THEORIST OF THE SCIENCE AND SENSIBILITY OF LANDSCAPE

CLAUDE REICHLER

I do not know if in all the world there is a more beautiful prospect than the one this terrace affords. But how to describe it to YOUR MAJESTY! ... What can I say, after all, about the effect the extremity of this magical Lake produces in the middle of the picture? How can I express what the eye ceaselessly, greedily seeks there, never able to decide what it sees?¹

Seeing and showing was the project with which Jean-André Deluc occupied himself upon his arrival in Lausanne at the end of the month of September 1774. He went there to wander in the Alps and record his observations. His program was harder to accomplish than might be thought. What should and can one see? The human eye is a limited instrument: light and moisture produce magical effects in the mountains that sometimes can confuse the mind. And how describe the scenes to others? Language is an even more limited and misleading tool than sight. Nor is painting any less illusory. Each medium invents its own devices and constructs its rationalizing frameworks, whereas what the traveler should do is only feel, appreciating the world through his sensibility. Deluc wrote a whole book on this subject.

1. DELUC AND TRAVEL WRITING

In 1778, the publishing house of De Tune in The Hague produced Deluc's Lettres physiques et morales, sur les montagnes et sur l'histoire de la terre et de l'homme adressées à la reine de la Grande Bretagne, which it later reissued under the title, Lettres sur quelques parties de la Suisse et sur le climat d'Hières, adressées à la reine de la Grande Bretagne. The success of the work may be judged by its appearance also

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in German in 1778 and its enlargement, in five volumes and two editions, in Paris in 1779-80, under its original title, which also had a German translation. The first edition of 1778 is the basis of the present article.²

The Lettres phyiques et morales of 1778 is a travel narrative presented in fourteen letters addressed to Queen Charlotte. They were written at irregular intervals between 30 September 1774 and 10 April 1775 from Lausanne (four letters), Geneva (one), and Hyères and Montpellier (nine). After their autumn excursion in 1774, Deluc and his traveling companion spent the winter in the south of France, hence the datelines of the last nine letters. But the work is principally an account of travel through Switzerland, a popular theme during the last quarter of the eighteenth century.

Travel literature is little constrained by rules and conventions. As a result, it is capable of containing a wide variety of content and writing styles. Its flexibility and openness are not so great, however, that it cannot be distinguished from other genres.³ Travel narrative always involves three functions, which may be called *testimonial*, *epistemic*, and *aesthetic*. The first of these has to do with the *I* who travels and who relates the incidents of the journey. The second concerns the difference between what the traveler knew at the beginning of the journey and what he knows at its end. Finally, the aesthetic function relates to the manner and style of writing (the poetics of the text) and to the pleasure, and even delight, evoked by reports of high-minded adventure. The delight appeals to the senses, the emotions and the imagination.

During most of the eighteenth century, the epistemic function dominated travel writing, as in the accounts of voyages of exploration to the Orient or of circumnavigations of the globe (Anson, Cook, Bougainville, etc.). Naturalists of the period also frequently wrote travel literature. In the linearity of its structure, travel narrative easily allows the translation of the empiricism of natural history into literary form. Travel writing thus develops readily around the process of observing and the intellectual syntheses that emerge from it. It reproduces the mental as well as the geographical route followed, the hypotheses formulated, the facts and the objects collected, and the history of discovery. This last feature is its

¹ LPm, 5.

² Cf. Claude Reichler, *La découverte des Alpes et la question du paysage* (Geneva: Georg, 2002), for earlier versions of ideas about Deluc's book pursued here.

