*Chapter 5*

# Rat-Fall

## *Time and Taxa in the Colorado River Delta, c. 1900*

Alex Benson

> "A most excellent 'rat-fall' may be made of a strong barrel, about half full of water. The cover should be placed on a pivot and well baited."
> —Yearbook of the United States Department of Agriculture, 1896

On June 30, 1895, Dane Coolidge writes a letter home. He is with a zoological expedition from Stanford University, camped near Silver Lake, California, in the Sierra Nevada. His letter describes the routine of the trappers' days, their concerns about supplies, their next destination. Mid-correspondence, though, he pauses, lifting his eyes. "I see a little chipmunk on the fence now," he writes, "and will stuff his skin to-morrow; we don't work Sundays."[1] Skipping from the sight of the specimen "now" to its taxidermic stuffing at the beginning of the workweek, the sentence elides the process of trapping, killing, and skinning.[2] It's a syntactic analog of the click with which photography has been said to shuttle its subject from life to death (figure 5.1).[3] The animal may be on the fence (a symbol of indeterminacy, an index of territorial enclosure), but its fate is so certain it doesn't need to be written.

Perhaps, though, this ascribes too much predictive power to the naturalist. Say he does catch a chipmunk the next day. How will he know that it is the same one, and that this one didn't get away? Practically speaking, of course, it hardly matters. The sardonic, macho confidence of the claim is founded on an imprecise but potent synecdoche: if the very reason to trap a given specimen is its representation of a larger whole, and if therefore there exist other parts which are similarly representative of the type, and if these parts have an especially robust fungibility when you're getting paid by the mammal, then

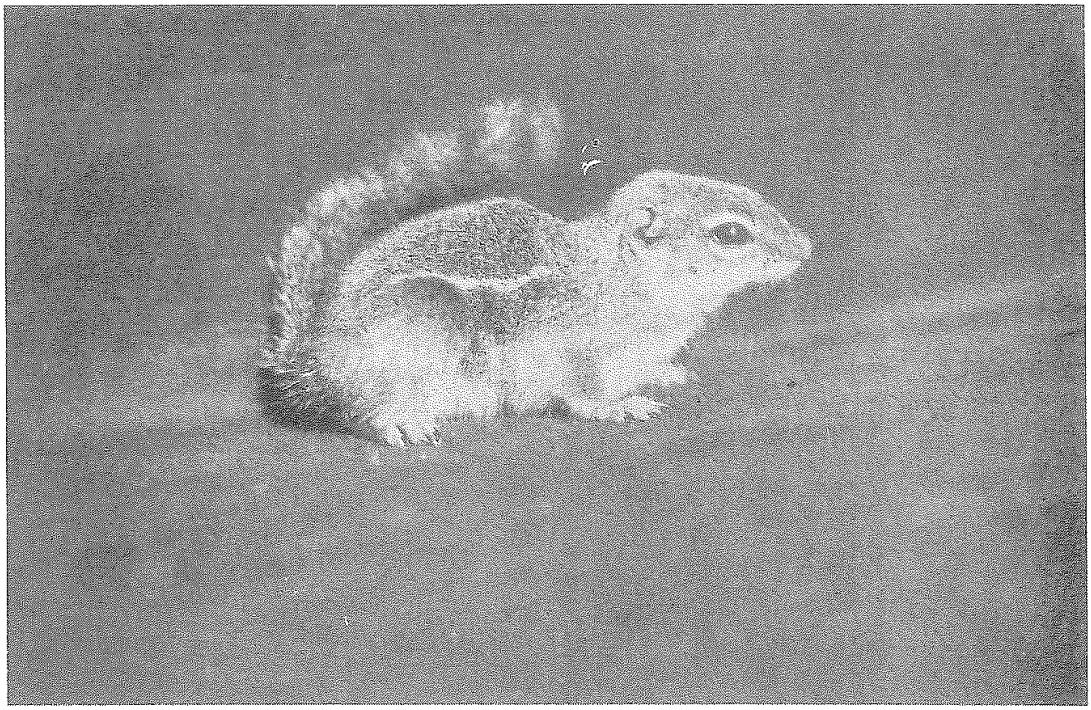

**Figure 5.1 Ground Squirrel Photographed by Dane Coolidge.** *Source:* "White-tailed spermophile (*Spermophilus leurcurus* [*sic*])," in Witmer Stone and William Everett Cram, *American Animals: A Popular Guide to the Mammals of North America North of Mexico, with Intimate Biographies of the More Familiar Species* (New York: Doubleday Page and Co., 1902), facing p. 162.

skinning one is something like skinning them all. In this way, the doom of this chipmunk—a doom inseparable from its typicality as Chipmunk—starts to take on the uncanny rhetorical shape of a little extinction.[4]

This chapter is about that shape, about the co-constitutive claims of taxonomy and temporality that give narratives of endangerment and extinction their legibility, their force, and their portability across lines of human and other-than-human life. Such claims are not politically neutral. Scholarship in animal studies has long registered the ideological complexities of wildlife conservation discourse and other sites of biological valuation. Critical work in Indigenous studies has for even longer elaborated the ways that the anthropological imagination of settler colonialism selectively designates living populations as "future ghosts," producing "a landscape of perpetual vanishing."[5] The text around which my argument here revolves, a work of fiction titled "The Biologist's Quest" by John M. Oskison, finds the overlap of these spaces of critique in the story of a specimen collector and his guides; it finds a landscape of both vanishing and perpetuation in the Colorado River borderlands; and it finds ghosts and futures in the figure of a short-tailed rat. My attention will move from the details of this text to their confluence with conventions of ethnographic writing, with the zoology of North American

rice rats, and with narratives of land and labor that are inseparable from these scientific histories.

