The Brain Wave Study of Direction Recognition

杜俊逸、高富建

E-mail: 363571@mail.dyu.edu.tw

ABSTRACT

This research discusses about recognizing direction by characteristics of brain wave frequency band in the digital coding mode. The experiences proceeded by catching brain wave signals of human vision while sensing the test interfaces of graphics and words representing direction by brain wave sensor. To compile the related samples of energies from brain wave frequency band and times of appearances, then establish the directions which stand for left.turn, right.turn, forward and backward of brain wave characteristics frequency band and its digital coding modes. Studies are to derive and analyze brain wave signals from testing interfaces of different color combinations of graphic and words, and after that build the digital coding combinations of brain wave characteristics frequency band. This research is to analyze and discuss every kind of brain wave frequency band characteristics while subjects recognize the directions; moreover, to confer the topics such as analyzing the influences of different designs of graphic and word testing interfaces made in brain waves of recognizing directions in the view of Cognitive Neuroscience as well as defining if testing interfaces of color designs effect the brain wave signals while judging directions from human vision.

Keywords : digital coding of brain wave characteristics frequency band、recognizing directions、Cognitive Neuroscience

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