³ Claude Reichler, "Pourquoi les pigeons voyagent? Remarques sur les fonctions du récit de voyage," *Versants, 50* (2005), 11–36.

particular merit in comparison to scientific treatises and memoirs, for new knowledge revealed progressively, in the manner of its acquisition, is quickly comprehended. To take an example close to Deluc: Horace-Bénédict de Saussure chose to present his own scientific *oeuvre* in this form in his *Voyages dans les Alpes* (1779-96), which collapses several different expeditions into a single narrative, structuring scientific experience so as to serve didactic goals. This particular form of scientific writing disappeared gradually after the publication of its last *chefd'oeuvre*, the travels of Alexander von Humboldt.⁴

During the last third of the eighteenth century, the aesthetic function gained dominance in travel writing including the accounts of scientific travelers. The success of aesthetic categories such as the sublime or the picturesque, experienced on the sea shore or in the mountains, along with the new culture of viewing originating in the English practice of landscape gardening, and the fashion for sensibility running through enlightenment Europe, all emphasized, and perhaps to some extent constructed, the pleasure felt in the contemplation of landscape.5 The epistemic and the aesthetic functions maintained a close relationship during the long transitional period between the Enlightenment and Romanticism, so that landscape painters and travel writers continued to give considerable space to scientific considerations. Natural philosophers for their part paid attention to the beauty of nature and its pleasures. Narratives of travel in the Alps constitute a testing ground for the convergence of the epistemic and aesthetic, of the scientific and the artistic.

LANDSCAPE: A COMPLEX OBJECT

The particular circumstances of Deluc's journey and the epistolary form obliged him to give real substance and soul to the I addressing itself to Queen Charlotte. Hence the testimonial function is exercised more, and the epistemic less, than in the later multi-volume versions of the

Lettres.⁶ In 1778, Deluc wrote more as a man of letters than as a man of science. That does not mean that science is not conspicuous in the first version. The history of mountains and glaciers, the formation of fog, the temperature of the air, the refraction of light, the creation of rainbows, and the functioning of the human eye frequently figure, and are explained by reference to Deluc's own work. Nor does Deluc fail to inform us that the ultimate purpose of his travels is to collect information relevant to his developing theory of the earth.

On the other hand, Deluc spent much time on what might now be called ethnology and anthropology, the "moral" part of the moral and physical letters. He described with care the alpine communities he encountered, village life, family customs, and the organization of agriculture. His judgments usually were conservative; he praised the *allmend* (traditional communal pasturing) practiced in the Bernese Oberland, and criticized the recent establishment of manufacturing in the mountains of Neuchâtel. He extolled the simplicity of mountain folk and villagers opposed to the sophistication of the inhabitants of preindustrial urban societies. This idealism was more moderate and practical than that of Rousseau, who is cited in the *Lettres*, but may well have been inspired by him.

Both these aspects of the *Lettres*—attention to natural phenomena and the human condition, and, via descriptions of natural scenery and village life, to their interaction—suggest that Deluc did not abandon his position of naturalist in writing his travelogue. Rather, he directed his attention to a new branch of natural history, which might be called landscape theory. In his narrative, Deluc deploys a number of extensive landscape descriptions as a means of presenting to the gaze of his royal reader both the places he has visited and their natural and human characteristics. These descriptions are in the sentimental style fashionable in both England and France at the time. The first letter opens with a word picture of the landscape of Lake Geneva, which functions as the starting point both of the journey and the book (Fig. 3.1). Letters I, II, VI, VII, X, XIII and XIV each contains one lengthy description and sometimes two, which, taken together, make a significant contribution to the fashion for alpine landscapes. A number of historical factors explain this interest in all things

⁴ A. von Humboldt, *Relation historique du voyage aux régions équinoxiales du nouveau continent, 1799–1804* (3 vols., Paris: various publishers, 1814–25). See chapter 10 (Home).

⁵ The expression "culture of viewing" comes from Michel Conan's preface to the French translation of William Gilpin, *Three essays on picturesque beauty* [1792] (Paris: Editions du Moniteur, 1981).

