Lewis Carroll, *The hunting of the Snark*

COLLÈGE DE FRANCE
1530

CHAIRE DE PSYCHOLOGIE COGNITIVE EXPÉRIMENTALE

Année académique 2012-2013

M. Stanislas DEHAENE, Professeur

Interactions entre espace, temps et nombre : 20 ans de recherches

Interactions Between Space, Time and Number: 20 Years of Research

Colloque en anglais le mardi 26 février 2013

All humans possess a sense of number. Surprisingly, number also interacts with space: in Western cultures, adults systematically associate small numbers with the left side of space, and larger numbers with the right side. This finding has been termed the SNARC effect (spatial-numerical association of response codes; Dehaene et al., 1993). Why are the concepts of number, space, and also time (as was later found) so tightly intertwined? Are babies and even animals innately equipped for thinking about them as related magnitudes? How are these interactions modified by culture and education? What are the brain mechanisms underlying them? Twenty years later, as the "hunt for the SNARC" continues, this workshop will review the state of our knowledge on these important issues.

École des Neurosciences Paris Île-de-France

EPS ESCOP Experimental Psychology Society

8:30 Welcoming of participants

Spatial-numerical interactions in human brain and behavior

9:00 Stanislas Dehaene, *Collège de France*
The discovery of the SNARC effect and its brain correlates

9:40 Martin Fischer (Postdam) and Samuel Shaki (*Ariel University,* Israël)
Cultural and conceptual aspects of SNARC

10:20 Wim Fias (Gent)
Mechanisms underlying the SNARC effect

11:00 Break

11:30 Marco Zorzi (Padova)
Neuropsychological impairments of number, space and time

12:10 David Burr (Pisa)
A visual sense of number

13:00 Lunch and Poster Presentations

Foundations of numerical, spatial and temporal coding in animals

14:30 Giorgio Vallortigara (Trieste)
Space and number in animals

15:10 Andreas Nieder (Tübingen)
The neural coding of number and other dimensions

15:50 Break

Developmental and pedagogical perspectives

16:10 Lola de Hevia, *CNRS* (Paris)
What babies know about space, time and number

16:50 Manuela Piazza, *INSERM* (Saclay)
How do young children expand their number sense?

17:30 Brian Butterworth
Space, time and number in dyscalculia

General Discussion

Amphithéâtre Marguerite de Navarre
11, place Marcelin-Berthelot, Paris 5e

www.college-de-france.fr

Registration and posters : www.uni-potsdam.de/pecog/?q=node/355

Serge Haroche
L'Administrateur du Collège de France