

Introduction: Bachelard's Living Philosophical Legacy

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The aim of this collection on the French philosopher Gaston Bachelard (1884–1962) is to pursue four major paths of inquiry in his work—time, methodology, language, alterity—which call to be explored at greater depth in the English language, while tracing specific ways in which his phenomenological adventures¹ contributed to the advancement of twentieth-century culture, and may further contribute in the twenty-first. With that in mind, this volume gathers recently written critical studies together with a few updated studies by established Bachelard scholars—pieces which, taken conjointly, are designed to stimulate discussion on potentials of Bachelardian thought in the fields of ontology, hermeneutics, aesthetics, ethics, psychology, science, the arts, and religion, as well as interdisciplinary fields in cultural, political, and environmental studies. By bringing Bachelard's work into close proximity and dialogue with the work of contemporary thinkers—including several who came after him—we thus intend to highlight the relevance and fecundity of Bachelard's insights vis-à-vis philosophical questions currently being debated in continental philosophy. Such a critical reopening of Bachelard's oeuvre is both timely and necessary at this historical juncture, considering the partial eclipse that Bachelard's oeuvre underwent during the heady rise of postmodernism after his death, and given the impasse that has persisted in the relation between the sciences and the humanities at the turn of the new millennium—challenges that may be more productively tackled if illuminated by Bachelard's farsighted perspectives.

Overview of an Unusual Philosophical Trajectory

In the late 1920s and early 1930s, Bachelard began an epistemological exploration of the revolutionary character of the scientific spirit spurred by twentieth-century discoveries in relativity and quantum theory from the perspective of the historical and critical rationalism then being advanced by his professor and mentor Léon Brunschvicg (1869–1944).² As the theoretical subtlety and applications of his thinking evolved through the 1930s, Bachelard's reflections increasingly focused on the transformative powers of imagination. It is often assumed that this shift in focus from the productions of reason to the imagination (and its ensuing alternation) occurred suddenly while writing *The Psychoanalysis of Fire* (1938),³ yet the first glimmers of Bachelard's fascination with poetic intuition can be detected as early as the *Intuition of the Instant* (1932),⁴ a meditation on the nature and enigmas of time prompted by his reading of Gaston Roupnel's philosophical drama *Siloë* (1927).

During the period that followed, and throughout the 1940s, Bachelard made several attempts to understand the dynamics of imagination, along with the nature and formative forces of language, through an open-ended, inductive approach organized heuristically around a literary exploration of elemental images (fire, water, air, earth), rather than through a deductive approach led by a priori principles and concepts (as had been the case in traditional epistemologies and certain applications of psychoanalysis). At this time Bachelard's philosophy was being gradually nourished in the fertile soil of the phenomenological movement that had begun yielding fruit in France since the delivery of Edmund Husserl's celebrated lectures on phenomenology at the Sorbonne in 1929 and the subsequent publication of his *Cartesian Meditations* in French. Although Bachelard would not explicitly align his studies with this movement until several years later (and not without first qualifying its methods through his own findings),⁵ his self-critical and practical philosophical style epitomized from the outset a fervent commitment to the phenomenological "attitude of crisis and wonder"⁶ in the face of phenomena that present themselves to human experience in science or imagination. Bachelard's philosophical itinerary thus exemplified the agility of a mind forever open to questioning, revision, adventure, and discovery.

While Bachelard pursued questions of time, space, matter, and language in the late 1930s, testing a number of approaches (epistemological, psychological, poetic), Maurice Merleau-Ponty (1908–1961) was just starting to compose *The Phenomenology of Perception* (1945), where he would

ultimately announce that phenomenological philosophy “is not the reflection of a pre-existing truth, but, like art, the act of bringing truth into being” (xx). Merleau-Ponty’s avowal that phenomenology “is as painstaking as the works of Balzac, Proust, Valéry, or Cézanne by reason of the same kind of attentiveness and wonder, the same demand for awareness, the same will to seize the meaning of the world or of history *as that meaning comes into being*” (xxi, emphasis added) happened to capture the essence of Bachelard’s practical explorations in the sciences and literature, which would lead in his later years to a mature articulation of his ontology.

The chapters collected here endeavor to highlight ways in which Bachelard was already beginning to carry the possibilities of the phenomenological movement in France to deeper and subtler levels, primarily by examining his distinctive mode of meditation in ushering the birth of knowledge from the recesses of world and being: a type of dream-thought (*pensée rêvée*) he would identify as “anagogic reverie” in *The Philosophy of No* in relation to scientific thought,⁷ and “poetic reverie” in relation to adventures in literary imagination or art. The latter is most precisely defined in *The Poetics of Reverie* (5–6) yet is intimated as early as *Intuition of the Instant* (10, 56). Bachelard’s characteristic mode of meditation is closely examined by a number of authors in this volume.

