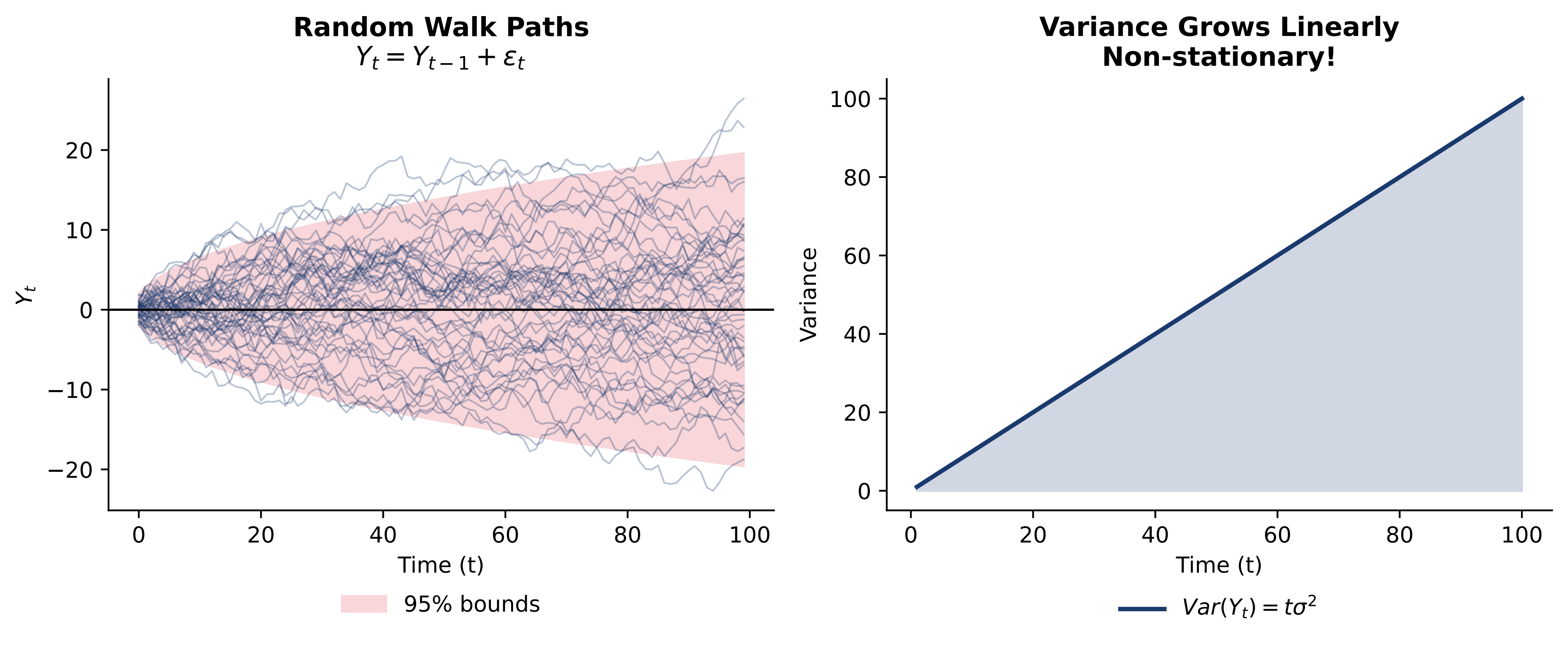

Random Walk Paths
$Y_t = Y_{t-1} + \varepsilon_t$
Y_t
20
10
0
−10
−20
0
20
40
60
80
100
Time (t)
95% bounds
Variance Grows Linearly
Non-stationary!
Variance
100
80
60
40
20
0
0
20
40
60
80
100
Time (t)
$Var(Y_t) = t\sigma^2$