

Introduction

Gabriele Dürbeck, Urte Stobbe,
Hubert Zapf, and Evi Zemanek

Ecocritical literary and cultural studies in the twentieth century are characterized by two apparently opposite but in fact interrelated tendencies. One tendency is the rapidly increasing globalization of the field, which started out as a regional phenomenon in the Anglo-American world in the later part of the twentieth century and has meanwhile become one of the most productive paradigms in literature and culture departments across the planet. The other tendency is the growing awareness and scholarly articulation of the enormous diversity and the distinct contributions of various cultures to ecological knowledge. The first tendency reflects a powerful dynamics of ecological thought to cross-regional, national, and cultural boundaries and to foreground the transnational and transcultural nature of all ecological processes within the framework of the planetary ecosystem. The second tendency reflects an equally forceful counter-dynamics within the new paradigm to foreground the historical distinctness and cultural uniqueness of all intellectual and artistic expressions of ecological thought. While the first tendency emphasizes the potency of transnationally shared knowledge and artistic communication about ecological issues across historical-cultural boundaries, the second accentuates the irreducible difference of all forms of ecological knowledge due to their embeddedness in specific experiential, linguistic, and cultural contexts.

The relationship between these tendencies can be interpreted in different ways. One, it can be seen as a mutually exclusionary opposition between incompatible perspectives, one insisting on the necessity to bring different ecological knowledge cultures into conversation with each other with a view to the global impact and significance of ecological processes, the other explicitly resisting this drive toward homogenizing globalization by emphasizing the radical heterogeneity and ultimate untranslatability of different

ecological cultures. Two, it can be seen as a subordinating relationship, in which the diversity of particular cultures is taken into account only insofar as they contribute to a globally shared ecological discourse; or in which, vice versa, transnational and transcultural implications are subordinated to the singularity of particular ecological knowledge cultures. Three, it can be seen as a relationship of equally valid and mutually complementary tendencies, which only in their fully acknowledged, even though paradoxical, coagency can bring out the best of current ecocultural scholarship. In this view, both the recognition of inevitable connectivity and of irreducible diversity is mandatory in assessing the relation between different ecological knowledge cultures. On an epistemic level, this corresponds to the fundamental structure of all ecological thought, which is defined in the polarity between potentially infinite *connectivity* and potentially infinite *diversity*.

The present book *Ecological Thought in German Literature and Culture*, in accordance with the *Ecocritical Theory and Practice* series of which it is part, is based on the latter interpretation. It is the aim of this book to offer a systematic survey and analysis of the characteristic contributions of German literature and culture to the evolution of ecological thought and writing both on a national and a transnational scale. In this sense, the book attempts both to do justice to the specific features of ecological thought in German-speaking cultures and to assess its most important and influential contributions to a globalizing ecocritical discourse. These contributions, while offering unique perspectives on the relationship between human culture and the nonhuman world, have never been restricted to national boundaries. A long history and cross-cultural evolution of proto-ecological thought has preceded and enabled the emergence of the characteristic forms and directions of German ecological thought, which in turn has had considerable impact on developments in other literary and intellectual cultures. The textual, scientific, and artistic manifestations of ecologically inspired thought in German-speaking cultures have always been intertextually and transnationally connected, and have, in fact, already become part of the larger field of ecocritical theory and practice in many ways. Goethe and the romantics, the German philosophy of nature culminating in Schelling, the explorations and writings of Alexander von Humboldt, the legacy of the Frankfurt Critical Theory, the phenomenological tradition from Heidegger to Gernot Böhme's philosophical aesthetics of nature, or Ulrich Beck's concept of the world risk society, are but a few hallmark examples of this dialogic exchange and mutually enriching reception process, which has been significantly intensified recently (cf. Goodbody/Rigby 2011; Zapf 2016). What is more, German ecological thought is in itself by no means a monolithic phenomenon but consists of a plurality of different developments, ideas, directions, and approaches. It therefore goes without saying that it is only some of the most important of these that we are able to represent in the chapters of this book.

One problem related to the question of cultural difference and transcultural commonalities in ecological communication is the problem of translation. To the extent that ecological thought, like all literary and intellectual phenomena, is deeply rooted in and mediated by language, its translation into other languages, especially into English as the globally dominant language of science and scholarship, entails the danger of losing its distinctive features. Stephanie Posthumus (2011) has made this argument with a view to the French and francophone traditions of ecological thought which, as she insists, are inseparably bound up with their linguistic and culture-specific semiotic context and can therefore only be translated at a considerable price. It is our view that there is an important, even though only partial, truth in this observation, which must be taken seriously in all such attempts as the present one. This book, too, is after all also such an act of translation, both in terms of language and of culture. We have tried to take account of this residual paradox, that is, the project of translating what can never be adequately translated in its full richness and semiotic complexity, in two ways: We are including the German original in all quotations from literary and artistic sources; and we have kept the original German expressions whenever certain terms are actually untranslatable into English, hoping that their meaning will nevertheless be indirectly accessible through the argument and semantic context. At the same time, it is our conviction that key ecological ideas, concepts, and aesthetic principles can be effectively communicated beyond the ineradicable linguistic and cultural differences. Indeed, we believe that in the act of translation, something is not only lost but also gained, because the mutual transference between linguistic and semiotic codes involved in the process of translation opens up new spaces in between languages and cultures that offer shared sites of exploration, reflection, and intellectual and artistic exchange between otherwise separated ecological knowledge cultures.

The present book is among the first of its kind to attempt such a survey. Previous volumes on the subject were mostly dedicated to special areas, thematic domains, and historical periods of German ecological thought. In 1997, Colin Riordan edited the first anthology on *Green Thought in German Culture*, which covers a wide-ranging and eclectic selection of topics beginning with nineteenth-century bourgeois conservatism, ecosocialism, and the dark time of Nazism, and moving on to trends of the later twentieth century like the Frankfurt School, early ecofeminist ideas, "new age mysticism," and more radical green ideas such as the advocacy of eco-dictatorship. The book explores the role of writers, artists, and cultural actors "in disseminating, elaborating and criticizing green ideas" (Riordan 1997: ix) in postwar German-language literature on ecological disasters and catastrophism, and features essays on such diverse topics as the Bildungsroman, eco-crime thrillers, and the eco-aesthetics of Joseph Beuys and filmmaker Werner Herzog.

