An Overview of General Semantics (2022)
Compiled and edited by Bruce Linnell, PhD
(Green text comes from the General Semantics website, or Science and Sanity)
(Blue text is my own words)
*(**Bold text is important terms and concepts**)*

Executive Summary

*General Semantics deals with the process of how we **perceive, construct, evaluate, and respond** to our life experiences **using language and thought.***

Because our language-behaviors are so integral to human cooperation, as well as human conflict, much (but not all) of Korzybski's General Semantics (as described in his seminal work, Science and Sanity) directly addresses the role of language and language habits in human behavior.

Language plays a tremendous role in human affairs. It serves as a means of cooperation and as a weapon of conflict. With it, men can solve problems, erect the towering structures of science and poetry — and talk themselves into insanity and social confusion (Lee, 1958, p.60).

Korzybski called General Semantics a "non-Aristotelian" system because its many-valued logic goes beyond the two-valued, either-or logic attributed to Aristotle. Two-valued Aristotelian logic says either *X is Y*, or *X is not Y*; it offers no middle choices, and it often leads to either-or evaluating. Non-Aristotelian logic employs multiple values, a range of choices, more in keeping with the diversity of lived experience. It adheres to the principle of non-identity (see the "Is-of-identity" below) by allowing <u>degrees</u> of difference or similarity.

What makes humans *human?* https://www.thisisnotthat.com/mooc/1-whatisgs/1-2-korzybski/

Alfred Korzybski's education focused on the sciences, especially chemistry and engineering. He had a deep curiosity about how things worked. Therefore in considering this first question, Korzybski sought an *operational* definition of humans — not merely a verbal definition. What did humans *do* that was different from non-human forms of life?

Plants as Chemistry-binders

First Korzybski considered plants. What do plants *do*? Plants absorb, or bind, specific chemicals in their immediate environment — nutrients from the soil and water — and together with the effects of sunlight (for above-ground plants), reproduce cells and produce growth. Plant growth and reproduction are influenced by other environmental factors such as climate, gravity, and (of course) plant-eating animals and pollinating insects, just to name a few.

Korzybski therefore distinguished plants by their ability to *bind* together the elements of their environment within and to their own organisms in order to produce and sustain life. He referred to them as ***chemistry-binders***.

Animals as Space-binders

Turning to the animal kingdom (including birds and fish), Korzybski determined that, operationally, what animals *do* includes everything that plants do with one crucial difference. Animals possess (to varying degrees) the ability to move about in their environment. If the source of its food or water is depleted, an animal can move to another place. The ability to move about in space also provides animals with defensive, and offensive, capabilities in their relations with other animals.

Based on this defining characteristic of being able to move about throughout their spacial environment, Korzybski referred to animals as *space-binders* in that they 'binded' the spaces within their living territory.

Humans as Time-binders

In assessing what humans *do,* over and above the capabilities of animals, Korzybski determined that the most critical difference is the ability to create, manipulate, record, and transform symbols. For him, however, the consequence of this uniquely-human capability was much more than just being able to think and communicate with symbols, words, signs, icons, etc.

Korzybski did not regard the human language capability itself as the defining characteristic of humans, but as the **tool** that enabled the capability that most differentiated humans from animals — **the ability to transfer knowledge from human to human, within and across generations**. Languages and other symbol systems, powered by the brain's neocortex (Korzybski, 1993, p. 149) provide humans with the means to document experiences, observations, tips, descriptions, etc., which means that a child can pick up from where the parent leaves off. Knowledge among the human species can therefore accumulate and advance as a body, not simply as random lessons taught and learned by copying, mimicking, or experience.

As a plant *binds* its chemical environment to reproduce and grow, and as an animal *binds* space to survive, humans are able to *bind time* such that a school girl in 2021 can learn physics from Isaac Newton, dance to an 18th-century waltz, become entranced by the words of a sacred ancient text, and try to keep up with Facebook's ever-changing privacy settings. Like the plants that 'bind' chemicals directly into the living cells of their own organisms, and the animals that 'bind' their movements within their environments, humans *bind time* by the activities and changes of their individual brains.

Korzybski coined the term *time-binding* to denote this defining capability of humans, first described in his 1921 book, *Manhood of Humanity*. He wrote:

We know that time-binding capacity — the capacity for accumulating racial [of the human race] experience, enlarging it, and transmitting it for future expansion — is the peculiar power, the characteristic energy, the definitive nature, the defining mark, of man; ... to make improvement — to do greater things by help of things already done — are of the very nature of the time-binding capacity which makes humans human (Korzybski, 1993, pp. 174-175).

All human achievements are cumulative; no one of us can claim any achievement exclusively as his own; we all must use consciously or unconsciously the achievements of others, some of them living but most of them dead (Korzybski, 1990a, p. 13).

Time-binding forms the basis for an ethical standard by which to evaluate human behavior : *does the behavior advance time-binding and human progress based on what is known at the time, or does it deny time-binding?*

Thus, freedom of speech, the ability to share information and knowledge, and the responsibility to be honest in this sharing, is the obligation of every human, business, and government, in order to improve the human condition.

Acknowledging our time-binding inheritance dispels us of the "self-made" notion; as we understand how much we owe to others, we begin to understand our own limitations.

Abstracting-Evaluating

In the context of General Semantics, **abstracting** refers to physio-neurological processes that occur on non-verbal and verbal levels. **From the world of energy stimulations that envelop us, our nervous systems abstract (or select, choose, pay attention to, etc.) only a fraction.** From these partial, incomplete, and fleeting sensations, the nervous system must construct our conscious or aware experiences by matching patterns of stimuli with the brain's 'database' of previous experiences. Note that abstracting may also <u>add</u> characteristics not present at the previous levels. This adding of characteristics may be due to prejudices or bias, but is mostly likely due to **<u>assumptions</u>** (we see the front of a house and assume it has an interior).

Our awareness of an event or happening is not the same as the actual event or happening. Each nervous system **abstracts a limited number of characteristics about an event**, from which that individual constructs what she senses and experiences. When she describes or talks about that experience, **she continues to abstract by selecting certain aspects and ignoring others**. Abstracting refers to this ongoing human process of selecting, rejecting, and constructing our own individual experiences from everything that goes on around us. In other words, **what we sense is not the same as what happens, what we can describe is not the same as what we sense, and the <u>significance</u> we give to what happens is more than what we can merely describe**.

As we will emphasize throughout, Korzybski **drew a sharp distinction between what we <u>experience</u> in our lives, and our <u>reactions</u> to those experiences**. **What our nervous system can sense and experience is but an abstraction of the total possible experience, and our reactions to what happens are yet another abstraction**.

Because people can expect to experience the 'same' event or situation differently, their reactions to the experience will inevitably be different. Influenced by his understanding of the tropism effect from biology (plant growth results from the effects of external stimulation from light, moisture, gravity, etc.), Korzybski initially coined the term *semantic reaction* to refer to the total response of a human to a meaningful event or experience. However, in his later work he came to use the more general *evaluational reaction* or simply *evaluation* **to denote human behavioral reactions as the collective or cumulative impact of one's** *abstractions*. Evaluations (as a noun) would therefore include activities (nouns) with labels such as *judgments, conclusions, opinions, beliefs, ideologies*, etc. We use **nouns** such as these to designate **the results of the evaluative processes**. But from its initial roots, remember that evaluation is a <u>reaction.</u>

But if we instead think of the **verb** forms that denote acts of *evaluating,* the generalized nature of what Korzybski called *evaluations* becomes more apparent. Below is a partial list of verbs that could be considered under the umbrella term of *evaluating*. You can likely think of more. The key is that in every case, from a GS perspective, **the action/verb necessarily involves this unique-to-humans capability to evaluate their experiences**.

analyze, apply, appraise, articulate, assess, categorize, classify, compare, conclude, connect, decide, deduce, define, describe, design, determine, differentiate, discriminate, estimate, explain, express, formulate, generalize, group, hypothesize, infer, interpret, judge, name, organize, predict, rank, recognize, select, separate, speculate, summarize

So in assessing the differences in human behaviors, Korzybski theorized that **these differences were matters of evaluation, due to the different <u>meanings</u> that individuals attached to <u>events and experiences</u>, based on their own individual values <u>and prior experiences</u>**.

Evaluating is often used in much the same way as abstracting, although I consider it a higher-level, more generalized term in that **we can cognitively** *evaluate* **the** *abstractions* that result from our *abstracting*.

Evaluating refers to the human **neuro-physiological processes by which we experience, react to, and form judgments about the world around us**.

… we take for granted that all "perceptual processes" involve abstracting by our nervous system at different levels of complexity. Neurological evidence shows the selective character of the organism's responses to total situations … that the mechanisms of "perception" lie in the ability of our nervous system to abstract and to project (Korzybski, 1990b, pp. 686-687).

