinking about the human: that found in the writings of the Tannaitic rabbis. This later conceptual strain takes up the Priestly invitation—to think through human distinctiveness in terms of reproductive mimesis—but turns it to different ends by introducing instability even to the point of resembling nonhuman species.

Does the presence of this way of thinking mean that the Tannaim repudiated the notion of the human as superior to other beings or as the ultimate purpose of creation? Certainly not. I don’t deny that the rabbis prioritized a humancentric and, more deliberately, a rabbinocentric, perspective. Besides, given the

multilayered and multiauthored nature of rabbinic writings, it is difficult to systematize their ideas into perfectly consistent and unequivocal principles. But even if one cannot reconstruct pure theories of rabbinic content, one can follow *ways* of thinking. It is in this way that I will trace the emergence of a fascinating and far messier view of the human and the animal, particularly when it comes to how we reproduce.

Let's immerse ourselves in this messy world. First, we must examine the place from which our assumptions derive. As such, we will trace the emergence of this human-dominant view, and its ramifications for human reproduction and nonhuman taxonomy, in the strata of the Hebrew Bible authored by the Priestly writers. We will then encounter a somewhat different way of thinking about species and reproduction in early rabbinic texts, written centuries after the Priestly stratum of the Hebrew Bible. As we unpack these sources, written by the group of people we call rabbis, we will visit other ancient "scientific" texts about species and reproduction, arguing that the rabbinic texts ought to be understood as participants in a broader scientific conversation about reproduction, species, and likeness/difference. We will do this not only to better contextualize the rabbis but also in order to elucidate both what is common and what is distinctive among these ancient writers. Finally, we will delve into the significant differences that emerge between the Mishnah and the Tosefta. (These two Tannaitic collections were edited at roughly the same time, but only one—the Mishnah—became the centerpiece of the rabbinic curriculum.) We will trace what seems like an insistence on human distinctiveness in the Mishnah, in light of its undermining or softening in the Tosefta, and speculate on the ramifications that emerge from this intriguing divide.

THE PRIESTLY ORDER OF LIFE

The Priestly authors (or "P") were interested in a variety of ritual matters, fanning out from those more closely related to the priesthood: the tabernacle, sacrifices, purity, festival ritual, and genealogies. To be a member of the priesthood (a *kohen*), one had to be a man descended from a particular lineage of Levites, which viewed itself as exclusively mandated to oversee both the cultic rituals (especially sacrifice) and the administration (including tithes) of the Temple.

The Hebrew Bible, as we know it, is composed of multiple layers generated over time. The Priestly authors, who we think lived around the sixth century BCE, were responsible for those biblical strata that order creaturely taxonomies and that install the human as a unique creature.¹ They supplied biblical narratives about creation, the sabbath, and circumcision.² They were heirs to the works of the authors—the Yahwist, Elohist, and Deuteronomist—who composed the earlier portions of what we now call the Pentateuch sometime between the tenth and seventh centuries BCE. According to some scholars, later members of the Priestly circle were also among the redactors of the Pentateuch.³

The idea that humans have a peculiar place in the divine schema of the world, and that they are to be distinguished from other creatures, finds potent expression in the Priestly creation account (Gen 1:1–2:4). This passage emphasizes the differentiation of various beings “according to their kinds” and the distinction of the human from the nonhuman. Such an insistence on differentiation echoes through several other Priestly writings, including the birth of Seth (Gen 5:1–3) and the “second creation” with Noah after the flood (Gen 9:1–7). And this claim culminates in the dietary and purity rules of Leviticus 11.⁴

Genesis 1 differentiates the beings of the world alongside the divisions of light and water (Gen 1:4 and 7), into distinct sequential events across six days, and through the naming of broader categories of creatures by their origins (water or earth), habitats (water, skies, earth), which are marked “according to their kinds” (*le-mineihem*). In the Priestly account of creation, the making of humans is entirely different from that of other entities (cf. Gen 2: while humans are made first, thereby indicating their primacy in creation, they, along with all the other creatures, are made out of earth). In the creation of all the other beings, God issues a declaration about the created entity X either in the jussive form, such as “let X swarm,” or as an indirect object that emerges from a material or source, as in “let element Y bring forth X” (earth and water bring forth land, air, and sea creatures). None of these characteristics are present in the case of the human created on the sixth day. Instead, God speaks in the first person plural: “Let us make *adam* in our image, after our likeness; and let them have dominion over the fish of the sea, and over the fowl of the air, and over the cattle, and over all the earth, and over every swarming thing that swarms upon the earth” (Gen 1:26).⁵ This is a fulsome plan, one that seemingly links human resemblance to God to human dominion over all other creatures. The text narrates God’s creation of the *adam* being in God’s image, with the further specification of the *adam* creature’s plural sexgender (“male and female”—Gen 1:27), matching God’s own plurality. I use the term “sexgender” to avoid the idea that there is a transhistorical, biologically universal “sex” that exists prior to culture’s imposition of “gender.”⁶ Indeed, later rabbinic teachings would posit that the *adam* species was originally an *androgynus*, what we might anachronistically dub “intersex.” In the Bible, God blesses the *adam* with proliferation, dominion over other creatures, and ample food from the earth.⁷ God had previously also extended the blessing of proliferation (fructify and multiply) to air and sea creatures (Gen 1:22); the blessing to subdue the earth and dominate other species, however, is unprecedented.⁸

Some have argued that the Priestly narrative was actually radical, as it democratizes to all of humanity what was hitherto the exclusive province of Middle Eastern monarchs, who justified their sovereignty and domination over other humans with the claim that they were images of the divine.⁹ Viewed this way, the human as image of God, dominating nonhuman creatures rather than fellow humans, offers a rebuke against kings claiming divinity. However, recent scholarship has seen an

important corrective to this celebratory interpretation, and a greater attention to the human/nonhuman hierarchy effected by divine resemblance.¹⁰

The Priestly-authored layer in Genesis resumes its thread with the “generations of Adam” recounted in Genesis 5. There it reiterates the link between the *adam* species’ divine image and reproduction. However, it adds an important detail: the perpetuation of the human through reproduction is itself a reproduction of an image. In this way, the reader can retrospectively understand the relationship between Adam (the proper noun) or *adam* (the species) and God to be one of kinship. Genesis 5 begins by reminding us of Adam’s creation in God’s image (Gen 5:1), with Adam then begetting his child Seth “in his likeness and in his image” (Gen 5:3).¹¹ Given the transmission of image and likeness from God to Adam and from Adam to Seth, we might be forgiven for understanding “image and likeness” not just as an incidental or even “common sense” note about the son resembling the male parent, but rather as a fundamental feature of human reproduction itself. Although Genesis 5:2 repeats the claim in Genesis 1:27 by referring to Adam with the plural sexgender (“male and female [God] created them”), there is definitely a patrilineal emphasis to the chapter’s statement regarding the “book of the generations of Adam” (Gen 5:1). We see this initiated in Adam begetting Seth, which is then repeated through ensuing generations: the chapter consistently describes only fathers “begetting” (the causative of *y.l.d.*) named firstborn sons, following with the more generic “and he bore sons and daughters” (e.g., Gen 5:4, 7, 10).

The third time we find the image of God surfacing is in the deity’s injunctions to Noah after the flood (Gen 9). There, God also affirms the blessing of reproduction and human domination of animals and offers something new: unlike the vegetable-only diet in the Garden of Eden, humans are now permitted to kill and eat animals. God then prescribes capital punishment for the killing of humans, again citing the image of God, and repeats the injunction to reproduce.

As E. B. Firmage argues, these Priestly episodes in Genesis “establish the philosophical underpinning of the dietary law” in Leviticus 11.¹² Within the meandering narrative of the later books of the Pentateuch, Leviticus 11 is part of the (Priestly) instruction given to the Israelites in the wilderness. It conveys rules designed to determine whether or not an animal is permissible for consumption and, relatedly, whether or not its dead body can transmit impurity. Certain animals are marked as ritually impure, meaning that they cause humans to contract impurity either through ingestion or physical contact with their dead bodies.¹³ While the particulars of classification in Genesis 1 are not echoed in Leviticus 11, the basic classes of living creatures (of the earth, of the water, and flying creatures) are reanimated, albeit with the latter being divided into what we might think of as birds and winged insects.¹⁴ In line with their interest in determining which animals are permitted for consumption and which are not, the Priestly authors enumerate particular “species” (in contemporary terms) such as hare and pig, some of which are tagged with “of its kind” (e.g., “the raven according to its kind,” Leviticus 11:15).

Much ink has been spilled in efforts to discern the logic of the pure/impure divisions among species. Mary Douglas's early argument is perhaps the most famous: the classification of certain animals as pure upheld normative categories, while also doing the symbolic work of social boundary maintenance.¹⁵ (Mammals that did not both chew the cud and have split hooves were considered anomalous; birds of prey were considered not typical, as were fish that did not have fins and scales.)¹⁶ Naphtali Meshel notes that the labeling of animals as pure and impure as such (in addition to having pragmatic implications about consumption and contact) points to the Priestly desire to classify beyond ritual repercussions.¹⁷ There is no elaborate explanation in Leviticus 11 itself about the specific logics of its classifications. However, in the closing of the chapter (Lev 11:43–47), the phrases “because I am the Lord your God” and “you shall be holy because I am holy” each appear twice, bookending “and you shall not impurify yourselves with any creeping creature that swarms (*romes*) upon the earth” (Lev 11:44).¹⁸ Thus, while the particulars are not justified, the overall impression is that the injunction against impure creatures and the classifications that preceded this are bound up with holiness and being Godlike.