Axel Goodbody's edited book from 1998, *Literatur und Ökologie*, gives a representative survey of German prose and poetry from the 1970s onward by leading contemporary authors such as Heinrich Böll, Volker Braun, H. M. Enzensberger, Franz Fühmann, Günter Grass, Elfriede Jelinek, Wulf Kirsten, Günter Kunert, Heiner Müller, and Christa Wolf. Another collection, *Ökologie und Literatur* (2000), edited by Peter Morris-Keitel and Michael Niedermeier, goes further back in history and offers a broad spectrum of essays across various issues of ecology and German culture, while only selectively touching on questions of literature and literary history. The anthology *Ökologische Transformationen und literarische Repräsentationen* (2010), edited by Maren Ermisch, Ulrike Kruse, and Urte Stobbe, brings together environmental research with literary research on German and American literature from the perspective of ecocriticism.

A new approach to the academic study of ecology and literature in Europe was provided by the book *Natur—Kultur—Text* (2005), edited by Catrin Gersdorf and Sylvia Mayer. After summarizing the development of ecocriticism in the United States and Britain, the two editors reflect the reasons why ecological thinking has been taken up belatedly in German academia, emphasizing the lack of a nature writing tradition on the one hand and the misapprehension of a mere ecological realism limited to didactic and political reasons on the other. At the same time, they point to the important role of German thinkers and theories such as the literary anthropology by Wolfgang Iser, the evolutionary cultural ecology by Peter Finke, and the functional model of literature as cultural ecology by Hubert Zapf, for a new theoretical fundament to ecocriticism in Europe. Against this background, Goodbody's book on *Nature, Technology and Cultural Change in Twentieth-Century German Literature* (2007) explores the role of literary and symbolic representations of German environmental thought, drawing a line from Goethe as an important predecessor of environmentalism to authors in the first half of the twentieth century (Georg Kaiser, Oskar Loerke, Otto Alscher, Paul Gurk et al.) and to writers in the 1970s (Adolf Muschg, Hanns Cibulka, Klaus Modick, Volker Braun et al.). Goodbody also considers the ambivalent position of Germany as a nation and an agent of modernity, technological development, and optimistic belief in progress on the one hand, and a "home to powerful traditions of cultural pessimism and [. . .] atavistic tendencies in politics" (xi) on the other, raising the question in this context of the role of creative imagining "as a counter-discourse to hegemonic, scientific-rationalist conceptions of nature and our relationship with it" (xiv). Additionally, Goodbody deploys the specific traditions of critical theory (Adorno), aesthetics of nature (Gernot and Hartmut Böhme), and cultural ecology (Finke, Zapf).

On this fundament, Goodbody's essay on "German Ecocriticism" (2014, cf. 2015) certainly provides the hitherto most comprehensive overview of the

field. It surveys numerous studies on individual aspects of German (proto-) ecological thinking, tracing its historic roots back to the romantic period and the rich philosophical and scientific traditions in the nineteenth century, and also presenting the relevant historical steps and major topics of later developments. Goodbody filters out two theoretical strands of recent German ecocriticism: on the one hand, hermeneutics, critical theory, and cultural anthropology leading up to an "aesthetics of nature" (Gernot Böhme); on the other, the connection between cultural ecology, systems theory, and literary analysis, which Hubert Zapf has proposed in his monograph *Literatur als kulturelle Ökologie* (2002) and his edited essay collection *Kulturökologie und Literatur* (2008). Zapf's approach of cultural ecology with the triadic functional model of literary discourse has been adopted in many ways by critics like Sieglinde Grimm and Berbeli Wanning (2016) who include cultural ecology in the field of didactics and teaching German literature.

The first German-speaking introduction to ecocriticism, *Ecocriticism. Eine Einführung* (2015), edited by Gabriele Dürbeck and Urte Stobbe, offers an interdisciplinary overview of central theoretical perspectives and transnationally relevant approaches such as eco-cosmopolitanism, biosemiotics, eco-feminism, new materialism, cultural animal studies, postcolonial ecocriticism, cultural ecology, critical theory, and the cultural discourse on the Anthropocene. The book also integrates environmental history and environmental movements in Germany and presents a survey of different genres such as pastoral and bucolic literature, nature poetry, climate change novel and ecothrillers, but also drama and theatre as well as children and young adult fiction and, last but not least, film studies and environmental art. Benjamin Bühler's German introduction *Ecocriticism: Grundlagen—Theorien—Interpretationen* (2016) begins with a survey on ecological thought and cultural history since the early modern period in Europe and sketches the development of ecocriticism, followed by a digest of German literary history from the eighteenth century to contemporary dystopian literature that consists mostly of a rereading of canonical authors from an ecocritical perspective. In the last part, Bühler addresses more general topics such as ecological space and dwelling, ecological narratives and genres, or ecological risks, disruptions, and disasters. In her book *German Culture and the Modern Environmental Imagination*, Sabine Wilke suggests a "framework for conceptualizing environmental literary scholarship within the German philosophical tradition" of Kant, romantic nature philosophy, Nietzsche's aesthetic theory, and Adorno's critical theory (Wilke 2015: 15); it also takes a postcolonial inflection of ecocriticism into account. Her investigation of a new concept of landscape in narrating and depicting nature by the explorers Georg Forster and Alexander von Humboldt, the painters Caspar David Friedrich and Albert Bierstadt, and the filmmakers Leni Riefenstahl and Werner Herzog, aims to highlight a specific

German tradition in environmental thinking “dedicated to the emergence of a European-style ecocriticism” (ibid.: 16). Two further books on ecological thinking in German literature are forthcoming this year. The book on *German Ecocriticism in the Anthropocene* (ed. by Schaumann/Sullivan 2017) complements ecocritical studies emerging from North America and Britain with a specifically German-studies perspective on canonical and noncanonical German-language texts and films, beginning with Goethe and the romantics and extending into the twenty-first century. Evi Zemanek’s book *Ökologische Genres* (2017) focuses on the question how environmental transformations have led and currently lead to genre transformations and the emergence of new genres in reaction to ecological crises. The book analyzes the ecological potential, for example the affinities to (proto-)ecological discourses and ecological text structures, of many genres which have not yet received much attention in ecocritical studies, such as German idyll, castaway story, gothic novel, risk narrative, diary, travelogue, guidebook, testimonial, and ecological science fiction. It discusses both genres that prevail in various cultures as well as genres that developed in a very specific cultural context.

