Becoming Amphibian: The Fowler's Toad and the Planetary Ethics of Relation

Peggy Bloomer[✉]
Central Connecticut State University

(Received: 17th October 2025; Revised: 9th January 2026; Accepted: 19th January 2026)

Abstract

This paper reconsiders the amphibian not as an emblem of transformation but as a living agent of planetary becoming. Beginning from an encounter with a Fowler's toad on the Connecticut shore, the essay explores how amphibious life mediates between water and land, matter and meaning, ancestry and becoming. Through Neil Shubin's evolutionary paleontology, D'Arcy Thompson's morphogenetic mathematics, and Gilbert Simondon's philosophy of individuation, the toad emerges as a transductive being—a mediator through which form, environment, and relation continually co-create one another.

Drawing on Indigenous Algonquian cosmologies of "life between waters," the analysis extends beyond morphology to ethical and ontological implications. The toad becomes both evolutionary archive and philosophical interlocutor, embodying a world in motion where being and becoming are inseparable acts. Its porous skin, poised between atmospheres, models a planetary ethics grounded in permeability rather than separation.

By merging personal narrative, evolutionary theory, and philosophical ontology, this study advances a multispecies framework for understanding animals as historical and cultural agents. The amphibian thus serves as a teacher of relation, demonstrating that to live, think, and create is to dwell perpetually in metamorphosis—a lesson the planet itself continues to enact through every breathing form.

Keywords: amphibian; individuation; morphogenesis; Simondon; Indigenous cosmologies; multispecies ethics

✉ bloomerp@ccsu.edu

Epigraph

"Nothing retains its form; new shapes from old
Nature, the great inventor, ceaselessly contrives."

— Ovid, *Metamorphoses*, Book XV (trans. Raeburn, 2004)



Figure 1: Fowler Toad at Night outside the author's door. (Bloomer, 2025)

Preface: The Doorway of Creatures

Through the thresholds of my life, animals have arrived as emissaries—each one carrying the soft grammar of transition. When my beloved Sharpei died, we buried her in the garden bed just beneath my front window. I marked the spot with a small clay pot, humble as a votive, and before long a garden snake began to weave in and out of its shadows. I am not always at ease with snakes; sometimes I imagine them coiled beneath the bed, keeping the pulse of the earth. Yet this one felt like a companion to Ching's passage, a messenger that life, even when hidden, continues to move.

Years later, when my husband passed, he left behind an old Jeep parked beside the garage. Two large snakes took up residence there, their bodies looping together in the warmth of sun on metal. I recoiled at first—at their intertwined presence, at the quiet trespass of their living—but when I placed the title into the glove compartment before the truck was taken away, I paused. Their pairing was not threat, I realized, but continuity—an uncoiling of endings into new, unimagined forms. I looked up the symbolism of snakes and found what the old stories

have always known: they are creatures of transformation, keepers of thresholds, guardians of the passage between worlds.

And now, a toad has taken up residence at my door. It arrived, it seems, with the new door itself—a sleek, modern threshold replacing the faux colonial frame that once sealed the house from the night. The toad sits there each evening, as if guarding the border between what has passed and what has yet to arrive. I have begun to think of it as the planet's small philosopher—its breath syncing with mine, its patience teaching me again how to live between worlds.

Methodological Orientation

This essay proceeds as an interdisciplinary philosophical inquiry grounded in a situated encounter—between human and amphibian, ancient and modern, deep evolutionary time and reflective presence. Rather than advancing an empirical study or taxonomic analysis, it develops a conceptual argument through the convergence of evolutionary biology, morphogenetic theory, philosophy of individuation, Indigenous relational epistemologies, and reflective narrative. The encounter with a Fowler's toad functions not as anecdotal ornament but as a methodological threshold—a concrete site through which broader questions of relation, form, and planetary becoming can be thought together. By moving between scientific accounts of amphibian life, philosophical frameworks of becoming, and lived attention to place, the essay adopts a mode of inquiry attentive to how knowledge emerges at the intersections of material bodies, environments, and conceptual systems.