The chapter closes, summarizing itself as “the instruction (*torat*) about the animal (*behemah*), and the flying creature (*‘of*), and the animate life-form (*nefesh hayah*) that swarms (*romeset*) in the water, and the animate being (*nefesh*) that creeps (*shoretset*) upon the earth, to distinguish (*lehavdil*) between the impure and the pure, and between the life-form that may be eaten and the life-form that may not be eaten” (11:46–47).¹⁹ The Priestly idea of distinguishing or separating (*b.d.l.*) nonhuman life along binary lines of im/pure and don't/eat echoes the establishing acts of creation (*b.d.l.* in Gen 1:4, 6, 7, 14, and 18). The Priestly arc from Genesis 1, Genesis 5, and Genesis 9 to Leviticus 11 gradually narrows the entailment of human dominance over other beings. On the one hand, the *adam* species is an image of God. By virtue of Adam's transmission of image and likeness to Seth, we could infer that *all* Seth's descendants—that is, all *adam* creatures are also in God's image. On the other hand, we begin to see a certain narrowing with the chapter's focus on patrilineal reproduction and its ensuing elision of wives, mothers, and daughters (as well as of other non-firstborn sons). There is a corresponding narrowing in human-animal relations: in Genesis 1 humans are to rule over animals but to only eat fruit and greens. After the flood, Noah and the other remaining human beings are now permitted to kill and eat animals but not to consume their blood. Leviticus 11 contracts yet more: a subdivision of humans—Israelites—may eat only a particular selection of (pure) animals.²⁰

This Priestly vision thus successively circumscribes both sides of the human/nonhuman dyad.²¹ These ever-narrowing concentric circles rest on a series of hierarchical binaries between human and nonhuman, pure and impure, Israelites and non-Israelites (and, among Israelites, between the priests and nonpriests). The Priestly view—that humans are made in the image of God—thus functions to

underpin a peculiarly human type of reproduction as well as related hierarchical divisions among beings. Or to put it in reverse, fine-grained distinctions among kinds, upheld by priests in the context of human and animal sacred commerce, are dispersed by Israelites in their dietary and purity practices, and, more generally, by the entire human species in its domination, killing, and consumption of nonhuman animals. The rabbis inherit these narratives, distinctions, and their hierarchical foundation in divine-human resemblance and human-animal difference, but, as we will see, they rework them in some unexpected ways.

FROM ORDER TO CONTINUA

Just about half a millennium later, after the destruction of the Temple, the first generations of rabbis—the Tannaim—emerged in Palestine.²² The texts in which their teachings are conserved make clear that the Tannaim were no less interested than the Priestly authors in mapping their world. Yet, while the rabbis draw their creaturely nomenclature from Genesis and Leviticus, they do not faithfully mimic Priestly classificatory logics. In Genesis 1, for example, life-forms are named according to the tripartite division of creatures of the earth, the water, and the skies. The term *behemah* (animal, lit. “mute” from the root *b.h.m.*)²³ and *hayah* (lit. living being) fluidly and somewhat inconsistently refers to cattle or other creatures of the land and sea. The terms *behemah* and *hayah* are hardly used in Leviticus, but when they are, they seem to function interchangeably to describe a slew of pure/impure species. The Tannaim, however, construe *hayah* and *behemah* as paired and opposed technical terms, referring respectively to wild animals versus domesticated animals. They further create a tripartite cluster of *hayah*, *behemah*, and *’of* (fowl).²⁴

Similarly, the Tannaim deploy the pairing, “forbidden creatures and swarming creatures” (*sheqatsim u-remasim*). Genesis 1 uses the noun *remes* thrice to designate the swarmer (or crawler) and the verbal form swarms, crawls, or slithers four times—for example, “the living being that slithers” (*nefesh hahayah harome-set*—Gen 1:21).²⁵ Leviticus uses the verbal form only, twice: on the first occasion it is applied to a forbidden creature; on the second it occurs in an unmarked case.²⁶ The form *sheqets* as a zoological marker appears neither in Genesis nor Leviticus. It does, however, surface in Leviticus in descriptive nominal (or verbless) clauses (“it is prohibited”) or in the form of a verb (“distance yourself”).²⁷ Jacob Milgrom argues that the term has two valences.²⁸ In the Priestly authored Leviticus 11:1–41 it has the functional meaning of prohibition with the requirement to distance oneself, much like the term “it is impure.” But in verses 11:43–45 (“be holy for I am holy”), originating in a different authorship according to Milgrom (the Holiness Code), it takes on a different meaning, which is more commonly translated as “abomination.”

The rabbis thus take the unmarked and somewhat broader designation of “swarmer” (*remes*) from Genesis, a designation that barely figures as a descriptor for locomotion in Leviticus, together with their pointedly negatively interpreted “*sheqets*,” and join them into a novel term, which they then deploy as a generic phrase for smaller impure creatures whose ingestion is forbidden.²⁹ A related pair that is similarly invented by the rabbis is “fish and locusts” (*dagim ve-hagavim*).³⁰ The word for fish (*daga*) surfaces in Genesis 1:26 and 28 (“fish of the sea”) as one of the kinds of creatures that humans are to dominate. But no such term is used earlier in the creation of water creatures (Genesis 1:20–22). And it appears not at all in Leviticus 11:9–12’s delineation of permitted and forbidden of “all that is in the water.” The term *hagavim* (locusts) is one of four species of quadruped winged swarming creatures (*sherets ha-of haholekh al arba*) that Leviticus 11 permitted (the remainder are forbidden or *sheqets*) rather than an umbrella term. But for the rabbis a biblical word for particular kinds of permitted locust combined with a generic term for water creatures becomes a generic pair for small, pure, and permitted creatures: *dagim ve-hagavim* (fish and locusts) as opposed to *remasim u-sheqatsim* (creeping creatures and forbidden creatures).³¹

In these examples the rabbis redeploy biblical language to create new creaturely classes. In other instances, they invent terminology wholesale. For example, the rabbis create new terms for large, domesticated animals (*behemah gasah*) and small (*behemah daqah*), which they use to distinguish cows from sheep and goats, respectively. This nomenclature appears across Tannaitic sources. It surfaces particularly in the tractates of the Mishnah and Tosefta on animal sacrifice, and also on Temple donations and tithes (e.g., Temurah, Bekhorot), slaughter for nonsacred consumption (e.g., Hullin), tractates detailing various aspects of impurity (e.g., m. Parah 9:2–3), and the like.

In addition to the classificatory nomenclature discussed, we also find the rabbis engaging in the iterated use of a term that is itself about classification. This is the word *min* (pl. *minim*), often translated as “kind” or “species.” In their organization of animal life—like both Genesis 1 and Leviticus 11—the rabbis associate *min* with different registers of creaturely nomenclature.³² Genesis refers to *minim* of herbs and fruit trees (Gen 1:11–12) and of swarming sea creatures and fowl (Gen 1:21). But Genesis also describes kinds within kinds: Genesis 1:24 refers to the living being brought forth from the land “according to its kind,” and goes on (in Gen 1:24–25) to enumerate three subsets: the animal, the swarmer, and the living land creature (*hayat ha'arets*)—each “according to its kind.” We find even more particularity in Leviticus 11, which describes the falcon, raven, hawk, heron, locust, and more “according to their kinds” (e.g., Lev 11:14–16, 19, 22, 29).

Importantly, for our purposes, even if their classes do not map onto those of the Priestly authors (as we saw above with creaturely nomenclature), the rabbis follow this flexible usage of *min*. They regularly designate creatures within a broader

class, such as those discussed above (e.g., as a domesticated animal kind or a wild animal kind; *min behemah*, *min hayah*).³³ They also append the term *min* to both the pure or impure creatures describing “pure species” or “impure species” (*min tehovah* or *min teme’ah*; e.g., mBekhorot 1:2). The term is also appended to creaturely nomenclature on the level of what we might, again, anachronistically, call species—for example, the “donkey species” (*min hamor*; mBekhorot 1:2a)—and even varieties (e.g., *minim* of wheat; cf. mPe’ah 2:5).³⁴ It is thus that *min*, while serving as a classificatory tag, operates at various registers. As noted in the introduction, in being used flexibly, *min* does not correspond to modern taxonomical definitions of species (nor, obviously, to evolutionary ideas of descent). As with Aristotle’s use of *genos* (“genus”) and *eidos* (“species”), the rabbis’ use of *min* is logical rather than taxonomical in the modern sense.³⁵

The Tannaim were thus not only continuators but also expanders of the Priestly project of classification (we will see this again and again in the next chapter). Their project was still, of course, humancentric. Nonetheless, there exists in Tannaitic writings a significantly different view of human and animal reproduction, distinctiveness, and mimesis. This difference is both a matter of degree and, to some extent, also a matter of kind. The overall effect is that the Tannaim upset a straightforward division between human and nonhuman and the idea that the human is exclusively in the image of God. Their writings do not directly contradict or oppose Priestly ideas. Indeed, not only do they absorb the Priestly classificatory impulse, but they also derive many technical terms—as we have seen, species (*min*), life-form (*hayah*), cattle (*behemah*), and swarming creature (*sherets*)—from terminology coined by the Priestly authors. However, at least with respect to the themes of human reproduction, species distinctions, and what it means to be in the “likeness” or “image,” the rabbis expand and redirect Priestly concepts to rather distinctive effects.

