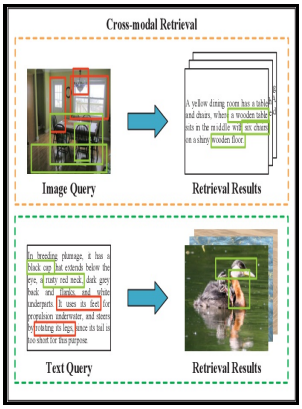
Crossmodal space and crossmodal attention

Oxford University Press - Designing Driver Assistance Systems with Crossmodal Signals: Multisensory Integration Rules for Saccadic Reaction Times Apply



Description: -
-
Attention -- physiology.
Space Perception -- physiology.
Sensation -- physiology.
Neuropsychology.
Cognitive neuroscience.
Senses and sensation.
Space perception.
Intersensory effects.Crossmodal space and crossmodal attention
-Crossmodal space and crossmodal attention
Notes: Includes bibliographical references and index.
This edition was published in 2004

Filesize: 34.14 MB

Tags: #Visual #Gender #Cues #Guide #Crossmodal #Selective #Attending #to #a #Gender

Crossmodal Perception — Department of Experimental Psychology

This limitation is particularly conspicuous in a traffic situation: the act of driving is a highly complex skill requiring the sustained monitoring of perceptual - predominantly visual - and cognitive inputs ,. We propose that the development of a physiological model of sensory competition is fundamental to deepen our understanding of the cerebral mechanisms of multisensory perception and integration.

Crossmodal Perception — Department of Experimental Psychology

Although the implications of this model have usually been discussed in the framework of unimodal extinction e. The facilitatory effect of the accessory stimulus on SRT was shown to decrease the later the auditory or tactile stimulus was presented relative to target onset, within the limited range of SOAs from ms before the visual target up to ms after the visual target employed in this study. To address this last point, the intensity of stimuli was first titrated independently on each side in order for the subject to detect 90% of left and right single stimulations, in order to avoid ceiling effects.

Crossmodal Perception — Department of Experimental Psychology

As such, both disorders have usually been addressed jointly by several theories proposed to account for their behavioral manifestations. Indeed, by revealing interferences between stimuli in a disturbed system, extinction provides an invaluable opportunity to investigate the interactions that normally exist between those stimuli in an intact system.

Designing Driver Assistance Systems with Crossmodal Signals: Multisensory Integration Rules for Saccadic Reaction Times Apply

Using a within-subjects design, participants were presented with a dynamic male face, female face, or fixation cross, with each condition being paired with a dichotomous audio stream of male and female voices reciting different lists of concrete nouns. For crossmodal interaction to occur, a nontarget stimulus must win the race in the first stage and the target peripheral process must terminate before the time window is closed. .

Visual Gender Cues Guide Crossmodal Selective Attending to a Gender

R05265CS, a scholar award from the James S. Procedure Before calibration started, participants were instructed to take a comfortable driving seat position, to put the head against the headrest in order to reduce movement during data recording , and to keep both hands on the steering wheel. This predicts that no spatial bias should be observed in the physiological state.

Frontiers

By applying the very same task in healthy humans and in trained monkeys to identify the networks involved in competitive sensory perception using fMRI, future work should allow establishing true homologies between humans and monkeys based on functional activations.

Visual Gender Cues Guide Crossmodal Selective Attending to a Gender

Rear speakers and middle console elements were not used in this experiment. One possible explanation —that will need further scrutiny— is that the temporal resolution might be higher in the horizontal than in the vertical plane of the retina and is hence more sensitive for detecting changes in the environment first stage of the TWIN-model. However, in the last few years, numerous examples of crossmodal interactions have been documented.

On the spatial specificity of audiovisual crossmodal exogenous cuing effects

The limited capacity of humans to divide their attention amongst all of the competing sensory inputs is further challenged by the of modern in-vehicle devices like cell phones or navigation systems. In monkeys, visuotactile neurons that normally fire only when visual stimuli are applied near the hand show an enlarged visual receptive field after tool use, which encompasses the hand and the tool. For auditory stimuli, the speedup is most pronounced when visual target and auditory nontarget were spatially coincident same direction in space and the auditory was presented 50 ms prior to the visual , , whereas for the tactile stimulus vibration of steering wheel the speedup was typically not more than 40 ms and no spatial effect was found.

Related Books

- Poemas irreparables
- International Tribunal for the Law of the Sea yearbook
- Re signore - tutto il racconto della vita di Umberto di Savoia
- Guide for U.S. cattle exporters
- Retrieval of roots for self-reliant development - some experiences from Thailand