

Adapting How We Practice In A Constantly Changing Working Environment

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Who Am I?

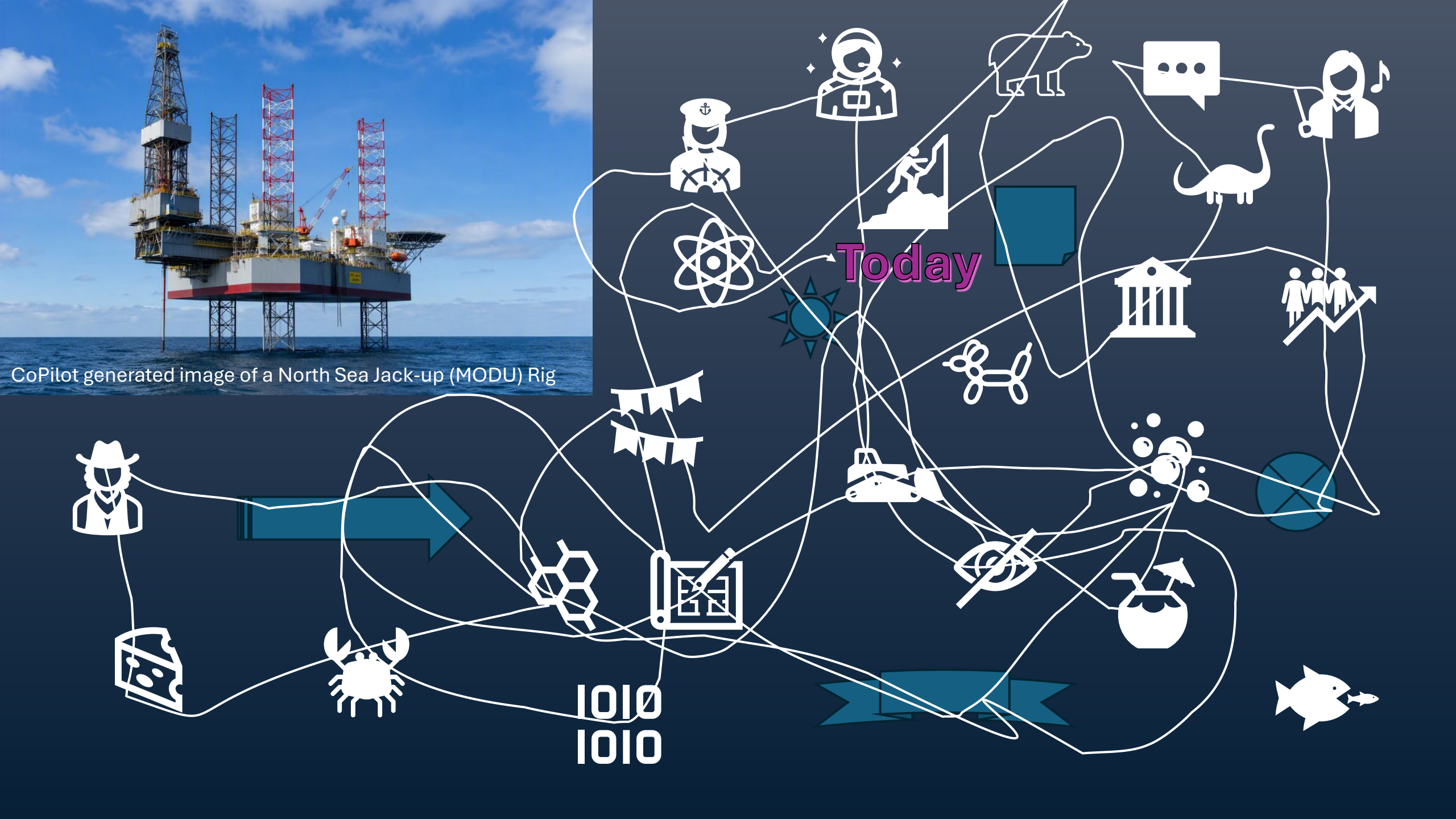
- Offshore & Mechanical Engineer
 - Roustabout, Roughneck, Well Engineer, Drilling Engineer, Ops Engineer, Night Superintendent
- Former Military Officer
 - Been to some places, applied some skills, drove vehicles in places no one goes on holiday
- Bumped into analysis and S&T research in Defence
 - Multiple deployments (again)

- Experienced others doing it
- Systems Engineering – connected it to Systems Thinking *
- Found I had some aptitude for it – joined the tribe
- Via a circuitous route of smaller courses, Lego Serious Play, ScrumMaster, experience and mentorship, found and completed the Apprenticeship – work-based learning is more valuable than academic prowess *

* Buy me a glass of wine and we'll discuss it. It makes complete sense to me.