⁶ J.L. Heilbron, "Citoyen de Genève and philosopher to the Queen of England," *Archives des sciences*, 58 (2005), 84–7; Martin J.S. Rudwick, *Bursting the limits of time: The reconstruction of geohistory in the age of revolution* (Chicago: University of Chicago Press, 2005).

alpine: questions about the formation of mountains, the tradition of the *grand tour*, and the sea change in aesthetic taste that elevated feeling over reason and the dynamic over the well-ordered. Landscape enabled integration of all these factors. To observe and to understand landscape implies a grasp of the natural environment and an understanding of the human communities that have shaped it.

To bring home these perceptions and connections, Deluc required a detector. He invented a most sensitive instrument for the purpose: Mlle S*. On the European journeys he undertook between 1774 and 1778 under the patronage of King George III, he was accompanied occasionally by Elizabeth Schwellenberg, one of the Queen's ladies-in-waiting.⁷



3.1 – Lake of Lausanne above Paudex. William Beattie, *Switzerland illustrated in a series of views taken expressly for this work by W.H. Barlett.* London: Virtue, 1836. Courtesy of the Bibliothèque cantonale et universitaire, Lausanne.

She was with him in Switzerland, which she visited for her health. Making the best of necessity, Deluc treated Mlle S* as the barometer of the sentiments one should feel on viewing dramatic landscapes for the first time. Thus Deluc, the maker of scientific tools, invented a human instrument for observing the double approach, scientific and moral, to landscape. Mlle S* functions as a sort of mercury that registers the pressure of impressions and the heat of emotions. She is both the object and the means of experiment, like Locke's child, Condillac's statue, or Diderot's blind man. Whether Deluc is presenting a series of observations made in reality during the journey or a thought experiment for the edification of the Queen (and readers of his book) scarcely matters. Mlle S* is the means by which a complex phenomenon can be understood (in this she takes on an epistemic function) and by which the pertinence of Deluc's landscape observations and the results he extracts for his theory can be justified (testimonial and aesthetic functions).

READINGS OF MLLE S*

Surprise, amazement, admiration, emotional shock are Mlle S* responses to dramatic landscape. Here we find her at Sion: "There is no change of scenery in the theatre that so strikes us as Mad. S was struck on arriving on the summit." Again, leaving Bern: "The moment we arrived above [the hill], the amphitheatre of the Mountains was revealed in its entirety. Mad. S was so struck by it, that she immediately ordered the carriage to stop." Before the spectacle of the rainbow formed at the base of the Staubbach waterfall: "I cannot undertake to express Mad. S's amazement to Y[our] M[ajesty]." On the Grindelwald glacier: "One of those crevasses, which suddenly appeared to us on leaving a wood that we had crossed to reach the Glacier, so struck Mlle. S., that she was transfixed and struck dumb." On the Marchairuz Pass, emerging above a sea of clouds: "We were gripped by something great, something extraordinary, amazing, in a word, something from another world."

⁷ "Schwelly" as the English court nicknamed Deluc's companion occasionally turns up in Georg Christoph Lichtenberg's correspondence as "Mamsel Schwellenberg" or "Madame oiselle Schwellenbergin." Clarissa Campbell Orr, "Queen Charlotte as patron," *The court historian*, 6:3 (2001), 183–212.

⁸ LPm, Letter I, 14.

⁹ LPm, Letter II, 44.

¹⁰ *LPm*, letter V, 94.

¹¹ *LPm*, Letter X, 149.

¹² LPm, Letter XIV, 215, italics added.

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Letter XIII relates an autumnal excursion through the forests that overhang Lake Neuchâtel. The two travelers had been climbing. Suddenly they emerged into an open pasture above the trees and saw a vast landscape before them. They dismounted to contemplate several lakes, towns, and villages in the plain; in the background beyond, the immense Alpine chain unfolded, while behind them and on either side the summits, forests, and precipices of the Jura Mountains ranged as far as the eye could see.

