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"Leave some for the Naïads and the Dryads": Environmental Consciousness in *Aunt Judy's Magazine*

di

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Abstract: This paper focuses on the role played by key figures of the mid-Victorian children's periodical Aunt Judy's Magazine: Margaret Scott Gatty, famous for her Parables from Nature (1855–71) and her British Sea-weeds (1863), and her daughters, Juliana Horatia Ewing and Horatia Katherine Frances Gatty, who edited the magazine after their mother's death and contributed many pieces between 1866 and 1885. As both naturalists and writers of children's literature, these Victorian pedagogues not only presented the natural world as an ecosystem in which organisms were interrelated and interdependent but encouraged above all young audiences to take an active part in the protection of the environment, helping thereby shape an environmental consciousness. Through their fictional texts, poetry and answers to correspondents, Margaret Gatty, Juliana Horatia Ewing and Horatia Katherine Frances Gatty revamped the environmental ethics advocated by Georgian children's writers, inviting juvenile audiences to reflect further, think about future generations and never collect nor "grub" too much so as to leave "some for the Naïads, some for the Dryads, and a bit for the Nixies, and the Pixies" (Juliana Horatia Ewing c.1895: 65). Thus, through their stories, poems and editorship of Aunt Judy's Magazine, these Victorian children's writers fostered ecoliteracy and offered potent examples of Victorian ecopedagogy which this paper examines.

> And after a time a new race came into the Green Valley and filled it; and the stream which never failed turned many wheels, and trades were brisk, and they were what are called black trades. And men made money soon, and spent it soon, and died soon; and in the time between each lived for himself, and had little reverence for those who were gone, and less concern for

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> those who should come after. And at first they were too busy to care for what is only beautiful, and after a time they built smart houses, and made gardens, and went down into the copse and tore up clumps of Brother Benedict's flowers, and planted them in exposed rockeries, and in pots in dry hot parlours, where they died, and then the good folk went back for more; and no one reckoned if he was taking more than his fair share, or studied the culture of what he took away, or took the pains to cover the roots of those he left behind, and in three years there was not left a Ladder to Heaven in all the Green Valley. (Juliana Horatia Ewing [1877] c.1887: 53-4).

Juliana Horatia Ewing's "Ladders to Heaven" (1877) relates the story of Brother Benedict, who lives in the Green Valley and looks after his garden, growing "herbs for healing, and plants that were good for food, and flowers that were only pleasant to the eyes" (Ewing [1877] c.1887: 51). As his garden flourishes, the place becomes a real hub for exchanging plants; more and more people ask for seeds and send seeds and roots, so that the garden of the Monastery of the Green Valley "became filled with rare and curious things" (Ewing [1877] c.1887: 51). Amongst Brother Benedict's botanical curiosities are "Ladders to Heaven" – lilies of the valley which, if left undisturbed, will "spread and flourish like a weed," as Ewing indicates in a note inserted at the end of the story (Ewing [1877] c.1887: 52). Years after Brother Benedict's death, whilst the industrialisation of the site has destroyed the monastery and all its plants, the resurrection of the lily roots by a few children who hope the plants will "grow for other folk and other folk's children when [they] are gone" (Ewing [1877] c.1887: 55) foregrounds Ewing's message: growing Ladders to Heaven "for the feet of those who follow" is what should be taught to children (Ewing [1877] c.1887: 55).

Ewing's "Ladders to Heaven" is a good example of the ways in which Victorian children's literature addressed the issue of the environmental consequences of industrialisation: the Green Valley, once exploited, soon changes into a Black Valley, allegorizing humankind's thoughtless use of natural resources. However, as Ewing's story illustrates, Victorian children's writers did not simply represent the dangers of industrialisation, featuring lost natural worlds threatened by extinction because of pollution and massive urbanisation. They also invited juvenile audiences to engage with their environment, sowing therefore ecological seeds throughout their children's texts.

"Ladders to Heaven" was first published in Aunt Judy's Magazine in May 1877, a mid-Victorian children's periodical founded and edited from 1866 to 1873 by the naturalist Margaret Scott Gatty (1809–73), and edited by her daughters, Juliana Horatia Ewing (from 1873 to 1875) and Horatia Katherine Frances Gatty (from 1875 until 1885). As this paper highlights, Margaret Gatty, famous for her Parables from Nature (1855–71) and her *British Sea-weeds* (1863), and her daughters, who contributed many pieces between 1866 and 1885, helped shape an environmental consciousness. As both naturalists and children's writers, these Victorian pedagogues not only presented the natural world as an ecosystem in which organisms were interrelated and interdependent, but encouraged above all young audiences to take an active part in the protection of their environment. As we will see, Aunt Judy's Magazine offers a good illustration of the way in which British women naturalists trained children both to collect and care for the natural world. Through their fictional texts, poetry and answers to correspondents, the Victorian

children's periodical revamped the environmental ethics advocated by Georgian children's writers, inviting juvenile audiences to reflect further, think about future generations and never collect nor "grub" too much so as to leave "some for the Naïads, some for the Dryads, and a bit for the Nixies, and the Pixies" (Juliana Horatia Ewing c.1895: 65).

