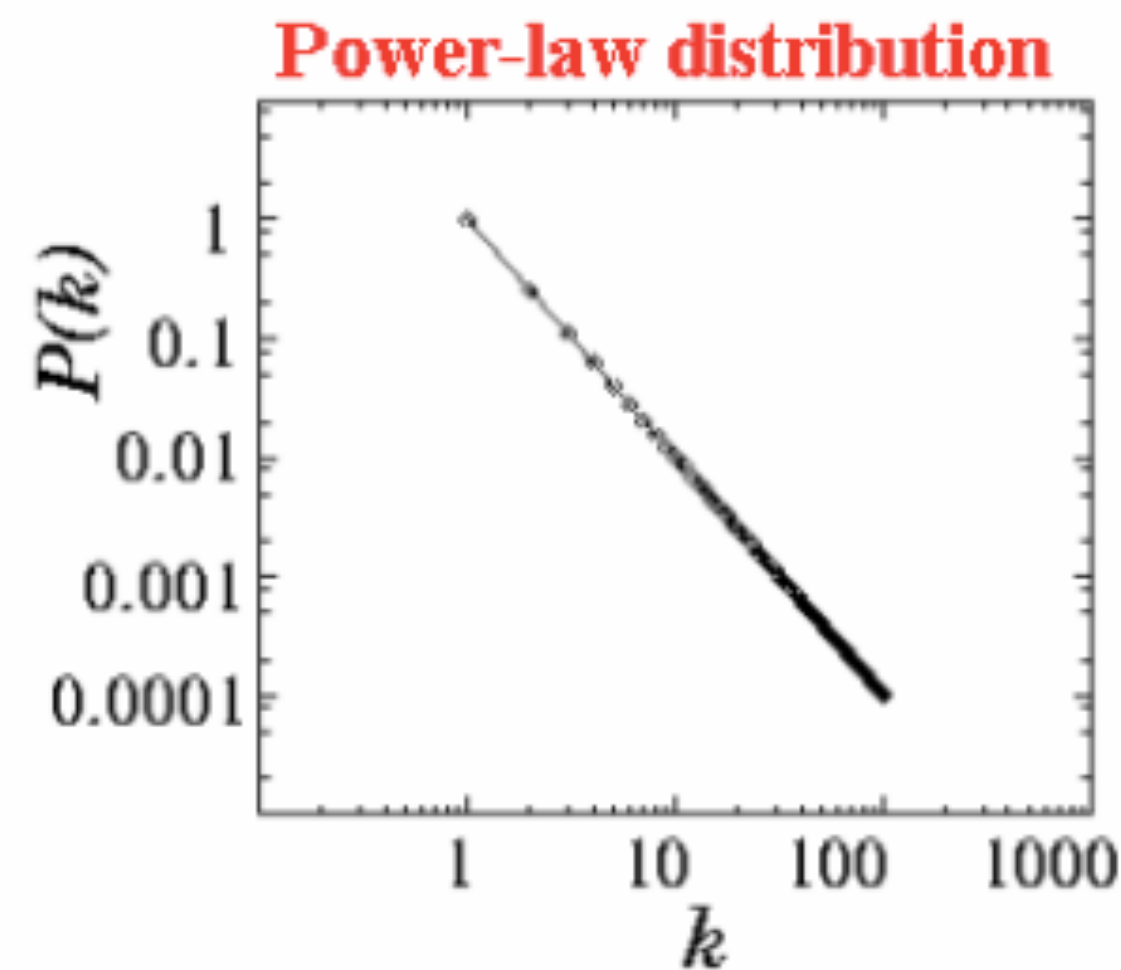
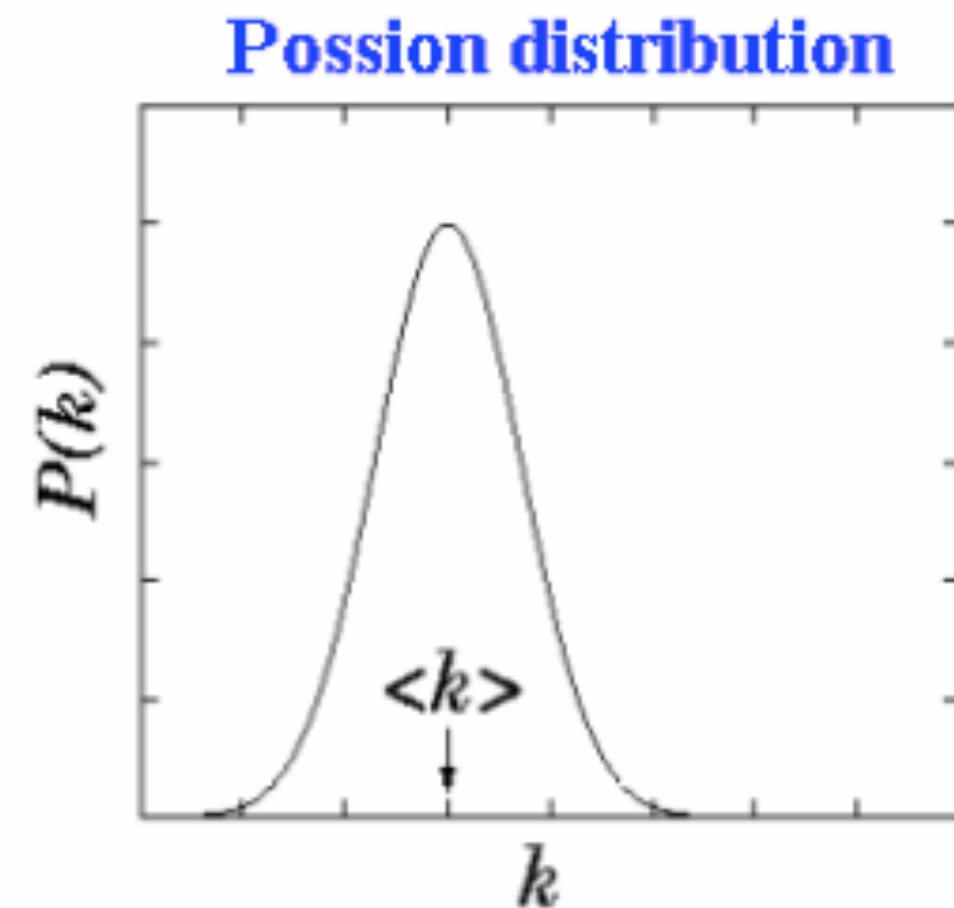