CoPilot generated image of a North Sea Jack-up (MODU) Rig

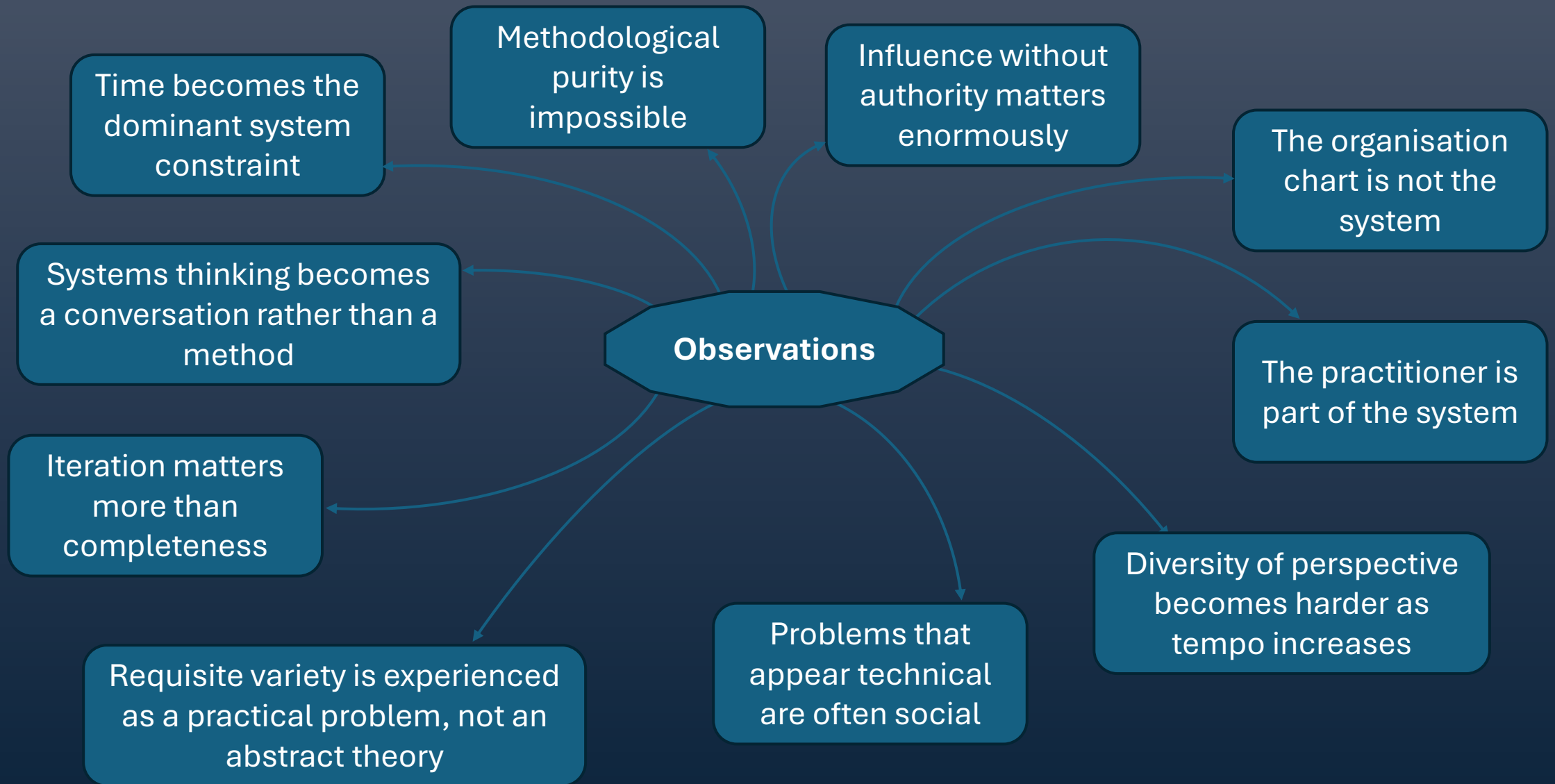


Scope

- Set the Context
 - Baseline Research Environment
 - High-tempo Operational Military Headquarters
- Observations and Possible Lessons
- Alignment with Systems Thinking Principles

Set the Context

- Baseline Research Environment
 - Match pace of research with the need
 - Most freedom to explore
 - TECHNICAL DETAIL IS CURRENCY
- High-tempo Operational Military Headquarters
 - Lots of uncertainty and change
 - High consequences
 - TIME IS THE CURRENCY



Successful practice depends more on preserving systems principles than faithfully reproducing a methodology.

