

Agile Project Management

Managing Projects under Uncertainty



Nariman Dorafshan, 2022

An opportunity for wonder

The pleasure of finding things out

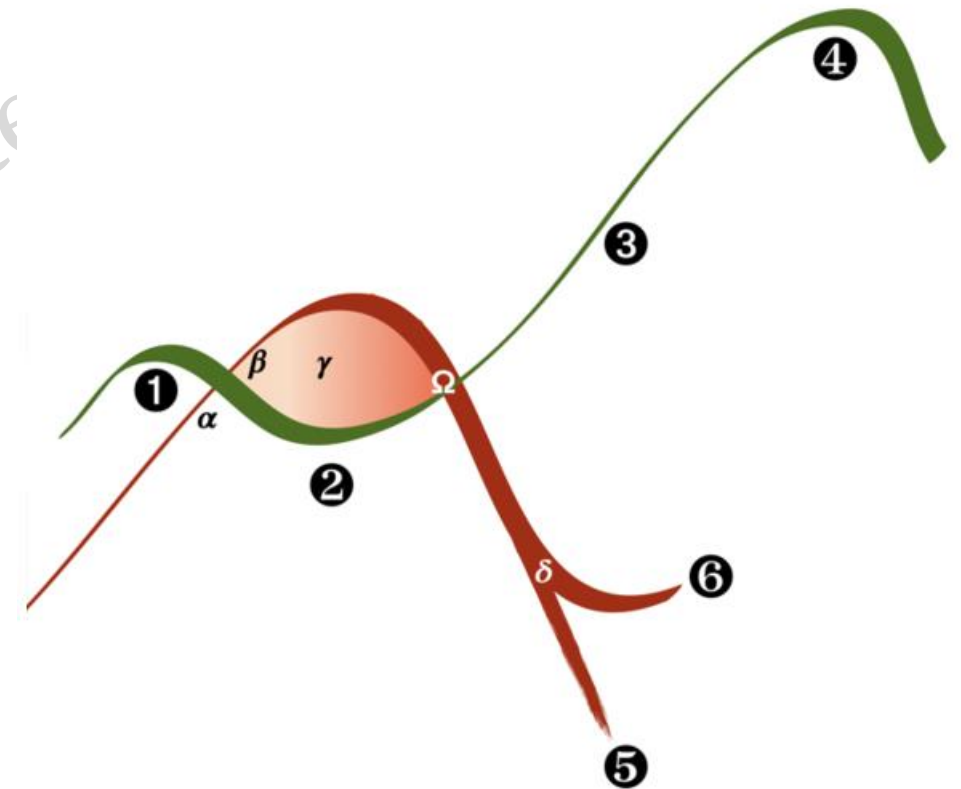
~ Richard Feynman

Session 01 Summary

Point 3

The novel left-field idea **becomes orthodoxy**,

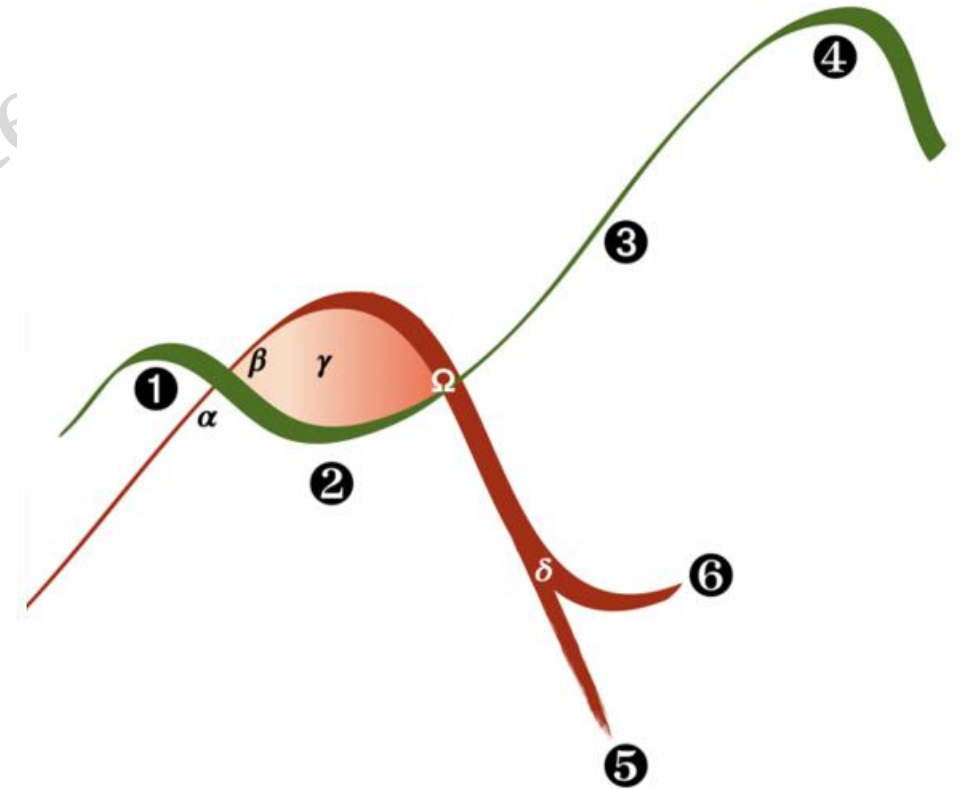
- it suddenly sees **mass adoption** although by this stage it may be compromised.
- It is on **everyone's lips**, popular articles are written, forms **its language**
 - and all novel ideas generally have some specialist language and seeing its third-party use is a buying signal



Point 4

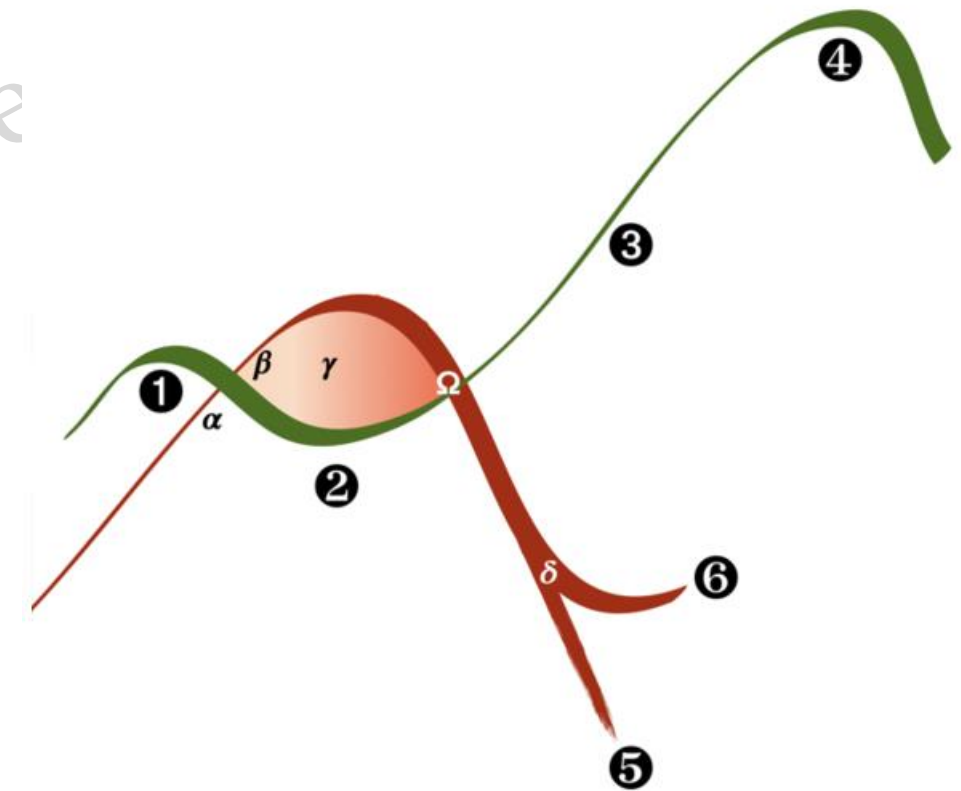
The novelty is now **wearing off**,

- the idea is starting to reach the **end of its life cycle**,
- **limitations of scale** and **context adaptability** are starting to show,
- **frustration** is building in progressive circles,
- but it is now the orthodoxy, the thing that everyone else is doing so there is **little risk** in its adoption.



State of Agile: Commodification

- We have clear signs of emergence that we are in near **the 4th point**, in gamma state
- Once it was:
 - a **novel** idea, radical, **small**, highly **energy efficient**
- Now:
 - Consolidated** into **Rigid**, **codified** frameworks, Certifications and accreditations as **commodity**
 - Even Big 6 consultancies entered the market





First Mover Advantage

- When the **first predator** enters an environment, the **rest of the ecosystem self-organizes around** the dominant predator.
- So, the dominant or the apex predator **survives**, **no matter how incompetent** they are, **until the ecosystem shifts**.
- The first and most important thing to do in strategy or operations, is to work out **where we are on the dominant predator cycle**; what's the context?
- After increasing stabilization and commodification, the **opportunity is now opening up** to something new to enter the field, something **low-energy and highly adaptive**

If you want to read more,

- Cynefin.io: [Flexuous Curves](#) (main reference for this section)
- Cynefin.io: [Exaptation](#)
- Cynefin.io: [Exaptive Triggers](#) (a method to be used inside Flexuous framework)
- TheCynefin.co: [Flexuously Untangled](#)
- TheCynefin.co: [Articles on Apex Predator](#)
- Cattani & Andriani, “[Exaptation as source of creativity, innovation, and diversity: introduction to the Special Section](#)”, *Industrial and Corporate Change*, Vol 25, (2016)

Hidden Order

- In the real world, even simple nonlinear systems can display uncertain, complex behavior that makes anything beyond short-term prediction impossible.
- “Chaos” used here is not chaos in the everyday meaning of the word.
- Chaos theory has revealed that, between order and disorder, a “hidden order” can appear.
- In this middle-ground, behavior never repeats itself exactly, but it is drawn to a “strange attractor”, which seems to set limit to what is possible.
- In these circumstances, patterns can be recognized, and it becomes possible to predict the overall “shape” of what can happen.
- All snowflakes have six sides while still all being different,

A difference between systems

- Newer developments in complexity theory mean that, nowadays, the term chaos theory tends to be **restricted** the study of the nonlinear dynamics observed in natural systems.
- In meteorology, physics, chemistry, and biology, the behavior of systems can often be modeled on the basis of a **small number of variables** with **fixed interactions**.
- In social and ecological systems, with **huge number of elements**, with **different and evolving characteristics**, and **impacted by numerous internal and external changes**, it is much more difficult to discern the influence of strange attractors.

Complexity and Other Traditions

Although some complexity theorists acknowledge their debt to earlier systems thinker,

More often, complexity theory likes to present itself as a “radical break” with what has gone before and, as a result, fails to acknowledge the achievements of the systems and cybernetics traditions that, particularly in terms of practical advice to managers are far ahead of their upstart rival.

Why is Complexity Appealing to Business Managers?

By the way, what does Complex, and Complexity means?

Part 1.3

What does **complex** means anyway?

A short Introduction

The greatest injustices in history
has started with

~ Attributed to Confucius (551 BC – 471 BC)



Conceptualization | مفهوم پردازی

- The **process** of **defining** or **specifying** concepts
 - What we **mean** when using certain terms
 - The main purpose: **Refining and Specifying abstract Concepts**
 - First step in the measurement process
 - When using different conceptualizations of a single word,
 - It's **not the question of Right or Wrong**
 - It's about **how useful** it can be
- Chaos
 - Complexity
 - Paradigm
 - Agile
 - Resilience
 - Thriavability
 - Anti-fragility

Knowledge of Terminology – What's the need?

