

## **Thoughts on Space, Time, Awareness, and Difference.**

In this essay, I propose that Korzybski's general semantics principle "non-identity" expresses a fundamental feature of Universe, human existence, and evaluations, including "epistemology". (In this essay, I do not elaborate on relationship between non-identity, and epistemology, but propose: Epistemology must ultimately be based on a premise of non-identity (and non-allness) -- if what we know and understand is not identical with what is being known or understood.) Difference precedes similarity. We evaluate things as being the same by ignoring differences. And we interact in a world of differences through a neuropsychological process involving "pattern recognition". At conscious levels, pattern recognition includes "relative invariance under transformation, fractals, structural similarity, metaphors, similes, theories, and so on. "Non-identity" can be considered a scientific theory (testable) stating that "no two things are the same in all respects". (In terms of structural change, and changing relationships, "a 'thing' is not even identical with 'itself'.")

We are aware of different things, and to emphasize this differential awareness, we give things different names. We also note that things occupy different positions. I think it important to emphasize here that if two things occupied the same position we would not be able to differentiate the one from the other...We wouldn't be able to say "Here is this one, and here is the other". From this it seems reasonable to me to make a generalization that "No two things can occupy the same position". The question comes up: "What's going on between things?" As we did not see molecules of air, waves of energy, or other substances in the interval between things, we assumed that there was nothing substantial there, and so we called this 'betweenness', this interval of seemingly 'no thing', "space".

It's worth emphasizing that our habitual and indiscriminate use of labels, names, and symbols facilitate identification. Things, situations, objects, individuals, groups etc., change despite our continuing to refer to them with the 'same' names and labels. A label or name, is not what is being labelled or named. We can minimize instances of our labelling identification habits and tendency to ignore change and differences by remembering to apply the general semantics devices of "indexing", "chain indexing", and "dating." Examples: Car (1), with a particular name is not car (2) with the same name. In international affairs, involving treatise and agreements: Government of a country at time (1) is not the same government of that country at time (2). War (1) at time (1) is not war (1), (the same war) at time (2). War 1914, is not war 2008. . (In general: Anything with a name (X) due to changes is not the same thing at some other time; and also is not the same thing as some other thing with the same name (X).) We create problems for ourselves when we treat others, situations, etc., focusing only on their names and labels while ignoring change and time.

**On Space:** In some dictionaries, "space" is defined as "the distance, expanse, or area between, over, within, etc, things". Here is what I am proposing: We could think of the word "space" as a label for "the totality of intervals between positions -- including whatever exists in these positions". We assume there are no empty spaces. In other words...there is no location where there is nothing. Following this, things, objects, light waves, electromagnetic waves, etc. could be considered -- not as existing in space, not as occupying space, but as "different expressions and configurations of space". And furthermore, these diverse space configurations -- existing at different energy levels and densities -- penetrate, destroy, displace, merge, interact, etc., with each other in diverse ways thereby creating other space configurations, and expressions. And on the premise that there is no empty space, we can now think not in term of "cause and effect", but "causes and effects": What we decide to label a cause might simply be seen as an expression of a prejudice...a leaving out of other spatial interactions and interconnections.

We are aware of, and live in a Universe of changes, activities, and movements. This involves spatial changes, spatial activities, and spatial movements. We can think of movement as “a sequence, continuity, or succession of spatial activity (things, objects, energy waves, etc.) changing positions from one location, through others, to another”.

**On Time:** No two happenings, no two changes, activities, or movements are identical (the same in all respects). If they were, we would not be able to distinguish one from another. So similar to our observations related to “space”, we are aware of an interval between two selected happenings, changes, or activities. We could now define “time” as a term relating to “the totality of intervals between successive spatial changes, movements, and activities”— as with space, we assume there are no time gaps. If we are aware of movement and activity, the notion of “time” represents one way of ordering such movement and activity in terms of before, after, now, earlier, later, minutes, days, hours, decades etc.

We determine a spatial location by relating it directionally -- with our chosen unit of measurement - - to some other selected location as our reference point. Similarly with “time”: We determine an interval of time by comparing it with some selected unit based on an agreed on standard interval between happenings --- the interval of the swing of a pendulum, the passage of the moon around the earth, the frequency of vibration of a Caesium-133 atom, etc. (Note that the interval of the swing of a pendulum, or passage of the moon around the earth, etc., all involve observed spatial changes.)

**On Standards:** We determine what comes first in ‘our’ time, through our awareness that one instance of our awareness is not identical with another: and that an occurrence took place before another. What comes first for me might not be so for another -- if information from a situation involves a longer interval, and speed of travel different for each of us. In a sense, we live through different times. We label our individual awareness of duration, “psychological time”. To minimize conflicts, we make allowances by using clocks and distance units as agreed on reference standards (chronological time). Things move: We determine their speed, frequency, and duration by comparing their change of position to some other selected interval between happenings as our standard. Similarly, we use agreed on standards of measurement to minimize conflicts that predictably would arise if in our dealings with each other we followed our individual estimations of distance, weight, speed, and so on. Unfortunately, in our everyday interactions and communications, we do not usually have or apply agreed on evaluation standards. This makes it difficult for parties to come to agreements in everyday discussions, and in negotiations. Each side gives their own measure (validity, reasonableness, fairness, importance, value, etc.) to their beliefs, ideas, opinions, plans, decisions, and so on. General Semantics provides us with principles we can use as evaluation and communication standards.

