

# Speaking for the Trees: Environmental Ethics in the Rhetoric and Production of Picture Books

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**A**s industrialism encroaches on the forests of Dr. Seuss's 1971 *The Lorax*, the title character warns of environmental devastation. "I am the Lorax. I speak for the trees," he shrills as a manufacturer named the Once-ler chops down Truffula Trees. Heedless of the Lorax, the Once-ler knits Truffula Tree fibers into sweater-like objects called Thneeds and, under the marketing slogan "You Need a Thneed," sells them for \$3.98 a pop (a man in a business suit buys the first one, implying the Once-ler's clientele). The Once-ler doesn't quit until the last Truffula Tree is axed, the woodland habitat spoiled, and the birds, animals, and Lorax long gone (although the word "extinct" never comes up). The Lorax ends with the greedy Once-ler living as a hermit and admitting the error of his ways to a boy who visits his lonely home: "'But now,' said the Once-ler,/ 'Now that *you're* here,/ the word of the Lorax seems perfectly clear./ UNLESS someone like you/ cares a whole awful lot,/ Nothing is going to get better./ It's not." The Once-ler tosses the last Truffula Tree seed to the boy with instructions to "Grow a forest. Protect it from axes that hack./ Then the Lorax/ and all of his friends/ may come back."

The Lorax is the automatic go-to text for pro-wilderness writers on children's literature: "the word of the Lorax seems perfectly clear." But while the Lorax (and other pro-tree picture book characters) take it upon themselves to speak for the trees rhetorically, do the picture book format and the children's publishing industry hold to that standard in the picture book's material construction? The Lorax's environmentalist stance, ostensibly upheld by picture book creators, editors, and readers, seldom finds its corollary in children's publishing practices. Publishing houses, after all, are Once-lers by trade, regardless of the sentiments of individual employees or the arguments stated in select books. The Lorax first appears on a Truffula stump, and cultural producers too make stump speeches, crowing an ecological warning from within the space they have a role in destroying. Production demands a split subjectivity, simultane-

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ously aware of destruction and of the necessity to stay in business by creating ever more goods or services. A rhetorical concern for ecological sustainability, so common in the words and pictures shared with children, is swept aside as a children's publishing industry strives for inexpensive and hasty production. Ecology-minded book creators, concerned with having their books published and reaching a maximum number of readers, feel obliged to look the other way when a major company's production values do not equate with their personal environmental ethics. Young consumers internalize that split too, because they habitually use products without being able to imagine the transformation of raw materials into those items, nor the regrowth of natural resources to make more.

This paradox also informs Seuss's book. Many writers cite *The Lorax* for its green voice, yet have a tough time reckoning with its ambiguous conclusion. In the end, the Lorax can do nothing but leave his home space, and the Onceler runs out of resources before passing the last Truffula seed to somebody else. Notably, the Once-ler (who only knows how to use things Once) does not bother cultivating the seed himself. He entrusts the seed to one member of the next generation, with a few words of advice. An "intergenerational equity for the resources, the Truffula tree habitat, is not a part of the Once-ler's ethos; it is left for the next generation to resolve, with no guidance from the generation that used the resources," write Bob Henderson, Merle Kennedy, and Chuck Chamberlin (139). Lisa Lebduska, another writer on *The Lorax*, says, "The planting of a seed or a solitary tree must be presented for the symbolic gesture that it is, an effort that without substantial changes will lapse into empty rhetoric." Despite Lebduska's sense that The Lorax "empowers the child audience...questioning consumerism and allowing the reader to realize that 'even a child can refuse to consume products that are useless,'" (174) the picture book does fail to give young readers much direction, other than to plant a tree or to stop consuming. Certainly *The Lorax* serves as a cautionary tale of production and consumption, but its solutions focus on the clandestine interaction between the Once-ler and the boy. Their private conversation and exchange of the last Truffula seed defines social and environmental change on an individual, limited level, regardless of Seuss' mass public readership and his choice of the children's picture book as a forum.<sup>1</sup>

In *The Lorax*—and in children's publishing and print media generally—there is a telling disconnect between a commonsense save-the-forest narrative and the material actualities of mass production and everyday shopping. Random House USA, part of the international corporate entity that publishes Dr. Seuss' books, prints children's picture books on high quality, chlorine-bleached white paper made from cut trees rather than recycled pulp; *The Lorax*'s saturated greens, blues, and yellows come courtesy of chemical inks and dyes that resist fading.<sup>2</sup> "Paper is biodegradable," write William McDonough and Michael Braungart, "but the inks that printed so crisply on the paper and created the striking image on the jacket contain carbon black and heavy metals. The jacket is not really

paper, but an amalgam of materials—wood pulp, polymers, and coatings, as well as inks, heavy metals, and halogenated hydrocarbons. It cannot be safely composted, and if it is burned, it produces dioxins, some of the most dangerous cancer-causing material ever created by humans" (68).

The picture book arises out of the Once-ler's capitalist world, which is our world too, and not out of the Lorax's peaceable, untainted wilderness. Timber workers and companies have protested The Lorax, but as I see it, the material commodity is not much of a threat to the industry it patronizes, although some readers might feel validated in their (and Dr. Seuss') political leanings for having supported the underdog hero who "speak[s] for the trees, for the trees have no tongues." Ecology-minded readers may hope for the return of the Lorax "and all of his friends," and take to heart its anti-consumerist message and remorseful villain. But while embracing the book's explicit message of conservation, they implicitly support the entrenched practices of the publishing industry. There's a discomfiting gap between the story told and the material medium used to communicate it to people of all ages. Theodor Seuss Geisel acknowledged this himself, saying, "The Lorax doesn't say lumbering is immoral....I live in a house made of wood and write books printed on paper. It's a book about going easy on what we've got. It's antipollution and antigreed" (Morgan 278, qtd. in Henderson 135-36).

Only a thoroughgoing cynic, or a cartoon villain like the Grinch (who also changes his consumer habits), openly supports a pro-pollution, pro-greed policy for kids. Yet even those book creators who want to convey conservationist sentiments must do so in a compromised format. This irony is not lost on children themselves. "Children... are acutely aware that there are alternatives to cutting down the Truffula Trees," Peter Friederici wrote in the Natural Resources Defense Council's *Amicus Journal* in 1995. Friederici quotes an example from Lynne Cherry, author of eco-themed picture books including *The Great Kapok Tree* (a 1990 text about a Brazilian tree and a would-be logger). "I got all these letters from children that said, 'How can you write a book about saving trees that's printed on paper made by cutting down trees?" Cherry explained. Despite the author's recognition of the problem and her creative work to make the issue visible, Friederici concludes that "Cherry's own books now in bookstores are from previously printed backlists, and they do not mention what paper stock they use, let alone its recycled content" (32–3).

Over the years, picture books like Helen Cowther's *Rain Forest* (1988), a story of South American flora and fauna threatened by a bulldozer; Eve Bunting and Ronald Himler's *Someday a Tree* (1993), about the long-term effects of pollution; Jeannie Baker's near-wordless *Window* (1991), whose melancholy collages chart twenty-four years as a landscape changes from forested to suburban; Bill Peet's *The Wump World* (1970), in which aliens called Pollutians despoil the Wumps' pastoral planet; and Janice Udry and Marc Simont's Caldecott winner, *A Tree Is Nice* (1956), on the manifold reasons humans ought to appreciate trees, run into the same dilemma of endorsing plants, animals, rich

soil, and clean air and water, while requiring deforestation and pollution for their production and distribution.<sup>3</sup> Critics recognize this difficulty as well as young readers. In her critical assessment of "Children's Books on Rain Forests: Beyond the Macaw Mystique," Mary Harris Veeder first expresses disappointment about supposedly eco-friendly books, but decides there is reason for hope: "Children's books, because they are themselves money-making enterprises, often do not question the value of the Western industrial marketplace; some books on the rain forest do just that" by raising ecological awareness, albeit in a commodity format.<sup>4</sup> Veeder decides, "I was, in fact, unconsciously assuming that a perfect book on the rain forest can exist" (168), and determines that for ecology-minded children's literature to exist at all, readers must make certain concessions between sustainable rhetoric and unsustainable corporate practice. Veeder, who focuses on "the tension between the visual and the written presentations of the books" (166), calls attention to the irreconcilable gap between visual image and written word.