Women, Flowers and Botany in Georgian and Victorian Britain

> "Aren't you sometimes frightened at being planted out here, with nobody to take care of you?" (Lewis Carroll [1871] 2001: 166)

According to Aileen Fyfe (2000: 471), from the beginning of British children's literature, children were invited to "participate in the sciences" and "were allowed to learn about science by doing things." In the Georgian period, books for children were generally meant to teach them to behave with Christian benevolence towards the natural world, often merging moral and religious lessons. Although the influential children's book reformer Sarah Trimmer (1741-1810) depicted children who "gathered flowers, but … did so to marvel at their variety and beauty, not to form collections, nor to dissect them," the children represented in Anna Laetitia Barbauld (1743-1825) and John Aikin's (1747-1822) texts, as in Evenings at Home; or, the juvenile budget opened (1792-1796), "made collections of dried plants, collected flowers to dissect, and tried some practical chemistry at home" (Fyfe 2000: 471). Indeed, in the course of the eighteenth and nineteenth centuries, many books written by (middle-class) British women invited children to observe the natural world, and to collect and classify specimens. Among the most famous Georgian children's writers, many penned works of popular science. These included Barbauld and Trimmer, mentioned above, but also Priscilla Bell Wakefield (1751–1832), Margaret Bryan (1780–1818) and Jane Marcet (1769-1858). Wakefield's *Introduction to Botany, in a Series of Familiar Letters* (1796), which popularised botany for girls, offering an overview of Linnaean taxonomy (albeit a desexualised one), and Marcet's *Conversations on Chemistry* (1805), which inspired Michael Faraday, were, just like Barbauld, Trimmer and Bryan, key texts and figures in children's education, participating in the development of children's literature in Britain. However, many of these publications remained highly didactic and moralising; science learning was not only "part of general and polite culture" (Anne B. Shteir 1996: 2), but it was also more used to bend children's minds to bourgeois standards of behaviour than for its own sake. Nonetheless, the publications reflected contemporary interest in natural history and even at times integrated the latest findings in natural history.

In the Victorian period, the natural world continued to appeal to women, showing further how the popularisation of science was the province of women, as exemplified by the numerous works by Sarah Bowdich (1791-1856) (*Elements of Natural History,* 1844); Mary Roberts (1788-1864) (*A Popular History of the Mollusca* (1851); *Voices from the Woodlands; Or, History of Forest Trees, Ferns,*

Mosses, and Lichens (1850)); Agnes and Maria Catlow (*The Conchologists's Nomemclator*, 1845); *Popular Geography of Plants* (1855); *Popular British Entomology*, 1848); and Elizabeth (1823-1873) and Mary (1817-1893) Kirby. Publications were particularly numerous in the field of botany, as illustrated by Jane Loudon's (1807-1858) *The First Book of Botany* (1841) and *Botany for Ladies* (1842) (republished under the title *Modern Botany* in 1851); Phebe Lankester's works (1825-1900); Elizabeth Twining's (1805-1889) *Illustrations of the Natural Orders of Plants* (1849-1855) and *Short Lectures on Plants, for Schools and Adult Classes* (1858) (aimed at the working classes); Lydia Becker's (1827-1890) *Botany for Novices* (1864); and Sarah Tomlinson's *The Vegetable Kingdom* (1856). In addition, women not only read botany books, but also "attended public lectures about plants, corresponded with naturalists, collected native ferns, mosses, and marine plants, drew plants, developed herbaria for further study, and used microscopes" (Shteir 1996: 3-4).

Women had been instructed in botany ever since the eighteenth century, as illustrated by Jean-Jacques Rousseau's *Lettres élémentaires sur la botanique* (1771-1774), translated into English in 1785 as *Letters on the Elements of Botany addressed to a Lady*. During the Enlightenment, following Rousseau's *Emile* (1762), the cultivation of gardens (and control of nature) was recommended for young women (Phyllis Bixler 2009: 209). The "cultivation of botany" worked in tandem with "the cultivation of female minds" (Samantha George 2017: 22). This was even more emphasised in the Victorian period, when John Ruskin's lecture, "Of Queen's Gardens," published in Sesame and Lilies in 1865, reinforced the comparison of "the growth of girls to flowers and a woman's duty to that of the gardener, securing order, comfort, and loveliness in the home and beyond" (Ruth Y. Jenkins 2011: 427).

The comparison of children to plants and "child rearing to plant nurture" (Sidney I. Dobrin and Kenneth B. Kidd 2004: 6) informed many Victorian books for children, from Catherine Sinclair's *Holiday House* (1839) to Frances Hodson Burnett's *The Secret Garden* (1911) in the early twentieth century. Indeed, a "central model for child rearing in Victorian culture" (Maude Hines 2004: 25), the "child botanical," to use James Kincaid's trope (1992: 90), pervaded Victorian children's literature. Though subverted in Lewis Carroll's *Alice's Adventures in Wonderland* (1865), where "rather than cultivating herself by cultivating plants, Alice is trained by the flowers themselves" (Lynn Voskuil 2013, 559), plants were recurrently used to talk about children, define their characters and map out their growth.

The rise of children's fiction using gardens and gardening throughout the nineteenth century may be explained by the development of the school garden movement, which, as Mary Goodwin has observed, was particularly marked by the founding of the "kindergarten" by German pedagogue Friedrich Froebel (1782–1852) in 1837 and the publication of Erasmus Schwab's treatise, *The School Garden*, in 1870 (Mary Goodwin 2011: 110). As "the act of gardening" was seen as "morally elevating for students of all classes" (Gargano 2008: 94, qtd. in Goodwin 2011: 110), the garden aimed "to domesticate nature and childhood simultaneously" (Gargano 2008: 89, qtd. in Goodwin 2011: 110). Moreover,

Victorian children's literature boomed at mid-century, as lower costs of production and distribution opened the market even further. Together with the Kay-Shuttleworth reforms in the 1850s, which gave a spur to education, and with more government expenditure on schools (David Elliston Allen [1976] 1994: 123), the development of children's weeklies and monthlies offered a growing range of natural history publications for children. From Samuel Beeton's *Boy's Own Magazine* (founded in 1855), W. H. G. Kingston's *Magazine for Boys* (founded in 1859) and the *Boy's Own Paper* (founded in 1879), to Alexander Strahan's *Good Words for the Young* (founded in 1868) and Margaret Gatty's *Aunt Judy's Magazine*, children's magazines placed less emphasis on religious topics, and offered young readers instead a mix of fiction and secular instruction. Nature studies and articles on explorers and scientists were a regular feature of such publications, thus blending instruction and entertainment (Noakes 2004: 155).