The chipmunk on the fence is a bit player in the story behind this story. Oskison (1874–1947), a citizen of the Cherokee Nation who grew up on a ranch outside Vinita in Indian Territory (now Oklahoma), met Coolidge (1873–1940), the white son of a southern California orange farmer, while studying law at Stanford. They both edited and wrote for the university literary magazine, the *Sequoia*. After graduating in 1898, they both studied writing for a year at Harvard. In 1900, they traveled together in western Europe, with Oskison later recalling that, during the transatlantic passage, he listened while Coolidge told him story after story about his life.[6] To pay for the trip, Oskison had a "pile" of over 400 dollars saved up; Coolidge met his costs by catching over 400 rodents for sale to the Smithsonian.[7] If this was an eccentric approach to the grand tour, it was the same way Coolidge had defrayed the costs of his English degree. During term breaks, he trapped for various natural history institutions, including the university. He took fieldnotes in a notebook meant for lectures, with "Mammals" handwritten on the cover.[8] On one trip, when a stage driver delivered the wrong grade of cotton, he griped that "the driver should take Hudson's course on 'interpretation'"—referring to William Henry Hudson, who specialized in Romantic poetry and aesthetic theory.[9] On occasion, Coolidge's notes themselves take an aesthetic turn:

> Below beautiful, sharp ridges covered with different oaks and madronas ran down to sand wash, broad, dry, shiny, cactus + brush on sides, no house no fence, one trail down wash, the sand-bed meandered, like the course of ones life.[10]

Published in the July 1901 issue of San Francisco's *Overland Monthly* magazine, "The Biologist's Quest" plays on the experiences of Oskison's naturalist classmates, especially but not only Coolidge. The story begins with a zoological hunch: some scientists at the Smithsonian believe that "a certain species of short tailed rat," previously designated extinct, might still inhabit the delta of the Colorado River, where it flows from the US-Mexico border and through Quecha (Yuma) and Cucapá lands to the Gulf of California.[11] A white naturalist named Lake is commissioned to investigate, and in Yuma, Arizona, he hires an "old Yuma Indian" named Kitti Quist and a "Mexican desert guide," Joe Maria, to take him down the river (52).[12] Once they have reached the gulf, Lake debarks and walks alone to the dunes where he hopes to find the rat. He never does. When weather forces the guides to bring the boat farther south than their planned meeting point, Lake wanders, becomes severely dehydrated, and, nearing death, dreams of the "wonderful short-tailed

rat, swimming forever from bank to bank of a sluggish salt pool that rose and fell as the tide crept in and out" (55). The guides rescue him, and on the way back to Yuma, Lake announces that he is done forever with "the short tailed rats" (57). This renunciation may reflect a sentiment Coolidge expressed in France in 1900; "I am going to retire from this rat business," he wrote to his father from Barcelonette.[13] But his influence on the text gets a more direct nod in a closing mention of the similarly named zoologist who ends up buying Lake's gear: "Cooley . . . went down to Yuma . . . to catch chipmunks for the new zoological park in New York" (57). In 1899, Coolidge followed the same itinerary, "Yuma and southward" and trapped "live mammals and birds" for Central Park.[14]

Transforming his source material, Oskison frames his fictional version of such an expedition within an understated farce of zoological debate. If Lake finds a specimen of the short-tailed rat in question, disproving the extinction claims, it will be "a curious survival, and the scientist who could secure and classify it would earn an enviable reputation" (52). Lazarus taxon! If he does not, presumably the case for this species' extinction would be supported. But the evidentiary burden is asymmetrical. Survival claims can point to forms of positive physical demonstration (among them, paradoxically, taxidermized corpses) that extinction claims, tasked with proving an absence, don't as readily afford. So although Lake fails to find the rat, the debate should, one would think, remain open. Biologists may have developed statistical methods of generating fairly reliable extinction claims, but a single, understaffed, abbreviated, hallucinatory excursion through unfamiliar terrain would not strike most observers as conclusive, a century ago or today. However, in the end, the case is abruptly closed, the epistemological terrain shifting underfoot as the debate is reframed in terms of another question entirely, not *does it still* but *did it ever:* "Professor McLean, of the Pennsylvania Scientific Society, published a pamphlet in the fall of 1897 to show that the short-tailed rat described by the Smithsonian never existed except in the imagination" (57). The dismissal of "imagination" presents the claim as the authoritative correction of a fiction, but McLean's "pamphlet" sounds a little lean, a jealous play in the short-tailed-rat reputation game.

The narration does not specify the substance of McLean's argument, but the likely inference is that the scholar has subsumed this rat under another species designation, having judged it appropriate to collapse some phylogenetic distinction.[15] Such a claim shifts the question of the species' life (or, more precisely, whatever set of lives had been imagined to constitute this species) from when to what, from the diachronic to the synchronic. The shift is also from a question that threatens to remain open indefinitely to one that admits of categorical decision. This produces nested conclusions: the closing of the debate at the end of the story.

If it's true of the experience of narrative structure that "the very possibility of meaning plotted through sequence and through time depends on the anticipated structuring force of the ending," then this particular ending produces an odd effect.[16] On one hand, it consolidates Oskison's satire of natural history, in that the entire expedition is made pointless. (Even if Lake had found the rat, it wouldn't have interested anyone, its life having been rendered unremarkable as just another example of some other species designation that lacks the frisson of possible disappearance.) On the other hand, in suggesting, as part of the same satire, that perhaps the scientific debate should not have been so summarily concluded—that "enviable reputation" may have biased it—the story's ending provokes us to think twice about story-endings as well. Implying that the "structuring force" of a conclusion, the sense of definitional synchrony that comes with the closing of a case, may involve a situated expression of power or vanity, Oskison's ending opens a horizon for other, less teleological, temporalities.

In fact, though, the text has already opened that horizon in multiple ways. It does so, first of all, through its emplotment. The story first follows the biologist's itinerary, beginning with his arrival in Yuma, in a relatively linear fashion, though with some moments of retrospection to indicate characters' backgrounds. But once Lake dreams of the rat and collapses on the verge of death, the text breaks from this chronological mode, interrupting itself with a line of asterisks and backtracking to explain what the guides have been up to during the same interval, before finally uniting these story threads at the moment of rescue. And then the end brings us back to the beginning: Lake, who had replaced a prior naturalist, will now be replaced by Cooley. (Will they ever stop coming?) While this may not in itself sound like such a radical narrative structure, there's a lot at stake, for Oskison, in such spiralizing movements, in the asynchronies of this text as an act of storying.[17] And we can begin to get a sense of these consequences—of how these temporalities mediate relations of human and nonhuman mortality—by attending to passages of the text that, by deferring the central question of a surprising survival, dwell on the fatal procedures of taxidermy and of a peculiar version of snake dancing. So I will consider each of those moments before returning to the short-tailed rat and to the imaginative genealogies of its classification and its threat status.