Against this background, and building on previous work in the field, the present book aims to present a cutting-edge overview of some of the most relevant and influential manifestations of ecological thought in German literature and culture. While being aware of the necessary limitations of selection, space, and personal preference, the collection nevertheless attempts to be as representative and informative as possible both about the historical evolution and the contemporary manifestations of German ecological thought across different disciplines, domains of culture, and genres of discourse. We have tried to cover those developments and manifestations that offer particularly rich examples of ecological thought in German literature, philosophy, science, and art, examples that represent milestones in its evolution, and examples that have had and continue to have a visible impact in the ecocritical community both nationally and internationally. While special emphasis is placed on the contribution of literature and the arts, the book covers contributions from a broad spectrum of disciplines ranging from philosophy to geography and environmental history, from ecological science to different genres and media of ecological communication.

Along the lines of these considerations, the book is structured into five parts. The first part, “Proto-Ecological Thought,” deals with early but influential manifestations of emergent ecological thought from the sixteenth to the nineteenth century. It starts with a contribution by Anke Kramer on the cultural history of the four elements. Kramer differentiates four contexts in which the elements became relevant—as scientific knowledge, as occult and magical knowledge, as medical and anthropological knowledge, and as an aesthetic model in literature and the arts—arguing that the theory of the four

elements and “the questions and problems it raises form an essential basis of today’s ecological thought” (chapter 1). She traces the history of the four elements from antiquity to the early modern period; zooms in on Paracelsus’s notion of animated elements as a pivotal point in the emergence both of modern chemistry and of ecological thought; and finally demonstrates their continued significance as a creative source for fictionalizing the elements in the literature of romanticism and beyond. In this history of creative reception and transformation, as Kramer demonstrates, the elements become an aesthetic agency in literary texts that transcends a narrow anthropocentrism and resonates with the forces of agentic matter.

In her contribution on Goethe’s concept of nature, Heather Sullivan argues that Goethe’s work is proto-ecological in the sense that it overcomes the inherited dualism between culture and nature toward an awareness of their “complex and inextricable interdependence” (chapter 2). Sullivan begins with briefly tracing the scholarly reception of Goethe, which led from the assumption of an idealized wholeness to a recognition of the importance of science and naturalism in his concept of nature. She then analyzes the ambivalences of experiencing nature in Goethe’s early novel *Werther*, juxtaposing it with its ironic counterpart *Der Triumph der Empfindsamkeit* (*Triumph of Sentimentality*), and pointing out that the contrast between nurturing/benevolent versus threatening/chaotic aspects of nature is not just a mirror of the protagonist’s inner state but a sign of the reciprocal, participatory interaction of human and nonhuman forces. In this sense, in Goethe’s *Farbenlehre* (*Theory of Colors*), color and light are likewise conceived as neither merely objective nor subjective but as interactive, co-emergent phenomena. Finally, Sullivan looks anew at the famous ending of Goethe’s *Faust* and reinterprets Faust’s final ascent to heaven not just as a metaphysical but a materially contextualized event, which includes geomorphic and meteorological processes such as air, water, and cloud in an intricately interwoven, open-ended movement that correlates rather than separates soul and body, mind and matter in complex forms of entanglement.

Kate Rigby examines this proto-ecological contribution of major writers of the *Goethezeit* in their role as antecedents of modern biosemiotics and ecotheology. In her chapter “Nature, Language, and Religion: Herder and Beyond,” she explores the hitherto underresearched prehistory of biosemiotics and ecotheology in the influential figure of Johann Gottfried Herder, eminent biblical theologian and theorist of language of his age. Herder’s creative reception of Spinoza and the latter’s doctrine of the immanent presence of the divine, according to Rigby, “lies at the heart of German romanticism and idealism, contributing decisively to their proto-ecological dimension” (chapter 3). Consequently, in his readings of the Bible, Herder adopts a historical-critical and poetological view of the sacred scriptures and places

them in the socio-environmental contexts of their historical conditions of origin. At the same time, he liberates the concept of nature both from dogmatic theological restrictions and from mechanistic models of Enlightenment rationalism by interpreting Spinoza's *natura naturans* as an active force inextricably interlinking humans with each other and the more-than-human world in a communicative process of continuous becoming and co-emergence. In his *Abhandlung über den Ursprung der Sprache* (*Treatise on the Origin of Language*), Herder combines the biosemiotic and ecotheological strands of this proto-ecological thought. In his concept of *Natursprache*, he traces a primal natural language which closely connects words and things and is the most ancient origin of language and poetry; as such, it also forms the most deeply expressive and valid passages of the Hebrew Bible. In his impact on Goethe and Schelling, as well as on Charles Sanders Peirce and Jakob von Uexküll, Herder marks a line of biosemiotic thought that is still relevant today, as Rigby argues, and that still needs to enter into a more explicit dialogue with the ecotheological branch of that tradition.

In the subsequent chapter, *Berbeli Wanning* compares two landmark figures of German romantic thought and literature, Schelling and Novalis, as representatives of proto-ecological thought in an unparalleled move in philosophical history. Schelling ascribes to art and poetry a superior capacity to understand nature in comparison with science and philosophy. Nature itself is equivalent to a poem, which can achieve the reintegration of subject and object, spirit and matter, and conscious mind and unconscious nature that are separated in science and cultural practice. Novalis, who like Schelling was scientifically well-versed, likewise assumed a closer kinship of poetry to the natural world than science but goes beyond Schelling in ascribing an additional, magical dimension to poetry. As Wanning demonstrates for example in Novalis's novel fragment *Die Lehrlinge zu Sais* (*The Novices at Sais*), this magical dimension enables poetry to escape the determinism of external laws and at the same time to move more deeply into the internal workings of nature's creative processes. As Wanning points out, both figures have left an important legacy for modern ecocriticism: While Schelling anticipates insights of material ecology in his conception of the agency of matter, Novalis anticipates the ecological force of the poetic imagination in synthesizing alienated and split up fragments of a rationalistic civilization.

As the next chapter in this section, *Caroline Schaumann's* contribution is dedicated to a singular, cosmopolitan figure and pioneer of ecological thought, Alexander von Humboldt. In his incessant activities of travels, writings, and scientific endeavors, Humboldt crossed the boundaries of nations, languages, genres, and disciplines. He became "one of the world's first time ecologists" in that he "did not limit himself to one single subject matter but paid attention to the organic and nonorganic, human and nonhuman, thereby

working in fields labeled today as geology, geography, meteorology, biology, physiology, and anthropology" (chapter 5). Conceiving of the world as a dynamic interweaving of active forces, he anticipated the modern ecological idea of interactive networks as a fundamental feature of the global web of life of which individual phenomena were an intrinsic part. His writings, among which his massive *Kosmos* stands out as his opus magnum, consists of generically hybrid forms combining narration, travelogue, scientific excursus, philosophical reflection, visual illustration, and extensive footnotes. In them, he already pointed out the first symptoms of the global environmental challenges of the Anthropocene—deforestation, desertification, species depletion, and climate change. Schaumann concludes her chapter by observing that after long neglect, Humboldt's reception has dramatically intensified in recent years, shifting from a critique of his alleged colonialist perspective in the twentieth century to a broadscale revaluation in the twenty-first century of his acceptance of cultural otherness that ties up with his pioneer role for the transdisciplinary environmental humanities.