Perhaps more than any other contemporary Victorian children's periodicals, *Aunt Judy's Magazine* typically embodied "feminine natural history expertise," emphasising the association of women with children's education, which Kate Hill (2016: 19) characterises as "domestically based, essentially 'hobbyist' in nature, centred on what we might call 'transferable skills' of observation, perseverance and self-discipline, and above all suited to popular communication." Indeed, the periodical was often considered as aimed more at girls than boys, despite Margaret Gatty's refusal to seek out a specifically gendered audience. Nevertheless, it also illustrated the shift from publications merely inviting children to observe the world in order to marvel at God's creations, in the vein of Sarah Trimmer's children's literature, mentioned above, to new formats which made room for children's active participation in the construction of natural history and the understanding of its curiosities. The Gattys all contributed pieces to the magazine: Margaret Gatty and Juliana Horatia Ewing were established children's writers in their own right, and the latter remained a major contributor of serials until the end of the magazine. But the family also wrote popular science articles which often reflected their interest in marine botany. Significantly, as will be seen, Margaret Gatty's, Juliana Horatia Ewing's and even Horatia Katherine Frances Gatty's role as naturalists – especially in the field of botany – enabled them to fully exploit the "child botanical" model, the better to highlight the need for children to protect the natural world, often addressing in so doing environmental issues.

Women "of literary and scientific pursuits" in *Aunt Judy's Magazine* (George James Allman to Miss Gatty, 10 February 1878)

Margaret Gatty's double role as naturalist and children's writer explains why *Aunt Judy's Magazine* regularly published advice on techniques of collecting and conserving natural history specimens. Though a clergyman's wife, Gatty was also "a botanical bacchante who trekked along the shore in an unconventional collecting costume she devised for herself" (Shteir 1996: 185-186). As she argued in the preface to her popular science work*, British Sea-Weeds*, "[a]ll millinery work, silks, satins, lace, bracelets and other jewellery etc. must, and will be, laid aside by

every rational being who attempts to shore-hunt" (Gatty 1863: ix; qtd. in Shteir 1996: 186). Furthermore, Gatty was a close friend of a number of leading scientific figures, including William Henry Harvey (1811-1866) (later to become Professor of Botany at Trinity College Dublin in 1857) and George Johnstone (1797-1855). She was introduced to the world of marine biology through William Harvey's *Phycologia Britannica*, which she read while recovering from a bronchial condition at Hastings in 1848. Although her relationship with the publisher George Bell (to whom she had been neighbour when they were younger) undoubtedly facilitated her entry into popular science writing (Bernard Lightman 2007: 117), Gatty's fame was confirmed by the publication of *British Sea-Weeds* and her *Parables from Nature* (1855-1871; eighteenth edition in 1882) (Lightman 2007: 107). Gatty was, in addition, skilled with her pencil, and did etchings on copper which she sent to the British Museum in 1842 with a view to having them exhibited to the public (Christabel Maxwell 1949: 83-84). Her activities as a naturalist were therefore fully developed through the marine specimens (seaweeds) she collected, those she kept in her aquarium, her drawings, as well as the network of contacts she developed actively with other naturalists. Moreover, her interest in scientific publications was genuine: she often asked her publisher for science books as payment for her own books[1]. Her collaboration with eminent scientific figures, like George Johnston[2], whom she visited and with whom she went on seaweed expeditions (Maxwell 1949: 93), and with William Harvey, indicate that she was highly experienced in the field of marine biology[3]. As a woman, however, her scientific role was limited to the publication of popular science works, as exemplified by *British Sea-Weeds*, and the editorship of *Aunt Judy's Magazine*, publications in which she concentrated on practical advice for collectors. Nonetheless, her correspondence shows that that her expertise in algology/phycology went beyond the family circle.

The case is similar with her daughter, Horatia Katherine Frances Gatty, both editor and regular contributor to *Aunt Judy's Magazine*. Horatia K. F. Gatty was just as active as her mother in the field of marine biology, pursuing her mother's work after her death. Her correspondence with several naturalists of the period shows that she collected specimens, probably, as her mother had done, through her contacts with correspondents in different parts of the British empire. In the 1870s, she corresponded with George James Allman (1812-1898), an Irish botanist and zoologist, and with George Busk (1807-1886), involved with editing several scientific journals, notably the *Quarterly Journal of Microscopical Science* (1853-1868), the *Natural History Review* (1861-1865). Both were active members of the Linnean Society; Allmann in fact was President of the Society from 1874 to 1881,

[1] When she published The Fairy Godmothers in 1851, Gatty asked for no payment, but asked to be given in exchange George H. Johnston's *A History of British Zoophytes* (1838, 2nd edn 1847). For the second edition of *The Fairy Godmothers* Bell sent her Johnston's *History of British Sponges and Lithophytes* (1842); Maxwell 1949: 93.

