# CHANGE SCIENCE BASICS Change Science Laws & Principles

I do not create complexity; I just try to define it!

I think everyone would agree that the known and unknown universe in which we live is an extremely complex environment of continuously changing conditions.

In change science we define change as the transformation or alteration of the current state of being to a different state of being as it relates to a person, place, or thing or as it relates to the interrelationships between persons, places, or things.

From this definition it naturally follows that change is constantly occurring around us, universal to all that exists, we know, experience, and observe.

This leads us to two basic questions:

- 1. Is there a way to simplify the complexity to help explain and understand change?
- 2. Are there a consistent set of rules that ALL change follow?

The great news is that the overlapping answer to both questions is YES.

The science of change is predicated on the fact that all change follows a consistent set of laws and principles. That is what makes Change Science a science.

Therefore, by defining what that set of laws, principles, definitions, and concepts are, we can create an ability to understand, simplify, and manage the complexity of the change that surrounds us.

In prior articles I have defined the basics of what change is (CHANGE SCIENCE BASICS - Definition and Elements of Change), and provided an understanding of environments and conditions associated with change (CHANGE SCIENCE BASICS - Environments and Conditions).

Here we will provide the laws and principles of change science that create the foundational basis of change as a science.

## THE ENVIRONMENTAL OVERRIDE PRINCIPLE

The change science ENVIRONMENTAL OVERRIDE PRINCIPLE states that if the conditions contained within a selected environment will not support the requirements of a specific defined process, the process will not execute and the change associated with the selected process will not be obtained.

Therefore, it does not matter if you are using a proven process to obtain a certain defined change. The reality is that the defined change will not be obtained using that selected process if



the actual conditions in a selected environment are not available to support the exact requirements related to that process.

For example, let us assume you want to freeze some water into ice cubes. The defined change is taking water (the beginning state of being) and transforming it into ice cubes (the ending state of being). The selected process is to place an ice cube tray containing water into a freezer and keep it in that freezer until the water has transformed to ice. From these assumptions, we can see that our selected process is adequate to obtain the defined change. However, if the actual environment of the freezer is not at least 32 degrees Fahrenheit or less, then the desired change will not be obtained even though the selected process was conceptually flawless. In other words, the temperature condition in the freezer (that is, the environment) is not low enough to in fact support the selected process.

Even when experts, authors, and consultants tell you they have a proven method to obtain change (for example, lose weight or implement a new business system), the success of that methodology will still be totally dependent on the actual conditions in the environment in which this methodology will be operating. Keep in mind these methodologies from experts are nothing more than a defined process, so the environmental override principle of change science must be applied.

This is why a so-called "proven weight control methodology" will work for Sam but not for Chris. The conditions in the environments Sam and Chris are operating in can be different at several levels. For example, Chris's body (his body would be considered an environment) is different from Sam's body and therefore, might not have all the necessary conditions required for the methodology to work even though it works in Sam's body. Environmental override can also be a major reason a so-called proven system works in one organization and not another. The differences and nature of the conditions within each organization can make the execution of the new system possible in one and not the other.

Note, if there is one concept to take away from this article that will help you cope and better understand the change you deal with daily in your life and business, the Environmental Override Principle is the number one principle of change science that you want to remember!

It is important to note that just because the principle of environmental override exists does not mean that there are not ways to counter its effects. Therefore, having an awareness of the environmental override principle will help you and an organization significantly improve the probability of obtaining successful change.

# LAW OF BOUNDLESS SPACE and SIMULTANEOUS CHANGE

## Postulates:

- 1. Environments do not exist except as a human construct. The use of environments does not exist except in the context of a frame of reference to enable us to narrow our focus when we are examining a specific change.
- 2. What does exist is a SINGLE Boundless Multidimensional Space in which things exist that have relative position and direction and in which change occurs creating altering states of being.
- 3. Therefore, SPACE exists as only a single environment that is all inclusive of the known and unknown universe.



In change science, the LAW OF BOUNDLESS SPACE and SIMULTANEOUS CHANGE states that Space exist as a single boundless multidimensional environment and change occurs universally and simultaneously across the entire single environment of Space.

Change is defined as not only the transformation or alteration of the current state of being to a different state of being as it relates to a person, place, or thing; but also, as it relates to the *interrelationships* between persons, places, or things. It is this "interrelationship" between everything that dictates that even if a single change exists in one location in multidimensional Space, then the state of being relative to everything else also changes. In essence, this represents change everywhere in Space that is generated from that single change.

For example, even if you have a "State of Being V" located in Space that has absolutely nothing in it (it is completely void of anything), the fact that a change occurs in a "State of Being C" located somewhere else in Space relative to the V still represents a change that is also associated with V. This is due to the change in the relationship between V and C prior to the change in C (the beginning state of being relationship) and the relationship between V and C after the change in C (the ending state of being relationship).

