## "THE WALRUS AND THE CARPENTER": LEWIS CARROLL, MARGARET GATTY, AND NATURAL HISTORY FOR CHILDREN

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atural history publishing for adults and children in the later eighteenth century and nineteenth century has considerable effects on the Victorian children's story. In this paper, I examine the connections between educational natural history reading for children, Margaret Gatty's Parables from Nature, and Lewis Carroll's Alice books. As I have already argued elsewhere,1 Carroll's habit of reference to natural history often throws light on the mysterious shape and substance of the Wonderland and Looking-Glass worlds. One small case of this is found in the bird nicknames immortalised in Alice in Wonderland -Dodgson himself as the Dodo, the Reverend Duckworth as the Duck, and Lorina and Edith Liddell as the Lory and the Eaglet (see Martin Gardner, The Annotated Alice 44). This is a group of bird names which draws on book knowledge as well as everyday knowledge and so probably refers to a shared reading experience. Perhaps Carroll and the Liddell children had looked together at pictures of the lory, a handsomely coloured parrot, in illustrated natural history books - Edward Lear's Psittacidae includes a splendid Black-capped Lory. But cheaper and more popular productions like the Rev. J.G. Wood's three-volume Illustrated Natural History (1859-63), or his earlier one-volume Illustrated Natural History of 1851, both feature pictures of the lory as well, and may well have been known to both Carroll and the Liddells.<sup>2</sup>

Another allusion to natural history, one which may also have had private as well as public dimensions, is found in *Through the Looking-Glass*, where in Chapter 3 the Gnat introduces Alice to three varieties of Looking-Glass Insect. In overall effect this scene recalls the educational practice of instructing children through questions and answers, and clearly anticipates a child reader familiar with such conventions as the "catechism," to be learnt off by heart, as well as the more subtle, fictionalised, form of instruction that purported to be a reported conversation between child and mentor. When the subject was natural history, educational conversations of this kind were often set outdoors, amidst the wonders of nature –

<sup>&</sup>lt;sup>1</sup> See Rose Lovell-Smith, "The Animals of Wonderland: Tenniel as Carroll's Reader." *Criticism* 45 (2003): 383-415.

<sup>&</sup>lt;sup>2</sup> In my *Criticism* article (see note 1, above) I argue that Wood's books were very probably known to Carroll, and were used by Tenniel as an aid to drawing the many creatures in Wonderland.

readers of Alice would recognise the convention at work where the Gnat instructs Alice to look "half-way up that bush" to "see a Rocking-horse-fly," and Alice responds by inquiring "What does it live on?" (56). Indeed, many scenes in both Alice books may be read as variations on this topos of the instructive ramble, which thus comes to constitute a kind of underlying ground or literary raison d'être for many of Alice's encounters with loquacious and instructive creatures. I will open my discussion with a brief survey of these conventions in natural history reading for children, a survey which in turn throws light on the peculiar discourse invented by Margaret Gatty, children's writer and editor, botanist, and seaweed specialist, in her popular and religiously-inclined Parables from Nature. As I will show, the important field of nineteenth-century children's reading in natural history is both evoked directly in Carroll's books but also reaches us distilled, as it were, for Carroll by Gatty: her Parables are certainly an important pre-text of the two Alice books. For when Carroll mocks the instructive ramble by handing the role of mentor on insects over to an insect, it is Gatty who preceded him in giving the natural world an instructive voice, and to whom he alludes most immediately.

Before turning to the Parables from Nature, then, a brief introduction to the natural history phenomenon. The nineteenth century saw a series of fashionable crazes for natural history in Britain.3 The first few pages of Charles Kingsley's Glaucus, or the Wonders of the Shore (1855) are a kind of archaeology of earlier fashions, where Kingsley acknowledges the charms of fossil-hunting, geologising, botanising, fern-collecting, moth-collecting, and the use of the microscope, before marking the transition to the next big thing, the mania for aquariums and sea-side collecting, with an enthusiastic depiction of summer holiday-makers thus turning their annual weeks at the seaside into an occasion of healthy exercise, wholesome self-improvement and useful research. It would have been hard for any middle-class reader to remain completely untouched by all this activity. Carroll himself, no enthusiast, was nevertheless affected to the extent that, while in 1863 he records in his diary going to the deanery to borrow a natural history to help with the illustrations he was making at the time for his manuscript of "Alice's Adventures Underground," by 1882 he owned several natural history books himself.4 Moreover, in 1857 Carroll touched briefly on the world of natural history studies, when he was

<sup>&</sup>lt;sup>3</sup> See Lynn Barber, *The Heyday of Natural History*, and Lynn Merrill, *The Romance of Victorian Natural History*.

<sup>&</sup>lt;sup>4</sup> See Green, 10 March 1863, for Carroll's diary entry about borrowing a natural history. For his later ownership of natural history books, see his letter to Marion Richards, 14 February 1882: "Does your mother know of any good book (not very dear) that will tell one how to mount seaweeds? [...] What I want it for is to lend it to a friend (a governess) at Brighton: the only book I've got, that says anything about it is Taylor's Half-hours at the Seaside, but it has only two pages on the subject. I have left at Eastbourne my Wood's Common Objects at the Seaside [sic: Carroll means Common Objects of the Sea Shore, 1857] and also Mrs Gatty's big book" [i.e., her British Seaweeds of 1863]. Cohen, Letters, Vol 1.

engaged by Dr Henry Acland, Regius Professor of Medicine at Christ Church, to take a series of photographs of the college's anatomical specimens before their transfer to the new University Museum then being built (Taylor and Wakeling 35-6).

These were entirely appropriate interests for a religious man and instructor of youth like Carroll. As Tess Cosslett remarks, "natural history, and later geology, were eminently respectable pursuits for a clergyman to follow" (3). Cosslett's Introductory essay to her anthology Science and Religion in the Nineteenth Century clarifies the important role of the clergy in the forefront of nineteenth-century scientific research and publication: what we still tend to think of as a Victorian battle between science and religion, she reminds us, has been recently understood by historians rather as a conflict between "religious science and irreligious science" (qtd. in Cosslett 2). But what it is important for today's readers of the Alice books to grasp is that the religious impulse in science, much more common than the irreligious, had long been a stimulus to natural history publishing for children at every level of the market. By the middle decades of the nineteenth century this practice was over a hundred years old5 and accumulations from the past were constantly being joined by new books and periodicals. And gradually, in a process traced by Harriet Ritvo, the early "Book of Beasts" of no specified audience, with illustrations and sensational anecdotes as its main attractions, was being displaced by instructive books specifically for children and based on contemporary "scientific data" (73). Many of these educational books were written by clergymen.6 Among them, a persistent convention of instruction through outdoors conversation can be traced - a convention which would immediately associate the Gnat scene in Looking-Glass with natural history reading for children in any contemporary reader's mind.

According to Richard Broke Freeman, the great original of the conversation or dialogue book, often called a "governess book," was the encyclopaedic eight volume Spectacle de la nature (1732-51) by Noel Antoine, Abbé de la Pluche. Initially published anonymously, it was translated from the French by Samuel Humphreys as Nature display'd in seven volumes in 1733-48: another translation, Nature delineated, appeared in four volumes in 1739. De la Pluche begins his instructive dialogues as conversations between a group of aristocratic characters, though in later volumes he descends to letters, and finally abandons the convention altogether. But the success of this work, unrivalled for forty years in English, produced imitations, often specifically about botany and aimed at girl readers – perhaps, says Freeman, "because the boys were away at boarding schools and the governess was educating the girls" (16). About a dozen of these appeared between 1780 and the 1830s.

<sup>&</sup>lt;sup>5</sup> "The first zoological book intended for English children, *A Description of Three Hundred Animals*, appeared in 1730" (Ritvo 72).

