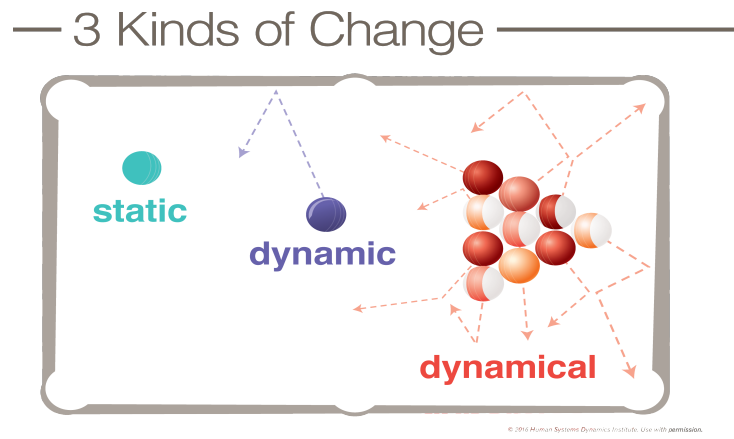HUMAN SYSTEMS
DYNAMICS INSTITUTE

# Three Types of Change

## Description of Three Types of Change

Systems experience different types of change, and each requires its own approaches for support and leadership. The Three Kinds of Change model and method offers a description of the three ways systems experience change. It helps you understand the type of change you experience so that you can plot the best fit system-wide response.

— 3 Kinds of Change —

static

dynamic

dynamical

## What?

Three types of change help inform your decision making about responding to system change.

► **Static Change** is one-dimensional change—simple movement from point A to point B. An example would be the shifting of a resource from one place to another.

► **Dynamic Change** is multi-dimensional change that is predictable on a measurable scale. You see this type of change when you control the speed and path of a stream of water by increasing the pressure on the hose or by increasing the arc of spray.

► **Dynamical Change** is an unpredictable, surprising change that happens in complex systems. Examples include learning, grief, and friendship.

Nothing is intractable.

## So What?

When you know the type of change you face, you can better plan your response.

► Static Change requires that you take directed action, follow step-by-step instructions, and stay with a carefully crafted plan.

► Dynamic Change requires that you know enough at the beginning to plan the predictable course, use algorithms and standards to understand what is happening, and to monitor and implement a plan of action.

► Dynamical Change requires that you engage in Adaptive Action* so that you can detect changes in environmental tension and make appropriate response to reduce tensions as they develop in the system.

## Now What?

Use the Three Types of Change model when you need to assess, understand, and take action in times of significant change.

► Gather information from your environment to understand the situation and the type of change that is occurring.

► Consider the implications of that change and plan for action that will respond appropriately to reduce system tension.

► Take action and determine its impact as you step into the next iteration of Adaptive Action*.

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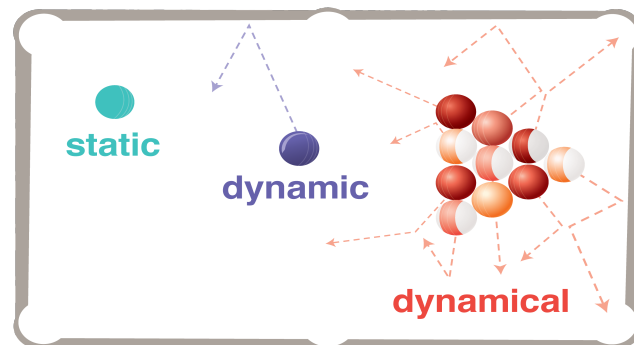* For more information, visit www.hsdinstitute.org.

Nothing is intractable.

# Three Kinds of Change

## What is the Purpose of Three Kinds of Change?

In a complex world, you encounter changes in your environment at every turn. Tension shifts in your system as the change in the environment causes a lack of fitness between you and your environment. The system immediately responds to attempt to resolve the tension, creating a need for you to find the best way to respond to the change.