[2] Johnston is the dedicatee of the original edition of *Parables from Nature.*

[3] Gatty was also interested in other scientific fields, such as astronomy and mycology (Maxwell 1949: 102), as well as medicine, especially the use of chloroform, the use of which she actively promoted.

during which time he corresponded with Horatia K. F. Gatty[4]. Their letters indicate that Horatia K. F. Gatty regularly asked questions about marine biology and the species she had found; that she knew about and read recent publications on the subject; owned a binocular microscope; and regularly sent Allman botanical specimens (zoophytes). Even though she, as a woman, was unable to attend meetings of the Linnean Society[5], her correspondence shows that she was a skilled naturalist when it came to identification. Allman even let Horatia K. F. Gatty – whose "interesting collection" (George James Allman to Miss Gatty, 10 February 1878), represented on 20 plates in his paper – choose any zoophyte which she would like to be named after her, reflecting her status as a woman "of literary and scientific pursuits" who had contributed to science many undescribed species of zoophytes through the specimens she had collected.

In her very first attempt at children's literature, *Parables from Nature*, Margaret Gatty had proposed short stories combining scientific information, morality and religion. As she explained in her preface to *Parables from Nature*, her "effort to gather moral lessons from some of the wonderful facts in God's creation" led her to an interest in both the physical and the spiritual (Margaret Gatty [1855-1871] 2006: n.p.). Many of the titles of her short stories indicate the moral or religious stance of the narratives, such as "A Lesson of Faith," "The Law of Authority and Obedience," "A Lesson of Hope" and "The Circle of Blessing". Yet Gatty's tales were overtly rooted in the facts of natural history: "A Lesson of Faith" relates the metamorphosis of a caterpillar into a butterfly; "The Law of Authority and Obedience" presents the lives of bees, the poisonous flowers they must not visit and the dangers that a honey-moth may represent for the hive; "The Unknown Land" features a sedge warbler whose characteristics are drawn from Gilbert White's *The Natural History of Selborne* (1789); "Whereunto" has a crab, a starfish and a limpet whose "advantages" are compared; while "Cobwebs" explains how spiders build their webs.

Gatty's life-long practice of natural history suffused all of her publications for children. The natural world she describes in *Parables from Nature* is never far from the study of the naturalist who collects and classifies species. "Knowledge Not the

[4] As the letters show, Horatia K. F. Gatty sent Busk a collection of hydroida (animals now seen as belonging to the cnidaria order) for identification. Busk sent the collection to George James Allman at the end of 1875, and the latter reached a decision in 1878, making drawings and descriptions of the numerous new forms. Allman's letter of 10 February 1878 mentions his desire to publish his conclusions in the *Journal of the Linnean Society*, and encloses tracings for H. K. F. Gatty to see. His remarks illustrate the role that H. K. F. Gatty played not only in providing him with marine species, but also by putting him in contact with an artist with whom Allman worked for the preparation of his paper on zoophytes. Moreover, H. K. F. Gatty seems to have advised Allman as to the naming or identification of some of the specimens she sent him. Once Allman had identified H. K. F. Gatty's collection, the correspondence between them became more regular, increasingly revealing H. K. F. Gatty's knowledge on zoophytes and Allman's acknowledgment of her skill at tracking and identifying new species. In his letter dating from 6 June 1878, twenty-one new species are listed, and Allman agrees to follow H. K. F. Gatty's suggestion regarding the naming of a species.

[5] Horatia K. F. Gatty asked Allman in her 19 March 1880 letter if she could attend meetings; Allman answered that it was not customary for women to do so even though "There is no law against their attending."

Limit of Belief" is set in a naturalist's library, where folio books of specimens fall down and a zoophyte, a seaweed and a bookworm start discussing species classification and the question of human superiority over other species. The work of the naturalist is described through the eyes of her anthropomorphised animals and plants: his washing, drying, squeezing and gumming are all detailed, as are his experiments and observations through the microscope, designed to further the classification of different species:

> he puts you into his collections, not amongst strange creatures, but near to those you are nearest related to; and he describes you, and makes pictures of you, and gives you a name so that you are known for the same creature, wherever you are found all over the world (Gatty [1855-1871] 2006: 48).

The zoophyte then describes being removed from its natural environment. Interestingly, its words echo the contemporary debate over the morality of specimen collecting: "I am only the skeleton of what I once was! All the merry little creatures that inhabited me are dead and dried up. They died by hundreds at a time soon after I left the sea; and even if they had survived longer, the nasty fresh water we were soaked in by the horrid being who picked us up, would have killed them at once" (Gatty [1855-1871] 2006: 41). The narrative asserts, however, that humans are superior beings ("man is, without exception, the most wonderful and the most clever of all the creatures upon earth!" (Gatty [1855-1871] 2006: 44)), and that the naturalist's ability to observe and classify the natural world means that he occupies a particularly elevated position: "However many mistakes he may make about *you*, he can correct them all by a little closer or more patient observation. But no observation can make you understand what man is. You are quite within the grasp of *his* powers, but *he* is quite beyond the reach of *yours*" (Gatty [1855-1871] 2006: 45). The naturalist's superiority over his collected species therefore tempers the view of the naturalist as an immoral individual collecting live specimens.