The second part of the book, "Theoretical Approaches," opens with a chapter on Martin Heidegger's critique of technology by *Silvio Vietta*. Heidegger has been an important, if controversial reference for ecocritics. While his concept of poetic dwelling has been well received, for example, in Jonathan Bate's *Song of the Earth* (2000), his affinity to National Socialism has led to rather skeptical responses. Vietta argues in reference to the *Black Notebooks* that Heidegger's alleged anti-Semitism should be understood not as evidence of his racism but as part of his fundamental critique of occidental rationalism and metaphysics, which Heidegger, according to Vietta, extends to all forms of modern power structures over humans and nature. Philosophically dating back to the Greeks and being most influentially conceptualized by Descartes, the split between subject and object, thought and experience, man and nature led to a *Seinsvergessenheit*, a forgetting of Being in the epistemic-technological architecture of modern civilization which Heidegger diagnoses in his *Sein und Zeit* (*Being and Time*). This fatal split, together with its alienating effects, was accompanied by an overriding will to power that became most forcibly manifest in totalitarian systems such as National Socialism or Soviet communism. Yet this alienation, as Vietta interprets Heidegger's views, is ultimately due to the all-dominating role of an objectifying science and technology, which has moved away from the knowledge of a common "being-in-the-world" that humans share with other beings in a planetary context.

Another powerful precursor of and influence on ecocritical thought in Germany and beyond is the Frankfurt School, as *Timo Müller* demonstrates in his chapter. Focusing on Walter Benjamin and Theodor Adorno, Müller singles out two important directions in which their reflections have become relevant to ecocriticism—the language of nature and the aesthetics of nature. To

Benjamin, things have a language comparable to humans, with the difference that human language involves an act of naming which has its metaphysical foundation in the divine, whereas the language of nonhuman things is mute yet has its own forms of communication. Within this rather anthropocentric framing, however, the material world is ascribed semiotic agency and “actively communicates itself to man” (chapter 7). The task of interpretation and the arts is the “translation” of this mute language of things into human communication. Theodor Adorno’s aesthetics of nature is more dialectical and constructivist. If Benjamin traces the alienation of man from nature to the technologization of society, Adorno sees it already implied in the “very act of human self-awareness,” which places man as a subject apart from nature and prevents any direct return to immediacy, thus anticipating contemporary strands of constructivist ecocriticism. However, beyond its cultural mediatedness Adorno also affirms the real material existence of nature as a principle of nonidentity that especially manifests itself in the aesthetic processes of art. As such, nature becomes a force in culture which resists instrumental reason and destabilizes the structures of domination based on it. In this dialectical, both materialist and constructivist approach, Adorno influenced developments in contemporary ecocriticism ranging from ecological aesthetics to environmental ethics, and from constructivist ecocriticism to cultural ecology.

Going against the grain of material and posthumanist ecocriticism, *Angelika Krebs* presents her own philosophical take on environmental ethics and aesthetics. Focusing on the beauty of landscapes as a “necessary constituent of a good human life,” Krebs argues for the “eudemonic intrinsic value of nature” as opposed to the assumption of its intrinsic moral value or its merely instrumental value (chapter 8). Calling for overcoming a “shallow traditional anthropocentrism,” she nevertheless also rejects the complete surrendering of the difference between the human and the nonhuman domains in some versions of contemporary ecological thought, pleading instead for what she calls a “deep humanism.” In a logical-classificatory mode, Krebs positions herself within different possible approaches to the aesthetics of landscape, and explains the reasons for environmental ethics than can be derived from it. The focal points around which she arranges her eudemonic argument are beauty, identity, and atmosphere, all of which contributing to a powerful effect of feeling “at home” in the world. These concepts describe synaesthetic resonances between the shifting qualities of landscapes and the embodied lives of human beings, which require the cooperation of philosophy and literature to bring out their full ethical potential, as Krebs demonstrates in a concluding interpretation of a contemporary poetic text, Michael Donhauser’s *Variationen in Prosa (Variations in Prose)*.

As an antidote to a self-repeating rhetoric of crisis and all-too-emphatic declarations of a new ontology, *Hannes Bergthaller* outlines the implications

of Niklas Luhmann’s theory of social systems for ecological thought. By conceptualizing society as an internally differentiated, self-organizing system embedded in system-specific environments, this theory provides a rigorously ecological, non-anthropocentric account of social evolution, as well as a compelling explanation for the development of environmental movements over the past fifty years. These movements failed to reckon with the functional differentiation of modern society, which strictly circumscribes its ability to generate resonance in response to changes in its ecological environment. Bergthaller argues that recent attempts to articulate new ontologies as a foundation for an ecological politics are likely to share the same fate. The systems theoretical perspective he introduces suggests that the discourse of ecological crisis has reached a point of exhaustion, and that different forms of observing ecological problems may be needed. He considers the recent turn toward the Anthropocene as an indicator that the search for such alternatives is already underway.

In his chapter on “Risk Theory,” *Benjamin Bühler* discusses three theoretical models of risk theory, which he correlates with three aspects of ecological risk already anticipated in Rachel Carson’s *Silent Spring*—risk as caused by human-made decisions; as involving irreversible damage and costs that no insurance can cover; and as a side effect of the process of modernization. The first aspect is addressed in Niklas Luhmann’s systems theory, in which he raises the problem to a meta-level by distinguishing between danger and risk, “danger” designating the assumption of an inevitable fate as characteristic of premodern societies, “risk” the partially unforeseeable consequences of human agency as a result of the multiplication of decision options in an increasingly complex modern society. The modern concept of risk therefore involves not only risk prevention but risk management, as Bühler illustrates with reference to the dyke building project in Theodor Storm’s *Der Schimmelreiter (The Rider on the White Horse)*. The second aspect is theorized in François Ewald’s contextualization of risk in technologies of power, in which the economic and mercantile dimensions of risk are foregrounded, and in which society itself is defined as the “insurance” of people against the uncertainties of economic risks. The most influential theory of risk in ecocritical studies, however, has been the third that Bühler discusses; Ulrich Beck’s concept of a risk society that is based on his notion of reflexive modernization. This concept focuses not on the human and technological use of nature as such but on the problems resulting from the techno-economic development itself in terms of its unintended, potentially hazardous side effects. In its extension to the theory of a *World Risk Society*, Beck envisages a planetary dimension of risk and of its unequal distribution around the world that has influenced important strands of contemporary eco-globalism and eco-cosmopolitanism. His observation that the anticipation of inherently catastrophic but necessarily

uncertain future scenarios makes life in a world risk society “both real and unreal” entails an increased importance of narrative, imaginary, and artistic stagings of such scenarios, as they have proliferated in recent literature, film, and media.