When engaging with established philosophical or scientific paradigms, however, Bachelard adopted a distinctive polemical style, a dialectic approach he had started developing since the early 1930s and laid out most succinctly in his *Philosophy of No* (1940). This approach could be qualified as a “critical hermeneutics” moved not by a wanton will to negate (as the book’s title might suggest at first glance) but by a need to confront preconceptions—by reopening and subverting founding questions in order to rethink reified paradigms from novel perspectives, often illumined by recent scientific discoveries in physics, chemistry, or depth psychology. These discoveries would turn out to have profound ontological and hermeneutic repercussions, as attested in the works of scholars later influenced by Bachelard’s oeuvre, such as Georges Canguilhem and James Hillman in the fields of health, medicine, and psychological insight, or Patrick A. Heelan and Don Ihde with regard to the physical sciences and technologies.⁸

Alongside such critical hermeneutics, Bachelard would adopt what poet Jean Lescure described as a “method of sympathy” in approaching literary or poetic discourse (II 64–71). This hermeneutic practice also took root early in Bachelard’s career with his reading of Roupnel’s *Siloë*, as laid out in his introduction to the *Intuition of the Instant* (1932). Bachelard in fact strove

consistently to attune his hermeneutics to the specific nature of each text, phenomenon, or question at hand—hence the mutability of his methods and discursive styles, depending on the call of the case. In this volume the reader will be able to witness several hermeneutic attitudes at work within Bachelard's own texts, as well as in the variety of critical approaches to his oeuvre—some of which stand in sharp contrast, while others complement or reinforce one another in surprising ways.

Reception of Bachelard in Continental Philosophy

In a recent study, *Home: A Concrete Bachelardian Metaphysics* (Oxford: Peter Lang, 2011), Miles Kennedy offers a sustained and provocative discussion of Bachelard's ontology vis-à-vis Heidegger's renowned project of being-in-the-world, as well as the thought of Jean-Paul Sartre, Jacques Derrida, Simone de Beauvoir, Luce Irigaray, and other leading figures in twentieth-century existentialism and continental philosophy. In his opening chapter, Kennedy makes the unsettling claim that Bachelard's original insights were often "borrowed" by his French colleagues and employed at times reductively or without due acknowledgment (*Home*, 1–24). This rather cavalier attitude toward Bachelard's oeuvre among his contemporaries in continental philosophy might be explained in part by Bachelard's early allegiance to Brunschvicg's analytical rationalism (an approach which in those years had lost popularity among French continental philosophers despite its new critical-historical thrust)⁹ and his appointment as chair of History and Philosophy of Science at the Sorbonne—not to mention his autodidactic and widely exploratory philosophical methods, too audacious for some when it came to his hermeneutic recovery of alchemical symbolism, for instance, after his own pungent criticism of its imagery and practices from the strict perspective of scientific epistemology.¹⁰

Surprisingly, however, Kennedy makes no allusion in this study to the work of Merleau-Ponty, who appears to have had contact with Bachelard during the late 1940s and 1950s when teaching concurrently at the Sorbonne and its neighboring Collège de France. This exception is perhaps due to Kennedy's focus in his book on the ontology of Bachelard's *The Poetics of Space* (with its mature notion of "dwelling" in the world), more than on his earlier work on the "elemental imagination," which had palpable influence on Merleau-Ponty's notions of the "imaginary" and the "flesh of the world" (VI 245, 267).¹¹ Yet Merleau-Ponty also appears to have criti-

cally predicated his “indirect ontology” in *The Visible and the Invisible* on the “direct ontology” proposed by Bachelard just a few years earlier in *The Poetics of Space*, a poetic ontology closely discussed by Glen Mazis in his piece for this volume (part 2, chapter 8).¹²

Later, in the introduction to *The Poetics of Reverie* (1960), Bachelard would highlight the subtle difference between the phenomenological approach he had been developing since the early 1940s and Merleau-Ponty’s approach in *The Phenomenology of Perception* by emphasizing what he considered to be the “primacy of imagination” underlying perception (PR 1–15, especially 13–14). Bachelard had expressed interest in Merleau-Ponty’s studies as early as *Earth and Reveries of Will*, teasing out examples of “intentionality” described in his colleague’s magnum opus (ERW 39–41). During those years one finds only a few brief references to Bachelard in Merleau-Ponty’s works: an allusion to the sacramental notion of Bachelard’s “elements” of imagination in a 1948 radio lecture,¹³ and another to the “superexistence” of a work of art in “Indirect Language and the Voices of Silence.”¹⁴ Yet judging by the working notes to *The Visible and the Invisible*, by the early 1960s Merleau-Ponty had come to a deeper appreciation of the ferment of Bachelard’s thought within French phenomenology and in the development of his own ideas with regard to the roles of the “elemental imaginary” in perception, the “flesh of the world,” “chiasmic intertwining,” and even the “*Stiftung* of a point in time” (VI 245, 267). In fact, Merleau-Ponty’s critique of Bergson’s theory of time had long exhibited sparks of contact with Bachelard’s arguments in *Intuition of the Instant* (1932), *The Dialectic of Duration* (1936), and “Poetic Instant and Metaphysical Instant” (1939)¹⁵—particularly with respect to the way Bergson’s notion of continuous duration tends to dissolve past, present, and future into the amorphous tide of the *élan vital*, without giving enough weight to the pulsating role of the ethical subject at the very heart of this *élan*.¹⁶

