

Revolutions in Botany: Nation, Gender and Education in the French Translation of Priscilla Wakefield's *Introduction to Botany* (1796)

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In 1801 a new botanical work appeared on French booksellers' shelves. Entitled the *Flore des jeunes personnes* (*Flora for Young People*), it swelled the ranks of both popular and more academic texts on the science of botany that were appearing in ever swifter succession on the francophone book markets towards the end of the eighteenth century.¹ But the *Flore des jeunes personnes* was no home-grown product. Rather, it was a translation by Octave Ségur (1778-1818) of the immensely popular *Introduction to Botany* (1796) by the British Quaker writer Priscilla Wakefield (1750-1832). Ségur's French rendering of Wakefield's work, like the original, set out in twenty-eight letters the guiding principles behind Linnaean botany, with eleven engraved plates at the back illustrating the twenty-four classes underpinning this system. Its appearance did not go unnoticed by the French critical press, and it was reviewed to some acclaim both in obviously scientific and more literary journals. The *Journal Général de la Littérature de France* (*General Gazette of Literature in France*) even bestowed on it the dubious accolade of being accessible to "the simplest of minds," given its relative brevity and avoidance of complex scientific terminology (Rev. of *Flore des jeunes personnes* 164). A year later the *Flore* had gone into a second edition and a third appeared in 1810.² Ségur's translation of Wakefield's work was not only taken up in French literary and scientific journals. It was also mentioned by the Genevan botanist Auguste de Candolle in the bibliographical supplement to his *Regni vegetabilis systema naturale* (1818-21).

But the popularity shared by the English and French editions of Wakefield's *Introduction to Botany* belies the fact that they were rather different works. While the *Flore des jeunes personnes* retained Wakefield's characteristic epistolary format, Ségur exploited the creative possibilities afforded by the activity of translation to reposition her text politically, scientifically and also with regard to gender. Moreover Ségur's translation was highly self-referential from the very outset, with the inclusion of a translator's preface and paratextual information in footnotes that ostentatiously demonstrated that we were reading a translation and that the French text was very much the product of his pen. Far from being an 'invisible' translator, he explicitly made his presence felt in the text in ways which, I would suggest, caused *his* voice to resound throughout the translation.³ Indeed, what I want to argue here is that the French translation was no longer solely Wakefield's text, and by offering a closer analysis of Ségur's *Flore des jeunes personnes*, I will examine how his translation subtly differed from Wakefield's original. Recent research in translation studies into the notion of 'voice' in translation has explored how the activity of translation can be considered a complex form of quotation, a re-enunciation of the source text and re-animation of it in ways that can be neutral but can also be interpretative, critical or dissociative (Hermans). I begin here by considering the translation as a virtual meeting point of two very different minds, Wakefield and Ségur being, as we shall see, from cultural and social backgrounds diametrically opposed – in itself a reflection of the range of people generating botanical writing in this period. Through a microtextual analysis of source and target text I then explore in turn the political,

gendered and scientific repositioning that characterises Ségur's translation of Wakefield's text, in order to understand how Ségur appropriated her work for his own ends.

Priscilla Wakefield, best known as a writer of improving and didactic works of non-fiction for children, produced seventeen books during her lifetime, principally moral tales, introductory works to natural history and fictional travelogues. Her career began in the 1790s when she was already over forty and her husband's business was beginning to founder. Financial need and legal costs arising from the unhappy marital circumstances of her sons compelled her to write for most of her remaining years, her last three works being penned by an amanuensis ("Mrs Priscilla Wakefield" 64). Writing was for her a way of making money, as much as it was a form of creativity. It also offered her brief respite and escape from some of the burdens of bringing up her numerous children and grandchildren, running the household and doing charity work to alleviate the plight of the poor. As she reflected in 1810, following the publication of her fictional travel work *Travels in Africa*, "The employment of writing is profitable, not only with a view to what it yields, but also as an amusement, affording considerable relief from the cares of life" (Mews MSS 284/1/21 106). Wakefield was not only a productive writer. She was also a voracious reader, as witnessed by her literary journals and diary. In 1807, for example, she worked her way through Jane Marcet's *Conversations on Chemistry* (1806) and Schiller's *Thirty Years War* (1800): other notes also refer to the Koran and Alexander von Humboldt's experiments on animal galvanism (which she presumably read in the 1799 French translation) (Mews MSS 284/1/1; 284/1/5). Wakefield could also speak French and translated from French and Latin. Intellectual curiosity encouraged her to start learning Italian in 1812 when she had turned 61, "a useless attempt at my age," she modestly noted (Mews MSS 284/2/19 16). Wakefield was therefore very much representative of the enlightened intellectualism that characterised a number of other Dissenting families such as the Wedgewoods, the Darwins and the Martineaus who supported women in making Enlightenment science accessible and inclusive (Hilton 110; Uglow 312-14).

