Learn

Learning is the process of building up redundancy in your brain-body's circuits about bits of information. This is true both for learning skills and learning broad intellectual generalizations.

Learning is the process of organizing and reorganizing what's already in your head -- and giving it names. Also what's in your body. Learning is becoming conscious of your self.

Like sensing, learning occurs panoramically. Your ear lobe, your pancreas and your little finger, left hand, are all involved in learning.

Your brain is only part of your learning system. You are a learning thing.

You can choose a great deal of what you will learn and what you won't learn. Then again, you won't have much choice about a lot of things you learn -- and don't learn.

To some extent, those learning abilities you don't use will atrophy. Not much is known about the subject. The Hopi Indians of the Southwest believe you have a door at the top of your head which enables you to communicate with God. But it you don't use it starting very young and keep using it, the door will close and you won't be able to open it again.

Learning is what you do for yourself. It's all up to you.

Information is free.

Metaconcept

Metaconcepts are what's behind what you're doing.

They're the rules you use to write the rules of your life. They're programs which are buried deep in your brain-body: metaprograms.

Meta means before. Metaphysics is the study of realities which occur "before" physical realities in a certain type of logic.

Metaconcepts have to do with more reality than concepts. They're packed so that it takes many concepts in your brain-body to achieve the effect of one metaconcept.

Myths are metaconcepts. They're packed with meaning. For example, Peter and the Wolf is an economical way of describing some realities of nature, childhood, and power. A myth says a lot with a little.

Metaconcepts elicit non-verbal and unconscious responses in us. You can "control" the effect of some concepts. But metaconcepts have their own life. They do surprising things.

Attitudes are metaconcepts. They come from way inside, way behind. Your attitudes are what are behind your appearance.

What's really HAPPENING is your metaconcepts. Your attitudes.

The meaning of this word is up in the air again. For several years, in commercial computer circles it has referred, primarily, to a type of computing machine, the digital computer. Most nervous system study has used this meaning also. In this sense, linear means sequential, cause and effect relationships, binary computing such as you get in digital computers. It was contrasted with "analogue" which is a different kind of computer that is often called "parallel" when applied to nervous system study.

Recently, linear has become the bad word for counter-culture types who find that the mentality behind the concept of linear is the industrial-age one of "by whatever means necessary." This is the way corporations, schools etc. act. The cybernetic understanding which permeates the young and young-thinking circles has made the idea of linear highly unattractive because, rightly, it is seen as a threat to the principle of homeostatic balance. People have therefore begun talking about "systemic" or "non-linear" life-styles.

Now, however, some people in the electronic environment have discovered similarities between the homeostatic principle and the massive application of the linear principle, particularly in the laser. It hasn't happened yet, but it seems likely that in the coming months considerable confusion will occur when people try to couple two uses of the word linear which are logically of different types, but nonetheless in the same knowledge continuum in a way which no one has the foggiest idea how to explain.

Religion

There are many complicated definitions of religion.

We tend to prefer a simple one which seems to have a lot of every-day usage to back it up: your religion is whatever you believe to be important.

Understanding

Understanding is perceiving the boundaries which are relevant to the situation you have under consideration. The boundaries which are relevant depend on the goals you have in mind.

If you aim to sub-divide 100 acres, the relevant boundaries will be the surveyed outlines of your land. If you plan to understand the eco-system of 100 acres, the relevant boundaries will include the physiology and teleology of the plants, animals, bacteria and inorganic matter in that and surrounding land.

Understanding itself, therefore, is not important. What is important are your goals. What is it that you want to understand?

The first thing which it is important to understand if you wish to understand the world is yourself. Not that you are a metaphor for the world, because you're not. However, you are your own central metaphor, and before you can get very far in the world, you have to know yourself.

Redundancy

Redundancy means that the same thing gets done many times at the same time. It is one of the characteristics of a system.

If pine tree production depended on one tree, we wouldn't have any pine trees. If only one cell in your body knew how to grow skin back over a cut, you'd stay cut.

Redundancy makes it possible for systems which have lost some of their elements to predict what must occur even though the element is gone — and even to generate a new element, sometimes. If A, B, C, and D all contain the same information about how A and D are to work together, then even though D gets lost, B and C will be able to help A either to create a new D or to function as if D were there anyhow.

The brain-body works on the same principle. Learning works on the same principle. In effect, you have to learn the same thing many times before it really sticks in the old brain. Pianists know that. Athletes know that. You have to build up huge amounts of redundancy in your self before you have learned a thing.

When we say, what you learn from us will be what you already know, we mean that all we've done is given you the same stuff to scan that you've scanned millions of times before and when you see ours it finally sticks in your head.

This is why learning is so difficult -- and why unlearning is so difficult.

not only heat-seeking missiles, but also men, tribes and forests are s/c-systems.