It's important to remember how time, order, or sequence plays into this model. Each level of the abstracting process occurs in a given order, i.e.:
- **Something happens** (*Event* : a macroscopic-to-microscopic conglomeration of things and actions)
  ↓ [abstraction]
- **I sense what happens** (*Object* : light, sound, and touch from the Event impacts our sense organs)
  ↓ [abstraction]
- **My brain biochemically reacts to the sensory input** [non-verbally]
  ↓ [abstraction]
- **I become conscious of what happens** (evaluate → *Description* [verbal])
  ↓ [abstraction]
- **I generate meanings for what happens.** (evaluate → *Inferences* [verbal])
  ↓ [abstraction]
- **I react to the meanings I have given to the event.** (evaluate → *Inferences* [verbal])

In terms of differentiation (see below), we should note that:
1. What happens (Event) **is NOT** …
2. What I sense non-verbally within my nervous system (Object), which **is NOT** …
3. What I can describe verbally about my sensing (Description), which **is NOT** …
4. The meaning(s) I generate based on what happened; etc. (Inferences) , which **is NOT** …
5. The reactions I have to the meanings I generated

Note that most of the things we "know" about the Event are **inferences** ("a conclusion or opinion formed from known facts, the truth of which is not known"), which are reached by the processes of abstraction and evaluation. See "Difference between Fact and Inferences" below.

Similarly, our experience/inference/meaning at Time(2) is not the same experience/inference/meaning at Time(1) but due to projection and memory, what we experience at Time(1) may well affect our Time(2) experience and what that experience means. Such as being bitten by a dog in the past may affect our reactions to seeing a new dog later on.

Korzybski considered **confusing levels of abstraction** (in the sequence of events described above) as one of the main sources of human problems. If we confuse the Event with the Object, or the Object with our Description of it, or our Description with our reactions to it, our reactions may not be appropriate.

Extensional / Intentional responses

https://www.corepsych.com
Extensional responses are those that deal with what is actually going on in the world, what is outside our own skins. They can be contrasted with what GS labels intentional responses, which are reactions based on what is going on inside us, how things are as far as we're concerned. The statements "The temperature is now ninety degrees" and "It is hot" may seem almost interchangeable, but they are not. The first comment describes an extensional condition in the world that can be objectively measured. The second statement describes the intentional nervous system reaction of a particular individual. To an Eskimo, fifty-eight degrees may be hot

while to someone living in Bangkok, Thailand, fifty-eight degrees may be cold. The distinction between extensional and intentional statements is by no means trivial. People who confuse the two types of statements can generate arguments and misunderstandings. You cannot prove to an Eskimo that fifty-eight degrees is "cool," but you can prove to him that it is fifty-eight degrees. Intentional comments such as "it is hot" or "it is cool" are not a problem **if the people making these comments understand that they are only expressing their opinions**, and that other individuals might have different takes on the matter. These comments can be a problem, however, **if the people making intentional statements think they are articulating objective facts**. If so, they may not be willing to entertain dissent from others about those "facts."

https://trans4mind.com
For example, a dog can be defined as "a four legged domestic pet which barks." One person's reaction might be "a loyal friend". Another's might be "a frightening biting thing". So when we say "dog", for some people warm feelings are aroused, and for others fearful feelings. These feelings are aroused by the personal meaning of the word (inferences), which is "intension", and not from an actual dog (Event). This also demonstrates that "dog" is a multiordinal word (see below).

Example of the Abstracting Process https://www.thisisnotthat.com/mooc/1-whatisgs/1-2-korzybski/

Let's take a situation in which a friend — call her Emily — relates with some anger an experience she just had while driving to the store … "*somebody cut me off!*" We can deconstruct her experience and emphasize the different 'levels' between what she experienced and what she evaluated.

Event — What is Going On? Street, traffic, trees, rain, wipers … plus microscopic and sub-microscopic particles and activities that we cannot observe, but which we infer based on current science.

Object — Emily's eyes capture (some of the) reflected light from (some of the) images in her (limited) field of view; the light is transformed (abstracted) by her visual system into nervous system signals that travel to her brain; neurons in her brain process the electrical/chemical signals (abstraction) and cause her to see …

Description — *I was driving about 25 miles per hour, perhaps 50 feet from the car ahead. A dark vehicle driven by a middle-aged man emerged from my right field of view. He was going faster than me. His car suddenly accelerated and veered into the lane directly in front of me, reducing my following distance to no more than 10 feet, which meant ...*

Inference(1) — *This guy's a rude jerk because ...*

Inference(2) — *He cut me off and almost made me have a wreck!*

Inference(x) — *I'm too upset to go to work. I need to go home and relax with my dog.*

Can you see that "he cut me off" is not what happened? Can you see that Emily's reaction to what happened is not the same as a description of what happened?

Summary of Abstracting

- Abstracting refers to ongoing physio-neurological processes that occur on verbal and non-verbal levels.
- We can verbally differentiate certain phases, or levels or orders, of the abstracting process to analyze our behaviors and reactions: EVENT is not OBJECT is not DESCRIPTION is not INFERENCE, etc.
- We can acknowledge that our abstracting occurs at different times … we should expect different results, reactions, responses, etc., from different experiences occurring at different times.

- We have human limitations that constrain all of our experiences — **we never experience all of what happens**.
- Similarly, **we can never say all or describe all about our experiences**; more could always be said, etc.
- What we experience is, to some degree, a function of our past experiences (feedback, projection, etc.).
- What we experience is a function of the unique capabilities and limitations of our own individual nervous system.
- We should therefore expect not only to experience things differently than others, we should expect to evaluate and react to things differently.
- **When we delay our responses and react conditionally (consciously) to this specific experience**, we tend to behave more sanely, more rationally, more appropriately to the facts of the situation.

The more you apply this process to analyze your own abstracting, evaluating, inference-making, belief-generating, etc.:

- you will become more aware and conscious of your own abstracting
- you will better differentiate between: 1) what happens; 2) what you sense of what happens; 3) what you describe of what your senses sense [evaluating]; 4) what you infer from what you've described [evaluating]; 5) your reactions to what you've described
- you will respond more conditionally (consciously) to what happens in your life
- you will experience less conditioned responses (less like Pavlov's dog)
- you will delay more of your responses, leap to fewer conclusions, snap to fewer judgments, and make fewer inappropriate assumptions

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Two Worlds https://www.thisisnotthat.com/mooc/1-whatisgs/1-2-korzybski/

As a consequence of our abstracting-evaluating processes, you can say we live in two worlds — the world that exists *out there* beyond our skin, and the world *in here* within our skin. What each of us knows about the world *out there* is constructed by our *in here* nervous systems based on our individual sensory interactions with the world *out there*.

As early as the 1920s, Korzybski extended the mathematical and linguistic notions of *abstraction* to refer to the biological and neurological functions by which our senses-brains-nervous-systems *abstract* (or *construct*) our experience of the world "out there" :

1. Our awareness of "what goes on" outside of our skin, is not "what is going on"; our awareness of our experience is not the silent, first-order, neurological experience.
2. As human organisms, we have limits as to what we can experience through our senses. Given these limitations, **we can never experience 'all' of what's 'out there' to experience** (see Allness below).
3. Given our ever-changing environment (which includes ourselves, and our awareness of ourselves), **we never experience the 'same' person, event, situation, 'thing', experience, etc., more than once**.
4. To the degree that our reactions and responses to all forms of stimuli are automatic, or conditioned, we copy animals, like Pavlov's dog. **To the degree that our reactions and responses are more controlled, delayed, or conditional to the given situation, we exhibit our uniquely-human (and sane) capabilities.**
5. We each experience "what's out there" uniquely, according to our individual sensory capabilities, our past experiences and conditioning. We do well to maintain an attitude of "to-me-ness" in our evaluations of our own behavior, as well as in our evaluations of others' behavior.

Summarizing

A. We need to acknowledge and take into account the characteristics of these two worlds :

The World "Out There"	The World "In Here"
Continually changing processes	Cannot experience everything that could be experienced
Events occur in order and in relation to other events	Experiences must be constructed
Environmental changes	Individually-unique acuities
Stimuli humans cannot detect (wavelengths, frequencies, etc.)	One's experience cannot be the same as another's

B. We need to understand that even our most basic sense experiences of the *out-there* world are created by our brains.

C. We need to **maintain awareness, and take responsibility**, for the neurological fact of this foundational distinction : **that what we experience *in here* is not what's *out there* to be experienced**.