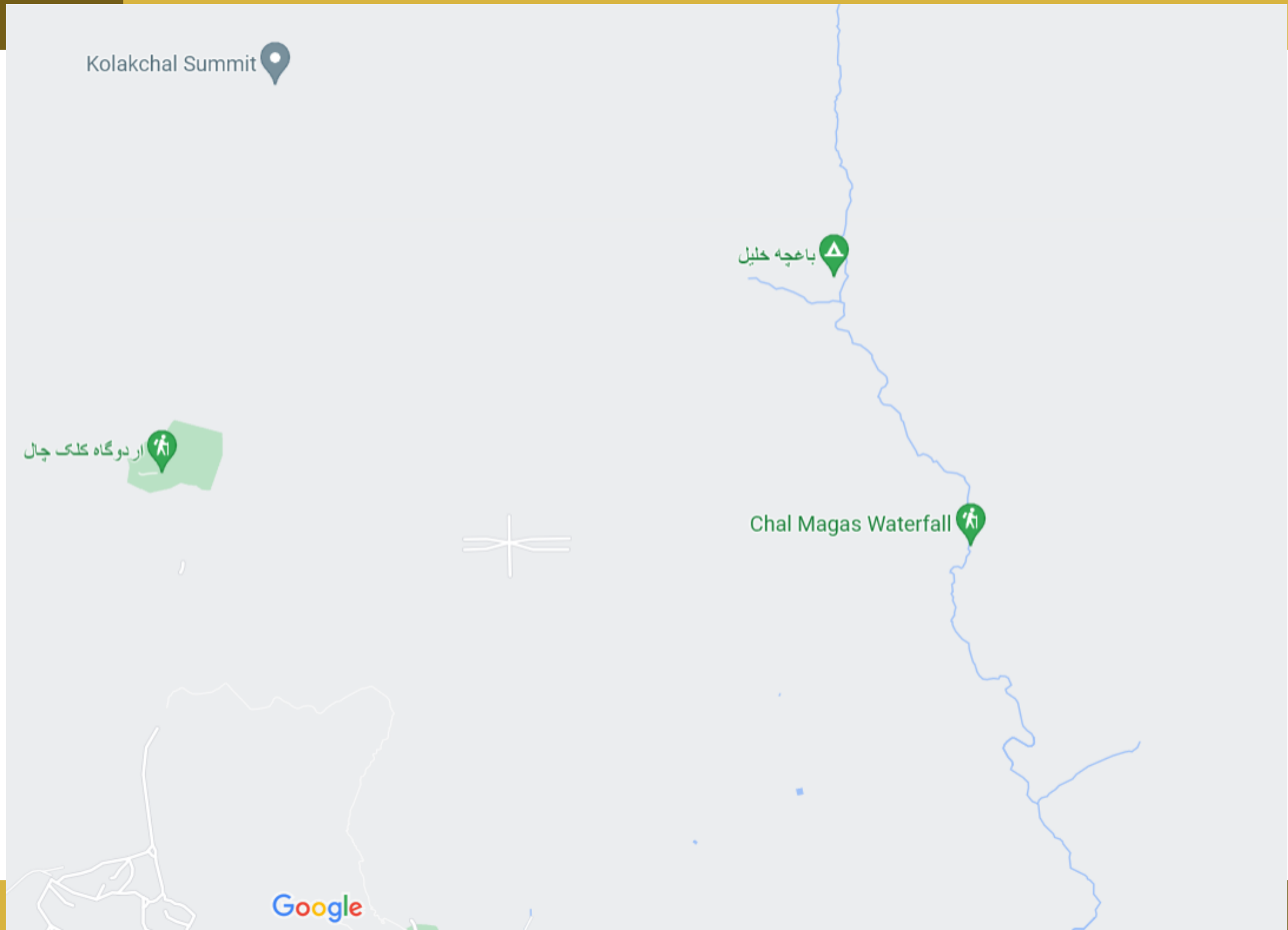
- Each subject matter contains a large number of **labels and symbols**, both **verbal and non-verbal**, that have particular referents.
- They are the **basic language of the discipline** – the **shorthand** used by **experts** to express what they know.
- The experts find it **necessary** to use them while communicating
- In many cases it is **impossible** for experts to discuss problems in their discipline **without making use of essential terms**
- It's even **impossible to even think about** many of the phenomena in the discipline unless they use these labels and symbols

Knowledge of Terminology - Precision

- The **novice** learner must be cognizant of these labels and symbols and learn the generally accepted referents that are attached to them
- As the **expert** must communicate with these terms, so must those learning the discipline have a knowledge of the terms and their referents as they attempt to **comprehend** or **think about** the phenomena of the discipline
- Scientists find it difficult to express ideas or discuss particular phenomena with the use of other symbols or with “proper” or “**folk knowledge**” terms more familiar to lay population

What is this?

*Shall we
discard this
map entirely?*



What's the
difference here?

*Can we use this
sort of map,
everywhere?*



Models, as Colored Glasses

- Can **Clarify** or **Magnify** something (point something out)
- Can make some things **undistinguishable**
- Can even **Distort** some things
- What is **Model Blindness**?
- Humanities and Management Studies starts from here!



مدل ذهنی و کاربرد مدل ذهنی در مدیریت

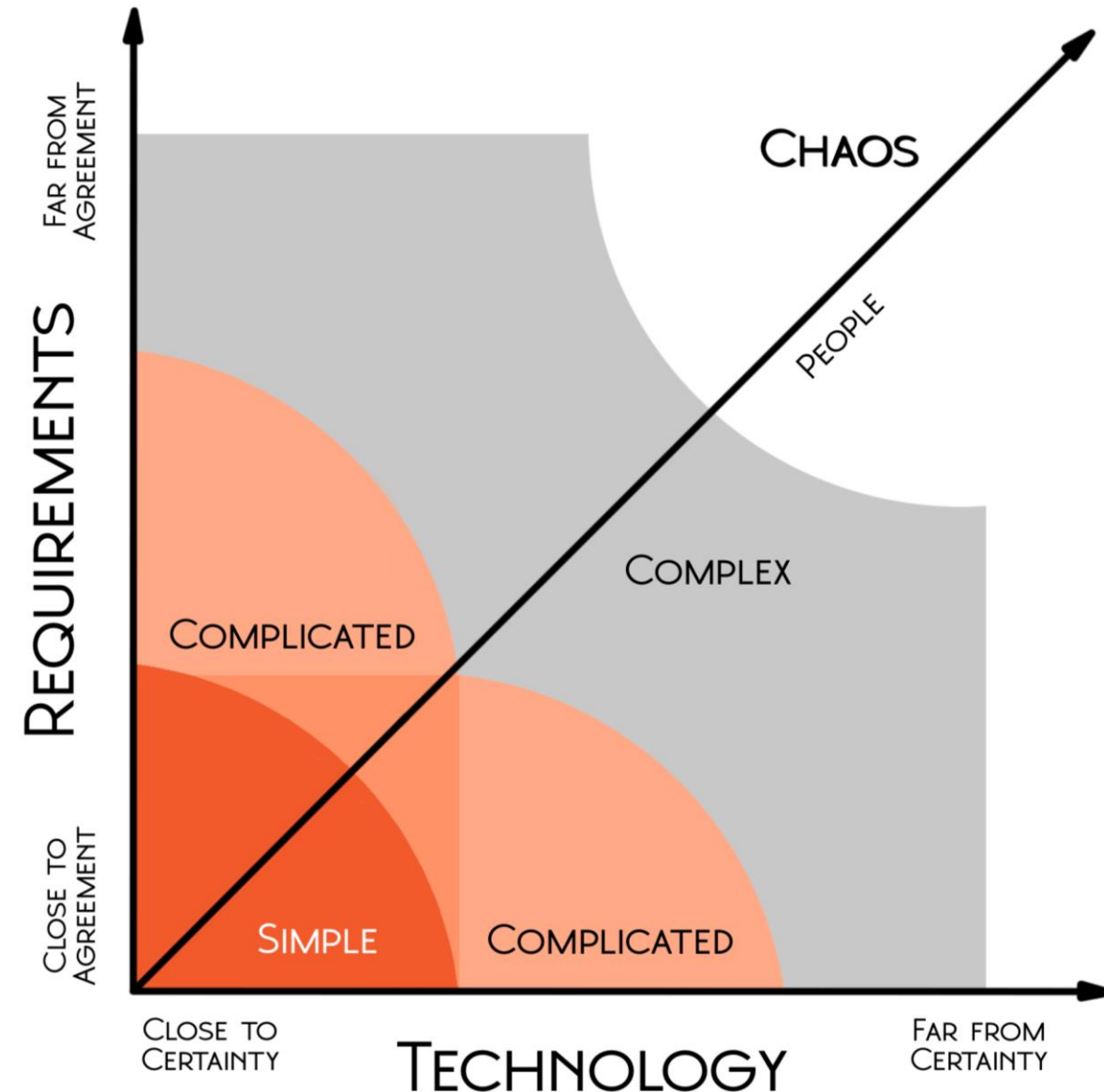
All models are incorrect,

some of them are beneficial to us,
in some situations.

Stacy Matrix

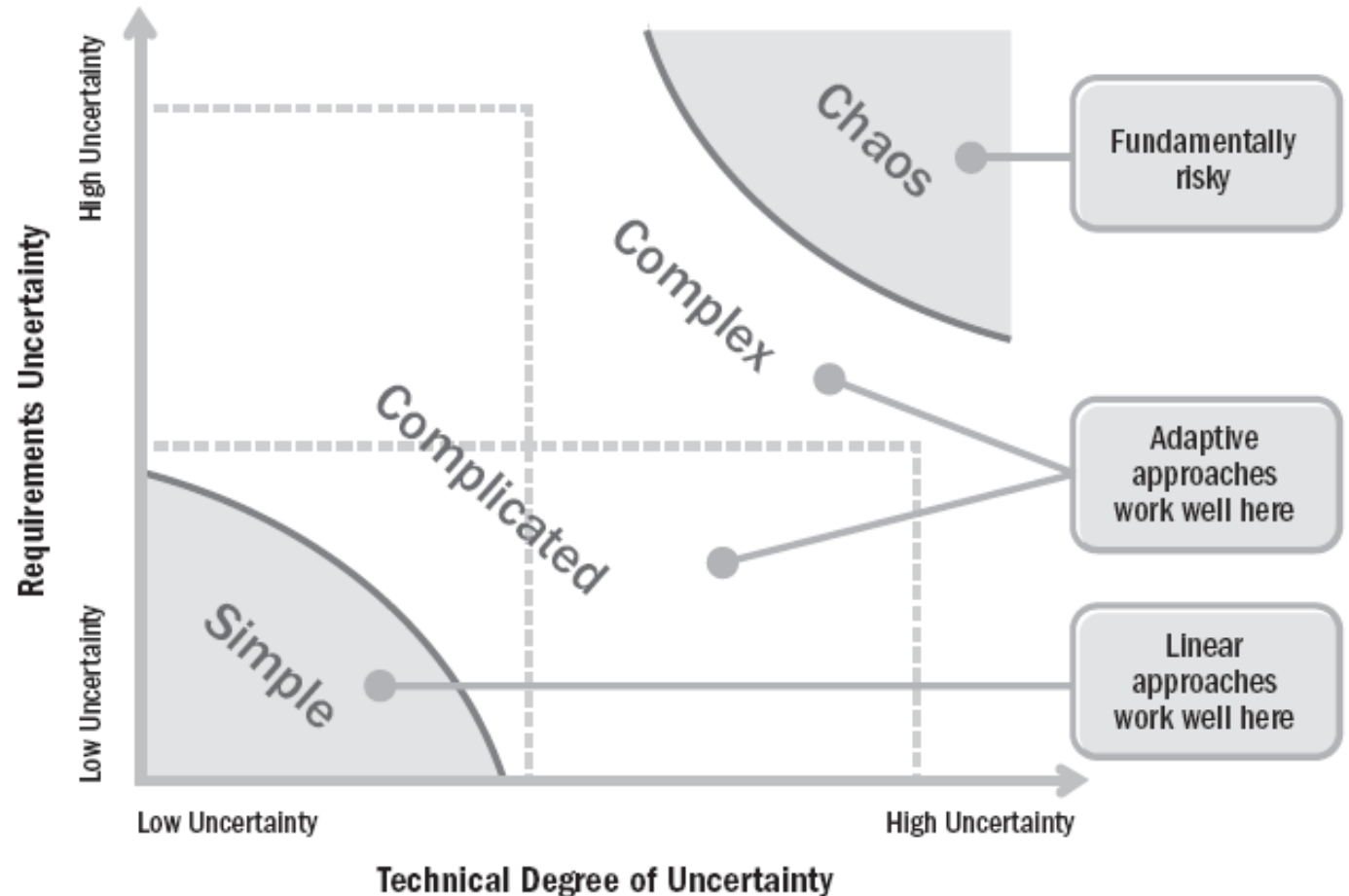
Has two dimensions to determine the **relative complexity** of a project:

- The relative uncertainty if the requirements for the deliverable (**WHAT**),
- The relative uncertainty of the technology that will be used to create the deliverable (**HOW**),
- Thus, **classifies** project into one of its four categories



Stacy Matrix – just another model

- What does it magnify?
- What does it make unclear?
- What does it distort?
- Where is it beneficial?