### Ramifications:

- > From a conceptual perspective, environments do not exist except as a human construct.
- ➤ If you break Space down into many separate environments, change will still occur simultaneously across all the environments no matter how they are defined.
- From the smallest particles to the largest objects change is executing simultaneously. Including somewhere in the most distant corner of Space at the same time you experience change in the small defined location of Space that you occupy.
- Change that occurs somewhere in Space might be so far away that any recognition of such a change here at your location in Space may never be detected or recognized.

## THE CHANGE/TIME CONTINUUM PRINCIPLE and LAW OF MAXIMUM CHANGE

#### Postulates:

- 1. The physicist Julian Barbour has stated that you cannot have an idea of time passing unless we see motion; unless we see change/differences. Time emerges out of change/differences.
- 2. Therefore, time does not exist except as a human construct. Naturally occurring events within the known and unknown universe will take place and exist without our construct of time. As humans, we use the concept of time to provide an ability to conceptualize what is happening in the naturally occurring world in which we exist.
- 3. What does exist is CHANGE which can be specifically defined and described through known and unknown physical laws that explain how naturally executing processes work to create change. As Albert Einstein once noted, "Nothing happens until something moves." Therefore, without movement/change, there would be no concept such as time.

However, as humans, we do live within a context where a construct of time is important. Therefore, the CHANGE/TIME CONTINUUM PRINCIPLE defines what that structure looks like.

The Change/Time Continuum Principle states that change between a beginning state of being and a subsequent state of being occurs in intervals along a change continuum which can be used as a construct of time. Therefore, change cannot occur without an interval of change/time.

Visually, the principle of change/time continuum look like the graphic in Figure 1.



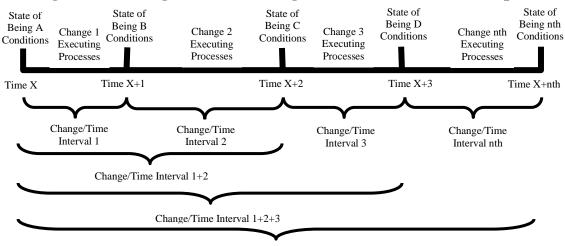


Figure 1 - Change Science Change/Time Continuum Principle

Change/Time Interval nth

Figure 1 indicates how the conditions at a specific state of being progress based on the actual change that occurs during the change/time interval selected in the change/time continuum. For example, the conditions that exists at the point on the change/time continuum X+2 equals the State of Being C, which reflects Change 1 that occurred in change/time interval 1 plus Change 2 that occurs in change/time interval 2 on the change/time continuum.

Because change is occurring universally and simultaneously everywhere in Space, the change continuum is not in a single direction or limited to a particular segment of Space. Instead, it represents a universal continuum of change that is governed by the Law of Maximum Change, the Environmental Override Principle, and the Chain of Events Principle of Perpetual Change. It applies equally to a Space that is known and unknown, expanding, collapsing, flat, or curved, along with change that can be moving in a single direction or emitting in multiple directions from an epicenter in Space.

In change science, the LAW OF MAXIMUM CHANGE states that the movement of light (what has come to be defined as the speed of light) represents the maximum amount of change that can take place between one state of being and a subsequent state of being. This movement of light represents the limit at which a process can execute at.

In other words, the maximum movement from one state of being to another state of being (Change) is limited to the movement of light between two states of being (the speed of light). Therefore, the execution of any given defined process is limited to the speed of light.

While other types of change between two states of being can occur at different relative levels when compared to the change associated with light, they can never exceed the level of movement/change of light. In other words, multiple changes can be executing simultaneously but at differing speeds none of which exceed the speed of light.

You will note that this limitation naturally exists with or without the human concept of time and is consistent with Albert Einstein's Special Theory of Relativity.

Ramifications of the Change/Time Continuum Principle and Law of Maximum Change:



- From a conceptual perspective, time does not exist except in a context of change.
- Since the amount of change that can take place between one state of being and a subsequent state of being is limited to the movement of light, a clear construct of time is the amount of movement relative to the movement of light.
- > Change (that is, progression from one state of being to another state of being on a continuum), can be depicted as the passage of an interval of change/time (time interval).
- Therefore, to have change, the passage of an interval of change/time must take place.
- The potential amount of total change in conditions taking place between one state of being and the next state of being increases as the length of the change/time interval increases along the change/time continuum.