Some of this rabbinic distinctiveness is captured in the following example:

There was a case of a woman from Sidon who three times expelled³⁶ a likeness of a raven (*demut ’orev*). And the case came before the sages, and they said, “anything that does not have something of human form (*mitsurat ha-adam*) is not offspring (*valad*).” (tNiddah 4:6)³⁷

If we put this stenographic narrative next to the account of Adam’s generation of Seth, we see both stark contrasts with Genesis’s story of human distinctiveness and generation, as well as points of contact:

This is the book of the generations of Adam. On the day that God created *adam*, in the likeness of God (*demut elohim*) he made him; male and female he created them, and blessed them, and called their name Adam, on the day when they were created. And Adam lived a hundred and thirty years and begot a son in his likeness (*bide-muto*), as his image (*ketsalmo*); and called his name Seth. (Gen 5:1–3)

From the distinctively human genesis as divine image (and a patrilineal reproductive mechanism that transmits said image), we arrive, several hundred years later, at the upending of both distinctiveness and of reproduction as mimesis. Instead of *adam*/Adam's "generations" (*toledot*) and begetting (*y.l.d.*) of Seth "in his image and likeness" (*bidmuto ketsalmo*) (Gen 5:3), here is a Sidonian woman who repeatedly "expelled" (*hipilah*) a "raven's likeness" (*demut orev*).³⁸ The sages consulted about this thrice-occurring issue declare that because they lack "human form" (*tsurat ha-adam*), they are not offspring (*valad*). This has purity implications: if the raven likeness is offspring, their dead body transmits the impurity of a human corpse (the most severe kind), and, concomitantly, the Sidonian woman is in a state of childbirth-related impurity. Additionally, if the ravenlike creature were a firstborn assigned as male, there are inheritance and priestly redemption repercussions. On its own terms, it is hard to know whether the sages made their decision in this case specifically because of the lack of "human form" in the *particular* being, or as a general rule concerning *ravens* per se, or for birds, or even for all nonhumans. Leaving these uncertainties aside for now, the scenario as a whole queries the inevitability of human generation as mimetic replication.

From the clarity and distinctiveness of the Bible's Priestly account of divinely derived human procreation, we are plunged into the unpredictable, messier, reproductive world of the late ancient rabbis. In this realm, we find creatures, both human *and* animal, which beget offspring very much unlike themselves. It is perhaps tempting to write off such accounts as absurd and bizarre—just the imaginings of rabbinic intellectuals with a propensity for the fantastic. After all, we *know* (or at least take as obvious) that cases of women expelling ravens and the like are impossible (at least according to many contemporary, scientific ways of seeing the world). Similarly relying on contemporary knowledge, as some scholars have done, one might be induced to rationalize such cases either as medical misdiagnoses or as intentionally and self-consciously constructed hypotheticals that are only meant to test the extreme limits of classification.³⁹ Certainly, interpreters who have ventured to discuss this and related accounts have made such moves.⁴⁰ Instead, and in accordance with the introduction to this book, I recommend that we restrain this impulse to naturalize contemporary perspectives and to rationalize ancient sources by retrojecting our own perspectives onto them.

Insights from both disability studies and animal studies enhance our capacity to challenge and further historicize the seeming naturalness of contemporary ways of construing difference and variation, both among humans and between humans and nonhumans. In these areas of study, scholars attend to the varied—culturally and historically specific—ways in which beings are distinguished as divergent versus "normate" and to how this difference is rendered in terms of species analogies and distinctions.⁴¹ Sunaura Taylor—artist and author—combines these approaches in various media. Many of her drawings and paintings explore

the ways that nonhuman animals and people with disabilities are allied in shared otherness. Describing how people have compared her to animals, Taylor declares, “The thing is, they were right. I do resemble a monkey when I walk—or rather I resemble an ape, specifically a chimpanzee.”⁴² Taylor points out that these observations only work as insults in a culture where “being treated like an animal” is a terrible thing. As she puts it, “I do not deny that I’m like an animal. Instead, I want to be aware of the mistreatment that those labeled ‘animal’ (human and nonhuman) experience. I am an animal.” Taylor’s paintings interlace her own body with those of other beings, particularly chickens. Through a playfully realist idiom, that is also deadly serious, she solicits iconographic resemblance between her and her fellow creatures, highlighting how “one large mass of greatly varying beings, are held together by one similarity—they aren’t us.”⁴³ It is thus that her visual argument juxtaposes heterogeneity and the multiplicity of difference versus the homogenizing and ableist gaze of the anthropo-exclusive view that homogenizes this variety.

What might the Tosefta’s raven “likeness” and Taylor’s chicken portraits say to each other? As Kathryn Kueny has shown, the search for resemblance is a “slippery business” and nearly always relies on rhetoric of one kind of another to uphold constructions of authority and filiation. In medieval Muslim sources, she concludes, it is the “tenuous nature of paternity” and “fragile masculinity” that prompts the authorization of specific criteria of resemblance/deviation.⁴⁴ Can we mount an analogous argument for the Tannaim—about the idiosyncratic nature of construing likeness and difference, the fragility of *humanness* (and concomitantly, the fragility of the normate human), and the tenuous nature of reproduction itself, all of which seem to undergird their rhetoric of animality and humanity in these varied cases of human-delivered creatures? It seems to me that such an approach is workable if we do not undermine the force of animal likeness as “mere” talk. There are good reasons to take the rabbis seriously here: and as with Taylor we might note that playfulness and dead seriousness need not contradict each other. The first is that, as mentioned, the rabbis observe species variation in nonhuman generation. Cows spawn camels, sheep deliver goats, donkey horses, and so on. Second, other ancient authors describe such phenomena, as we will see.

The rabbis acknowledge but do not necessarily embrace the fragility of humanness and the vulnerability of its vaunted generative mimesis. They signal their equivocation by describing these deliveries by humans as miscarriages—the parturient is one who “causes to fall,” “expels” or “aborts” (*hamapelet*).⁴⁵ Contrast this with the analogous scenario of the animal who “gave birth” (*yaldah*) to living entities. If the human-delivered entity is *not* considered to be offspring, its flesh, even though nonliving, potentially escapes the rabbinic impurity lens as it is not exactly a corpse.⁴⁶ Withholding offspring status on the basis of insufficient “human form” renders the ravenlike creature “mere” material without any of the usual childbirth-related ritual, purity, and kin entailments or corpse-related disposal. But, in being



FIGURE 5. Rafael Rachel Neis, *Becoming Flora, Becoming Fauna*. Mixed media on paper, 9 in. × 12 in., 2018.

nonhuman (and likely even not assimilable as any species) and nonkin, their body does not even register as a corpse.

Nonetheless, the rabbis' recognition of species variation across creatures pushes against a narrowly humancentric interpretation of the Tannaim. This is to say that a lens of *animality*—as opposed to *species*—is inadequate for a full analysis of the Sidonian human who delivers ravenlike creatures. Tannaitic generation subjects the human, along with a variety of animals, to nonmimetic reproductive outcomes. And, as we will see, how the rabbis parse nonmimetic outcomes is unexpectedly capacious. Even if, as we might expect, the biblical Priestly authors would exclude such entities from classification as human offspring, the Tannaim do not do so. Rather, they acknowledge species variation, resulting in generative queerness. To the extent that the very idea and term species—*specie*, *eidos*, and *min* themselves—derive from and depend on appearance and form, these *transgressive* species forms disrupt expectations that mimetic generative progeny necessarily result from same-species, heterosexual coupling. Even if the rabbis had no desire for the annihilation of classification, their recognition of the susceptibility of reproduction to nonmimetic species blurring is crucial.⁴⁷ In the remainder of this section, we will enter into this dimension of Tannaitic reproduction and explore the ways it *linked* species, including those across the supposed human-animal divide.

Reproductive Variation in Tractate Niddah and Tractate Bekhorot

Before we deepen our acquaintance with reproductive variation across humans and animals, let me foreground the Tannaitic sources we will encounter. The two tractates—in both the Mishnah and the Tosefta—that are of particular importance to us in this chapter are Tractate Niddah (which deals with menstrual purity) and Tractate Bekhorot (on firstborn male humans and animals). Recall that the Mishnah and Tosefta consist of the same tractates. The brief account of the villager from Sidon who gave birth to a raven is in the Tosefta. We'll begin by focusing on human and animal reproductive variation in the Mishnah, with references to parallel and additional material in the Tosefta, as well as to other theories of reproduction in antiquity.⁴⁸ In the third section of this chapter, we'll focus further on those Tosefta parallels to the Mishnah and attend to the significance of their differences with the Mishnah.