## GENTLE ART, ROUGH MAGIC

> "I notice you use the term 'rat-fall' in your précis; would one dead rat come under that category?—There may have been one dead rat in a house, but two or three is more general."
>
> —Transcripts of the Plague Commission at Belgaum, India, 1899

Camped by the Colorado one evening, Lake shows his Yuma guide how he performs taxidermy, catching and skinning some lizards and a desert rat (length of tail unspecified). Kitti Quist watches "with astonishment the transformation from a limp corpse to a flabby, empty skin, then back again to a cotton-stuffed, perfectly shaped rat, pinned out in a scampering attitude" (53). The paradoxes here of a body being at the same time "pinned" and "scampering," and of death as a means to renewal, have been contextualized by cultural studies of the taxidermic imagination in the early-twentieth-century United States. If (per Donna Haraway) taxidermy's production of an eternal Edenic present—vitality in stasis—is meant to alleviate anxieties of social decadence, appealing particularly to racial eugenicists and patriarchists, it also (per Fatimah Tobing Rony) tropes the ethnographic desire to make that which is dead seem living, in the way that salvage anthropology neglects contemporaneous social processes in favor of more "authentic" forms of traditional practice understood to be endangered.[18]

The association of naturalist practices with ethnography did not go unrecognized in Oskison's circles. Commonplaces related to fieldwork and to the observation of habitual behavior bridged natural-scientific and social-scientific discourse. An 1899 article about Coolidge, for instance, noted that his collection of specimens "requires that he visit many different localities," where "he must remain long enough to become thoroughly acquainted with the habits and the life history of his victims."[19] Stanford did not yet have a dedicated anthropology department when Oskison and Coolidge studied there, but in the *Sequoia*, edited by students, one could find discussions of ethnology alongside folklore, zoology, travel writing, and the kinds of local color sketches that were highly popular in the period and that make up the bulk of Oskison's early work.[20] In a March 1895 piece for the magazine, Mabel L. Miller paraphrased Franz Boas' suggestion, in a recent lecture at Stanford, "that an interesting history was yet to be written of the almost extinct tribes of the Pacific Coast."[21] Describing her study of the "burial and mourning customs" of an unspecified people that "will doubtless soon become extinct" (288), Miller equivocates: the piece describes the group as "*once* inhabiting the east side of the Sacramento River" while also indicating that they still do, so that when Miller writes that "they *had* many customs of mourning" (289, my emphases) the past tense comes to imply the loss of either object or subject, customs or people. This equivocation collapses into redundancy. The dead don't mourn.

The turn of the twentieth century was a moment of particular intensity for such discourse about vanishing Indians, a "dominant discourse," as Wesley Leonard notes in this volume, replicated materially in the settler state's facilitation of programs of linguistic assimilation, genocidal violence, and dispossession. These programs included the parceling and often the expropriation of

communally held lands by means of territorial allotment. In Indian Territory, Oskison had a close view of this process as carried out under the protocols of the Curtis and Dawes Act. These territorial transformations figure throughout his writing. His political orientation to such histories, though, has eluded scholarly consensus. Does he, in the terms with which Daniel Heath Justice coordinates the politics of Cherokee literary history, entirely follow a Beloved path of peace and compromise, or does his work also encompass Chickamauga principles of active resistance?[22] Or is he simply assimilationist? A major factor in scholars' collective difficulty with this question stems from Oskison's strong inclinations, as a writer, toward ironic expression, and the ironies of "The Biologist's Quest" hardly confirm any single view of its author's politics. They do, though, add up to a pointed reflection on the medium of fiction as a site for both cultural representation and interspecies ethics.

Take one of the story's central puns: short tail, short tale. Although it is a rote bit of wordplay, here it interfaces complexly with genre and geography. The pun frames the zoological folly over the potentially extinct animal as a joke about the medium of the short story, the privileged venue for local color fiction and its representations of folks whose ways of life are imagined to be imminently plowed under by an industrialized, mass-mediated modernity. The scene evoked: urban magazine writers heading down the river, clueless, in search of short tales.

If those hypothetical writers were to actually mount such an expedition, Kitti Quist might be there to guide them, for a fee. In this character, Oskison explores forms of survival and invention in and against the currents of westward settler incursion, while opening a satiric view onto associated scripts of cultural performance and labor. Consider the scene in which the guide explains his various past employments (each evocative vignette, in itself, the shortest of tales). Although Kitti Quist had once "been the most feared medicine man in the Southwest," this changed as "the Yumas grew poorer, less energetic, and careless of the fame of their great man." To get by, Kitti Quist performs for tourists; he serves as a guide for miners, smiling at their failure; then, after curing the governor of rheumatism by sucking his joints, he becomes a "self-important white man's medicine doctor." And "now he was going to help the new doctor catch rats—for what he knew not. And next he would be?—well, he didn't know" (52–53). Yet his itinerancy is not accompanied by dread. When Lake is driven to the point of insanity, Kitti Quist takes the naturalist's tools and sells them to the next comer. He may not know what he will be (at least, he isn't saying), but—in a casual assumption of personal futurity—he will be something. His name itself seems to announce this adaptability in its lexical resonances: the first part sneaks a feline homonym into a story about chasing a rodent, while the second part

stands in close proximity to the title's "quest." In fact, the original printing of the story includes a single instance of Kitti Quist with an alternate spelling that underscores this proximity: "'You have showed me strange medicine tricks with the rat and the lizards,' said Kitti Quest" (53).[23]

Reconsidered with this echo in mind, the title "The Biologist's Quest" takes on a secondary sense. There's a familiar anthropological grammar of possession here: my tribe, my informant. And indeed, after Lake shows Kitti Quist (I'll retain the predominant spelling) his "strange medicine tricks," the guide's response might seem to follow the scripts of salvage. Astonished by the scientific transformation of the rat, he in turn finds a rattler and demonstrates a snake dance.[24] He describes this as a tradition in danger of disappearance, boasting that his version is still robust whereas other (Yaqui) dancers in the region have resorted to performing a watered-down version with young snakes (53). But he presents an idiosyncratic version of snake dancing—one that, I'd suggest, Oskison imagines for particular rhetorical purposes rather than for the verisimilar representation of southwestern dance practices—and the process of the performance suggests a form of what Audra Simpson calls "ethnographic refusal"; this dance, in other words, is an act of analysis rather than of acquiescence.[25]