# THE CHAIN OF EVENTS PRINCIPLE AND PERPETUAL CHANGE

- Every change has a process that must execute to move from one state of being to the
  next state of being. Environmental Override Principle describes how all the required
  conditions for any given process must be available or that process will fail to execute. In
  other words, the actual conditions that exists must include all the requirements that are
  necessary for that process to execute thereby resulting in the change.
- 2. If there are missing requirements, then a series of events (executed processes) must transpire creating changes in the actual conditions until there is the availability of any missing process requirements. This series of events exist as a naturally occurring implementation or can also take the form of a cognitively influenced implementation in an environment that includes human interaction.
- 3. There is a natural continuous sequence of events whereby continuously executing processes produce new conditions (that is, new states of being) which become implementations that support the requirements of a new set of processes that can be executed.
- 4. Because this is a continuing sequence of events, the result is perpetual change.

Thus, the CHAIN OF EVENTS PRINCIPLE AND PERPETUAL CHANGE in change science states – There is a continuous chain of events whereby conditions that exist at one state of being, support the execution of processes that create changes resulting in a new set of conditions, that then implement the execution of a subsequent set of processes, and this chain of events continues along a continuum creating perpetual change.

Therefore, perpetual change is the result of a) a continuous cycle of implementations, b) created by the execution of processes on a change continuum, c) which create the conditions necessary for the execution of a subsequent set of processes, d) all of which represent a continuous chain of events as there is progression along the change continuum creating perpetual change.

Figure 2 depicts that at any state of being, there is a universe of possible processes available for execution, all based upon the laws of science (both known and unknown). In addition, there is a universe of actual conditions that are available for possible use in the execution of available processes. This universe of potential processes and conditions exists everywhere in Space, including points completely void of anything, to points from the micro (smallest particle) to the macro level (largest object).

Figure 2 then depicts that as we move along the change/time continuum there are changes to the conditions because of the chain of events. Therefore, new processes will execute whenever the conditions support all the process requirements associated with any given available process.



Consequently, there will be a universe of processes that are executing and a significant universe of processes that are not executing as we move along the change/time continuum. There will also be a universe of conditions that exist, some of which are relevant to a specific set of defined processes that are currently executing and some of which are not.

Figure 2 The Chain Of Events Principle Universe Of Possible Processes (Includes Both Naturally Occurring & Cognitively Influenced) Process 5 Process X+ Process 3 Conditions Conditions Conditions That Support That Support That Support Process 1 All Process Process 3 All Process All Process Requirements Requirements & 4 & X Requirements & 5 For Process 1 For Process 3 Execute For Process **Execute** & 4 & X Fxist X+ Fxist & 5 Exist **↑**■ **↑**■■ **↑**■ **Universe Of** Universe Of Universe Of New Conditions New Conditions Created By Actual Created By Actual Actual Change Change **Conditions At Conditions At** Conditions At Resulting From Resulting From State Of Being State Of Being State Of Being The Execution The Execution Of Process 1 & 5 Α Of Process 3 & 4 & X State Of State Of State Of Change/Time Interval X Change/Time Interval X +1 Change/Time Continuum

The chain of events principle is at the heart of all that is. Perpetual change occurring in all directions in known and unknown Space created by the execution of known and unknown processes based upon the actual conditions that exists at any point (state of being) on the change continuum.

#### Ramifications:

- ➤ The chain of events principle with resulting perpetuating change is an extremely powerful concept and goes to the heart of what is occurring in the world around us. It is because of this principle that naturally-occurring change takes place with the events (that is, changes) that occur in one change/time interval triggering the changes that will take place in subsequent change/time intervals perpetual, constantly occurring, and theoretically never-ending.
- Cognitively-influenced change on the other hand, attempts to alter (that is, influence) this naturally-occurring chain of events. The objective of cognitive influence is to obtain a



- specific desired state of being that, barring such cognitive influence, might not otherwise occur if the naturally-occurring chain of events was left to its own. Therefore, for cognitive influence to exist, influence must be focused on the chain of events so-as-to attempt to obtain a specific ultimate desired defined change.
- ➤ The chain of events principle helps explain why change is constantly taking place around us. More importantly, it provides a starting point to develop an understanding of just how, through cognitive influence, we can attempt to alter a future chain of events in any given environment to obtain a desired change.

## CONCLUSION

There are two different aspects to consider when exploring the subject of change. The first is the specifically focused context of change as it exists within the naturally occurring physical realm of Space. This aspect has been my focus here as defined by the scientific laws and principles I have outlined above.

The second aspect is from the perspective of human understanding and interaction. For us as humans to be able to understand, describe, manage, and control change, we must establish constructs to assist in those efforts. Those constructs include such concepts as time, observation, and environments along with cognitive awareness and influence.

The laws and principles herein describe the underlying structure and dynamics of change itself. Sciences such as physics, chemistry, and other sciences provide the constructs, concepts, laws, and principles necessary to describe the actual cause and effects, processes, events, and interactions at play.