Gatty's touching on the morality of specimen collection was developed further in *Aunt Judy's Magazine*, a children's periodical much concerned with the practice of natural history, rather than simply listing facts about animals and plants, as already suggested. Although the emphasis on collecting appeared to clash with the magazine's frequent admonishments regarding bird-nesting and the cruelty of collecting live specimens, the children's periodical regularly offered practical advice on what to collect and why – albeit without involving "any wanton destruction of life," as Horatia Katherine Frances Gatty explained (1876: 160). In so doing, Aunt Judy's Magazine developed both a moral and a scientific approach to collecting. As argued above, this typified the evolution of British children's literature in the second half of the nineteenth century, moving away from didactic stories, sermons and the "maternal" tradition of women popularisers of science of the beginning of the nineteenth century, who had often used letters, dialogues and conversations in a domestic setting (Lightman 2007). Instead, Victorian children's magazines invited young readers to travel to far-away places and discover new species and peoples, opening onto the vast British empire. In the first issue of *Aunt Judy's Magazine*, Margaret Gatty assured parents that they "need[ed] not fear an overflowing of mere amusement" and that "[o]f natural history, too, [they] hope[d] to find something to say in most numbers" (Margaret Gatty 1866a: 2). In fact,

natural history informed most of the stories, poems, articles and music pieces published in the magazine. Many of the natural history articles were penned by Margaret Gatty herself, but recurring names included E. Horton, Ruth Mervyn, Catherine C. Hopley[6] and E. S. H. Bagnold[7].

Thus, the periodical's emphasis on observing "the beauty and order of God's works" (H. K. F. Gatty 1876: 160), which illustrated the moral considerations which permeated children's literature, especially when aimed at a young (female) audience, marched hand-in-hand with information regarding the practice of natural history. The mix of practical advice, fiction and popular science articles underlined as well how the making of collections, which combined healthy outdoor activity and intellectual engagement, matched bourgeois ethic. Natural historical activities were even emphasised in the stories published in the magazine, as in Alexander Ewing's "The Prince of Sleona," where the protagonist, whose illness challenges the knowledge and expertise of doctors, is advised to travel around his island. As he does so, he makes "collections of plants of other natural productions," including a collection of seaweed (Alexander Ewing 1866: 31). Similarly, in Juliana Horatia Ewing's "Mrs Overtheway's Remembrances," characters look for botanical specimens (Juliana Horatia Ewing 1866: 83), whilst in Margaret Gatty's "Nights at the Round Table," the children press flowers and collect shells from the sea-side to send to sick children at the children's hospital in London (Margaret Gatty 1866b).

In addition to encouraging children to observe the natural world, therefore, many articles – fiction and non-fiction alike – advised children how to plant trees, cut flowers, or feed birds. This was even more highlighted by a section which appeared for the first time in November 1867, as a result of the high number of letters sent to the magazine: "Aunt Judy's Answers to Correspondents." The advice provided by the editors and contributors to the magazine consistently taught children to respect the natural world, including plants and flowers, typically fitting Diana Donald's definition of conservative female moralists who "saw the world in terms of co-operation and interdependence within a stratified society" (2020: 149). Stressing as it did the "collector's responsibility towards the welfare of live collections" (Francis O'Gorman 2000: 158), the magazine reflected the Victorian pedagogues' desire to inculcate the duty of care in young readers. Indeed, it may be argued that *Aunt Judy's Magazine*, by publishing and encouraging many women "crusaders for the protection of plants and animals," played a part in awakening public feeling and promoting nature conservation, fostering thereby an **"**ecological consciousness" (Barbara T. Gates 1998: 251). This was most illustrated by Juliana Horatia Ewing's publications, as we shall see in the next section.

[6] Catherine Hopley (1817-1911) was a naturalist who travelled to the United States and worked at the London Zoological Gardens in London where she developed a passion for reptiles.

[7] Probably Eliza Sophia Helen Bagnold (1822-c. 1890), born in India and daughter of John Bagnold, lieutenant, 13th Bengal Native Infantry.

"Do you – care for gardens so much?" (Frances Hodson Burnett [1911] 2007: 118): Juliana Horatia Ewing's "Earthly Paradise"

> She looked at birds with an eye to hats, and at flowers with reference to evening parties. … An enthusiastic horticulturist once sent Miss Letitia a cut specimen of a new flower. It was a lovely spray from a lately imported shrub. A botanist would have pressed it – an artist must have taken its portrait – a poet might have written a sonnet in praise of its beauty. Miss Letitia twisted a piece of wire round its stem, and fastened it on to her black lace bonnet. (Juliana Horatia Ewing [1869-1870] 1992: 147).

Juliana Horatia Ewing, who took over the editorship of *Aunt Judy's Magazine* for two years after her mother's death is today more renowned as a writer of fairy tales and children's fiction than as a naturalist. However, as her sister recalled in *Juliana Horatia Ewing and her Books* (1896), whether she dealt with hedgehogs or flowers, Ewing "spared no trouble in trying to ascertain whether Hedgehogs *do* or do not eat pheasants' eggs," consulting *The Field* (69), or "naming [flowers] scientifically from Professor Ada Gray's *Manual of the Botany of the Northern United States*" (Eden 1896: 81). Yet, by the mid-Victorian era, as science was becoming increasingly professionalised, "the language of flowers and the language of botany diverged," as Shteir puts it (1996: 158). Indeed, Ewing's publications for children particularly showed how "literary botany and scientific botany became distinct discourses" (Shteir 1996: 158), even if Ewing's interest in botany and horticulture was genuine. Many of her letters to her mother indicate that she practised "botanizing" on a regular basis (Ewing to Gatty, 21 Sept. 1867, qtd. in Eden 1896: 166) and carried out horticultural experiments, as for instance when she attempted to transplant tubers of one species of Trillium – North American herbaceous plants – into English soil (Eden 1896: 82). She also exchanged seeds and roots[8]. To her husband she wrote in 1879 that she "revel[ed] in" the botanical varieties of the back premises of Clyst S. George Rectory in East Devon (Ewing to A.E., 23 May 1879, qtd. in Eden 1896: 208). Several of her letters similarly dwell on her passion for flowers in hyperbolic terms: "Oh! the FLOWERS! The cowslips, the purple orchids, the kingcups, the primroses! And the grey, drifting cumuli with gaps of blue, and the cinnamon and purple woods, broken with yellowish poplars and pale willows, with red farms, and yellow gorse lighted up by the sun" (Ewing to A. E., 17 April 1872, qtd. in Eden 1896: 189). Her visits to Horticultural Gardens are also mentioned, as well as horticultural papers she certainly read (Ewing to A.E., 30 April 1880, qtd. in Eden 1896: 230).