<sup>&</sup>lt;sup>6</sup> Freeman, *Children's Natural History Books before Queen Victoria*, singles out particularly C.A. Johns, J.G. Wood, and F.O. Morris, who "earned substantial sums from a copious output of little books" (9).

Freeman comments on the conversation convention that "even at its best [it] seems stilted and seldom reads naturally; at its worst the young become priggish automata who seem there merely to give the governess pause in her long-winded monologues" (16). But acceptance of genre conventions makes a considerable difference to how a book is read, and I have found it quite easy to enjoy Sarah Trimmer's An Easy Introduction to the Knowledge of Nature (1780). Trimmer's lessons almost all turn on a walk out-of-doors, and she silences her child characters, older sister Charlotte and the younger Henry, whose activities can only be deduced indirectly:

What is Henry running after? Oh! It is a butterfly, I see; well, you have caught it, poor little tender creature! Take care how you handle it; would you believe it? All that powder, which comes off on your fingers, is feathers. I have seen some like it in a microscope, and will shew some to you by and by.

Try if you can find a caterpillar. Why, you have got several sorts! Well, I have a long history to tell you about them when we go home. See what a nest of little ones are in that web in the hedge: as soon as they were big enough to go to work, they spun it to keep the wet off; the dew, you see, hangs withoutside, and does not penetrate through. (45)

As seen here, Trimmer is modelling a discourse for adult women employed in education as well as engaging child readers. The artificiality of the "conversation" convention is lessened, too, by her leaving the children's words and actions to be invented by readers. The success of this book, which went through many editions between 1780 and the 1820s, is not hard to understand, although Trimmer's moralities and endlessly instructive stance would not suit a later age. And the conversation convention was occasionally taken up in more lively narrative fictions. It is at work in Thomas Day's long-popular History of Sandford and Merton (1783-9), which records many verbatim conversations between Tommy, Harry, and the kindly and instructive Mr Barlow. Here the focus is more on moral instruction than on scientific knowledge, and animals principally occur in stories so that lessons may be given on kindness and cruelty: but here, again, is modelled for educators the instructive ramble, as when Harry and Mr Barlow walk in the fields, "where Mr Barlow made Harry take notice of several kinds of plants, and told him their names and nature." In keeping with Day's practical orientation, the main lesson Harry learns is not to eat the fruit of the nightshade (25).

At the more commercial end of the market, W. Pinnock's Nature Displayed: Being an Easy Introduction to Natural Theology, setting forth, in familiar conversations, the Wisdom, Power and Goodness of God, as Manifested in the Works of Creation Adapted for the Use of Schools and for Private Tuition was published in 1839, the year that Charles Lutwidge Dodgson turned seven. Its title

summarises both its typically religious and educational designs on a juvenile audience - though the information offered is of a pre-scientifically random nature, and the "familiar conversations" are really just questions and answers between a tutor, the Reverend Mr Beauclerc, and a pupil, Lionel. More systematic was Pinnock's A Catechism of Natural History; or, The Animal Kingdom Displayed (at least six editions by 1822), which works its way down from "man" to insects and was so successful that it was followed by other volumes, Catechisms of Ichthyology, Conchology, Entomology, and Ornithology. The "catechism" generally works in the opposite direction to the "governess" book, for the former offers model answers for pupils in the (ostensible) voice of the child, while the governess book has the governess supply the answers (and, as in Trimmer's book quoted above, sometimes the questions as well). But Pinnock's catechisms bring us very close to the lesson on insects offered to Alice by the Gnat in Chapter 3 of Looking-Glass: the information offered by A. in answer to questions from Q. in Pinnock's Ornithology volume sometimes closely resembles the kind of information offered by the Gnat, who works systematically through the name, appearance, and feeding-habits of his Looking-Glass Insects, not without assistance from Alice's repeated questions. In answer to Q's "Describe the Caudatus," for instance, A's response is:

The Caudatus, or Long-Tailed Titmouse, has a white head, with a broad streak of black along the back; the bill is thick and black; and the tail, which resembles that of the magpie, is longer than the body. It feeds on insects, seeds, etc., and forms a close oval nest, with a hole in the side for an entrance. (64-65)

Clearly, the Gnat parodies such responses when he informs Alice that the Snap-dragon-fly lives on "Frumenty and mince-pie" and "makes its nest in a Christmas-box" (57).

Pinnock's series, though catechism is blightingly dismissed by Freeman as the "final degeneration of conversation books," are acknowledged by him to have been "reprinted over and over again" (17). Their offerings of disparate bundles of facts for learning by rote are a discouraging educational model, but the rather looser and more inventive conversation convention continued to have adherents – Merrill's *The Romance of Victorian Natural History* describes a "charming little book of popular geology" of 1840, *Conversations on Geology* by Granville Penn, where the characters are Mrs R. and her children Christina and Edward (Merrill 84-5). Moreover, the conversation convention and its offspring, the instructive ramble, did have one genuinely distinguished exponent in Philip Henry Gosse, who used them in his first book, *The Canadian Naturalist* (1840). This book takes the form of a "dialogue between father and son, 'a series of conversations on the Natural History of Lower Canada" where Gosse had lived, and done some schoolmastering, between 1835 and 1838 (Gosse, qtd. Thwaite 96). That Gosse embarked on his

publishing career in this particular format indicates its centrality in his idea of natural history educational publishing – and perhaps he was the only writer who could ever have succeeded in making both a workable narrative and a genuine scientific treatise out of it. This The Canadian Naturalist often reveals Gosse's experience in catching the attention of boys:

F. - [...] What do you suppose are these?

C. - A fox's tracks.

F. – Oh no! they are much too large: a wolf has passed here since last evening. (33)

The Canadian Naturalist received excellent reviews and was praised for both text and illustrations, though it had not sold out its first edition by 1867, when Van Voorst still had 112 copies unsold (Thwaite 103). Nevertheless at the time of the publication of Carroll's Alice Through the Looking-Glass the instructive ramble was still in flourishing condition, as indicated by its adaptation by Charles Kingsley in Madam How and Lady Why or First Lessons in Earth Lore for Children (1870), and the appearance of the Rev. W. Houghton's Country Walks of a Naturalist with his Children (1869). Kingsley takes up the narrative position of a parent or mentor addressing a "dear child" accompanying him on a walk to observe the wonders of nature: "though all things, I say, seem dead, yet there is plenty of life around you, at your feet, I may almost say in the very stones on which you tread." (2) This sounds like the same genus of instruction as Carroll's "Crawling at your feet," said the Gnat (Alice drew her feet back in some alarm), "you may observe a Bread-and-butter-fly" (Looking-Glass 58)8 But Kingsley merely refers to the convention: there are no child characters in his book, and it is Houghton who is more in the classic mode, with his naturalist and father (the "governess" character) accompanied by three active children on country rambles. And unlike Sarah Trimmer, Houghton has the children, Willy, Jack and May, enter the book by making observations and asking questions:

"Oh! Papa," said Jack, "what is this curious plant that grows so abundantly on the grass here? I know it well by sight, but do not know its name." "It is a spike of horse-tail; see how the stem is marked with lines, and how curiously jointed it is, and quite

<sup>&</sup>lt;sup>7</sup> Gosse may have chosen this format because children and marriage were then denied to him by his poverty: or because it resembles the way he was taught himself; he certainly planned to use readings in catechism format as a teacher. (See his letter to James Green of 4 September 1840 about his planned new school in London, qtd. Thwaite 107, where he writes of using "Pinnock's and Goldsmith's Greece, Rome and England, with questions, as we did at Lance's.")

