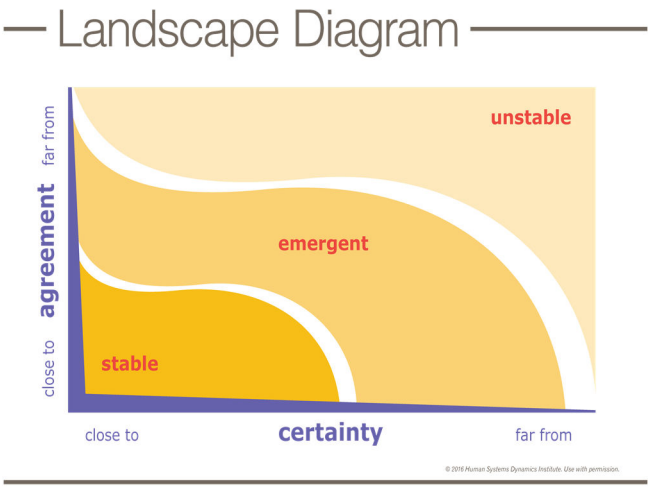
HUMAN SYSTEMS
DYNAMICS INSTITUTE

Landscape Diagram

Description of the Landscape Diagram

The Landscape Diagram demonstrates the impact of constraints on a system. It gives you a "map" or picture of how those constraints influence patterns of stability, activity, and decision making across the whole system.



What?

The Landscape Diagram helps you see, understand, and influence the conditions that create stability for individuals, groups, and communities.

So What?

Under certain conditions, a complex system can be stable and predictable. Change the conditions, and it becomes unpredictable and unstable. A happy marriage can be stable for years, then a life crisis shifts it into patterns of instability. A team or organization can be reliable and high performing, and a change in membership, goal, or requirements make it unpredictable and unstable.

High stability can be a problem, too. When tradition stifles innovation, when habits interfere with health and wellbeing, when standard operating procedures interfere with good decisions in the moment, then you know your system is too constrained to do its work.

Nothing is intractable.

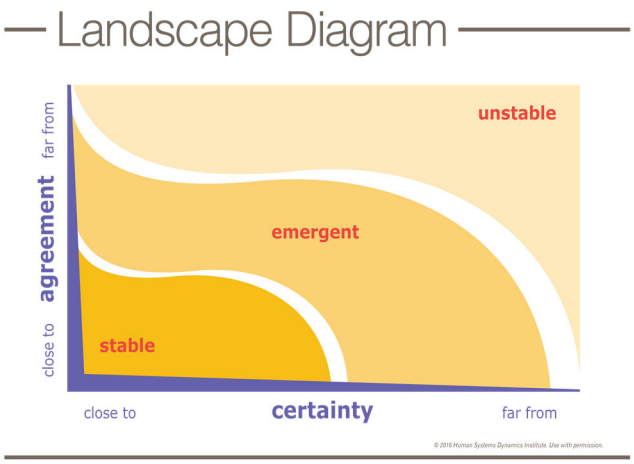
Now What?

Use the Landscape Diagram to inform your Adaptive Action as you ask:

- Where are you and your system now?
- What position on the Landscape would be more productive?
- Now what can you do to change agreement and certainty to go where you need to go?

Landscape Diagram

What is the Purpose of the Landscape Diagram?



As an individual in the system, you can use the Landscape Diagram to understand conditions that shape your ability to respond or take action or those that shape the overall responsiveness and adaptability of the system as a whole. Understanding the landscape around you informs your wise decisions as you respond to tension in the system.

The tension in the system informs your actions to increase or decrease constraints. For example, if data and information are not being used in a timely manner, you may find it is because one person or department is holding data. You look for actions to shift those particular constraints. Perhaps it is a lack of clarity about what needs to be shared—expectations are unclear. Your response could be to constrain those decisions by setting clear expectations about data sharing. On the other hand, that person may be hoarding information, releasing bits of information to a limited circle. In that case you can open lines of communication to increase the flow of data and the audience who receives it.

In working on the Landscape Diagram, you constantly ask yourself whether the constraints at any given time allow for responsiveness and adaptability that is fit for a given function.

The two axes represent critical dimensions of human interaction.