Part 1.4

Cynefin Framework

A sense-making framework

Sense-Making:

Making sense of the world so as to be able to take act in it

- It is the processes through which people interpret and give meaning to their experiences.

Do not Distribute

Limits of Rationality

- Is **causality** always **determinable**?
- Can we **relate cause and effect** for sure?
 - If taking a certain action, can we know what would be the effect?
 - Or, given the effect, determine what caused it?
- We need to acknowledge that there are systems in which we can determine causality and those in which we cannot: **ordered** and **un-ordered** systems.

Un-ordered

Ordered



Ordered system

- System is highly constrained,
- The behavior highly predictable
- The causality is either
 - Obvious from experience (simple system)
 - Can be determined by analysis (complicated)
- Can be taken apart and put back together

Un-ordered

Ordered

Complicated

Cause effect
requires analysis

Obvious

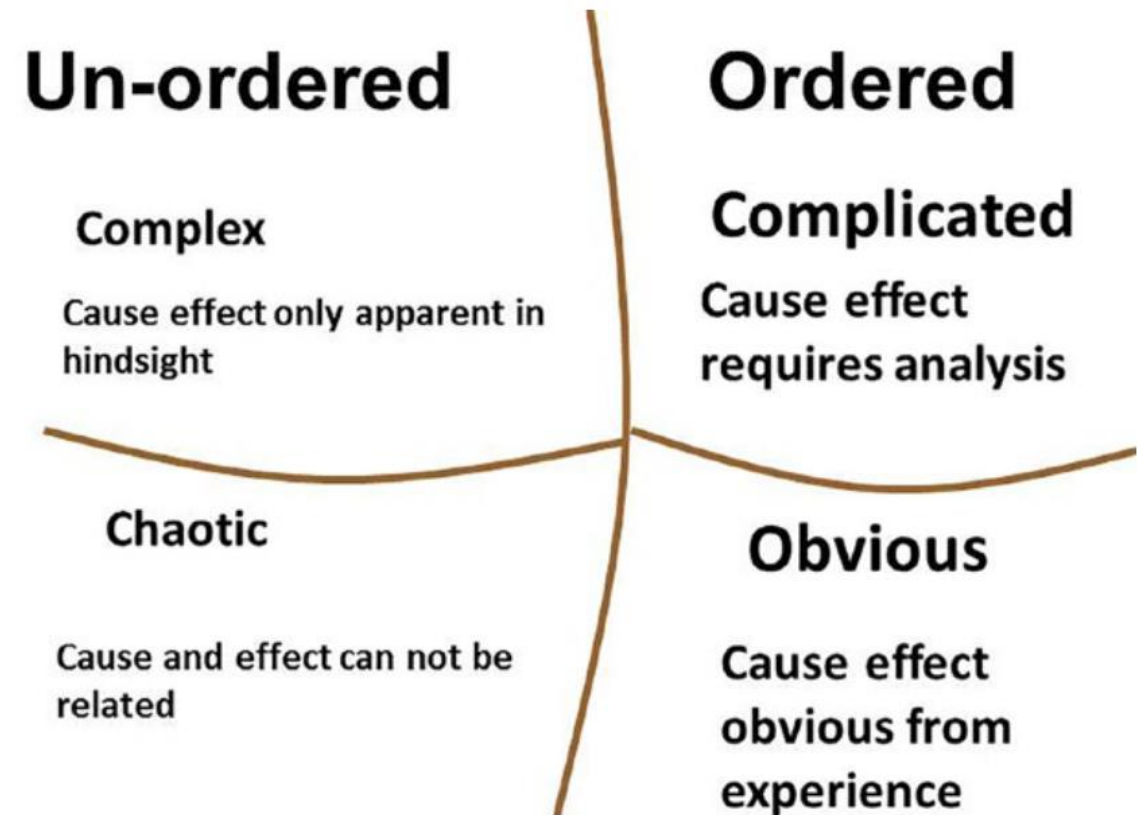
Cause effect obvious
from experience

Un-ordered

Although we cannot determine causality,

- Some of these systems are stable, and constraints and behavior evolve over time through interaction of the components
- Causality can only be determined in hindsight, and no amount of

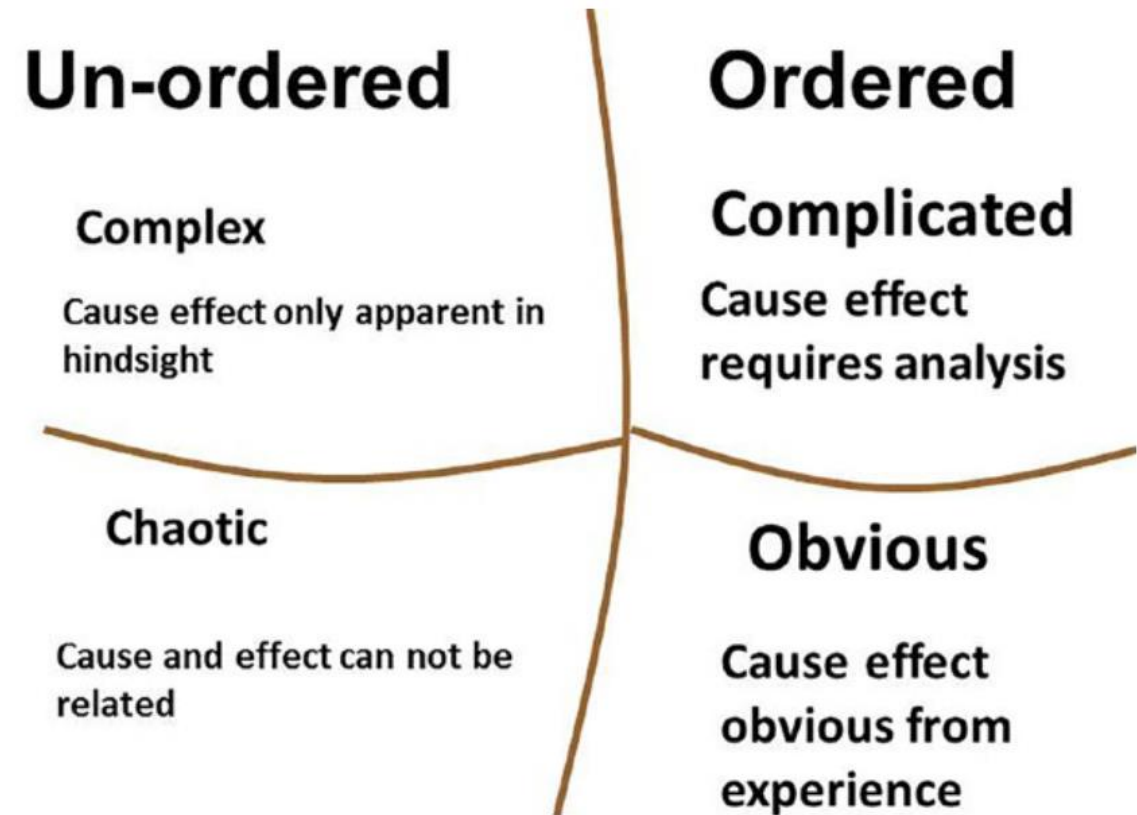
They then realized there is a huge difference between



Un-ordered - Continue

There are also systems that are not stable and which we can only describe as chaotic:

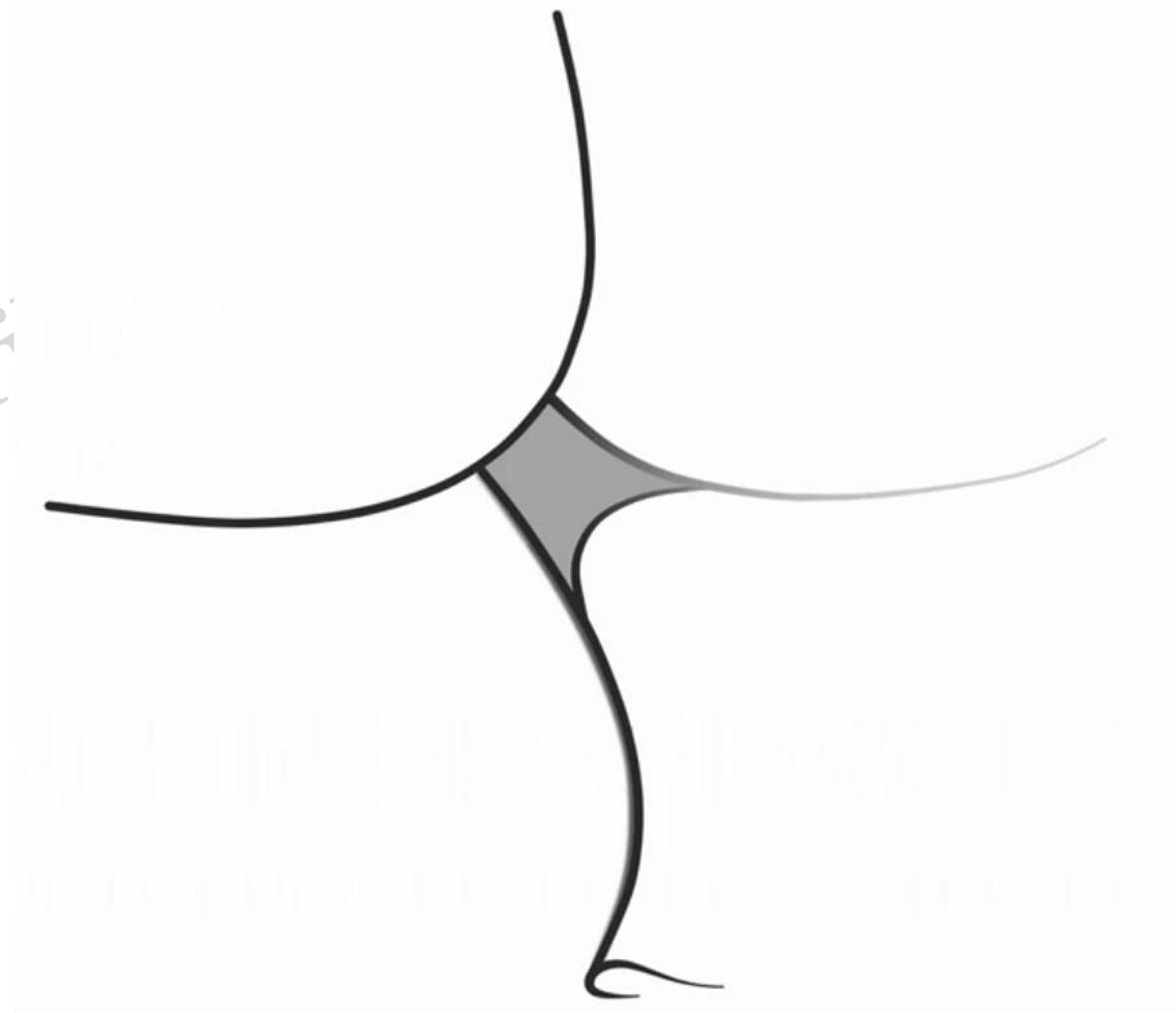
- There are few to no constraints, and behavior is random



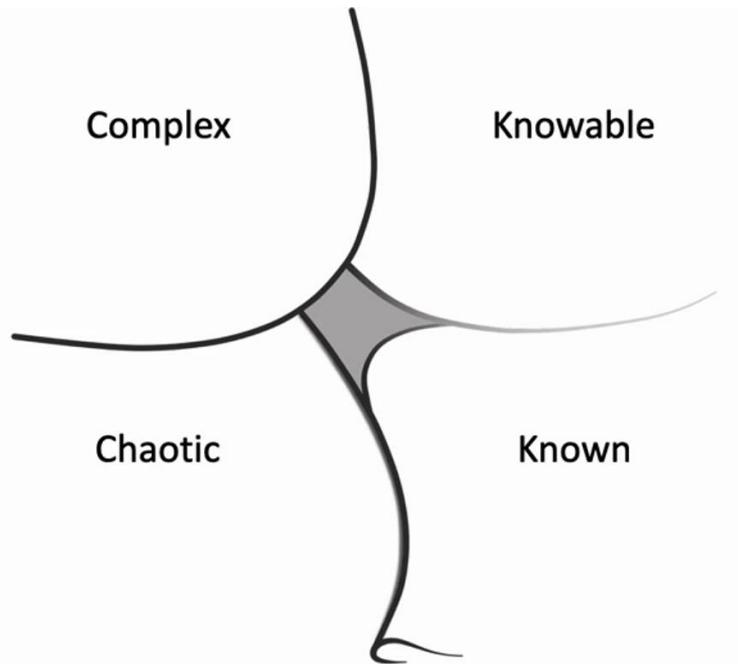
Also, one additional domain

Systems that we have not yet determined, we put these in the “**disorder**” bucket.