While Veeder does not examine picture book fabrication, her literary-visual analysis can be applied to the flawed—but for now, essential—picture book package itself. When we look through a conventional picture book (or journal, or magazine, or other text), we handle a material object designed for some entertainment or educational purpose. Picture book design and packaging are typically considered functional elements of form, or format, existing as a disposable framework to support words and pictorial information. But the picture book is not strictly a learning tool in a throwaway paper-and-ink information-delivery system. If we become attentive to design and packaging as part of the text's content, in addition to what its words and pictures convey, we develop a critical and ethical sensitivity to tangible resources as well as to language. This ecologically literate outlook extends beyond the reading of a single book. Attention to materiality enhances our engagement with the environment and draws our awareness to the resources we use when communicating, traveling, or producing and consuming goods like the picture book.

# Spare the Reader, Save a Tree?

In 2002, writer Dana Lyons and illustrator David Danioth collaborated on *The Tree*, the story of a Douglas fir and the human threat to its continued existence. The book is published by Illumination Arts, a small, independent publishing company in Bellevue, Washington that describes itself as "a member of Publishers in Partnership—replanting our nation's forests." The text includes cheerful introductions by tree-sitter Julia Butterfly Hill and folk singer/activist Pete Seeger, two individuals with unquestionable ecological commitments.<sup>5</sup> Hill quotes the "UNLESS" conclusion of *The Lorax* in her optimistic contribution, then says, "Things can get better, and they will, as each of us decides to become a caretaker of the trees, the Earth, and each other. We are the ones." *The Tree* is printed in Hong Kong by Palace Press International, and includes "[e] ndpapers

created by artisan, [sic] Russ Cowman, using needles and seed cones dropped by an 800-year-old Douglas fir." (The endpapers are photographed reproductions of the artisan's work, not the actual handmade paper.) The Tree's copyright page lists the paper-and-cardboard package's environmentally responsible ingredients: "Paper content: 50% recycled (25% post consumer waste, 25% pre-consumer waste), chlorine free bleaching process. This results in measurable environmental benefits, saving trees, water, and energy, while reducing solid waste, greenhouse gasses, and other pollutants."

The Tree's title character seems to speak for itself or, rather, through Lyons as its intermediary. In an afterword, Lyons claims that he went on a camping trip where "I read and played my guitar at the base of an ancient Douglas fir. As I was packing up to return home, a...fully formed song came flowing through me. Looking up to the giant tree, I said, 'I bet this is your song." He wrote down the rhyming words, which became the guiding principles for Danioth's dramatic, naturalistic illustrations of a mossy, primeval forest populated with wolves, grizzlies, owls, salmon, and elk. The 800-year-old tree explains, "I have seen great glaciers melting,/ and I've met lightning eye to eye./ But now I hear bulldozers coming,/ and I wonder, Am I soon to die?" At the end of the book, the worried tree takes heart when a group of smiling children run through the woods and hold hands around its trunk: "But now I hear children running,/ circling my trunk... hands soft and strong./ People are holding on to my branches,/ So the wind may always carry my song." In the final image, a dark-haired girl's head and shoulders seem to fill the sky as she cups the glowing tree in her hands and looks down at it with awe and caring. Lyons and Danioth, like Seuss, end their book by depicting one child and one tree as the promise of a safe, caring tomorrow. This conclusion promises a quasi-religious experience for those individuals who would commune with the tree. The Douglas fir becomes a subaltern figure, unable to speak in its native voice and in need of assistance from benevolent representatives of a colonizing population (who are likely to misinterpret, based on their own interests).

Whereas a tale of environmental consciousness like *The Lorax* warns against devastation of the wilderness but is printed in a non-sustainable manner, a sustainable production process is central to *The Tree*. Design and production share the spotlight with verbal-visual content. Raw materials and their transformation into the picture book format (complete with hard cover, endpapers, and glossy dust jacket) are at least as important to the narrative as the overt "story," a peritextual extravaganza that includes kudos from noted environmentalists, first-person musings from a tree's point of view, and two afterwords detailing the author's inspiration and his commentary "About the Pacific Rain Forest." *The Tree*'s written and pictorial content complement its conscientious material packaging, and the book serves as a three-dimensional argument that the publishing process need not devastate the environment.

Materially speaking, *The Tree* is an impressive book-object. Unfortunately, those who are not trained to read its environmentally responsible packag-

ing—whether children who lack a sophisticated understanding of publishing or adults who have neglected to educate themselves about the environmental consequences of mass production—may well be disappointed with the written and pictorial tale it tells. In her essay "Eco-edu-tainment," Michelle H. Martin seeks environmental songs that "[address] children respectfully as subjects and [acknowledge] them as rational beings, with the expectation that listeners will not only develop an eco-consciousness but will also act on the convictions that develop from it" (219). The Tree advocates this environmental stewardship model, but it only observes children standing with the tree and gives them no tactics for making a difference. They likely need to get older before they can take charge. Holding hands around a tree, or gazing at it with reverential wonder, makes a charming fantasy image but remains highly impractical. The Tree does not provide readers with knowledge about a "natural world that they already understand intellectually but for which they have never developed empathy or appreciation" (Martin 226). Instead, it depicts the Douglas fir as a speaking, solitary entity in a forbidding wilderness where lightning strikes, angry grizzlies roar, and heavy machinery rumbles. The Tree depends on an earnest first-person voice to elicit sympathy (not empathy), and it boasts material properties that look so similar to nonsustainable resources as to become invisible.

Books about respecting nature, printed in a way deemed respectful of nature, can be prosaic or overtly manipulative treatises that ultimately waste the resources on which they are printed—all for the sake of showing how books ought to be printed and what responsibilities people ought to take. The Tree's literary argument may not be persuasive to one who lacks appreciation for trees or cannot imagine (or visit) a Douglas fir; The Tree's presumptuous miming of the tree's voice, and the simplistic cry for children's help, infantilizes and colonizes nature. Despite the considerate packaging and the evident emotional, intellectual, and physical commitments of its creators, the text cannot convert a new generation to ecological consciousness. Like Sunday School literature, The Tree preaches to the choir and sentimentalizes nature and childhood. It promises without proving that a Douglas fir is sublime, and anthropomorphizes one gigantic organism as opposed to conveying the interdependence of the ecosystem. Further, its creators take such pains to make it a conventionallooking picture book that its unconventional elements suffer under a form of negation. Even though its material makeup proposes viable solutions to the use of virgin timber and poisonous chemicals, The Tree encounters multiple slippages between consumer aesthetics and environmental politics. Its narrative and its materiality grow out of an environmentalist logic, but the realization comes up lacking.

