DOSSIER CLOUDS

Ce dossier comprend 3 documents :

- Document 1 : Percy Bysshe Shelley, *The Cloud,* 1820
- Document 2 : John Constable, *The Hay Wain,* 1821
- Document 3 : Extrait du site web "The Royal Meteorological Society"

The Cloud

I bring fresh showers for the thirsting flowers
From the seas and the streams;
I bear light shade for the leaves when laid
In their noonday dreams.
From my wings are shaken the dews that waken
The sweet buds every one,
When rocked to rest on their mother's breast,
As she dances about the sun.
I wield the flail of the lashing hail,
And whiten the green plains under,
And then again I dissolve it in rain,
And laugh as I pass in thunder.

(...)

I am the daughter of Earth and Water,
And the nursling of the Sky;
I pass through the pores of the ocean and shores;
I change, but I cannot die.
For after the rain when with never a stain
The pavilion of Heaven is bare,
And the winds and sunbeams with their convex gleams
Build up the blue dome of air,
I silently laugh at my own cenotaph,
And out of the caverns of rain,
Like a child from the womb, like a ghost from the tomb,
I arise and unbuild it again.

Doc 1 : *The Cloud*, Percy Bysshe Shelley, *Prometheus Unbound, A Lyrical Drama, in Four Acts, With Other Poems*, Charles and James Ollier, 1820.

Doc 2 : *The Hay Wain,* oil on canvas, John Constable, 1821, The National Gallery, London

Luke Howard and Cloud Names

In December 1802, a pharmacist called Luke Howard presented his paper, "On the modification of clouds" ('modification' meaning 'classification'), and in it proposed some of the cloud names we still use today. Howard introduced three basic cloud types:

Cirrus (Latin for a curl of hair), which he described as "parallel, flexuous, or diverging fibres, extensible in any or all directions".

Cumulus (meaning heap), which he described as "convex or conical heaps, increasing upward from a horizontal base".

Stratus (meaning something spread), which he described as "a widely extended, continuous, horizontal sheet, increasing from below".

He combined these names to form four more cloud types:

Cirro-cumulus, which he described as "small, well-defined roundish masses, in close horizontal arrangement";

Cirro-stratus, which he described as "horizontal or slightly inclined masses, attenuated towards a part or the whole of their circumference, bent downward, or undulated, separate, or in groups consisting of small clouds having these characters";

Cumulostratus, which he described as "the cirrostratus blended with the cumulus, and either appearing intermixed with the heaps of the latter, or super-adding a widespread structure to its base";

Cumulo-cirro-stratus **or** ***Nimbus,*** which he called the rain cloud, "a cloud or system of clouds from which rain is falling". He described it as "a horizontal sheet, above which the cirrus spreads, while the cumulus enters it laterally and from beneath".

Howard's sketch of cumulus with anvil

A sketch by Luke Howard

Luke Howard's Biography

Luke Howard was born in London on 28 November 1772, the first child of successful businessman Robert Howard and his wife Elizabeth. He was educated at a Quaker school at Burford in Oxfordshire and was then apprenticed to a retail chemist in Stockport. He became, like his father, a businessman, developing a firm that manufactured pharmaceutical chemicals. His real interest was, though, in meteorology, and he made a number of significant contributions to the subject besides his cloud classification. He published The Climate of London (first edition 1818, second edition 1830), Seven lectures on meteorology (1837), A cycle of eighteen years in the seasons of Britain (1842) and Barometrographia (1847). He was elected a Fellow of the Royal Society on 8 March 1821 and joined the British (now Royal) Meteorological Society on 7 May 1850, only a month after the society was founded. He died in London on 21 March 1864.

Doc 3 : The Royal Meteorological Society website,
http://www.rmets.org/weather/observing/luke-howard.php