In Korzybski's terminology, we need to maintain a *consciousness of abstracting* (see next section), beginning with the understanding that everything we experience represents an abstraction of something else. In a very real sense, **all we can 'know' are abstractions and associated neurological constructions (evaluations).**

Consciousness of Abstracting https://www.thisisnotthat.com/mooc/1-whatisgs/1-2-coa/

One of the expressed goals in General Semantics is what Korzybski referred to as **"consciousness of abstracting,"** or *awareness* **of one's own abstracting and evaluating processes on both verbal and non-verbal levels**. In other words, the objective of learning GS is to apply it in some way to one's own circumstances, and one way to apply GS is **to maintain an ongoing awareness of the abstracting process**.

Consciousness of abstracting involves : remembering that whatever we imagine, think-feel, say, etc., we have not, and cannot, include everything (see Allness below). Conscious abstracting means being attentive to what we think, believe, imagine, say and do; consciously listening and consciously observing; especially listening to, and observing ourselves. Conscious abstracting is a "precursor" to consciousness of abstracting: to change, modify, learn from what we are doing, we have to be aware, witness, and attend to **what** and **how** we are doing.

Differentiation enables consciousness of abstracting : it is the discrimination between levels of abstraction, avoiding the is-of-identity (see below), and separating multiordinal terms (see below).

The following table may help summarize some of the key differences between maintaining an awareness of your own abstracting processes, compared to remaining unaware of abstracting.

CONSCIOUSNESS OF ABSTRACTING

Unaware . . . . *Aware*

Presumption of *Allness*, what is experienced or sensed is exactly what is there to be experienced.	Aware of the abstracting process and limitations of the nervous system, recognition that one can never know or experience *all* about *anything*.
Condition**ed** responses, jump to conclusions, make snap judgments.	Condition**al** responses, delayed reactions.
Bypassing – presuming that meanings are in words, that listeners presume speakers should use words the same way the listener uses them.	Meanings are found in individuals and how they use words; ask *what does the speaker mean?* Definitions in dictionaries, meanings in people.
Two-valued, either-or, right-wrong, good-evil thinking.	Multi-valued thinking, acknowledging shades of grey.
Talking is prone to absolutisms, certainty, closed-mindedness.	Talking recognizes limitations of abstracting process, open-minded, tentative, acknowledges degrees of uncertainty.
Confusion between *facts* and *inferences/observations*, low standard for what is treated as *fact*. Prone to treat inference statements as if they were factual statements.	Aware of differences between *facts* and *inferences*, sets a high bar for *facts*: 1) must have already occurred; 2) must be personally observed/experienced; 3) as close to certainty as humanly possible.
Assumptions are bad and should be avoided.	Assumptions are inevitable and useful for time-binding, but need to be acknowledged and brought to awareness as much as possible.

Examples of Visual Abstracting

Our eyes-brain-visual-system is not a perfect recorder of how we convert our "out there" sensations into "in here" sensory experiences. In some cases, our brains have been trained to interpret certain visual stimuli in very specific, and sometimes misleading, ways. In other cases we can recognize certain images (such as faces) with very sketchy and ambiguous inputs.

In other words, **the _result_ of what we *abstract* (what we think we see) is not the same as the *object* of what we are abstracting**.

Do you see just black and white dots in this picture?

What if I told you there was a Dalmatian dog in the picture?

Look at the following image. This image includes what might be considered as "dimples" which appear to recede into the image, and "bumps" which appear to come out of the image. How many "dimples" and how many "bumps" do you see?
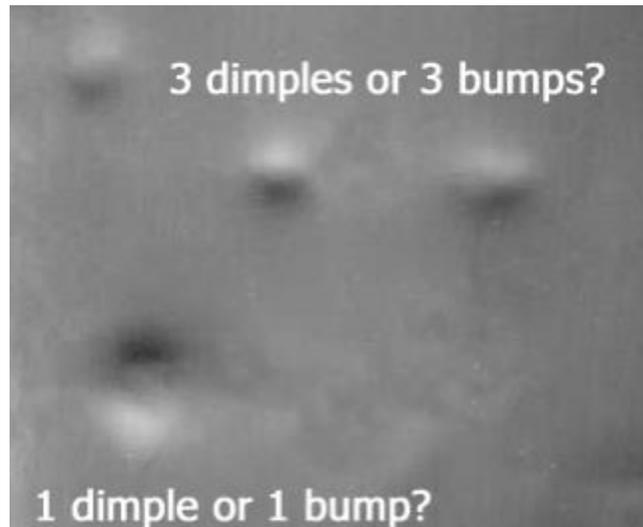
Now rotate it 180 degrees. How many "dimples" and how many "bumps" do you see from this perspective? (It's the same image, just turned upside-down.)

1 dimple or 1 bump?

3 dimples or 3 bumps?

3 bowls

Consider this demonstration in terms of differentiating between what happens on *non-verbal levels* as compared to what can be verbalized. What do the results of this activity suggest about verbal constructs such as *absolute* and *relative*?

Put cold water in one bucket, or bowl, placed to your left, comfortably hot water in a bowl to your right, and lukewarm ("just right") water in a middle bowl. Place your left hand in the cold water and your right hand in the comfortably hot water. Keep your hands submerged in the water for about a minute. Then raise both hands and place them in the middle bowl.

What do your senses tell you about the water temperature in the middle bowl?

You're probably sharp enough to speculate what happens (but go ahead and do it for yourself anyway). Your left hand, conditioned by the cold water, tells you that the middle water is "warmer"; while your right hand, conditioned by the comfortably hot water tells you the middle water is "cooler**." You have only one stimulus – the middle bowl of water – but you have two different sensory responses. Which one is "right" or "true"?**

Just like the left and right hands in the experiment, we are each 'conditioned' by our past. Each of us has lived through our own unique, no-two-the-same life experiences. To every new situation or experience, we bring our own unique perspectives and attitudes resulting from our past experiences. We therefore can't help but experience each situation uniquely from anyone else. If we fail to recognize this – **if we expect others to see or feel or smell or otherwise experience something exactly the same as we do** – then we forget the lesson of the three water buckets.

The Structural Differential https://en.wikipedia.org/wiki/Structural_differential
https://www.generalsemantics.org/wp-content/uploads/2011/05/articles/other/korzybskis-structural-differential-and-hayakawas-abstraction-ladder-by-steve-stockdale.pdf

The structural differential was Korzybski's attempt to create a visual analogy of the abstracting-evaluating process.

The structural differential consists of three basic objects. The **parabola** represents the domain beyond our direct observation, the microscopic and sub-microscopic dynamic world of cells, molecules, atoms, electrons, protons, quarks, and so on; a world known to us only inferentially from science. Korzybski described it as an "Event" in

the sense of "an instantaneous cross-section of a process." Thus the "event" or parabola represents the totality that constitutes an apple (for example), which is changing from moment to moment (every second, its cells are breaking down, starches are being converted to sugars, etc.). This is reality-as-a-whole, and is the "external" cause of what we experience. It is cut off at the top to show it is infinite in extent. (It is still debated whether the parabola represents one object, or the entire universe.)

The **disc** represents the non-verbal result of our nervous system reacting to the total Event – e.g., the apple that we see, hold, bite into, smell, all on the non-verbal level of experience (*Object*). The disc represents what we *experience* (senses → nervous system → brain) of our surroundings versus what our surroundings actually *are*. This is the silent, first-order, neurological experience. What we experience is also, to some degree, a function of the unique capabilities of our individual nervous systems – no two people will even experience a given event in the same way!

The **labels** are shaped like old-fashioned suitcase labels, and represent the static world of words (for example "apple"), which give imperfect accounts of a non-verbal, dynamic reality. For example, while the label "apple" itself never changes, an object called an "apple" left in a jar for months becomes a putrid liquid (because of its underlying, dynamic, sub-microscopic structure). Ideally, what you say, think, hear, etc., at this first level (the first label under the circle) about your experience should be as close to "just the facts" as possible.

The downward chain of labels represents the multiple levels of *inferences* and *abstractions* that can be constructed from the experience, which determine what meaning or significance is drawn from it, and how you react to it. As the diagram implies, you can generate as many inferences, abstractions, beliefs, theories, judgments, conclusions, etc., as you care to. However, later abstractions have a greater chance of not matching the original reality (being "false-to-facts"). The word "steak" (a verbal label), may imply "something good to eat" at a higher abstract verbal order, but in the sub-microscopic domain, a particular steak may be contaminated with poisons created by harmful bacteria that we could see only on microscopic levels.

It is also important to realize that time is flowing from top to bottom as well : first the event happens, then it impacts our senses, then we describe it and then generate inferences and abstractions.

The **holes** in the figures represent the characteristics that exist at each level. Only some of these characteristics (the hanging **strings**) can even *possibly* be detected by human senses. The characteristics that are abstracted to the next level are indicated by the attached strings. The strings that don't make it to the next level represent characteristics left out of our abstractions (as do the holes without strings). More is left out of our abstractions at each level than was there at the previous level. *Therefore, we can never know "everything" that's going on in an Event.* If we accept that we don't know "all" that's going on around us, we're less likely to be close-minded about our ideas, opinions, decisions, etc.