When Kitti Quist first grabs the snake by the neck, it writhes and hisses. He calms it with slow movements until "all motion had ceased; the rattler lay along his hand and arm pliant and quiet as a huge cord; the unwinking eyes were still and the rattling had ceased" (53). ("To make the rattlesnake pose—that is the heavy work of the artist," wrote Coolidge in a 1908 article titled "The Gentle Art of Photographing Rattlesnakes.")[26] Eventually, after untwining the snake, Kitti Quist recomposes himself, then casually takes the snake by the tail. "He whirled it about his head and brought it back with a jerk that separated the head and body, and flung the mutilated trunk away" (53). In a sequential inversion of taxidermy, here the living is first rendered silent, motionless, as if dead. Only then is it killed. This sequence figures the relation between myths of vanishing and material violence. To be seen as already dead is to be exposed to injury without redress. But the mutilation of the snake also presents a more straightforward contrast with taxidermy. No longer any good for reconstruction, study, cataloging, or display, its body becomes unavailable to the specimen economy.[27]

The same is true of a rat found only in a dream. After the biologist and the guides have reached the gulf, Lake walks into the hills to search; meanwhile, weather forces Kitti Quist and Joe Maria to steer the boat a ways off the coast. Lake is left stranded overnight, runs out of food, gets dehydrated, and finds himself walking miles farther than expected because of the unique topography of the delta—those "desolate, saline mud flats, ten to twenty miles wide and forty or fifty miles long, intersected by meandering sloughs" (meandering like

the course of one's life?) through which, as it happens, Coolidge's colleague William Wightman Price had stumbled in 1898 (figure 5.2). According to a later account, having traveled down the Colorado and "penetrated into the gulf with some Mexicans in a ramshackle craft," Price grew so seasick that he tried to walk back to Yuma alone, almost dying of dehydration before he "reached an Indian settlement."[28] Lake's itinerary largely mirrors Price's, but (in addition to the difference of the rescue) no accounts of Price's journey include a short-tailed rat, nor a dream of it swimming in a tidal slough; these elements are specific to Oskison's text.[29] The effect of their inclusion is to make the failure of the quest issued by the Smithsonian into an unintentional fulfillment of the kind of "vision quest" practiced by Indigenous peoples in the Southwest and other parts of North America—given, that is, the possibility of such fulfillment without intention.[30] Oskison is again playing fast and loose with such cultural reference, in a parodic mode that is visible in the mismatch

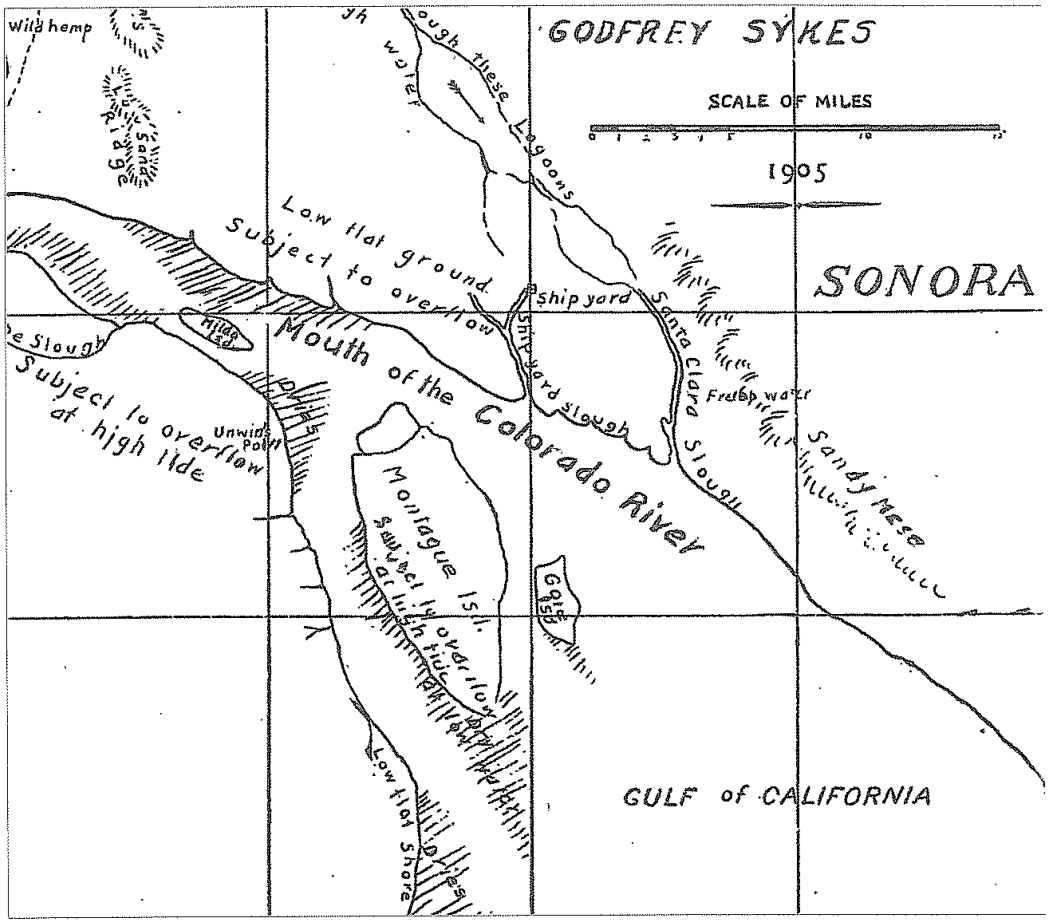


**Figure 5.2 Detail View of Sykes' 1905 Map of the Delta.** Four short lines, each just over a mile at scale, run perpendicular from the shoreline west of Montague Island in a formation matching the tidal inlets described in "The Biologist's Quest." *Source:* Daniel Tremblay MacDougal, "The Delta of the Colorado, with Map by Godfrey Sykes," *Bulletin of the American Geographical Society* 38.1 (Jan. 1906): 1–16, foldout.

between the elevation of the "quest" (with its implications of chivalry, though quixotic) and its object: not just a rat—the paradigmatic problem animal or pest, especially so for urban magazine subscribers—but one with a short tail.