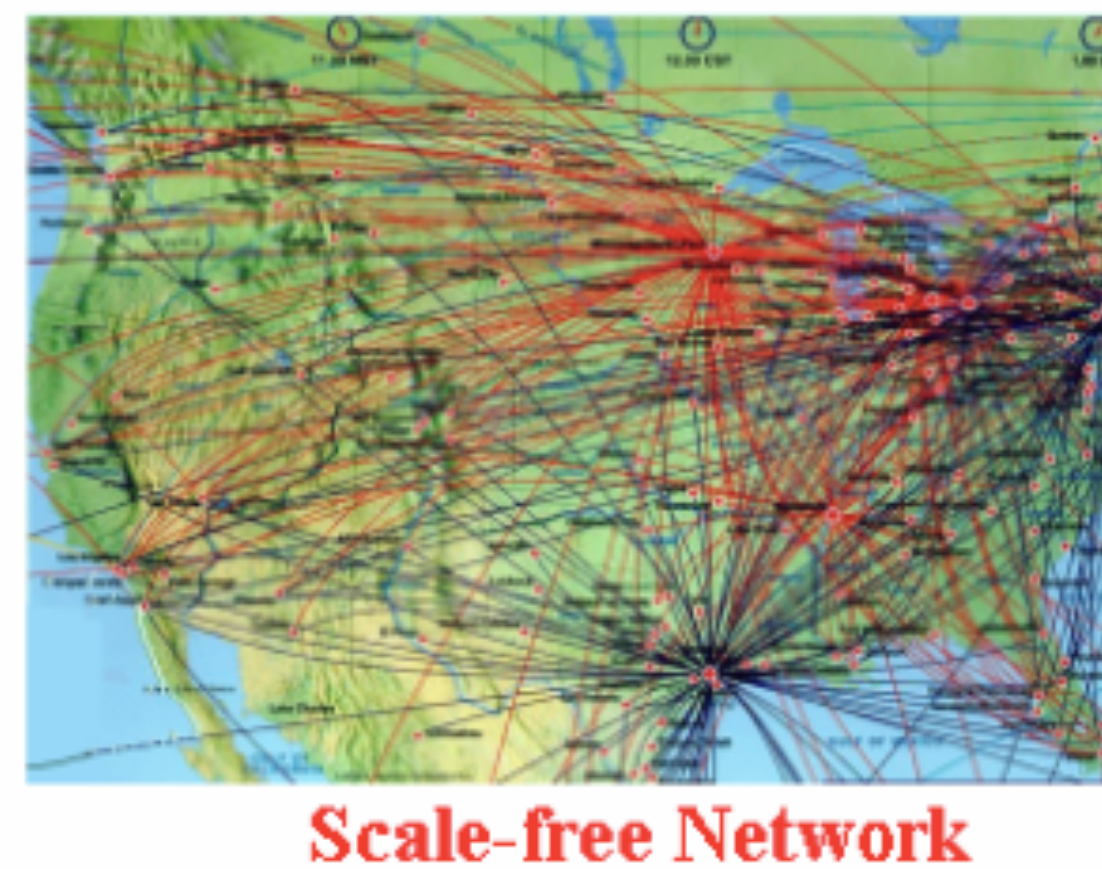