The disc at the top left represents an animal, which also interacts directly with the environment thru its senses (strings from parabola to animal not shown), but does not generally create labels. However, many animals can make associations. If you connect a bell with food, a dog will salivate at the sound of the bell. This is *abstracting* – associating a symbol (bell) for the "reality" (food). We could even then associate a whistle for the bell, so the dog would salivate for the whistle, which would be a second order abstraction. But dogs are unable
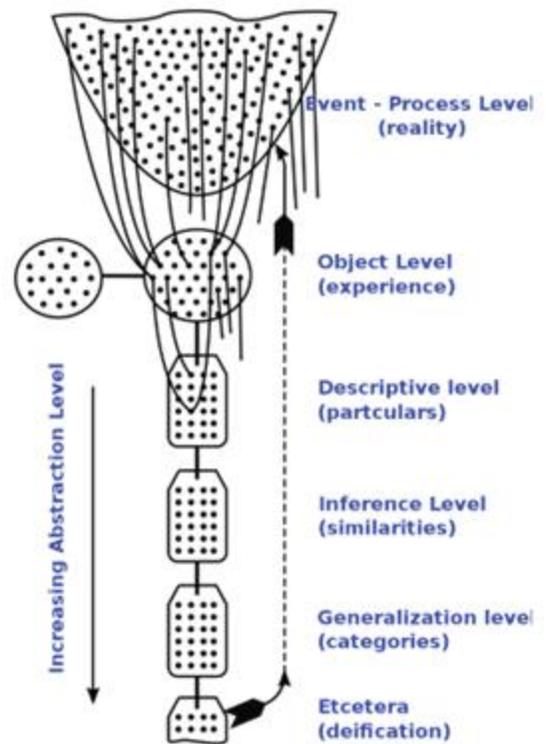
And it has become apparent that some animals–especially chimpanzees and gorillas–have powers of abstracting (thinking) that are greater than we once thought. The **arrow** from the bottom inference label back to the Event suggests feedback. In other words, our *inferences* from prior experiences can become *Event-level* aspects or characteristics of what we experience in the future. In other words, what we experience now is, to some degree, a function of our past experiences. A perhaps better picture, one showing time flowing down then right, down then right, etc., depicts a succession of these abstracting processes, one after the other, for every moment of our lives. In this case, with successive abstracting processes, we can see the feedback arrow projecting from our prior inferences to our next experience :
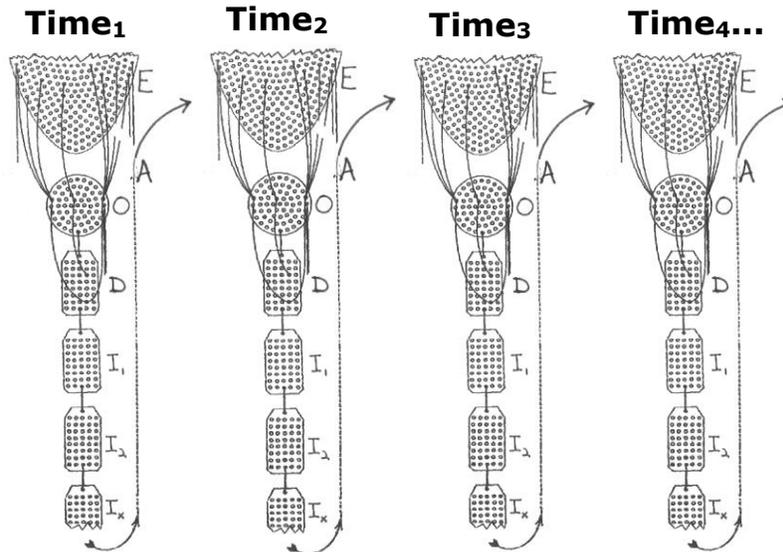
The label "apple" is not the same as the actual thing we *call* an apple. Always remember : the **INFERENCE** is *not* the **LABEL** is *not* the **EXPERIENCE** is *not* the **EVENT**!

Ordinary thinkers see an object or event and immediately label it, see its similarities with other objects or events, and react to it based on previous experiences. Instead of looking intently and consciously, they jump to conclusions and "think" they know "all" about the object or event.

One of the most powerful lessons of general semantics – when we become conscious of this abstracting process as illustrated by the Structural Differential – is that we can better train ourselves to respond **conditionally** (consciously) to the things that happen to us. We don't *have* to react with a **conditioned** respond like Pavlov's dog, reacting to a substitute stimulus **as if** it were "real" - but we often do (like someone getting sick from merely *hearing* the details of an operation).

Our language helps confuse us, because we tend to say things like, "Ooh, *it made me* so mad!" We allow the "*it*" - the *event*, the *what happened*, the *stimulus* - to determine our *response*. We need to remember that between the stimulus and your response, there's a *YOU* :

STIMULUS -----> YOU(observation,label,inference) -----> RESPONSE
Time(1) -------------> Time(2) -> Time(3) -> Time(4) -------> Time(5)

Again, "time" is an important aspect of our conditional (conscious) responses. Remember the old adage "count to 10" before getting mad? There's a lot of merit to be gained by practicing your ability to consciously *delay* your responses so they become conditional instead of conditioned. Then we tend to behave more sanely, more rationally, more appropriate-to-the-"facts" of the situation. When we react immediately, when our responses are conditioned and controlled by the *stimulus* (the "thing"), we behave like Pavlov's dog and subject ourselves to control by others, and our memories.

Open-minded, flexible thinkers are also aware that their knowledge about something may have become obsolete and inaccurate over a period of time, so they try to make new observations, which they will use to update their descriptions to make them more accurately reflect reality. We invite trouble when we sometimes fail to account for change in people or things, and act *as if* no change occurred.

The Map|Territory Analogy

1. The map is not the territory it represents.

A map depicts only limited aspects of the territory it represents or symbolizes. **For a map to be useful, it must accurately reflect the relative structure or relationships of the key features of the territory.**

Similarly, our language behaviors can be thought of as *maps* of our actual life experiences. These **verbal expressions of how and what we think, feel, react, judge, assume, etc., should be in accordance with the 'territory' of our lived experiences**. And on a pre-verbal level, we can use the metaphor to remember that even our lived experiences — **what we see, hear, feel, smell, taste, etc. — are neurological constructs ('maps') of whatever it is in the 'real' world outside ourselves** that we are seeing, hearing, feeling, smelling, and tasting.

Of course, "the map is not the territory!" But let's not be so quick to take these six words for granted. Arguably, the whole of General Semantics derives from this six-word premise and the consequences which follow.

In General Semantics, "*the map is not the territory*" means **the word is not the thing it represents. You cannot eat the word "apple"!**

In other words, a particular type of distinction is expressed: *one* thing is not the *same* thing as *another* thing **which are represented by the [same name]**. More generally, an *abstraction* is not the same as *that from which the abstraction is abstracted*. **The map** (an abstraction) *is not the territory* (what is actually going on).

Also, the map cannot include the ever-changing or fluctuating "realities" of the referred territory. That is why we should continually update our beliefs with new information (see next section).

2. The map cannot show all of the territory.

Maps are limited in size and detail. They can only depict selected items of interest or importance. Similarly, our language behaviors — **our talking, listening, writing, thinking — are limited and cannot include or comprehend *all* of whatever we are trying to describe or understand** (see "Allness" below). And on a pre-verbal level, **the *maps* of what we are seeing, hearing, feeling, tasting, and smelling account for only a fraction of what exists in the *territory* of the 'real' world (due to abstraction).**

So in Korzybski's term, we can think of a map as an abstraction of the territory it symbolizes; **the words we use to express ourselves are an abstraction of the thoughts and feelings we experience; and even those thoughts and feelings are abstractions of whatever stimulates our sensory experiences from the 'real' world**.

3. A map is made by a <u>map-maker</u> and is self-reflexive.

Maps don't spring up from nowhere, maps are constructed by their makers. An individual decides the purpose of the map, the size, the scale, the features to be included, etc. In deciding all those details, the human map maker must also determine which features will not be included, which might be exaggerated or emphasized for importance, what descriptive annotations might be helpful. And if the map-maker were constructing a map of the territory which surrounded the map-maker herself, then a theoretically-complete map would include both the map itself and the map-maker.

In terms of our language behaviors, we can remember that **whatever we "reduce to language," or whatever thoughts and feelings we abstract from our experiences**, are <u>human constructions</u> reflecting evaluations. <u>We are the map-makers</u>, **making our own maps (evaluations) of our experiences, and we can also then evaluate our evaluations (creating inferences)**. In language, since we can almost endlessly talk about our talking, we are in a sense making maps of maps of maps, etc.

