

# Intro

- Who I am and why I'm here
- CLDs and what are they for
- Basic notations
- Loops
- Multiple perspectives
- Worked examples

# What are CLDs for?

Causal loop diagrams are directed graph representations of systems.

- Nodes are causes and effects.
- Edges are relationships

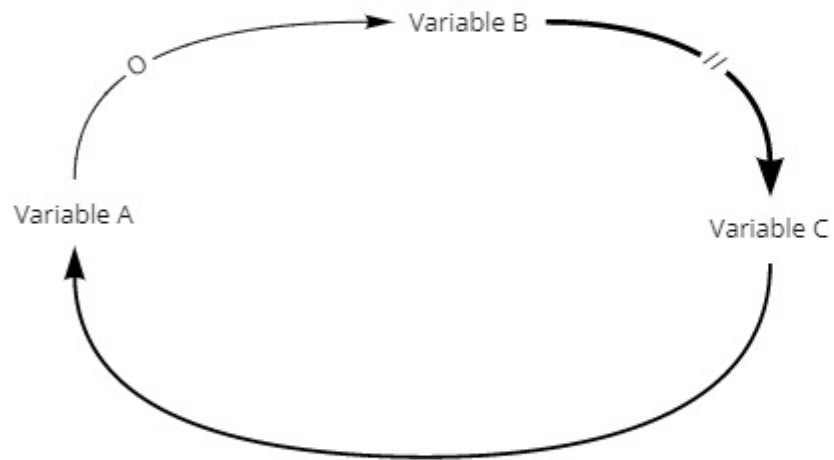
They help us to:

- reason about systems
- develop shared mental models
- visualise relationships and patterns
- develop our own insights about cause & effect
- have productive discussions

Most of the value is in the conversation



# Basic Notation



Default no  
annotation  
means positive  
effect

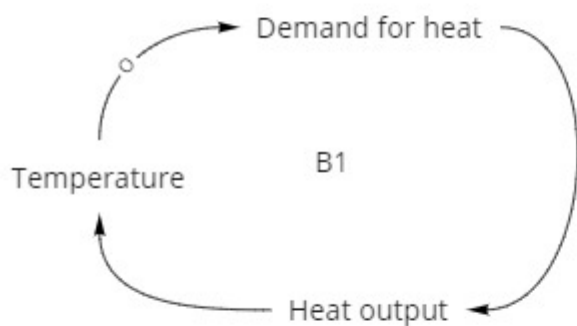
"O" means  
Opposite or  
negative  
effect

"//" means  
Delayed  
effect

Line thickness  
indicates  
strength of  
relationship

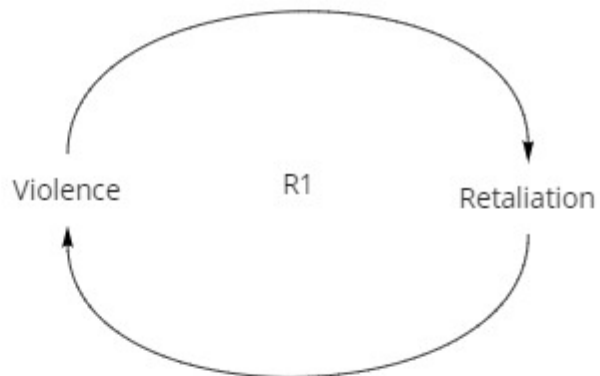
# Loop types

Balancing Loop



- maintain equilibrium
- limit growth
- e.g. disease or resource limitations as balancing factors in population growth

Reinforcing loop



- Reinforce growth & decay
- Compound change in one direction
- e.g. positive vs negative reinforcement from a teacher or supervisor