The term *niddah* appears in the context of childbirth (Lev 12:1–8) and genital emission of blood—menstruation—in Leviticus 15:19–25. For the Priestly authors it functions as “a technical term for menstrual discharge.”⁴⁹ For the rabbis it entails ritual impurity related to menstruation. Tractate Niddah treats these topics and related matters. Bekhorot, meaning “firstborns,” refers to the biblical demand that firstborn Israelite boys, as well as certain animals (cows, sheep, goats, and donkeys), are consecrated to God (Num 3:13).⁵⁰ While the latter were sacrificed, human (and donkey) firstborns were instead to be “redeemed” with a payment to the priesthood (Exod 13:13; Num 3:45–47). The tractate elaborates various dimensions of these matters. In addition, it treats the inheritance due to firstborn males, as well as the bodily variations (“blemishes,” *mumim*) that exclude priests and animals from the Temple.

On their surfaces, the tractates of Niddah and Bekhorot do not, it seems to us, have much in common. But, as I will show, both dedicate attention to facets of human and nonhuman generation that share common concepts, language, and literary formulation, and that ought to be read together. Here are two such commonalities in the Mishnah's tractates of Niddah and Bekhorot:

she who expels (*hamapelet*) something like a kind (*ke-min*) of domesticated animal, wild animal or bird, whether pure or impure . . . (mNiddah 3:2)

A cow that delivered (*sheyaldah*) something like a kind (*ke-min*) of donkey or a donkey that delivered something like a kind (*ke-min*) horse . . . (mBekhorot 1:2)

The first text comes amid an unsettling list of women expelling various nonhumanlike or partly human entities, and it is paralleled in various tractates in the Mishnah, the Tosefta, and other Tannaitic texts.⁵¹ The second is one of the multiple cases of spontaneously occurring species variation that occurs both in Mishnah Bekhorot, and in Tosefta Bekhorot, as well as elsewhere in Tannaitic literature. Before delving into the larger contexts, contents, and consequences of these two

particular cases, let us first note that they posit similar scenarios with similar language used to describe them. Both involve a species of one kind—a female subject—who expels an entity that is “like” another species (*ke-min*, “like the kind”). In the first scenario a human expels (*hamapelet*) a nonliving entity (as treated above). In the second, a cow gives birth (*sheyaldah*) to a living creature.

In further contextualizing these passages in both literary and historical terms, I will elaborate on a central point: as discussed earlier, these scenarios were not understood as fantastic hyperbole or as nonliteral approximations for contemporary medical diagnoses. Let us begin by looking at the broader passage of which our citation from mNiddah 3:2 is a part:

1. One who expels a piece, if there is blood with it, she is impure (as a menstruant), and if not, she is pure. Rabbi Judah says: either way she is impure.
2. One who expels something like a kind of (*ke-min*) peel, like a kind (*ke-min*) of barley,⁵² like a kind (*ke-min*) of dust, like a kind (*ke-min*) of red flies,⁵³ let her put them into water. If they dissolve, she is impure, and if not, she is pure. One who expels something like a kind (*ke-min*) of fish and locusts (*dagim vehagavim*), forbidden creatures and creeping creatures (*sheqatsim uremasim*), if there is blood with them, she is impure and if not, she is pure. One who expels (*hamapelet*) something like a kind (*ke-min*) of domesticated animal, wild animal, or bird (*behemah, hayah, va-’of*), whether pure or impure (*ben tame’in ben tehorin*)—if it is male she should sit [out the days of impurity] for a male (*zahar*), and if female she should sit for a female (*neqevah*), and if it is unknown she should sit for both male and female: the words of R. Meir. And the sages say: Anything that does not have something of human form (*mitsurat ha-adam*) is not offspring (*valad*). (mNiddah 3:1–2)

This passage delineates, with no apparent surprise, the abundance that may emerge from a woman’s uterus and parses it in terms of potential menstrual or fetal material. This profusion progresses from smaller organic materials and creatures (e.g., red flies) to larger creatures (e.g., fish), through to quadrupeds and birds. These descriptions of uterine materials use standard rabbinic nomenclature for different nonhuman species and tags them as “*min*” (species). We see the rabbinic trinary of wild animal, domesticated animal, bird (*hayah, behemah*), and *’of* (bird) applied to the delivery in question in mNiddah 3:2. We find two additional rabbinic technical terms for pairings of quintessentially permitted and typically forbidden small creatures. We see rabbinic classificatory and creaturely terms of art put to new effects here.

The usage of such classificatory nomenclature means we ought to take the expelled uterine entities that resemble various kinds—peel, barley, dust, red flies, fish and locusts, forbidden and crawling creatures, domesticated animals, wild animals, or birds—seriously. Alongside *min* as a terminology of classification, there are additional details that pertain both to the classification of species according to the broader rabbinic scheme of creatures and to a (perhaps surprisingly)

graphic literalism. I pointed out that mNiddah 3:2 uses both the trinary of animal classification—wild animal, domesticated animal, or bird—as well as the classificatory terminology of pure/impure. This last element has no ultimate impact on the ruling but it conjures a vision of a person bent over the body in question, scanning for split hooves or other “signs” (*simanim*) of a particular “kind” (*min*).⁵⁴ Such details undo the metaphorical force of the modifier “like” attached to “kind” that is peppered through mNiddah 3:2. The *mishnah* describes these various entities as “like a kind of” creature (e.g., *ke-min behemah*, like a kind of domesticated animal). The implied inspection for particular species markings weights the meaning of “like” toward one of likeness and resemblance (rather than mere metaphor or figure of speech) in the same way that a cow delivered something “like a kind of donkey” (*ke-min hamor*). Every instance of the five species variations in mBekhorot 1:2 and the rest of the tractate uses the same locution. This formula reverberates across human and animal cases—and across the tractates of Niddah, Bekhorot, Kilayim, and elsewhere—to the extent that it suggests that the parallel language is citational.

The rabbis’ scrutiny of the excreted contents of a person’s uterus—and, along with it, the graphic literalism of these images of species-variant deliveries—is further sharpened in the dispute between Rabbi Meir (second century CE) and the sages in the last part of mNiddah 3:2. According to Rabbi Meir, for whom the delivery is offspring, the parturient calculates the days of postpartum impurity depending on the gender assigned to it. This detail of gender assignment and that of the precise species (“whether it is pure or impure”) vividly emphasize materiality as they are ascertained through bodily examination.⁵⁵ They substantiate the argument that we must take the formula “*ke-min* + creature” as more than rhetorical convenience or casuistic hyperbole. Instead, they indicate earnest and formal criteria for assessing these materials.⁵⁶

But what is the disagreement between the sages and Rabbi Meir about? As we will see, the difference is about the degree of species difference itself. On both a minority or a majority view we are far away indeed from the biblical idea of the human as an image of God. There is a morphological gaze at work: the rabbis scan the features of these deliveries. In opposition to Rabbi Meir, who allows that the nonhumanlike fetus is offspring and who rules, therefore, that the woman is subject to childbirth impurity, the sages opine thus:

Anything that does not have something of human form (*mi-tsurat ha-adam*) is not offspring (*valad*). (mNiddah 3:2)

The sages do not totally disagree with Rabbi Meir. They do not require, for instance, full human likeness. Instead, their position is more modest: a delivery that looks like an animal must bear *some* resemblance to the human species to be offspring, as well as for all the usual requirements entailed after childbirth to obtain. They do not quantify this “something of”; neither do they qualify “human form.” There

is a spectrum of possibilities: from totally human to totally nonhuman form, with permutations along the way. At what point do the sages exclude a being from the class of human offspring? For the Tosefta's case, at least, we have an answer in the case of the Sidonian woman: a birdlike creature does not qualify. The dispute between Rabbi Meir and the sages in the Mishnah is in part a disagreement about degrees of reproductive dissemblance/resemblance to kind. Rabbi Meir holds that even if there is *total* mimetic dissemblance between a woman and what she produces, the latter is still offspring. The sages do not go so far, but they also do not require total mimesis. Their minimal mimetic requirement is exclusionary, yet it allows part likeness and part unlikeness. On either ruling, we are worlds away from the classificatory clarity of the priests whose human image of God is cleft over and above the animal.

The quasi-humanlike, quasi-animal-like delivery that the sages would allow as offspring is *not* what the Tannaim would have dubbed a "hybrid." For the rabbis a hybrid was a technical term: *kilayim*—the subject of chapter 4 of this book. The Bible refers to *kilayim* as the prohibited combining of different kinds, whether in agriculture, animal reproduction, at the plough, or—in the case of fibers—in garments. For the Tannaim it also refers to the products of such combinations. In reproductive situations, *kilayim* designates the offspring of interspecies coupling. However, for both the human deliveries in Niddah and the animal deliveries in Bekhorot, this is *not* what the sages are contemplating.