<sup>&</sup>lt;sup>8</sup> Compare, too, Sarah Trimmer: "Take care, take care, Charlotte, mind where you tread! Why you might have destroyed a city for aught I know. Look at those little busy ants; they are at work as hard as possible" (46).

hollow except where the joints occur. The fruit is borne at the top of the plant;" (61)

and so on, at considerable length. There is indeed something Carrollian about Houghton's expeditions, where a pedantic and loquacious companion pours forth more information than you could ever wish for and the natural world proves to be just bursting with curious but explicable creatures and plants. Learning to identify and name the species is the main lesson offered: one realises that not only the Gnat's lesson in insect identification, but also Humpty-Dumpty's exposition of the meanings of "toves," "borogrove," and the "outgribing" of "mome raths" is suggestive (if in a Learish way) of natural-history-for-children genres (Looking-Glass 126-9). The Wood of No Names, which Alice visits after leaving the Gnat, is also resonant with natural history instruction. This wood is often seen as an invention springing from Carroll's interest in the behaviour of language, but the Gnat first mentions it in the context of "rejoicing in" and naming insects ("What's the use of their having names,' the Gnat said, 'if they won't answer to them?" 55). Carroll makes the wood a pleasant and restful interlude in the Looking-Glass narrative, a kind of wordless Arcadia, for instruction in natural history (or anything else) is suspended where names cannot be learned - and in fact, the Gnat in his discussion of names and naming has already explained to Alice that being without a name would be a good strategy for avoiding lessons.<sup>10</sup>

Gosse, Kingsley and Houghton are all authors whose enthusiasm for God's purposes manifest in the natural world could well be described as "rejoicing in" insects. When Martin Gardner published in 1977 the missing "Wasp in a Wig" scene from Carroll's original draft for *Through the Looking-Glass* it revealed, too, that Alice's encounter with Looking-Glass Insects in Chapter 3 was matched in the book as originally conceived with another insect episode which would have been positioned near the end of Alice's adventures. <sup>11</sup> This scene if it had been included in the book would have further strengthened the natural history connection for Carroll's readers. Insects were a common focus of natural history for children, and the wasps' Exploring Party to the Pantry (30-31) in the cancelled episode may be read as a parody version of the heroic travels of such as Darwin, Belt, Wallace and Bates in search of new observations and new species. Before further expanding on Carroll's parodic designs on natural history discourses for children, however, it is

<sup>&</sup>lt;sup>9</sup> See for example Martin Gardner's *The Annotated Alice* 227. Gardner takes the wood to be a reference to the arbitrariness of the linguistic sign.

<sup>&</sup>lt;sup>10</sup> In one of Gatty's tales, "A Lesson of Hope," we find what might well be characterised as a "Wood of Names." In it a croaking Raven, a Pine-tree, an Elm-tree, a Beech, an Owl, an Oak and a Poplar are overheard conversing by the narrator. Another Gatty tale, "The Law of the Wood," is similarly set in a forest and has tree characters.

<sup>11</sup> Goldthwaite points out that Alice's conversation with a gnat is matched by Tom's conversation with a mayfly in *The Water Babies (Make-Believe* 101-2).

necessary to turn now to his main inspiration in this area, Margaret Gatty and her *Parables from Nature*, where the practice of offering religiously motivated natural history for children through conversation is married to an older tradition, that of offering moral instruction through fables and tales about humanised animal characters. Gatty brought about this marriage by endowing the creatures themselves, (and the many other kinds of natural being or entity which are given voice in her *Parables*)<sup>12</sup> with a little scientific self-knowledge: a Gatty tale generally follows some instructive storyline, but also presents a mix of ignorant and better-informed characters so that the former can ask questions and the latter have opportunities to hold forth as experts. The result is that Gatty's natural world is an immensely talkative place where, though human instructors are also not lacking – the narrator often plays this role – the creatures of the natural world themselves may also become temporary governess-characters.

This proved to be a winning formula. The five series of the *Parables from Nature* (1855, 1857, 1861, 1864, 1871) were a success from the beginning. <sup>13</sup> The author of these *Parables* would achieve a modest degree of fame as a children's writer and as the editor of *Aunt Judy's Magazine* for children, <sup>14</sup> but Gatty was also an enthusiastic scientist (she published a monograph on seaweed, *The History of British Sea-Weeds*, in 1863) and an advocate of the seeking of scientific knowledge as "an appropriate pastime for both men and women" (Rauch 138): the *Parables* thus represent a conjunction of both her main interests as an author. One of the early tales, "Knowledge not the Limit of Belief," (First Series 1855) well demonstrates her commitment to science. It is located in a Naturalist's library (we might say

<sup>12</sup> An exhaustive list of Gatty characters endowed with the power of speech would be very long, but in the first seven tales the speaking characters include: Butterfly, Caterpillar, Lark, Working-bee and older bee, Girl, Boy, family of Sedge-warblers, Magpie, Zoophyte, Seaweed, Bookworm (a rare example of a fantasy creature), Naturalist and friend, Wind, Convolvulus Major, Carnation, Rose, Lily, Mother, Daughter, Will-o'-the Wisp (and a series of human travellers), House-crickets, Spider, Grasshopper, Mole, Grandmother and child.

<sup>13</sup> In December 1857 Gatty reports in a letter "I have five books in the press" including "a new series of Parables," and "a fifth edition of the old Parables" (Maxwell 110). Even before all five series were finished, volumes of collected or selected parables had begun appearing, and these continued in print for decades. In 1880 George Bell and Sons, Gatty's publishers, brought out a complete edition: all quotations in my article are from this New and Complete Edition, With notes on the natural history, [by Gatty herself] and Memoir of the author by her daughter, Juliana Horatia Ewing of 1880. The book was handsomely produced and illustrated by some famous names, including Holman Hunt, E. Burne Jones, J. Wolf and J. Tenniel: Gatty originally illustrated the first series, and (I think) the second series, but her work was soon replaced. As far as I can ascertain, the complete Parables last appeared in 1919. But shorter selections of parables, usually the most Christian ones, continued to appear well into the twentieth century, often published under the auspices of the SPCK or similar organisations. Alan Rauch draws attention to a 1984 rewriting of some of the tales, also Christian, by Pat Wynnejones (150, n. 5).

<sup>14</sup> Gatty began to edit this magazine in 1866.

laboratory) where some specimens, a Zoophyte and a Corallina seaweed, have fallen loose from the folio in which they were mounted. This is not a common setting for a children's moral tale, and the lesson offered by this tale on the scientific method – errors in classification are corrected after the Naturalist has used an "experiment" and examination through the microscope – is particularly noteworthy. So is the usual Gatty technique, of giving voice to the creatures themselves: while the Corallina and Zoophyte can hardly believe in their own misclassification, the former as animal, the latter as vegetable, a Bookworm, who has travelled the pages of the naturalist's library, assures them that man the scientist is nevertheless very much their superior in knowledge and intellect.

The publication period of the Parables is a significant one in terms of changing approaches to both the natural sciences and to children's literature. The five series begin to appear only two years later than the large, illustrated tenth edition of Vestiges of the Natural History of Creation (1853)<sup>15</sup> and immediately after Kingsley's Glaucus (1855) and Gosse's The Aquarium (1856): prior to and during the period of the conception and production of Charles Kingsley's The Water-Babies (1863) and Lewis Carroll's two Alice books (1865 and 1871); and straddling the appearance in 1859 of Charles Darwin's Origin of Species. But Gatty's commitment to science was far from controversially materialist. The debates following Darwin's Origin made their mark on her, the pious wife of a country vicar: in Christabel Maxwell's Mrs Gatty and Mrs Ewing Gatty's hostile and disturbed reaction to Darwin is recorded in a detail of family history, that "After the publication of the Origin of Species [Gatty's correspondence with her mentor Dr Harvey on seaweeds] became particularly agitated, especially when Margaret suspected her friend of leanings towards Darwinism. She accepted Darwin's autograph, but placed it in her collection in juxtaposition with that of Voltaire and Tom Paine, in her Chambers of Horrors" (125-6). Gatty's Parables then, despite their commitment to scientific ways of seeking knowledge, typically ridicule those who find Nature purposeless and directionless, and some of the later tales, such as "Whereunto," "Inferior Animals" and "The Cause and the Causer", take up the battle with materialism, and with Darwinism, explicitly. To quote Alan Rauch again: "Gatty created the Parables to cultivate a new generation of biologists who would find in her stories the strength to resist the growing materialist explanations" (140).