Methodologically, the paper draws on what might be described as a transductive or relational approach to theory-building. Concepts are not applied from above as explanatory tools, but allowed to resonate across domains—evolutionary, ontological, ecological, and cultural—so that each reframes the others. This approach aligns with Gilbert Simondon's account of individuation as a process arising from tensions within a milieu, as well as with Indigenous cosmologies that understand knowledge as relational, situated, and responsive rather than extractive. The essay thus resists linear argumentation in favor of a cumulative logic in which meaning unfolds through proximity, return, and variation. In doing so, it offers amphibious life not only as an object of study but as a methodological guide: a way of thinking that remains attuned to thresholds, permeability, and the ongoing co-constitution of beings and worlds.

This essay argues that amphibious life—figured through the Fowler's toad—provides a generative framework for rethinking planetary ethics and relational ontology as modes of becoming-with, in which form, environment, and meaning co-emerge through transductive, porous relations. The argument unfolds deliberately across a constellation of theoretical perspectives that, while historically and disciplinarily distinct, converge around a shared concern with relational formation. Neil Shubin's evolutionary paleontology situates amphibious life as a living archive of planetary transition, revealing how bodies carry the unresolved potentials of prior environments. D'Arcy Wentworth Thompson's morphogenetic formalism reframes biological form as the visible negotiation of physical forces, rendering anatomy not as a static blueprint but as a diagram of relation. Gilbert Simondon's philosophy of individuation provides the ontological grammar that binds these insights together, understanding beings not as completed substances but as metastable processes emerging through transduction within a milieu. Indigenous Algonquian cosmologies further extend this relational ontology beyond Western scientific and philosophical traditions, offering an ethical and cosmological account of life as correspondence, reciprocity, and co-becoming across

human, animal, and elemental worlds. Read together, these perspectives do not collapse into a single framework; rather, they form an amphibious method—one that moves across disciplines and epistemologies to illuminate how life persists, thinks, and becomes at the thresholds where environments meet.

I. The Toad at the Threshold

On the damp edge of the Connecticut shore, as night settles and weather shifts, a Fowler's toad emerges at the threshold—less an object to be observed than a relational event through which evolutionary, environmental, and philosophical questions begin to take form. The encounter felt less like observing an animal than meeting a messenger from the porous world between elements. The toad's quiet presence proposed a question older than language: What does it mean to live between mediums—between becomings?

In that threshold moment, the amphibian became a lens through which three voices—Neil Shubin, D'Arcy Wentworth Thompson, and Gilbert Simondon—could be heard in chorus. Shubin's *Your Inner Fish* (2008) reminds us that our very wrists and lungs descend from fins that once probed the shallows. Thompson's *On Growth and Form* (1917) teaches that every curve and wrinkle is the diagram of physical forces. Simondon's *On the Mode of Existence of Technical Objects* (Simondon, 2017/1958) reveals being itself as a field of ongoing individuation—never complete.

The toad, perched at the threshold, thus stands as a figure of metastable becoming—its body an evolutionary archive, its geometry an inscription of force, its life a transductive negotiation between pond and porch. In its breathing, I sense the planetary pulse that unites matter and thought: an invitation to see evolution, form, and individuation not as separate stories but as one amphibious rhythm—a planetary mode of existence still unfolding.

II. The Amphibian as Evolutionary Archive (Shubin)

When Neil Shubin kneels in Arctic stone and lifts the fossil of *Tiktaalik*, he lifts not a relic but a relation—a hand extended across 375 million years. In *Your Inner Fish*, Shubin (2008) writes that "every reptile, bird, and mammal alive today can trace its origins to ancient fish" (p. 23) and that our own architecture carries "a map of our distant aquatic past" (p. 23). The amphibian body, then, is less a step between species than a metastable moment—a bridge still humming with the tension of water and air.

The Fowler's toad embodies this continuity. Its lungs recall the gas-filled sacs of Devonian fish; its four-limbed crawl reiterates the first hesitant push upon mudflats. Each breath repeats an ancestral experiment in converting water's buoyancy into the leverage of bone. Shubin's vision collapses the divide between human and animal, between origin and presence. He reveals evolution not as a ladder but as transduction—a passage of potential across matter, each new form inheriting the incomplete charge of the one before.

Through Simondon's lens, this evolutionary story is not a linear genealogy but a field of individuation. The toad is not the "end" of the fish; it is a resonance, a persistence of unexhausted potentials. The preindividual energy of the aquatic milieu remains active within it, expressed through its porous skin and nocturnal song. Evolution becomes an act of becoming-with—the world individuating itself through successive milieus rather than erasing them.