The fact that Wakefield herself was a translator and had a reading knowledge of French immediately begs the question of how she responded to Ségur's translation of her work. What remains of her familial correspondence and private journals diaries is at best rather fragmentary: I have found no evidence of letters between Ségur and herself on the translation and also no comments elsewhere that indicate Wakefield's awareness of the existence of Ségur's *Flore des jeunes personnes* or of its wider reception in France. If Ségur did indeed produce the *Flore* without contacting Wakefield before, during or after completing his translation, that in itself is a telling indication of how little collaboration he sought with Wakefield, how readily he was prepared to appropriate her scholarship, and how intellectually 'unsociable' the male treatment of female scientific learning could be.

This stands in contrast to Wakefield's own approach to the circulation of scientific knowledge. A common theme running through her writing is the sociability of learning. Her frequent recourse to the epistolary format that characterised the *Introduction to Botany* or to educational conversation found in other works reflects her commitment to a mode of learning that centred on knowledge acquisition through observation, discussion and exchange. Her *Mental Improvement, or, The Beauties and Wonders of Nature and Art* (1794-97) was constructed around conversations between children and their parents that covered a diverse range of subjects, from whales to wool manufacture, sugar to slavery. *Domestic Recreation, or Dialogues Illustrative of Natural and Scientific Subjects* (1805) similarly features a conversation between

mother and daughter on topics covering rainbows, sea anemones and the workings of the human eye. All of these books were heavily underpinned by the notion that the workings of God were made manifest in the visible natural world, and that moral education and scientific observation were not at odds with each other at all, but rather complemented each other productively.⁴ The *Introduction to Botany* was followed almost twenty years later by another natural history written along the same lines, the *Introduction to the Natural History and Classification of Insects* (1816), which drew on the figure of Felicia (familiar to us from the *Introduction to Botany*), who again corresponded from "The Shrubbery" to Constance, instructing her in butterflies, beetles, moths and suchlike. Here too learning and companionship went hand in hand, for as Felicia commented: "What is a walk, without a companion? or a book, unless there is a friend to converse with on its contents?" (*An Introduction to the Natural History and Classification of Insects* 1).

Wakefield's introductory scientific work was 'revolutionary' to the extent that it directly appealed to a female audience, it considered women capable of understanding Linnaean botany and it set about teaching them its principles in some detail. Indeed, Wakefield's *Introduction to Botany* was considered one of the most important works to disseminate Linnaean botany to a chiefly female audience. The *Monthly Review*, in a 1796 critique of Wakefield's *Introduction*, succinctly described the difficulties bound up with producing any elementary work on botany which engaged meaningfully with the complexities of the Linnaean system:

The knowledge of Natural History in its various branches has deservedly become an object of attention in general education [. . .] but the subject is of immense extent; and, unless it be followed as it were professionally, there will always be a difficulty in determining *how much* of it should be taken. The Linnaean system, especially, is founded on such minute particulars, that it is scarcely possible to enter on it with advantage in parts; and all attempts to render it easy and familiar must speedily terminate either in a resolution to encounter it as a serious task in its full extent, or in a hopeless dereliction of the ground already gained. (Rev. of *An Introduction to Botany* 348 [original emphasis]).

In her *Introduction to Botany* Wakefield had successfully circumvented most of these problems, the *Monthly Review* observed, by neither overwhelming readers with a flood of fact nor oversimplifying Linnaean botanical theory:

Many attempts [. . .] have been made to familiarise this system [. . .]; and that before us is a respectable one. In the form of letters from a young lady to her sister, it goes through all the Linnaean classes and orders of vegetables, with such explanations and instances as are best calculated to aid the comprehension; and with occasional relations of particular facts, useful or amusing. The language is pure and perspicuous [. . .]. (348)