In the concluding chapter of the section, *Hubert Zapf* presents the trans-disciplinary approach of cultural ecology. As he points out, cultural ecology resonates both with transnational ideas from Anglo-American thinkers such as Gregory Bateson and Charles Sanders Peirce, and with a genealogy of German ecological thought reaching from *Naturphilosophie* to phenomenology, the Frankfurt School, ecological aesthetics, up to Peter Finke’s evolutionary cultural ecology and Wolfgang Iser’s literary anthropology. As a specific theory of the cultural function of imaginative texts, a cultural ecology of literature combines the insights of general cultural ecology with insights of literary theory and aesthetics and indeed of the literary texts themselves, which are seen as representing a distinctive form of ecocultural knowledge and communication in their own right. In their narrative embodiment and imaginative transgression of inherited binaries between mind and body, human and nonhuman nature, literary texts in this view act like an ecological force in the larger system of cultural discourses. Zapf exemplifies this in a comparison between Rilke’s *Birth of Venus* and Kafka’s *Metamorphosis*, in which the age-old principle of literary metamorphosis works in different ways: as the biophilic emergence of human from nonhuman life in Rilke, and as the biophobic deformation of human into nonhuman life in Kafka. At the end, Zapf describes his triadic functional model of cultural ecology, which, in accordance with Peirce and Iser, moves away from a binary toward a triadic, relational, and transformative concept of the sign and the text. Its three dimensions of culture-critical metadiscourse, imaginative counter-discourse, and reintegrative interdiscourse are illustrated, besides American examples, in Goethe’s *Faust* and Thomas Mann’s *Doktor Faustus*.

The third section of the book gives a brief overview on central themes and issues of environmental history in Germany. The first chapter focuses on risks and disasters, one of the well-established research fields of environmental history in Germany. In his contribution “Representation of Natural Catastrophes: Floods, Droughts, and Earthquakes,” *François Walter* explores the link between environmental and cultural history. He stresses that it can be often observed as a coexistence of rational and religious interpretations of natural phenomena from the seventeenth to twentieth century. On the one hand, disasters were interpreted as divine punishment, and on the other hand, philosophers like Leibniz conceived the world created by God as “the best of all possible worlds.” Apocalyptic visions, however, are primarily found in the context of large-scale man-made disasters like wars and also in the context of nuclear catastrophes. During the 1970s this connection shifted to the

environment. Concerning acid rain, the fear of *Waldsterben* (forest dieback), and other climate or nuclear disasters, a fundamental pessimistic attitude leads to a kind of end-of-the-world hysteria during the 1980s. As Walter argues, science and literature also participated in this complex phenomenon of catastrophism and the cultivation of crisis in German culture.

Martin Bemmman’s essay analyzes how forest damages were discussed by scientists, state authorities, companies, and private actors in the late nineteenth and early twentieth centuries. Due to growing industrialization, air pollution and damage to vegetation caused by sewage, dust, soot, ashes, and gases became a clearly visible environmental problem in the time around 1900. Bemmman firstly concentrates on the difficulties to rate the forest damages exactly since reliable information like reports and testimonies of forest damages were missing during the investigation period. A crucial problem was to state the exact extent of damages because it was impossible to prove causal links between air pollution and vegetational harms. In the second, main part of the article, Bemmman analyzes the different patterns of arguments and proposed solutions that social groups such as property owners, scientists and technicians, legal experts, state authorities, and conservationists developed. He shows that each of them interpreted damages in a different way and thus formulated various strategies to mitigate or circumvent the problems depending on financial interests, existing laws, or available knowledge. The article finishes with considerations on transnational entanglements and the necessity to reflect the given assumptions of industrial pollution in historiography.

The subsequent chapter “Cultural Landscapes in Germany—Continuities, Ruptures, and Stewardship” by *Werner Konold* gives a differentiated overview of the huge variety of landscapes in Germany. Cultural landscapes differ not only in climatic, geological, geomorphological, hydrographic, and vegetational ecological characteristics, but also with respect to territorial history, religious denomination, settlement history, house forms, agricultural structures, rural transportation structures, and land improvements, to name but a few. Thus, the term “cultural landscapes” is more appropriate than just the term “landscape.” Konold emphasizes that a combination of different factors leads to identity, familiarity, and regional awareness of the inhabitants or visitors who often evaluate changes in landscape as a loss. Therefore, he draws attention to the fact that all landscapes are culturally “grown” and, thus, change is a constitutive factor of landscapes. What looks “natural” is in fact mostly human-made, be it intentionally as in landscape parks, or by different means of land use. These historical changes and traces are in the main focus of the essay, which pleads for a new view on what we call rupture and continuity in landscapes. The question is how these changes were seen in former times and which processes lead to the specific value attributed also to lesser known regions. A deeper knowledge of landscape formation processes

and an awareness of the historicity of cultural landscapes are therefore necessary to enable a more positive view of recent and forthcoming changes.

Richard Hölzl's essay gives an overview of nature protection and environmental movements in Germany since 1900. In accordance with recent research, Hölzl distinguishes between three phases of development that show different intellectual characteristics and sociocultural structures. The first, the environmentalism between 1900 and 1918, was supported mainly by urban liberal bourgeois elites who followed the idea that the "soul" of the German nation was formed by characteristic landscapes such as the Alps, the river Rhine, or the coastline of the North Sea and the Baltic Sea. The contact with pristine nature was considered the best remedy for typical maladies of urban industrialism. In the second phase from the 1920s to the 1960s, the middle classes developed romantic, conservative, and often chauvinistic ideas of homeland (Heimat), for which Hölzl suggests the term "home-town environmentalism." In the 1930s, the amount of (resource) preservation reached a European scale with the two central debates about close-to-nature forestry and the fear of desertification, which can be interpreted as an ecological turning point in German environmentalism. The third phase, starting in the 1970s and lasting until recent times, can be characterized as environmentalism in the age of ecology. Alternative bourgeois elites as the main supporters pursue transnational goals of environmentalism, often using apocalyptic rhetoric and catchy media campaigns on global problems like chemical pollution, nuclear disasters, and other environmental themes such as *Waldsterben*, material recycling, and renewable energy.