A note on "self-reflexive" :

When Korzybski used the term "self-reflexive" in Science and Sanity, he merely said **"*Languages exhibit also this peculiar self-reflexiveness, that we can <u>analyze</u> languages by linguistic means.*"**. Over the years, others have tried to (re-)define it. I found many different definitions, including :
- *"If the map could be ideally correct, it would include, in a reduced scale, the map of the map; the map of the map, of the map; and so on, endlessly."* (Korzybski). He made this statement immediately before the above statement, but does <u>not</u> indicate that this concept is referring to "self-reflexive".
- *Making a map from another map.* This is what is said immediately above this box.
- *Self-reflexive = "multiordinality of terms" (see below).* While correct, this does not clarify anything.
- *The thing that is self-reflexive about a map is the key on the map that explains the symbols on the map.* This makes no sense to me.
- *We can map our maps indefinitely.* I don't know what this means.
- *We can also make statements about statements, and statements about those statements, and so on.* This seems to be the linguistic equivalent of making a map from another map, above.

Applied to daily life and language:
1. A word is *not* what it represents.
2. A word does *not* represent *all* of the 'facts', etc.
3. Language is *self-reflexive* in the sense that in language we can speak *about* language. We can also have *self-reflexive* emotional reactions to our emotional reactions, such as getting angry about getting angry.


Scientific Orientation Toward Language
https://www.thisisnotthat.com/mooc/1-whatisgs/1-4-on-language/

The application of a scientific approach or method has proven to be the most effective problem-solving process yet created by humans. Therefore it makes sense to apply a scientific approach in our evaluations and judgments about ourselves and our experiences — including how we think-talk-write-reflect on those experiences, and how we listen-read-interpret-reflect on others' experiences.

This means that we should continually test our assumptions and beliefs; continually gather new facts, data, and observations; revise our beliefs and assumptions as appropriate; and then hold our conclusions and judgments <u>tentatively</u>, in accordance with our own experiences, pending the possibility that new

data, new experiences, might necessitate new theories or new assumptions to be tested. This is the scientific method, and could be called "conscious time-binding" :
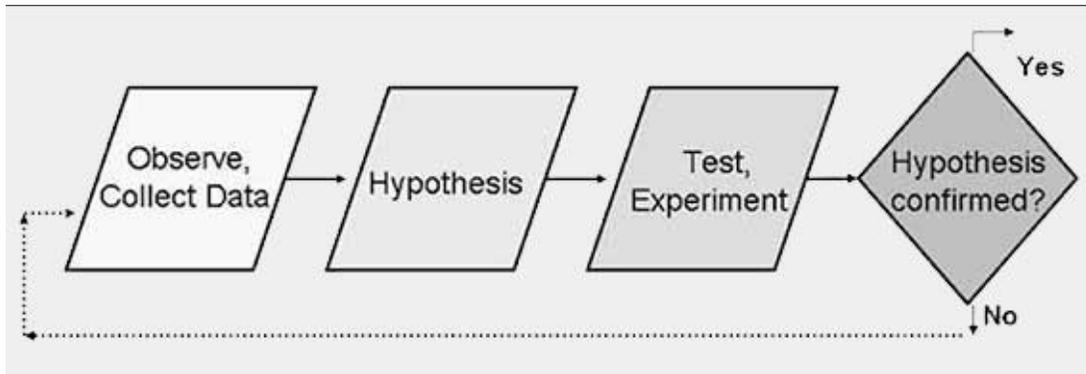
Unstated or hidden assumptions of which we are unaware can often drive our behaviors and attitudes; therefore we do well to acknowledge their influence and attempt to increase our awareness of them. One of the oft-repeated "conventional wisdoms" we hear is the admonition to avoid making assumptions. However…

Making assumptions and inferences is not only unavoidable, but a vitally important human capability. Some of our most intelligent and productive human behaviors depend on our ability to intuit, correlate with past experiences, match patterns, and dozens of other activities akin to "making assumptions." In short, we cannot *NOT* make assumptions.

The key takeaway is here that rather than trying to *avoid* assumptions, we need to make a special effort to **recognize and become more aware of** our assumptions, inferences, beliefs, etc. **and be able to discriminate between them and "facts"**. An activity to highlight how much we unknowingly infer about simple situations is the uncritical inference test (below).

Difference between Facts and Inferences

Most declarative sentences in English are assumed to state facts. But a "fact" is something we observe or see, while inferences are what we assume.

"This apple has seeds in it" : while every apple you've ever dealt with in the past has had seeds in it, and you've never heard of a seedless apple, **you do not know for sure that this apple has seeds** (before cutting it open).

We can only make statements of fact after an observation (cutting open the apple). Inferences can be made at any time. Statements of fact deal only with what is observed, while inferences go beyond what is observed. A fact is as close to certainty as possible, inferences involve degrees of probability. Even a very high probability statement (like "this apple has seeds in it") is not a fact until an observation is made.

We cannot live without making inferences or assumptions all the time. But **when we fail to realize the difference between facts and inferences** we begin to behave as if inferences were factual statements, and we are likely to make them with the same amount of confidence and surety as factual statements. This leads us to believe that know something (and so are done with it), when with inferences it is better to ask further questions.

Stating a fact is extensional; stating an inference is intentional (from above).

Factual statements	Inferential statements
1. Based on observations.	1. Based on any of: observations, factual statements, other inferential statements, evaluations or assumptions, etc.

2. Hence can only be made after an observation.	2. Can be made after, during or before an observation, or relate to no observation at all.
3. Limits itself to observed information.	3. Moves beyond observed information and/or is unrelated to it. Removes and/or adds in new information.
4. Hence limited number of statements.	4. Unlimited number of statements can be made.
5. Statement reliability nearly certain.	5. Statement reliability varies from very low to high. Science uses many independent facts (observations) to increase the reliability of its inferences (theories).
6. Increases chance of agreement.	6. Decreases chance of agreement.

Try to do the following with your own evaluating:

1. Become more conscious that you are using inferences rather than just "the facts." Know the differences between them.
2. Hence try and avoid behavior/thinking based on inferences as though they were facts.
3. Check your inferences with the facts.
4. Use the scientific method, i.e. start with the facts, then induce some inferences from them. Finally, check out these inferences with further facts.

Also, if people try to pass off inferences as factual statements, ask them:

1. "What do you mean?" To make sure you didn't misunderstand, i.e. try to reduce your communication errors due to incorrectly **inferring** what you think they might mean.
2. Then ask: "How do you know?" to find out what the statement is based on, i.e. facts, inferences or something else.
3. Finally, ask "What did you leave out?" to be sure they are presenting all the available information.

Uncritical Inference Test

This uncritical inference test is based on the work of William V. Haney.

Carefully read the brief story that follows. Assume that all of the information presented in the story is true and accurate. Next, read the statements following the story. If the statement is definitely true based on the information presented in the story, mark it as TRUE. If the statement is definitely false based on the information presented, mark it FALSE. If the true or false answer cannot be determined based on the information presented, indicate NOT SURE. You may refer back to the story whenever you wish. But you must answer the questions in order, and once answered, you can't go back and make changes.

Stephanie and her friend walked into the music store after lunch. Stephanie wanted to buy the new CD by the group, "No Girls Allowed". There was only one other person in the store when Stephanie and her friend arrived. Stephanie asked, "How much is this CD?" Stephanie's friend said, "Here, let me see it. I don't think he heard you. This tag says it costs $11.99."

1. Stephanie wanted to buy a CD.
2. Stephanie and her friend ate lunch together.
3. Stephanie owns a CD player.

4. There was only one boy in the store.
5. Two girls walked into a music store.
6. There are no boys in the "No Girls Allowed" group.
7. Stephanie and her friend are teenagers.
8. The store's owner didn't hear Stephanie because the music was too loud.
9. Stephanie had enough money to buy the CD.
10. The "No Girls Allowed" CD cost $11.99.
11. The owner of the store is a woman.
12. Stephanie wanted to buy a CD as a gift.
13. One of the CDs costs $11.99.
14. There were two boys in the store.
15. The clerk was hard of hearing.

Pretty easy? Did you notice how you projected information into this story that wasn't stated as 'fact'? The only statement that is TRUE is #1! In every encounter or situation we face, we bring our past experiences to it in the form of unstated, usually unconscious assumptions and premises. We draw inferences based on these assumptions about the situation as if they were fact. Many times we cause problems for ourselves and others when we confuse our inferences with the 'facts', and when we don't recognize our projections as projections.

Language as a Map https://www.thisisnotthat.com/mooc/1-whatisgs/1-4-on-language/

The Importance of Constructing Proper 'Maps'

Humans can build on the knowledge of prior generations. Alfred Korzybski referred to this capability as *time-binding*. Language serves as the principle tool that facilitates time-binding. Language also serves as a guiding influence in shaping our world view and life experiences.