We spent some time, each of us, lost in admiration. But little by little, I became aware in Mlle. S. of that effect of sensibility that I anticipated. It exceeded my expectations: she became as though lost in a dream, no longer looking at anything; now and then she drew in a great breath like a parched person slaking her thirst; and then she almost closed her eyes and said nothing. I observed her and kept silent myself. There was no temptation to speak; words could not express one's feelings. Oh how well we are! would say everything, if the expression were still used. Mlle. S. found another that moved me but did not surprise me. In her calm and dreamlike state, tears appeared through her half-closed eyelids, followed immediately by a smile. What is this? she then said in surprise; I am really crying for joy. 13

Observing with virtually medical precision, if somewhat voyeuristically, the altered breathing, the veiled regard, the flowing tears, the offered smile, the naturalist notes all his companion's physiological reactions, her "striking symptoms," from which he draws his general conclusions. Although he shares her feelings, he nonetheless delegates the expression of his own subjectivity to this being whose sensibility seems keener and more visceral than his own. Through her closeness to the Queen, moreover, Mlle S* will enable the addressee to place herself in the position of the subject of the experience and to reproduce the emotions described in her imagination.

The last letter of the volume relates an excursion in the Vallée de Joux during which the travelers climb to the summit of the Dent de Vaulion. There they are gratified by the spectacle of the immensity of the Alpine range and of the sea of fog opening beneath them.¹⁴ They glimpse a

church through the dividing fog, then the village around it, and finally the countryside, its copses illuminated by shafts of sunlight.

Mlle S. was not expecting such a metamorphosis. Never had such a curtain opened before her eyes; her amazement was indescribable. She imagined that she had been transported to this special place, where the very clouds opened for her. She was reminded of [barometrical] announcements of fine weather to inhabitants of the plains.... And the very idea that she might herself be up in this pure air, whose return, together with fine weather, gives such pleasurable anticipations, amounted in her to all the delights her imagination could devise. Much would she have wished to continue to contemplate these almost heavenly scenes.¹⁵

Mlle S* here gives a multitude of responses to what she sees, of course, but also to what she feels (the freshness of the air, the breeze on her skin), imaginary movements (*she imagined that she had been transported*), memory (*she was reminded*), self-consciousness (*the idea that she might herself be*), etc. All these elements come together to create her experience of joy in the landscape, joy in which both body and soul participate.

We note how often the mention of mountain air comes up: its purity (this pure air), its invigorating quality, and all the benefits that it brings to the traveler. Deluc repeated this for the benefit of the Queen: for Mlle S*, who came to the mountains for her health, the good mountain air is doing its therapeutic work. By associating its qualities with the beauty of the landscape, Deluc suggested that aesthetic surroundings also improved health. Sensibility is brought to a peak during their descent, as they rejoice in seeing that the veil of cloud has lifted completely and enjoy the different points of view they encountered on their way.

Like the book that contains it, their journey in Switzerland ends with a eulogy to air and light. Deluc mixes his enthusiasm for landscape with scientific explanations about its formation and about the dissipation of clouds under the heat of the sun. The author of *Modifications of the atmosphere* is once again at home. He reminds us constantly of the state of the air throughout the *Lettres*, in which observations always contain meteorological notes. Here he goes beyond the reactions of his traveling

¹³ LPm, Letter XIII, 191-2.

This panorama was to become famous in the description of it by Goethe, who viewed it in October 1779 together with the young Duke of Weimar. He published it for the first time in the year 1796 in the Journal of his friend Schiller, *Die Ohren*. See *Goethes Schweizer Reisen*, ed. Paul Stapf (Basel: Birkhäuser, 1958).