- I. An s/c-system corrects its operation to try to ensure maximum effectiveness (relative to its own goals) on the basis of perceived differences (in its environment).
- 2. Like other systems, s/c-systems are linked sets of components in which the differences created or experienced by one component tend to affect the other components.
- 3. An s/c-system interacts with other systems and non-systemic entities, both "larger" and "smaller" than itself. It exists within contexts of supra-systems, and its functioning depends on sub-systems within it.
- 3.1 Some, but not all, of these supra-systems and sub-systems are themselves s/c systems. The rest of the external and internal environment may be an assortment of:

other kinds of systems; linked responses; inert entities.

For example, a live human body has a blood circulation system, reflexes, and perhaps gall-stones.

- 4. An s/c system generally has the following abilities:
- 4.1 perceive and evaluate differences in its environment
- 4.2 receive, store, process and release data, including feedback
- 4.3 receive, store, and release energy
- 4.4 make decisions
- 4.5 use adequate communication patterns
- 4.6 economize message capacity
- 4.7 draw upon an innate motivation or purpose, which controls the flow of energy involved in all these activities

these statements are tools.

the use of such tools does not imply that a man is merely a complex machine, but may facilitate the perception and evaluation of some differences in ourselves and our environment.

In the vernacular, objective means "factual", "truthful". Subjective means "opinion", "speculation". There is supposed to be a gulf between something which is a fact and something which is an opinion. The distinction is used particularly in the commercial news media where people scrupulously distinguish "reporting" of the news from "comment on the news. The distinction never really satisfies anyone.

The reason it never satisfies anyone is that subjective and objective are really the same thing in two different aspects. The "fact" is that the world is what we see of it and there are therefore as many worlds as there are observers seeing it. This does not mean that the world is only there if you see it. It's there whether you see it or not. However, the only part of the world which is important for you is that part of which you are aware.

Therefore, our condition in the world is always objective. However our perception of the world is always subjective.

All "news" is editorial. What occured is objective. What gets told about what occured is objective in the sense that it, too, occurs. But the messages that come through about what occured are gleaned and put together by subjective processes. This is such a simple fact that it's surprising how much people argue about it.

I am the center of my world. But I am a part of the world.

Process

Process is what's happening. NOW

The world signifies the on-going, n-dimensional interaction of things.

It can be used to refer to a specific process such as the growth of an individual or the changing of a society. Or it can be used to refer to the process of life and the universe itself.

As we see it, the word carries the meaning of homeostatic balance. In process we see opposites united. Yins and Yangs come together. Opposites are seen as linked together within a suprasystem.

As we see it, what's happening is a beautiful thing, non-compulsive, impotent and gentle. That's the description of the whole. In small sectors of the whole process, there is plenty of compulsion, power and violence.

It's possible to live happily aware of both wholes and parts. However, decision-making and life-styles are different in each area. More information is needed here.

In the history of physics and mathematics this word has a fairly specific meaning. The meanings of the word in these disciplines stems largely from Aristotle's work. The meanings we attach to the word reflect the tendency of modern cybernetic theory to steer clear of these older, scientific meanings of the word.

In the past, the word has referred to the reality of linear sequencing of some sort. The basic scientific model as it has come down in the West assumes the possibility of tracing a specific cause and effect sequence for any given set of realities. It is often admitted that the sequence of a specific situation may not be known, but "given enough time. . . ."

Recent developments in mathematics, physics and cybernetcis have led to the recognition of homeostatic systems in which cause and effect sequences don't really exist in the old sense. Now we're more concerned with the balancing or phasing of mutually-inclusive on-going processes or energy flows. In effect, the old scientific model was useful as long as people didn't bother to look outside it for different patterns of relationship besides the cause and effect one. (All models hold up so long as no one peers outside them.)

The word cause won't be used here very much. It just doesn't occur to one thinking the way we do. Politicians and industrialists like the word. So do economists. These people enjoy "causing" things to happen.

We assume that a little more humility is not only desirable but harshly realistic.

Technically, a medium is a means by which we receive a message. A message is anything we perceive and process in our brain-bodies. However, the meaning of the term is more up in the air than that.

A medium can more or less distort a message. Also, the medium is the message.

Media give us the information we wish to receive. The information we wish to receive is the kind which will confirm our preconceptions about the kind of world we live in. These preconceptions are formed by what we perceive of the world (the world is objective in itself). What we perceive of the world is what we have an ability and a want to perceive of it.

Over a lengthy period of evolution, what we "want" tends to become hard-programmed, genetically, into abilities. Thus it is possible, using a logic based on a very long-term view of things, to say that for the brain-body, the category "what is" tends to be the same as the category "what ought to be."

