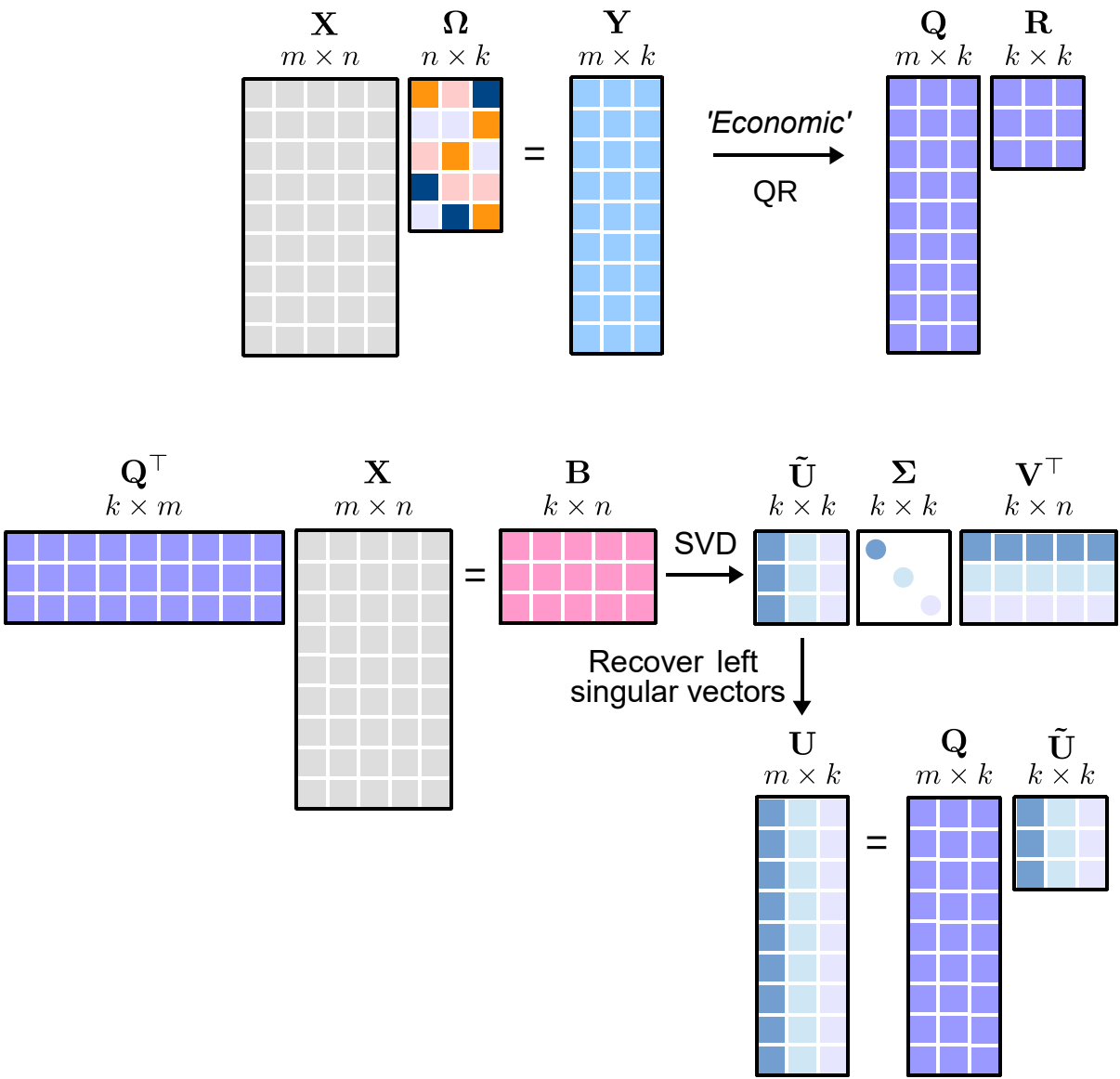
X
m × n
Ω
n × k
=
Y
m × k
'Economic'
QR
Q
m × k
R
k × k
Q^⊤
k × m
X
m × n
=
B
k × n
SVD
Ũ
k × k
Σ
k × k
V^⊤
k × n
Recover left
singular vectors
U
m × k
=
Q
m × k
Ũ
k × k