If so, and if the wholly animal-like entity produced by a woman is not offspring, in accordance with the sages' view, then what is it? Furthermore, what can we say about the "human form" requirement on which so much depends? We will return to these intriguing questions once we have addressed the species-variant animal deliveries in mBekhorot 1:2.⁵⁷

As with mNiddah 3:2, let's explore the literary setting in which our animal births are embedded:

A cow that delivered something like the donkey kind (*ke-min hamor*) or a donkey that delivered something like the horse kind (*ke-min sus*)—it is exempt from the laws of the firstborn. But what about eating? If a pure animal delivers something like an impure kind (*ke-min temeah*), it is permissible to eat [the offspring]. If an impure animal delivers something that is like a pure kind (*min tehorah*), it is forbidden to eat. For that which emerges from the impure is impure, and that which emerges from the pure is pure. (mBekhorot 1:2)⁵⁸

The obligation to donate the firstborn pertains to (male) firstborns of pure kinds (as well as to the donkey, which itself is classified as impure, but which is to be "redeemed" with a pure animal instead). The classification of animals as pure or impure functions as a means of species designation in and of itself (following Leviticus 11), inasmuch as "kind" for the Tannaim is a logical grouping of members who share some characteristics rather than a taxonomical operation. Both divine altar and human table can only accept properly slaughtered pure animals, but

the Temple has narrower standards, excluding those with “blemishes” (*mumim*). Tractate Bekhorot vastly expands the lists of biblical “blemishes” that disqualify animals and priests from Temple sacrifice or service.⁵⁹ These blemishes include all kinds of bodily variation among nonhuman animals and human priests, including the possession of features of different species.⁶⁰ Many of the sources about species variation in animals emanate from this tractate, including the one mentioned above.⁶¹ The tractate also considers human firstborn primogeniture and priestly redemption. As part of this it cites mNiddah 3:2: the determination of whether a delivery that resembles a nonhuman species is offspring may, as we intimated earlier, affect firstborn considerations.⁶²

In mBekhorot 1:2 a cow’s firstborn is disqualified from the firstborn obligation if he is “like a donkey kind”; so is the donkey firstborn if he is “like a horse kind.” “Fitness” for the Temple was based on an exclusionary aesthetics that othered “blemished” bodies while upholding idealized, normate bodies of humans and animals.⁶³ But this did not speak to ontology or classification of these creatures. For the latter, the Mishnah returns to the simple question, “but what about eating?” The ultimate test for this creature’s species designation is not its eligibility for Temple donation, but rather its kind-based (im)purity and thus its admissibility for human ingestion. And kind is determined not by how the animal *looks* but by its parentage. This is then elaborated in what I style the Tannaitic “generation principle”:

If a pure animal delivers something like an impure kind (*ke-min teme'ah*), it is permissible to eat [the offspring]. If an impure animal delivers something that is like a pure kind (*ke-min tehovah*), it is forbidden to eat. (mBekhorot 1:2)

What does this mean for the particular species-variant deliveries in our passage? The donkey is an impure animal. But the creature in our *mishnah* who looks *like* the donkey kind (*ke-min hamor*) is permitted for slaughter and consumption by virtue of its bovine parentage: he is cow offspring. The generation principle also states that if a donkey births a cowlike creature, that creature is of the donkey kind (and hence not permitted despite its looks). The principle is summarized in the final succinct statement of the *mishnah*: “for that which emerges from the impure is impure, and that which emerges from the pure is pure.” This is not just a rule to use for classification; it also constitutes a constraint on the possibilities for biological reproduction. It is also not, as we will see briefly below (and at greater length in chapter 4), a matrilineal principle of speciation.

How do these animal cases link to the dispute between Rabbi Meir and the sages in the human case of species variation in mNiddah3:2? There is no analogous dispute about whether or not the species variant animal is offspring in mBekhorot 1:2. In fact, the anonymous, unchallenged voice echoes Rabbi Meir’s view in its substance.⁶⁴ Or, to put it conversely, Rabbi Meir’s view on cases of species variation in human deliveries accords with the principle of generation according to which

what comes out of a creature is necessarily of the birthing creature's kind. The sages' requirement for "something of human form" seems in fact to exclude the human from the broad principle of generation and suggests stricter species gate-keeping, in what surely amounts to a measure of human exceptionalism. Even so, as noted, these sources have moved us away from the adamic distinctiveness of the divine image and its mimetic necessity in reproductive processes. The very fact that humans, along with other animals, are subject to these same unpredictable vicissitudes of dissemblance chastens human exceptionalism to its generative core. Species seemingly slip into—or at least out of—the uteruses of other species; even the human is caught up in this web of reproductive and species queerness. As we have seen to some extent, and as we will elaborate more fully in subsequent chapters, the Tannaim expanded the staccato bestiary of Genesis, and the sparse animal purity scheme of Leviticus, into a reworked map of creaturely life. This rabbinic proliferation and reconfiguration of life-forms goes hand in hand with their realignment of the Priestly schema in the realm of reproduction and species. What I am trying to convince my reader of is that altogether what we have here is a variety of (perhaps surprising) ideas about creatureliness—including *even* human creatureliness—and reproduction that do not quite uphold, and even challenge, the rather more hierarchical Priestly binaries embedded in Genesis and Leviticus.

GENERATION AND VARIATION IN LATE ANTIQUITY

The issues we have examined so far were themselves a variant of a larger ancient conversation about reproduction, species, and resemblance. Let us spend a little time listening to some of those conversations. I do not claim that the Tannaim read these texts in which some of these conversations took place (although there is a constellation of moves in *Tosefta Bekhorot* that bears curious echoes to a similar set in Aristotle's *Generation of Animals*).⁶⁵ But, as we will see in the following tour of the ancient Middle East and Mediterranean, the rabbis were far from alone in attesting to a world of reproductive variation and unpredictability.⁶⁶

Over a millennium earlier and several hundred miles east, Babylonian scribes compiled a long list of omens, known as the *Summa Izbu* ("anomalies"). Compiled around 1300 BCE as part of a much larger scribal collection, the *Summa izbu* collections consist of long lists of "anomalous" human and animal births and their predictive significance. The births are posed as protases, "if an anomalous (newborn human or animal) . . .," followed by apodoses in the form of what is portended. Francesca Rochberg urges us to forgo notions of empiricism that would lead us to judge such cases as "ontologically suspect or even impossible."⁶⁷ She declines to follow scholars who rationalize such birth scenarios via modern medical or scientific models, or who view them either as absurd fictions or as logically generated extensions of observed cases.⁶⁸ Rochberg points out that the *Summa izbu* collections themselves do not hierarchically distinguish "real" from

“absurd” cases, and she warns us against retrojecting seemingly “commonsense” understandings of objectivity and empiricism onto Babylonian science.⁶⁹ I suggest we do the same with our other ancient sources too. Working within cultural contexts of Babylonian science and noting how these observations are patterned and framed, we can understand its “conceptual framework.”⁷⁰ The Babylonian science of divination made for a world replete with signs through which the gods communicated. Just as the expert could interpret signs in the everyday for what was to come, so might they diagnose illnesses or know how to maintain the cosmic order when a person harmed another.⁷¹

While the apodotes in rabbinic lists of deliveries in mNiddah and mBekhorot are not portents, their content is similar to that of the *Summa izbu*: both lists include species variation, deliveries of dual-sex young, deliveries of body parts, and more. The rabbinic texts also echo the older and longer lists in form, juxtaposing a scenario with a kind of consequence, even if, in the case of the rabbis, it is ritually significant. Like the *Summa izbu*, the totality of the chapter (as well as its Tosefta parallel) comprises what in contemporary terms might qualify as “empirically observable” and “fantastic” deliveries, but without any distinction between the two.

There are significant differences between the much more extensive lists of the *Summa izbu* and the more limited roster in the Mishnah and the Tosefta in both the tractates of Niddah, and Bekhorot. Besides the quantitative discrepancy, the Mishnah assesses whether uterine emissions as menses (*niddah*) or offspring (*valad*), or as firstborn or pure, each of which entails specific consequences.⁷² In those tractates the assignment of fetal, menstrual, or neither status to a uterine entity has consequences in the realm of inheritance, sacrificial ritual, and priestly redemption of firstborns, respectively. Thus, if we compare the anomalous delivery and the portent in the *Summa izbu* to the delivery, status, and ritual implication in the Tannaitic sources, we find a much more pragmatic and engaged role in the latter. Rather than the delivery being just one (of many) divinely generated signs in the phenomenal world to be interpreted, the rabbinic version thereof is subject to a forensic gaze that seeks to dictate consequent human action. Both texts, however, insist on, are shaped by, and take for granted a coterie of formal experts—people who claim authority to interpret uterine emissions of both humans and nonhumans.

Despite these important differences, Rochberg explains that the Babylonian omen lists do not consider variant births to be “monstrosities”; they are neither “unnatural” nor are they divine punishments. Some, in fact, contain normate features, and many of the “atypical” deliveries portend positive events.⁷³ The Tannaitic texts similarly lack a moralizing or stigmatizing tone; instead, no matter how seemingly divergent these creatures are, the rabbis engage with them pragmatically, in order to figure out the ramifications for classification, ritual, property, and so on. Rochberg contrasts the ways that the *Summa izbu* registers the anomalous with later Greco-Roman and Christian characterizations, in which such

phenomena are nearly always seen as contrary to nature or as divine retribution for some misdeed.