## **Materiality Matters**

As people concerned with artifacts and their signifying properties, we all examine the moral and ethical messages embodied in and expressed through

narrative. Materiality literally matters, as we know. Roland Barthes distinguishes between the work, which is the unread object, and the Text that "decants the work (the work permitting) from its consumption and gathers it up as play, activity, production, practice." The Text, Barthes argues, "asks of the reader a practical collaboration," so that the reader's engagement with the Text is not a passive consumption but an active, productive process (162-63). Barthes has in mind the enjoyment or even the bliss (*jouissance*) of the reading experience, which ideally creates a breathtaking sense of immediacy and an imaginative "rewriting" at the moment a Text is read. He is not an ecocritic, but we can extend his formulation of the productive or "writerly" Text to encompass our sensual experience of the material book-object. The Text is the sum of the multifaceted "work" or book itself, plus the written, readable, re-writeable, and pleasurable narrative. The Text includes perceptible verbal-visual components, like words and pictures amounting to a story, as well as a material, tangible "body" of paper and cardboard, constructed of resources from nature. The significance of this material body, like the significance of the words and images contained in it, deserves intensive critique.

While observing literary-artistic form and content, we cannot ignore the ways actual objects are fabricated and sold, and how their very cellular materiality might be interpreted. We hold the book as we read it, and that physical, three-dimensional quality facilitates our reading pleasure. The materiality of the picture book is its outward physical form, its commodity identity, and also part of its legible, meaningful content. In the publishing and reading of picture books, we must pay attention to the relationship between medium and message famously examined in Marshall McLuhan's 1964 Understanding Media. More recently, in an issue of Word & Image devoted to texts' physical properties, Roger Chartier has written that "the production of any illustrated book is a complex process involving many players including the author, publisher, designer, engraver, copyeditor, compositor and proofreader. The collective dimension of all printed publication is further complicated by the technical exigencies of printing a text, one or more images, and even musical notation on a single sheet" (182). Picture book creators themselves—including Aliki, in her explanatory How a Book Is Made (1986)—acknowledge the lengthy collaborative processes and resources that go into the publication of any picture book. The original artist works with paper, pens and pencils, brushes and inks; the author, an editor, a copyeditor, and an art director design a book dummy; a production department and printer work with color separations, inking, printing, and binding; and fossil-fueled vehicles ship finished books to warehouses, libraries, bookstores, post offices, and mailboxes. A finished book is far removed from its origins in the artist's studio and the publishing house, but as Jane Doonan writes, "[a]lthough picture-book art must be produced by a mechanical printing process, the print still records the technique used in the original and something of the effects of the chosen materials, even if the actual materiality is lost to our direct apprehension" (12). Doonan, echoing

Barthes' account of the writerly Text, describes "the synthesis of the picture book experience, with object, words and images uniting in the composite text—the work that exists only in [the reader's] mind" (9). She suggests that as we read, we don't see printed information alone: "stories are made by the pictures, the words, and the book itself" (50).

When we read, we use all our senses, not just the visual. While holding the book, we become accustomed to its particular materiality, born of mechanical reproducibility. We appreciate the multisensory appeal of a three-dimensional, reproducible work of art. We "read" much more than interdependent images and words; we interpret a multifarious text, whose many layers contribute to our complex interpretation. We are cognizant of the art and craft involved in making the functional textual object, even if fabrication is not at the forefront of our consciousness as we read. We grasp that a picture book creator manipulates multiple media to convey some message, although that message is abstract and incompletely perceived. "[A]rt transforms its material, not necessarily in some absolute way, but in the sense that it continually stages itself as transforming material," Joseph Leo Koerner writes (180); readers handling a book understand that raw material has been transformed to make it, and subconsciously perceive the place of the printer's technology as related to storytelling media in the contemporary world. Thus, scholars concerned with the verbal-visual narratives created with children in mind, and the material-textual artifacts ultimately sold to young readers, need to explore the ways texts are constructed of words, pictures, and tactile material beyond their changing narratives.

While taking this formalist approach, we still can remain conscious of the historical context and sociopolitical relevance of the picture book as a storytelling mode and as a commodity. Chartier comments on Stephen Greenblatt's concern

that emphasis on the materiality of texts can lead to a neglect of the content—"that to talk too much of materiality means to give up representation, reference and meaning." While this risk certainly exists,...we must attend to elements long overlooked by literary criticism in order to reveal the multiple, fluid and even contradictory meanings invested in works. Such attention helps avoid anachronistic readings which allow for only a single interpretation—that of the contemporary critic—and which unduly (and unconsciously) consider as universal categories, distinctions and hierarchies peculiar to our own discourse. (182)

Chartier warns critics that texts—picture books among them—need to be understood as inhabiting diachronic, changing time, and influenced by socio-economic conditions. If we situate the literary-visual content of a text (e.g., a story about unfortunate trees being cut), we also can contextualize its material packaging (e.g., archival paper manufactured from cut trees). If we scrutinize the environmental rhetoric of the picture book in the late twentieth and early twenty-first century U.S., we likewise note the unsustainable practices required to produce and distribute it. When we assess the picture book, we need to

consider its dual status as narrative and as commodity; we should not take for granted the picture book's design, construction, and distribution and how these modify the narrative. In their book *Ecological Design*, Sim Van der Ryn and Stuart Cowan contend, "Design is not neutral. It is molded by powerful political and economic forces....[C]ultivating design intelligence requires that design education once again become permeable to the outside world, responding to the challenges offered by real places and adding ecology and community to its list of concerns" (151–52). By reflecting on design and modes of production, we defamiliarize the ordinary picture book. As it stands, the picture book is so conventional that its production is seldom examined, except when consumers assess their buying habits or publishers change service suppliers.<sup>6</sup>

Our habitual modes of designing and producing children's literature therefore reveal much about our concept of the child, our design sensibilities, and especially our cultural priorities. The gleaming, full-color picture book might seem, to the environmentalist, like sausage (or the law): you sleep better if you don't know how it's made. Inexpensive paper stock—used in mass-produced paperbacks but not quality picture books—is likely to be chlorine-bleached, a process that pollutes soil and water with cancer-causing dioxins.<sup>7</sup> Picture books, ideally printed on acid-free stock to preserve their high-quality color, are fabricated using long-lasting archival papers made from virgin timber, and printed using chemical inks, toxic adhesives, and millions of gallons of potable water. Despite the availability of recycled paper,8 de-inked paper,9 alternative fibers for paper production, 10 soy inks, and sustainable products like "green" adhesives, the international publishing industry uses timber from old-growth trees and tree farms, chemical products, and wasteful and polluting production techniques that contradict the feel-good, pro-wilderness anecdotes and imagery in many children's texts.

Our production preferences did not develop in a single generation, but evolved from traditional ways of thinking about bountiful nature, human wants and needs, and immediate gratification. Based on how we learn about commodities and grow up to supply and demand them ourselves, we develop a particular understanding of modern experience, with our collective growth paradoxically founded on ceaseless environmental destruction. David Orr writes, "[t]he emergence of the consumer society was neither inevitable nor accidental. Rather, it resulted from the convergence of four forces: a body of ideas saying that the earth is ours for the taking; the rise of modern capitalism; technological cleverness; and the extraordinary bounty of North America, where the model of mass consumption first took root" (141). Orr's list recapitulates the favored tropes of Western children's literature, from Defoe's Robinson Crusoe and the Robinsonnades, (which categorize and colonize natural specimens) to Rousseau's Émile (the child educated via nature for public life) to Horatio Alger tales (of economic gain and capitalist consumption) to positivist machine-in-the-garden narratives from the Industrial Revolution on (which teach that industry improves upon nature). Such anthropocentric master nar-

ratives teach that land is there for humans' taking and equate technological, financial, and imperial advancement with good fun, uplift, and adult success. Books' literary content and stylistic form have a great deal to do with books' materiality too. A long-term carelessness with natural resources, modeled in literature and image, helps determine book-makers' and readers' disregard for green alternatives in the manufacturing process.