Thus, the small amphibian at my door is also an ontological archive. It carries in its soft geometry the memory of the oceans that shaped vertebrate possibility, and by its survival on land it continues the work of translating the sea into breath. It is the living sentence of Shubin's claim that "our humanity rests on the same foundations as the rest of animal life" (Shubin, 2008, p. 7).

If I listen closely, I can almost hear in the rasp of its throat the echo of that ancient tide—the world still forming its lungs.

III. The Geometry of Becoming

If Shubin gives us ancestry, D'Arcy Wentworth Thompson gives us architecture. In *On Growth and Form*, Thompson (1917) proposes that "the form of an object is a diagram of forces" (p. 10)—a visible record of invisible struggles. Every curve, wrinkle, and ratio is a compromise: matter negotiating gravity, pressure, and flow. The toad's squat geometry—its domed skull and wide-set limbs—is thus not ornament but argument: a living equation balancing weight against moisture, leap against adhesion, breath against drag.

To watch the toad move is to witness a physics lesson rendered in flesh. Its body yields and stiffens by turns, translating the elasticity of muscle into the geometry of trajectory. Where Thompson saw shells spiraling according to logarithmic law, I see in the toad's crouch the parabolic poise of potential energy—a body perpetually calculating the world's resistance. In that calculus lies beauty: the beauty of equilibrium sought and never quite achieved.

Simondon would read this geometry not as the outcome of a plan but as a transductive resolution—form and matter co-emerging within a metastable field. The toad's skin, neither dry nor wet, mediates between surface tension and evaporation; its bones mediate between the buoyancy of water and the compression of earth. What Thompson mapped mathematically, Simondon translates ontologically: being itself is morphogenetic, a ceaseless adjustment of forces seeking coherence without closure.

IV. Metastability and the Ontogenesis of Form

Gilbert Simondon's thought begins where both Shubin's and Thompson's converge—at the threshold where form, matter, and environment cease to be separable. In *On the Mode of Existence of Technical Objects*, Simondon (2017/1958) writes that "the individual is not a substance but a phase" (p. 23)—a temporary crystallization within an ongoing process of individuation. To live, then, is to persist in a state of metastability—not equilibrium, but the shimmering poise between unresolved potentials.

The amphibian body exemplifies this principle with exquisite clarity. The Fowler's toad is not merely an evolved form; it is a continuous negotiation between milieus—between the liquidity of its larval past and the solidity of terrestrial existence. Its metamorphosis from tadpole to toad is not a linear progression but a transductive relay: water becomes air, fin becomes limb, gill becomes lung—yet none of these transformations erases what came before. The organism retains traces of its earlier states as latent potential, ready to be reactivated by rain, temperature, or song.

Simondon (2017/1958) insists that "individuation is never complete; it is the being that is undergoing individuation" (p. 26). To watch a toad breathe, half-submerged in twilight water, is to witness the very image of this ongoing genesis—a being suspended between

stillness and movement, between unity and multiplicity. Even its skin participates in transduction: porous and osmotic, it becomes the interface where inside and outside coalesce.

This view dismantles the ancient hylomorphic model, which imagined form as an external mold imposed upon inert matter. For Simondon—and for the amphibian alike—form arises from within the dynamic tensions of the milieu itself. The toad's architecture is not designed but discovered through its relation to humidity, temperature, and sound. It is a living equation solving itself in real time—a modulation of planetary forces.

In this light, metamorphosis becomes less a biological curiosity than an ontological statement. The amphibian demonstrates that to be is to transform—to maintain identity through difference and continuity through change. Its croak, emerging from the dark edge of a pond, is not mere sound but transductive resonance: the voice of matter reflecting upon its own potential.

The toad thus personifies what Simondon might call a philosophy of relation. It does not exist *in* the world; it is a relation the world has made with itself. Each leap across the damp grass performs an individuation in miniature—an exchange of forces, a communication between air and earth, a renewal of the planet's own creativity.

In that sense, the amphibian becomes a teacher of ontology. It shows us that we, too, are metastable beings: our thoughts, like its leaps, arise from tension—from the interplay of energies that never quite settle. To think with the toad is to think with the earth as it individuates itself through us.