I turn now to the relationship between Gatty's *Parables* and Carroll's *Alice* books, undoubtedly an important one. Carroll certainly read Gatty's tales, as they were friends, and each admired the other's work. <sup>16</sup> Morton Cohen records Gatty's

<sup>15</sup> The favourable reaction to this edition is explained by James Secord, *Victorian Sensation*, 150-1 and 479-80. As Secord remarks, the anonymous author, Robert Chambers, had effectively subsidised the earlier cheap editions to enable the price to be kept low (Secord 151). The tenth and eleventh editions, though, were illustrated and handsomely produced "gentlemen's" editions (150-1).

<sup>&</sup>lt;sup>16</sup> (Morton Cohen ed., *Letters*, Vol 1, 148.) Cohen says "The Gattys lived in Oxford, and Dodgson became acquainted with them early." Yet according to Juliana Horatia Ewing her mother married

delighted reaction to Carroll's tale "Bruno's Revenge," written and sent to Aunt Judy's Magazine in 1867,<sup>17</sup> while inscribed in the Alices is the homage that Carroll pays Gatty and her imaginative scenarios by borrowing a number of them. Yet the Alices often make the process of drawing lessons from nature irresistibly comic, too, (consider the narrative of the dormouse at the Mad Hatter's Tea-Party, for instance) and display an adverse reaction to both the moral purposefulness and the intellectual gaps in Gatty's tales. The relationship between the Parables and Carroll's books is therefore far from simple. It operates on several levels, and (understandably enough given the dates of publication) affects the world through the Looking-Glass more profoundly than Wonderland.

These points may be illustrated with regard to one of the best of Gatty's tales, which is about two mothers (one is a cat and one is a human), two kittens, and two children. It is entitled "Purring When You're Pleased" (Third Series, 1861); the title, I believe, is recalled by the Cheshire Cat's witty speech in the Pig and Pepper chapter of Alice in Wonderland: "a dog growls when it's angry, and wags its tail when it's pleased. Now I growl when I'm pleased, and wag my tail when I'm angry" (91). Here the Cheshire Cat undermines the idea of drawing useful morals for children from the observation of animal behaviour. The same Parable, however, is referred to at more length in the opening of Through the Looking-Glass. Gatty's two

Alfred Gatty in 1839 and lived with him in the vicarage at Ecclesfield in Yorkshire for the rest of her life (Gatty, Parables from Nature xvii). However it happened, Carroll and the Gattys knew each other: Carroll's diary for 7 September 1863 remarks that a Miss Lucette Barker "is an artist and has drawn for Mrs Gatty" [she illustrated The Fairy Godmothers, 1851], and continues "Mrs Gatty wrote today to say she'd not come over to be photographed, and asking me to visit them - I must decline." The acquaintance persisted. Aunt Judy's Magazine reviewed Alice in Wonderland (June 1866) and Maxwell quotes a letter from Gatty, to an unknown recipient, written in April 1866 soon after she first read Alice: "It is the only dreamy dream I ever read, and it makes one feel as if one were asleep in a very fantastical world of animals all topsy-turvy. It is really by Mr C. Dodgson, who gave me the photographs you have seen here of Tennyson and the children, but he tells me he wrote it accidentally after telling it to three charming little children in a boat!" Subsequently Gatty recruited Carroll for Aunt Judy's Magazine, to which he contributed the tale "Bruno's Revenge" (the germ of the later Sylvie and Bruno books) in December 1867: Gatty sent him a fulsome letter of thanks and praise (see note 18 below). Despite solicitations from small readers, however, Carroll's only other contribution, seven puzzles from Wonderland, did not appear until 1870. But Carrol and Gatty remained in touch a letter of 20 February 1870 to Gatty mentions that Tenniel has gone to work (i.e., on the pictures for Looking-Glass) "with a will' and is getting on capitally" (Cohen ed., Letters), and in a letter to Mrs J. Chataway written two years after Gatty died, Carroll remarks "I used to know Mrs Gatty well" (Cohen ed., Letters, 9 December 1875).

17 "I need hardly tell you, [Gatty enthused] that the story is delicious. It is beautiful and fantastic and child-like, and I cannot sufficiently thank you. [...] Some of the touches are so exquisite, one would have thought nothing short of intercourse with fairies could have put them into your head. [...] Make this one of a series. You may have great mathematical abilities, but so have hundreds of others. This talent is peculiarly your own, and as an Englishman you are almost unique in possessing it. [...]" (qtd. Cohen, Biography 246).

kittens are strongly contrasted – in fact, they are one of those exemplary pairs of contrasting characters so beloved of the moralist – and her tale begins thus: "They had been licked over hundreds of times by the same mother, had been brought up on the same food, lived in the same house, learnt the same lessons, heard the same advice, and yet how different they were! Never were there two kittens more thoroughly unlike than those two!" (179).\(^{18}\) Carroll opens \(^{18}\) Looking-Glass in the same sort of exclamatory mode, also uses the scene of a mother cat washing its kittens, and takes up and transforms the difference between the two kittens into something both less subtle (one is black, one is white) and more subtle (though the black kitten is a bit naughty, we like it best). When Alice reproaches Dinah for not teaching her kittens better manners, too, Carroll is probably recalling the "lessons" and "advice" which the mother cat in Gatty's story hands out very freely to her offspring.\(^{19}\)

The Alice books respond to Gatty, then, with a mix of creative imitation, critique and mockery. I think that is because Gatty's effects are themselves complicated. In the first place, as Rauch remarks, she is a "witty" parodist herself (143): in "Purring When You're Pleased" the speeches of her mother cat echo familiar human anxieties and snobberies. Moreover, there are likeable dimensions to Gatty's tale, which offers tactful instructions on how to care for a kitten and play kindly with it, as well as a thoughtful exposition of the world from a mother cat's point of view. Gatty's main point is to do with her human characters - she contrasts a sad child with a happy, secure child rather than a virtuous child with a vicious one, and her "moral" is subtle and warm-hearted. On child-reader level, the gift of a kitten helps to overcome sad and bitter feelings experienced by a recently orphaned child. On adult-reader level, it is noted for parents that it is much pleasanter and easier to deal with a child who expresses feelings than with one who is too blocked or frightened to - a most interesting lesson to come across in a mid-century didactic context, when "self-control" was still such a prime virtue. Carroll's response to the story is to retain a child's relationship with a cat family but to assign to Alice the imaginative empowerment - and active participation in narrative - that comes with her ownership of the playful fantasy that dramatises the cat family's life as analogous to human family life. But then, within Alice's dream-world through the Looking-Glass the kittens transform into the chess queens: this fantastic compounding of pairings and assailing of individual identity blurs the difference between types and kinds and opens a phantasmagoric abyss beneath Gatty's busily instructive natural world.

<sup>18</sup> Gatty's *Parables* are cited from the 1880 complete edition. As the publication date of each series is important, I provide this in parentheses each time I refer to a new tale.

<sup>&</sup>lt;sup>19</sup> As Kathleen Tillotson pointed out in 1950, this Carroll scene also resembles a parody of Dickens's *The Cricket on the Hearth* which appeared in *Blackwood's Magazine* in November 1845. There seems no reason why Carroll should not have had Gatty in memory as well: perhaps the Gatty tale had recalled the old "Maga" parody to his memory.