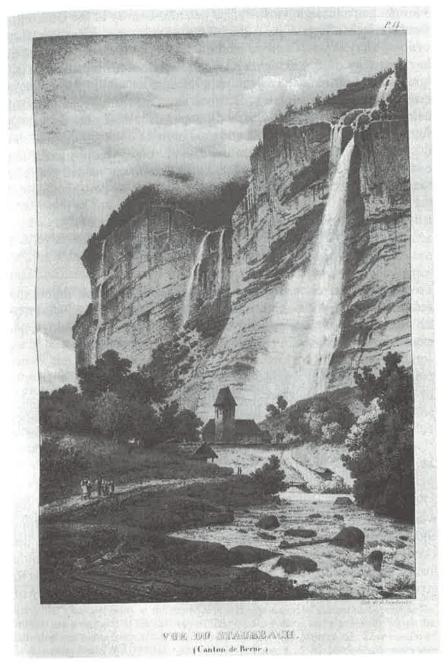
¹⁵ *LPm*, Letter XIV, 221–2.

¹⁶ The book's first landscape description develops a detailed meteorological account of the variations of light over Lake Geneva and the optical effects caused by light passing through clouds and mist, a frequent subject of scientific and aesthetic interest at the end of the eighteenth century.

companion to exercise his painter's eye for meteorological phenomena. Here are two moments taken from the night spent close to the foot of the glacier (which at that time reached virtually to the village) in Grindelwald, when the full moon rose to illuminate the surrounding mountains with its pale clarity. First the response of the traveling companion: "Never would Mlle. S. forget this moonrise. The sudden brilliance with which it shone is quite inexpressible." Then the painter's: "The moon shone brightly enough for us to be able to make out those motionless waves [undulations in the surface of the glacier], which nevertheless appeared to rush into one another so that they looked like nothing so much as one of *Vernet's* storms."¹⁷ Joseph Vernet was the master of storms and shipwrecks, the painter par excellence of the sublime seashore. Diderot gave a most glowing account of his work exhibited at his 1759 Salon.18 While Deluc often referred to painters in his ruminations on landscape, only Vernet met with his approval; he rejected Claude Lorrain, Poussin, Salomon Gessner, and others for copying idealized classical models.

2. A SCIENCE OF ECSTASY

A close association between aesthetics and science, as well as between the sensibility of Mlle S* and the observations of the philosopher, is continually being drawn in the landscape descriptions. Here is a last example: a visit made to the Staubbach Falls during which the travelers admired the rainbow produced at its foot (Fig. 3.2). The site was well known. Albrecht von Haller had devoted a stanza of his poem *Die Alpen* (1732) to it. Bernese artisans had engraved prints of it and travelers already thought of it as a compulsory station on their pilgrimages of admiration. The paintings of Caspar Wolf, the earliest of which were produced in the same year as Deluc's visit, would soon increase their reputation.¹⁹ Having arrived at the romantic site in the morning, Deluc and Mlle S* first admired the interminable ranks of serried slopes backed by the snow-capped summits before approaching the waterfall just as the



3.2 – View of Staubbach. G. Engelmann, *Lettres sur la Suisse* (Paris: Engelmann, 1823), 1, 38–9. Courtesy of the Bibliothèque publique et universitaire, Neuchâtel.

¹⁷ *LPm*, Letter X, 151.

¹⁸ Cf. Baldine Saint Girons, Les marges de la nuit: Pour une autre histoire de la peinture (Paris: Editions de l'Amateur, 2006).

¹⁹ See pictures of this phenomenon in "Merkwürdige Prospekte der Schweizer Gebirge," in *Caspar Wolf, Ein Panorama der Schweizer Alpen* (Aarau: Aargauer Kunsthaus, 2001).

sunlight began to light its foot. The better to convey to the Queen the form and light effects of the waterfall, Deluc referred to the recent work of Joseph Priestly on fixed air (carbon dioxide), which he supposed to be released by water striking rocks. Deluc explained to his patron that the bow or iris formed in the myriad droplets into which the falling water broke. He went on to describe, in rococo style, the scene of the waterfall as an antithesis of fire and water, and compared the earthy build-up at the foot of the rock face by stones and mud brought down by the water to the crater of a volcano. Having climbed with some difficulty to the top of this mound, the two travelers lifted their eyes to the sudden vision of the rainbow created by the sunlight shining through the dust-like spray of the falls:

It appeared to us as though the most ardent flame was issuing from the *crater's* mouth while, at the same time, the falls above looked like a column of smoke.²⁰

To grasp the interest of the passage completely, we must follow the details of the metaphors. Then an insistent arabesque of senses, woven of the associations of water and fire, becomes as clear as if sketched on the woman's emotive body:

With each upward step we took, the *Iris* grew larger, deploying its magnificent colors one after the other. It came ever closer to us as well, following us in all our movements, so that we were always at its center; finally, as we reached the very edge of the falling droplets, it described an almost complete circle. As we went forward, what a force was awakened in Mad. S. by this crescendo of beauty in the Phenomenon! A continual and ever-swelling joy is the veritable goad of instinct, of the faculty that precedes the feelings of the heart and the counsel of reason.²¹

Readers familiar with eighteenth-century texts will recognize the words used to relate this experience as the vocabulary of amorous encounter: the *crescendo* (of beauty just as of sensual pleasure), the *swelling joy*, the *goad of instinct*, and the *feelings of the heart*. A little further on, Deluc depicted necessity as "a demanding mistress...able to give us pleasure as the prize for our efforts." Does this vocabulary of

pleasure issue unconsciously from the philosopher and theologian, who, at the level of his conscious mind, is only describing a landscape? More than the sensual lexical frame, which he uses so insistently, the sequential structure of the text quite literally describes an orgasmic crescendo of pleasure and emotion. This is followed by the capture of the two protagonists in the sort of magic circle formed by the solar iris. And finally they descend again, cheerfully and rapidly. Should one read into this coupled intensity of experience the sublimation of erotic emotions? Is Mlle S* perhaps a Mme Guyon of landscape, and Deluc her Fénelon, quick to eulogize pleasures of senses become indistinguishable from spiritual aspiration? And finally, what are we to make of his approach to all these landscapes as a powerful sensual stimulus?

To go further in unpacking the subconscience of Deluc the naturalist theologian would be unproductive. The use, however, of the lexical frame of love within an intellectual text interrogating the relationship between man and nature can also be explained by the contemporary predominance of *sensibility*, which transformed the force of erotic responses into an impulse of a more sentimental or even spiritual kind: a transformation that in turn altered the way the human value system considers things.²³ In the letters, landscape provides the opportunity of interaction between the senses and the spiritual, between the carnal and the divine; the opportunity for a desired mingling, or rather a communion, of levels. Deluc considered this communion a gift, an ecstasy, that nature offers to mankind. "Here are the ecstasies in which I find myself when I am in the mountains," he writes during the extended reflection that followed his discovery of the vast panorama of the Alps viewed from Chaumont.²⁴

Mlle S*, for whom no precipice holds any terror but who is frightened by the barking of a small dog, reacts like a child: she is both inattentive and susceptible to capture by wonders, in which her imagination overwhelms and exalts her. She is moved by everything, discovers the world avidly, and everywhere follows her mentor, whose feeling and pleasure

²⁰ *LPm*, Letter V, 94.

²¹ Ibid., 95,

²² Ibid., 96.

²³ "When emotion is coupled with a moral sense allied with reason and intuition, an individual's susceptibility to the experience and expression of sincere and spontaneous emotion are a measure of the delicacy of the nervous system, and a means by which the individual can move from self-interest to benevolence." C.J. Murray, ed., *Enyclopedia of the Romantic Era: 1760–1850* (London: Taylor & Francis, 2004), 1039. Shaftesbury and Adam Smith, with whose works Deluc was familiar, insisted that emotion leads to knowledge as well as, if not better than, reason does.