The last chapter in this third section is dedicated to "Substance Stories," a quite young transdisciplinary and globally oriented research field between ethnography and history. Jens Soentgen introduces the basic ideas and consequences of this approach, which sees in substances a central motor of environmental change. Substances are not only passive material of trading or commercial value—the conventional view on material goods—but should be seen as powerful agencies that transform, diffuse, are (self-)mobile, and exchange with other substances. Thus, substance stories focus on narrations of how substances are produced, transformed, and moved, but also tell us about the ways that, for example, oil spreads into the ocean, nitrogen fertilizer and pesticides diffuse into the ground water, and smog distributes in the air. Metaphorically speaking, both, the practices in dealing with materials and the self-activity of substances, can be called the "social life" of substances. This metaphor refers to Arjun Appadurai, who spoke of the social life of things in 1986. Soentgen criticizes Appadurai's assumption of clearly structured, linear, and logical processes of material exchange. Instead, substance stories track the roots of substances around the globe that often show rhizomatic structures with unforeseen side effects and dissipation processes.

The fourth part of the book is devoted to "Ecocritical Case Studies of German Literature." Concerning the question which literary genres show a special focus on human-nature-relations and offer topical scenarios, Anglophone ecocritical research usually distinguishes between "pastoral" and "apocalyptic" modes of representation. One of the traditional pastoral models, bucolic poetry by and in imitation of Theocritus and Virgil, features shepherds in a harmonious relationship with their animals and natural surroundings in an idealized landscape that sharply contrasts with urban life. In his contribution "From Baroque Pastoral to the Idyll," Jakob Heller shows that within the productive seventeenth- and eighteenth-century reception of the classical bucolic tradition, German poetry developed its own pastoral genre variations. At first, the *Pegnesischer Blumenorden* (the *Pegnitz Flower Society*), a baroque literary society founded in Nuremberg in 1644, replaced the rather standardized imitation of the antique *locus amoenus* (pleasant place) with an idealized landscape that depicts the real landscape around Nuremberg and a particular nature in detail, thus referring not solely to literary topoi but to the natural environment. Later, Salomon Geßner further modified the genre with his widely read and highly influential *Idyllen* (Idylls, 1756, 1772) that display an awareness of the poet's construction of nature, rather than its mere imitation. Thereby, Heller argues, they offer a proto-ecological perspective on the interdependence of man and nature. The essay demonstrates why the idyll is an outstanding genre for ecocritical thought.

Another genre that plays a significant role as a medium for the communication of knowledge about nature as well as for the articulation of proto-ecological thought is lyrical nature poetry, as Axel Goodbody shows in his chapter on "German Ecopoetry." Due to the qualities of poetic language, lyrical nature poetry occupies a special place in writing about nature: by its artful diction, sound, and rhythm, which intensify the expression of ideas and feeling, as well as by its metaphors and tropes creating a polysemic texture, it appeals to the reader's senses and offers alternative ways of perceiving nature and imagining humans' relationship with it. Drawing on many examples, Axel Goodbody traces a development from "nature poetry" (Naturlyrik) of the eighteenth century that celebrates nature's beauty and the poetic laments over its loss in the nineteenth century, to "environmental poetry" ("Ökolyrik") of the later twentieth century, which thematizes ecological crises from a politically engaged perspective, to contemporary ecopoetry, which he calls "poetry in the Anthropocene" ("Lyrik im Anthropozän") that is characterized by its awareness of humanity's influence on and interdependence with nature and by a resulting sense of global responsibility. Ultimately, Goodbody points out the plurality of Anthropocene ecopoetry, which manifests its creativity in a broad spectrum between linguistic and formal experiment, the recycling of traditional poetic forms, and with an empathetic imagination that gives voice

to the more-than-human. Poetry, Goodbody concludes, fosters ecological thinking through its “ability to communicate moments of emotional intensity and insight, building bridges between abstract scientific knowledge and individuals’ subjective feelings” (chapter 18).

One recent phenomenon that deserves special attention is German poets’ increasing interest in the elements and their incorporation of ancient element theories into their poetry. In her contribution on “Elemental Poetics,” *Evi Zemanek* shows why two of the most renowned contemporary poets, Franz Josef Czernin and Ulrike Draesner, chose a model that science has long considered an outdated matrix. She explores the common ground between these two elemental poetics and basic ideas of material agency that have recently been (re-)conceptualized under the label of “new materialism” or “material ecocriticism.” A comparison of the elemental poems by Czernin and Draesner reveals similarities and differences. In both poets’ texts, the dichotomy of mind and matter, and of nature and culture, is deconstructed in acts of communication, in which the human subject is replaced by autonomous elements. Thus both poets try to abandon the anthropocentric perspective in a performative way. While in Czernin’s poems, the borders between man and his environment are open to a healthy, natural exchange, Draesner’s more often describe contaminations, that is, how humans poison their environment and thereby themselves. For Czernin, the elements serve as media to convey general ideas about nature. Draesner, by contrast, uses them as indicators for processes of ecological transformation. Hence, the two poets seem to advocate contrasting positions: Czernin implies the calm certainty that man will be outlived by nature anyway, whereas Draesner alerts us to man’s influence on the elements and reflects on the conditions for creating nature in the face of ecological crisis.

Urte Stobbe filters out ecological thought in Grimms’ *Fairy Tales* and then analyzes the intertextual references to fairy tales in the example of Christa Wolf’s novel *Störfall* (*Accident*, 1987). In the first part, the article extracts “green” motives, images, and imaginations of Grimms’ fairy tales that are still popular in German culture, albeit several fairy tales derive from a broad European oral and written fairy tale tradition. In the context of ecocriticism, it is of interest that popular fairy tales reveal the idea of a wisely acting and helpful nature in response to good human behavior toward other beings, but they also show the possibility of nature’s revenge in case of human’s misconduct and disrespect of her. Fairy tales usually feature a clear moral message that makes them attractive also for authors of 1980s literature in environmental respects. Stobbe demonstrates by the example of Wolf’s *Accident* that Grimms’ *Little Brother and Little Sister* and *The Three Little Men in the Forest* are interwoven in the text with clear moral and political intents. Since Wolf’s novel raises the question of humankind’s capacity of self-destruction,

especially these two fairy tales reveal a unique perspective on dealing with people’s greed and their lacking awareness of danger, which can be seen as two main causes for environmental problems. The typical morality of fairy tales serves the first person narrator of *Accident* in the attempt to find a solution for the “blind spot” in human culture by pleading for a more responsible behavior toward the human and natural environment.