Moreover, the *Monthly Review* continued, when studied in parallel with "the actual exhibition of specimens" out in the gardens, lanes and fields, Wakefield's work made a valuable contribution to the pursuit of scientific botany. This, in essence, was the great achievement of Wakefield's *Introduction to Botany*: to condense the complexities of the Linnaean system into a work accessible by young women and their charges, while neatly sidestepping accusations of impropriety, by encouraging

women to classify plants but not think about them as changing, reproducing entities. The *Lady's Monthly Museum* was unstinting in its praise of Wakefield's "enchancing study of vegetable nature" and even accorded it a place in a pantheon of late eighteenth-century botanical literature alongside Martyn's *Letters on Botany*, William Withering's *A Botanical Arrangement of British Plants* (1787-92), James Sowerby's *English Botany* (1790) and William Mavor's *The Lady's and Gentleman's Botanical Pocket Book* (1800) ("The Old Woman's Botanical Library" 148). Some twenty years after the first publication of Wakefield's *Introduction to Botany*, the *Gentleman's Magazine* was still recommending it as a work that would valuably supplement the Welsh botanist Reverend William Bingley's *Practical Introduction to Botany* (1817) (Rev. of *A Practical Introduction to Botany* 54).

But her writings on women – notably her lengthy discursive essay *Reflections on the Present Condition of the Female Sex* (1798) – do not radically rethink women's role in society in general and in (scientific) education in particular. Rather, Wakefield was concerned to give women greater access to knowledge and to increase the scope of their learning. "The intellectual faculties of the female mind have too long been confined by narrow and ill-directed modes of education," she declared, considering this "a neglect of the mental powers which women really possess, but know not how to exercise" (52). Wakefield thus saw women hindered not by their intellectual shortcomings but by social constraints and a lack of challenging educational and occupational opportunities for their sex. Her understanding of women's education was practically all-inclusive: "Nature has imposed no invincible barrier to their acquisition and communication of languages, arithmetic, writing, drawing, geography, or any science which is proper for girls to learn" (52). Education remained, however, a phenomenon which Wakefield continued to connect not so much with intellectual self-improvement as with the acquisition of knowledge that could then be imparted to others. "There are many branches of science [. . .], in which women may employ their time and their talents, beneficially to themselves and to the community," Wakefield noted, "without destroying the peculiar characteristic of their sex, or exceeding the most exact limits of modesty and decorum" (8-9).

Octave Ségur, almost thirty years younger than Wakefield, was the son of the aristocrat Count Louis-Philippe de Ségur who was a diplomat and military man, but also a poet. Octave studied natural sciences at the *École polytechnique* in Paris and by the age of twenty-two had gained a position in civil administration, which he subsequently gave up to join the army. The year in which Ségur published his translation of Wakefield's *Introduction to Botany* marks the beginning of the decade in which other works authored and translated by him appeared. Shortly after the publication of *Flore des jeunes personnes*, he wrote a popular work on chemistry, the *Lettres élémentaires sur la chimie (Elementary Letters on Chemistry)* (1803), which undoubtedly modelled its title on Rousseau's botanical letters and drew its inspiration from translating Wakefield. Ségur also clearly inherited his father's interest in literature, producing a French edition of T. J. Horsley Curties's Gothic historical piece *Ethelwina* (1807).⁵ But in the years that followed, domestic troubles plagued Ségur's life and severely affected his mental health, such that in 1815 he threw himself into the Seine and drowned (Michaud 82: 64-65).

The preface to Ségur's translation of *Ethelwina* is instructive in understanding his own motivations for writing, translating and publishing. Ségur's decision to translate *Ethelwina* might seem strange, given his strongly scientific background. But the vogue for reading and translating English novels in France at this time made it a potentially successful translation project. Ségur's preface betrays a nervousness at

translating such obviously 'frivolous' literature which pandered to common taste, but it also stresses his conviction that it had an important role to play in an age in which the onward march of reason had stamped out any sparks of imaginative creativity (1: i). There were also moral (and implicitly political) justifications for choosing this work. Set in the age of Edward III, Ségur argues that *Ethelwina* derived its authenticity from the fact that it did not represent the "fickleness, religious neglect, impiety even, that characterise the Europeans of the eighteenth century" (v).⁶ The past therefore offered him refuge from the realities of the post-revolutionary French political and cultural worlds. Where for Wakefield, then, the end of the Enlightenment had brought progress, greater access to knowledge and (limited) empowerment for women, for the newly reinvented 'citoyen Ségur' it signified the destruction of the old order and the descent into a modern age of artifice and irreligiosity, both of which awakened in him a palpable nostalgia for a pre-revolutionary France.⁷

