Notes from *The Fifth Discipline*

These notes are from Peter M. Senge's *The Fifth Discipline*. They are meant for classroom discussion purposes--and may well also serve as reminders of particularly relevant or important concepts.

Real learning gets to the heart of what it means to be human. Through learning we re-create ourselves. Through learning we become able to do something we never were able to do. Through learning we reperceive the world and our relationship to it. Through learning we extend our capacity to create, to be part of the generative process of life. There is within each of us a deep hunger for this type of learning.

Seven Learning Disabilities:

1. I am my position

2. The enemy is out there

3. The illusion of taking charge

4. The fixation on events

5. The parable of the boiled frog

6. The delusion of learning from experience

7. The myth of the management team. School trains us never to admit that we do not know the answer, and most corporations reinforce that lesson by rewarding the people who excel in advocating their views, not inquiring into complex issues.

Systemic structure is concerned with the key interrelationships that influence behavior over time. These are not interrelationships between people but among key variables, such as population, natural resources, and food production in a developing country; or engineers' product ideas and technical and managerial know-how in a high-tech company.

The systems perspective shows that there are multiple levels of explanation in any complex situation. In some sense, all are equally 'true.' But their usefulness is quite different:

> **Event explanations** are the most common in contemporary culture, and that is exactly why reactive management prevails.

Pattern of behavior explanations focus on seeing longer-term trends and assessing their implications. For example, a pattern of behavior explanation would be: Production/distribution systems are inherently prone to cycles and instability, which become more severe the further you move from the retailer. Therefore, sooner or later, severe crises are likely at the point of production.

Structural explanation is the least common and most powerful. It focuses on answering the questions, "What causes the patterns of behavior?" In the beer game [see Senge], a structural explanation must show how orders placed, shipments, and inventory interact to generate the observed patterns of instability and amplification; taking into account the effects of built-in delays in filling new orders, and the vicious cycle that arises when rising delivery delays lead to more orders placed.

We tend to blame outside circumstances for our problems. "Someone else"--the competitors, the press, the changing mood of the marketplace, the government--did it to us. Systems thinking shows us that there is no outside; that you and the cause of your problems are part of a single system. The cure lies in your relationship with your "enemy."

Perhaps **for the first time in history**, humankind has the capacity to create far more information than anyone can absorb, to foster far greater interdependency than anyone can manage, and to accelerate change far faster than anyone's ability to keep pace.

Systems thinking offers a language that begins by restructuring how we think.

Reality is made up of circles but we see straight lines. Herein lie the beginnings of our limitation as systems thinkers.

A linear view always suggests a simple locus of responsibility. When things go wrong, this is seen as blame--"he, she, it did it"--or guilt--"I did it." As a deep level, there is no difference between blame and guilt, for both spring from linear perceptions. From the linear view, we are always looking for someone or something that must be responsible--they can even be directed toward hidden agents within ourselves.

There are **two distinct types of feedback processes**: reinforcing and balancing. All ideas in the language of systems thinking are built up from these elements.

Reinforcing (or amplifying) feedback processes are the engines of growth. Whenever you are in a situation where things are growing, you can be sure that reinforcing feedback is at work.

Balancing (or stabilizing) feedback operates whenever there is a goal-oriented behavior. If the goal is to be not moving, then balancing feedback will act the way the brakes in a car do. If the goal is to be moving at sixty miles per hour, then balancing feedback will cause you to accelerate to sixty but no faster.

Delays--when the effect of one variable on another takes time--constitute the third basic building block for a systems language.

In many ways, the greatest promise of the systems perspective is the unification of knowledge across all fields--for these same archetypes recur in biology, psychology, and family therapy; in economics, political science, and ecology; as well as in management.

A shared vision is not an idea. It is not even an important idea such as freedom. It is, rather, a force in people's hearts, a force of impressive power. It may be inspired by an idea, but once it goes further--if it is compelling enough to acquire the support of more than one person--then it is no longer an abstraction. It is palpable. People begin to see it as if it exists. Few, if any forces in human affairs are as powerful as shared vision. 206

It may simply not be possible to convince human beings rationally to take a long-term view. People do not focus on the long term because they *have* to, but because they *want* to.

Today, it is common to hear managers talk of getting people to "buy into" the vision. For many, I fear, this suggests a sales process, where I sell and you buy. Yet there is a world of difference between "selling" and "enrolling." "Selling" generally means getting someone to do something that he might not do if they were in full possession of all the facts. "Enrolling," by contrast, literally means "placing one's name on the roll." Enrollment implies free choice, while "being sold" often does not.

I believe that the discipline of building shared vision lacks a critical underpinning of practiced without systems thinking. Vision paints the picture of what we want to create. Systems thinking reveals how we have created what we currently have.

Systems thinking is especially prone to evoking defensiveness because of its central message, that our actions create our reality.

Bohm identifies three basic conditions that are necessary for dialogue:

1. all participants must "suspend" their assumptions, literally hold them "as if suspended before us"

2. all participants must regard one another as colleagues, and

3. there must be a “facilitator” who “holds the context” of dialogue.

Perhaps **the single greatest liability of management teams** is that they confront complex, dynamic realities with a language designed for simple, static problems. Management consultant Charles Kiefer says it this way: “Reality is composed of multiple-simultaneous, interdependent cause-effect-cause relationships. From this reality, normal verbal language extracts simple, linear cause-effort chains. This accounts for a great deal of why managers are so drawn to low leverage interventions.” For example, if the problem is long product development times we hire more engineers to reduce times; if the problem is low profits we cut costs; if the problem is falling market share we cut price to boost share.

Today, the only universal language of business is financial accounting. But accounting deals with detail complexity not dynamic complexity. It offers “snapshots” of the financial conditions of a business, but it does not describe how those conditions were created.