**Minimizing Conflicts:** We bring our own standards, values, expectations, etc, to situations based on our individual time-space-experiences. No two are identical. When we are unaware of this – conflicts become unavoidable, and their resolutions practically impossible. Imagine trying to decide how important, how true, how valuable, how serious, how fast, how heavy, how tall, how fair, how beautiful, and so on, something is, when both parties in a conversation or dispute do not agree on some standard they can use as a reference. In Alfred Korzybski’s General Semantics (Science and Sanity), indiscriminate use of the word “is” (“is” of identity) constitutes a general source of many of our personal, interpersonal, and international problems. In our conversations, we often use the word “is” as if one thing, situation, individual, equals---was the same as another. But things, situations and individuals (including ourselves) are different from what we say, or think they are. What we say and think about anything involve words, images, memories, etc.: And these words and images represent our individual (usually non-conscious) evaluation standards based on our own values, beliefs, expectations, priorities, and so on. (See how often you catch yourself using

the word “is” in speaking or writing. For more on “is” and other forms of the verb “to be”, look up D. David Bourland ‘E Prime’. )

Generals Semantics provides us with standards of evaluation and communication. This includes many principles including “non-identity, non-allness, and consciousness that we abstract”: This involves consciousness that in our thinking, feeling, judgment, attitude, behaviour, etc, we have not (and cannot) include everything; consciousness that what we see, hear, think-feel, say, believe, understand, etc., is not the same as--is different from whatever we happen to be believing, thinking, or talking, etc., about.

Space-time: Based on these propositions related to noted intervals between spatial change and happenings, we can say it makes little sense to talk about “absolute time”, or the “passage of time”. “Time” is not a thing that moves from one place to another. In this scheme it makes little sense to talk about the “beginning, and end of time”--unless we also say “nothing moves, and nothing changes”. We talk about “managing time”. But we cannot manage time: More accurately we can seek to manage our behaviour and ourselves in the time we have. From these notions of spatial movement, and activity, we can easily make sense of the interconnection between our notion of “space”, and our notion of “time”. The one unavoidably involves the other.

From the above considerations we can see that “human consciousness, time, space, matter, energy, change, movement, activity, rhythms, difference, existence, and awareness”, are all interrelated...all based on “difference” (non-identity). A great deal of our human problems at personal, societal, and international levels results from ignoring differences (‘saming’, stereotyping, etc). Below I offer an overview of some of the interconnectedness mentioned above.

Universe: I propose a working definition of Universe: Indefinitely extended matter-energy configurations interacting at wide ranges of frequency, mass, density, electromagnetic charge, speed, rotation, etc., with consciousness and human self-consciousness as special emergent processes. In a Universe of ‘sameness’ there would be no movement, no change, no life, no consciousness.

Existence: Anything that exists, exists somewhere at some time. (In planning to meet someone, we want to know not only “when”, but also “where”.) As we assume that there are no empty spaces in Universe, “To exist...is to be in relationships.” Ignoring relationships, and differences in our ways of relating to anyone or anything, situation, etc, often gets us into deep trouble -- not only with others, but also with ourselves. (See “Rhythms” below.)

Difference, Non-identity, Consciousness: The quality of our existence as individuals depends on the degree to which we are aware of and make distinctions. To be conscious is to be conscious of something: Consciousness depends on difference. Without an awareness of difference we would have no sense of change, movement, or anything for that matter. Without an awareness of change (difference, non-identity), we would have no sense or experience we could label time and space. If an instance of awareness was identical to others, we could not be self-conscious. Without self-consciousness, we could not consciously time-bind: We could not consciously, deliberately endeavour to improve what we thought, said, felt, did. Our creativity as time-binders, depends a great deal on our awareness that there are different ways to think-feel-talk about, interpret understand, and do things.

**Movement:** involves an awareness of objects changing from one position, through others to another. (Xeno's paradox disappears when we stop thinking of the structure of space as being identical with 'our' divisions of space.)

**Rhythms:** involve patterns of change. Ignoring or not respecting rhythms (differing patterns of change) often gets us into deep trouble with others and with ourselves. Different structures (spatial configurations), objects, individuals, groups, societies, nations, etc.), operate following their own rhythms. (For instance: American society moves at a faster pace than say a small tribe in the Amazon forest.) In our relationships and dealings at international levels, when we forget or ignore the factor that cultures, societies, groups, etc. operate at different rhythms –and tend to resist change, we are likely to establish a source of resentment, conflict and violence. Social problems arise related to the factor that economic, technological, and other social factors change faster that we change our laws, policies, regulations, and attitudes. The rhythms of our 'minds' (billions of interacting neurons) are not the same as the rhythms of our bodies as a whole. Sometimes our 'minds' make demands that the rest of the body cannot accommodate. Consciousness of this difference in mind-body rhythm can make a very big difference in reducing stress. (For more on "rhythms, change, consciousness, and others, visit <http://miltondawes.com/>)

**Humans:** Particular configurations of space with the ability to respond in increasingly diverse ways; improve on their responses (time-binding ability); symbolically represent, and purposefully, destructively, creatively, transform and use other configurations of space. As "configurations of space", we ignore to our peril our interconnectedness with, and dependence on other space configurations.

A unique characteristic of humans as space-time configurations is our ability to modify our responses and actions, and learn from the consequences of our responses and activities indefinitely. All this depends on our awareness and appreciation of difference—that no two things are the same in all respects. But except in the activities of science and mathematics, there seems to be very little species-wide interest in appreciating, developing, and valuing this 'most important for survival' time-binding ability—our ability to experience finer and finer distinctions: And with more information, more up to date, more accurate information, to do better and better in a Universe of differences.

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