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R. W. SPERRY. Harvard Biological  
Laboratories. Fixed persistence in  
the rat of spinal reflex patterns  
rendered extremely maladaptive by  
cross union of sensory nerves.

After crossing nerves from the left hind foot to  
the right hind foot in 16 rats, the right foot became  
reinnervated only by nerves that originally supplied  
the left foot. This resulted in all cases in a false  
localization of sensation and a reversal of hind limb  
reflexes mediated by the crossed nerves. Although  
extremely maladaptive, the reversed spinal reflexes  
persisted through prolonged training over a period of  
ten months without correction or inhibition by central  
nervous adjustment.