²⁴ LPm, Letter XIII, p. 195.

are stimulated and renewed through hers. When moved to tears by the beauty of the landscape at Chaumont, she asks herself about this newfound childlikeness:

Have I suddenly gone backwards in life? Never have I experienced, with no apparent cause, anything like the state in which I find myself, except in the most serene days of my childhood.²⁵

In addition to her character of sensitive woman and her role as experimental subject, Mlle S* also constitutes the narrator's feminine double, allowing him to gauge his own emotions. They appreciate the same things; and we and us provide the most frequent subject person of the verbs of their emotions and experiences, particularly during their visit to the Staubbach Falls. They share a natural ecstasy, which we must understand in all its paradoxes if we are to grasp the fullness of the theory of landscape expounded in the *Letters*.

In his exposition of this theory at the end of Letter XIII, Deluc first evokes Rousseau and the journey made through Canton Valais by the hero of his *La Nouvelle Héloïse* (1761) to escape from Julie d'Etanges, with whom he is hopelessly in love. Deluc adopts Rousseau's idea that a stay in the mountains, breathing their pure air, moderates the passions and calms the senses to produce an "ethereal feeling" (Rousseau's term). Deluc goes so far as to compare this feeling of detachment, which he assimilates to ecstasy, to death. Etymologically, ecstasy is here a species of out-of-body experience, a means of achieving an existence separate from the corporeal *I*: "Oh, I exist! My God! And I praise you! I really shed this bodily envelope! I need imagine nothing more to conceive of perfect happiness!"²⁶

This realization of the spiritual nature of the soul through experience of sensual pleasure constitutes the paradox of landscape grandeur. Man finds himself elevated above his carnal nature, while God is revealed to him in the splendor of His works. Faithful to his natural theology, always his guide in his research into the history of the earth, Deluc fiercely attacks sensualist philosophy and mechanistic materialism. Beyond their exploitation as temporarily useful images, he rejects altogether the idea of automatons and machines: the *intelligent harpsichord* and *irritable fibres* of sensualist science. Contrary to these metaphors, mountain travel and

the experience of landscape deliver observations pertinent to replacing mechanistic systems by the sense of selfhood that equips mankind with a reflexive conscience. An animated statue cannot know itself:

[Materialists] may sometimes climb to the mountaintops, and I trust that they shall then feel themselves something more than Automata; that they shall learn to discern the *Being* that *feels*, & to distinguish it from everything associated with it.²⁷

Like Rousseau—and, before him, Adam Smith in the *Theory of moral sentiments* (1759)—Deluc deduces morality from *sensibility*, and the latter from an awakened conscience. We see that Mlle S* has played the part of chemical reactant or experimental apparatus just long enough for her to become aware of herself. In the "silence of her body" (*silence des organes*), her emotions in the presence of landscape are more than simple nervous reactions; they are ontological awakenings. The ambiguity remains complete. Of this woman so easily a victim to emotional upheaval and tears, Deluc now says, "It is this *calm*, this perfect silence of her body that Mlle S. felt, that caused her such happiness on the Mountain of Neufchatel." 29

3. LANDSCAPE AND HOMO ALPINUS

Mlle S*'s presence in the *Lettres* may also be read from a social perspective as an external reactive, an urban proto-tourist introduced into the Alps. In that case, the text contains an internal control type: the alpine peasantry described by Deluc. Their behaviour and way of life posed questions of moral observation that were widely discussed during the second half of the eighteenth century. They underlined a second essential aspect of landscape: the adaptation of mankind to his natural environment, a subject now called cultural landscape. Deluc effected a protoethnological survey of *homo alpinus*, in which he was as adept as Rousseau. He identified with mountain villagers who were "happy simply to live." Audaciously inviting his royal patron to share this identification, Deluc portrayed the natural man as he saw him: "I do believe

²⁵ LPm, Letter XIII, 192.

²⁶ LPm, Letter XIII, 193.

²⁷ LPm, Letter XIII, 204.

²⁸ "Smith links sight, sensation, emotion and morality as the constituent elements of sensibility." Murray (ref. 23), 1039.