Merleau-Ponty’s new project—though cut short by his premature death in 1961—was fortunately carried forward by creative phenomenologists who would follow in his steps and beyond, prompted by his fertile proposals. Whereas his living legacy endured and flourished over the ensuing decades, Bachelard’s critical relevance for Merleau-Ponty’s project remained virtually unexplored in continental philosophy.¹⁷

From early on in his career, meanwhile, Michel Foucault had begun to detect the significance of Bachelard’s thought within continental philosophy and culture¹⁸—drawing attention, in particular, to the subversive element in Bachelard’s philosophical outlook and style, most vividly captured in the following excerpt from an interview recorded in 1972:

What strikes me the most about Bachelard is that, in a way, he plays against his own culture with his own culture. In traditional education, as well as in the popular culture we inherit, there are always a certain number of established values: things one must read and others one need not read, works considered highly significant and others negligible; there are renowned people and less significant people. There is a hierarchy—you know, that whole celestial world with its thrones, dominations, angels, and archangels—all this is well hierarchized, and roles are very precisely defined. Bachelard knows how to disengage himself from this ensemble of values, and he knows how to disengage himself simply by reading everything, and by confronting everything with everything. He reminds me, if you will, of those skilled chess players who manage to capture the biggest pieces with pawns. Bachelard does not hesitate to oppose Descartes to a minor philosopher or an imperfect or eccentric eighteenth-century scholar. He doesn't hesitate to bring together in the same analysis the most important poets and a minor anti-poet he might have discovered by chance while browsing in a small bookshop. By doing that, he does not mean to reconstitute the “great global culture”—if you will, that of the West, Europe, or France. It's not about showing that it is always the same great mind [*Esprit*] that lives and swarms everywhere. My impression is, on the contrary, that he tries to seize his own culture through its interstices, its deviances, its minor phenomena, its dissonances.¹⁹

Bachelard Entering the Third Millennium

As Edward S. Casey and Kristupas Sabolius reveal in two of the opening pieces in this volume, “The Difference an Instant Makes: Bachelard's Brilliant Breakthrough” and “Rhythm and Reverie” (part 1), Bachelard was indeed a pioneer in discovering and illustrating how *reverie*—as a subversive mode of thought responsive to the sudden, though subtle, call of the instant—is the preeminent faculty capable of *breaking open* human intuition to inchoate energies that brew in the umbral dimensions of the pre-perceptible. With regard to anagogic reverie's role in the sciences, Anton Vydra's essay “Bachelard vis-à-vis Phenomenology” (part 2) then points to Bachelard's ventures into

the noumenal realm of possibility, perhaps too readily dismissed by those among his phenomenological contemporaries who, without his intensive background in microphysics, had yet to come to a full appreciation of its ontological potentials. Mary McAllester also addresses this key mode of scientific thought in her essay “Adventures of Consciousness” (part 2) in terms of pure mathematical ideas that Bachelard intuitively hovers around real phenomena (NSS 58)—possibilities that can break open astonishing paths to *realization* via the poetic exercise of mathematical reverie.

Alternatively, in the phenomenal realm of art, although we may subconsciously partake in such latent potentialities from the outset as living embodied creatures, Bachelard’s waking-working reverie (*rêverie ouvrante-oeuvrante*) was intended to raise them to conscious awareness by teaching us to participate *attentively* in their invisible energies through the arts of contemplative listening and active expression (from lyrical poetry to metalwork). Such hermeneutic and ontological processes of disclosure, realization, and transformation—discussed respectively by Eileen Rizo-Patron and Glen A. Mazis (part 2)—would in turn make it possible for consciousness to harness and educate embryonic forces toward elected values or purposes: hence the ethical-political implications of Bachelard’s philosophy.²⁰ The ethical implications of Bachelard’s thought are addressed throughout this volume from a variety of critical perspectives—ranging from Richard Kearney’s remarks on the categorical imperative of the “vertical instant” (part 1) to the essays by Madeleine Préclaire, Edward Kaplan, and Samuel Talcott on Bachelard’s responses to the call and demands of “otherness” (part 4).

Although Bachelard opted not to adopt the existentialist ethos that predominated in continental discourse in the 1940s and 1950s (see Kennedy, 5–6, 142–44), nor to engage in heated debates on political philosophy that took ascendancy during and following World War II, he carried his critical activism into the hidden will and dynamics of the psyche—personal and collective—away from domains of consensual and partisan thinking. Having fought almost four years in World War I, more than a decade before being assigned as philosophy professor at the University of Dijon in the 1930s, Bachelard appears to have developed a mistrust of ideological discourse. No longer keen on rehearsing the inflexible gridlock it can lead to, instead he determined to find new paths toward opening the cultural psyche and helping to heal the spirit of his times. During the 1940s he was thus drawn toward a psychological depth-analysis of pervasive habits of feeling-thinking which he termed “culture complexes”²¹—attitudes and automatisms that could drive human behavior into obtrusive if not catastrophic impasses—through

a painstaking study of language and imagery that tends to shape our very perception of the world.