Ewing wove the plants and flowers she grew in her garden into her stories, as in the case of *Trillium erythrocarpum*, found in "The Blind Hermit and the Trinity Flower" (Eden 1896: 82). The idea of writing a collection of stories around flowers emerged in April 1869. In one of her letters to her mother Ewing mentioned "(a dear project) a book of stories, chiefly about Flowers and Natural History associations (*not scientific, pure fiction*)… (none even planned yet!)" (Ewing to

[8] "Now will you present my grateful acknowledgments to Mrs Going, and say that … I 'too-too' gratefully accept her further kind offers. I deeply desire some 'Ladders to Heaven'…A neighbour has given me a few Myosotis – but I am a daughter of the horseleech I fear where flowers are concerned, and if you really have one or two to spare I thankfully accept" (Ewing to the Rev. J. Going, 11 Oct. 1883, qtd. in Eden 1896: 281; emphasis in original).

Gatty, 19 April 1869, qtd. in Eden 1896: 183, emphasis in original). Furthermore, in 1870, she wrote that she had "got some work into [her] head which has been long seething there, and will, … begin to take shape. It is about *flowers* …" (Ewing to Gatty, May Day 1870, qtd. in Eden 1896: 186, emphasis in original). Ewing's flower stories, merging as they did flowers, natural history and fiction, drew upon long established associations of women and botany. Yet, blending the poet and the naturalist, or science and literature, they also, significantly, prompted environmental care ethics.

Ewing's flower stories were published between the early 1870s and 1885. With the exception of "The Blind Hermit and the Trinity Flower," first published in The Monthly Packet in May 1871, the poems and stories including flowers – "The Willow-Man" (Dec. 1872), "Our Garden" (March 1874), "Dandelion's Clocks" (Aug. 1876), "Our Field" (Sept. 1876), "Ladders to Heaven" (May 1877), "Garden Lore" (March 1879), "Grandmother's Spring" (June 1880), "Sunflowers and a Rushlight" (Nov. 1882), "Mary's Meadow" (from Nov. 1883 to March 1884) and "Letters from a Little Garden" (from Nov. 1884 to Feb. 1885) – appeared in Aunt Judy's Magazine. The texts all encouraged juvenile audiences to practice natural history more than simply learn botany as one of women's accomplishments. In "Letters from a Little Garden," for instance, Ewing recalled her grandmother's education and her frustrated desire to "grub" about her garden:

> She was a botanist, and painted a little. So were most of the lady gardeners of her youth. The education of women was, as a rule, poor enough in those days; but a study of the "Linnean system" was among the elegant accomplishments held to "become a young woman"; and one may feel pretty sure that even a smattering of botanical knowledge, and the observation needed for third and fourth-rate flower-painting, would tend to a love of variety in beds and borders which Ribbon-gardening would by no means satisfy. *Lobelia erinus speciosa* does make a wonderfully smooth blue stripe in sufficient quantities, but that would not console any one who knew or had painted *Lobelia cardinalis* and *fulgens*, for the banishment of these from the garden.
>
> I think we may dismiss Ribbon-gardening as unfit for a botanist, or for anyone who happens to like *grubbing*, or tending to his flowers (Ewing [1884-1885] c.1895: 124).

Interestingly, the direct contact with the natural environment her poems and stories promoted did not so much aim at domesticating nature (and therefore childhood) as it encouraged the protection of wild plants – weeds – which the children learn to nurture. Indeed, the choice of indigenous and often very hardy English flowers, such as cowslips, shows that Ewing's discourse was primarily ecological, aiming at nature protection rather than simply metaphorising the cultivation of a desirable (female) behaviour.

"Our Field" (1870) is a case in point. It relates the story of a group of children who make a collection "of wild flowers with the names put to them," and take part in a competition which enables them to rescue an abandoned dog. The flower show, which seeks to "encourage a taste for natural history" (Ewing, 1877: 239), nevertheless constructs natural history as, first and foremost, an engagement with the green world: the dog, the children and the flowers they collect "create a small ecosystem" (Gates 2002: 96). As the children, the dog and the flowers become interdependent, the story does not close on the children's (physical and

psychological) transformation; rather the question of to whom "our field" belongs is raised, since the children realise they are part of a world they must tend to: "Our Field does not really belong to us" (Ewing, 1877: 242). Ewing's ecological consciousness matches here Adeline Johns-Putra's conceptualization of "caring as knowing" (Johns-Putra 2013: 131). Indeed, Johns-Putra's "new materialist" vision of care contends that "care is the mode by which objects are known" (2013: 131). In "Our Field," the practice of natural history (through the making of a collection), which emblematises the children's education to science, is ultimately bound up with their growing ecological consciousness.