# Perspectives

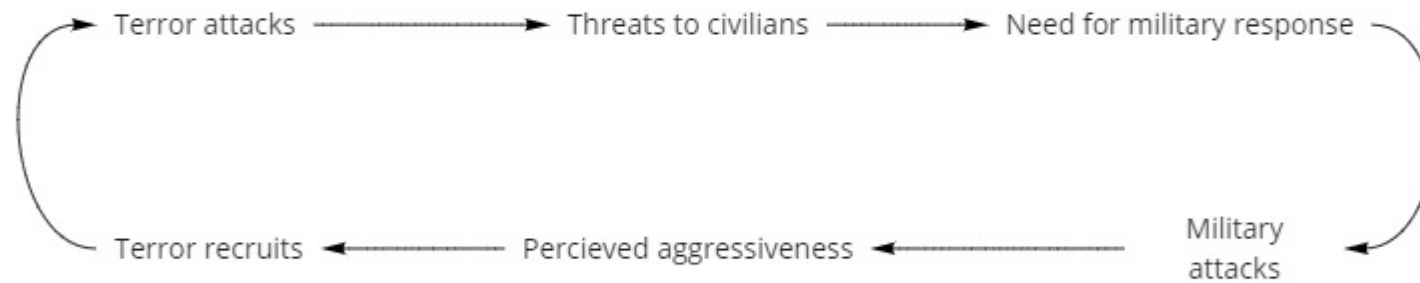
## Government perspective

Terror attacks → Threats to civilians → Need for military response

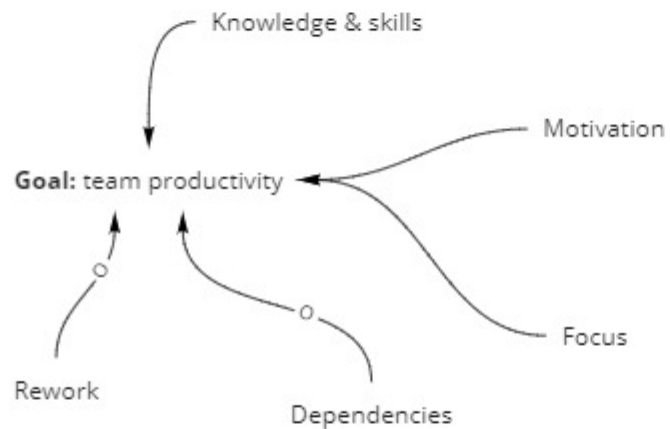
## Aggrieved group perspective

Military attack → Percieved aggressiveness → Terror recruits

## Combined perspective



# Example



## My approach

Start from a goal

Work outwards

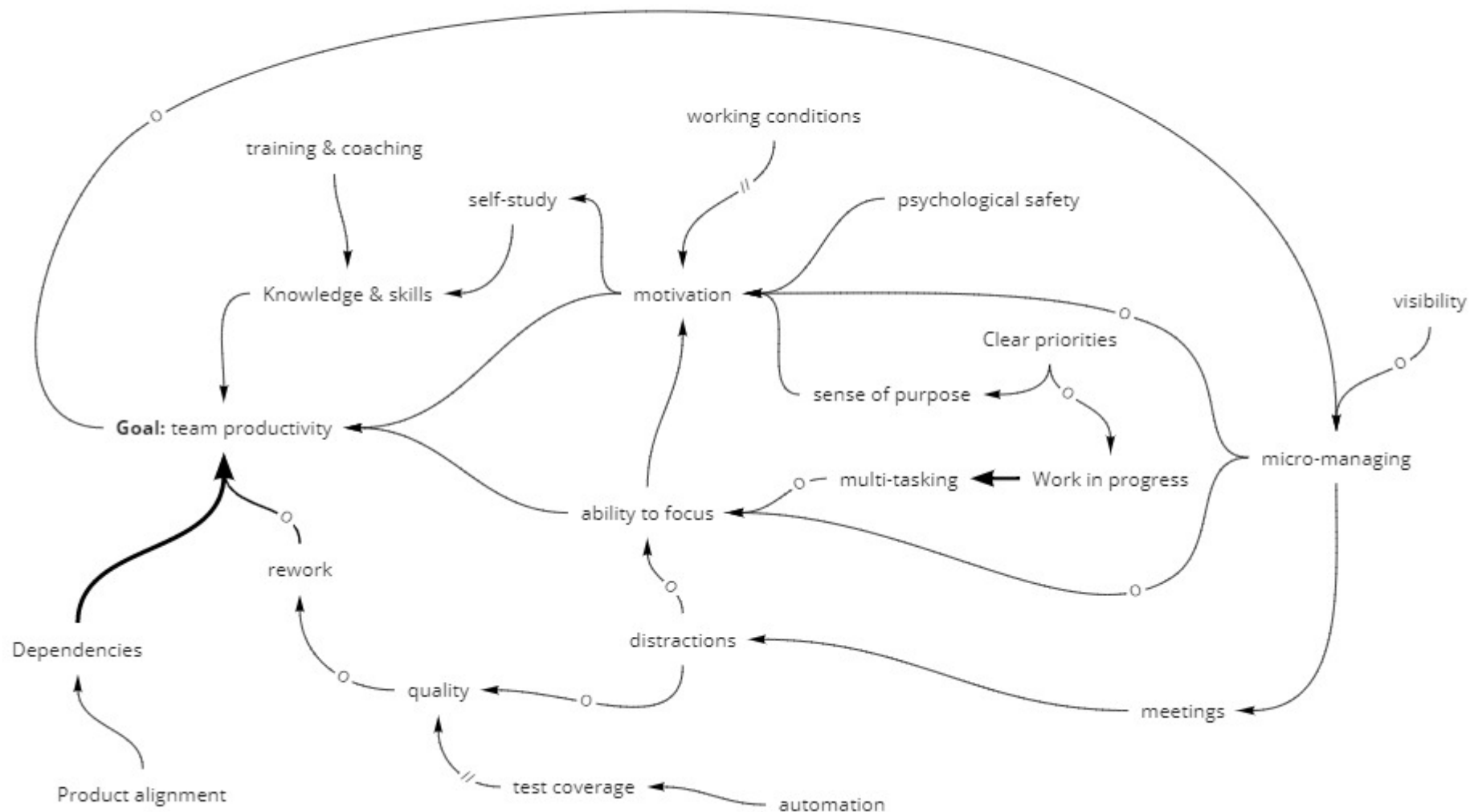
Keep asking "what else?"

Look for unintended impacts

Variables should be:

- Measurable
- Expressed as positives
- Nouns not verbs

# Example



Facilitates deeper discussion

Groups or 1:1

Preparation for important conversations

Build portfolio of actions

Find indirect ways to achieve outcomes

Each node can be a launch point for new diagram

Lots out there

<https://less.works/less/principles/systems-thinking>

<https://thesystemsthinker.com/guidelines-for-drawing-causal-loop-diagrams-2/>