Thanks to technological progress, we have multiple media at our disposal (in all senses of the word "disposal"). We have various shopping options for our literature, from chain and online bookstores to used book shops and the Syracuse Cultural Workers catalogue. We have an easygoing relationship to synthetic materials as opposed to natural fibers, from plastic grocery bags to treated or unfinished wood and even uncolored and uncoated metal, all substances that rely on troublesome, polluting production processes. And we have a vague grasp of the alienated labor that gathers resources and produces goods; most U.S. and European picture books, for instance, are printed in Asia or South Asia, and their production is linked to deforestation in places like Indonesia, where environmental protection standards go unenforced in the name of (and human need for) economic development. Thus we take the book publishing industry and its standard operating procedures for granted, and argue that the industry simply needs to operate as it does. We demand, and pay for, tough books that really will outlive us, won't get torn or stained, and will retain their brights and whites in seeming perpetuity. In the twentyfirst century, we seem to want our children's books, like some other vestiges of childhood, to last forever. But what does it mean to tell the child to take good care of a book, to avoid using it roughly or irresponsibly, when the book itself is a material trace of a destructive network? What does it mean to buy a children's book that does not wear out, even after childhood has passed? Which reading habits are bred, and which discouraged, by texts that celebrate the environment in their words and pictures, yet disregard the ecology in terms of their material construction?

Few adult producers or consumers would claim not to care about "the children," that often-undifferentiated mass of young individuals. Yet unreflective production strategies fail to anticipate future generations and in fact guarantee that careless consumption becomes second-nature to young adults. Today, we are all born shoppers. Like the consumers in *The Lorax*, we need a Thneed, and when we get tired of that Thneed, we need a new one. "We have grown up in a culture so devoted to consumption—grown up so solid in the understanding that we define ourselves through certain patterns of consuming—that I doubt very much we can truly shake our conditioning. How else would we behave? From 'real needs'?" Bill McKibben writes (91). Orr echoes this, writing that "[c]ompulsive consumption, perhaps a form of grieving or perhaps evidence of mere boredom, is a response to the fact that we find ourselves exiles and strangers in a diminished world that we once called home" (141). We—at least the "we" of the Western world—cannot fathom our "real needs" for comfort

and survival. We no longer can locate a secure "home" in the overwhelming, busy world, and our mourning takes the form of frenzied, often guilt-ridden, consumption. Uncertainty and insecurity drive our relentless consumer practices and result in our perpetual dissatisfaction. Thus we excuse questionable production practices in order to satisfy mundane cravings, and children inherit this consumerist outlook—which appears casual on the surface but bespeaks a deep, internalized pessimism about raw materials and wild spaces. In addition, "we" are not so far removed from being "the children" and they are not too distant in years from us. The grade-school child of 1990 now works and votes, and The Lorax's first 1971 audience is thirty- or fortysomething (begging the question of reception: if *The Lorax* or "Give a hoot, don't pollute!" slogans produced environmentalists, wouldn't everyone be driving DaimlerChrysler smart cars and funding wind energy by now?). A perceptible but largely artificial separation between generations enables adults to place faith in children as "our future," meanwhile persisting in their own destructive practices—just for the time being, because it is convenient.12

Meanwhile, all children (and adults) derive an understanding of the world from the everyday commodities they handle, and they base their nascent desires on a limited set of commodities made available by cultural producers in any given year: the iPod, the GameCube, the latest Harry Potter accessories. They also develop a sense of their own identities through the written language and imagery in picture books, as well as from conventional picture book packaging. Even if children interpret words and pictures unpredictably, reading against the grain, they and all readers also derive a shared moral and ethical outlook from the materiality and design of their chosen texts. They base their notions of reality upon the artifacts they encounter. When children handle a book, they do not read language or pictures alone. They observe the context in which they acquired it, whether at the library, at school, at a bookstore, or at home via the mail or as a gift. They interpret its size, textures, and ingredients. They make sense of textual parts and wholes that tell them about their world, including their own class, race, ethnicity, sex, and gender. Preliterate human beings take the symbolic measure of a text as a nonverbal as well as a verbal mode of communication, even if they are not taught to "read" the signifying structure of the book-package itself. Depending on, or despite what, their co-readers point out, they cannot help but notice the characteristics that make a book simultaneously a vehicle for narrative and a palpable, more or less valuable commodity.

Further, reading audiences develop certain expectations for how children's books should look and feel, and uncritically learn to accept the contradictions between literary and material messages. If a book praising the outdoors and mindful consumption originates from virgin timber pulp in a paper mill and is then purchased in a mega-mart with a vast concrete parking lot, critical readers understandably might resist the text's overt argument—yet uncritical reading habits, and an overwhelming sense of impotence within corporate culture, press them to overlook the text's problematics. If readers grow up during a time when

chemically treated, coated paper and synthetic inks and dyes are in fashion, they likely learn to take comfort in novelties that express this trend, and they seek to reproduce that trend through their later habits of consumption. For example, even experienced college-age readers will dismiss a picture book out of hand if it lacks the "bright colors" and high gloss they have come to associate with pleasurable children's commodities, based on their elders' (and their future children's) consumer habits. Thus when a slickly designed book depicts an animal, tree, or other representative of a healthy earth, young readers might perceive a mixed message without having a clue what to do with that confusion. They cannot imagine possible alternatives unless those alternatives get modeled in material practice. "In a de-natured place, we are likely to develop de-natured imaginations, lacking room for Bishop pines or upswimming salmon," write Van der Ryn and Cowan. "We have rendered both nature and the consequences of our own technologies increasingly invisible....[But by] making nature visible again, favoring technologies that are not hidden and that do not possess hidden consequences, our imaginations are again enfolded in nature" (160-62). Van der Ryn and Cowan assert that "[d]esign transforms awareness" (162) in ways that are variously beneficial and detrimental to ecological sustainability. It should be a goal of children's literature scholars to understand, and improve upon, the ecological design of the texts we criticize and teach.

## What We Can Do Now

This brings us to practical approaches, including some reasons why sustainable practices have not yet become industry standards, even among academic and independent publishers that seem most likely to support green measures. It also brings us to several efforts underway to address industry issues and make changes in design and production. In closing, I want to suggest some practical and easy ways to raise awareness of green publishing alternatives via university presses, written communication, and casual conversations. Following David Orr, I recommend cultivating a "materialistic" attitude, in the sense that "[a sustainable society] would…be a more materialistic society in the sense that its citizens would value all materials too highly to treat them casually and carelessly" (145).

Texts like *The Lorax* and *The Tree* indicate writers' and publishers' awareness of toxic production methods and the material meanings of the picture book. On the one hand, producers and consumers are cognizant of resource depletion, but on the other hand, simple acknowledgement of a concern does not breed a sense of responsibility or a conservation ethic. In general, picture books not dealing with an environmental topic are printed on archival acid-free stock, manufactured by a timber company with which the publisher and printer contract. When topical texts like *The Tree* deal unambiguously with the environment, publishers could (but seldom do) see fit to print them in an overtly sustainable manner. Another well-known picture book on Douglas firs, Barbara Bash's *Ancient Ones* (Sierra Club Books, 1994), initially was "printed [in

the U.S.] on paper containing a minimum of 50% recovered waste (of which at least 10% is post-consumer waste) and absolutely no fiber from old-growth trees," according to publicity materials. Since Sierra Club Books does not have a dedicated production department, however, Ancient Ones' packaging ultimately depended on other major publishing houses' contractual obligations. Sierra Club Books has co-publishing relationships with Crown (a division of Random House) for its adult titles, and Gibbs Smith for its children's books; in the early 1990s, Sierra Club Books printed other ecology-sensitive books, like Dale H. Fife and Jim Arnosky's The Empty Lot (1991) through a co-publishing arrangement with Little, Brown and Co. Some reprints of Ancient Ones ended up being handled by a Hong Kong company that lacked the original post-consumer/pre-consumer materials, although Sierra Club Books did request paper from tree farms rather than old-growth forests, and acid-free, chlorine-free pulp. 13 Sierra Club now has joined the Green Press Initiative—a nonprofit environmental advocacy group whose mission "is to work with publishers, printers, manufacturers, suppliers, and authors to create paper-use transformations that will conserve natural resources and preserve Endangered Forests" ("Blueprint" 2)—in awareness of progress yet to be made.