The *Lettres élémentaires sur la chimie* cast Ségur in quite a different light. The preface forcefully conveys Ségur's confidence of his own position as an educated figure within a French national tradition of chemical research: the names of eminent French chemists – Antoine Lavoisier, Jean Antoine Chaptal and Antoine François, comte de Fourcroy – pepper the introductory pages. Aimed at a readership "of all ages and of both sexes" (like Wakefield's work before it), Ségur's *Lettres élémentaires* claims to enable readers to better understand the natural world and open up new paths of enquiry to them (vi). But the basic organisational device of epistolarity which it shares with Rousseau's and Wakefield's introductory botanical works operates rather differently. Ségur structures his introductory work on chemistry as a correspondence between two men "Octave" and "Auguste" in the opening letter, thus automatically sidelining his female readers (an interesting decision given that chemistry at the turn of the century was still very much a scientific domain accessible by women, as works such as Jane Marcet's *Conversations on Chemistry* (1806) demonstrate). This half-dialogue between these two male friends promptly shifts in the second and following letters to the more generalised "Octave à ses amis" ("Octave to his friends") (2). The individual, intimate nature of the exchange which Rousseau and Wakefield had rhetorically constructed is therefore weakened in Ségur's text as it becomes more of a lecture by the narrator to a general group of readers. It is surely also no coincidence that Ségur names his narrator-instructor after himself. While Wakefield must have projected herself into the role of "Felicia" as she composed her *Introduction to Botany*, the link between herself and the narrator is only implicit; Ségur's *Lettres élémentaires sur la chimie* makes this much more explicit in a work where the narrator is concerned less to educate by expository description and encourage 'sociable' learning than by direct instruction. Nor does Ségur shy away from using chemical terminology – was the term "oxygen" any more technical or stylistically barbarous than "syllogism," he enquired? – and he has no qualms about liberally employing a footnote apparatus that reinforces the text's more scholarly, rather than "introductory" nature (x).

Wakefield and Ségur therefore embodied radically different approaches to the dynamics of the age, to the goals of popular science and to the aims of authorship. How were these to be reconciled in translation? The translator's six-page preface with which the *Flore des jeunes personnes* opens – and which, through its larger font size dwarfs the three-page translation of Wakefield's own preface – offers us a useful starting point. Where Wakefield sets out brightly and firmly the aims of the *Introduction to Botany*, namely "to cultivate a taste in young persons for the study of nature" (v), Ségur begins his translation by reflecting that while man's achievements

are sometimes admirable, their price in gold, toil and blood is extortionately high and history has always proven them short-lived (1). Ségur's lament on the shortcomings of human civilisation gains momentum as his narrative of decline accelerates into a violent sequence of destructive, annihilatory images:

Les Palais les plus magnifiques des Rois les plus puissans, s'anéantissent ainsi que leurs Maîtres; les Temples s'écroulent, les Superstitions qui les avoient fondés s'oublent; les Cités se dépeuplent et se changent en ruines; les Empires même disparaissent; tout ce que produisent les Mortels est mortel comme eux (1)

The most magnificent palaces of the most powerful kings are destroyed like their masters; the temples collapse, the superstitions on which they were founded are forgotten; the cities empty of people and fall into ruin; whole empires even disappear; all that mortals produce is mortal like them (author's translation)

The origin of Ségur's apocalyptic vision is clear: the destructive power of the French Revolution throbs unremittingly through this passage. It can only be countered by one force – Nature:

et pour confondre la vanité, la Nature, constante et tranquille, leur montre, dans les plus légères de ses Productions, le cachet de l'immortalité. [. . .] Les plus illustres Dynasties se détruisent par les tempêtes politiques; et les Familles éternelles des Plantes et des Fleurs ne connoissent point de révolution [. . .] (1-3)

and to thwart this vanity, Nature, calm and constant, reveals to them in the most delicate of its productions the character of immortality [. . .] The most illustrious dynasties destroy themselves in political storms; and the eternal families of plants and flowers do not know revolution. (author's translation)

Nature, man's superior, had much to teach him about stability, order and productiveness. And plants invariably "knew their place", maintaining the position assigned to them according to their individual qualities (3).⁸ Ségur's defence of the old hierarchies was unmistakable.

The plant world not only provided a model for political order. It was also a "pure and inexhaustible" source of magnificent images on which poets and moralists alike could draw to make their own work less sober, more subtle and more sensitive (4). These visual possibilities were what made botany accessible to children, Ségur proposed, and were the science presented in a simpler and more digestible form than that used by the learned figures currently studying it, it could rank among the most important pastimes for children. Indeed, there was enough material in the Book of Nature to make their young people more sensitive to the world around them and more aware of their place in it (4). Wakefield would have agreed wholeheartedly with this last comment. Thus as Ségur drew his preface to a close, it regained something of the calmness and the religious conviction that characterised Wakefield's writing and engagement with botany.