The media we use depend on the kind of world we perceive. Video would not have occured if people had not already been seeing the world as a video camera sees it, rather than as a book sees it.

Behind each medium is a certain way of looking at the world which is more or less unique, logically and metalogically, to that medium.

The medium is the model. Medium is a synonym for thing. How many media are there?

Trust

Trust is the precondition for human relations. It can be built up by 2-way communication.

Trust is a thing your mind-body has to decide to do or not to do. It's a thing which can grow and deepen over time or it can shrink and shrive!

Trust doesn't stand still,

What are opposites?

high/deep

humility/arrogance

alive/dead	in/out
apogee/perigee	input/output
aware/unaware	linear/systemic
bad/good	long/short
cause/effect	man/woman
center/edge	micro/macro
closed-system/open-system connect/disconnect	night/day
cool/hot	order/chaos
couple/decouple	past/future
create/destroy	positive/negative
damping/expanding	profit/loss
deduction/induction	rich/poor
dialogue/monologue	right/wrong
direct/indirect	
divergence/convergence	same/different
explosion/implosion	simple/complex
	subjective/objective
fast/slow	synergy/entropy
function/dysfunction	transmit/receive
feedback/feedforward	
health/sickness	up/down

yin/yang

what if they're combined?

where is neutral?

One of the four modes of communication. INTER is a mode in which each symbol has a specified, narrow meaning which is agreed upon by a rather wide number of people. Examples would be computer languages. The language used by pilots and astronauts. Engineering language. Any language which attempts to be rigid and precise to the smallest particle in its meanings is in the INTER mode.

INTER has been the ideal for almost all fields in the West since the early 19th Century, when the precision of scientific language began to be taken as an ideal. The social Scientists and even the theologians have tried to put their subjects into the INTER mode, usually exclusively.

INTER is only effective within the model of reality which it is intended to serve. For example, COBOL, an IBM System 360 language, does not apply to the theoretical model of St. Thomas Aquinas. Aviation language does not apply to computations of gross national product. Not as obvious but just as true is the fact that bureaucratic languages do not apply to human situations; or they apply only to such abstracted functions of human situations as to be unreliable.

OUTER is one of the four modes of communication. You're using OUTER when you're searching for new concepts and using symbols in such a way that the meanings of each symbol are indefinite and up in the air.

OUTER can be used in most any language. However, it is extremely disorienting when people use INTER symbols in an OUTER mode. OUTER is used when people are brainstorming, coming at some new ideas and trying to rearrange meanings of symbols to hold the meanings they're inventing as they brainstorm.

When people are communicating in OUTER, it's unfair to ask them to "define" their terms since they are precisely trying to arrive at new meanings. And these meanings may not be specified for long periods of time (e.g. the development of religious ritual).

OUTER can only occur in groups of two or more. Generally more than two is desirable because a wide range of meanings must be put together in order for significant conceptual breakthroughts to occur. The more variety the better when people are in OUTER mode.

The same reality makes it desirable to OUTER for brief periods of time.

OUTER is a means of dissolving existing boundaries and since there is an emotional component to the process, too many boundaries may get dissolved too fast if the process is not kept fairly brief.

The effect and uses of extended periods of OUTER is a subject on which there is altogether too little information.

SITUATIONAL is one of the four modes of communication. When people are just talking freely about the time of day or what interests them, they're using SITUATIONAL. It is your normal, daysto-day mode of communication.

Different regions of the country tend to have different SITUATIONALs.

Just as young people tend to have a different SITUATIONAL from older people.

But there is still a great deal of communality across cultural, sectional and chronological boundaries when it comes to SITUATIONAL.

SITUATIONAL is a relaxed, flexible, free-flowing mode. It's the one we use most often. This does not mean it is all-purpose. It's the mode we use when we're in neutral. And we should be in neutral most of our lives so that when we need to be in INTER, OUTER or ZONE mode we've got enough energy to do it.

ZONE is one of the four modes of communication. Ordinarily, it is one of the least used modes, being confined primarily to religious ritual or, in the old days, royal/state ritual. However, in today's world, when we are busy generating a culture essentially from scratch, people tend to use ZONE a great deal since it is the only means of communicating the wealth of meaning they are experiencing.

ZONE is the mode in which each symbol is packed with a wealth of meanings. The aim is to say a lot with a minimum of symbols. In addition, if several symbols are used together, the unit which is formed by linking them together has a meaning which is richer than the simple addition of the separate symbols.

For example: the Pledge of Allegiance and the Kyrie Eleison. It is possible that genetic communication and information storage is of this type: ZONE.

What it might take trillions of words to say in INTER might be said in one word using ZONE. The tendency of ZONE is to make a simple stroke of the pen stand for the universe.