Bachelard thus remained a philosophical trailblazer and resistance fighter within academia by opting to go “underground” via his decisive turn to the elemental imagination, wherefrom he struggled against a diseased environment and political establishment by first bracketing the din of ideological discourse in order to listen to the hidden pulses of the collective psyche, as expressed in dynamic imagery that arose in literature and the arts. Through this penetrating and solitary effort (even as he served as chair of the History and Philosophy of Science faculty at the Sorbonne), Bachelard was able to explore the hidden roots of the ills of his day and thereby to open up new ground. Pieces that especially highlight this cultural-political problem embedded in language and psyche, in our volume, are those by Eileen Rizo-Patron (part 2), Jason M. Wirth (part 3), and Samuel Talcott (part 4).

In the spirit of this intrepid thinker, several chapters gathered herein revisit areas of Bachelard’s phenomenology that pertain to his ventures amid gaps or crossovers between the real and the imaginary, or between and among philosophical thinkers. For bold advances prompted by Bachelard’s thought, see in particular Edward S. Casey’s “Missing Land: Between Heidegger and Bachelard” (part 4), Jason M. Wirth’s “The Heat of Language” (Part 3), and Samuel Talcott’s “Environmental Politics” (part 4). Philosophical partners examined include ones from whom Bachelard drew inspiration or incitement (Novalis, F. W. J. Schelling, Henri Bergson, Edmund Husserl, Martin Heidegger, Jean-Paul Sartre, Henry Corbin, C. G. Jung, Martin Buber) and ones whose works were in turn spurred by Bachelard’s unsettling proposals (Walter Benjamin, Michel Foucault, Henri Lefevre, Maurice Merleau-Ponty, and Jacques Derrida). Other prominent thinkers who may not have had contact with Bachelard yet whose works overlap with his in stimulating ways are also brought to the table (Hans-Georg Gadamer, Jean-Luc Nancy, and Gilles Deleuze). Salient among such dialogical analyses are Jean-François Perraudin’s probe into Bachelard’s polemic with Bergson (part 1), Anton Vydra’s study of Bachelard vis-à-vis Husserl’s phenomenology (part 2), Jason M. Wirth’s symposium between Bachelard and other major philosophers on the tension between idea and image, Eileen Rizo-Patron’s soundings of the Λόγος in Bachelard and Gadamer, Roch C. Smith’s examination of Bachelard’s “logosphere” versus Derrida’s “logocentrism” (part 3), and two luminous accounts of Bachelard’s spiritual encounters—the first with theologian and professor of Islamic studies Henry Corbin, by David L.

Miller (part 3), and the second with Jewish philosopher Martin Buber, by Edward K. Kaplan (part 4).

On the whole, Bachelard's work was aimed at responding to the call of the world's ever-nascent Λόγος—not to accomplished *givens* but to *gifts* that come as pleas, crises, or “coefficients of adversity” (to use Bachelard's phrase). This is a key aspect that Bachelard's phenomenological adventures shared, if tacitly, with those of his colleagues in continental philosophy, although Bachelard—especially during the 1940s—adopted more of a polemical intentionality vis-à-vis the perceived world than did his fellow phenomenologists, who focused on a vectorial intentionality less emphatic of the dynamic entanglements (*l'entrecroisement*) that Bachelard found persistently provoking/transforming subjects and objects, in unpredictable ways (WD 159–60; ERW 39–41; MR 182).²²

Part 4 of our volume thus ends on an open note with a chapter from Madeleine Préclaire's *Une Poétique de l'homme*²³ on “Bachelard's Open Solitude,” as well as two appendices: Bachelard's Preface to Buber (appendix A), featuring Bachelard's response to Buber's call in *I and Thou*, with its consequent summons to the “thou” of future readers, and Georges Gusdorf's personal testimony about his revered mentor (appendix B), which concludes with Bachelard posing a direct challenge to his reader and interlocutor.

Challenges of Translating Bachelard's Oeuvre

Although Bachelard scholarship continued virtually uninterrupted in the French academy after his passing in 1962,²⁴ one logistical factor that contributed to its relative eclipse in the English-speaking world toward the end of the twentieth century was the difficulty of gathering his prolific oeuvre into a cohesive array of publications in English translation.²⁵ The interdisciplinary nature of Bachelard's writings themselves—spanning scientific epistemology, psychoanalysis, depth psychology, philosophy of imagination, and phenomenology—is no doubt one of the reasons for its fragmented reception, along with the sporadic emergence of translations and critical analyses by scholars from diverse fields and schools of thought over the years. Yet the formidable task of translating his large body of work was valiantly undertaken, albeit in a scattershot approach, by different publishers and translators.