This feature sets the species apart, taking the folk-biological vermin category of "rat" and converting it into life associated with Nature rather than with plague. But it also manages to depreciate it in ways that echo Kitti Quist's disposal of the snake, potentially evoking castration (destabilizing the masculinism so predominant in the history of natural history and in the mythology of frontiersmen like Kit Carson) and dismemberment (ruining the corporeal integrity of the scientific specimen). The short-tailed rat's body is an object whose value, in other words, is inseparable from its devaluation. This incongruity stands at odds with the common allegorical work of extinction narratives, which, Ursula K. Heise has written, often imagine that "part of one's national identity and culture might be preserved, revived, or changed for the better if an endangered species could be allowed to survive or an extinct one could be rediscovered."[31] "The Biologist's Quest" invokes this logic without obeying it, creating a borderlands ambiguation of the "national identity and culture" in question, and registering forms of precarity that do not break along the human-nonhuman line in the form of analogy. If this is an imaginative adaptation of material pulled from a local history of zoological knowledge, it is also an interpretation of the imaginative and material processes of such knowledge in the making.

## MY NAME IS ORYZOMYS

> "He was walking by a brook one day, and saw a water-rat run past on the opposite bank in great haste. Almost immediately afterwards came a very fine stoat, hot in pursuit . . . and he expected to see the rat fall every moment. But such was not the case."
>
> —James Rodwell, *The Rat: Its History and Destructive Character*, 1858

In 1896, along the Río San José del Cabo, an estuarial river near Santa Anita at the southern tip of the Baja peninsula, Coolidge caught six specimens of an unfamiliar rice rat.[32] The specimens were sent on to the British Museum zoologist Oldfield Thomas. The following year, Thomas published a note about the new species under the designation *Oryzomys peninsulae*.[33] He wrote in a letter to Coolidge: "Oryzomys peninsulae is a particular surprise."[34] Another description of the species published in July 1901 (the same month as "The Biologist's Quest") lists the following characteristics: "Size rather large; ears rather small; tail short; color grayish; belly whitish; skull broad and massive."[35]

Tail short. This Baja swimmer sounds familiar. Coolidge's 1890s field-notes mention many, many rats—a daily entry might record having caught, say, seven kangaroo rats and two wood rats—but I have not found reference, in his journals or correspondence, to any species other than *O. peninsulae* that would fit the bill of being both short-tailed and semiaquatic. Given that this species was esteemed a "particular surprise" by zoological authorities, one could imagine that the story merited mentioning to a friend—perhaps, with a wry reflection or two, while passing the time on a transatlantic passage.

Of course, the identification I am insinuating—Coolidge's *O. peninsulae* as the rat that swims through the brackish sloughs of Lake's dreams—is unreasonable. This is not only because I'm unable to prove the absence of another similar species within the totality of Coolidge's victims. Nor is it because Coolidge found *O. peninsulae* farther south on the peninsula than Oskison's fictional biologist ever traveled, nor because McLean of the Pennsylvania Academy of Sciences denied this species' existence. This identification is, instead, unreasonable because "the Pennsylvania Academy of Sciences" did not exist either, not in the form imagined here, no more than Cooley or Kitti Quist did.[36] Because, that is, of the capacity of literature both to refer and to make, both to reproduce and also (and thereby) to speciate and split.[37] A fictional work generates taxonomies irreducible to those outside it.

Irreducible but not unconnected. If there aren't identities here—if Cooley isn't Coolidge; if these rats aren't rats—there are metonymies and resemblances, and they aren't confined to the immediate interpersonal channel (a college friendship) that brings us from source material to story. According to a recent review of the history of *O. peninsulae*'s classification by Michael D. Carleton and Joaquín Arroyo-Cabrales, only twenty-one specimens have ever been collected: six by Coolidge and fifteen more a decade later in 1906. Field teams tried to find more in 1979 and again in the early 1990s. Like Lake, they failed. All twenty-one specimens had been found along the Río San José. Largely dried up by irrigation, polluted by the infrastructural development of the tourism destination, the estuary has become an inhospitable habitat for *O. peninsulae*. As a result, the species is now probably critically endangered or extinct. But for several decades, beginning in 1971, nobody thought it existed at all. It was lumped, Professor McLean style, into the expanded description of another kind of *Oryzomys* (*couesi*), which lives across the gulf on the mainland. *O. peninsulae*'s taxonomic status as a distinct species has recently been reasserted, however, based on morphological observations of the extant specimens, as well as a phylogenetic hypothesis: its location in an isolated pocket around Cabo may have resulted from the tectonic rift that, about six million years ago, separated the peninsula from the mainland, creating the gulf and the conditions for a lineage-splitting event.[38] Rock strata and remains have brought the species back to recognition, if not to life (figure 5.3).

