## Temporally-extended Action Models

- Low-level, object-specific actions don't scale
- Long-term planning & inference is intractable

"Unload the truck"







## Temporally-extended Action Models

- Robots need richer models of actions that objects afford
  - Object-, task-, and agent-specific actions
- Action-effect representation offers scalability
- · Ground affordance representations in perception
  - e.g., articulated object models
- Robots must learn action-effect representations opportunistically based on experience