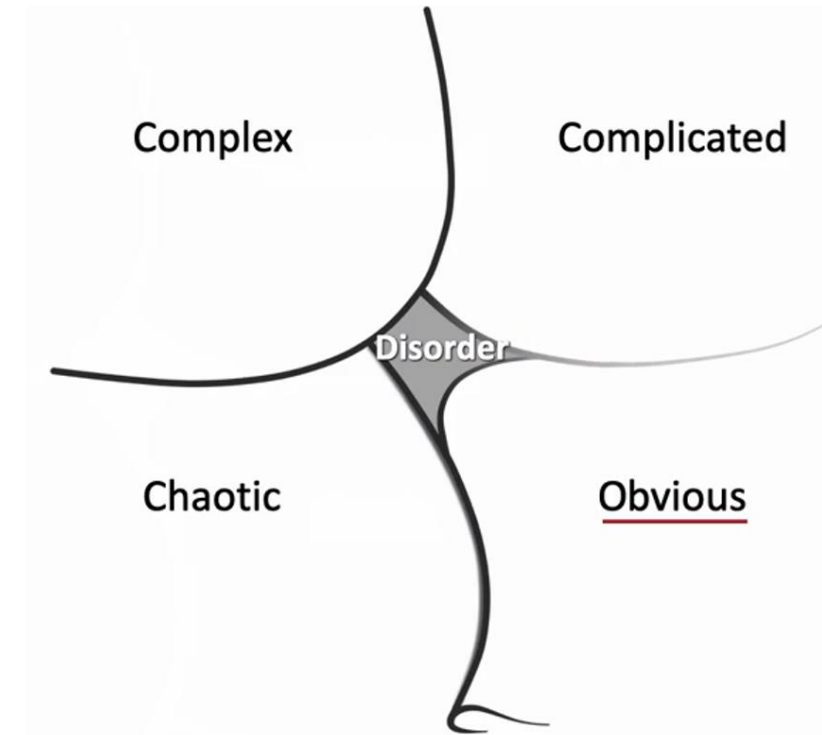
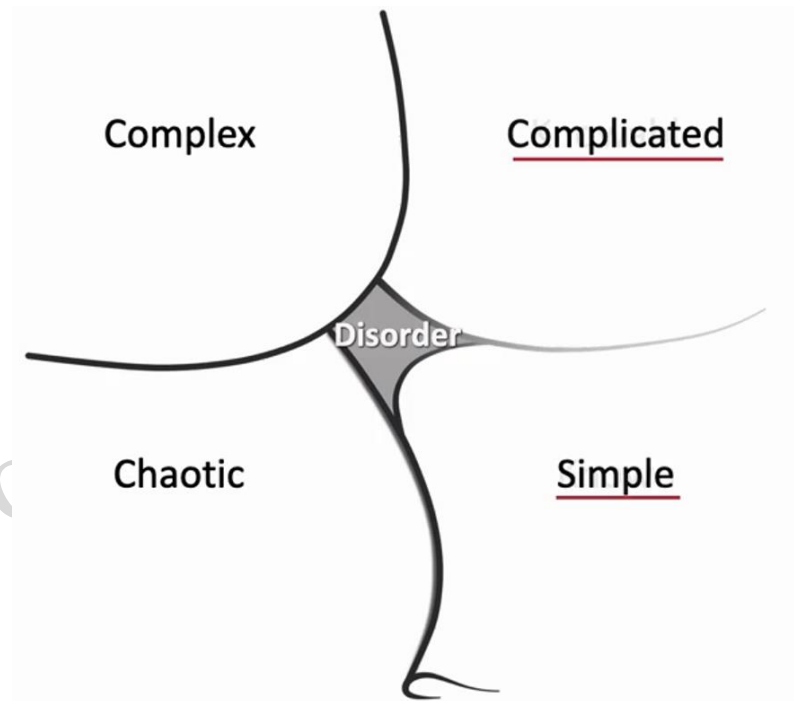
- Now it is named “**Confused**”
- What’s the **fundamental difference** from the previous four?



Cynefin changes over 20 years

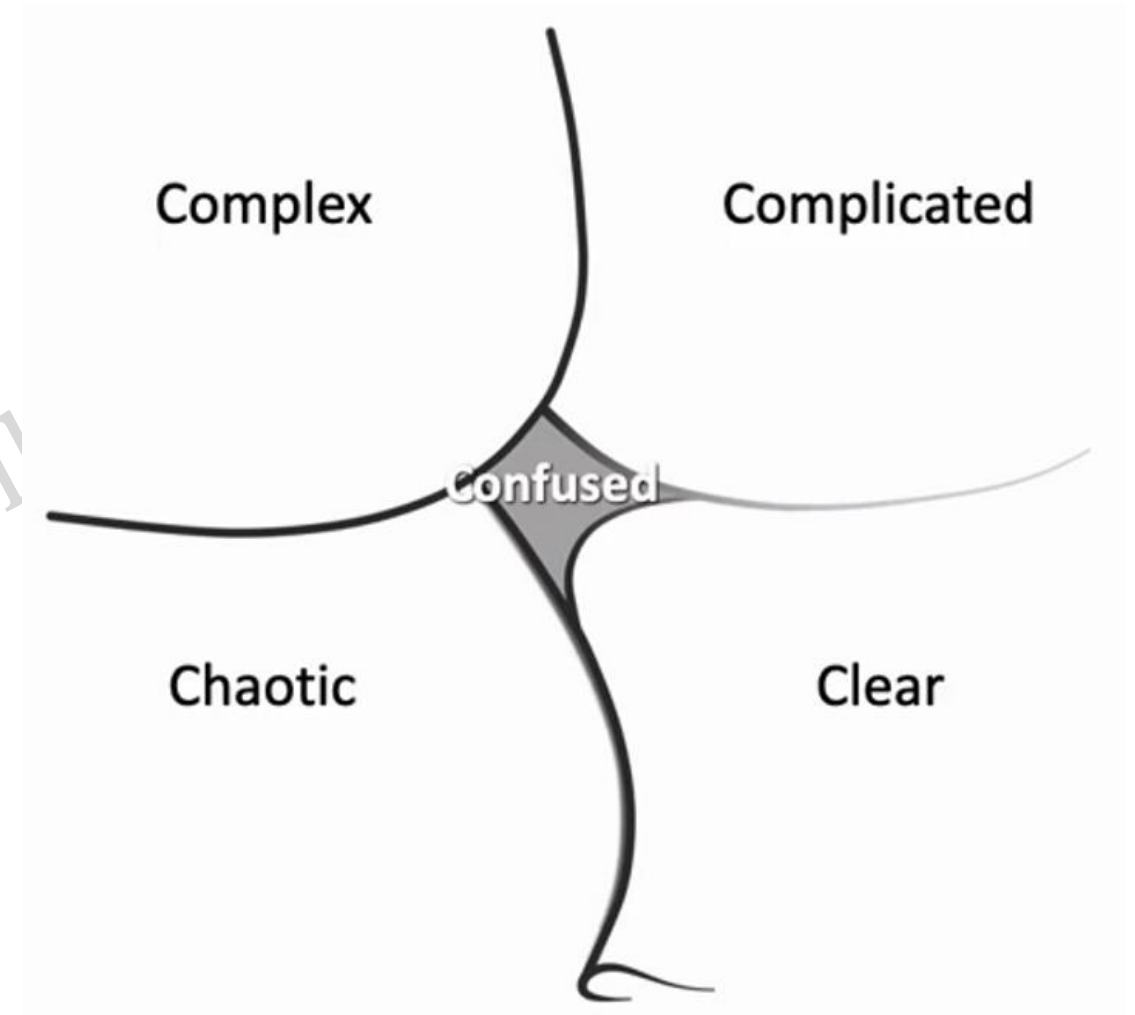


They started as a Knowledge
Management framework in 2001



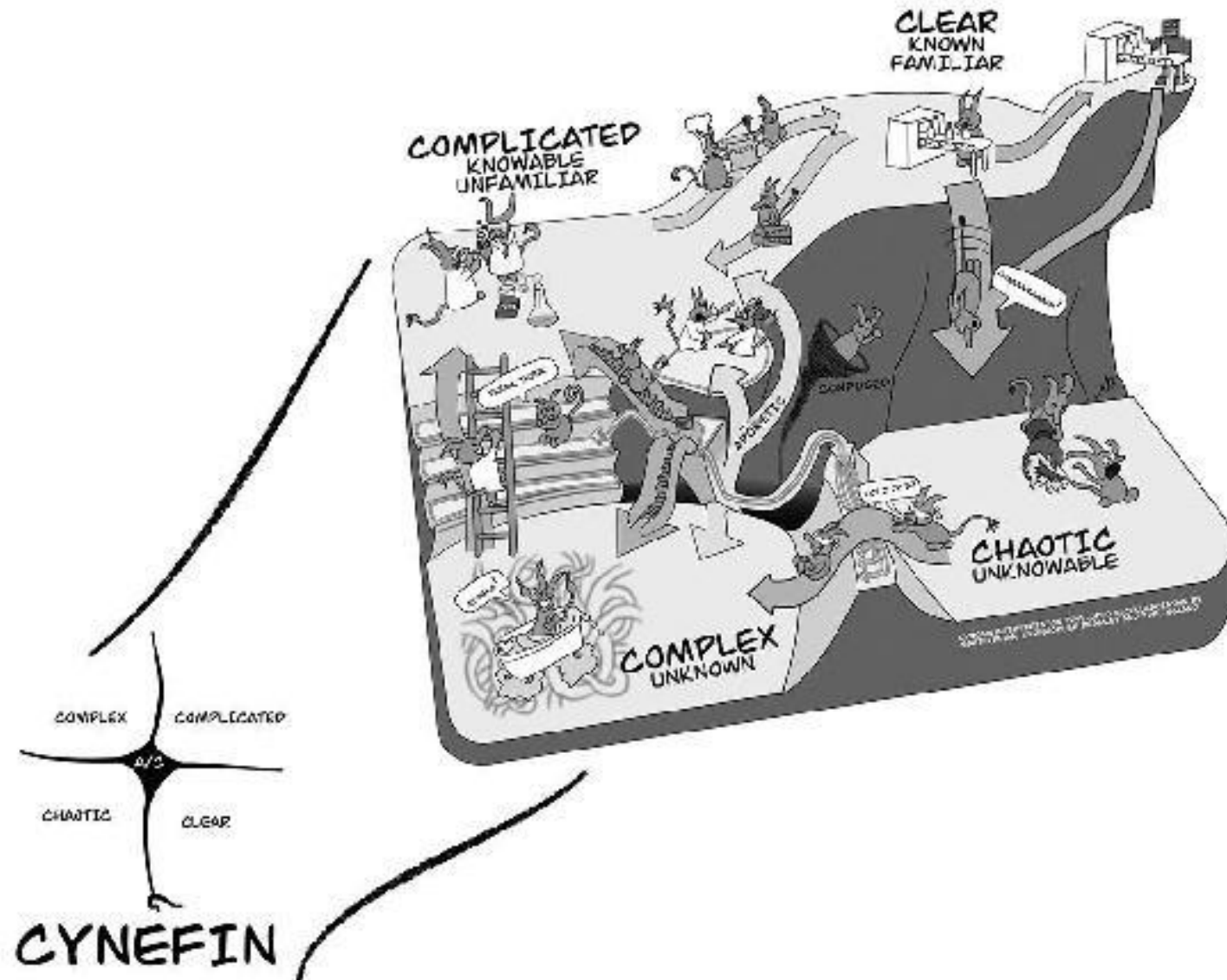
Cynefin Framework, 2021

- 5C Domains
- A **sense-making framework** (not a model)
- Transitions between domains
- 3*3 Domain Models



