

# **L19: Multi-site atomicity**

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# Buying a ticket (travel agency)

```
purchase_ticket(...):  
  begin  
  issue_tkt(flight, ...)  
  xfer(cust, airline, 500)  
  commit
```

```
issue_tkt(flight, ...):  
  begin  
  ... reserve seat ...  
  commit
```

```
xfer(a, b, amt):  
  begin  
  a = a - amt  
  b = b + amt  
  commit
```

# Two generals' dilemma



If both attack, they win; otherwise, either one will be defeated

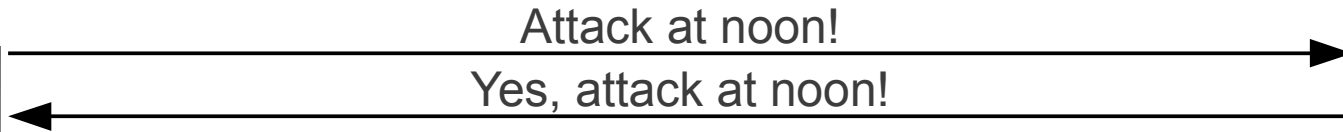
# Two generals' dilemma

Attack at noon!



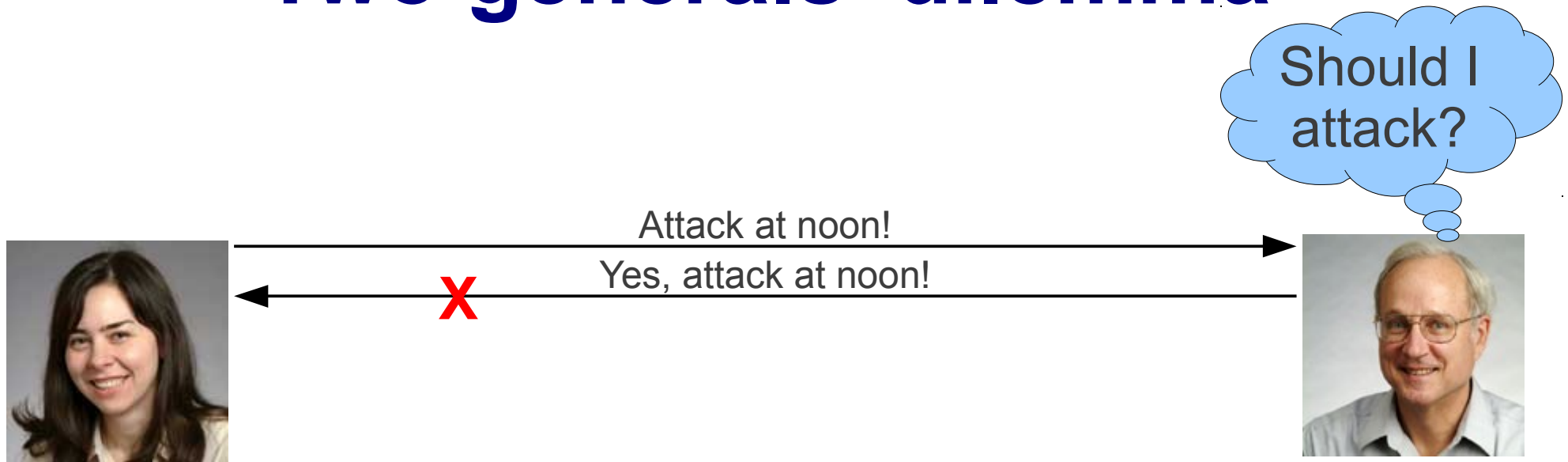
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Attack at noon!

Yes, attack at noon!

Got it, attack at noon!



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# Two generals' dilemma

Attack at noon!

Yes, attack at noon!

Got it, attack at noon!

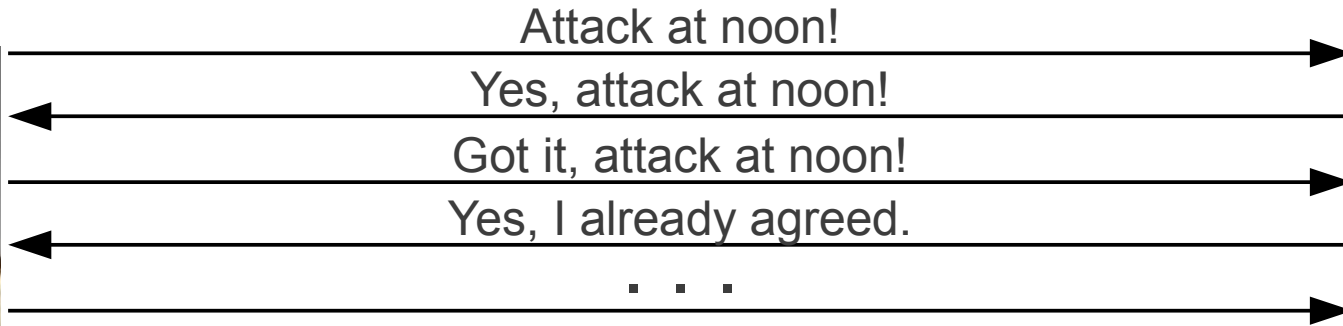
Yes, I already agreed.



If both attack, they win; otherwise, either one will be defeated



# Two generals' dilemma



If both attack, they win; otherwise, either one will be defeated