- The "X", or horizontal, axis represents the **degree of certainty** in the system. It describes a continuum from close to certainty (representing a high degree of predictability and stability) to far from certainty (representing little or no ability to predict how the system will behave and high levels of instability.) A system that is close to certainty allows for greater control and clearer understanding of what is happening. The system is tightly constrained to minimize surprise. Constraints that generate high levels of certainty include close coupling, detailed specifications, limited diversity, small spaces or containers, and clear expectations. On the other hand, unclear specifications,

broad diversity, ambiguous expectations, large spaces, unclear connections are examples of how lack of constraint or low levels of constraint will push the system further from certainty and toward instability.

- The "Y", or vertical, axis represents the **degree of agreement**. It describes a continuum from close to agreement (representing strong consensus and stability), to far from agreement (representing little or no commonality and instability). When agents are close to agreement, they see things in similar ways and respond to stimuli in the same way as other agents in the system. The system is constrained in such a way that disagreement is minimized or eliminated. Some examples of constraints that bring high levels of agreement include commitment to a shared goal, fear of punishment or retribution, clearly-stated expectations, or high levels of similarity. At the same time, lack of clarity, freedom to challenge existing wisdom, ambiguous expectation and broad diversity tend to push a system further from agreement and toward instability.

So What Can the Landscape Tell You?

Activities in a system can be assigned to one of three zones, based on levels of constraint. Given a particular situation, the two dimensions can be graphed according to the constraints in play.

- **Stable Zone** – Close to Agreement and Certainty – This zone is predictable and constrained. Governed by procedure, rules, and policies, it is where organizational operations reside. Payroll procedures, employee supervision, and regulatory activities constrain a system to ensure employees know what is expected and can predict process or ensure procedural activities move along.
- **Emergent Zone** – Further from Agreement and Certainty – This zone represents constraint that allows patterns to emerge. Constraints are strong enough to hold, yet loose enough to allow the system to respond and build fluid, robust connections. Examples of activity in this zone include learning, relationship, creativity, and innovation. Activities in the Emergent Zone are governed by Simple Rules that may be explicit or not.
- **Unstable Zone** – Far from both Agreement and Certainty – This zone is characterized by disconnected weak signals that may or may not have meaning in the system. This zone has few, if any system constraints, so there are no discernable patterns. It is an area of random activity, unpredictability, and surprise. It is often where Research and Development personnel stand as they look into the broader landscape to explore new ideas, experiment with innovation, and seek the next niche.

When system constraints increase, activities move toward the Stable Zone. As system constraints decrease, they move toward the Unstable Zone.

Now What Can You Do?

You can use the Landscape Diagram to see stability in a current situation, understand how it is or is not fit for function, and take action to shift constraints and change stability to be more productive. As you do, keep in mind:

- Any given map on a Landscape Diagram represents a single set of conditions. What is high constraint in one situation can show up as random or unconstrained in another. For instance, Company A may have done major development on an idea to create a new level of technology or product that Company B has no idea about. For Company B, those ideas are still highly unconstrained—individuals in that group are far from both agreement and certainty about the new idea. Once Company B becomes aware of it, people begin to constrain its meaning to them, moving it into emergence as they recognize and build on the new idea's use and/or value to them.
- Any given map may change across time or circumstance. As Company B becomes aware of a new idea, it begins to consider possibilities, opportunities, and limitations, relative to the new technology. Patterns begin to emerge as agents in the system move toward higher levels of agreement and certainty. Company B may like the new idea so much they decide to adopt it as their own. Then their work is to increase agreement and certainty in manufacturing or design, moving into the Stable Zone through specs and regulations.
- Any one individual's map on the Landscape Diagram depends on personal perceptions of constraint. Some individuals are more comfortable in the highly constrained, more predictable Stable Zone. Some individuals find their niche in the more fluid, connected Emergent Zone. Still other individuals love the surprise and lack of predictability of the Unstable Zone. One person is no more "right" than another. The question is about fitness. How do individuals contribute to the system at any point to allow greatest response, adaptation, and resilience? How do individuals best contribute to system fitness?
- By the same token, no one area of the Map is better or worse than another. Where activities need to reside is solely dependent on where they best contribute to system fitness. There are activities that contribute to system fitness if they take place in the Stable Zone; activities that support best fit when they reside in the Emergent Zone; and activities that are best fit for the Unstable Zone.

How will you use the Landscape Diagram to inform your decisions?