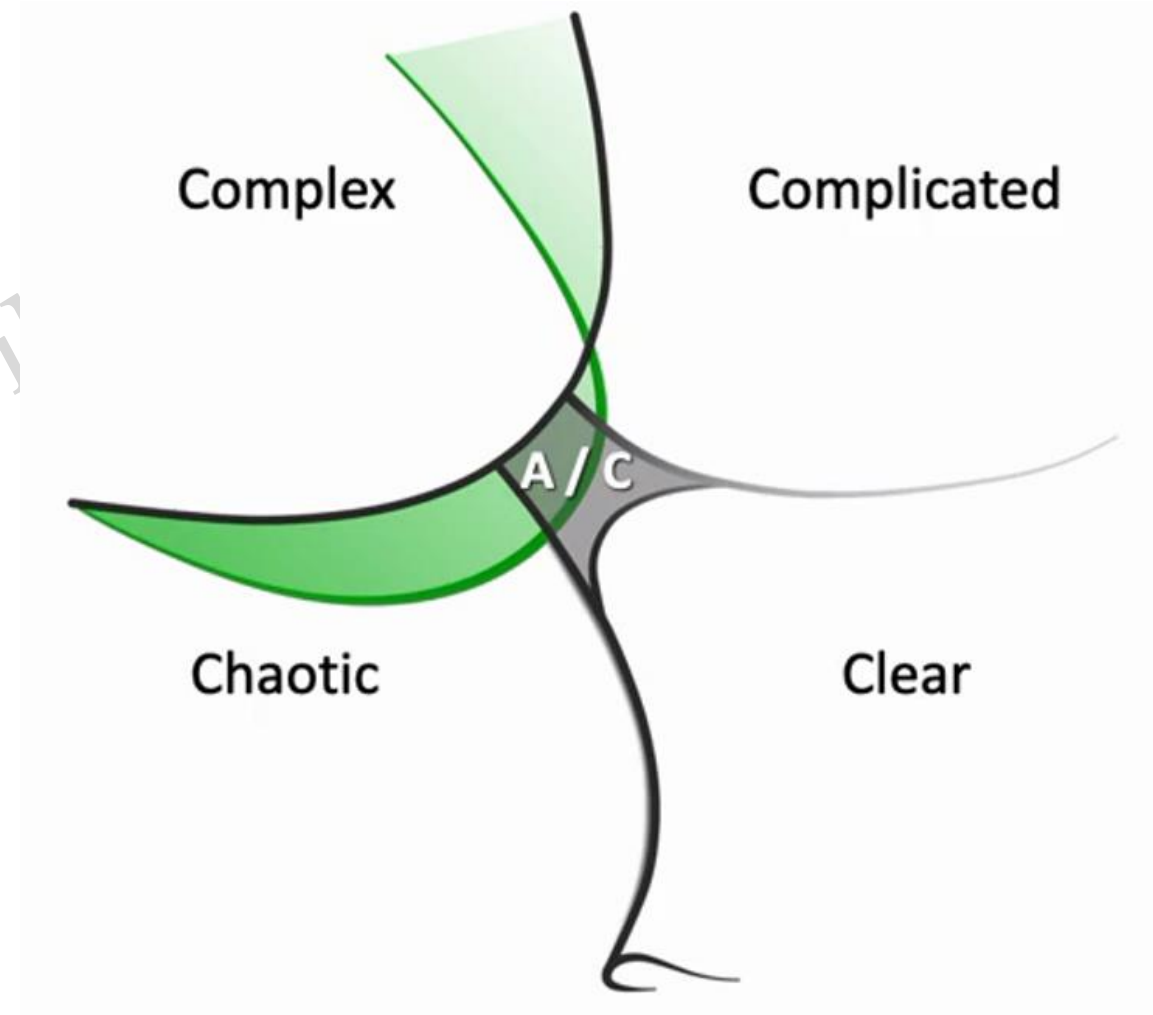
Edge of Complacency

- between Clear and Chaotic domains
- Complacency:
a feeling of **satisfaction** with a situation or with what you have **achieved**, so that you **stop trying to improve or change** things – used to show **disapproval**

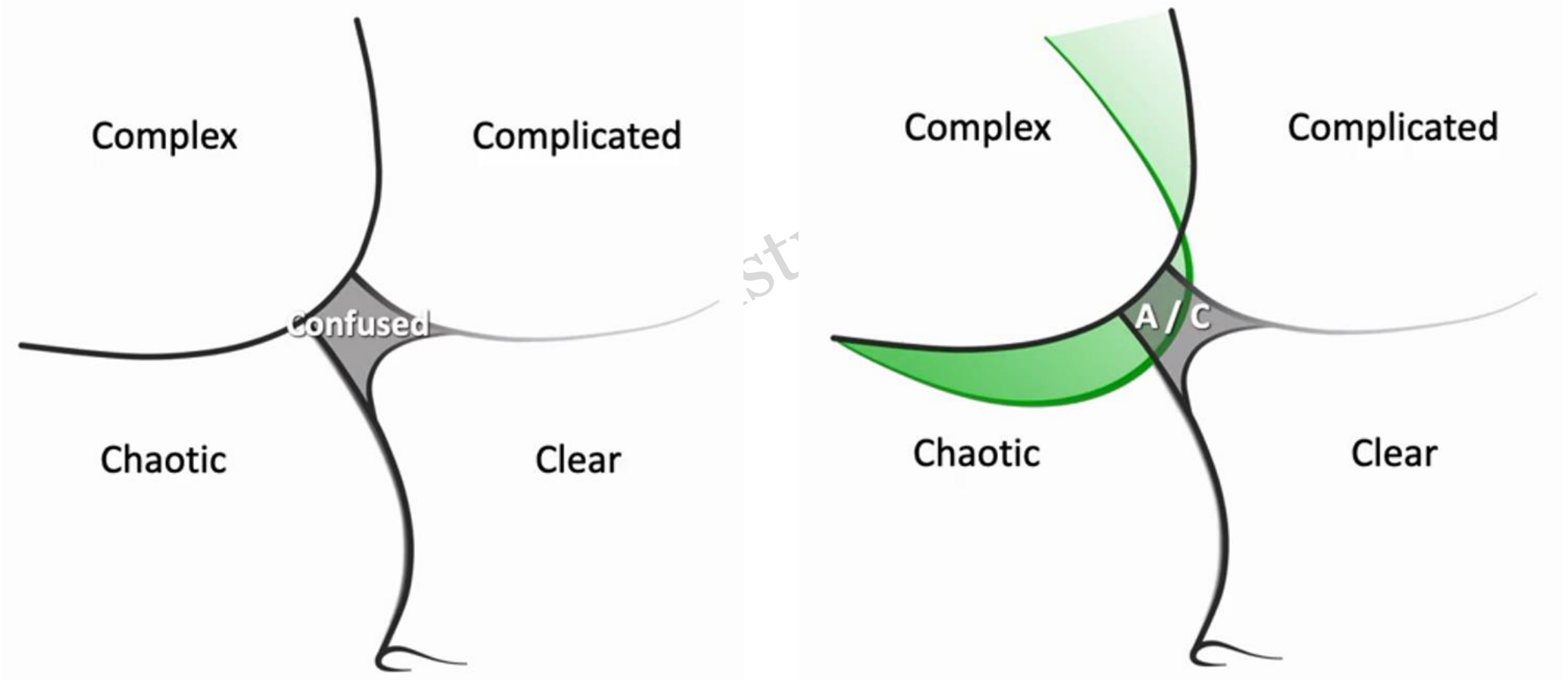


Liminal Version

- Not Covered here
- Liminal Line, creating Liminal Areas
- 4 new domains
- Aware Aporetic / Confused



Cynefin – Two Versions

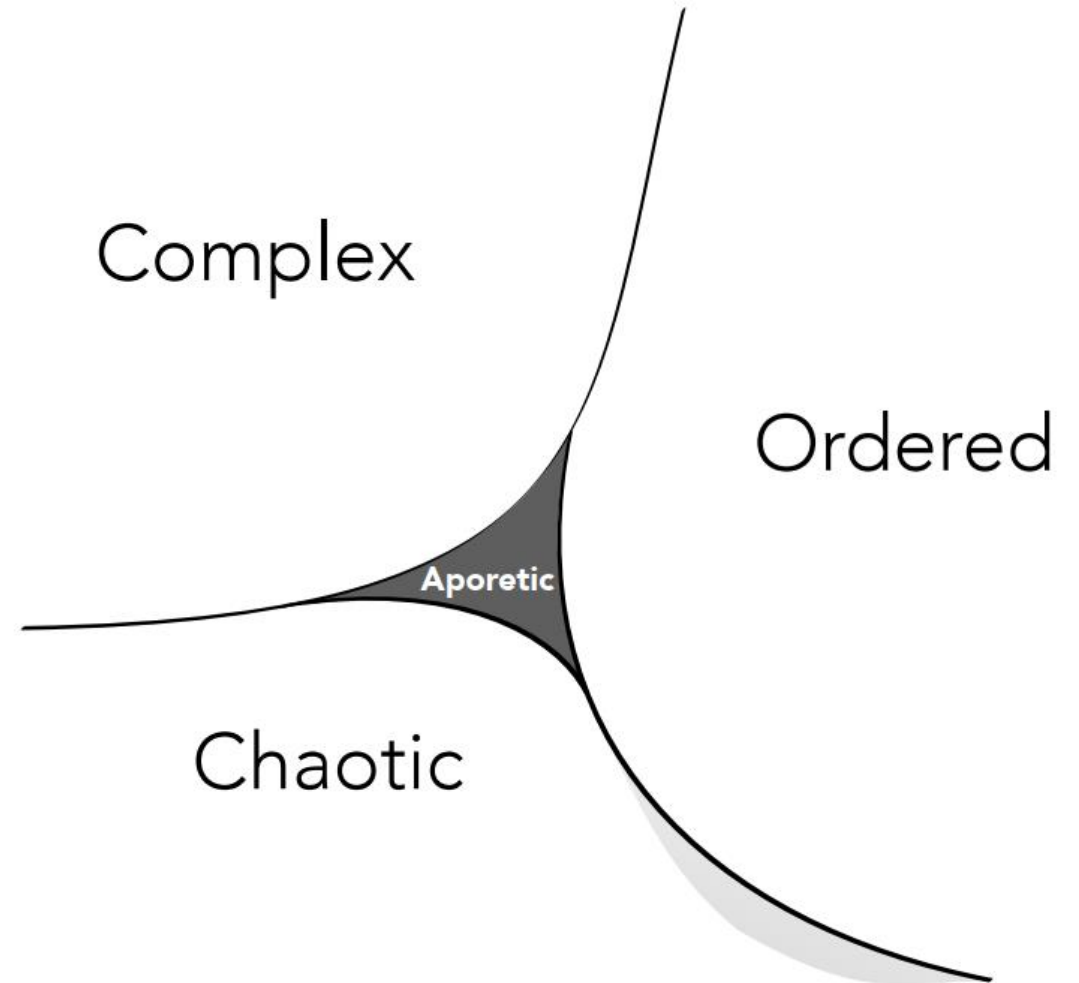


3 types of systems

- What was the real difference between Clear and Complicated?