In the 1960s, Beacon Press published popular and influential translations of what were to become Bachelard's best-known works in North

America: *The Psychoanalysis of Fire* (1964, trans. Alan D. Ross), *The Poetics of Space* (1964, trans. Maria Jolas), and *The Poetics of Reverie* (1969, trans. Daniel Russell). These otherwise excellent editions did not include analytical indexes, which would have made them more accessible to scholarly study; moreover, the lexicon of key terms for Bachelard lacked both consistency and nuance, as different translators handled terms independently of each other, and certain problematic terms were introduced (such as “daydream” for the French *rêverie*, meant to connote a more lucid mode of attention than the aimless fantasies of a wandering mind). This sometimes made it difficult to correlate his philosophical ideas in more cohesive ways.

In the 1980s, the Dallas Institute of Humanities and Culture launched its Bachelard Translations Series under the direction of Joanne H. Stroud, who contracted with Éditions José Corti in Paris to publish all of Bachelard’s works on the imagination in English: *Water and Dreams* (1983), *Lautréamont* (1986), *Air and Dreams* (1988), *The Flame of a Candle* (1988), *The Right to Dream*, a collection of essays and prefaces on art and literature (1988), *Earth and Reveries of Will* (2002), *Earth and Reveries of Repose* (2011), and his posthumous *Fragments of a Poetics of Fire* (1990). Each of these editions included helpful analytical indexes and illuminating editorial commentary.

Two anthologies of translated Bachelard selections in English were also published during those years, one with an extensive introduction by Colette Gaudin, *On Poetic Imagination and Reverie* (New York: Bobbs-Merrill, 1971; Dallas: Spring, 1987), and the second with selections from Bachelard’s work in philosophy of science and poetics, including close textual analyses by Mary McAllester Jones, *Gaston Bachelard: Subversive Humanist* (Madison: University of Wisconsin, 1991). Several years earlier Roch C. Smith’s comprehensive study *Gaston Bachelard* (Boston: Twayne, 1982) had appeared already tackling the cross-fertilization between his epistemology and his poetics despite their differences in philosophical approach and style.

Meanwhile, in the field of scientific epistemology, and on the question of temporality, Mary McAllester Jones was spearheading Bachelard studies in the United Kingdom, publishing translations of Bachelard’s works with Clinamen Press in Manchester, UK—specifically, *The Dialectic of Duration* (2000) and *The Formation of the Scientific Mind* (2002). Also notable in the area of epistemology had been the earlier critical work of Mary Tiles, *Bachelard Science and Objectivity* (Cambridge: Cambridge University Press, 1984), and that of Patrick A. Heelan, author of the foreword to Bachelard’s *The New Scientific Spirit* (1984, trans. Arthur A. Goldhammer). The only other book on Bachelard’s philosophy of science published in English

until then had been *The Philosophy of No* (1968, trans. G. C. Waterston). From Bachelard's collection of essays *Études* (1970), a single article entitled "Noumenon and Microphysics" has since been translated by Bernard Roy and published in *Philosophical Forum* (2006): 75–84. But all other works on scientific epistemology have yet to be translated into English. These include Bachelard's *Le Pluralisme Cohérent de la Chimie Moderne* (1932), *Intuitions Atomistiques* (1933), *L'Expérience de l'espace dans la physique contemporaine* (1937), *Le Rationalisme appliqué* (1949), *Le Matérialisme rationnel* (1953).

In this volume, we are pleased to feature Edward K. Kaplan's newly revised English translation of Bachelard's 1938 "Preface to Buber's *I and Thou*." Also recently published is Eileen Rizo-Patron's translation of Bachelard's 1932 essay on the question of time, *Intuition of the Instant* (Northwestern University Press, 2013).

Alongside this ongoing translation venture, some illuminating analyses of Bachelard's contributions to continental philosophy have appeared in English during the last couple of decades, whether as book-length monographs, chapters in thematically-oriented volumes, or as articles in scholarly journals. Richard Kearney's *Poetics of Imagining* (New York: Fordham, 1998), for instance, sets Bachelard's philosophy of imagination beside that of Husserl, Heidegger, Sartre, Merleau-Ponty, and postmodern thinkers, dedicating a chapter to each, while Cristina Chimisso devotes her entire *Gaston Bachelard: Critic of Science and the Imagination* (New York: Routledge, 2001) to a study of the pedagogical orientation of Bachelard's oeuvre within its cultural and institutional context. Gary Gutting's *Continental Philosophy of Science* (Oxford: Blackwell, 2005) includes an excerpt from Bachelard's *Essai sur la connaissance approchée* (1928) in translation, with a critical commentary by Mary Tiles. During this time, individual essays on Bachelard's work were being periodically published in academic journals such as *Continental Philosophy Review*, *Religion and the Arts*, *Philosophy Today*, *International Studies in Philosophy*, and *Studies in History and Philosophy of Science*.