Many of Ewing's stories foregrounded the need to attend to the natural world with care, and to "*Leave some for the Naiads and Dryads.*" The phrase was used by Margaret Gatty with her children "as a check on the indiscriminate 'collecting' and 'grubbing' of a large family," as Ewing explained in a note given in *Aunt Judy's Magazine* when her narrative poem, "Grandmother's Spring," was first published (Ewing [1880] c.1895: 69). It aimed to teach children to "Think for others, and care for others" and "Leave something behind,/For love of those that come after" (Ewing [1880] c.1895: 65)[9]. It appeared as well in her poem, "Our Garden", and her non-fiction article "May-Day, Old Style and New Style," both published in the same volume in 1874. In the latter, moreover, the narrator directly addressed her audiences:

> But, when the sunny bank under the hedge is pale with primroses, when dog-violets spread a mauve carpet over clearings in the little wood, if cowslips be plentiful though oxslips are few, and rare orchids bless the bogs of our locality, pushing strange insect heads through beds of *Drosera* bathed in perpetual dew – then, dear children, restrain the natural impulse to grub everything up and take the whole flora of the neighbourhood home in your pinafores. In the first place, you can't. In the second place, it would be very hard on other people if you could. Cull skilfully, tenderly, unselfishly, and remember what my mother used to say to me and my brothers and sisters when we were "collecting" anything, from fresh-water algæ to violet-roots for our very own gardens, *"Leave some for the Naiads and Dryads*" (Ewing 1874a: 439).

Likewise, Ewing closed her narrative poem, "The Willow-Man," which deals with children grabbing mistletoe on an ancient willow, with a moral which warns children about their "selfish greed": "Oh children who gather the spoils of wood and wold/From selfish greed and willful waste your little hands withhold./Though fair things be common, this moral bear in mind,/Pick thankfully and modestly, and leave a bit behind" (Ewing [1872] c.1895: 23).

As her sister explained, "Ladders to Heaven," quoted in the introduction to this essay, where the characters plant forgotten lily roots "for other folk and other folk's children when [they] are gone" ([1877] c.1887: 55), was directly inspired by

[9] As Ewing's sister explained, Margaret Gatty's phrase originated from a particular incident: "They were driving to Sheffield one day, when on Bolsover Hill they saw a well-known veterinary surgeon of the district, Mr. Peech, who had dismounted from his horse, and was carefully taking up a few roots of white violets from a bank where they grew in some profusion. He showed Mrs. Gatty what he was gathering, but told her he was taking care to *leave a bit behind*. This happened fully forty years ago, long before the Selborne and other Societies for the preservation of rare plants and birds had come into existence, and Mother was much impressed and pleased by Mr. Peech's delicate scrupulousness" (Horatia K. F. Eden, Preface, Ewing c.1895: viii, emphasis in original).

Ewing's concern about industrialization, and reflects "spots near her Yorkshire home, where she was accustomed to seeing beautiful valleys blackened by smoke from iron-furnaces, and the woods beyond the church, where she liked to ramble, filled with desolate heaps of black shale, the refuse left round the mouths of disused coal and iron-stone pits" (Eden 1896: 84-86). Interestingly, years later, Ewing "heard with much pleasure that a mining friend was doing what he could to repair the damages he made on the beauty of the country, by planting over the worked-out mines such trees and plants as would thrive in the poor and useless shale" (Eden 1896: 86).

The impact of Ewing's stories was even more significant in her last serial story, "Mary's Meadow," first serialised in *Aunt Judy's Magazine* from November 1883 to March 1884. According to her sister, the story was inspired by Ewing's "practical cultivation of flowers" at Taunton, where she settled in May 1883 (Horatia K. F. Gatty, "Preface," Ewing 1886: n. p.).

"Mary's Meadow" relates the story of five children – Mary, Christopher, Arthur, Harry and Adela – whose gardening and horticultural education eventually successfully alter the natural environment, softening in so doing the character of their scrooge-like neighbor, a selfish old squire who first refuses to share his field. The sharing of natural resources for the well-being of all lies thus at the heart of the narrative, whilst Ewing's environmental ethics tackle "the question of human conduct and its effect on the human and nonhuman environment" (Johns-Putra 2013: 125).

Though fictional, "Mary's Meadow" hinges upon verisimilitude, and reads very much like a popular science lesson woven into a story. Actual botanical books structure the narrative, from Philip Miller's *Gardener's and Botanist's Dictionary* to John Parkinson's *Paradisi in Sole, Paradisus terrestris* (1629), which the children find in their father's library, informing therefore the botanical and horticultural lessons. The *Gardener's and Botanist's Dictionary* "rouse[s] [the children] up about [their] gardens" (Ewing 1886: 22) and spurs their interest in books about gardening. The "Book of Paradise" teaches Mary about the flowers the Queen had in her garden, comparing them to the flowers the children have in their garden. The Latin names, given in footnotes, further the botanical lesson. However, the children also learn practically about digging up, planting, transplanting seedlings, renewing the soil with compost, dividing roots, gathering seeds and sowing them, etc.: as the children read the definitions of flowers in their books so as to be able to identify them, the texts mediate therefore the children's contact with reality. Moreover, Parkinson's *Paradisi in Sole, Paradisus terrestris* inspires Mary a story about a queen whose garden is called the "Earthly Paradise," which in turn convinces the children to create their own Earthly Paradise and plant flowers "not in [their] garden, but in wild places, and woods, and hedges, and fields" (Ewing 1886: 59). Likewise, Arthur, who is "sick of books for young people" because "there's so much *stuff* in them" (Ewing 1886: 19, emphasis in original), gives his little brother some compost, because "It'll be ever so much better than a stupid book with 'stuff' in it" (Ewing 1886: 47). Though seemingly rejected, instructive books fuel the narrative and are extensively quoted in the text: Alphonse Karr's *A Tour Round my Garden* (1855), a French popular science book, inspires

the children to likewise "scatter the seeds of [their] most favourite plants, which re-saw themselves, perpetuate themselves, and multiply themselves" in "the widest and least frequented spots" (Ewing 1886: 34). Karr's aim is to confuse botanists' system a hundred years from here by increasing biogeographical diversity: "All these beautiful flowers will have become common in the country" (Ewing 1886: 35).