Publishers and other cultural producers typically reject environmentally friendly practices based on cost and convenience. Picture books are a "soft market" in the twenty-first-century children's publishing industry, which has seen a downturn in sales of expensive hardcover editions. Children's fiction in novel and comic book formats is the current trend. Thus it is important to the book industry to save money on in-house production, overseas printing and binding, and international distribution of picture books. As a consequence, old commitments to virgin or tree-farm timber and conventional printing methods maintain a distinct edge over new enterprises using sustainable resources, which may be short-lived because they cannot compete with quick-and-dirty methods.

The publishing industry stresses a need for rapid production and global distribution, reasoning that eco-friendly solutions cannot be found when information must be processed so speedily. Orr nimbly challenges this reasoning, arguing that meaningful design leads to thoughtful, rational consumption of the sort valued by deep ecologists and the "slow food" movement. "The old truism that haste makes waste makes intuitively good ecological design sense." Orr continues:

Increasing velocity often increases consumption, thereby generating more waste, disorder, and ugliness....Good design acknowledges the fact that beyond some relatively low threshold, the rapid movement of information works against the emergence of knowledge, which requires time for people to mull things over, to test results, and, when warranted, to change perceptions and behavior. (149)

Orr explains that it is less costly—financially and environmentally—to recycle materials that already exist than to produce brand-new paper from logs. For instance, according to the Green Press Initiative,

[F]rom a fiber-cost perspective, recycled paper is cheaper to produce than paper made with virgin fiber pulp. The higher cost of recycled paper is due in large part to economies of scale: recycled paper is up charged [i.e., it costs more] due to the fact that a majority of end-users are still requesting virgin-fiber paper and there are production costs associated with switching pulp recipes and associated downtime. As customer demand for recycled and environmentally superior papers increases, these internal costs dissipate and recycled paper becomes available at price parity. ("Blueprint" 12)

The Green Press Initiative suggests that "customer demand" can influence manufacturing processes—but that means raising consumer awareness and concern, as organizations like Co-op America's WoodWise Program, the Forest Stewardship Council (FSC), the Independent Press Association, and Conservatree (which has a detailed list of products and paper companies on its web site, www.conservatree.com) have begun to do. Initiatives like the "Magazine PAPER Project: Printing Alternatives Promoting Environmental Responsibility" (www.ecopaperaction.org) are encouraging book and magazine publishers to reconsider their production methods.

Public policies also drive producer choices in terms of raw material costs and availability. Back in 1995, Peter Friederici wrote that "[t]he paper Harcourt Brace now uses [to print children's books] is exceptional at 20 percent postconsumer content. Ten percent is more common; the industry lags behind the standards set by President Clinton for federal agencies, which must use paper that is at least 20 percent post-consumer" (33). Friederici expressed optimism for Harcourt, a major publisher, as well as for the Center for Children's Environmental Literature (CCEL), a nonprofit venture on green publishing founded in 1992 by Lynne Cherry (and now a program of the Antioch New England Institute). In 2004, Jim Motavelli wrote in E Magazine, "consumers have become complacent, and big potential purchasers have become worried about steady sources of recycled paper. Recycled paper content slid from a high of 10 percent in the early 1990s to a current rate of less than five percent" (29). Motavelli indicates publishers' and printers' need for a reliable source of materials, as well as flagging consumer pressure on behalf of recycled and other environmentally friendly resources.

Thus, changes in the field of children's literature—that is, publishing for and about children and childhood—could make a significant difference in publishing. Almost a decade ago, Friederici explained that "[children's books] make up only about 1 percent of the total U.S. book-printing market, but they use some 20 percent of the high-grade paper consumed in book publishing" (32). Children's books remain a high-end proposition, and children's publishers' and scholars' attention to ecological matters could have a noteworthy effect on printers and timber providers. To name an important example, a Canadian edition of *Harry Potter and the Order of the Phoenix*, published by Raincoast Books of Vancouver, B.C., was printed on post-consumer stock: "Out of 55 publishers globally, Raincoast Books is the only one to print Harry Potter on Ancient Forest

Friendly paper (100% post-consumer recycled, processed chlorine free)," says the Markets Initiative, a Canadian nonprofit.<sup>14</sup> Raincoast publisher Michelle Benjamin told Greenpeace International that workers at the publishing house "feel like they're contributing to a larger global initiative....[And in] terms of the environment, it means we've been able to not destroy approximately 40,000 trees—and also see a number of other environmental savings in terms of water usage and creation of waste." 15 Notably, the Italian publisher Salani published its hardcover edition of *The Order of the Phoenix* with up to thirty percent FSC certified paper, while the UK publisher Bloomsbury printed *Phoenix* on ten percent post-consumer waste recycled paper. For the release of *Harry Potter* and the Half-Blood Prince (July 2005), Bloomsbury committed to using thirty percent FSC certified wood pulp, and the Greenpeace Book Campaign is urging that publisher to follow Raincoast's bolder lead. Meanwhile, Scholastic Books—the U.S. publisher of the Harry Potter books—has not yet shown such foresight. Given J.K. Rowling's stated support of Raincoast, <sup>16</sup> American consumers have the opportunity to call Scholastic's attention to environmental consciousness in the United States—and it may interest readers to know that Arthur A. Levine, Rowling's acquiring editor, once wrote an eco-themed picture book titled *Pearl Moscowitz's Last Stand*. Levine presently publishes the Harry Potter series under his own Scholastic imprint, along with a list of picture books and children's titles every season. He and other key editors are uniquely situated to make significant changes. "I think publishers generally are a very socially aware community and environmentally aware," says Raincoast's Benjamin, who encourages consumers to contact publishing houses and express concerns about ecological design and publishing.<sup>17</sup>

Benjamin's optimism notwithstanding, publishing executives and book creators do resist change. Their jobs depend on the profitability of seasonal book lists and on creating aesthetically pleasing objects, including expensive picture books. An uninformed public—that is, people unaware of or indifferent to environmental concerns—might not acknowledge a switch to sustainable methods, so it's easier to stick with business as usual and renew contracts that in turn reward polluting technologies. "The biggest challenge to eco-friendly book publishing remains the low demand for recycled paper, which results in higher cost, compared with virgin fiber stock," writes Avery Yale Kamila of *Poets & Writers*.

Many professionals in the industry anticipate this will change if the large trade publishers—Random House, Penguin Group, HarperCollins, Simon & Schuster, AOL Time Warner Book Group—begin to purchase recycled paper. Since the amount of paper they buy is so great, these publishing houses set the standard for the price of book paper. As of this writing [Jan–Feb 2004], no trade houses have joined the Green Press Initiative" (11).