Most recently, new perspectives on specific issues of Bachelard's oeuvre have appeared in English as well—in particular, Miles Kennedy's *Home: A Concrete Bachelardian Metaphysics* (2011), a study of Bachelard's and Heidegger's differing notions of being and dwelling in the world, illustrated by a reading of Mark Z. Danielewski's novel *House of Leaves* (New York: Pantheon, 2000); and Zbigniew Kotowicz's *Gaston Bachelard: A Philosophy of the Surreal* (Edinburgh University Press, 2016), which highlights the "atomistic roots" of Bachelard's philosophy.

Finally, to help offset the thematic and disciplinary gaps in Bachelard scholarship among English speakers over the years, the State University of New York Press has just reissued, as part of its Contemporary French Thought Series, a revised and updated edition of Roch C. Smith's comprehensive introduction to Bachelard's philosophical oeuvre, with a fully annotated critical bibliography, under the new title of *Gaston Bachelard: Philosopher of Science and Imagination* (2016).

Notes

1. We use the phrase *phenomenological adventures* here not to refer exclusively to a school of thought but to suggest the dynamic processes of sedimentation-dissolution, activation-reduction, expansion-contraction by which our phenomenological world is constituted and critically recreated in Bachelard's accounts. The term *adventures* (related to both ventures and advents) is further meant to underline Bachelard's penchant for crossing the limits of the phenomenal, time and again, by reaching into the unknown to solicit the virtues of the noumenal.

2. See FSM 19. More detailed accounts on the intellectual context in which Bachelard's early thinking developed (including major influences on his thought) can be found in Roch C. Smith's *Gaston Bachelard: Philosopher of Science to Imagination* (Albany: State University of New York Press, 2016), 1–8; Mary McAllester Jones's *Gaston Bachelard: Subversive Humanist* (Madison: University of Wisconsin Press, 1991), 4–8; and Cristina Chimisso's *Gaston Bachelard* (London: Routledge, 2001), chaps. 2, 4, and 5.

3. Bachelard never abandoned the early epistemological interests awakened by the new scientific spirit, as attested by his books published between 1949 and 1953: *Le Rationalisme appliqué, L'Activité rationaliste de la physique contemporaine, Le Matérialisme rationnel*. Roch C. Smith, Mary McAllester Jones, and Cristina Chimisso present powerful arguments in the above-cited works (see n. 2) on the significance of Bachelard's epistemology of science for his developing theories of imagination.

4. See Bachelard's introduction (II 3–5), as well as the lyrical epigraphs heading each chapter, and those passages where Bachelard summons the reader “to return to the shores of Siloam where mind and heart become reconciled as they complement each other” (II 27). Most poetically revealing, in this regard, are the final pages of chapter 3 (II 52–54) and the conclusion (55–57).

5. Bachelard engaged in a practical and critical exploration of phenomenological methods after the mid-1930s, as Anton Vydra recounts in his essay “Bachelard vis-à-vis Phenomenology” (in part 2 of this volume). Although by the early 1950s phenomenology had attained thematic status in his critical philosophy (MR 1–36),

his commitment to its approach would be most eagerly articulated and demonstrated in *The Poetics of Space* (1957).

6. The attitude of “crisis and wonder”—which can be traced back to Husserl’s “phenomenological reduction”—is clearly laid out in Bachelard’s introduction to *The Poetics of Space* (xi–xxxii, esp. xi, xiv, xxviii–xxix), though one finds it already at work in his approach to the scientific challenges that called forth the revolutionary movements in twentieth-century science. Citing Eugen Fink, once Husserl’s assistant, John Cogan here unpacks it in a lucid commentary that vividly reflects Bachelard’s own practice: “[I]t is in this wonder that the unsettling idea of a *genuine mode* of knowing the existent suddenly emerges from beneath the ordered, familiar world in which we are at home and about which we have fixed meanings concerning things, man and God, meanings which make certainty in life possible.’ It is a ‘genuine mode’ precisely because it is not already decided what the nature of the existent and the nature of truth are. . . . The only ‘knowing’ that is original is the knowing that properly belongs to astonishment; because it is only in astonishment that man experiences the complete collapse of his traditional knowledge and pre-acquaintance with the world and with things; a collapse that is due entirely to a *new* confronting of the existent and a *new* projection of the senses of ‘being’ and ‘truth.’ . . . The way [Fink] uses [the term ‘original’] in this passage heralds the sense of ‘founding’ invoked in the way phenomenology provides a ground for epistemology. Fink has told us that the astonishment in which philosophy begins is in no way ‘merely a disposition, a feeling.’ Rather, ‘it is the fundamental disposition of pure thought; it is *original theory*.’ . . . In astonishment a change and transformation of knowing occurs such that what we already know is reduced to mere opinion and even the very nature of knowing is altered. . . . Fink [thus] marks a distinction between the ‘knowing’ that stands in need of a foundation and the ‘knowing’ that does the founding. The knowing that does the founding is the original knowing of astonishment . . . and the door to sustained astonishment is opened by the rigorous performance of the phenomenological reduction” (John Cogan, “The Phenomenological Reduction,” in *The Internet Encyclopedia of Philosophy* (ISSN 2161-0002, <http://www.iep.utm.edu/phen-red/#H7>, accessed June 30, 2015).