# Network / Graph topology: It's a Scale Free World After All



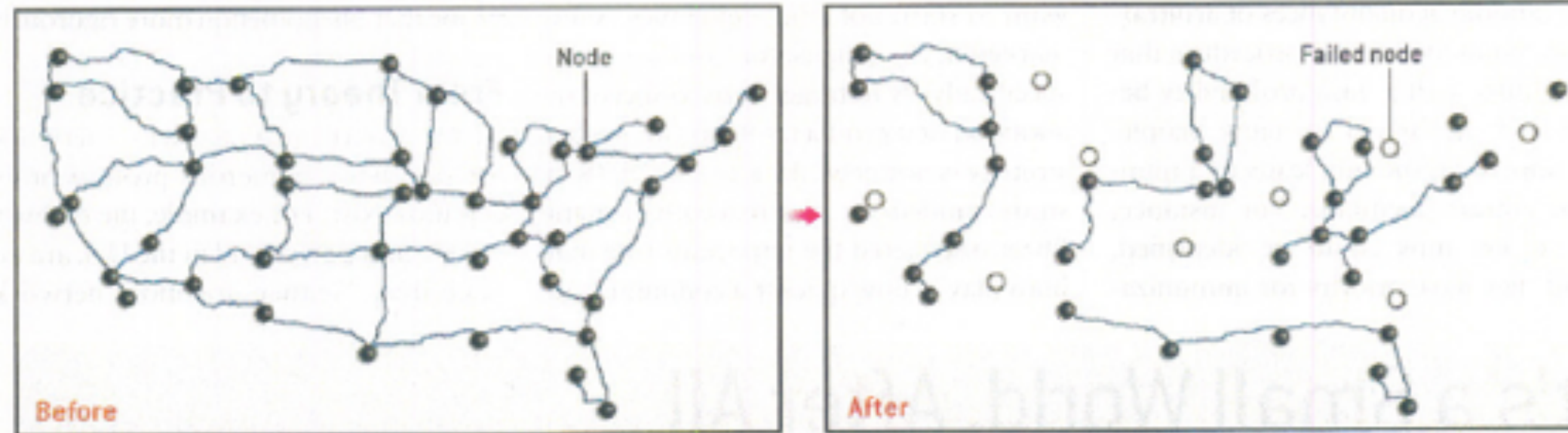
Number of connections a node in the network has: degree ( $\delta$ )