Not all Gatty tales, therefore, are merely Carroll's satirical butts. One that comes off less lightly is Gatty's "A Lesson of Faith" (First Series, 1855), in which a green caterpillar is used to convey (via the caterpillar's difficulty in believing that it could ever be a butterfly in future) the lesson of faith in a future resurrection. In Alice in Wonderland a blue caterpillar takes a very different view of its own future development - Carroll's caterpillar, indeed, seems to respond directly to Gatty's rather gushing exposition of the miracle of metamorphosis in her Preface to the first Series of the Parables: "the soaring butterfly arising from the earth grub [is] a change which, were the caterpillar a reasonable being, capable of contemplating its own existence, it would reject as an impossible fiction" (Parables from Nature, First Series, 1858, ix). Contrast the riposte of Carroll's blue caterpillar - very much a reasoning being - when Alice suggests that the processes of becoming a chrysalis and then a butterfly might make the caterpillar "feel it a little queer," and the caterpillar crushingly replies, "Not a bit" (60-61). Whether the caterpillar scene is referred by the reader to Gatty or not, Carroll must still be acknowledged to be writing anti-Gatty: his animal characters are often knowing, superior in tone, and so persistently non-exemplary as to mock hers at every point. It is a reminder of Gatty's conservatism, too, that her use of this traditional trope should resemble so much Anna Laetitia Barbauld's (1743-1825) reference to it decades earlier, in "Immortality" (qtd. in Thwaite 51):

"I have seen the insect, being come to its full size, languish, and refuse to eat: it spun itself a tomb, and was shrouded in the silken cone: it lay without feet, or shape, or power to move — I looked again: it had burst its tomb; and was full of life, and sailed on coloured wings through the soft air: it rejoiced in its new being. Thus shall it be with thee, O Man! And so shall thy life be renewed."

This theme of Gatty's tale is taken up by its professional illustrator, Calderon, who produced a very literal depiction of the human soul leaving a dying body. (Gatty facing p. 1. See Figure 1). As far as we know, Carroll never abandoned the substance of this belief, whatever he thought of such metaphorical outbursts as Barbauld's as ways of expressing it. Yet his resistance to Gatty's methods and worldview is evidently taking shape in *Wonderland*, and it will become more marked and developed in *Through the Looking-Glass*.

This resistance may be demonstrated in Chapter 2 of Looking-Glass. The famous scene where a garden of rather bossy and outspoken flowers offers advice to Alice opens up an intertextual gap with "Training and Restraining" (Parables from Nature, First Series, 1855) which is also about a garden full of chatty and disputatious flowers. Gatty's tale expresses a rather frightening conservatism: in it a "revolutionary" wind – ergo, to Gatty, a deceitful flatterer and mischief-making

demagogue – preaches the advantages of growing free and unrestrained to a receptive garden full of flowers. With little difficulty, the wind succeeds in persuading the flowers to see gardening, with all its pruning and clipping and tying to supports, as intolerable constriction. However when the flowers, won over, invite the rough wind into the garden to set them free, the result is damage and destruction and "a dreary confusion" reigning in "the once orderly and brilliant little garden" (42). Gatty's final scene has a young lady, after viewing the devastation, voicing the moral to her mother: "I am thinking that now, at last, I understand what you say about the necessity of training, and restraint, and culture, for us as well as for flowers" (43).



A LEASON OF VAITH.

Figure 1. Calderon's illustration for "A Lesson of Faith" represents the survival of the human soul after death, thus emphasising the human "parable" side of Gatty's tale rather than the natural history story about a caterpillar.

Being pruned, or trained to lean on supports to which one is firmly bound, are, to my mind, disturbing metaphors whether for the condition of England - that "brilliant little garden" - or for the education of a young woman. But here, as in "Purring When You're Pleased," Carroll's response to Gatty exploits the imaginative and comic possibilities of Gatty's story-situation as well as, on the other hand, undermining and ridiculing its didacticism and its lesson. Carroll belittles "Training and Restraining" partly through having his flowers' conversation focus on such trivial matters as the untidiness of Alice's "petals": rather than big issues of social order and disorder, rebellion and obedience, Carroll's flowers talk hairdos. Similarly, when educational advice is offered to Alice in plenty by the Red Queen, her appearance in the garden offers a mocking and nonsensical reduction of the mother and daughter scene in Gatty. Behind the Red Queen and Alice in this scene, too, stand the ghosts of all the other governesses who ever offered improving instruction outdoors, their informative and improving impulses delivered over to Carrollian parody: "Speak in French when you can't think of the English for a thing - turn out your toes as you walk - and remember who you are!" (Looking-Glass 45). The double meaning of that last imperative, simultaneously familiarly snobbish and profoundly disconcerting, is especially pleasing.

Because Carroll uses the device of belittlement, though, we should not therefore belittle the radical consequences of Carroll's attack on Gatty, or fail to read the gap that opens between his garden of live flowers and hers. Carroll's garden disowns the underlying assumptions of Natural Theology which uphold Gatty's Parables. In his looking-glass world the flowers comically reverse the flow of instruction, offering flower-centered advice and criticism to the human world and eagerly learning what they can by observing those strange beings, Alice and the Red Queen.20 In the flowers' view Alice is another, if somewhat inferior, flower, a logical enough mirror-(re)writing of Gatty's assumption that humans are the apogee of creation, her relentless anthropomorphising, and her determined readings in nature of divine lessons for humans. Carroll's reassigning of the roles of reader and instructor - the "governess" roles - from humankind to the flowers thus acts as a reminder of the revolutionary implications of scientific controversy in mid-century Oxford. And fascinatingly enough, the assumption about nature that Carroll makes when he isn't on official religious duty but is indulging in the dreamlike or nearautomatic creativity which (he claimed) produced the Alice books21 is in line with,

<sup>20</sup> We are thus supposed to note the comedy of the flowers' natural history mistake, their confusion of a chess piece and a human being as representatives of the same species. On the other hand, the Rose's suggestive comment to Alice, that she thought wearing thorns around the head was the "regular rule" with humans, is a theologically resonant moment which Gatty, more overtly pious, is incapable of. Alice will indeed end the story as an adult wearing her "crown," a subdued notification of the passage from carefree childhood to the religious duties and unavoidable sorrows of adulthood.

<sup>&</sup>lt;sup>21</sup> According to Robinson Duckworth, present on the famous boating-trip when the story of Alice was first being told to the young Liddells, Dodgson described himself as "inventing as we go along"

rather than against, one of the less comfortable implications of Darwinism, the fundamental identity and continuity of the human and non-human living worlds. This is made vivid for us by the contrast between "Training and Restraining" where, as usual in Gatty's tales, there is plenty of talk but the two conversational worlds of biology and humanity never meet, and Carroll's chapter "The Garden of Live Flowers" where Alice enters into conversation with the looking-glass flowers and is revealed to us as she appears to them, under their gaze. Gatty's growing girl and her mother never are privileged to hear the Rose, Lily, Convolvulus, Sweet-peas and Carnations chat together: Carroll's Alice is like Gatty's reader, more fortunate.

Possibly debate about language in 1860s Oxford fed into Carroll's game of inversions and reversals here, enlivened as it had been by Professor Friedrich Max Müller's opening up of the new science of comparative philology, which tended to lead enquiry towards the knotty problem of the origins of language.<sup>22</sup> Müller was unable "to accept, even after considering linguistic processes exhaustively, [...] an extension of the Darwinian theory of evolution to the origin of language" (Chaudhuri, Scholar Extraordinary 192) and when, in an 1872 letter to the Duke of Argyll, Müller posed to himself the question of the "fundamental difference between man and the brute world" his response to his own question was: "The one great barrier between the brute and man is Language. Man speaks, and no brute has ever uttered a word" (qtd. in Chaudhuri 193). Müller's lectures in London in 1861 and 1863 had won him a popular reputation which resulted in high sales of the published lectures (Chaudhuri 185) and he sounds at times rather like an opponent of Humpty-Dumpty's theory of language, for which see Looking-Glass 124: "When I use a word, [...] it means just what I choose it to mean" and compare Müller's "the poet and the philosopher become the lords of language only if they know its laws and obey them": the "individual as such is powerless" (qtd. in Chaudhuri 190-1). Carroll's Looking-Glass may well reflect wryly on Gatty's talkative world of nature, given this authoritative colleague's views on human language: Gatty is certainly also interested in this theme.<sup>23</sup>

<sup>(</sup>Green 182). In later life Carroll explained that he "had sent my heroine down a rabbit-hole, to begin with, without the least idea what was to happen afterwards" and that even when writing the tale down in MS and then later expanding the MS for publication, "every such idea and nearly every word of the dialogue, *came of itself.*" ("'Alice' on the Stage," *The Theatre*, April 1887. Qtd. Haughton, Introduction xxxiii).