However, at least nine university presses are on board: Cornell University Press, Michigan State University Press, Southern Illinois University Press, University

of North Carolina Press, University of California Press, University of Georgia Press, University of Iowa Press, University of Missouri Press, and University of Notre Dame Press. If academics publicize this issue in *The Chronicle of Higher Education* and elsewhere, sustainable materials could become an academic publishing standard. As readers, writers, researchers, and book buyers, we each have a philosophical and practical stake in this and can work with Johns Hopkins University Press to strategize for the future. Tyson Miller, of the non-profit Green Press Initiative, says that Johns Hopkins might be willing to join the other university presses by pledging support to the initiative.<sup>18</sup>

Further, if publishers do switch to greener alternatives, they fear having to reconfigure production specifications. Tona Pearce Myers, production director at New World Library, writes, "[O]n reprints, when quantities come down and printing costs rise, recycled paper is rarely an option. Also, the bulking of recycled paper and virgin paper differs. Reformatting the cover to fit recycled paper's thinner spine width also drives up reprint costs" (58). Other publishers, recognizing that green companies have worked to rectify inconsistencies in paper quality, blame the status quo on authors and illustrators. According to a picture book production expert who spoke to me informally, no authors or illustrators have ever expressed an interest in environmentally sustainable products; instead, this production manager said, picture book creators want to see their work reprinted to exacting archival standards, sustainability be damned. In part, he was deflecting blame away from his employer and onto the books' original creators (and indeed books need to be of good quality for archival purposes), but his production department does help determine a mainstream publisher's bookmaking process, and could explore options like alternative papers and inks that are as long-lasting as their toxic cousins. In addition, many book creators are well aware of green issues, although few have the cultural capital to demand that their publishers demonstrate ecological concern. Among major authors, Margaret Atwood, Barbara Kingsolver, and Alice Walker "have agreed to require recycled paper as part of their publishing contracts," according to Kamila (10). Readers should encourage other established artists and writers, editors, publishers, production experts, and printers to rethink the process of book production. Children and adults alike can discuss the critical issue of whether a book's rhetorical stance contradicts the material circumstances of its fabrication.

As researchers, teachers, editors, and members of children's literature organizations, readers of *Children's Literature Association Quarterly* are poised to make critical inquiries and pose solutions. "We are all designers," write Van der Ryn and Cowan. "We constantly make decisions that shape our own future and those of others. We choose our everyday reality: where and how we live, how we use our time and energy, what we value and whom we care about, how we earn and how we spend. All these choices involve dimensions of design" (146). Thus we begin to design for the ecological future when we involve students and colleagues in a conversation about ecological publishing. If a publishing house

plans a large print run for a picture book or YA title, how much of this can be done using environmentally friendly resources? How can the use of sustainable resources become part of the publicity effort, thus drawing attention to the materiality and allowing the texts themselves to raise consumer awareness? How can we get publishers, creators, and consumers to begin asking these questions and eventually act upon them?

For example, those of us invested in children's literature often encounter picture books that have a "natural" look and feel, minus the nature-centered publishing methods. Lane Smith's *The Happy Hocky Family Moves to the Country* (Viking, 2003) is printed on flecked, oatmeal-colored paper; Megan McDonald and illustrator Peter Reynolds' "Judy Moody" series for Walker Books appears on a wheaty brown stock. Recycled, archival quality paper would complement the existing designs of books like these, and could be a selling point to an ecosensitive audience. Other notable creators have conceptual reasons to argue for sustainable resources in publishing process: D.B. Johnson's "Henry" series of picture books (e.g., Henry Hikes to Fitchburg, Houghton Mifflin) are based on Thoreau's Walden; author John Marsden and artist Shaun Tan have published two cautionary tales, *The Rabbits* (Simply Read, 2003) and *The Viewer* (2004), both stunning picture books dealing with environmental devastation and class politics; and Carl Hiaasen's bestselling, Newbery Honor winning novel Hoot (Knopf, 2002) concerns endangered burrowing owls in Florida. All these books have wide distribution, solid library/bookseller recommendations, reasonable sales, and sometimes a star creator or editor. Any of them could be created using sustainable resources, but they aren't, yet. Via our networks in the field of children's literature, we can ensure that these issues enter an interdisciplinary

In addition, I would urge the Children's Literature Association and Johns Hopkins University Press to print publications including *ChLAQ*, *The Lion and the Unicorn*, *Children's Literature* annual journal, and membership correspondence on unbleached, post-consumer stock with the best possible ink. The *ChLA Newsletter*, a small publication already printed on a grainy brown paper, could appear in soy ink on a sustainable paper brand from any number of companies, including New Leaf Paper (San Francisco), Living Tree Paper (Eugene, OR), Cascades Inc. (Quebec, Canada), the catalog and magazine recycler Manistique Papers Inc. (Manistique, MI), or another manufacturer that supports sustainable publishing and printing methods. *Bookbird* and IBBY publications, too, could make the transition to green alternatives. By calling attention to picture book production and the production of printed matter in general, scholars recognize that picture books and scholarly texts participate in "the social life of things," to borrow a phrase from Arjun Appadurai's anthropological study of objects and commodities for daily use.

Despite a prevailing sentimental notion that childhood is apolitical and ahistorical (that is, inhabiting synchronic time and space), U.S. children's texts today are manufactured in an unsustainable manner that supports a model of

constant turnover. While the rhetoric around childhood emphasizes security, a culture of distraction and uncertainty is implicit in the design of the picture book, as publishing professionals admit; publisher Patricia Lee Gauch calls publishing "a fast-food process," and author Jane Kurtz has referred to the Greenwillow imprint as "a small, literary boutique within the large K-Mart world of HarperCollins." 19 Cultural producers situate children's texts, with their attendant nostalgia and protectionist attitude, within a market that values disposability and change.<sup>20</sup> Picture books—representations of youth and innocence—signify as artifacts of time passing and as freshly minted commodities meant to stay squeaky clean and naïve forever, alienated from factory processes and the ugly ravages of time. In short, we and the cultural producers we patronize engage in teleological thinking yet acquire objects that promise constancy (and are thus bound to disappoint). We see this paradox, and this hypocrisy, in the stark contrast between sustainability rhetoric and the actual production of children's literature. The production and design of picture books, environmentalist and popular alike, is as much a part of children's "narrative" as the visual and verbal storytelling itself.

So often, picture books like *The Lorax* and *The Tree* give us stories about the global concerns of protecting nature, the beauty of wilderness, and the importance of conserving the environment. These texts carry the narrative message that children should treat all natural phenomena, down to the finest grains of sand, as marvels. Yet book-objects, which are the materialization of the stories they contain, are printed in such a way that they damage environmental ecology, dismiss socioeconomic realities worldwide, and reward destructive practices of consumption that are then reproduced in the behavior of children as consumers. Even when the narrative celebrates the beauty of the organic and wild environment, the material text celebrates technical cleverness and presumes human dominion over nature. The packaging of a book, the realization of a narrative in book form, constitutes a kind of information that as children we learn to take for granted. Scholars must consider the disconnect between rhetoric and production, and the failure to establish ecological and rational priorities as children grow up and make consumer choices. The time is ripe for an ecocritical assessment and a revision of publishing practices, for future generations and for the generations living right now.

### Notes

- 1. By comparison, Wangari Maathai's Green Belt Movement in Kenya might be cited as a collective, promising exercise in promoting biodiversity. Maathai, winner of the 2004 Nobel Peace Prize, has been working since 1977 to plant indigenous seedlings and reinvigorate her country's depleted forest space. See also Zicht, "Who's in Charge of the Last Truffula Seed?"
- 2. According to Greenpeace, Random House Canada has joined sixty-seven Canadian publishing houses in pledging to phase out "ancient forest fibres" from the books they

print (see www.greenpeace.org). U.S. publishers lag far behind international publishers in efforts toward green publishing.

