

Visual and auditory object representations in ventral visual cortex after restoring sight in humans

Raczy, K., Linke, M., van den Hurk, J., Heitmann, C., Guerreiro, M.J.S., Zhan, M., Kekunnaya, R. Goebel, R., & Röder, B.

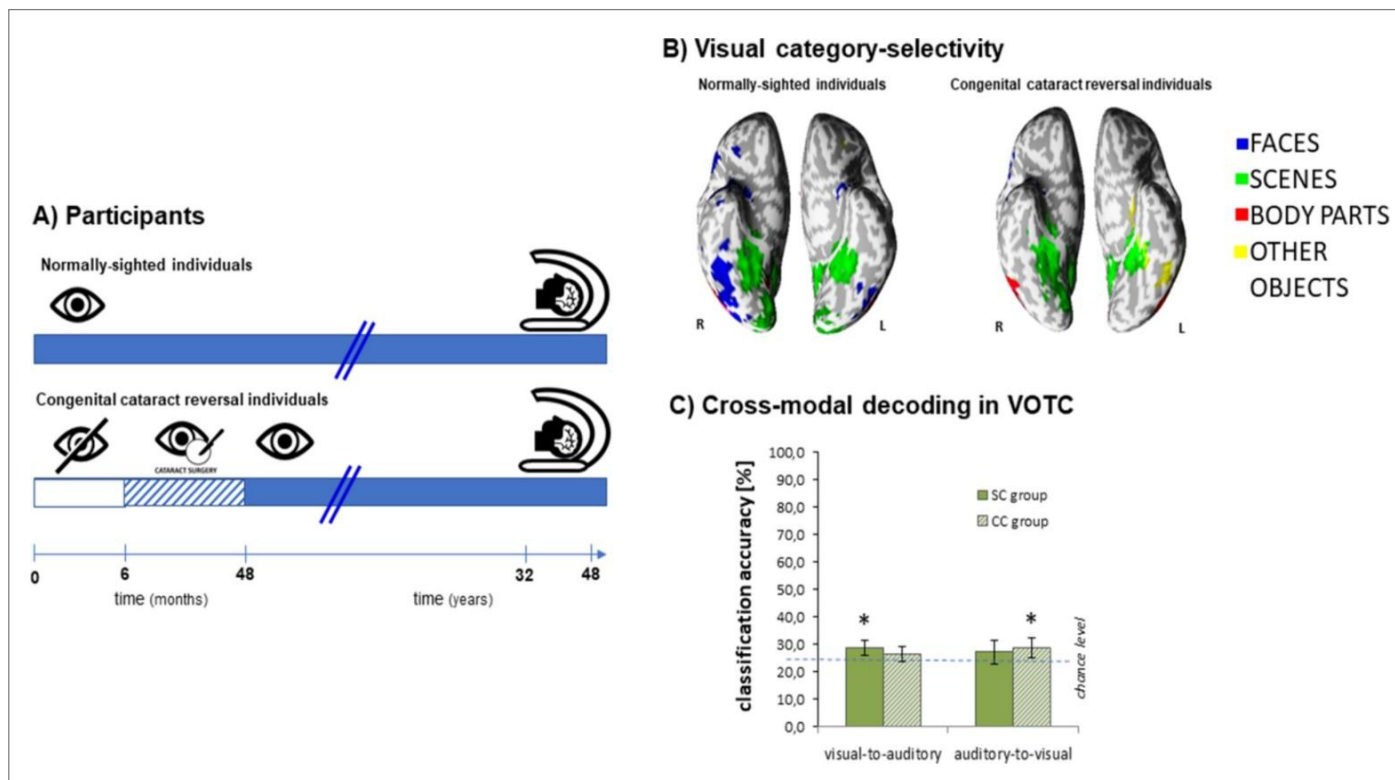


Figure 1. **(A)** Individuals with reversed congenital cataracts (CC) and controls (SC) watched or listened to videos displaying faces, scenes, body parts or other objects while functional magnetic resonance data was acquired. **(B)** Visual category selective regions for **faces**, **scenes**, **body parts** and **other objects** in the ventral occipital temporal cortex. **(C)** Crossmodal decoding accuracies for visual category representations decoding auditory categories (left) and visa versa (right),

Category-selectivity for faces in ventral occipital temporal cortex was markedly **reduced** in individuals with reversed congenital cataracts (Figure 1B).

Category selectivity for scenes was indistinguishable from normally sighted controls (Figure 1B).

Auditory activity in higher-order visual cortex seemed to support the acquisition of visual category-selectivity in individuals with reversed congenital cataracts (Figure 1C).