Anomalous deliveries—and particularly species variation—in Greek and Roman writings are not in the “if . . . then” form, but exist rather as recorded events followed by their chronicled consequences, and so as retrospectively signifying portents or prodigies. In real time, then, such beings pointed to the future. Such writings originated in Hellenistic and Roman contexts across South West Asia, North Africa, and the Mediterranean from the fifth century BCE to the fifth century CE. In the first century, Josephus describes portents that preceded the destruction of the Jerusalem temple, including a cow that delivered a lamb.⁷⁴ Phlegon, author of *The Book of Marvels*, and an approximate contemporary of and neighbor to the Tannaim, describes a series of “wondrous” births by women.⁷⁵ These include a monkey, an infant with the head of Anubis (the dog-headed Egyptian god), and a pair of snakes; at least the first case is explicitly marked as an omen and all are related to political events.⁷⁶ Similar cross-species portents appear in the writings of Herodotus, Aelian (a sheep delivering a lion), Tacitus, Livy (a woman giving birth to an elephant-headed infant), Dio, and Pliny (women delivering snake and elephant).⁷⁷ In every instance, these births function as warnings. Given this consistency, it becomes all the more noteworthy that the Tannaim writing in the Roman province of Palestine do not consider species variation as portents: this arguably relates to a broader disdain of omens and their interpretation as the “ways of the Amorites.”⁷⁸ What we do see in common across all this evidence is that species variation is understood to take place among all creatures, including but not limited to humans.

Not all ancient people considered species-variant deliveries for the ways in which they pointed to *future* consequences. Some investigated them as consequences in themselves and sought to understand their causes. Both Pseudo-Aristotle and Aristotle are useful examples here, as they speculate about both the causes and subsequent classifications of variant deliveries. In Tannaitic texts, there is little explicit illumination of reproductive mechanics that matches these other ancient writings. As we will see, Tosefta Bekhorot expresses biological principles that underpin variant deliveries; while far more succinct than those Aristotle gives, these nonetheless dovetail with his ideas.

Problems, pseudepigraphically attributed to Aristotle, asks: why is it that a variety of entities emerge from our body, yet only some of these entities merit the label “offspring” (*ekgonon*)?⁷⁹ Pseudo-Aristotle distinguishes between genuine offspring, which come from seed (semen), and things that “come from something foreign.” However, sometimes even seed can become corrupted, producing “monsters” (*terata*). Like entities generated from “foreign” sources or like worms generated by “excrement”: they are not offspring.⁸⁰

Although Pseudo-Aristotle provides a kind of (circular) explanation for his determinations, his purpose is similar to that of Mishnah Niddah and Bekhorot:

he wants to classify of variation. His criteria—the mark or sign (*sēmeion*) by which we can distinguish offspring versus entities derived from “corruption”—is likeness: offspring “comes to be naturally *like* that from which the seed came—if from a horse, a horse, if from a human, a human.”⁸¹ Resemblance is the key to species classification. In this regard he is perhaps closer to the Priestly authors than the rabbis. Even as Pseudo-Aristotle accepts the apparent randomness and unpredictability of generation, variation is excluded.⁸² In this respect, he seems to go further than the sages in mNiddah 3:2. They, after all, accept variation, requiring just “something of” human resemblance. Perhaps, though, the sages would affirm that the entity they designate as *not* offspring (*valad*) is ultimately a “foreign” body, akin to “excrement.”⁸³ This we can extrapolate because there seem to be no purity consequences if the uterine entity is found to be neither menstrual nor fetal: thus, unusually, this fleshy product is invisible—just as excretions like urine and excrement are—in the scheme of rabbinic purity.⁸⁴ The parallel to mNiddah 3:2 in the Tosefta affirms our surmise. It recounts two narratives of women who expel variant entities (tNiddah 4:3–4). The sages consult physicians who in each case parse the entities as a uterine growth and a wound. This is as close as the Tannaim come to discussing etiology.

Not all ancient thinkers took such a hard line as Pseudo-Aristotle. Aristotle himself showed more flexibility. While he flourished in fourth century BCE Athens, his ideas continued to circulate throughout late antiquity. They surfaced, whether acknowledged or disputed, in a variety of “scientific,” “medical,” “natural history” writings from Galen to Pliny.⁸⁵ Aristotle provides a useful contrast to Pseudo-Aristotle. While he hews narrowly to resemblance as an ideal, he is more inclusive of variation as it occurs.⁸⁶ For Aristotle, offspring ought, all things being equal, to resemble the male parent. For him this relates to the very mechanics of reproduction: resemblance is tied to male seed, which acted on female matter (blood), imparting form to it. Failure of the seed to control the material caused deviation from this ideal.⁸⁷ The form in question was both specific—features and gender of the male parent—and generic—including species. Note that “form” (*eidos* in Greek, or *tsurah* in Hebrew) is how the sages express human resemblance: *mi-tsurat ha-adam*.⁸⁸ However, Aristotle, like Pseudo-Aristotle and the Tannaim, acknowledges that divergences do occur. Ranging from minor to major, Aristotle ranks these anomalies as follows: offspring resemble the female parent; some ancestor (e.g., a grandparent); a generic human (i.e., not an ancestor); and even, something that “no longer has the appearance of a human being at all, but that of an animal” (*zōon*, or living being).⁸⁹ He then follows with examples moving from human-born but animal-like variation to animal-born variation.

But here is where Aristotle differs from the author of the Pseudo-Aristotelian *Problems* and the majority view in mNiddah 3:2. While Aristotle dubs these variations as “monstrous” and “contrary to nature,”⁹⁰ he is at pains to argue that they *are* still offspring.⁹¹ This “inclusiveness” of partial to radical variation as genuine

progeny, coupled with the tagging of certain sorts of dissemblance as monstrosity, is key to the seemingly unpredictable outcomes in reproduction. Aristotle's insistence that whatever emerges from a particular animal is a member of that animal's species is famously expressed with the principle, "if from a human, a human." While Pseudo-Aristotle infused the same principle with the caveat of resemblance, effectively rendering it into "*only* if it resembles a human is it a human, and if not, it is not a human," for Aristotle, the principle serves to admit variation. We ought to think of Aristotle's principle as the equivalent of the generation principle that we saw in mBekhorot 1:2, "that which emerges from the impure is impure, that which emerges from the pure is pure." As we will see there is even closer adherence to this Aristotelian principle in Tosefta Bekhorot's version of the generation principle. As I have noted elsewhere, there are several curious convergences between Aristotelian and Tannaitic reproductive thought and biology.⁹²

In the same section of the *Generation of Animals*, which is where Aristotle explains why offspring resemble or differ from their parents in one way or another, he is keen to clarify one thing. While he acknowledges that offspring that radically or partly differ from their parents are indeed born, he flatly denies that these can be the product of two different species' coupling (beyond a small range of species). He explains that variation in reproductive modes and "widely different" gestation periods across species—listing those of humans, sheep, dogs, and oxen—preclude the gestation of hybrids.⁹³ This fits with his emphasis that even widely divergent deliveries are still offspring. Their likeness to other species, he stresses, are "resemblances only."⁹⁴ This means, for example, that the centaur is *not* a hybrid, but merely appears as such.⁹⁵ We will see that the rabbis' extended version of the generation principle in tBekhorot 1:9 (and tKilayim 5:8) mandates a similar conclusion.⁹⁶

Like Aristotle, the Tannaim tolerate a range of species variation, including certain kinds of animality in humanly delivered entities.⁹⁷ Aristotle maintains a distinction between ontology (or classification) and aesthetics as it conforms to or departs from an ideal body; we see a similar gap between cultic law on blemishes versus classification for the Tannaim.⁹⁸ The terminology of "monstrosity" has no precise analog in Tannaitic writing. At the same time, we may ask whether the "blemishes" (*mumim*) of humans and animals that uphold idealized, normate bodies, are the functional equivalents of "monstrosity." As stated, the Tannaim broadened the biblical category of *mum* for priests and animals to include many additional forms of variation. They explicitly declared about the additional animal blemishes the following: "these [same] blemishes, whether permanent or temporary, disqualify the human (*poslin ba-'adam*)."⁹⁹ They extend this analogical thinking to map priestly blemishes onto the bodies and capacities of potential women as marriage partners: "all the blemishes (*mumin*) that disqualify priests disqualify women."¹⁰⁰ The tone and consequences are ostensibly technical, pragmatic, and material rather than explicitly moralistic. Variation from the normate body does not call into question the priest's species classification as human or the camel-like

creature's classification as a cow. Nonetheless, the inverse of the "blemished" body is an idealized able-bodied or normate creature, whether human or nonhuman. Moreover, given that obligation is a mark of status for the rabbis, it is hard to see the exclusion of a divergent priest or cow from the Temple in anything other than stigmatized terms.¹⁰¹ Finally, given that the "blemishes" pertaining to animals are the basis for those pertaining to human priests, and since the latter form the ground of those pertaining to potential wives, we see that the seemingly narrow purview of cultic exclusion has far broader implications. Perhaps the distinction between the expansive species "ontology" and the exclusionary and ableist "aesthetics" of "blemishes" are less meaningful given the ways that the latter constricts possibilities for some beings.