We can apply the map-territory analogy to evaluate our language habits and behaviors. As a map represents a territory, so our language symbolizes our thoughts, emotions, ideas, opinions, and experiences. To the degree that the maps we construct accurately portray the <u>structural</u> relationships of the territory, they serve us well.

If, however, the maps we construct inaccurately depict the relationships among the territory of our experiences, they can result in trouble. To best serve our own time-binding interests, our verbal 'maps' ought to be congruent and consistent with the realities of our non-verbal 'territories'.

Previously, we discussed how current brain scientists agree that what we have naively believed were **direct experiences of 'reality' are instead experiences that we construct within each of our own brains, minds, and nervous systems**. How does this knowledge affect our language habits and behaviors?

*We ought to easily recognize, then, that ancient notions such as objective or absolute reality do not accurately reflect the limitations of our nervous systems as they interact with the outside world. Therefore language structures, patterns, or terms that rely on this **false-to-fact notion that what I experience (or say) "is" the same as what exists "out there" in the world thus misrepresents, misleads, and misinforms**. The fact of the matter is that the 'real world' is to a large extent unconsciously built up on the language habits of the group ... We see and hear and otherwise experience very largely as we do because the language habits of our community predispose certain choices of interpretation. — **Edward Sapir** (Carroll, 1956, p. 134)*

Language *Mis*behaviors

No language is perfect. Every language, being man-made and not inherent or inerrant, has structural flaws and cannot properly reflect the structure of the world we uniquely sense and experience. **If we accept the view that language(s) shape, influence, affect, etc., how a given culture constructs the 'realities' of that culture's experiences, behavioral norms, world view, etc.** (Ramachandran, Sapir, and others), then it behooves us as individuals and societies **to acknowledge these flaws and revise our language habits and behaviors accordingly**.

In addition to these structural flaws, individuals are prone to commit errors that result from lack of awareness of the abstracting/evaluating process, conventional language habits and usages, or careless inattention.

Some of the symptoms of language misbehaviors include:

1. We uncritically accept the language we use to describe the world 'out there' as complete, accurate, and "the way it is" (see Allness, below).
2. We fail to consider the perceptions and perspectives of others who see "the way it is" differently than we do.
3. We confuse the word itself with what the word stands for. Thus, we can sit on the object called 'a chair,' but we cannot sit on the noise we made or the name we applied to that object.
4. We act as if words have 'meanings' on their own, **without respect to __individuals__ and __context__**.
5. We mistake or confuse facts with inferences, assumptions, beliefs, etc.
6. We simplistically consider issues in terms of either-or, black or white, right or wrong, good or bad; we do not account for "shades of gray." This comes from Aristotle, who said a thing either is or it isn't, which cements our language into an unhealthy two-valued system.
7. We tend to look for and recognize similarities more than differences, which results in mistaken generalizations, stereotypes, biases, etc.
8. We forget or overlook the fact that every person and every thing changes over time.
9. We use language to verbally 'separate' what cannot be separated in the real world (ex. mind from body, thoughts from feelings, style from content, form from function, "pure" reason or emotion, etc.) – see non-elementism below.

Multiordinal words

A multiordinal term is one that can be applied to statements containing that same term infinitely. A statement about a statement is a higher order of abstraction than the first statement. **Multiordinal terms have different meanings at different levels of abstraction.** Multiordinal terms are "*in general infinite-valued and ambiguous. They become specific and one-valued only in a given context, or when the orders of abstraction are distinguished*". Two specific examples are "love" and "hate" – in how many ways can these words have different meanings?

Identification https://www.thisisnotthat.com/mooc/1-whatisgs/1-2-korzybski/

In General Semantics, the behavior we label *identification* is normally to be avoided, or at least recognized. We talk about it as a *misevaluation* in that **when we *identify*, we confuse or mistake our impression or reaction __to__ something with the something itself** (which is confusing levels of abstraction). Put another way**, we allow the stimulus to determine our response, without deliberately or conditionally (consciously) evaluating the stimulus** (like Pavlov's dog, we are not differentiating), which means we are automatically and compulsively reacting to a new experience **as if it were like earlier similar experiences** and not in terms of the uniqueness of

this experience itself. Consciousness of abstracting can prevent identification. Examples of *identification* include:

- Mistaking the word as the thing, or the map as the territory. With a map in hand, some people will presume the map is correct and the land around them "should" be like the map.
- Have you ever been disappointed when you arrived at a hotel by your *Deluxe* accommodations?
- I read a product review recently on Amazon.com recently in which an outraged reader wrote a negative review of a plastic product made by a company called Steelmaster, even though the reader acknowledged the product was described as being made of plastic.
- Imagine someone who is allergic to something, like a flower. If you gave that person a very real-looking silk flower, and the person had an allergic reaction, that would be identification.
- Someone who eats an unfamiliar food, then later has a rather upsetting reaction when informed what the food was, isn't reacting to the food. The person is reacting to the sound of the name of the food. The verbalized name is associated (identified) with a previous or imagined terrible experience and that drives the reaction.

The use of "is" in language
http://stevenlewis.info/gs/identity.htm
http://www.generalsemantics.org/wp-content/uploads/2011/05/articles/etc/52-3-johnston.pdf

Korzybski built his non-Aristotelian system on the rejection of the "is-of-identity" or, in positive terms, on the principle of "non-identity" : that no events or things are the same in all details. If we use the is-of-identity, semantic reactions may be negative and may lead to un-sane choices. For example, if we say some nation "is evil", such a statement may lead to paranoia and war. The disregard of this principle, according to Korzybski, is the foundation of many misevaluations. His prescription for avoiding or treating the identity delusion was training in differentiation – to differentiate individuals from generalities, words from their referents, descriptions from inferences, 'emotions' from the stimuli that evoked them, etc.

Suppose I say, "Pat is a politician." Such a sentence uses a form of "is" called the **is-of-identity**. It violates the non-identity principle. In effect, I've said, individual noun (Pat) equals class noun (politician), X is identical to Y, "Pat is identical to politician." I've confused the specific with the general, confused things with words, and imposed linguistic limitations that do not reflect the rich diversity of a living human who has personality, hopes, habits, a certain physique, etc . I've reduced Pat to a label, "politician". My self-imposed tunnel vision will pre-judge and damage my relationship with Pat. By treating this individual as identical to a class, category, or group, I can't help but think and act as if all politicians are alike . If a particular politician has disappointed me, I will probably react badly to all politicians. Instead, one could say **"He works as a politician."**

When we say, for example, "that apple is red" we may be confusing our response to the apple, "red," with the apple itself, which is the **is-of-predication** – assuming that characteristics exist in things, instead of in the relation of an observer to what is observed. In the dark, we would not see the apple as red; if we were wearing tinted glasses we may not see the apple as red; if we were 'color blind' we may not see the apple as red, etc. The structure of our statement, "that apple is red," may be both cause and effect of our misevaluation and may lead to unnecessary disagreements. We are projecting our own values, concepts, and standards onto other things. Someone else might have different views. A more structurally appropriate formulation would be **"I see that apple as red."** Here the observer is included in the statement, leaving open the option that other observers may abstract something different.

Korzybski cautioned against the thoughtless use of 'is' that implies identity, especially when applied directly to objective levels like "this is a cup." He wrote: "... *the use of the 'is of identity', as applied to objective, unspeakable levels* (see below)*, appears invariably structurally false-to-facts and must be entirely abandoned.*"

This could be achieved by :
1. Replacing "is" by "appears to me to be"
2. Describing things in terms of their behaviors rather than their properties

However, "Milton is writing" and "Milton is a Canadian" both contain "is", yet we evaluate these two "is-es" differently because the contexts evoke different meanings. Labelling the second use of "is" as "is of identity" may be misleading because identity in General Semantics refers to a confusion of two or more entities or stages of processes in our evaluations. The naked statement "Milton is a Canadian" does not give us evidence that the person making the statement is confusing Milton with any other Canadian. The naked statement does not tell us that we do not appreciate the individuality of Milton, only that we know something about Milton's origin or citizenship.

Because "identity" and "identification" have such specialized meanings within General Semantics, we could refer to uses of "is" as in "Milton is a Canadian" as the "is of classification." This labelling is less inferential and more descriptive, and so does not induce us to jump to conclusions, to "identify" or "confuse the orders of abstraction."

Korzybski's admonition against using the "is of identity" does not mean we must expunge from the language all forms of 'to be,' which is hardly practical. Instead, it points to the need to change the meanings-evaluations evoked in us so that **the "is of identity" no longer means identity (sameness in all respects) but means merely classification (similar in some respects)**.