- Aporetic

Being in the epistemological state of **not having made sense of a given context**, while being aware of **such ignorance** and having an intentional attitude towards overcoming it



Some Terms

- System:
any **network of interaction** with **coherence**, even with fuzzy boundaries
- Agent:
anything that **acts within** the system; that may be a person, a community, a dominant narrative, a process, or a rule.
- Constraint
Somethings that **contain** or **connect** agents inside the system
Anything **limiting** the space of future possibilities or **favoring** its evolution in a certain direction

Causality and Correlation

- Causality:

Cause-effect deterministic relationship between two phenomena or events, implying that one necessarily follows the other
(not to be confused with correlation)

- Correlation:

Joint statistical recurrence of two phenomena or events
(not to be confused with Causation)

Do not Distribute

Emergence and Attractor

- Emergence:

appearance of something, typically a property, as a result of the interactions of parts in a system, in a way that is not predictable starting from the analysis of those parts

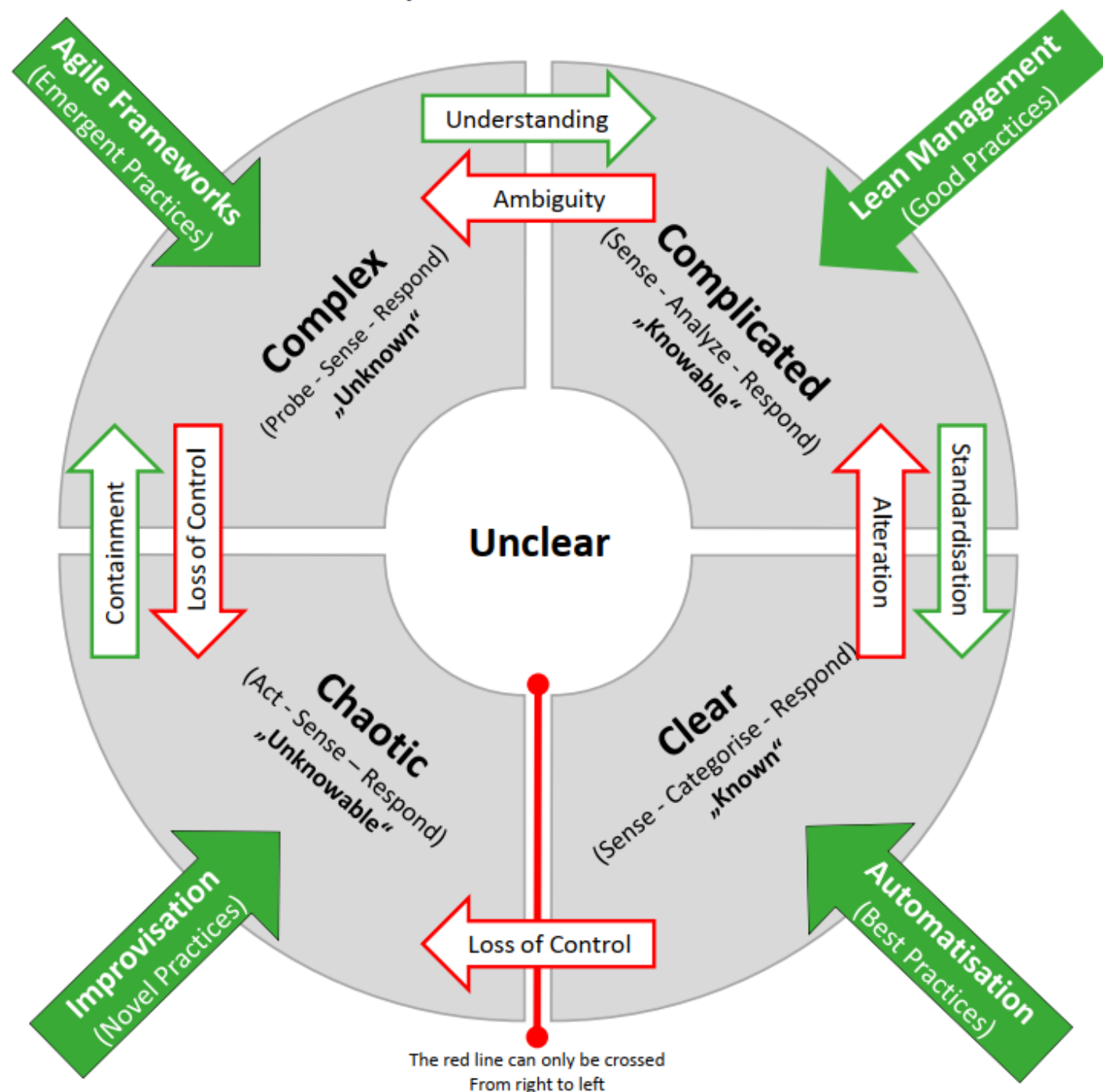
- Strange attractor:

A behavioral phenomenon where, although individual actions never repeat, they follow a certain recognizable recurrent pattern

(borrowed from mathematical physics)

- An **over-simplistic** comparison

Do not



The *wholehearted* organisation

– where it's every leader's responsibility

Up, down, and across the organisation – everywhere change is needed:

Engaging openly on its challenges, imbalances, and contradictions

The *wholehearted* organisation

– where it's every leader's responsibility

Up, down, and across the organisation – everywhere change is needed:

Bringing people together, building trust, keeping it whole:

Engaging openly on its challenges, imbalances, and contradictions

Inviting participation in every dimension of the strategy process

The *wholehearted* organisation

– where it's every leader's responsibility

Up, down, and across the organisation – everywhere change is needed:

Bringing people together, building trust, keeping it whole:

Powering it from the inside, bringing energy and purpose:

Engaging openly on its challenges, imbalances, and contradictions

Inviting participation in every dimension of the strategy process

Celebrating the **initiative** of those closest to the need and opportunity

The *wholehearted* organisation

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Engaging openly on its challenges, imbalances, and contradictions

Inviting participation in every dimension of the strategy process

Celebrating the **initiative** of those closest to the need and opportunity

When that's working at its ideal best for us, what's that like?

Whose needs would we be meeting?

What new stories could they tell?

The *wholehearted* organisation

– where it's every leader's responsibility

Engaging openly on its challenges, imbalances, and contradictions

Inviting participation in initiating, developing, and pursuing strategy

Celebrating the **initiative** of those closest to the need and opportunity

Exercise 1.2

***What stops that?
What gets in the way?***

What stops you leading like that?

TIP: Sell the pain, not the solution, the theory, or the blame

The *wholehearted* organisation
– where it's every leader's responsibility

Engaging openly on its challenges,
imbalances, and contradictions

Inviting participation in initiating,
developing, and pursuing strategy

Celebrating the **initiative** of those
closest to the need and opportunity

Exercise 1.3
Part 1

***What would you like
to have happen?***

***Then what
happens?***

- signs of emergence
- indicators of progress
- measures of success
- goals and aspirations

The *wholehearted* organisation
– where it's every leader's responsibility

Engaging openly on its challenges,
imbalances, and contradictions

Inviting participation in initiating,
developing, and pursuing strategy

Celebrating the **initiative** of those
closest to the need and opportunity

**If “15% is
*always there
for the taking*”,
what could we
be trying?**

**Of those options,
where should we
start? Where
might that take
us?**

Exercise 1.3
Part 2

Let's ask questions!

- As a warm-up exercise,

Think back to previous decision-making meetings that you've led or attended;

- So that everyone knew quickly why they were there and how they could contribute, how was context established?
- Conversely, where that didn't happen, what might have been done differently?

Who and what are we dealing with?

- **Identity / scope**

What organisation (or part thereof) do you **identify with** most strongly?

What **role** do you play there?

- **Mission / purpose**

In your own words, how would you **describe its mission or purpose**?

What does it do, who does it do that for, and what does it hope to achieve?

What are its challenges?

- Challenges confronting it from outside
- Challenges it sets for itself
- Emerging challenges – challenges not fully recognised or understood
- What crucial information are lacking? If I know the answers to which questions, could I make a better decision?

Adaptive Challenge

Of those challenges (including any others you may now think of), which might be described as *adaptive*?

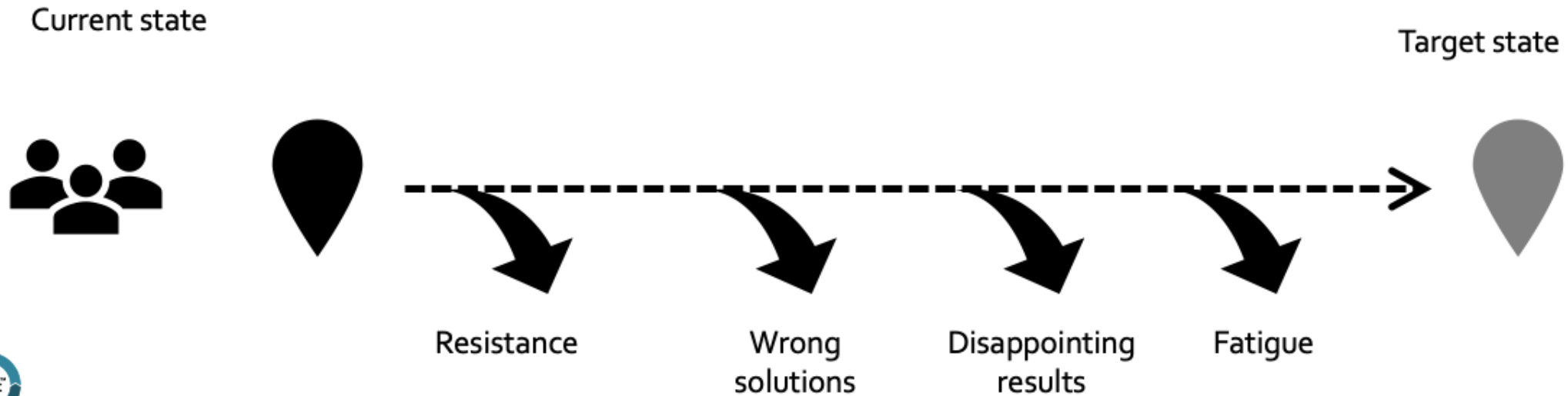
Your *adaptive challenges* are:

- the **hardest to scope accurately** before they are **engaged with**
- those most likely to **require significant learning and adaptation**

Taking care again to *avoid language that might constrain strategy prematurely*, can you summarise in a few words?

Solution-driven Rollout meets *adaptive challenge*

How's that working for you?



Celebration-5W

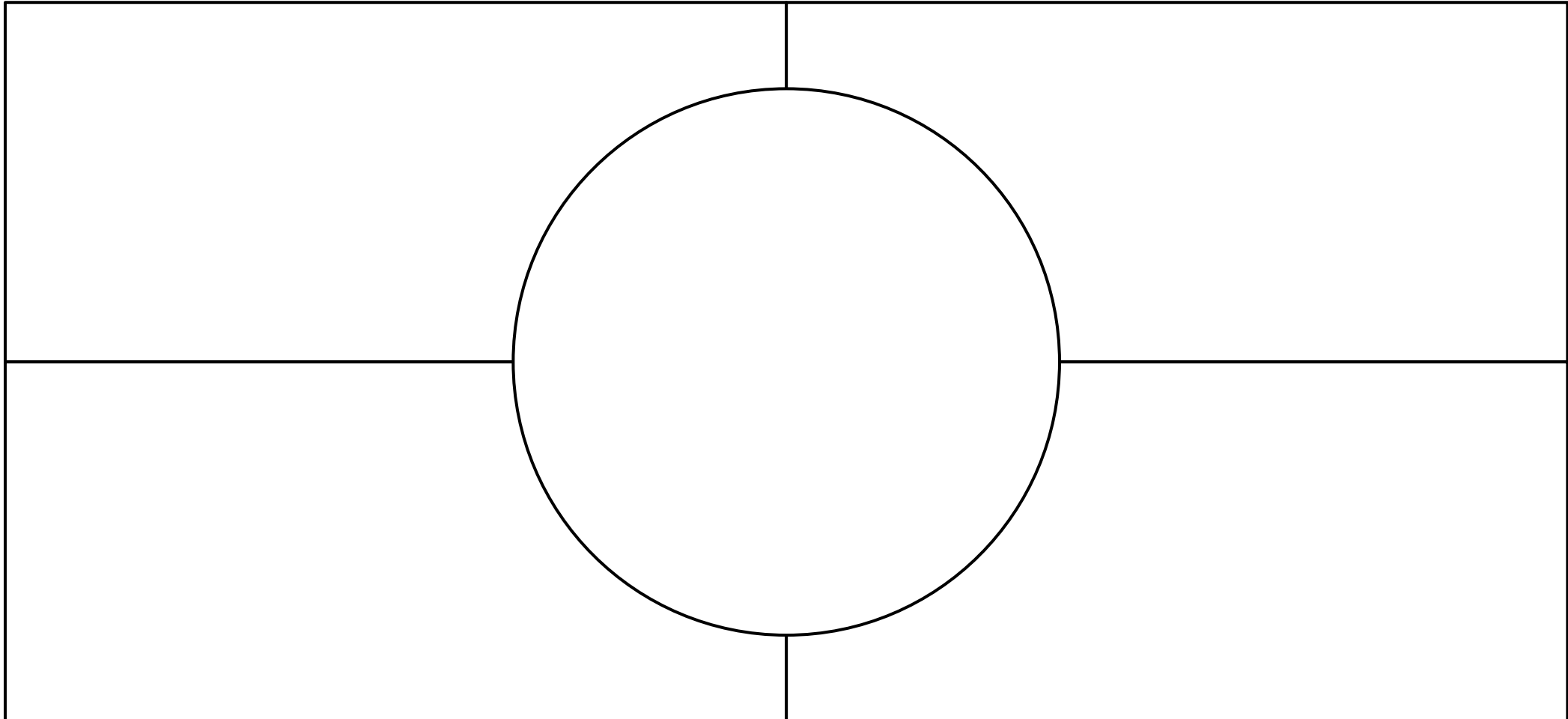
Explanation

You're celebrating **your next big breakthrough** –

- Celebrating with everyone who helped make it happen
- Reminding each other of how you were stretched and why it was all worth it
- Put that into business context with the 5W questions (deliberately deferring the How)