V. Indigenous Cosmologies and Planetary Relation

Before the language of morphology and individuation—before even the fossil record that Shubin reads as a scripture of stone—there were the songs and stories of the land itself. Along the Connecticut coast—the ancestral lands of the Pequot, Mohegan, and Niantic peoples—the toad has long been understood not as a lesser being but as a keeper of balance. In Algonquian cosmologies, amphibians inhabit the zones between *waters*, mediating rain, fertility, and the rhythm of renewal. Their croaks are not noise but ceremony—what Indigenous philosopher James Maffie (2014) calls "a world in motion," where being and becoming are inseparable acts (p. 30).

In these narratives, the toad is a teacher of relation. It dwells where opposites touch—mud and sky, silence and song, transformation and persistence. When rains return, the wetlands stir with its voice, summoning the microbial bloom that feeds insects, which in turn nourish birds and fish. It is a singer in the ecological chorus—a planetary node of reciprocity. The Pequot notion of life as "breath shared among beings" resonates with Simondon's idea that individuation occurs only within an associated milieu (Simondon, 2017/1958, p. 28). Both describe a cosmos that is not built from isolated parts but from relational events—moments of co-becoming.

To stand before the toad, then, is to stand before a philosophy older than metaphysics. The amphibian at the threshold is the living emblem of what modern ecology now rediscovers: that form and meaning are relationally constituted, that there is no self outside the web of interdependence. When the toad breathes, it breathes for the wetlands; when it calls, it calls the rain; when it crosses the porch, it enacts a planetary continuity of movement.

This Indigenous understanding already embodies what Simondon (2017/1958) describes as *psychic and collective individuation*—a shared becoming between beings and environments. Where Western thought often begins with separation, these cosmologies begin with correspondence: human, animal, and element co-participate in the world's unfolding. The toad's body is not a "thing" but a mode of relation, a vibrational link in what Pequot storytellers might describe as "the skin of the world"—that which feels and breathes across all boundaries.

To recognize this is to move beyond the anthropocentric gaze. The toad is not "other"; it is the world individuating at another scale and rhythm. Indigenous epistemologies, like Simondon's philosophy, teach that every being is an ontological gesture—a way the earth experiments with itself. The Fowler's toad, singing by the coastal marsh, continues this experiment in resilience and resonance. It is, quite literally, the planet speaking amphibian.

To attend to such a being is to practice a mode of thought that does not rush to explain, but learns to linger. An amphibious methodology does not seek mastery over its object; it waits at the threshold, allowing relations to disclose themselves in their own time. The Fowler's toad, breathing at the edge of land and water, offers neither doctrine nor solution, but a rhythm—one that draws scientific insight, philosophical reflection, and Indigenous understandings of reciprocity into quiet alignment. In its stillness, evolutionary memory, morphogenetic force, and ongoing individuation are not resolved into a single account, but held together without strain. Planetary ethics emerges here not as prescription, but as attunement: a way of dwelling with the world that remains responsive to permeability, transition, and co-presence. Becoming amphibian thus names a discipline of attention—one that pauses, listens, and stays with the living processes already underway, recognizing that thought itself must sometimes learn to breathe with the earth.

References

Battaglia, D. A. (2015). Symbiotic vision: Amphibian lives and planetary becomings. *Environmental Humanities, 7*(2), 247–268. https://doi.org/10.1215/22011919-3616416

DeLanda, M. (2011). *Philosophy and simulation: The emergence of synthetic reason.* Continuum.

Maffie, J. (2014). *Aztec philosophy: Understanding a world in motion.* University Press of Colorado.

Ovid. (2004). *Metamorphoses* (D. Raeburn, Trans.). Penguin Classics. (Original work published 8 CE)

Shubin, N. (2008). *Your inner fish: A journey into the 3.5-billion-year history of the human body.* Pantheon Books.

Simondon, G. (2017). *On the mode of existence of technical objects* (C. Malaspina & J. Rogove, Trans.). Univocal Publishing. (Original work published 1958)

Thompson, D. W. (1917). *On growth and form.* Cambridge University Press.

Viveiros de Castro, E. (2014). *Cannibal metaphysics* (P. Skafish, Ed. & Trans.). Univocal Publishing.