Allness https://www.thisisnotthat.com/mooc/2-allness/

Allness refers to acting as if what I am saying (writing or thinking) is completely all that is important about the subject, person, or event at that moment. Its opposite, the principle of "non-allness" says we cannot imagine, think, say, understand, know all about anything or anyone—including ourselves. Where applicable, **modifying our thinking and speech with words including "some", "sometimes", "some", "usually", "probably"**, and others, can help us avoid the trap of allness, as opposed to words of certainty, tones of finality, and absolutes (e.g., *always, never, all, every*, *entirely* and *none*), which imply that we know everything.

Allness occurs because we forget that we are abstracting, or are ignoring the limitations of our abstracting process : we can never experience all of the event, and our words do not capture the whole of the event. Because we abstract, we cannot say or know everything about anything.

Allness occurs because we forget the general semantics premise that "a map cannot cover all of a territory, so any map **is only part of** the territory."

Allness attitudes are harmful because they block communication—**a person with this attitude is unable to learn and unable to change**.

Consciousness of abstraction (from above) can combat allness. When we remember that abstraction inhibits our ability to cover everything, we find it easier to be less absolute. Also, adding "etc." (even if only mentally) to the end of a sentence will remind us that there is always more to be said about something.

In addition to realizing that abstraction inhibits our ability to cover everything, Haney (1992) proposed exploring how often we are closed to new and different ideas. For example, when we have a chance to hear a new perspective, do we listen carefully and then paraphrase what we hear? Many of us rarely paraphrase because we have been preparing rebuttals instead of listening. Morreale, Spitzberg, and Barge (2007) outlined various opportunities to withhold judgment during the three stages of the listening process:

1. *Receiving:* postpone evaluation of the message
2. *Constructing meaning:* set aside bias and prejudice
3. *Responding:* clarify meaning by paraphrasing and asking questions

Non-elementalism https://miltondawes.com/2013/04/21/some-general-semantics-principles/

The concept of **non-elementalism** is : we live in a world of relationships. **To be, is to be in relationships**. "Non-elementalism" involves not separating verbally and conceptually what is actually not separate : thinking-feeling, matter-energy, intellect-emotion, space-time, action-consequences, mind-brain, belief-behavior, observer-observed, and especially organism-as-a-whole-in-its-environment. Thinking in term of relationships, we make better decisions, and arrive at more effective solutions to problems…among other consequences.

Developing New Language Behaviors and Attitudes
https://www.thisisnotthat.com/mooc/1-whatisgs/1-4-on-language/

"Words create worlds so choose wisely" (Whitney&Trosten-Bloom, 2010). Regardless of the context in which we find ourselves, we might communicate more effectively if we explore our daily language behavior. A general semantics methodology provides the opportunity to do so. General semantics is not just a theory but a practical approach to delay the way that humans automatically respond: **it is something we must *do***.

Our language habits can affect our physiological behavior; we can allow what we see, hear, say, etc., to affect our blood pressure, pulse, rate of breathing, etc. As we become more aware of our verbal and non-verbal behaviors, we can practice techniques to achieve greater degrees of relaxation, less stress, greater sense of our environment, etc.

When we respond automatically, without exercising control over our response, we allow the stimulus to condition or determine our response. In other words, we behave more like Pavlov's dog than an aware human being when we let someone or something "push our emotional hot buttons."

Korzybski referred to two aspects of these behavioral implications of our internal language habits. He continually stressed the importance of what he called **"cortico-thalamic" integration** (Korzybski, 1994, p. xxvi). By this he meant that there needed to be a balanced integration of the *new brain* (the cortex) and the old or *reptilian brain* (which in the terminology of the time he referred to generally as the *thalamus* – what we now call the amygdala). In other words, he described how, with proper awareness, **one could use the capabilities of the cortex to temper, dampen, or even override the emotional or reactive responses of the thalamus/amygdala**.

He emphasized that **aware humans have the ability to respond *conditionally* to both non-verbal and symbolic stimuli**. In other words, we have some degree of control over our response to a specific stimulus.

This could be achieved by using the method of **delayed reaction** : waiting while we mentally sort out what is really going on before describing it in words. This helps us avoid reacting to words as triggers, and allows us to see them as symbols. This allows us to dissociate the event and the word which symbolizes it from associations and evocations related to the word. In other words, we are holding off our thalamus from reacting until our cortex has time to process the information.

If you are distressed by anything external, the pain is not due to the thing itself, but to your estimation of it; and this you have the power to revoke at any moment. — **Marcus Aurelius**

Extensional Devices

Korzybski proposed the use of several language habits he called "extensional devices" to help us become more aware of these language flaws in our everyday talking and listening, and thereby behave more responsibly :

- **Indexing** — Muslim(1) is not Muslim(2) is not Muslim(3); see differences and do not group things together based on their similarities (non-identity)
- **Dating** — Bob Jones(2004) is not Bob Jones(1994); things change over time (differentiation)
- **Quotes** — a caution that the term may be used in a peculiar or *'not normal'* way (differentiation)
- **Etc.** – a reminder than *more could always be said*, our knowledge is incomplete (non-allness)
- **Hyphens** to remind us of the complexities of interrelatedness in this world (space-time, body-mind, etc.), which is non-elementalism.

Our ability to achieve "maximum humanness" and evolve to our human potential is a function of how accurately our language behaviors (what we do) reflect and are consistent with what we know. Therefore we can evaluate our language behaviors according to criteria such as how well we :

- maintain an ongoing attitude of "relative-to-me-ness"
- hold our opinions, judgments, beliefs, and assumptions with a degree of tentativeness and willingness to change if new information or experiences warrant
- live comfortably with uncertainty
- exercise a healthy degree of skepticism and inquisitiveness
- strive for more description and less opinion, as appropriate to the occasion
- strive for more unique and personal observations in our pronouncements, and fewer cliches, stock phrases, aphorisms, and conventional wisdoms
- look for differences among similarities, as well as recognize similarities among differences, seeing both the forest and the trees, depending on the circumstances
- maintain a deserved sense of humility and minimize know-it-all attitudes

In short, never "know" that you are "right".

Verbal and Nonverbal "Thinking"
http://www.generalsemantics.org/wp-content/uploads/2011/05/articles/etc/62-4-silence.pdf

Definitions :
"Unspeakable" means that an object or feeling, say, a toothache, is <u>not</u> verbal, is <u>not</u> words. Also called the "silent level".
The "objective level" is the brain's **<u>non-verbal</u>** processing of sensory input. It is unspeakable.
    Pinch your earlobe – that feeling is objective, <u>then</u> we apply words to it ("pain", "ouch", etc.).
NOTE : Korszybski ofen refers to the "silent, unspeakable, objective level", blurring these distinctions.
The "verbal level" is the words we use to think about and express our objective-level experiences.

Korzybski stressed developing a <u>conscious awareness of the objective level</u> – that part of existence that is pre-verbal, life "before" we apply words to it to think or talk about it.

There is a tremendous difference between "thinking" in verbal terms, and "contemplating," inwardly silent, on nonverbal levels. If we "think" verbally, we act as biased observers and project onto the silent levels the structure of the language we use, so remaining in our rut of old orientations. In contrast, when we "think" without words, or instead with pictures or visualizations (which involve structure and, therefore, relations), we may discover new aspects and relations on silent levels.

Once we discriminate among the objective and verbal levels, we learn **'silence' on the unspeakable objective levels**, and so introduce a most beneficial neurological 'delay'—engage the cortex to perform its natural function.

It must be realized that **our lives are lived on the silent, objective levels** : that whatever we "think," "feel," and "do" happens as such silently, and that <u>only as a secondary matter does talk come in</u>. To see what is going on and to evaluate it properly without identification *we must be silent*. "Silence" in this context refers to **an inner experience of non-verbal awareness**. To be silent on the objective level, as Korzybski used to say, or <u>silent on the level of the senses</u>.

"Silence on the objective level" may sound redundant, since the objective level is by defintion silent. But what Korzybski is saying is to <u>remain</u> in the silent objective level longer and not immediately ascribe words to your experience.

Try this:
Allow your verbal thinking to become still. Allow yourself to become aware of your surroundings this very moment. Experience the sounds, smells, sights, and temperature; sense the position of your body, the touch of your clothes against your skin, experience your feelings and sensations in real time — without thinking or speaking words.

How the amygdala hijacks our attention
https://www.thisisnotthat.com/mooc/1-whatisgs/1-4-on-language/

GOLEMAN: Well, here's the problem. The way the brain was designed worked very well in ancient days when we lived in jungles, and we, you know, there was a Saber-tooth tiger and we had to have this radar for threats called the amygdala on watch all the time because you never know when that rustle in the leaves is going to mean you better run if you're going to survive. Today that same brain mechanism is looking for threats constantly, and it reacts to symbolic threats as though they were real biological ones.

REHM: Give me an example.