- 3. Baker's *Window* closes with an author's note on deforestation and extinction: "Our planet is changing before our eyes. However, by understanding and changing the way we personally affect the environment, we can make a difference." Her comment seems most appropriate to this concern for printed matter.
- 4. Veeder argues that *The Great Kapok Tree*—in which rainforest animals and an indigenous child persuade a logger not to cut the tree—asks readers "to believe in a Disneyfied peaceable kingdom, a roadside zoo on a million-acre scale" (166). In Veeder's estimation, few rain forest books adequately consider neocolonialist attitudes toward exploitation of resources: "While the majority of the emotional thrust of these books is toward creating empathy, some do move beyond this concern to address the root forces of ecologial destruction" (168).
- 5. According to its copyright page, Hill's *The Legacy of Luna: The Story of a Tree, a Woman, and the Struggle to Save the Redwoods* (HarperCollins, 2000) is printed "with soy-based inks" on "paper that is made from 100% post-consumer recycled fibers and is processed in a totally chlorine free process (TCF). TCF bleaching is a pollution prevention process that does not create dioxin in our waterways or air." Hill is among the authors demanding green packaging. *The Tree* is unpaginated, so quotations here are not cited by page number.
- 6. A detailed class analysis of the environmentalist (or any) picture book is beyond the scope of this essay, but the rhetoric and fabrication of most children's texts does depend on a global system of alienated labor and social inequality. Further, historic methods of making archival-quality books from rags and other non-paper resources may be worth reintroducing into the publishing process, because consumers have good reason to want their purchases to last. These are rich topics for later exploration.
- 7. According to the Magazine PAPER Project (www.ecopaper.org),

  [s]tandard chlorine bleaching technology (which uses elemental chlorine gas) and ECF
  [elemental chlorine free] bleaching (which employs a chlorine derivative such as chlorine
  dioxide) both result in the production of organochlorines, which are hazardous substances
  such as dioxin, an endocrine disrupter and human carcinogen. TCF [totally chlorine free]
  bleaching, on the other hand, is accomplished with oxygen, hydrogen peroxide or ozone,
  which do not produce any organochlorines. An average mill employing standard chlorine
  bleaching technology will release about 35 tons of organochlorines a day; an ECF mill
  will release 7 to 10 tons; and a TCF mill will release none. ECF mills are obviously an
  improvement over standard bleaching technology, but since organochlorines are highly toxic
  and bioaccumulate in the food chain, even their lower level of release is cause for concern.
  Environmentally speaking, TCF is the best choice for bleaching technology.
- 8. "Recycled" paper can have many sources and will vary in its definition. Recycled paper containing "post-consumer waste" includes "[f]iber that has been used by a consumer, put in a recycling bin, gone through a recycling facility, and made into new paper." That with "pre-consumer waste" includes "[f]iber made from mill scraps or recovered materials" that might never have been used in a product. (Source: Vanessa Gravenstine, "The Facts about Paper")
- 9. Deinking is primarily a mechanical process, during which machinery washes and beats recovered pulp in order to separate usable paper fibers from dye, ink, toner, adhesives and paper fibers that are too short to be used again. Detergents or other

surfactants may be added to bind to these unusable substances and make them easy to remove from the mixture.

The sludge that results from deinking can be put in landfills, as opposed to being dumped in rivers or otherwise improperly discarded. "[T]he process of deinking neither uses nor creates any additional toxic substances, and it can actually aid in the safe disposal of toxic inks and other materials that have been added to paper." (Source: Magazine PAPER Project)

- 10. As fiber alternatives to paper, Jim Motavelli lists agricultural waste, industrial hemp, kenaf ("a relative of okra and cotton"), linseed oil flax pulp, and "long-fiber linen rags, cuttings, and threads." He also sees potential in bagasse fibers from sugarcane production, abaca or manila hemp ("a leaf fiber and a member of the banana family"), ramie, hesperaloe, and two varieties of grasses called arundo donax and esparto. See "The Paper Chase," *E Magazine* 15:3 (May–June 2004): 34–35.
- 11. Carolyn Sigler examines "anthropocentric" and "biocentric" visions in eighteenth-, nineteenth-, and late twentieth-century children's literature, although she largely neglects early to mid-twentieth century modernity. Sigler finds that 1990s environmental children's books "often blend eighteenth-century didacticism with Victorian fantasy, encouraging active involvement in social debates," then recommends calling children's attention to "real but wondrous creatures" (151–52). Lisa Lebduska is less sanguine about nature's more awe-inspiring specimens, arguing that "the danger here lies in the risk of divorcing children from nature by turning it into spectacle" (171). Mundane wildlife—like taken-for-granted picture book packaging—is a practical concern.
- 12. "Poor design," write architect William McDonough and chemist Michael Braungart, "...reaches far beyond our own life span. It perpetrates what we call *intergenerational remote tyranny*—our tyranny over future generations through the effects of our actions today" (43). Their book *Cradle to Cradle: Remaking the Way We Make Things*

is printed on a synthetic 'paper'....made from plastic resins and inorganic fillers. This material is not only waterproof, extremely durable, and (in many localities) recyclable by conventional means; it is also a prototype for the book as a 'technical nutrient,' that is, as a product that can be broken down and circulated indefinitely in industrial cycles." (5)

Like the creators of *The Tree*, the authors earnestly seek alternative book production methods and profess concern for future generations. Yet despite its potential, their book remains prototypical and their argument is undercut by conflicts of interest; they act as apologists for their design firm's major corporate clients, Ford Motor Company in particular.

13. According to the Green Press Initiative, "most of the world's paper supply, about 71 percent, is not made from timber harvested at tree farms but from forest-harvested timber, from regions with ecologically valuable, biologically diverse habitat" ("Blueprint" 4). According to Gravenstine, "[m] ore wood is used to make paper than for any other purpose....And less than 20% of those trees [used for paper] come from tree farms" (np). Tree farms might seem to pose a solution, but they come with their own set of difficulties; old-growth timber gets clear-cut to make way for farms like the loblolly pine plantations in Tennessee. "Harvard biologist E.O. Wilson has commented that plantation forests are 90 to 95 percent less biologically diverse than natural forests. But this hasn't slowed the rapid transformation of Southern hardwood forests into monoculture [single-species] tree farms," writes Jim Motavelli (38). Gravenstine adds,

- "[e]ven paper that comes from tree farms is not good for the environment because the pesticides and herbicides used [on farms] are more toxic and used more heavily than those used on food farms" (Quoted in "The Effect of Post-Consumer Content" [25 April 2003]).
- 14. See the Markets Initiative web site at http://www.marketsinitiative.org/potter.html. The Markets Initiative, "with support from several major nonprofit groups and linked to the U.S.-based Green Press Initiative, has persuaded 67 Canadian book publishers to buy their paper from forest-friendly sources. The Harry Potter books printed in Canada are among the converts," writes Motavelli (29).
- 15. Greenpeace International, "Conversation with a Publisher," 10 October 2003. http://www.greenpeace.org/international/news/conversation-with-a-publisher
- 16. "[T]he Harry Potter books are helping to save magnificent forests in the Muggle world, forests that are home of magical animals such as Orangutans, Wolves and Bears," Rowling writes on the Markets Initiative web site. "It's a good idea to respect ancient trees, especially if they have a temper like the Whomping Willow." By mentioning the Whomping Willow, Rowling whimsically invokes the Harry Potter series' fictional tree, which thrashes any perceived threat with its branches but doesn't actually "speak" for itself. Rowling calls real animals "magical," thereby dissociating them and her books from the "Muggle" or nonmagical human world, but despite this problematic distancing move, she does express support of environmentally conscious publishing.
- 17. Greenpeace International, "Conversation with a Publisher."
- 18. Email correspondence, 7 June 2004.
- 19. Gauch and Kurtz are quoted in Joel Taxel, "Children's Literature at the Turn of the Century," 156, 161.
- 20. Joel Taxel points out a plural attitude toward books: "Noting that books may have a 'sacred status,' [S.] Stossel (2001 [*The American Prospect* 12:2 (43)]) recalls Bertolt Brecht's observation that they are, in fact, 'sacred commodities,' and that 'to think that publishing can stand outside or above the market system that produces other commodities is naïve" (159). Brecht's evocation of the "sacred commodity" implies that books (like childhood) can seem to exist in synchronic, messianic time, whereas mass production takes place in diachronic, ever-changing time.