From a broad background of “nuclear fiction” in German literature, *Wolfgang Lückel* filters out “Cold War bunker narratives” in the 1980s as a field of underestimated ecological readings. Lückel analyzes bunker fiction as an extreme perspective of detachment from the outer world that shows a strong relation to increased environmental awareness and ecological disaster concerning the risk of nuclear energy hazards, acid rain, or forest dieback. Using the examples of Friedrich Dürrenmatt’s *Der Winterkrieg in Tibet* (*The Winterwar in Tibet*, 1981) and Gerhard Zwerenz’s *Der Bunker* (*The Bunker* 1983), Lückel’s analysis not only points to the bunker as a symbol for quite undemocratic hierarchical power structures, but also as an inescapable dark place like a labyrinth or a “mole maze” where life is degraded to a mere physical struggle without any human compassion. Despite apocalyptic fantasies of nuclear devastation in a cosmic dimension and the idea that “Mother Atomic nature comments its reign” (Zwerenz), the two authors hold up the possibility of a spot of the natural world where survivors might find an ecological niche. Reading Matthias Horx’s *Es geht voran* (*It goes forward*, 1982) as “an icon of 1980s popular culture,” which depicts the nuclear apocalypse as a reckless life-or-death gamble, and also referring to Günter Grass’s famous doomsday novel *Die Rättin* (*The Rat*, 1986), Lückel emphasizes that these two novels play out the tension between aesthetic pleasure and an ecological message, but nevertheless “nurture the hope for a post-nuclear society” (chapter 21) in degraded agrarian communities. Concluding, nuclear bunker narratives attest human disengagement with nature and look with moral impetus beyond the confines of our own civilization.

Environmental crisis and climate change have been broadly reflected not only in Anglophone but also in contemporary German literature. The chapter by *Gabriele Dürbeck* starts with a short overview of the history of disaster narratives, dystopia, and the apocalypse, which play a central role in recent environmental literature. She compares four exemplary texts: Max Frisch’s *Der Mensch erscheint im Holozän* (*Man in the Holocene*, 1979), Ilija Trojanow’s *EisTau* (*Melting Ice*, 2011) as risk narratives and two ecothrillers, Frank Schätzing’s dystopian cautionary novel *Der Schwarm* (*The Swarm*, 2004) and Dirk C. Fleck’s *Das Tahiti-Projekt* (*The Tahiti-Projekt*, 2006), the fictional blueprint of a social-ecological model state, both following the apocalyptic pattern. Although all four texts explicitly relate to the environmental sciences, narrate large-scale ecological changes, and critically depict human

dominance over the planet as the main driver of the ecological crisis, this is displayed differently. The two ecothrillers follow genre conventions, alert the audience and yet prioritize reader entertainment (e.g., through suspense or exotic settings), while the ambivalent epilogue of *Der Schwarm* leaves the reader with an open moral question that reinforces the apocalyptic narrative. In comparison, the texts of Frisch and Trojanow describe a slow-motion, persistent catastrophe that also becomes manifest in setting, character, and narrative form. They display a fragmented or cacophonous poetry which remains skeptical about the human capacity to manage the climate crisis, either anticipating the possible extinction of our species (Frisch), or embracing an ironic version of a comic apocalypse illuminated through deficiencies of a morally ambivalent protagonist (Trojanow).

The fifth part, finally, is dedicated to "Ecological Visions in Painting, Music, Film, and Land Art." In the first contribution to the section, "Images and Imaginations: The Perception of German Landscape," Nils Büttner starts with remarks on the question whether and to what extent ecological thought can be found in landscape paintings as a historical source. Assessing ecological research in art history, Büttner emphasizes the fact that visual images can offer historical information only indirectly. Therefore, he argues for an appropriate contextualization, since contemporary ecological thought must not simply be projected onto historical art works of earlier times. Research has to reflect the historically changing circumstances of art production and the concepts of landscape perception in a respective time such as the emergence of an art market, the function of representing land property of the sponsors, and innovations in painting material. The construction of a national character in art historical writing has also to be taken into account. In this sense, Büttner argues for a history of art which reflects the medium as well as the different concepts of landscape such as aesthetic, allegorical, or emblematic concepts, and also the theoretical discourses of a "speaking nature" or the aesthetics of autonomy around 1800. Drawing a line from Dürer, Altdorfer, and Caspar David Friedrich, through landscape photography in the context of "blood and soil" ideology to the paintings of Anselm Kiefer, the essay gives an overview on central developments of landscape painting in Germany.

Among the emerging fields within the environmental humanities, there is also ecomusicology, which considers musical issues related to the natural environment. While some scholars in this field focus on "the music of nature," others look at the inherent connection between humans' experience of nature and musical composition or try to detect themes and images of nature in music. A promising object for ecomusicological studies is Ludwig van Beethoven (1770–1827), one of the most influential German composers of all times, known for his famous nine symphonies and many other instrumental and vocal works. While many of his songs contemplate nature, the Sixth

Symphony, "*Pastoral*," Op. 68, is his most significant work demonstrating his fascination with nature. In his contribution, Aaron S. Allen presents proof of Beethoven's well-known love of nature as it is traceable in his biography, in his music, and in his reception. First, he demonstrates that Beethoven's frequent retreats to the countryside were essential for his creative process, then he offers a panoramic overview of the works reflecting nature in various ways, before he knowingly shows seven musical features of the *Sixth* that show its pastoral traits including its programmatic elements, and, finally, he discusses this work's international reception. Although Beethoven was no proto-ecologist, since his love for nature was rather personal, Allen argues that Beethoven has contributed to our own understandings of the connections both between music and nature and between German culture and ecological thinking.