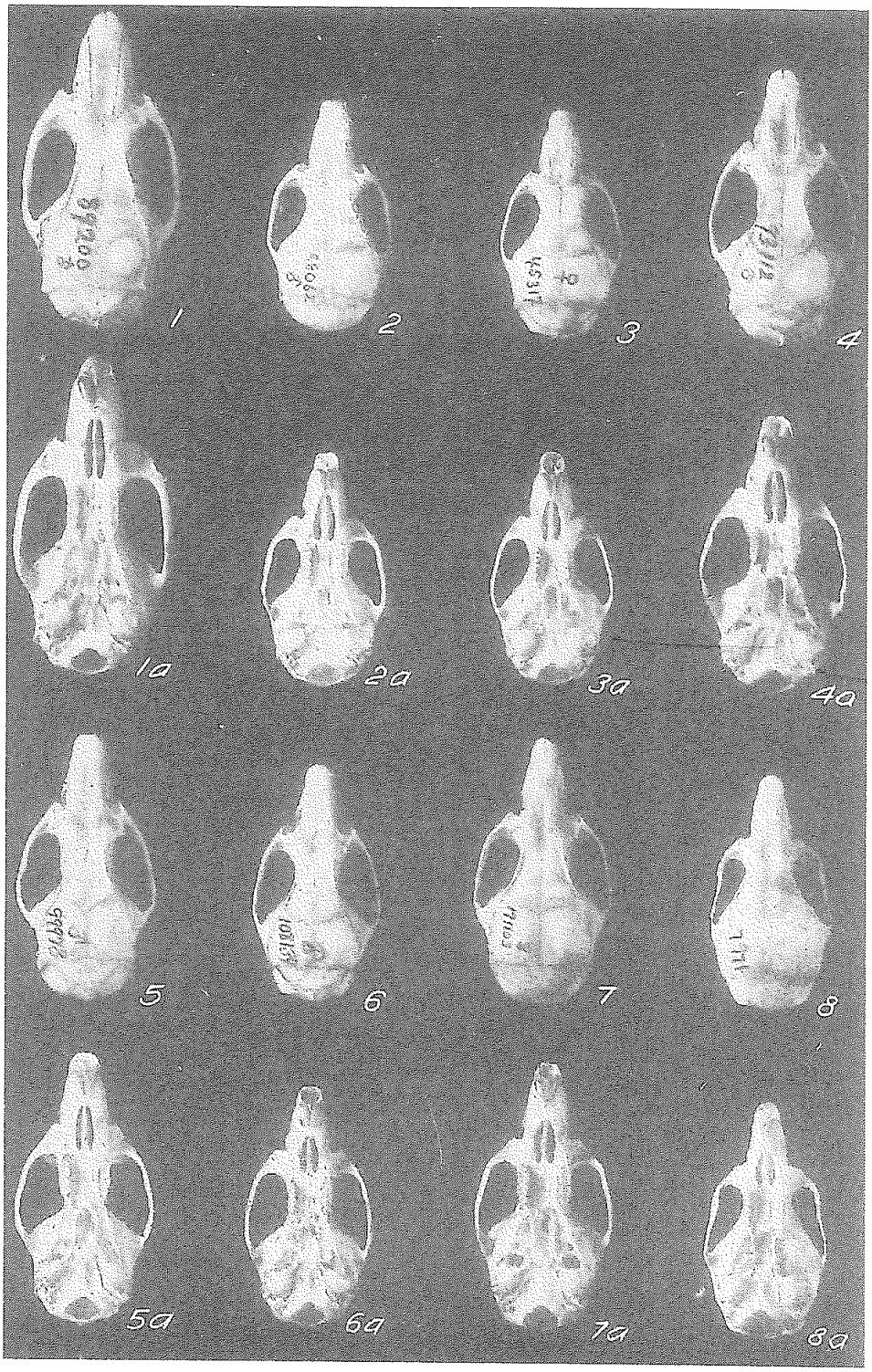


**Figure 5.3** ***Oryzomys Peninsulae*** **at Bottom Right, 8 and 8a, and** ***O. Couesi*** **at 3 and 3a.** *Source:* "Skulls of Oryzomys" (Plate 1), in Edward Alphonso Goldman, *The Rice Rats of North America (Genus Oryzomys)*. U.S. Department of Agriculture, Bureau of Biological Survey: North American Fauna, no. 43 (Washington: Government Printing Office, 1918), facing p. 98.

At the other end of the peninsula from Cabo, what happened to *O. peninsulae*'s habitat happened to the Colorado.[39] It hasn't been possible for over half a century to get in a boat and follow Lake's itinerary, nor that of Aldo Leopold in 1922, who later recalled that, in the delta, the river "meandered in awesome jungles," "nowhere and everywhere."[40] By the 1960s "nowhere" was the key word: the Colorado had stopped flowing from Yuma to the gulf. Major causes include the construction of the Hoover Dam in the early 1930s—first authorized in 1929 by Coolidge's cousin Calvin, and then advanced under the presidency of Herbert Hoover, Geology major, Stanford class of 1895—which was followed, in the second half of the twentieth century, by Glen Canyon Dam and later by the Central Arizona Project aqueduct, among other water diversion projects.

But this process had already been accelerating since the turn of the century. Articles at that time describing enormous new irrigation projects in southwestern Arizona and California often compared the Colorado, in its potential, to the Nile. "The stupendous irrigation system is calculated to render the vast arid waste as fertile and useful as the delta of Egypt's sacred river," noted a representative April 1901 piece in the *Arizona Republican*.[41] In this comparison, agro-industrial development sounds like reflorescence. Here the "vision of the origin" so central to natural history in the period—a vision suffusing its institutional spaces, biopolitical discourses, and taxidermic practices—also finds expression in the geomorphic transformation of the zoological field itself.[42] The actual effects of that transformation, though, have involved severe desiccation and biodiversity loss throughout the borderlands. A 2012 initiative to revitalize the river and delta biomes, negotiated by the US and Mexican governments, led to strategic "pulse flows" of water released into the riverbed along with reductions in irrigation diversion.[43] To date they have had minimal lasting effect. A recent study of Cucapá responses to these environmental conditions notes that many people living around the delta articulate the exigencies of their situation, including conflicts over fishing access, not solely through the question of the water's disappearance but rather through the difficulty of finding work, "shift[ing] the terms of the debate onto the conditions of poverty that [make] feeding their families the ultimate priority."[44] And shifting, too, from a narrative of absence, of the river that vanished, to an assertion of presence.[45]

In turning from Oskison's narrative to its surprising reverberations across a longer and ongoing history of environmental violence—or perhaps they're unsurprising, perhaps this is the genre of such stories—I haven't meant to ascribe to him the kind of proleptic vision that Coolidge assumed over that little chipmunk's fate. The story of Lake's dehydrated blundering through the dunes and around the sloughs of the delta does not, for instance, anticipate the desiccation of the region. Nor do I want to overmeasure this short tale's

moral or historical magnitude. That would, after all, entail falling right into the trap of its satire.

Still, "The Biologist's Quest" offers valuable provocations. Poaching on a network of naturalist, natural-historical, and ethnographic writing (a network that is both highly localized and transnational), the story unsettles the commonplaces of these overlapping fields. While riffing on a certain romance of fieldwork—lampooning the gendered identificatory space of this romance, if also probably reinforcing its allure in the reading experience of some *Overland Monthly* subscribers—the narrative also enfolds subjectivities, forms of labor, and temporalities that usually only haunt the margins of the kind of publications it plays on: the non-teleological temporalities of its spiral emplotment, for instance, but also of the infinite oscillations of a dream rat "swimming forever" back and forth as the tides ebb and flood. At the same time, and in part through its verbal oscillations—its puns, ironies, and nomenclatural slippages—the story develops a counternarrative to the favored plots of classificatory discourse. It makes weird taxa.