Ségur's opening political diatribe could not have been further removed from Wakefield's apolitical stance. Overtly political comments rarely enter her private writings, let alone her public ones. In a diary entry of 18th November 1799, she quietly notes "Buonaparte has effected a revolution in France" (Mews MSS 284/2/21 58),

remarking more judgementally some fifteen years later in a letter to her grandson Felix: "Buonaparte is great but not good, that is, he has superior talents, but is void of virtue and religion, he seems to forget that men must give an account of their actions in another life" (Mews MSS 284/1/3). Thus Ségur's prefacing of the translation with a series of comments that clearly pointed back to the revolution of ten years earlier gave the *Flore* a distinctly outspoken political voice that was a very far cry either from the tone of the *Introduction to Botany* or indeed the political persuasions of its author.

Ségur's coupling of the botanical with the political is striking, but not particularly unusual. Already by the 1790s, new ways of thinking about the plant world had in some circles become aligned with revolutionary Jacobin culture that threatened established order (Bewell 132-39). From Erasmus Darwin's *Loves of the Plants* (1789), published the same year as revolution broke out in France, to Wollstonecraft's *Vindication of the Rights of Woman* (1792), ideas about sexuality and freedom were being radically questioned, if not rewritten. Just as the Flower Power movement of the 1960s reworked the symbol of the flower to freight it with a host of moral, social and political meanings, so the same had occurred some two hundred years earlier. Cultivated flowers, known as 'luxuriants', which were beautiful but sterile, pointed to the pernicious culture of luxury as much as to the ills of continental horticulture which largely generated them. They stood in stark contrast to home-grown and native wild flowers which represented simplicity, purity and health. Meanwhile Rousseau's call to a return to a state of nature similarly cast the natural world as one of social and political harmony, democracy and equality (Bewell 134).

Ségur's comments on how he came to consider translating the *Introduction to Botany* are revealing of his own position with regard to the authorship of the *Flore des jeunes personnes*. By recasting the very title of the work away from Wakefield's stiff and formal "Introduction" towards something that directly addressed a target audience of "jeunes personnes", Ségur's translation explicitly seeks to gain popularity by appealing to a young readership. But as his preface clearly reveals, Ségur's concern to bring botany to the attention of the young people of France is far from wholly disinterested:

Comme je m'occupois de cette idée, j'entendis parler d'un Recueil de Lettres sur la Botanique, composées en Angleterre par Priscilla Wakefield. Je le parcourus, et il me parut, par sa simplicité et sa clarté, très-propre à remplir le but que je me proposois. (5)

As I was occupied with this idea, I heard talk of a Collection of Letters on Botany, composed in England by Priscilla Wakefield. I glanced through it and it seemed to me that its simplicity and clarity rendered it most suitable in fulfilling the task that I had set myself. (author's translation)

Those final words "le but que je me proposois" are telling. Wakefield's text already fulfilled the aims that he had had in mind himself, namely to publish an elementary work on botany. But to make a translation of her text in which he was an 'invisible' translator would fail to grant him the prominence – intellectually, scientifically, pedagogically – that he craved. Wakefield's work was therefore a useful basis for him on which to construct his own persona as a scientist and scientific educator – and through which his own (male) voice would speak.

Wakefield set out her own 'gender agenda' quite clearly in the preface to her *Introduction to Botany*. Natural history, she had argued, possessed many advantages:

it contributes to health of body and cheerfulness of disposition, by presenting an inducement to take air and exercise; it is adapted to the simplest capacity, and the objects of its investigation offer themselves without experience or difficulty, which renders them attainable to every rank in life. (vi)

But it also had its shortcomings for the inquiring female mind:

but with all these allurements, till of late years, it has been confined to the circle of the learned, which may be attributed to those books that treated of it, being principally written in Latin; a difficulty that deterred many, particularly the female sex, from attempting to obtain the knowledge of a science, thus defended, as it were, from their approach. (vi)

Not for nothing, then, are Latin terms simply footnoted in her text. In the nineteenth letter, for example, which focused on the class of tetrandria – the class of plants with four stamens of the same length – she mentions motherwort, ground ivy and catmint, self-heal, thyme and basil. The Latin terms for all of these can be found in footnotes at the bottom of the page, should the reader have been interested (123). So in Wakefield's text Latin is, quite literally, pushed to the margins. In Ségur's translation, by contrast, the terms are all absorbed into the main text itself. Since Wakefield draws on so many examples, Ségur's text is as a result overloaded with Latin terminology in a way in which the original is not:

L'agripaune (leonorus), le lierre terrestre (glechoma), la menthe (mentha) la germandrée (tencrium), la bugle (ajuga), la bétoine (betonica), l'ortie blanche (lamium), la chatadie (nepeta), la ballote (ballota), le marrube (marrubium) ont aussi un calice pentaphylle; mais le thym (thymus), la brunelle (brunella), l'origan (origanum), le chinopode (chinopodium), la mélisse des bois (melitis) et la mélisse (melissa) ont un calice à deux lèvres. (127) (original italics)

This passage therefore hinders reading because the reader is continually obliged to jump between French and Latin terminology – unlike the same passage in Wakefield's text, which reads much more smoothly since it is not packed so full with botanical names in two languages:

A cup, divided into five clefts, is a circumstance in which the following plants of this order generally agree: Motherwort, Ground Ivy, Mint, Germander, Bugle, Betony, Dead Nettle, Catmint, Henbit, Horehound; but Thyme, Self-heal, Marjoram, Basil, Balm-leaf, and Calamint, have their calyxes cleft into two parts. (123-24)

But Ségur's inclusion of Latin terminology is not only disturbing to the reader because it slows his readers down or presents them with a surfeit of information to process. On one occasion he would surely have left his French female audience acutely embarrassed, where Wakefield's lady readers would have had to scour the small print at the foot of the page to be discountenanced to quite the same degree. In the final letter of the collection which examined various species of fungi, French readers were confronted directly with the following in the main text:

La morille (phallus) est connue par sa surface inférieure lisse, et non poreuse. La surface supérieure est comme un réseau. Celle qui est bonne à manger est portée sur une tige nue et ridée: sa tête ou son chapeau est ovale et remplie de petites cellules. (198-99) (original italics)

In essence, this is a faithful translation of Wakefield's description of this plant:

The Morell is known by a smooth surface underneath, and a kind of network on the upper part. That which is eaten has a naked, wrinkled pillar, and a hat that is egg-shaped and full of cells. (187)

While Wakefield also referred to the term "phallus" in her footnotes, the English reader is not directly confronted with the similarity between this plant's structure and male genitalia. By juxtaposing the French and Latin terms in the main text, Ségur's translation makes this connection very explicit. A French woman reading this letter out loud to her charges or (female) companions would have had to be quick-witted enough to pass over the Latin term and plough boldly on. The more curious British lady reader might well have let her eye stray to the bottom of the page in Wakefield's text and discovered the same term. But, given the realm of possibilities that paratext offers to be considered both spatially and thematically peripheral, she could have left her discovery modestly un-commented.

Thus Wakefield's intention to write a text that could be read easily by a demure female audience was confounded by Ségur's realignment of her text towards a (male) readership. He clearly considered that he was writing and translating for an audience already initiated into the language of professional science – which still had Latin as a *lingua franca* at the time. He also failed disastrously to reflect on how (in)appropriate his piece would be for young ladies. It is interesting to note that where in the English version, Wakefield has Felicia comment "I am impatient to make a beginning, but am full of the number of hard words at the entrance" (18), Ségur omits the word "hard" in French so that the translation simply reads "Je ne veux point m'effrayer par la multitude de mots nombreux qu'il faut retenir: c'est une difficulté dont la persévérance triomphera" ("I do not want to be frightened by the many and numerous words that have to be committed to memory: it is a difficulty over which perseverance shall triumph"; author's translation) (12). He therefore shows little understanding of the problems that the very language of science could present to his amateur (female) readers: indeed, it almost seems as if women have no real place at all in Ségur's thinking about how and for whom the French translation should be written.

Ségur's reorientation of the *Flore des jeunes personnes* to emphasise its scientific nature went beyond the deployment of Latin in the main text, though. It served his purpose of restating his claim both to be the figure underpinning its entry onto the French market and a male scientist (*polytechnique*-educated, he stressed on the title page) who was intellectually superior to the *Flore's* female author. Ségur added information which both supplemented and corrected Wakefield's narrative. What was striking about deadly nightshade, one of the key plants in the poisonous *Luridae* family, was that it had a wheel-shaped corolla and stamens with oblong lips, Wakefield had observed (79). Ségur disagreed. What was actually an essential feature of deadly nightshade, he argued, was that each anther was perforated with two holes through which the pollen escaped – a point he made briefly in a footnote (79). The addition of this information not only points to a potential difference in educational

aims but also implicitly asks whether an amateur botanist could be expected to see such minute details and whether these were important facts they should know. More urgently, it queries how Ségur characterised the audience of the *Flore*. Would a remark about how pollen escaped not encourage in the female reader's mind those titillating thoughts about plant reproduction which the Reverend Richard Polwhele had satirised in his polemical poem *The Unsex'd Females* (1798)? Certainly Ségur's additional footnote gestures towards the differences between what men and women could engage with in their botanical studies, and further underlines Wakefield's concern with the structure of the plant in stasis, while Ségur placed greater emphasis on the dynamics of pollination and reproduction.

