

Special Issue on “Brain Activities Corresponding to Subjective Responses through Auditory, Visual and Taste Senses”

Preface

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In this special issue, we discuss methods of measuring brain activities corresponding to subjective responses through auditory, visual and taste senses. Due to the most primitive response of a living creature, information corresponding to subjective preference can be found in brain activities. Specific factors extracted from the slow vertex responses (SVR), the electro-encephalogram (EEG) and the magneto-encephalogram (MEG) are well corresponding to subjective preference or primitive response. If the temporal factors of sound field are changed, then the left hemisphere is much more activated, and the spatial factors of sound fields are varied, then the right hemisphere is activated (Ando, *Architectural Acoustics, Blending Sound Sources, Sound Fields, and Listeners*, AIP Press/Springer-Verlag, New York, 1998). This concept might be applied for the visual field, also.

It is remarkable that the temporal factor, i.e., the effective duration, extracted from the autocorrelation function (ACF) of alpha waves in both EEG and MEG is well proportional to the scale value to individual subjective preference. On the other hand, analyses of the crosscorrelation function may found behavior of the alpha waves distributing on the brain. It reveals that the greater area on the brain is activated by the larger scale value of the subjective preference than that by the small value.