#### Works Cited

Aliki. How a Book Is Made. New York: Crowell, 1986.

Appadurai, Arjun, ed. *The Social Life of Things: Commodities in Cultural Perspective.* Cambridge/New York: Cambridge University Press, 1986.

Barthes, Roland. *S/Z: An Essay*. Translated by Richard Miller. New York: Hill and Wang, 1999 [1974].

——. "From Work to Text." *Image Music Text.* Translated by Stephen Heath. New York: Hill and Wang, 1977. (155–64)

Bunting, Eve. Someday a Tree. Illus. Ronald Himler. New York: Clarion, 1993.

Chartier, Roger. "Afterword: Materiality and Meaning." Trans. Graham Larkin. (for special issue) Word & Image 17:1–2 (Jan–June 2001): 181–83.

- ——. Forms and Meanings: Texts, Performances, and Audiences from Codex to Computer. Philadelphia: University of Pennsylvania Press, 1995.
- Cherry, Lynne. The Great Kapok Tree. San Diego: Harcourt Brace Jovanovich, 1990.
- Coats, Laura Jean. The Oak Tree. New York: Macmillan, 1997.
- Cowcher, Helen. Rain Forest. New York: Farrar, Straus and Giroux, 1988.
- Dobrin, Sidney and Kenneth Kidd, eds. *Wild Things: Children's Culture and Ecocriticism*. Detroit, MI: Wayne State University Press, 2004.
- Doonan, Jane. Looking at Pictures in Picture Books. Stroud, Glos.: Thimble Press, 1993.
- Fife, Dale H. Illustrated by Jim Arnosky. The Empty Lot. Boston: Sierra Club/Little, Brown, 1991.
- Friederici, Peter. "Pen and Green Ink." Amicus Journal 17: 2 (Summer 1995): 32-34.
- Geisel, Theodor Seuss (Dr. Seuss). The Lorax. New York: Random, 1971.
- Gravenstine, Vanessa. "The Facts about Paper." Unpublished document on sustainable resources. 2004.
- ——. "The Effect of Post-Consumer Content on Paper Jamming and Malfunction in Printers and Convenience Copiers." Unpublished research paper. April 25, 2003.
- Green Press Initiative. "Book Publishing and Ecological Stewardship: A Blueprint for Transformation." Unpublished draft of project, 2004. http://www.greenpressinitiative.org
- Greenpeace International. "Can Harry Potter save ancient forests?" 24 February 2005. (www.greenpeace.org)
- -----. "Conversation with a publisher." 10 October 2003. (www.greenpeace.org)
- Henderson, Bob, Merle Kennedy, and Chuck Chamberlin. "Playing Seriously with Dr. Seuss: A Pedagogical Response to *The Lorax*." *Wild Things: Children's Culture and Ecocriticism.* Eds. Sidney I. Dobrin and Kenneth Kidd. Detroit: Wayne State University Press, 2004. (128–148)
- Kamila, Avery Yale. "Turning a Page, Saving a Tree." *Poets & Writers* (Jan/Feb 2004): 10–11.
- Koerner, Joseph Leo. "Commentary III and Postscript." Word & Image 17:1–2 (Jan–June 2001): 177–80.
- Larkin, Graham, and Lisa Pon. "Introduction: The materiality of printed words and images." *Word & Image* 17:1–2 (Jan–June 2001): 1–6.
- Lebduska, Lisa. "Rethinking Human Need: Seuss's *The Lorax.*" *Children's Literature Association Quarterly* 19 (Winter 1994–95): 170–76.
- Magazine PAPER Project, a cooperative project of Conservatree, Co-op America, and the Independent Media Project. (PAPER stands for "Printing Alternatives Promoting Environmental Responsibility.") http://www.ecopaper.org.
- Marsden, John. Illustrated by Shaun Tan. *The Rabbits*. Vancouver, BC: Simply Read, 2003.
- Marshall, Ian S. "The Lorax and the Ecopolice." *Interdisciplinary Studies in Literature and Environment* 2 (Winter 1996): 85–92.

- Martin, Michelle H. "Eco-edu-tainment: The Construction of the Child in Contemporary Environmental Children's Music." Wild Things: Children's Culture and Ecocriticism. Eds. Sidney I. Dobrin and Kenneth Kidd. Detroit: Wayne State University Press, 2004. 215–231.
- McDonough, William, and Michael Braungart. *Cradle to Cradle: Remaking the Way We Make Things.* New York: North Point Press/Farrar, Straus and Giroux, 2002.
- McKibben, Bill. "Consuming Nature." *Consuming Desires: Consumption, Culture, and the Pursuit of Happiness.* Ed. Roger Rosenblatt, Washington, DC/Covelo, CA: Island Press/Shearwater Books, 1999. 87–95.
- McLuhan, Marshall. *Understanding Media: The Extensions of Man.* Cambridge: MIT Press, 1994 [1964].
- Morgan, Judith, and Neil Morgan. *Dr. Seuss and Mr. Geisel: A Biography*. New York: Random House, 1995.
- Motavelli, Jim. "The Paper Chase." E Magazine 15:3 (May/June 2004): 26-39.
- Myers, Tona Pearce. "Potholes on the Road to Recycled." *Booktech* (Nov/Dec 2003): 58, 52.
- Orr, David. "The Ecology of Giving and Consuming." In *Consuming Desires: Consumption, Culture, and the Pursuit of Happiness*. Ed. Roger Rosenblatt. Washington, DC/Covelo, CA: Island Press/Shearwater Books, 1999. 137–54.
- Peet, Bill. The Wump World. Boston: Houghton Mifflin, 1970.
- Sigler, Carolyn. "Wonderland to Wasteland: Toward Historicizing Environmental Activism in Children's Literature." *Children's Literature Association Quarterly* 19:4 (Winter 1994–1995): 148–53.
- Taxel, Joel. "Children's Literature at the Turn of the Century: Toward a Political Economy of the Publishing Industry." *Research in the Teaching of English* 37 (November 2002): 145–97.
- Udry, Janice. Illustrated by Marc Simont. *A Tree Is Nice*. New York: Harper, 1956. (1957 Caldecott)
- Van der Ryn, Sim, and Stuart Cowan. *Ecological Design*. Washington, DC: Island Press, 1996.
- Veeder, Mary Harris. "Children's Books on Rain Forests: Beyond the Macaw Mystique." Children's Literature Association Quarterly 19:4 (Winter 1994–95): 165–69.
- Zicht, Jennifer. "In Pursuit of the Lorax: Who's in Charge of the Last Truffula Seed?" EPA Journal (Sept–Oct 1991): 27–30.