²⁹ Letter XIII, 206.

that if we could be transformed suddenly into the sort of villagers I have observed, retaining of our previous way of being only the abstract idea of happiness, or the feeling of the normal condition of our soul, then we would believe ourselves in a state of bliss."³⁰

The pages in which Deluc enthusiastically describes the life of peasant communities in the Bernese Oberland, the happiness and beauty of the villagers, the virtuous life of the villages, etc., should be read in the context of reservations about the value of progress and proto-industrial society. When Deluc's observations are placed among these reflections, they appear less naïve and their absence of critical distance less shocking. In the complete edition of the *Lettres*, Deluc returned frequently to these themes in connection with his travels in Germany, Holland, and England. He showed himself to be an attentive observer of anthropogenic changes in the landscape, noting techniques of terraced cultivation and the advantages of commons, while criticizing enclosure and its effect on the common people.

Just like Mlle S*, though in a different register, the alpine peasant causes the narrator-traveler to reveal his true self, which is different from the identity attributed to him by the society to which he belongs. The peasant prompts a thought experiment, which Deluc relates to the Queen as a means of thinking philosophically about mankind and the ultimate purpose of human societies.

The traveler's *I* is deeply implicated in the landscape experiences Deluc had during his journey through the Alps. The testimonial function therefore was of first importance in the *Lettres* of 1778, though closely linked to the epistemic and aesthetic functions. Indeed, this linkage was at stake in the journey. If we add to the three functions the issues of cultural landscape, we come to the heart of Deluc's theory. He did not expound it in a systematic manner, give it a name, identify its characteristics, or keep it free from theology, something that Saussure was careful to avoid.³¹ Yet still it constitutes a remarkable scientific advance.

That the elaboration of a theory of landscape does in fact constitute the veritable crux of the *Lettres* of 1778 becomes even more obvious when we compare this journey with those that preceded and followed it. In his *Recherches sur les modifications de l'atmosphère* (1772), Deluc

related the three attempts he made to reach the summit of the Buet Glacier. which he finally accomplished with his brother late in September 1770.³² He described the discovery of the high mountain landscape in a lively but sober way, a far cry from Mlle S*'s transports of sensibility. The conjunction of amazement and dread, the emotional response to the splendor of the still unknown universe, are present, but without evoking an explicit reaction for lack of a mechanism for theorizing about subjective experience. Following the journey of 1774, in the complete edition of the Lettres, Deluc described many trips through Germany, Flanders, and the Netherlands. He developed his "cosmology" through descriptions of the marine fossils that anchored his diluvialist concept within the framework of his natural theology. But if Mlle S*, who invariably accompanied him during this part of the journey, appears from time to time, she plays no part in the text. The theory of landscape had been produced in the Alps; there was no further need of the sensitive soul. Without bothering to contradict his earlier affirmations, Deluc wrote: "There is a world of difference between enjoying and knowing.... Enjoyment is concerned only with the surface of things, whereas knowledge concerns their interior."33 Here the epistemic has reclaimed all its prerogatives. What has the pleasure of reading, or even knowledge, gained by it?

³⁰ *LPm*, Letter XIII, 194–5.

³¹ Cf. Olivier Fatio, "La spiritualité de Saussure," in *H.-B. de Saussure (1740–1799): Un regard sur la Terre*, ed. René Sigrist (Geneva: Georg, 2001), 487-99.

³² Deluc, "Relation de divers voyages aux Montagnes de Sixt en Faucigny," in *Recherches*, 2, 293–333, abridged by Marc-Théodore Bourrit in his *Description des glacières*, glaciers et amas de glace du duché de Savoye (Geneva: Bonnant, 1773), and reprinted in an elegant little duodecimo by P.G. Dentand as *Relation de différents voyages dans les Alpes du Faucigny* (Maestricht: J.E Dufour & P. Roux, 1776).

³³ LPM, 1, 16.