In military organisations there can be an assumption that change follows hierarchy. Systems influence often travels through relationships rather than command chains.

Understanding formal structures is necessary but insufficient. The real system lives in the relationships between actors, not in the boxes on the chart.

What the practitioner notices changes what gets modelled.

In high-tempo environments, the critical resource is not information, money or authority. It is attention and time. Many textbook examples assume these resources are available.

The actual methods vary considerably but the underlying practice remains and continues.

The faster the environment moves, the easier it becomes for viewpoints to converge too quickly. A systems practitioner may therefore need to deliberately create variety.

In fast-moving environments, iterative understanding is often more valuable than comprehensive analysis.

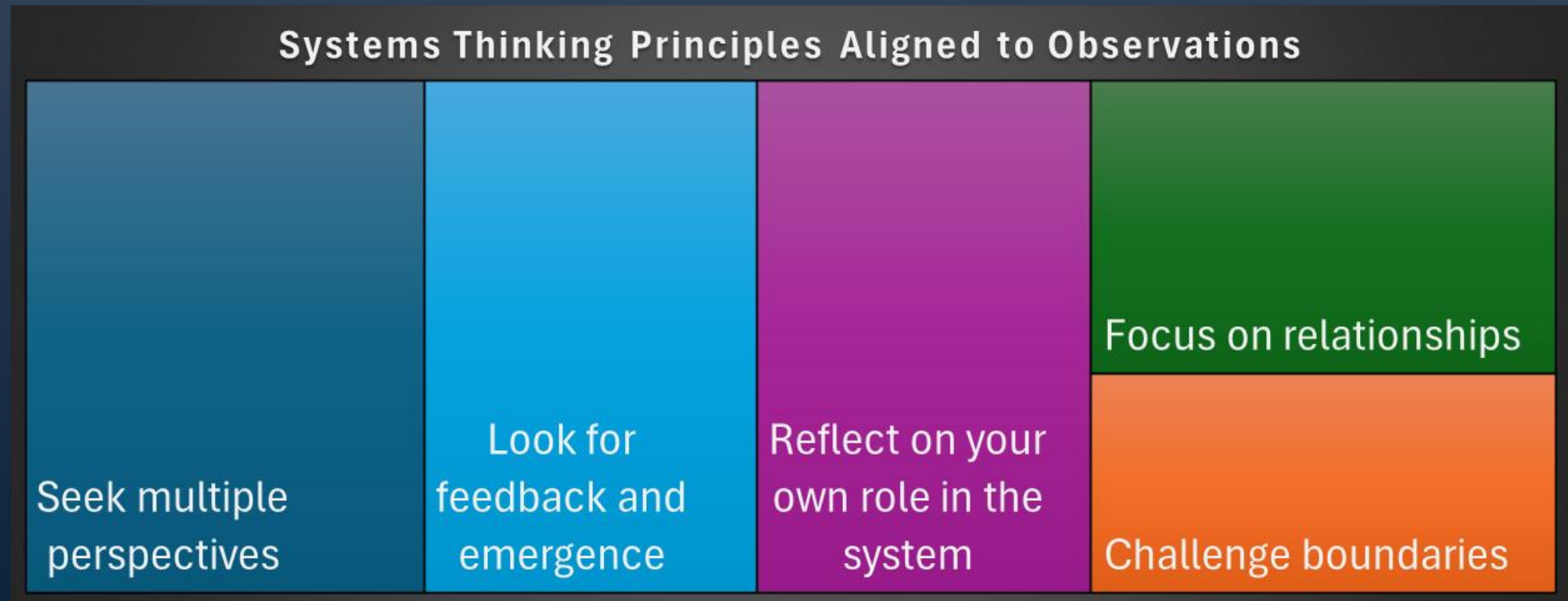
Perhaps requisite variety is not a theoretical property of the organisation in the high-tempo and military environment. It is more likely experienced day-to-day as adaptability.

Most technology problems turn out not to be technology problems.

Diversity of perspective

Systems Principles

- Methods may adapt, shrink, or become impossible to complete, but systems practice survives through the consistent application of a small set of underlying principles.



Reflections

- I entered an operational headquarters believing I was there to do systems thinking and discovered I was actually there to help people think systemically whilst the environment continually disrupted my plans.
- The practitioner's ability to adapt may be more important than the specific methods they carry.
- The military is hierarchical, but innovation systems within military organisations behave much more like networks.
- Don't reject methods – rather the principles survive when the methods become difficult to apply.

Summary Possible Lessons

- The environment will not wait for your methodology
- Innovation networks behave differently from hierarchical command structures
- A useful intervention may change thinking long before it changes process

Thanks for listening