I do not see it, but my brain knows what it means

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Patients suffering from “hemineglect” cannot attend to, and hence cannot see, things presented to their left side. However, sometimes these ignored stimuli may be processed without awareness.

In a paper published in the May 2008 issue of *Cortex*, Jerome Sackur and colleagues at Unité de Neuroimagerie Cognitive, Paris France, reported that unconscious processing in hemineglect is not limited to low level features of the stimuli.

The research was carried out on 4 right-handed female patients (40-56 years old), suffering from left unilateral neglect secondary to right hemispheric stroke and 14 neurologically normal, right handed patients (6 females, 9 males, 19-32 years old). An additional group of 4 neurologically normal age-matched control subjects was separately tested on the main experiment.

By analyzing the results of their experiment, the authors showed that the brain may extract the meaning of symbols that the patient has not consciously perceived. Thus, digits or number words presented on the left side were not detected by hemineglect patients, but still their numerical value influenced the way these patients performed on a numerical task presented shortly thereafter.

“This study demonstrates that in hemineglect the left part of the world is not a "blind" region: in a way, patients read and understand unconsciously what is there” says Dr. Sackur, coordinator of the study.

“However, the patients cannot make conscious use of this information”.

Source: Elsevier