<sup>&</sup>lt;sup>22</sup> Müller had settled in Oxford in 1848, became Taylorian Professor of Modern European Languages in 1854, controversially failed to win election to the Boden professorship in 1860, but was made Professor of Comparative Philology in 1868.

<sup>&</sup>lt;sup>23</sup> Her narrator comments, for instance, on the learned earwig character in "The Cause and the Causer," that "The professor was guilty of wishing the flower would turn into an insect and tell him the truth about it. For you must know the flowers speak in too low a whisper for even insects to hear them, so the two worlds do not communicate" (343) while the dreamer and narrator of "Inferior Animals" is even more interested in the language and communication of other animals. Gatty's

Contemporary resonances are also evoked for the reader when the parable called "Whereunto" (Third Series, 1861) is compared to Chapter 4 in Through the Looking-Glass. In setting and incident this tale resembles Carroll's poem "The Walrus and the Carpenter" (Looking-Glass 72-79) in so many ways that the latter is surely best read as a sinisterly amusing revision of the former. Firstly, Gatty's tale opens on a very sunny day at the sea-side, "one of those rare, serene ones, when there is not a cloud in the delicate blue sky, and when the sea lies so calm and peaceful under it, that one might almost be persuaded to believe nothing would ever again ruffle its surface" (170). (Compare the first stanza of Carroll's poem.) Into this common enough seaside scene, after some Gattyish bickering between two seacreatures, intrude "two other creatures" whom the reader quickly recognises to be two human beings. They pause beside a "ledge of rocks [. . .] which would have furnished seats for dozens of human beings" (170-1) - compare the appearance of the Walrus and the Carpenter, and the rocky seat where the Walrus and Carpenter later rest (Looking-Glass 75). One of the humans is heard brooding aloud gloomily on the "Wasted life and wasted death" he sees around him, and on the way that many humans, too, have "no more end in life, and [are] of no more use, that one can see, than these vile useless sea-weeds; coming into the world, in fact, for no earthly purpose but to go out of it, in some such wretched manner as this!" Following which, he petulantly kicks a number of stranded star-fish across the sands into the sea, repeats "Whereunto?" three times, and departs in argument with his companion. This scene is surely closely related to the opening conversation of the Walrus and the Carpenter. There are other echoes in Carroll's poem too: at the end of the tale, Gatty produces some humour that must have been noted by Carroll, when she records that a starfish fortunate enough to have been thrown into the shelter of a tangle of seaweed later tells and re-tells the story of her own lucky escape: "and the longer she told it, the more pathetic she made it, till at last there was not a creature in the sea who could listen to it with dry eyes" (178). Both the alienation exhibited by Gatty's "Whereunto" questioner and this joke about a lachrymose starfish doubtless contributed to the "sobs" and "bitter tears" of the Walrus and Carpenter.

By a felicitous coincidence, Tenniel himself produced the illustration for "Whereunto" (See Figure 2). It shows the two human characters beside rocks on the beach, making of them a slightly Walrus and Carpenter-ish couple of middle-aged men (though I have referred to these characters as "he" and "him," Gatty herself is careful not to specify the sex of either of these characters).<sup>24</sup> As in Tenniel's

position in the *Parables*, that "The races do not communicate" (347) is not at all the same as Müller's assertion that animals lacked language.

<sup>24</sup> Gatty may have done this to make the point that women can engage in science and philosophical speculation as well as men, but I think she was probably concealing a more specific reference to her own sea-side conversations with Tennyson, with whom, according to an excited diary entry quoted by Christabel Maxwell, Gatty had disputed "his definition of the man of science as having: 'an eye well practised in nature, a spirit bounded and poor." Maxwell also records how Gatty, after "a



WHEREUNTO!

Figure 2. Scientific enquiry and gloomy religious scepticism together at the seaside: John Tenniel's illustration to Gatty's "Whereunto."

Looking-Glass illustrations to "The Walrus and the Carpenter" disagreement is signalled by the way the eyes of the two companions do not meet, but there are few signs that Tenniel recognised the textual relationship I am pointing out here: Tenniel's "Whereunto" characters, for one thing, are clearly of a higher social class than his Walrus and Carpenter.<sup>25</sup> I am surprised that neither Tenniel (nor anyone

pleasant fight," gave Tennyson a gift of a few anemones found on the shore, "a aquarium in a soap-dish" (128).

<sup>&</sup>lt;sup>25</sup> Tenniel drew Gatty's sceptical character with hair resembling the Carpenter's short dark rough hair, and a prominent handkerchief in one pocket: he is prodding at a starfish with his stick. In the picture on page 73 of *Looking-Glass* an unhappy-looking starfish lies beside the Carpenter's feet. The other character in the "Whereunto" illustration has a horizontally striped waistcoat (like the Walrus's) and a flowing beard which, parted in the middle, might easily resemble the Walrus's exuberant

else) seems to have noticed the relationship between Carroll's and Gatty's works until now: perhaps this is because Carroll's references to the *Parables* are of a rather enigmatic nature, there for private pleasure rather than public recognition. At any rate, if each *Alice* book (as well as Gatty's) has its sea-side scene where gloomy chaps confer, that may be because the sea-side, site of so many Victorian holiday strolls and so much Victorian professional and amateur natural history collection, had become in the popular mind a probable and appropriate site for scientific/religious speculation. The beach often appears in natural history illustration (see Figure 3) and perhaps partly from this association of ideas, as well

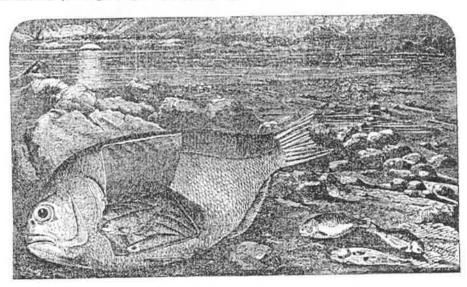


Figure 3. The viviparous fish, an illustration from *Hardwicke's Science-Gossip* (Nov 1, 1866). The setting sun and long shadows cast by the rocks on the beach create a sombre mood, unnecessary to the ostensible scientific purpose of the illustration, but well suited to the idea of the beach suggested by such works as Gatty's "Whereunto?"

moustaches. But it would be misleading to press the resemblances too far: the connection is certainly not intended by Tenniel to be unmissable. Tenniel probably worked on the Looking-Glass illustrations later than the "Whereunto" one. He finished most of the long-delayed Looking-Glass illustrations for Carroll and Macmillan in 1871 (see Hancher 103-4), and the first edition that I have seen with Tenniel's "Whereunto" picture dates from 1870. (The original, 1861 edition of the Third Series of Parables was illustrated by Gatty herself, but Bell started employing "name" illustrators to provide pictures for the Parables earlier than the 1880 complete edition.)

as more traditional ideas about the ocean as source of life, symbol of oblivion and death, becomes the metaphoric location of Matthew Arnold's "Dover Beach" (1867) that poignant lament for the long withdrawing of the "Sea of Faith." Gatty's nameless character's cry of "Whereunto?" offers a moment of high-Victorian angst rather like Arnold's – and her sceptical character stands much where Arnold's speaker does, both literally and philosophically. The real point of Gatty's story, though, is her optimistic answer to the question. For other beings – a limpet, another shellfish, a clump of seaweed, the tiny animals which live among its fronds, and finally even the sea itself – all speak up in her tale, each arguing that the questioner who passed by was clearly wrong, for the sea-weed is not at all purposeless from their point of view. The fortunate starfish who fell under the seaweed even remarks, with a deliberately Christian echo, that the man himself was undoubtedly "born to save me" (173).