7. Bachelard wrote: “It is in [the] area of dialectical surrationalism that the scientific mind *dreams*. It is here and nowhere else that anagogic reverie [*rêverie anagogique*] comes into being, reverie which ventures into thought, reverie which thinks while it ventures, reverie which seeks an illumination of thought by thought, which finds a sudden intuition beyond the veils of informed thought” (PN 32/39, trans. modified).

8. Notable in this regard are Canguilhem’s *Knowledge of Life*, where he examines the overcoming of “epistemological obstacles” in the advancement of biological cell theory (29), and Hillman’s *The Force of Character: And the Lasting Life*, which shows how “reverie” can tap those deep intuitions whose moral force

can orient an entire life (183–84). While Patrick Heelan is a professed follower in the Heideggerian hermeneutic tradition, the seeds of Bachelardian inspiration can also be found in his work after he authored the foreword to the 1984 translation of Bachelard's *The New Scientific Spirit* (*Le Nouvel Esprit Scientifique*, 1934); see his essay "Why a Hermeneutics of the Natural Sciences?," *Man and World* 30 (1997): 271–98. Don Ihde's "material hermeneutics" was avowedly nourished by Bachelard's scientific epistemology, including (as in Heelan's case) his notion of "phenomenotechnology" (NSS x, xiii, 13). More recently, Bachelard's works are leaving their mark in the neurosciences, as noted by Michèle Pichon in her recent book *Gaston Bachelard: L'intuition de l'instant au risque des neurosciences* (Paris: L'Harmattan, 2012).

9. Alan D. Schrift, in *Twentieth-Century French Philosophy: Key Themes and Thinkers* (Oxford: Blackwell, 2009), 36–37, reports a divisive rivalry between two distinct modalities of philosophizing that had emerged from the introduction of Husserlian phenomenology in France in the late 1920s: "philosophies of rationality, knowledge, and the concept" (Cavaillès, Bachelard, Canguilhem) and "philosophies of experience, sense, and the subject" (Sartre, Merleau-Ponty). Although this blanket categorization tends to have been uncritically accepted, Georges Canguilhem claims in his book *Knowledge of Life* (New York: Fordham University Press, 1955) that Bachelard's philosophy was far too subtle and complex to be categorized as "a philosophy of the concept." Jason M. Wirth's "The Heat of Language: Bachelard on Idea and Image" in this volume (part 3) will make this point patently clear.

10. On the seeming contradictions in Bachelard's early philosophical project, see his two 1938 publications, *Formation of the Scientific Mind: A Psychoanalysis of Objective Knowledge* and *The Psychoanalysis of Fire*. Bachelard, in fact, did not eschew contradictions but deliberately sought to explore their creative challenges and dynamics—not unlike some of his ancient pre-Socratic predecessors.

11. Bachelard's prolific work on the elemental imagination is briefly cited in Kennedy's *Home*, vis-à-vis Irigaray's metaphysics of Being-within or maternal space (107–8). Bachelard had long explored the imaginary of "flesh" (*la chair*)—starting implicitly with experiences of inner maternal warmth in *Psychoanalysis of Fire* (40–41), a poetics of living blood in *Water and Dreams* (59–60), and most ostensibly in *Earth and Reveries of Repose* (127–28, 130, 170–71, 181). In *Le Matérialisme rationnel* he would radically distinguish such "material reveries" from the "positive experiences at work in the world of tangible matters" (21), a line of epistemological research that has since paved the way for the recent surge in "materials science programs" in universities throughout the world.

12. In this 1957 text, which won the Grand-Prix National des Lettres in 1961, Bachelard proposed that the unfolding of being in the dynamism of a poetic image is "referable to a direct ontology" (PS xii), stressing that such a nascent ontology entails a break with previous knowledge at the moment when the new being of an image emerges in consciousness (PS xi, xiv, xix). Shortly thereafter Merleau-Ponty declared that "one cannot make a direct ontology. My 'indirect'

method (being in the beings) is alone conformed with being—‘negative philosophy’ like ‘negative theology’” (VI 179). Possibly in response to Merleau-Ponty’s objection, in *The Poetics of Reverie* Bachelard would further qualify his ontology by noting that “one can know states which are ontologically below being and above nothingness,” where “the contradiction between being and non-being fades away” and a playful “sub-being (*moins-être*)” tries itself out as being without yet bearing being’s full weight (PR 111).

13. Merleau-Ponty, *The World of Perception*, trans. Oliver Davis (New York: Routledge, 2004), 65.

14. Merleau-Ponty, *Signs*, trans. Richard C. McCleary (Evanston: Northwestern University Press, 1964), 57.

15. See Merleau-Ponty, *The Phenomenology of Perception*, trans. Colin Smith (London: Routledge, 1962), 276n1 and 415n1. See also Gary Gutting’s comments in *French Philosophy in the Twentieth Century* (Cambridge, UK: Cambridge University Press), 116–17.