Do not Distribute

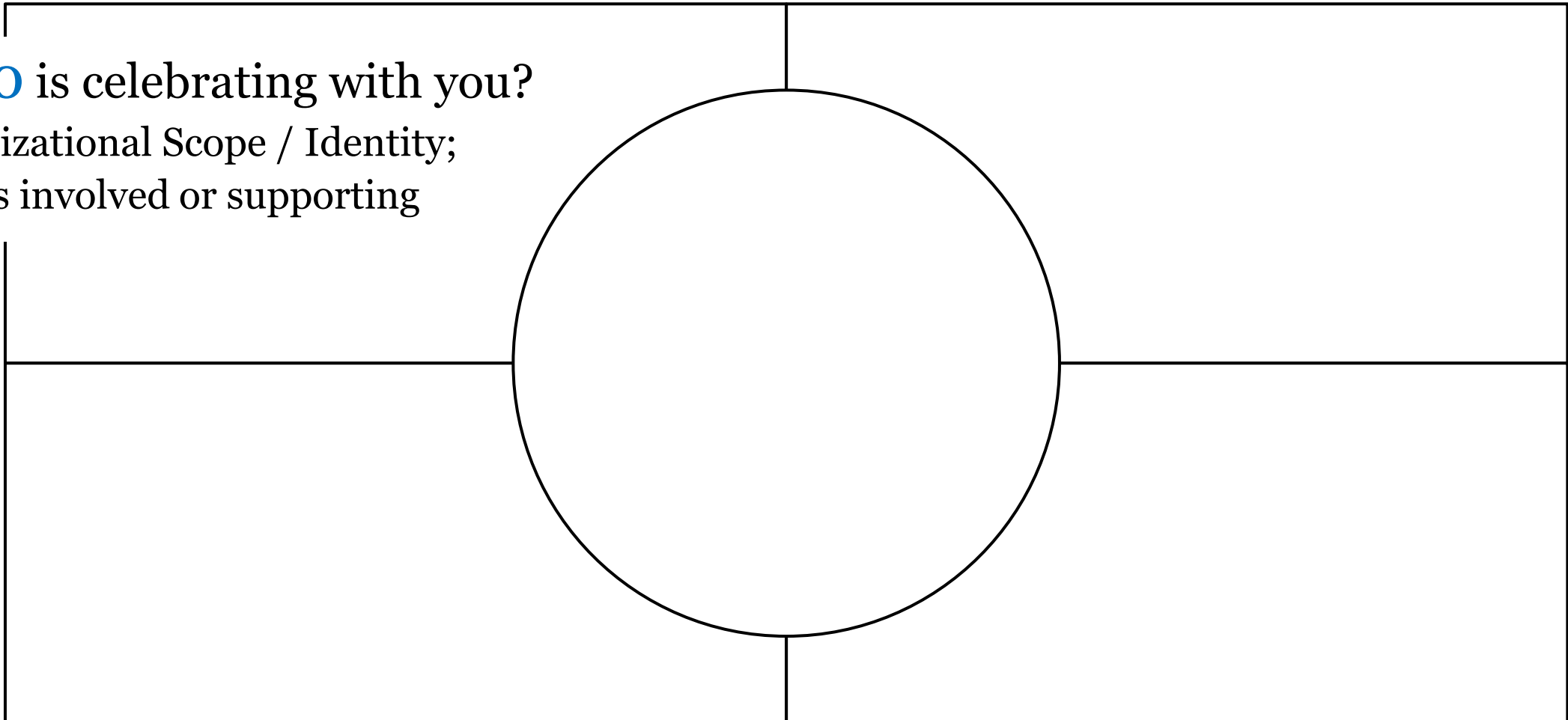
Put it into context with 5Ws



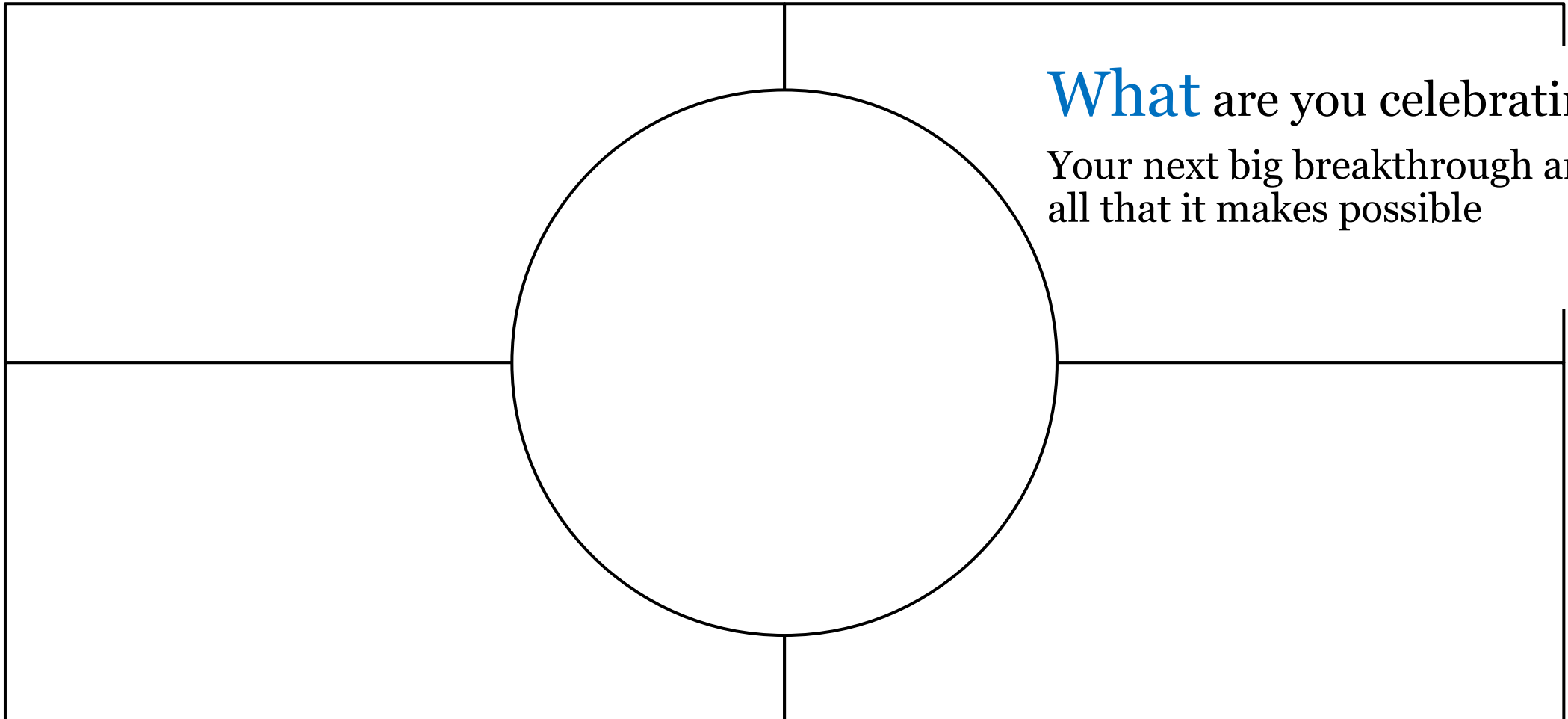
Who

Who is celebrating with you?

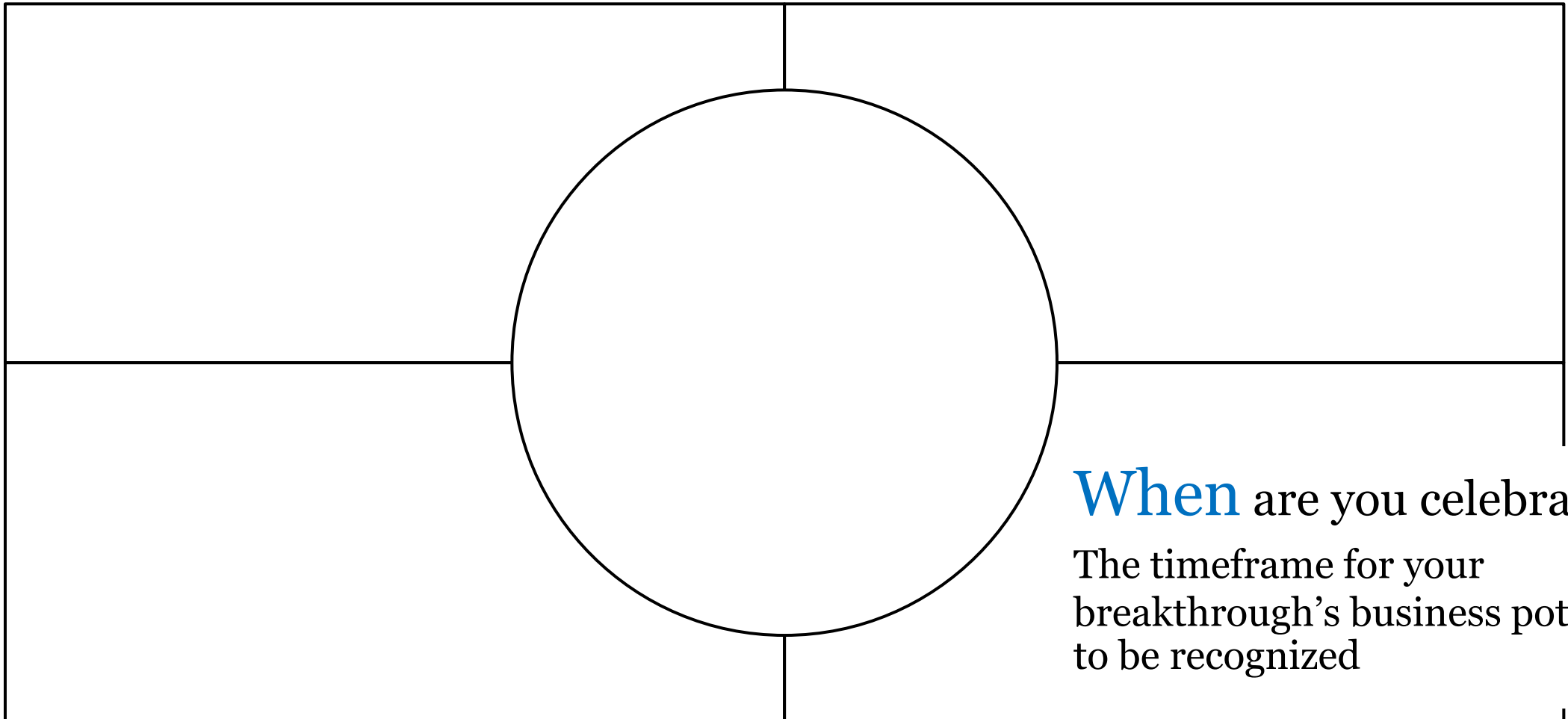
Organizational Scope / Identity;
Others involved or supporting



What



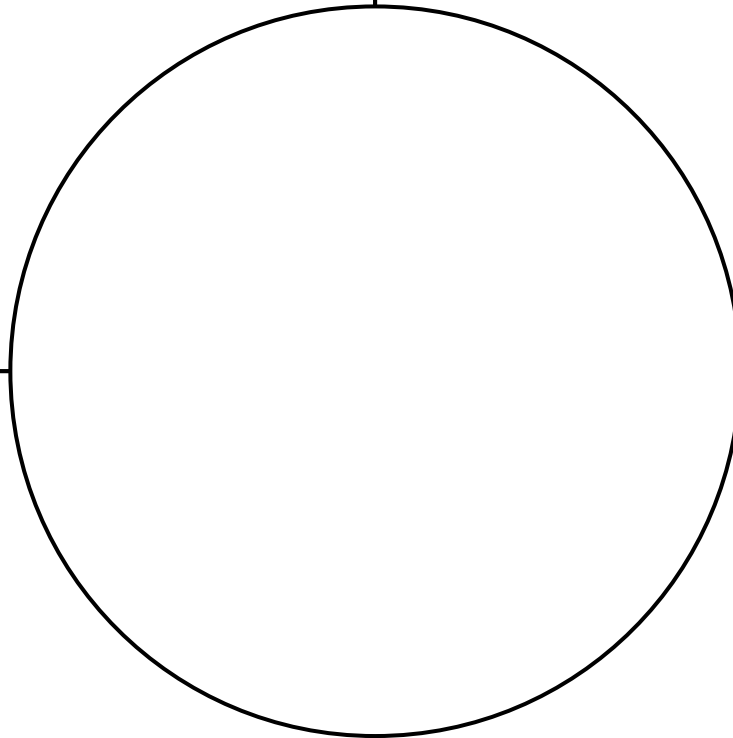
When



Where

Where are you celebrating?