In Anglophone academia, Green Film studies have begun to emerge in the past few years, but German cinema has so far largely been neglected. Therefore the essay by Matthias Hurst is one of the first attempts to detect ecological thought in German film, focusing on fictional films and TV programs. Following an introduction that distinguishes between "environmental films" and "ecocinema"—only the latter one explicitly reflects upon ecological problems, tries to raise awareness and to transcend the anthropocentric view with experimental "non-narratives"—this essay explores the specifically German traditions of *Heimatfilm* and *Bergfilm*, German western films and "Green" films since 1970. In the early twentieth century, at the beginning of the film era, depictions of a beautiful countryside and a harmonious human-nature-symbiosis already served as contrast to a corrupt, immoral urban society. However, the reception of German film produced in the 1920s and 1930s is overshadowed by the fact that appreciation of nature and homeland were associated with a patriotism that was difficult to distinguish from nationalism and racism, which is why the *Heimatfilm* was successful in the Third Reich. Even in the postwar era, the genre disguising the realities of a defeated and destroyed country was still very popular and has been ignored by scholars for a long time for its ideological potential, while it offers more than escapism and mindless entertainment, as Hurst argues with reference to examples from the New German Cinema movement of the 1960s and 1970s and to what could be even called "Anti-Heimatfilme." Like German western films they touch upon ecological issues even without explicit ecological message, as Hurst observes. He furthermore discusses a selection of aesthetically interesting recent productions that successfully merge the genres of *Heimatfilm*, *Bergfilm* and Western, and thus continue the rich tradition of depictions of nature in German cinema.

In his chapter on "Landscape Architecture inspired by Land Art and Environmental Art," Udo Weilacher addresses a highly relevant topic in the discourse on landscape architecture. First, he focuses on the close

interrelationship between American and European developments in the fields of landscape planning and Land art movements. He shows that the original concept of Land art was not connected to ecological notions: while young artists rejected that their art became an object of speculation and consumption, they created new forms of art called "Earthworks," which were far away from society and inaccessible for actors of the art market. In the early 1970s in Europe, Nature Art became popular, which was, unlike Land art and Earthworks, clearly ecologically oriented, though incoherent as a movement and in style. The concept of Nature Art is marked by a silent dialogue with nature, a meditative activity working with footprints, stones, wood, or sand, dealing with transience as a temporal process, and based on a sensitive understanding of environment. In the terms of Hartmut Böhme, the perception of time demands a different relationship with time, and in line with Umberto Eco, art opens new possibilities to see the world. Weilacher also discusses Minimal art which seems to look quite similar to Land art, but is rooted in different historico-cultural contexts and has no ecological concerns at all. For the mid-1990s, he points to the acceptance of decay and erosion as aesthetic phenomena in landscape architecture. A third strand is the rediscovery of romanticism in the sense of regressive tendencies to a romantic understanding of nature. Recent projects of landscape planning still show traces of these different movements.

It is our hope that this collection will help more firmly to establish the ecocritical paradigm in German literary and cultural studies; that it will advance teaching and research in this area; that it will encourage cross-disciplinary connections between the areas addressed in the various chapters; and that it will help inspire scholarly explorations beyond the scope that can be covered within the limited framework of a single book.

We would like to thank the general editor, Douglas Vacoach, and the Editorial Board of the Lexington Ecocritical Theory and Practice series for accepting the book for the series. We also want to thank the authors for having supplied such substantive, state-of-the-art contributions on their respective topics. Finally, we want to say special thanks to Madeleine Gänge and Jonas Nesselhauf from Vechta, Anna Rauscher, Carolin Gluchowski and Carina Engel from Freiburg, Anna Rauscher and Carina Engel from Freiburg, and Jessica Friedline, Theresa Schwaiger, and Andreas Tschierse from Augsburg for their invaluable help in preparing the book for print.

WORKS CITED

- Bate, Jonathan. *Song of the Earth*. Cambridge/MA: Harvard University Press, 2000.
 Bühler, Benjamin. *Ecocriticism. Grundlagen – Theorien – Interpretationen. Eine Einführung*. Stuttgart: Metzler, 2016.

- Dürbeck, Gabriele, and Urte Stobbe, eds. *Ecocriticism. Eine Einführung*. Köln et al.: Böhlau, 2015.
 Ermisch, Maren, Ulrike Kruse, and Urte Stobbe, eds. *Ökologische Transformationen und literarische Repräsentationen*. Göttingen: Universitätsverlag Göttingen, 2010.
 Gersdorf, Catrin, and Syliva Mayer, eds. *Natur – Kultur – Text: Beiträge zur Ökologie und Literaturwissenschaft*. Heidelberg: Winter, 2005.
 Goodbody, Axel, ed. *Literatur und Ökologie*. Amsterdam/Atlanta, GA: Rodopi, 1998.
 ———. *Nature, Technology and Cultural Change in Twentieth-Century German Literature. The Challenge of Ecocriticism*. Basingstoke: Palgrave Macmillan, 2007.
 ———. "German Ecocriticism: An Overview." *The Oxford Handbook of Ecocriticism*, ed. by Greg Garrard. Oxford/New York: Oxford UP (2014): 547–559.
 ———. "Ökologisch orientierte Literaturwissenschaft in Deutschland." *Ecocriticism. Eine Einführung*, ed. by Gabriele Dürbeck and Urte Stobbe. Köln et al.: Böhlau (2015): 123–135.
 Goodbody, Axel, and Kate Rigby, eds. *Ecocritical Theory: New European Developments*. Charlottesville: Virginia University Press, 2011.
 Grimm, Sieglinde, and Berbeli Wanning, eds. *Kulturökologie und Literaturdidaktik*. Göttingen: V&R Press, 2016.
 Morris-Keitel, Peter, and Michael Niedermeier, eds. *Ökologie und Literatur*. New York, NY et al.: Lang, 2000.
 Posthumus, Stephanie. "Penser l'imagination environnementale française sous le signe de la différence." *Raison Publique* 17 (2012): 15–21.
 Riordan, Colin. *Green Thought in German Culture. Historical and Contemporary Perspectives*. Cardiff: University of Wales Press, 1997.
 Schaumann, Caroline, and Heather Sullivan, eds. *German Ecocriticism in the Anthropocene*. Basingstoke: Palgrave Macmillan, 2017.
 Wilke, Sabine. *German Culture and the Modern Environmental Imagination: Narrating and Depicting Nature*. Leiden/Boston: Brill Rodopi, 2015.
 Zapf, Hubert. *Literatur als kulturelle Ökologie: Zur kulturellen Funktion imaginativer Texte an Beispielen des amerikanischen Romans*. Tübingen: Niemeyer, 2002.
 ———, ed. *Kulturökologie und Literatur. Beiträge zu einem transdisziplinären Paradigma der Literaturwissenschaft*. Heidelberg: Winter, 2008.
 ———. *Literature as Cultural Ecology: Sustainable Texts*. London: Bloomsbury, 2016.
 Zemanek, Evi, ed. *Ökologische Genres*.