From this bizarre conversation, Gatty's reader may come to understand something of the complex interdependencies of the shore environment, and may also learn that we ourselves - as limited in viewpoint and as anxious about our personal fate as any crab or shellfish - are hardly likely to be the best judges of the purposefulness, or otherwise, of our worldly lives. The lesson that Gatty announces to her reader in the epigram to her text supports this reading: it is a quotation from Tennyson's In Memoriam Section 128: "I see in part/That all, as in some piece of art, /Is toil cooperant to an end." The quotation implies that Gatty's tale, like Tennyson's poem, deals with the triumphant overcoming of doubts and despair by taking a wider view. Yet to today's reader, the "moral" or lesson Gatty announces may possibly no longer emerge from her story: her point may not now be the point we want to take. My own major problem in reading the story now is that not just death itself (the jelly fishes are all dead before the story begins 170), but also the uncomfortable possibility of one species' consuming another, do intrude on my mind: this is a narrative setting where some of the characters must inevitably fear being eaten by others, and in fact, fear is felt by the crab, who "was remarkably bold when there was no danger" (172), and given voice by an anxious "Shell-fish, no distant relation of the blue-eyed limpet who had spoken before," who lives in hiding: "I don't fancy being sucked at by star-fishes, or picked out of my place by crab's claws" it confesses (175). The unpleasanter sides of ecological interdependence predation, consumption - lie thus half-revealed at the center of Gatty's tale, tending to overwhelm the general argument that wider scientific awareness reveals a benign disposition in nature.

This uncertainty, as in the Shell-fish's confession, is built into Gatty's narrative. When later the human couple come walking back up the beach and pause to watch the returning tide, the less gloomy of the two companions — clearly a believer — drives Gatty's lesson home by reproaching the unbeliever for lack of understanding. But the tale is so ordered that this human speaker, Gatty's mouthpiece, is made to merely echo the conclusion already reached by another of

her characters, a complacent limpet, that "the whole thing is perfect and complete" (174). Such philosophical speeches by shellfish tend to undermine Gatty's tale, offering incipient absurdities which might easily be grounds for literary fun. Readers may well come to share Carroll's suspicion that an optimistic mollusc – such as, for instance, a gullible oyster – is more in the nature of somebody else's dinner than a trustworthy natural theologian.<sup>26</sup>

This tale displays Gatty's talents well, then – the conversation of the seacreatures satirises human egotism and echoes human speech amusingly, and much biological information and understanding is imparted along the way – but in my reading her tale ends up by revealing the weaknesses of the "religious science" position it ostensibly sets out to defend. As Carroll parodied Gatty "Whereunto" characters human and animal through that oddly assorted animal/human couple the Walrus and the Carpenter, at least one contemporary reader found the argument at the heart of this tale wanting too. Indeed, the point of weakness in Gatty's worldview is the one that Carroll's Walrus and Carpenter themselves exploit, as they walk on from the scene of their original conversation accompanied by optimistic and over-friendly oysters, and proceed to confer a very particular kind of teleological destiny or purposefulness in life on these too-trusting shellfish by eating them.

The final effect of Gatty's Parables is therefore not nearly so programmatic as implied by Rauch's comment that she offered "strength to resist the growing materialist explanations." As Rauch himself noted, a Gatty tale runs the risk of "undermining itself as a parody," conferring authority on "the persuasiveness and perhaps even the effectiveness of the original [evolutionary] argument" (145). Complexities thus open up below the surface of these apparently artless tales: I will discuss one final example, "The Cause and the Causer" (Series 5, 1871). Set at ground level, this is a strange little story in which the death of a moth becomes the occasion for a kind of coroner's court, with snail magistrate, bumble-bee barristers, distraught moth widow and Dr Earwig in attendance. The dead moth is shown by the earwig professor to have died as a result of his proboscis having become weighed down with an unusual overload of packets of pollen, which got attached to it while the moth was visiting a flowering orchid. As the earwig well understands, by this process the orchid ensures its fertilisation and thus survival: the argument pursued by the bumble-bees and pronounced on by Sir Helix, is whether this case of overloading can be considered an "accidental" death. One bumble-bee feels that all is random and a matter of chance, one argues that nature acts purposefully (if unconsciously) to bring about such effects, but the snail magistrate, who speaks with

<sup>&</sup>lt;sup>26</sup> That Carroll should substitute oysters for the lesser breeds of shellfish in Gatty's tale is unsurprising. Walrus were believed to eat oysters, and of course people enjoyed them too: moreover, Michael Hancher and John Goldthwaite have both pointed out elaborate (but rather different) pathways by which Carroll might have derived from Tenniel's 1862 cartoon "Law and Lunacy: Or, a Glorious Oyster Season for the Lawyers" ideas of heartless gluttony and too-innocent oyster victims. See Hancher 15-17, and Goldthwaite, "Do You Admire the View" 58-61.

authority and has the narrator's approval, argues that the complexity and ingenuity of the orchid/moth relationship can only be due to a designer (God) at work in the world. In the biblical quotation used as an epigram for this tale Gatty, too, endorsed this lesson: "Be ye sure that the Lord he is God: it is he that hath made us, and not we ourselves" (Psalm 100.3).

Which is all well and good. But what strikes me about this tale is that Gatty should illustrate her point from a malfunction in the system, the death of the moth. Surely a happier plot could have been devised that demonstrated the complexity of the orchid, that "masterpiece of ingenious contrivance" for fertilisation (346, 352) in all its efficient glory. But Gatty, I think, becomes the victim of competing discourses: the story deploys scientific knowledge, proving to us that nature's system can be miraculously complex and brilliantly functional, despite some built-in vulnerability: but simultaneously undertakes a theodicy, an accounting for death and disaster, showing their insignificance in the grander schemes of God manifest in the natural world. The result - by what I have come to think of as the Gatty effect - is that precisely its honesty and scientific breadth of vision make her story vulnerable to an obvious counter-reading, in which God's lack of concern or justice for the individual moth instead becomes the centre of our anxiety as readers.<sup>27</sup> As Cosslett remarks, Gatty's parables "often seem to be getting out of control, as the morals she tries to attach to her material do not quite fit" ("Child's Place in Nature: Talking Animals in Victorian Children's Fiction" 478). This, I think, as in "Whereunto," is a quality of her writing to which Carroll's books often respond.

The link between the *Parables* and the *Alice* books therefore remains a lively one, making Gatty's tales essential reading for the *Alice* scholar. In preparing this paper I have found the *Parables* still readable, even (in places) enjoyable. Alan Rauch, who is enthusiastic about them and their importance as "a focused effort to use children's literature as a means of confronting one of the most serious issues in Victorian scientific culture" (137), goes so far as to call them "wonderful stories" (138). More temperately, F.J. Harvey Darton remarked in 1958 that Gatty's book had become "a classic of its kind, [of which] it can only be said that it fulfils the purpose of its title with the greatest sweetness and lucidity" – although he adds that "this is moral rather than tale: more parable than nature" (284). There is, however, considerable variation in the parables and both Rauch's and Darton's comments apply better to some tales than to others, for just as Gatty's willingness to value science goes along with willingness to confront Darwinism, her openness to new knowledge about nature goes along with conservative social ideas. It is typical of the difference between them that where Carroll mocks Isaac Watts' "little busy bee"

<sup>&</sup>lt;sup>27</sup> Another Tennyson quotation from *In Memoriam* might well have been applied to this tale:

Are God and Nature then at strife,

That Nature lends such evil dreams?