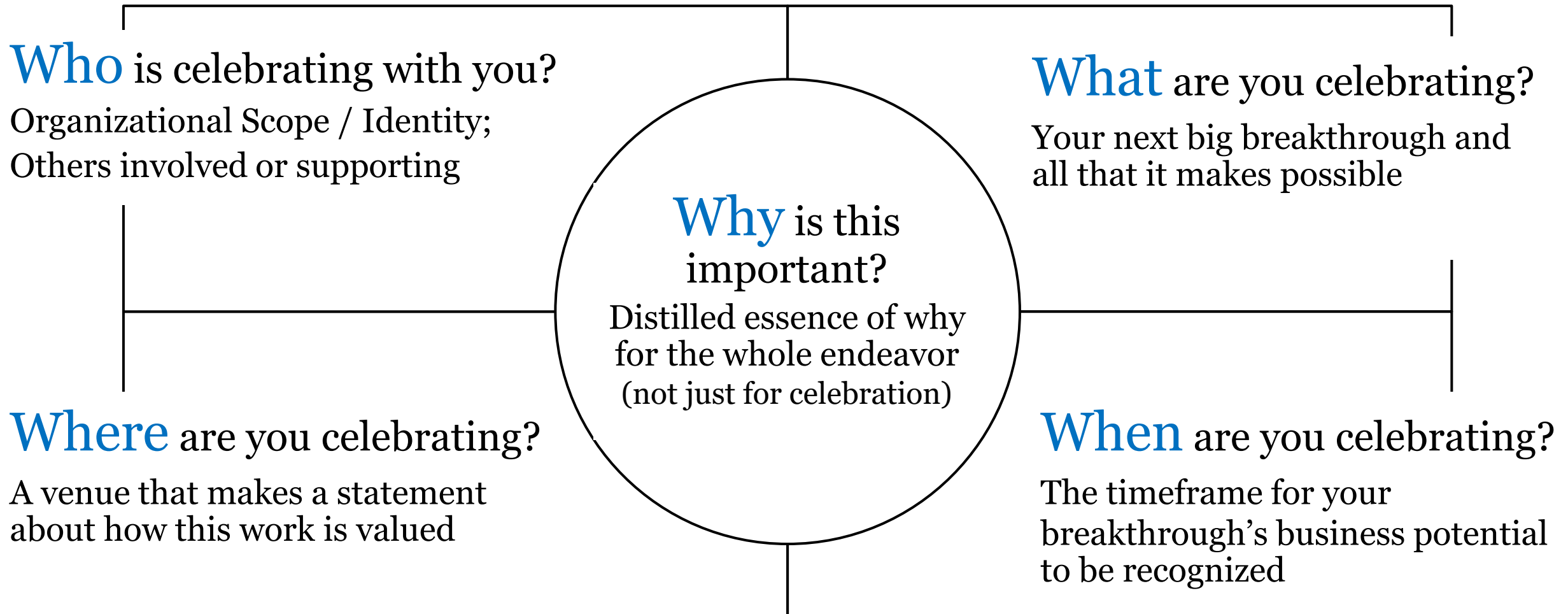
A venue that makes a statement
about how this work is valued



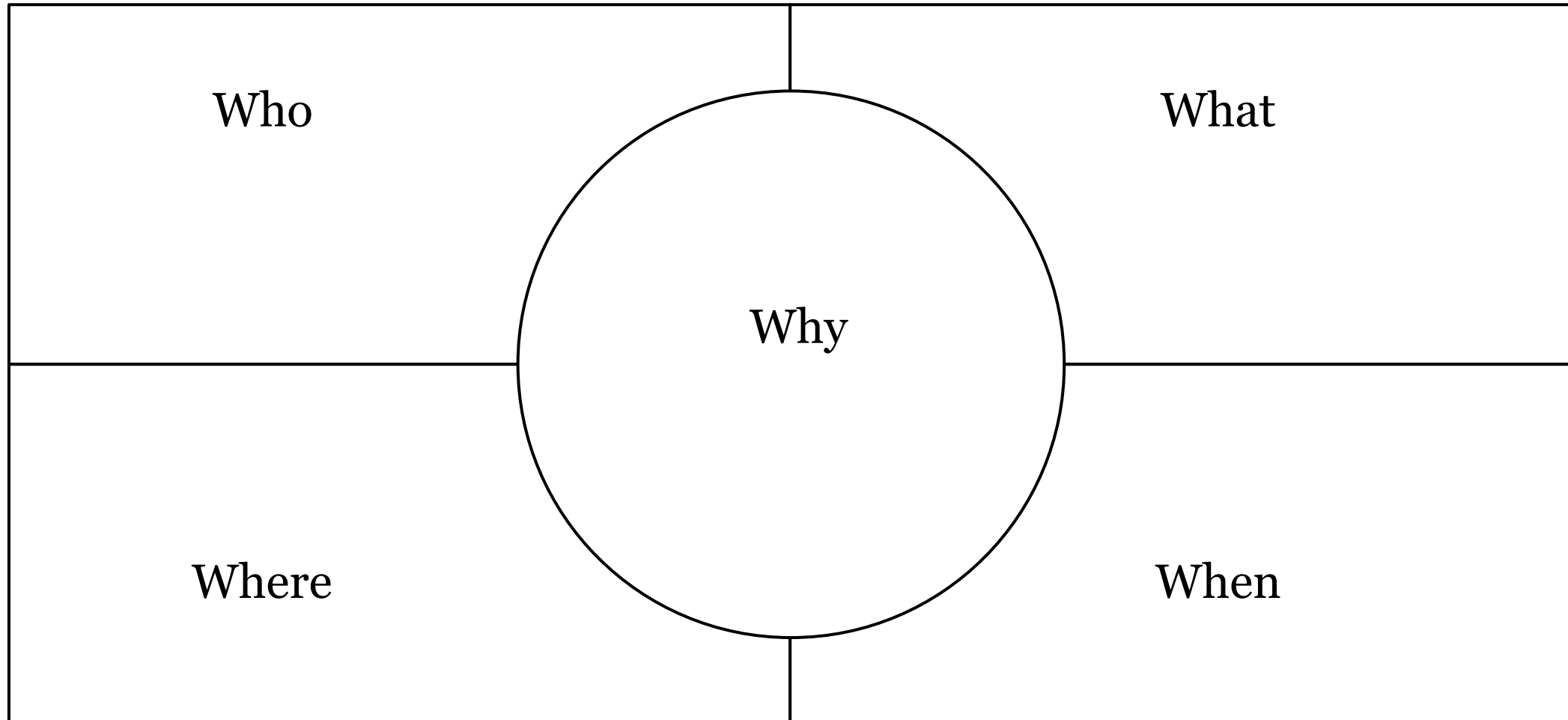
Why



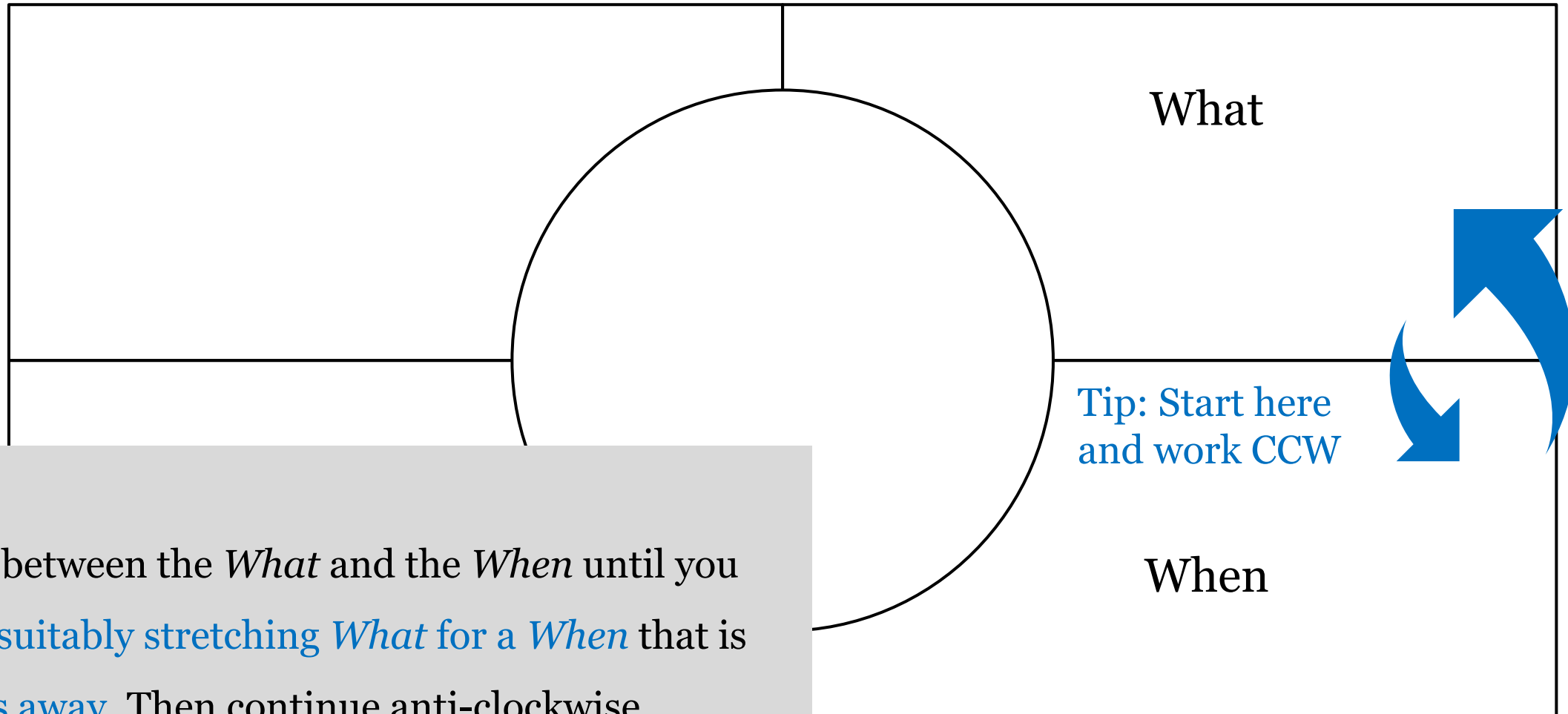
5 Wh-Questions



Celebration 5-W



Celebration 5-W



Tip:

Iterate between the *What* and the *When* until you have a suitably stretching *What* for a *When* that is months away. Then continue anti-clockwise.

Reflecting on your Celebration-5W

For you personally, for you as a team, and for its various other stakeholders,
when your adaptive challenge is accomplished at its ideal best:

- What does that look like?
 - What does that feel like?
 - And that's like what?
-
- What would you need to be true for that ideal best to happen for everyone?
 - What (if anything) does this change for your Celebration-5W?