By doing so, it points up the situated contingency of classification systems, particularly as they take shape within contexts of corporeal and territorial expropriation. These contexts make ethical demands as urgent as the disappearance of the taxa such systems name. Among other responses to those demands, one might shift one's gaze from the chipmunk (or with the chipmunk; who knows, maybe it's still out there) to the mesh of materials and spatiotemporal structures—a fence, cotton of a certain grade, the workweek, a trap, a sense of plot—by which its life came to seem knowable and its death a sure thing.

## NOTES

1. Dane Coolidge to Francis Coolidge and Bert Coolidge, 30 June 1895, Dane Coolidge Papers, Outgoing Correspondence.

2. On such temporal deixis as an "ecomimetic" blurring of distinctions between subject and environment, see Morton, *Ecology without Nature*, 3; in Coolidge's letter, though, this blur is a background against which animal death stands out in high definition.

3. See Barthes, *Camera Lucida*, 92. My comparison is also informed by Haraway's understanding of wildlife photography in "Teddy Bear Patriarchy."

4. This moment in Coolidge's letter has elements of the familiar "last of its kind" story, in which the death of the individual dramatizes that of the group or species; on the way that this convention "translates extinction into narrative," see Heise, *Imagining Extinction*, 38. Of course, this conceit would be undermined by the fact that "chipmunk" encompasses many different species designations, but here the term works as a vernacular species name or what philosophers of taxonomy would call a

folk-biological kind. The dynamic I'm describing in Coolidge's letter also involves what Bennett, thinking through the phenomenology of her own response to an assemblage of street debris including the body of a poisoned rat, describes as a shimmer between instrumentalized object and irreducible thing—an irreducibility embodied in the "singularity of *that* rat" (*Vibrant Matter*, 4).

5. On "future ghosts" see Morrill et al., "Before Dispossession," 3. On "perpetual vanishing," see N. Brown, "Logic of Settler Accumulation." On animal studies, Indigenous studies, and Oskison, see Hudson, "Domesticated Species."

6. Oskison, "A Letter to his Father: John Oskison Writes of his Visit in Europe," in *Tales*, 137–38.

7. John M. Oskison to Dane Coolidge, March 6, 1900, Dane Coolidge Papers, Incoming Correspondence. Coolidge's journal from the Europe trip lists specimens continuously numbered 1001–1458 (Dane Coolidge Field Book, 1900, Smithsonian Institution Archives, Acc. 12–232).

8. Dane Coolidge Field Book, 1897, Smithsonian Institution Archives, Acc. 12–433.

9. See Coolidge's field journal entry dated June 25, 1897 (Dane Coolidge Papers, Carton 1).

10. See Coolidge's field journal entry dated June 24, 1896 (Dane Coolidge Papers, Carton 1).

11. Oskison, "Biologist's Quest," 52.

12. Coolidge's 1896 Lower California journal (Dane Coolidge Papers, Carton 1) refers repeatedly to a José Maria, which may have informed Oskison's choice of this guide's name, although the character does not otherwise obviously resemble the person represented in Coolidge's journal.

13. Dane Coolidge to Francis Coolidge, July 15, 1900, Dane Coolidge Papers, Outgoing Correspondence.

14. "Dane Coolidge Returns." The Bronx Zoo, founded in 1895, was more properly "new" than Central Park in the 1890s. On the history of bringing rodents to East Coast parks—and on representations of class, ethnicity, and morality in the language of social reform that generally surrounded these programs—see Benson, "Urbanization of the Eastern Gray Squirrel." My work in this essay also benefits greatly from our many conversations on related questions and from his writing more generally.

15. The splitting or lumping of classifications was much debated in the period; see Theodore Roosevelt's criticisms of C. Hart Merriam's "overemphasis on minute points of variation" (*Letters*, 614).

16. Brooks, *Reading for the Plot*, 93.

17. On models of storying that open alternatives to "chrononormativity," see Rifkin, *Beyond Settler Time*, esp. 36–37.

18. See Haraway, "Teddy Bear Patriarchy," and Rony, "Taxidermy and Romantic Ethnography," in *Third Eye*, 99–126.

19. "Collecting Wild Animals."

20. There was, however, a Sociology department, where Mary Roberts Smith taught courses on race, immigration, and gender before founding the Sociology

program at Mills College. She married Coolidge in 1906. In 1939 they coauthored an ethnography titled *The Last of the Seris*. Despite that title, Seri people still live in Sonora and on the Gulf of California.

21. Miller, "Burial Customs," 288.

22. Justice's own answer is that Oskison develops a Beloved position that makes space for principles of Indian governance, although, he notes, Oskison's politics can be "inconsistent" (*Our Fire Survives the Storm*, 119).

23. Lake's name (which itself rounds out the story's proliferating bodies of water) seems to also get misspelled as "Jake" in the stylized drop-cap J that begins the story (52). Both this and the spellings of Quist/Quest may of course be typesetting errors, but the latter draws my particular attention because even in its standard form it evokes the wording of the title—because, in other words, whether or not one takes the alternate spelling to be accidental, the conditions of its probability and its suggestiveness are less likely to be so. My attention to both the sense of fluid futurity and the semantic play that surround this name is informed by the work of novelist, poet, and critic Gerald Vizenor, particularly by his account of "postindian warriors of survivance"—those who make of resignification a practice of ongoing survival, not as a mere biological fact but as an ongoing creative process (see Vizenor, "Ruins of Representation"). Although Vizenor has never in print made more than a brief mention of Oskison, my sense is that there are affinities in their understandings of the political potency of irony.

24. The responses to taxidermy depicted in "The Biologist's Quest" may have been informed by something that happened on Coolidge and Oskison's 1900 journey. The story opens with a reference to another biologist having been killed by a "superstitious Mexican" (52), which seems to alternatively nationalize some "superstitious peasants" Oskison remembered from the Europe trip: "Once the superstitious peasants threw stones at Dane until the priest came along and assured them that this American was only a harmless magic maker" (Oskison, "An Autobiographical Letter to Journalist Frederick S. Barde," in *Tales*, 139–43, 141).