16. Given that their mutual friend and colleague Jean Wahl had asked Bachelard to direct the 1939 International Colloquium at Pontigny on the theme of “Destiny,” it is unlikely that Merleau-Ponty and the young philosophers in France who were then turning to the concrete “moment” (Jean-Paul Sartre, Louis Althusser, Emmanuel Levinas, who became a naturalized French citizen in 1931, and Walter Benjamin who moved to Paris escaping the Nazis in 1933) were unaware of Bachelard’s groundbreaking work on vertical time and the fertile instant. Although they did not cite him on this crucial topic, a stir was decidedly in the air—no small thanks to Bachelard. For a fascinating account of the history and legacy of the Pontigny encounters (to be resumed temporarily at Mount Holyoke College during World War II, and in the Norman village of Cerisy, after the old abbey at Pontigny was decimated by the Nazis), see Christopher Benfey’s “A Violence from Within,” in *Artists, Intellectuals, and World War II*, ed. C. Benfey and K. Remmler (Boston: University of Massachusetts Press, 2006, 1–13), and Jacques Derrida’s chapter in the same book, “The Philosophical Model of a Counter-Institution” (46–55).

17. This long oversight is now being redressed by recent publications, such as *Imagination et Mouvement: Autour de Bachelard et Merleau-Ponty*, edited by Julien Lamy and Gilles Hieronimus (Lyon: Transversales Philosophiques, EME Éditions, 2015), Anton Vydra’s comparative work on both phenomenologists (see Vydra’s notes in chapter 6 below), and Glen Mazis’s *Merleau-Ponty and the Face of the World: Silence, Ethics, Imagination and Poetic Ontology* (Albany: State University of New York Press, 2016), which addresses Bachelard’s influence on Merleau-Ponty’s development of his philosophy of flesh. At least since the mid-1940s, a tacit cross-fertilization had been underway between the works of these two philosophers, no doubt stimulated by the surge of artistic and poetic circles in France at the time.

18. See Foucault’s 1954 essay “Dream, Imagination, and Existence,” trans. William Forrest, published in Ludwig Binswanger’s *Dream and Existence*, ed. Keith

Hoeller, as a special issue of *The Review of Existential Psychology and Psychiatry* 19, no. 1 (1984–85): 31–78.

19. Posted on YouTube on February 15, 2015: <https://www.youtube.com/watch?v=am6TghIrYEc>; English translation by E. Rizo-Patron.

20. These ethical-political implications were the critical focus of the recent 2012 colloquium at Cerisy (*Colloque à Cerisy-la-Salle*), celebrated on the occasion of the fiftieth anniversary of Bachelard's passing. The proceedings of this colloquium have been published in Jean-Jacques Wunenburger's edited volume *Gaston Bachelard: Science et Poétique—Une Nouvelle Éthique?* (Paris: Hermann, 2013).

21. Bachelard assigned the term *culture complexes* to collective tendencies grafted onto deeper personal complexes identified by Freudian psychoanalysis (WD 17; see also DD 153, PF 12, L 34). While Carl G. Jung had written about “feeling-toned complexes” decades earlier, in the mid-1930s Bachelard started developing the notion as a research tool along a parallel track, until he became familiar with Jung's work, which he strongly endorsed in his books after 1947 (ERW, ERR, PS, PR). In a 1957 interview with Alexander Aspel, Bachelard admitted that he had “received Jung too late” (cited in C. G. Christofides, “Bachelard's Aesthetics,” *Journal of Aesthetics and Art Criticism* 20, no. 3 [1962]: 267–68).

22. Merleau-Ponty would later articulate such dynamics in *The Visible and the Invisible*, trans. Alphonso Lingis (Evanston: Northwestern University Press, 1968) under the rubrics of “reversibility” or “chiasm” (130–55), though he tended to describe it more as a structural condition or an act with two faces (263–65) than as a polemically productive force.

23. As stated in her preface, Madeleine Préclaire had considered entitling her book *Un chemin vers Siloë*, a phrase which—through its allusion to the healing fountain of Siloam (John 9:7)—suggests the forces of eternal renewal that inspired Bachelard's oeuvre until the end of his life. With this in view, the forthcoming English translation by E. Rizo-Patron is entitled *On the Way to Siloam*.

24. The impressive coterie of French continental philosophers whose thinking came under the impact of Bachelard's pioneering work during the twentieth century—despite its uneven reception—is remarkable. Besides Althusser (on the “epistemological break”), Sartre, Merleau-Ponty, Foucault, Derrida, and Irigaray, others deserving special mention here are Paul Ricoeur (on the development of his theories of language and poetic hermeneutics), and Canguilhem (in the fields of scientific epistemology and the health sciences).

25. Bachelard's advances in the field of the history and philosophy of science nonetheless appear to have had a lasting hold on American research, especially from the late 1940s onward—as attested, for instance, by the influence of his notion of “epistemological rupture” on Thomas S. Kuhn's “paradigm shift” theory in *The Structure of Scientific Revolutions* (Chicago: University of Chicago Press, 1962; 50th-anniversary edition, 2012).