Unlike Aristotle and Pseudo-Aristotle, the Tannaim exhibit a curious lack of interest in the causes of variation. This changes for the later rabbis who consider how various forms of progeny come to resemble one parent or another, as well as how entities and perceptions within and without the parent dyad impact fetal appearance. Such deliberations find company with contemporaries of the Tannaim such as Soranus, Pliny, Oppian, and Heliodorus.¹⁰² As in these Greco-Roman sources, the later rabbis consider such mechanisms not only as retroactive explanations for parental (most often paternal) mimetic resemblance or dissemblance, but also as prospective eugenic tools.¹⁰³ Furthermore, unlike the Tannaim, but in company with some Greco-Roman and Christian sources, some later rabbinic texts frame dissemblance, whether related to human devolution (humans becoming animal-like) or to sexual transgression, in moralizing terms.

We just noted how "blemishes" function as exclusionary devices even for the Tannaim and how they articulate them as part of pragmatic ritual orderings and classificatory programs. We observed that this quite different from the ways in which variation is tagged as "monstrous," "portending," or as the opportunity for moralizing in Greek, Roman, and Christian sources. The writings of Roman jurists preserved in Justinian's *Digest* echo the pragmatic tone, substantive concerns, and even the *ratio decidendi* of Tannaitic sources on variation.¹⁰⁴ Even from the terms that they were considering, we can see that the Roman discussion is more loaded: Paul and Ulpian respond to questions about monsters (Paul and Ulpian), portents (Paul), or prodigies (Ulpian). Were these to be considered offspring—*partus* or *valad* in rabbinic terms—or children (*liberi*)? Paul distinguishes between those who "abnormally procreated in a shape totally different from human form" (*formam humani*) versus those that have multiple limbs.¹⁰⁵ He does not consider the former "monster or prodigy" to be in the class of children (*liberi*); the latter are offspring (*partus*) and benefit the parents under the *ius liberorum* (law designed to reward parents). Eerily echoing the sages in the case of childbirth impurity (Tractate Niddah), inheritance (Tractate Bekhorot), and postchildbirth sacrifices (Tractate Keritot), he disqualifies such entities on the basis of lack of "human form" (*formam humani*—the equivalent of *tsruat ha-adam*).

Ulpian, on the other hand, determines that a delivery that is “not of human form (*non humanae figurae*), that is some other offspring, more of animal rather than a human (*animalis quam hominis, partum*)” does entitle the mother to alimentary payment.¹⁰⁶ There is no reason, he states, to blame parents or penalize them. Elsewhere, Ulpian further allows that the delivery of an “incomplete being (*non integrum animal*)” impacts the beneficiaries to a will (i.e., can break a will).¹⁰⁷ The disagreement between the two jurists about whether deliveries of creatures without “human form” (*formam humani* or *humanae figurae*) are offspring (*partus* or *liberi*) is strikingly similar to the dispute between Rabbi Meir and the sages about whether such a delivery is offspring (*valad*) requiring “human form” (*tsurat ha-adam*). The criteria for human form and monstrosity are similarly unstated by the jurists. Whereas Paul may imply a judgmental stance toward such deliveries, he shares with Ulpian an overwhelmingly pragmatic focus on questions of classification, status, and consequence, related in this case to legal or social ordering. The rabbis also concern themselves with such matters but extend beyond to questions of ritual and purity.

Like Begets Like, Except When It Doesn't

As Daryn Lehoux puts it, there was a general expectation in antiquity that “life affects like” (in the realm of reproduction this translated into “like begets like”)¹⁰⁸ Yet the material we have briefly toured from fourteenth-century BCE Mesopotamia to third-century CE Palestine points to a widespread and long-lived recognition that this governing principle of life itself did not always obtain. My aim in this review was less to posit some line of knowledge transfer across these diverse cultural moments than it was to dispel any suggestion that the rabbis were peculiar in describing bodily variation, including cross-species resemblance, in a matter-of-fact fashion. The knowledge about these sorts of diversity that was generated by the rabbis may have been inflected toward different ends than those of the scribes of Babylonia, the efforts of Aristotle, or the decisions of Ulpian. But that does not mean it was any less determined to understand and know the world and its denizens, their coming into being, and their passing away.

Most of these authors—whether natural historians, scribes, divination specialists, historians, jurists, or rabbis—claim a kind of expertise about how to understand variation. These people variously predict, diagnose, experiment, study, scrutinize, and try (at least) to determine the meaning of the contents of animal and human uteruses. Theirs is obviously a very partial view that occludes the knowledge, experiences, and affective lives of the human and nonhumans (also) very much involved: pregnant people, midwives, mothers, caregivers, kin, shepherds, cows, sheep, goats, and so on. That is, to the extent that we are talking about science or ways of knowing the world, we are largely reliant on the writing of people gendered as men writing about the bodies and experiences of beings that they construe and construct as women and as animals.¹⁰⁹ Even as I urge us to incorporate the rabbis into this “history of science and medicine” we must similarly account for the



FIGURE 6. Rafael Rachel Neis, *Canine Metathesis* (Scribal Errors series). Mixed media on paper, 5.5 in. × 5.5 in., 2018.

gendered and political ways in which knowers and known were entangled. Faced with the tenuous character of reproduction and even humanness, Babylonian scribes subsumed this knowledge within a generalized legibility and susceptibility of all phenomena to point to meaning beyond themselves, with the scribes as expert interpreters. For the rabbis, species variation is just one of the many things that falls under the assumed aegis of their expertise, along with all the other stuff that comes out of bodies: flesh, bone, semen, blood, and other liquids.

In ancient Babylonian scribal cultures the principle of mimesis was less about reproduction and more about experts who could read representations of what was to come across a variety of phenomena (including, but hardly limited to, reproductive events). However, in Roman sources, species variation and other kinds of difference were viewed as harbingers of unsettling news. Later natural historians and paradoxographers infused a fetishizing othering into such accounts. While Roman jurists used the fraught language of monstrosity to describe species variation—in human reproductive contexts—their rulings were without such affective or moralizing tones. Such a pragmatic posture also inflects the Mishnah, which considers human and animal species variation alike, albeit, as I noted, not without internal disagreement. The abundance and endurance of interest in species variation in generative contexts is striking. It seems to tell us something about the fragility of generation and of species boundaries. Yet the range in how people framed and grappled with these recurring themes ought to caution us against explanations that rely on essentializing and transhistorical accounts of “nature.”

THE SAMENESS OF DIFFERENCE

We earlier noted a conflict and a contradiction among the Tannaim. There is conflict between Rabbi Meir and the sages about whether to admit or to exclude the radically species-variant creature as human offspring. There is a contradiction between the sages' requirement for "some human form" in mNiddah and the principle of generation in mBekhorot that unqualifiedly admits all deliveries as offspring. One way to resolve any apparent inconsistency is to assume that the principle of generation only pertains to nonhuman generation: we can then argue that the sages' qualified acceptance of variation operates only in the human case.¹¹⁰ That, in turn, suggests that despite the similar language and conceptual apparatus in Niddah and Bekhorot, a majority adherence to human exceptionalism persists. This would not be a surprising outcome by any means. And yet an examination of the Tosefta texts that parallel the Mishnah's (again, Tractates Niddah and Bekhorot) yields yet another set of perspectives. Tosefta Bekhorot makes significant changes to the generation principle and Tosefta Niddah intervenes substantively in the dispute between Rabbi Meir and the sages.

We begin with the parallel to mBekhorot 1:2 in the Tosefta. Recall that in the Mishnah the scenario entailed a cow delivering something like the donkey species or a donkey delivering something like a horse species. After dispensing with the question of their eligibility for the firstborn donation, the Mishnah asked about their classification in terms of consumption and then issued the generation principle. The parallel in Tosefta Bekhorot is considerably expanded and more involved.¹¹¹ It raises various instances of species-variant deliveries from the "pure animal that gave birth to an impure kind" (tBekhorot 1:6) and vice versa, to cows that give birth to camels (tBekhorot 1:9), or to lambs (tBekhorot 1:13). Like mBekhorot 2:5, it envisions partial dissemblance/resemblance: oxen, sheep, and goat deliveries may have "some signs resembling its father" (tBekhorot 1:5); an impure kind delivered by a pure kind may have "some of the signs" (tBekhorot 1:6); and a camel born of a cow may have its "head and majority resemble its mother" (tBekhorot 1:9).¹¹² There is a dispute in the Tosefta that is surprising: the lone Rabbi Simon opines that a camel born from a cow is—despite its bovine parentage—a camel. Immediately following and in opposition to this opinion is a lengthy version of the generation principle. Significantly, it is followed by a list of various animals' reproductive periods (length of gestation) and modes (e.g., eggs versus live birth: tBekhorot 1:10–12):

9. Rabbi Simon says: what does [Scripture] come to teach you by having *camel* (Lev 11:4) *camel* (Deut 14:7) twice? To include the camel that is born of a cow as if it were born of (*kenolad min*) a camel. And if its head and majority resemble its mother's, it is permitted for eating.¹¹³

And the sages say: *that which emerges from (hayotse min) the impure is impure, and that which emerges from (hayotse min) the pure is pure*, for an impure animal is not born of (*yodedet min*) the pure, neither is a pure animal born of (*yodedet min*) the

impure. And not a large, domesticated animal (*behemah gasah*) from a small domesticated animal (*behemah daqah*), nor a small one from a large one, and not a human (*adam*) from any of them, nor any of them from a human (*me'-adam*).¹¹⁴

10. A pure small domesticated animal gives birth at five months; a pure large domesticated animal at nine months,¹¹⁵ an impure large domesticated animal at twelve months; a dog at fifty days; a cat at fifty-two days; a pig at sixty days; a fox and creeping creatures at six months; the wolf, lion, bear, panther, leopard, elephant, baboon and monkey at three years; the snake at seven years.