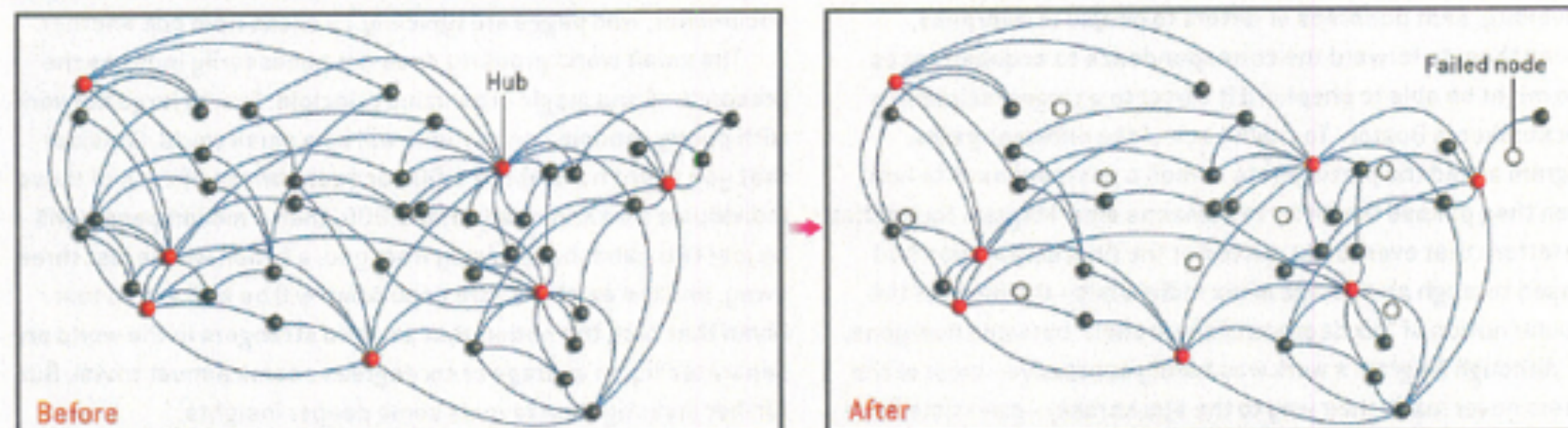
Scale-free network: degree distribution is a power law!



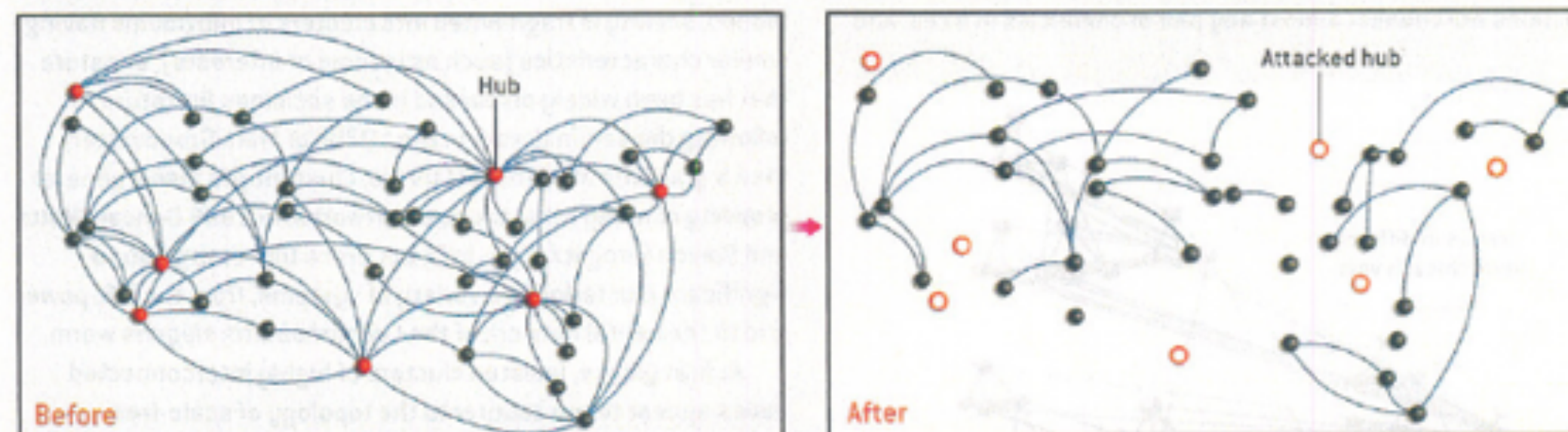
Random Network, Accidental Node Failure



Scale-Free Network, Accidental Node Failure



Scale-Free Network, Attack on Hubs



Scale free networks  
are resilient to  
random attacks on  
nodes or node  
failures

(cf. internet on 9/11)

when more hub nodes  
fail though....

targeted attack!