Ségur's additions were sometimes more obtrusive. He fiercely interrupted Wakefield's discussion of the "Vallisneria of Italy" (*Vallisneria spiralis*) in her section on aquatic plants that were polyandric (with numerous stamens), to correct the implicit suggestion that the *Vallisneria* belonged to this class (122-23). Rather, he remarked in a footnote covering a good three quarters of a page that this plant was diandric (i.e. had two stamens). He then went on to discuss in some detail how the single white flowers grow up to the surface and, if pollinated, are then curled back in a spiral fashion under the surface of the water, as the fruit begins to grow. Thus Ségur exploited the implicit multivocality inherent in translation to demonstrate his superior knowledge by both amending and supplementing Wakefield's text. His critical attitude to the source text both frames and invades the translation, in which he functions as more than purely the 'animator' of Wakefield's English original. Here he becomes a very real, dominant, presence in the text which itself becomes a space in which knowledge is constructed and contested.

Ségur's translation was concerned with the construction of other identities, not just his own. In this final section, I will explore Ségur's engagement with issues of national identity and science. He adopted a rather dissociative tone when it came to the relative importance of Linnaeus in the establishment of a plant taxonomy, subtly reinstating his compatriot Joseph Pitton de Tournefort alongside Linnaeus on a number of occasions, and thus reminding the French reader of Tournefort's achievements. Linnaeus is principally considered to have given botany a new impetus by organising the plant world according to the organs of reproduction and by introducing a binomial system of classification, genus and species – each characterised by one single word. Tournefort, working approximately fifty years earlier, had also made a distinction between genus and species (although the organisation of his *Insitutiones Rei Herbariae* (1700) owed much to the structure of herbals, starting with smaller plants, moving on to shrubs, bushes and then trees) – but organised his taxonomy around the structure of the corolla.

Wakefield's work was unashamedly Linnaean in outlook. As she enthuses in her discussion of eminent naturalists:

Tournefort is a name that was highly distinguished on this list, before the time of Linnæus, whose superior genius has raised him above all his predecessors: his system is now universally adopted. (42)

Whereas in the French translation we read:

Tournefort est un de ceux qui eurent d'abord beaucoup de réputation jusqu'à ce que Linné eût surpassé, par son génie, tous les prédécesseurs et ses

contemporains botanistes; son système est presque universellement adopté. (39)

Tournefort is one of those who acquired great distinction initially, until Linnaeus surpassed all his predecessors and contemporary botanists by his genius; his system is now almost universally adopted. (author's translation)

The addition of the word "presque" ("almost") is subtle, but it is important. It gives a slight tarnish to the brilliance of Linnaeus's genius that had shone out of Wakefield's text. And Ségur goes one step further by adding in a footnote to this line that Tournefort's system was actually easier and more accessible for beginners than Linnaeus's nomenclature.

Wakefield's emphasis on the universal acceptance of Linnaeus's system (a point which she repeats again a couple of pages later, where she argues that it is not necessary to confound the reader's memory with any other) and the exemplary nature of his system is translated with a little less enthusiasm by Ségur. As Wakefield comments:

Linnaeus, dissatisfied with every system invented before his time, undertook to form a new one, upon a plan approaching nearer to perfection, and depending on parts less liable to variation. (46)

Ségur makes of this:

Linné, peu satisfait de tous les systèmes qui existoient avant lui, résolut d'en donner un nouveau au règne végétal, qui se rapprochât plus de la nature et qui eût plus d'ensemble et d'harmonie. (43)

Linnaeus, scarcely satisfied with all the systems which existed before his time, resolved to give a new one to the plant world, which was closer to nature and which had greater unity and harmony. (author's translation)

The translation does not, at first glance, vary wildly from the original. But I think it is essential that one key word is missing, namely "perfection." Ségur, we must conclude, could not quite bring himself to accept the superiority of Linnaeus over his French compatriot Tournefort. Thus the translation not only demonstrates the extent to which there was a certain jockeying for position between scientists of the time but also that, for some at least, scientific achievement could not be divorced from issues of national identity. It is also interesting that Wakefield's "system" becomes "règne végétal" with all its associations of royalty and kingship, and that Ségur adds the notions of "ensemble" and "harmonie" that draw us back to the sense of order that Ségur was convinced that the *ancien régime* had embodied.