— 3 Kinds of Change —



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When you understand the Three Kinds of Change, you have a better opportunity to plan for a response that will most likely shift the system tensions to resolve the issues of fitness:

► **Static change** is the simplest, and it depends on direction and force of change. This type of change is predictable. You know that the tension in the system will be shifted if you just move from Point A to Point B. You respond by applying force or external motivation or incentive to move the system. The move you take is informed by:

▷ The direction of movement that will resolve the system tension

▷ The force you believe to be required to resolve the tension

► **Dynamic change** is more complicated, being multi-dimensional. It can best be described as moving along a smooth trajectory toward a predictable end point. Like water shooting out of a hose, if pressure and angle are known, you can predict height and distance of the arc of water. Tension in the system emerges when the expectation is for a set performance that you may or may not be able to accomplish. The move you take is informed by:

▷ Prescribed algorithms, set standards, or organizational or cultural expectations

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▷ The degree to which you believe your compliance will shift the system toward acceptable levels of tension

► **Dynamical change** is complex and results from multiple forces acting in unpredictable ways, generating surprising outcomes. On the other hand, the forces interact in intricate ways, so the change is not random. It is unpredictable, but patterned. Think about water dripping from a faucet. The rate of drops depends on too many factors to predict, precisely, when each drop will fall. These forces include: amount of deposit in the pipes; temperature, wind, and humidity in the room; and amount of water in the pipe. These factors and others interact in unpredictable ways to determine when drops will fall—non-predictable and maddening in the middle of the night. Tension in the system emerges when the multiple forces push the system too far from equilibrium. The move you take to resolve the tension is informed by your understanding of the patterns in the system:

  ▷ The similarities, differences, and connections that shape local patterns in the system

  ▷ Action you can take to shift any one of those conditions in the short term

  ▷ Your perception of fitness between the new patterns and the greater environment

## So What Do Three Kinds of Change Mean to You?

Each type of change is present in a system to some degree. Human systems, however, are highly diverse, open to influence from inside and out, and have the capacity to learn from past events. These characteristics put them squarely in the realm of dynamical change. Leaders who understand this, shape their decisions and interactions to take advantage of this complex nature of the systems where they work and play.

In human systems, the following types of assumptions emerge from this perspective of Static Change.

► Only the outcomes of a process or effort are considered, with little or no attention to how those outcomes are achieved.

► Incentives and rewards, or punishment, provide the motivation for change in behavior or performance.

►  Projects are managed by tracking only the before and after.

► Individuals and groups resist change as they push back against the static force.

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In human systems, the following types of assumptions emerge from this perspective of Dynamic Change:

► Change occurs according to developmental stages that can be described, tracked, and predicted.

► If people understand the stages of change they will experience, they are more likely to move through those stages gracefully and smoothly.

► You can use externally-derived standards and benchmarks as incentives for change.

In human systems, the following types of assumptions emerge from the perspective of Dynamical Change:

► While you can neither predict nor control how change will happen, you can set conditions that will be more likely to shape the emergent change.

► Change on the large scale is dependent on change at the local scale, and local change is informed by systemic change.

► A short list of simple rules can help to shape change across a large system by establishing conditions that have the potential to shape the desired patterns.

## Now What Can You Do to Use Three Kinds of Change in Your System?

Consider the implications of the change and your response according to four factors.

► **Frequency of assessment**

▷ Static Change – For any change event, identify what needs to be done and then assess whether that gets done.

▷ Dynamic Change – For any change event, you identify expectations around cycle time, completion project dates, and agreed-upon milestones of completion.

▷ Dynamical Change – This calls for ongoing conversation and formative feedback in ongoing inquiry about pattern change.

► **Unit of Measurement**

▷ Static Change – Degree of difference at the end of the event, as compared to the beginning.

▷ Dynamic Change – Performance is measured against milestones, standardized measures, or established and documented expectations.

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▷ Dynamical Change – Performance is assessed by the system's ability to engage in Adaptive Action to see, understand, and influence patterns as they emerge.

► **Definition of Success**

▷ Static Change – Success is considered if the system reaches the expected outcome.

▷ Dynamic Change – Success is measured by the degree to which established milestones, standards, rate of change are met.

▷ Dynamical Change – Success is measured by increased sustainability and fitness across the system.

► **Rewards and Incentives**

▷ Static Change – Success is measured by external, disparate awards or enticements (money, prestige, privilege) based on narrowly focused measures.

▷ Dynamic Change – Success is measured by increasing levels of reward or certification, established levels of performance or engagement, reward for individually set goals.

▷ Dynamical Change – Success is measured by increased autonomy and authority as well as personal accountability and recognition of contributions.

Use these to help you consider your responses as you deal with change in your system.

► Determine the types of change occurring in the system.

► Identify your best response to reduce tension toward greater fit.

► Implement your response and watch for system response before you consider net steps.

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