Led by Mary, who acts as a kind of mother figure to the children whilst their mother is absent, the group thus learns about sharing seeds, roots and lands. The romantic nurturing of the field works in tandem with the children's use of flower names as nicknames: Mary, Christopher, Arthur, Harry and Adela fully become part of their environment which grows as they become more experienced. Mary, who is more closely associated with the field from the beginning of the story – known as "Mary's meadow – is also the one who is caught by the old squire as she is "planting double cowslips to grow up and spread amongst the common ones" (Ewing 1886: 55). Wrongly accused of stealing flowers, she helps, in fact, multiply them, and is later rewarded by becoming the official owner of the field. As the old squire eventually realises, the sharing and multiplication of flowers typifies what might be gained when humans nurture the natural environment. Selfishness, on the contrary, only breeds bareness:

> Since I became Traveller's Joy, I had chiefly been busy in the hedge-rows by the high-roads, and in waste places, like the old quarry, and very bare and trampled bits, where there seemed to be no flowers at all. You cannot say that of Mary's Meadow. Not to be a garden, it is one of the most flowery places I know. I did one begin a list of all that grows in it, but it was in one of Arthur's old exercise books, which he had "thrown in" in a bargain we had, and there were very few blank pages left. I had thought a couple of pages would be more than enough, so I began with rather full accounts of the flowers, but I used up the book long before I had written out one half of what blossoms in Mary's Meadow.
>
> Wild roses, and white bramble, and hawthorn, and dogwood, with its curious red flowers; and nuts, and maple, and privet, and all sorts of bushes in the hedge, far more than one would think; and ferns, and the stinking iris, which has such splendid berries, in the ditch – the ditch on the lower side where it is damp, and where I meant to sow forget-me-nots, like Alphonse Karr, for there are none there as it happens. On the other side, at the top of the field, it is dry, and blue succory grows, and grows out on the road beyond. The most beautiful blue possible, but so hard to pick. And there are Lent lilies, and lords and ladies, and grown ivy, which smells herby when you find it, trailing about and turning the colour of Mother's "aurora" wool in green winters; and sweet white violets and blue dog violets, and primroses, of course, and two or three kinds of orchis [*sic*], and all over the field cowslips, cowslips, cowslips – to please the nightingale (Ewing 1886: 53-54).

"Mary's Meadow" illustrates the idea that "[c]are is not the means by which agency occurs; it is itself agential", as Johns-Putra argues (2013: 126). The children's nurturing of indigenous flowers rather than the fashionable exotic "hothouse" ones, and the story's verisimilitude more generally, explain why the story had a significant impact upon its readers. The popularity of the tale was such that it prompted many readers' letters inquiring "about the various plants mentioned in her tale" (Horatia K. F. Gatty, "Preface," Ewing 1886: n. p.), thus prolonging the tale through the correspondence section of the children's periodical which enabled readers to exchange specimens as well as advice. Moreover,

Ewing's sister reported that a little boy in Ireland, "who had determined one day with his brothers and sisters, that they would set out and found an 'Earthly Paradise' of their own," had found a Hose-in-hose, which he had named after "Christopher," and had sent a bit of the root to Ewing (Eden 1896: 122). In addition, whilst "Mary's meadowing" became a term used to describe the planting of flowers "beautifying hedges and bare places," a "Parkinson Society" was formed in the months that followed the publication of the story. Presided by Ewing (and by the man who first introduced Ewing to Parkinson's *Paradisi in sole Paradisus terrestris*, after Ewing's death: Daniel Oliver (1830-1916), British botanist at the Royal Botanical Gardens, Kew, and University College London, and keeper of the library and herbarium at Kew from 1864), the society aimed to "search out and cultivate old garden flowers which have become scarce; … exchange seeds and plants; … plant waste places with hardy flowers; … circulate books on gardening amongst the Members" and "… try to prevent the extermination of rare wild flowers, as well as of garden treasures" (Horatia K. F. Gatty, "Preface," Ewing 1886: n. p.). The "Parkinson Society" later became merged in the "Selborne Society," which had similar conservation goals (the preservation of rare species of animals and plants).

Thus, Ewing's contribution to ecopedagogy climaxes in this last serial story, which epitomises the way in which the Gattys, through their stories and their editorship of *Aunt Judy's Magazine*, fostered ecoliteracy. Very much in line with earlier pedagogues and children's writers, these Victorian pedagogues nonetheless impacted the trajectory of children's literature, by inviting children to actively participate in the protection of their environment, as shown by "Parkinson Society," or even later the Hardy Plant Society, founded in 1956 and aimed at the preservation of hardy plants. Whilst "[e]xhortations to reject cruelty accordingly became a standard, almost an obsessive feature of improving books for young children" from the late Georgian period onwards, as Diana Donald has shown (2020: 26), *Aunt Judy's Magazine* illustrated the pivotal role children's literature could play in ecology. In so doing, the mid-Victorian periodical sowed the seeds for later publications for children which became more and more progressive in the last decades of the nineteenth century and early twentieth century, consistently encouraging juvenile (and often female) audiences to take the lead in the protection of the environment.

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