25. Simpson, "On Ethnographic Refusal." In this volume, see also Figueroa, Perez, and Mantz on such refusals as "survival responses" and Heryford on Glissant's sense of "opacity." On naturalist guides' influence on zoological knowledge, see Jacobs, "Intimate Politics of Ornithology" (with thanks to Yuka Suzuki for pointing me to this piece). By suggesting that Kitti Quist's snake dance is "idiosyncratic," while writing, myself, as a white settler descended from European families with no affiliation with Indigenous nations of the Southwest (the Quecha/Yuma nation of which Kitti Quist is a fictional member; the Moqui/Hopi nation in which snake dancing is famously practiced), I claim no knowledge of snake dance practices beyond my awareness of a textual record produced by outsiders whom I do not take to be authoritative on the topic. As my reading here of Kitti Quist's dance suggests, my sense—perhaps wrong, given these limitations—is that this imagined performance is, in key respects, an anomalous one through whose peculiarities Oskison, probably not closely familiar with snake dancing himself at this point in his life, develops a critique of scientific (including anthropological) paradigms of representation. In this reading, taking Kitti Quist's dance as a canny comment, I

diverge from Cox's description of the same moment as a masculinist display that reveals the guide's "desperation." More generally, Cox finds in "The Biologist's Quest" a stereotype of Mexican political disorder—"Mexico promises death rather than a new life"—that is reinforced in its reference to Joe Maria as "lazy" ("Learn to Talk Yaqui," 405). This analysis importantly reframes Oskison's politics in a transnational context and illustrates his capacity for expressions of bigotry and American expansionism. But "The Biologist's Quest" mocks rather than advances these attitudes. It associates Mexico with death in the perspective of Lake, a fool, and in that of his East Coast employers, at their conspicuously ill-informed remove. The guide's ostensible laziness, meanwhile, is contradicted by his obvious competence, and the epithet is used precisely when it is least appropriate, not only in that Joe Maria's plan saves Lake's life but also in that he is described in the same breath as acting "frantically" (56). For another approach to the rhetorical complexities of Oskison's management of the perspective of white characters, see Hunnef, "Alternative Histories."

26. Coolidge, "Gentle Art," 676.

27. In this way the snake refuses to become the kind of "boundary object" that the sought-after rat exemplifies; see Star and Griesemer, "Institutional Ecology." In a new-materialist register, one might say that Kitti Quist's destruction of the snake enacts a violent reminder of "a culture of things irreducible to the culture of objects" (Bennett, *Vibrant Matter*, 5).

28. Fisher, "William Wightman Price," 56. See also Price's own brief account, "Some Winter Birds." On the 1895 trip, see correspondence from Dane Coolidge to Bert Coolidge, May 12, 1895, Dane Coolidge Papers, Outgoing Correspondence.

29. In this dream-state encounter with a biological specimen, Oskison elaborates on a scenario he had explored in one of his earliest published stories, "A Laboratory Fancy," which involves a student who falls asleep in the laboratory and dreams that the protozoon he is studying starts to speak to him about the violence of biological study. The ambivalence with which Oskison treats the dream-space in these texts, as a site of both violent alienation and empathetic experience, also features in Vizenor's autobiographical account of a terrible hunt. He shoots a squirrel but fails to kill it immediately; the extended description of what follows combines brutal physicality and fantastic identification. The squirrel tries "to escape from my dream, the city in me," Vizenor writes; "I understood his instinct to escape; in a dream we reached up with our right paw, shattered and blood soaked, but it was not there" ("October 1957: Death Song to a Red Rodent," in *Interior Landscapes*, 167–70, 168).

30. I have not found examples of the precise phrasing "vision quest" in print prior to Oskison's story, but it does come into academic discourse around this time (before coming into wider usage in the mid-twentieth century, with the commoditized representation of "vision quests" and "spirit animals" in popular settler culture). In 1882 Alice C. Fletcher describes a sacred fasting ceremony as a "quest for the raven or the stone" in which a young man "may see in his vision one of these symbols" ("Religious Ceremony," 289). By the time Robert Lowie uses the phrase in 1914, he refers to the "familiar heading" of the "vision quest" ("Ceremonialism," 627).

31. Heise, *Imagining Extinction*, 49.

32. Coolidge had been hired by Price to lead "a party to southern Lower California to collect birds and mammals" (Nelson, *Lower California*, 145).

33. Thomas, "Description of New Bats and Rodents," 544–53, description of *O. peninsulae* at 548–49.

34. British Museum [signed Oldfield Thomas] to Dane Coolidge, March 3, 1898, Dane Coolidge Papers, Incoming Correspondence.

35. Merriam, "Synopsis," 278.

36. The organization occasionally referred to, in the period, as the "Pennsylvania Scientific Society" was a scientific fraternity at Penn that hosted a lecture series; a more probable institution for the activities Oskison mentions (collecting specimens, publishing reports) would have been the Academy of Natural Sciences of Philadelphia.

37. On the history of the idea of the "monstrous" as encompassing not only surprising hybrids but also classifications that "had their genesis in human ingenuity, imagination, or violence," see Ritvo, *Platypus and the Mermaid*, 133.

38. Carleton and Arroyo-Cabrales, "Review of the Oryzomys couesi Complex," 114–15.

39. See, in this volume, both Ottum on Lydia Millet's fictional version of a similar scenario involving the impact of development on kangaroo rats, and Oele in response to Michel Serres on the weakening and death of rivers.

40. Leopold, "Green Lagoons," 150. Lamenting the agricultural despoiling of an untouched Edenic space that ostensibly has "no place names"—a "milk-and-honey wilderness" where journeyers find themselves "back in the Pleistocene"—the essay culminates in a lyrical critique whose premises include Indigenous erasure (156, 155, 157).

41. "Uncle Sam's Egypt and Nile," 6.

42. Haraway, "Teddy Bear Patriarchy," 20. See also Yusoff, "Anthropogenesis."

43. The project is known as the Minute 319 project, in reference to an element of the 1944 water treaty, and was renewed in 2017 as the Minute 323 agreement.

44. Muehlmann, *Where the River Ends*, 5.

45. This assertion also refuses a discursive history in which anthropological predictions of Cucapá disappearance were entwined with agricultural claims of the Colorado's potential to support an increasing settler population; this claim is advanced in explicitly social-evolutionary terms (and in direct comparison with the Nile) in what is perhaps the period's most detailed geographical study of the area: MacDougal, "Delta" (see 15–16).

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