

A work in it's context

Charles Lutwidge Dogson

Charles Lutwidge Dogson (1832-1898) was a mathematics teacher in Oxford. He is mainly known by the name Lewis Carroll for his artistic work (photography, novels,...), but he also published a few books about mathematics.

Alice's Adventures in Wonderland, published in 1865 and the sequel *Through the Looking Glass*, published in 1872, have immediately been very successful. These two novels, which take an important place in the renewal of the nonsense, contain a criticism about the Victorian society, especially about the place it gives to the children.

The Victorian age

Queen Victoria reigned over the British Empire from 1837 to 1901. During this period, the society as well as the scientific world has been through major upheavals.

Since the middle of the 19th century, children were seen as unachieved adults: they were working like adults, but not with the same rights. So were women. The need to have an educated labour, as well as Rousseau's idea about education (spread by the romantics) led to a reform of the education system (1870) and a limit to children's work. Along the century, children started to be seen as proper beings. Lewis Carroll takes part in this changing: *Alice's Adventures in Wonderland* is the first novel really written for children, from their point-of-view, not from adults' one.

The 19th century has also been a period of revolutions in science, in Europe and especially in England. Logicians for example tried to overtake the limits of Aristotle's syllogistic. G. Boole created a calculation for logic (*Mathematical Analysis of Logic*, 1847): the formalization and the calculation of the rule of thought were a major upheaval. In the same time, A. De Morgan decided to give the same status to a statement and it's contrary in defining the "universe of discourse" (*Formal Logic*, 1847). Lewis Carroll is contemporary of these works in formal logic which he knew, at least indirectly.

The Victorian age has been a period of changing, but also of doubts and questioning. In this context, the nonsense genre is renewed.

The nonsense

The nonsense is a literary genre which is renewed in England in the middle of the 19th century, especially by Edward Lear (*A Book of Nonsense*, 1846) and Lewis Carroll.

The nonsense is a sort of humour, not very different of absurd. It doesn't mean a lack of sense but, contrariwise, a manipulation of the sense. A

nonsensical effect generally comes from a gap between what we expect and what we are given. There are different means to produce these effects: game on words (pun, ambiguity,...), seeming contradiction,...

An example of Carrollian nonsense

The way Lewis Carroll produces nonsensical effects is peculiar. We analyse here an extract of the 6th chapter of *Alice's Adventures in Wonderland*, entitled "Pig and Pepper" to give an example of this nonsense.

This is the first time Alice meets the Cheshire Cat, a well-known character in Alice's adventures. The main nonsensical part here is the Cat's proof of his own madness (l. 78-87)...which is a bit of a paradox if we understand "mad" as "irrational"!

The Cat's demonstration looks like a syllogism such as the famous one :

All men are mortal
Socrates is a man
Therefore, Socrates is mortal

In the text, the Cat says:

A dog is not mad
I'm not a dog
Therefore I'm mad

But this proof is not valid: the first statement says nothing about creatures that are not dogs! A valid proof would have been:

A creature that is not mad is a dog
I'm not a dog
Therefore I'm mad

This syllogism is valid, even if his shape is not the same as our example's one. The Cat's mistake is confusion between "A dog is not mad" and the converse statement.

If we compare the example about Socrates and the Cat demonstration, we can also notice that he uses the word "a" instead of "all". This is often used in common language.

The way the Cat proves he is not a dog is also interesting. He first says "a dog growls when it's angry, and wag its tail when it's pleased" and then "I growl when I'm pleased and wag my tail when I'm angry" as if it were the negation of the first statement...which is not!

We can finally wonder why the Cat doesn't care about "purring" and "growling" are not the same. We can assume that as long as his proof is not valid, the words used are not important.

We could go further into the analysis of this demonstration. But we have already identified how Lewis Carroll plays with logical rules to make a piece of nonsense here.