11. Dolphins give birth and grow (*molidin u-megadlin*) [offspring] like the human (*ke-adam*); impure fish spawns (*mashrits*); pure fish lay eggs. (tBekhorot 1:9–11)

Rabbi Simon is wrong according to the generation principle: the camel born of a cow is a cow because “that which emerges from the pure is pure.” On its face, this principle is simply inserted to refute Rabbi Simon. But note how much longer this version of the principle is than the Mishnah’s “for that which emerges from the impure is impure, and that which emerges from the pure is pure” (mBekhorot 1:2).¹¹⁶ We see that the Tosefta has supplemented the Mishnah’s version with an additional negative formulation, “for an impure animal is not born of the pure . . .,” and that its remainder continues in this vein: “an \times cannot be born of a y ”. It has also extended the principle beyond the pure/impure categories of the Mishnah’s version. We learn that, aside from the impossibility of these various kinds emerging from each other, neither can this occur across other classifications—large and small cattle and even across all the aforementioned (*kulan*) and the human (*adam*). There follows a conspicuous display of animal reproduction and embryology. As I have argued elsewhere, these added elements serve an explanatory function: given the specific gestational modes and periods, it is impossible for species variation to be the result of cross-species coupling. I have also pointed to the echoes in this particular passage and the sequence of arguments in Aristotle’s *Generation of Animals*.¹¹⁷ Rather than making a claim about the rabbis consciously appropriating Aristotle, we may note how these ideas ripple and coalesce into a broader rabbinic biology (i.e., a science of how life-forms come into being) and a zoology (i.e., a science of species) that is far murkier than that of the Priestly authors of Genesis 1 and Leviticus 11.

The additional attention to the human (*adam*) here is crucial. Seemingly set apart from “any of them”—that is, other animals—the human is simultaneously folded into the rule about species variation and classification. The anonymous view here, with its unmitigated inclusion of all variation—explicitly including that related to the human—squarely contradicts the sages’ demand for minimal human form in mNiddah 3:2; instead, it aligns with Rabbi Meir. This difference about difference—the ascription of humanness to the species-variant delivery born to a human—in the Tosefta echoes a consistent approach that we can also discern in the Tosefta’s parallel to mNiddah 3:1–2. The Mishnah holds a space for some human distinctiveness. The Tosefta enfolds the human more definitively into the vast and unpredictable realm of reproductive variation.

Now let's explore the corresponding passage in Tosefta Niddah to mNiddah 3:2. Like Tosefta Bekhorot, this passage unsettles human distinctiveness. If the dispute between Rabbi Meir and the sages revolves around the question about whether or not some minimal mimesis is necessary for a delivery to a human to qualify as offspring (*valad*), the Tosefta flattens the dispute by redefining human form in a surprising way. Citing the Mishnah's debate, the Tosefta then follows the sages' requirement for "human form" with the following:

5. She who expels (*hamapelet*) something like a kind of domesticated animal, a wild animal, or bird—the words of R. Meir. And the sages say: as long as it has human form.

R. Hanina son of Gamliel said: the words of Rabban Meir are fitting with respect to an animal because the eyeballs of an animal resemble human eyeballs, and the words of the sages with respect to a bird, because it does not have something of human form.

6. There was a case of a woman from Sidon who gave birth to a likeness of a raven (*demut 'orev*) three times, and the case came before the sages, and they said: anything that does not have human form (*tsurat 'adam*) is not offspring (*valad*).¹¹⁸

7. The facial form (*tsurat panim*)¹¹⁹ of which they ¹²⁰ can be one of any facial forms, except the ears . . .¹²¹ (tNiddah 4:5–7)

Rabbi Hanina's harmonistic intervention shifts the terms of the debate between Rabbi Meir and the sages by softening the differences between them and—more crucially—between animals and humans. It finds common ground by declaring that domesticated and wild animals are already inherently of (sufficient) human form because their eyeballs resemble (*domin*) human eyeballs. The requirement for human form is thereby upheld via the logic of resemblance—but in such a fashion as to simultaneously undermine the human's species uniqueness.¹²² The logics of distinction and resemblance are thus intertwined.

Rabbi Hanina's reading effectively narrows the dispute between the sages and Rabbi Meir to only birdlike cases. The case that follows about our habitual (three-time) Sidonian aborter affirms the compromise reading of the dispute, with a ruling in which the uterine entity is described as "a likeness of a raven" (*demut 'orev*).¹²³ Instead of having a human form, this is "like a kind of bird" (*ke-min 'of*) and is not deemed to have human form. As we will see in the conclusion to this book, the Palestinian Talmud expresses dissatisfaction with this distinction between birdlike and animal-like creatures.

If Rabbi Hanina highlighted the eyes in tNiddah 4:5, tNiddah 4:7 explicitly declares that the focus of human form (*tsurat ha-adam*) is the face and its features (*tsurat panim*). Like "something of human form" (*mi-tsurat ha-adam*) or "its head and majority" (*rosho ve-rubo*, tBekhorot 1:9), the Tosefta's stipulation of facial features for human form envisions partial resemblance—that is, a multiform creature with a humanlike face (or certain humanlike facial features) and an animal-like body.¹²⁴ Indeed, facial features are obviously a lesser requirement than the "head

and its majority” (as in the minority view in the case of a camellike creature born to a cow), especially if eyes are already taken for granted as human/animal. We might well still consider the focus on the face to be a humancentric move in and of itself. Rabbinic laws requiring verification of a spouse’s death before allowing his wife to remarry focus on the facial features (*partsuf panim*) over other identifying marks.¹²⁵ The face can signify humanness both generically (as a kind) and specifically (as an individual). In fact, these two are potentially related notions, blended in the idea that humans are the only creatures that possess a face or a countenance that is uniquely varied.¹²⁶ Pliny, a contemporary of the Tannaim, expresses this very idea as follows: “though our physiognomy (*facie vultuque*—lit. appearance and countenance/face) contains ten features or only a few more, to think that among all the thousands of human beings there exist no two countenances (*effigies*) that are not distinct—a thing no art could supply by counterfeit in so small a number of specimens.”¹²⁷

However, in Tosefta Niddah, Rabbi Hanina’s effort at harmony renders even this focus on facial features meaningless. His claim is that animals and humans already effectively share facial features (eyes). It is thus that the distinction between humans and domesticated/undomesticated animals draws their construed commonality into relief. Paradoxically, the very effort to draw humans apart folds them in with other kinds. As we shuttle between the Tosefta’s expanded generation principle in Bekhorot and the Tosefta’s rereadings of human form in Niddah, we find an image of the human that is, at least partly, animal.

CONCLUSION

In this chapter I have argued that the rabbis both manipulated and moved beyond the classificatory schema of Genesis 1 and Leviticus 11. In the process, they created a zoology and a biology that relied on an aleatory (spontaneous, unpredictable) instability of species, especially when it came to reproduction. I show that the Tannaim lived in a world in which the possibility of such generative richness, variation, or “failure” was shared by their predecessors and contemporaries (as tagged by terms like monstrosity, anomaly, *mum*, or simply “not offspring”). They, like other late ancient literary, medical, and philosophical writers, sought to make sense of such events. Their determinations of the species of uterine products would have tangible consequences about everything from how to kill animals to how to eat them, and from how to dispose of presumptive human remains to ritual impurity of the parturient. Finally, I have sought to pry apart the differing orientations of the Mishnah and the Tosefta; as we have seen, the latter presses more firmly on the overlaps than the boundaries, between the human and the animal in the realm of reproduction. In this respect, the Tosefta finds likeness to reside not only in the markings of human difference but in the very set of features that signified the “personhood” that humans were thought to uniquely possess: the face.

This stickiness of likeness here starts to expose the arbitrary nature of the project of discerning difference *versus* likeness in the first place. Historians who have come of age after “reproduction,” understand it to have been wedded to modern industrial commitments to mass manufacturing and the distribution of identical products, as well as to the tracking and standardizing of populations through various state institutions. As such, it is perhaps more difficult for us to appreciate the more artisanal, smaller-scale sense of image making in antiquity (even in its relatively large scale forms), not to mention the insecure ways in which it was tied to generation. Here the fragility of humanness—and, indeed, of species distinctions themselves—generates criteria of likeness/unlikeness.

If standard models of kinship rested on the notion that “like begets like,” at the very least both the Mishnah and the Tosefta express dissent about how likeness is established, exposing the arbitrariness of the very distinction between “like” and “unlike.” The Tosefta—per Rabbi Hanina—goes even further: for him, even the sages’ minimal requirement for human difference is intertwined with the very other that it seeks to distinguish. The result is a perspective that does not seek to find commonalities between humans and nonhumans (as do so-called “likeness” animal studies theorists); nor does it insist on the radical alterity of nonhumans (as do so-called “difference” theorists). Rather, this approach is what might be described as an “indistinction” theory, according to which we ought to attend to the ways that the human is always, already animal.¹²⁸