The French translation of the *Introduction to Botany* therefore constituted the meeting of two very different minds: that of Wakefield, a middle-aged devout Quaker woman, largely self-taught and a great advocate of 'sociable' learning, and that of a young *polytechnique*-educated aristocrat, keen to vaunt his knowledge, who saw education principally as instruction. These radically different backgrounds, and the authors' divergent approaches to scientific education, gender and politics, meant that the notion of 'revolution' was articulated in the *Flore des jeunes personnes* in a variety of different ways. The English source text itself was quietly revolutionary in its determination to facilitate women's access to science through sisterly modes of learning that made the transmission of botanical knowledge a sociable undertaking. Its

direct appeal to a female audience through the quasi-intimate formal device of epistolarity, its challenge to women to apply themselves to understanding the intricacies of the Linnaean system and its quiet assurance that all this was within their intellectual grasp made it an important work of its time. Ségur's input into the translation was, in a number of different ways, rather less revolutionary. He certainly did not seem keen to embrace post-Revolutionary culture and society, recoiling at the violence, terror and bloodshed out of which it was born. Indeed, he appears to have had some difficulty in locating Wakefield's text within the newly established political, cultural and scientific systems of 1790s France. The plant world on which Wakefield had focused in the *Introduction to Botany* was essentially 'English' in its concentration on native British plants and essentially (if subtly) had a patriotic slant – not unlike William Withering's work which likewise presented the science of botany "in an English dress," specifically oriented towards British women readers (George, *Botany, Sexuality and Women's Writing* 87). Ségur's patriotism was more overt, and, in its nostalgia, implicitly aligned his translation within a political system whose passing he mourned and whose restoration he appeared to seek. For him, botany acquired an idealised, consolatory power as he redefined it to represent a world framed by stability, harmony and order: the world, as he perceived it, of the *ancien régime*. Moreover where Wakefield's work was essentially a descriptive flora, Ségur's translation focused on more complex and – with their sexual implications – more dangerous issues of pollination and reproduction rather than the relatively pedestrian and anodyne activities of description and classification.

The text itself, then, underwent its own turn – its own 'revolution' – in translation. It shifted from being subtly patriotic to highly politicised; from explicitly promoting women's scientific education to only including them implicitly; from being forward-thinking to essentially rather conservative; from being largely free of national concerns to lauding the French contribution to the development of botanical science. Self-referentiality, as we have seen, was an essential characteristic of Ségur's translation: a characteristic which, on occasions, foregrounded his own political and national values and judgements above those of the source text's author. In analysing how Wakefield's *Introduction to Botany* fared in French translation, I have shown how women's botanical writings circulated beyond their home country, allowing them to make their mark in European scientific circles. But I have also pointed up the potential vulnerability of their work in translation: an activity which, paradoxically, both promoted internationally and yet at the same time sidelined their very achievements.

Notes

1. Some thirty years earlier, Rousseau's immensely popular *Lettres élémentaires sur la botanique* (*Elementary Letters on Botany*) (1771-74) had been among the first French-language books to make botany accessible to a wider public; subsequent scholarly and more popularly oriented works included Jean-Baptiste Lamarck's *Flore française* (*French Flora*) (1778), Jean-François Durande's *Notions élémentaires de botanique* (*Elementary Notions of Botany*) (1781) and Louis-Claude Richard's *Dictionnaire élémentaire de botanique* (*Elementary Dictionary of Botany*) (1798).

2. For a review of the second edition, deemed "a true present to offer young people," see Rev. of *Flore des jeunes personnes* 330.

3. On the translator's (in)visibility in the target text, see Venuti.

4. For further discussion of the relationship between science and religion in elementary botanical works, see Gates and Shteir (11).

5. Ségur is also considered to have contributed to the translation of Maria Edgeworth's *Belinda*, published in Paris in 1802, although the translators of this work are given as "L.S." and "F.S."

6. "La véritable invraisemblance seroit de donner à des Anglais du temps d'Edouard III, cet esprit de légèreté, d'insouciance religieuse, d'impiété même, qui caractérisent les Européens du dix-huitième siècle".

7. "Traduction du citoyen OCTAVE SÉGUR, fils" ("Translation by citizen OCTAVE SÉGUR, son") heads the list of his works (including the *Flore des jeunes personnes*) advertised by his father Louis-Philippe de Ségur at the back of the latter's *Contes, fables, chansons et vers* (258).

8. "des Plantes et des Fleurs [. . .] gardent invariablement les places que leur assignent leurs différentes qualités" ("plants and flowers [. . .] invariably retain the place assigned to them by their different qualities"; author's translation).

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