So careful of the type she seems,

So careless of the single life. (Section 55)

poem and grotesquely exaggerates the savagery of the Queen of Hearts, bees are used by Gatty to model the necessity of social inequality and the advantages of obedience to higher authorities – especially queens. Her tale about bees, "The Law of Authority and Obedience" (First Series, 1855), derives from nature a morality of plenty of respect and lots of subservience.

Yet my feeling in concluding this paper is that Gatty, in some ways so conservative, personally rendered so anxious by the threatening ideas of Darwin, may have dreamed - within the licensed world of the moralising fantasy for children - an evolved interconnectedness of human and nonhuman before Carroll's Alice did. Some of Gatty's tales are themselves dream-visions. In "Inferior Animals" (Series 3, 1861) a dreaming human narrator overhears a rook arguing to a rook parliament that human beings must have been in origin rooks - though now sadly degenerate. The tale shows a strong interest in the language of animals. Here, as in "Whereunto," there is a skilful parody of a certain kind of human discourse - in this case, evidently Darwin's - through its being taken up by animal voices.<sup>28</sup> In other tales, too, Gatty's world of nature is enormously talkative: there's another disputatious garden, this time full of vegetables, in her story "Gifts" - a parable of differing vocations or talents - while in "The Universal Language" those who hear the nightingale's song include both human characters and a kitchen garden full of native and "foreign" vegetables. So Gatty's tales, while the literary project signalled in her Preface remains firmly orthodox, by transplanting the conversation convention of the "governess book" right into the world of nature can come to imply much the same as Carroll's witty scenarios of parody and reversal come to imply. It is true that Gatty maintains the separation of human and non-human living characters: they never converse together as in the Alice books. But endowing the rest of the natural, living world with the power of speech - especially so much speech, and speech so wittily suggestive of human conversation - is also a way of configuring its continuity with the human world. Inadvertently, Gatty's tales bring the reader close to the intellectual position so boldly argued by Thomas Huxley in Edinburgh in January 1862.

<sup>28</sup> Gillian Beer describes Gatty in "Inferior Animals" as a skilled and sceptical parodist of Darwin's "syntax of conditionals" (Beer 140). In her attack on evolution, conducted through a long speech made by an old rook who argues that "man is neither more nor less than a degenerated brother of our own race" (Parables from Nature 223) Gatty is getting at both "the assumption of full explanation within the natural order, and also [mocking] [. . .] that vastly extended time-scale which makes everything possible" (Beer 141). Beer also comments that "Gatty goes on to satirise Darwin's claim of enormous numbers of unused facts behind The Origin and his acceptance of his friends' researches. So she performs a double pastiche — of Darwin's methods of argumentation and of the concealed anthropocentrism of much development theory [. . .]." (140). Beer thus finds Gatty a more subtle critic of Darwin than many another contemporary: my view (and Rauch's, and Cosslett's) of the Gatty who wrote the other tales seems somewhat at odds with Beer's high opinion.

So Gatty is Carroll's true ancestress. By giving an instructive voice to nature she too on occasion makes the human reader experience something of the same giddy sense of displacement that the Alices offer us. To Gatty, Nature is always actively offering us lessons: in "Knowledge not the Limit of Belief" a mere Bookworm defends our capacity to learn; in "Inferior Creatures" (Series 3, 1861) we become the object of another order of being's speculative theorising about evolutionary descent. Similarly, in Wonderland Alice is "ordered about by mice and rabbits" (46), questioned as to her identity by a caterpillar and about her intentions by a cat, and in Looking-Glass falls under the gaze of flowers. She hears about herself as others see her in the railway carriage, swaps the status of human child for that of nameless co-inhabitant of the wood with the fawn, and is denied the subjectivity of the dreamer and instead claimed to be a figment of somebody else's dream by the Tweedle twins. Even more outrageously, an egg, Humpty-Dumpty, dares to finds her face lacking in distinguishing characteristics, and she is pondered as a "fabulous monster" by Haigha and the Unicorn. The world through the Looking-Glass is especially liable to reverse at any moment Alice's expectation of being the traveller through, observer of, or reader of, nature, and to re-position her, disconcertingly, as the one who is being read.

As a result of all of which, both the *Alice* books and Gatty's *Parables* present difficulties for us now as readers. Our worldview has shifted: it is as hard now to ignore the materialist or Darwinist implications of these books "for children" as contemporary readers apparently found it easy to ignore them. The external evidence is that Carroll and Gatty believed in the divinely-ordained superiority of humanity to the rest of creation, for instance. But Gatty's tales come to intermittently and indirectly inscribe a rethinking of humanity's place in the natural world: Carroll more outrageously represents contemporary controversy directly, subjecting Alice to an immediate and symbolical (if jocular) fall down the rabbit hole into an underworld of an uncomfortable inferiority to reasoning and talking animals.

A photograph taken by Carroll of his friend Southey in 1857 (see Figure 4) provides a kind of emblematisation of the contemporary field of discourses about humanity's place in nature. The date of the photograph is well after the publication date of Robert Chambers's *The Vestiges of Creation* (1844), which had dared to enquire "In what way was the creation of animated beings effected?" (qtd. in Secord 105), and the careful posing of the figures appears to reflect on ideas about human evolution circulating at the time: the photograph shows Reginald Southey in the Christ Church Anatomical Museum, standing behind a human skeleton with his arm resting affectionately on its shoulder. They both face, but look past, the skeleton of a monkey or small ape which faces them but also looks past them, one of its bony hands touching that of the human skeleton: on a table nearby repose a gorilla skull

and a human skull. Carroll's biographer Morton Cohen<sup>29</sup> describes a man whose piety suggests this careful juxtapositioning of figures was undertaken to draw

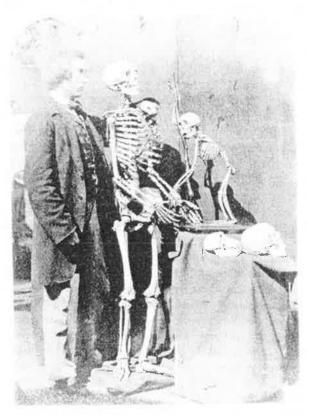


Figure 4. Reginald Southey and Skeletons. Today it is difficult to disentangle Victorian controversy about human evolution from Carroll's 1857 photograph of his friend.

attention to the gulf between the animal and the educated, civilised man, perhaps implying a joke about the obvious differences. There may also be a hint that religion offers a life beyond inevitable bodily death. But where Carroll, we surmise, planned a photograph where an affectionate image of an admired friend mocked and displaced an evolutionary theory, it is our dilemma today that it is impossible *not* to see the picture as about human evolution from animals. Certainly this is how Roger

<sup>&</sup>lt;sup>29</sup> Cohen discusses Carroll's reaction to Darwin and his ideas about evolution on pages 350-52 of his *Biography*.

Taylor, in the recent publication of the Princeton University's albums of Carroll's photographs, reads the picture: "The gesture of the monkey's hand on the forearm of the skeleton and that of Southey's arm resting on the shoulder of the human skeleton link the three figures in an evolutionary affinity. The gorilla and human skulls [...] arranged to show their exact profile, serve as indices of human development and mental capacity" (39). The photograph has thus become ambiguous, ultimately unreadable. It offers us a neat Victorian time-capsule, analogous in effect to the contradictory reading experiences that Margaret Gatty's speaking world of nature offers us through her *Parables*. It is a fitting reminder of the world of intellectual and religious expansion, controversy, and readjustment in which both she and Carroll worked.

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