GOLEMAN: For example, someone doesn't answer your email. You're expecting something right away and you start obsessing about it, and in fact you start to review everything that's happened in the relationship for the last week and what you may have done wrong that made them mad at you. In other words, you make the assumption that there's an emotional emergency and what happens is the amygdala can hijack your attention so that you're thinking about that instead of, you know, the work you're supposed to be doing or the person you're with, whatever it is. But that's the way our brain is wired.

Language-Behaviors That Matter
https://www.thisisnotthat.com/mooc/1-whatisgs/1-4-on-language/

As *maps* are not the same as *territories*, so are *words* not the same as the *objects, things, or life events* they represent. When we act as though the words have priority over the things the words stand for, we often cause problems for ourselves, or others. Some examples :

What is a 'weapon'? (*the perils of zero-tolerance thinking*)

In 2002, a 16-year-old high school honor student at L.D. Bell High School in Hurst, TX, was expelled from school for a year and sentenced to the Tarrant County Juvenile Justice Alternative Education Program.

His offense? He had helped his parents move his grandmother's belongings on a Sunday afternoon. The next Monday, while his pickup truck was parked in the school parking lot, a security guard found a bread knife in the bed of the truck.

Local newspapers reported that the school district administration insisted that the young student had been expelled for bringing a "weapon" onto campus. In the wake of the 1999 Columbine High School murders in Colorado, a Texas Education Code statute mandated a "zero tolerance" one-year expulsion from school. The law explicitly defined by statute what constituted a "weapon." The bread knife, the common tableware type of knife, met the statute's definition of a "weapon." Therefore, by the school district's interpretation of the state statute, the student "brought a weapon onto campus."

Not only did the student bring a "weapon" (by definition) onto campus, but according to one school district official, by the very act of bringing the "weapon" onto campus (in the bed of his truck in the student parking lot), "I do feel he put students at risk, whether he knowingly did that or not." Of course this benign bread knife, hiding in the bed of a pickup truck in the far reaches of the sophomore parking lot, posed a "threat" to campus students — *by definition*.

Perhaps so in the verbal world of carefully scripted legislated words written on papers collected in notebooks stacked on shelves in offices in the state capitol. But in the 'real world' of real weapons, real threats, and real harmful intentions, this benign bread knife posed no threat … other than to the future education and life for a 16-year-old honor student.

Was Uncle Bruce a Nazi? (or, *the meaning of symbols*)

A second uncle of my great-grandfather became a graphic artist and moved to New York City as a young man. While perusing my family mementos, photos, and scrapbooks one day, I found a handmade Christmas card that "Uncle Bruce" mailed to my great-grandparents in 1924.

The card features a silhouette of a family in their decorated home, seen through the grill of a frosted window. Hanging in the window frame are several different seasonal ornaments and symbols. Featured prominently in the center of the window, I was taken aback to see an unmistakable … *swastika!*

Well, no. After just a few minutes of online research, I discovered that, prior to Hitler's German National Socialists party appropriating the swastika symbol for its own branding, the symbol had been used as an expressive symbol for good fortune, good luck, good wishes, etc., *for centuries*.

In fact, Rudyard Kipling featured the symbol prominently on the front covers and title pages of several early editions of his books, at least through the 1920s. Was Kipling a Nazi? Even *before* there were Nazis?

We need to remember that *every* symbol — every word, sign, icon, code, etc. — was created by humans. Just as there is no, to my knowledge, piece of music or art that spontaneously emanated with inherent (and inerrant) 'meaning,' there exists no symbol with *inherent and inerrant* 'meaning.' As the American pragmatist philosopher Charles Sanders Peirce is attributed with saying: Y*ou don't get meaning; you respond with meaning*.

I find it important to remember that the *symbol* we recognize and call a "swastika" can convey — or, perhaps more appropriately, can *evoke* — different meanings among different people in different contexts. The *symbol* itself carries no inherent meaning or sense of goodness or evil or luck.

Conclusions

Any language, to be most effective, must incorporate what we know (from scientific investigations) about the world around us and what we understand about ourselves. Therefore it's important to discern the world "out there" (beyond our skin) from the world "in here" (within our skin).

- Our <u>awareness</u> of 'what goes on' outside of our skin is not the same as 'what goes on.'
- Our ability to experience the world is relative, unique to our own individual sensing capabilities (or sensory acuities), past experiences, and expectations.
- Every person abstracts and evaluates their life experiences differently, based on their prior experiences, genetics, and their environments.
- Our environment, the world around us (including ourselves), is ever-changing. We never experience the 'same' person, event, situation, or thing more than once.
- We have limits (due to evolution, genes, physics, etc.) as to what we can experience.
- We can never experience all of what's to experience. We abstract only a portion of what we can sense. We experience reality incompletely on all levels (macroscopic, microscopic, sub-microscopic, cosmologic, etc.).
- We sense and experience on silent, non-verbal levels, from which we then speak, think, infer, etc.

Structure

https://harishsnotebook.wordpress.com/2020/05/17/korzybski-at-the-gemba/
http://korzybskiinstitute.blogspot.com/
https://en.wikipedia.org/wiki/General_semantics
https://www.evensarc.com/thinking/2010/08/16/linguistic-metaphor

Korzybski considered his realization that General Semantics was all about "structure" to be his biggest breakthru in its development.

Korzybski said "*As words are not the objects they represent, the only link between the verbal and objective world is exclusively structural, necessitating the conclusion that the only content of all "knowledge" is structural.*" He defined structure as "*a complex or network of <u>ordered</u> and <u>interrelated</u> **relations**.*"

What we "know" is based on the structure of our language (and hence, the structure of our nervous system). And the structure of our language determines in a very large part **how we think**. Only if the objective and verbal worlds are structurally similar does the empirical world, and our place in it, become intelligible.

The "structure" of a langauge is desccribed by how it teaches you to think. General Semantic's structures include : non-identity, non-elementalism, non-allness, extension, differentiation, awareness of abstraction, etc.

So language can provide people with a structural "map" of empirical facts, but there can be no "identity", <u>only structural similarity</u>, between the language (map) and the empirical facts (territory) as observed by people.

Some maps (abstract representations of reality), are better than others, and what distinguishes a better map from a poorer one is the degree to which they <u>have a **structural similarity** to the underlying reality</u>.

Theory of Sanity

Alfred Korzybski proposed that General Semantics was a theory of sanity. He said "*sanity is tied to the <u>structural fit</u> or lack of it between* **our reactions** *to the world and* **what is actually going on** *in the world*". That's because "*A map is not the territory it represents, but, if correct, it has a "similar structure" to the territory, which accounts for its usefulness.*" **Therefore, the structure of language should be similar to the structure of our nervous system and to the structure of reality.**

He believed that the key to achieving sanity would be found in the scientific method, which continually seeks to adjust its theories structurally to fit the facts, i.e., improves its maps to fit the territory, so the adoption of an **attitude of continual adjustment by the individual toward their inferences by comparing them to the empirical world** was the way towards sanity. He also stressed that sanity requires the awareness that "*whatever you say a thing is, it is <u>not</u>*" because anything expressed through language is not the reality it refers to : language is like a map, and the map is not the territory. The territory, or reality, remains unnamable, unspeakable, and mysterious. Hence, the widespread assumption that we can grasp reality through language involves a degree of "unsanity".

In delusions and hallucinations, the internal model of reality is not consistent with objective fact. This is due to a confusion between orders of abstraction (confusing the thing with the word we use to describe it, and/or our reaction to that word as if it was the thing), or false evaluations from reversing the natural order of processing (object → senses → brain → name → inferences → reaction). Korzybski stressed that using non-identity can be used to remove all confusions of orders of abstraction, and to not identify words with objects.

A thoroughly sane individual, according to Korzybski, follows an extensional orientation, adjusts themselves to life-'facts', shows consciousness of abstracting, avoids identification, has fully conditional (conscious) reactions, realizes that everything changes over time, etc.

A Brief Summary of Terms

The map is not the territory : the word is not the thing it represents
Non-Identity : do not say "A is B", say "A appears to be B to me"
Non-Elementalism : do not verbally split things that are not split in reality : body-mind, space-time
Non-Allness : do not assume you know or have said <u>everything</u> about an event or thing
Multiordinality : many words have different meanings depending on how they are used (love, hate)
Extension/Intension : be aware whether you're making a statement of fact (extensional) or a statement of
                    inference or reaction (intentional)
Differentiation : discriminate between levels of abstraction, avoid the is-of-identity, and separate multiordinal
                terms, individuals from generalities, words from the things they refer to
Consciousness of Abstracting : be aware of your entire abstraction process
Conditioned response : be aware of your abstraction and evaluation process before reacting to an event

Extensional Devices
  Indexing (implements differentiation)
  Dating (implements differentiation)
  Quotes (reduces multiordinality)
  Etc. (implements non-allness)
  Hyphenation (implements non-elementalism)
Identification : confusing or mistaking our impression or reaction to something as the something itself