## **Lance Strate's Lecture Notes on Teaching General Semantics**

Martin Levinson, President of the Institute of General Semantics, asked that I share my lecture notes for teaching general semantics, and I am happy to do so. For many years, I taught a basic course introducing students to the field of communication. These courses are known by many names, Introduction to Communication (Theory/Studies), Process of Communication, Perspectives on Communication, Concepts of Communication, etc. My approach has been to present general semantics on its own terms, as a separate topic and unit. I should note that my approach to teaching general semantics in this context has also been to build upon material covered in other units, and otherwise point out interconnections with topics such as perception, rhetoric, linguistics (including Sapir-Whorf and Vygotsky), semiotics and symbolic communication, metaphor, symbolic interaction, information theory and cybernetics, systems theory, and of course, media ecology, but that has varied over the years, and across different contexts, and is an option, not a requirement. In addition to the readings listed below, these notes are drawn, in part, on graduate courses I took with Neil Postman and Christine Nystrom in the late, lamented Media Ecology Program at New York University, and also on undergraduate courses I took with Jack Barwind as an undergraduate Communication Arts major at Cornell University. Some modifications have been made to the notes over the years, and in the course of preparing them for distribution in this form.

For those looking to familiarize themselves with general semantics, or deepen their understanding, here are some recommendations. Wendell Johnson's classic work, *People in* Quandaries, was the required text in general semantics in Neil Postman's doctoral program in media ecology, providing a comprehensive, well organized, and clearly written discussion (albeit with some dated material on stuttering and other therapeutical issues at the end). Postman also used Harry Weinberg's Levels of Knowing and Existence, which he used when he covered general semantics in a graduate class on Language and Human Behavior. Both of these works can be purchased through the IGS, as can many other fine works in this area, more than I can mention here, including Korzybski's original works such as Science and Sanity, and Kenneth Johnson's Outline Survey of general semantics, which I would highly recommend as a concise summary of the field. Also of particular interest in an educational context would be two anthologies edited by Mary Morain, Teaching General Semantics: A Collection of Lesson Plans for College and Adult Classes, and Classroom Exercises in General Semantics. In preparing these lecture notes, in addition to People in Quandaries and Levels of Knowing and Existence, I have drawn upon two works that are sadly out of print, John C. Condon's short book, Semantics and Communication, and Postman's own work, Crazy Talk, Stupid Talk, which is based in part on People in Quandaries, advances many of the ideas, and provides an important bridge to media ecology.

#### **General Semantics**

- I. Founded by Alfred Korzybski
  - A. Korzybski was a Polish engineer who immigrated to the US, and was motivated by experiences in WWI
  - B. War—communication problem
  - C. When engineers get together to build a bridge, they have no problems understanding each other or getting the job done. Why shouldn't peace be as easy to build as a bridge?
  - D. Language of science was the key, and general semantics founded on idea of scientific language. As one prominent general semanticist, Wendell Johnson, a professor of speech pathology, put it, "The language of science is the better part of the method of science."
  - E. A product of early 20<sup>th</sup> century faith in science and progress, and continued appeal to American pragmatism
  - F. Highly influential in mid-20<sup>th</sup> century, proponents include S. I. Hayakawa (US Senator), Wendell Johnson (and his son Nicholas, former FCC Commissioner), Stuart Chase (economist highly influential in FDR's New Deal), William S. Burroughs (novelist), A. E. van Vogt (sf writer, *Alien*), Robert Heinlein (sf writer, *Stranger in a Strange Land*), Frank Herbert (sf writer, *Dune*), Robert Anton Wilson (sf and nonfiction writer), L. Ron Hubbard (dianetics and scientology), Albert Ellis (rational emotive behavior therapy), Richard Bandler (neuro-linguistic programming), and many more
  - G. More close to home, had influence on Kenneth Burke (rhetoric), Gregory Bateson (anthropology), Buckminster Fuller (design), French poststructuralists such as Derrida and Foucault, German sociologists such as Niklas Luhman, communication theorists such as Irving Lee, Elwood Murray, Tom Pace
  - H. Favorable mentions from Mumford, McLuhan. Foundational to the media ecology of Neil Postman, who edited *ETC: A Review of General Semantics*, for a decade. Pervades much of his early, collaborative work, and his important book, *Crazy Talk, Stupid Talk*. An ecological approach, Korzybski described it as an "organism-as-a-whole-in-an-environment" perspective, and also makes reference to neuro-linguistic environments, neuro-semantic, and simply, semantic environments (the latter used by Wendell Johnson and Neil Postman). General semantics and the non-Aristotelian approach represents a response to the postliterate, electronic culture that has been emerging over the past century, Aristotelian thinking being a product of writing, literacy, and the alphabet.

- II. From a scientific point of view, energy is fundamental
  - A. Laws of thermodynamics, Einstein's E=MC<sup>2</sup>
  - B. Energy is fundamental substance of the universe
  - C. Matter is a form of energy
  - D. Energy is dynamic, not static; event, not thing
  - E. All forms of life based on energy
  - F. Categorized into 3 classes of life based on use of energy
    - 1. Chemistry-Binding—plants, completely dependent on chemical processes, photosynthesis for life
    - 2. Space-Binding—animals, ability to move around on their own
    - Time-Binding—humans, transmit knowledge over time, make progress. "If I can see farther, it is because I am standing on the shoulders of giants."
       (Newton). Knowledge is power, energy, most of which we inherit from previous generations
      - a. progress through time-binding most apparent in science and technology—geometric advances
      - b. progress in ethics, politics, economics, social and human relations, much slower—arithmetic advances
      - given the superiority of science and technology in making progress, other sectors of society need to become more scientific in their thinking and communication
      - d. scientific method, empiricism, reality-testing, use of precise language is essential
- III. Following Einstein's non-Newtonian physics, and non-Euclidean geometry, Korzybski proposes a non-Aristotelian mode of thought and communication
  - A. Not anti-Aristotle, but post-Aristotle
  - B. Aristotelian Laws of Thought (rules of logic)
    - 1. Aristotle codified basic rules of logic, which we take for granted, seems natural to us
    - 2. Law of identity. A=A. A thing is what it is. A man is a man, truth is truth. A is always A; A is all A
    - 3. Law of excluded middle. A=B or A≠B, either/or. Either a man or not a man, either the truth or not the truth
    - 4. Law of non-contradiction. Not A=B AND A≠B. Not both a man and not a man, not both the truth and not the truth
    - 5. Laws implies permanence, static relationship, polarization, things are discrete, not process. Allows us to categorize things (no double counting to confuse inventories).
  - C. Korzybki's Non-Aristotelian Principles of Thought
    - 1. Principle of Non-Identity—A is not A. No identity relationships in nature. A map is not the territory it represents. The word is not the thing it represents. Whatever you say a thing is, it is not.

- a. Korzybski sat on a chair and it broke, hence a chair is not a chair. Money is money--\$100 check vs. \$100 cash. Different attitudes towards money in rich, see it as symbol, not thing. Spinal tap amp "11." Taboo words, curse words, bigot words, Lenny Bruce, body and sex words, death, disease—cancer; euphemisms
- b. Korzybski/IGS seminars. Give out biscuits, people eat them, no problem, then show box of dog biscuits, some people feel sick, reacting to symbol or reality? Same with chocolate/chocolate covered ants. Cultural/symbolic prohibitions about food, kosher laws, insects (perfectly fine to eat, survival training), shell fish as insects of the sea. Scenes from Indiana Jones and the Temple of Doom, Survivor reality TV series.
- c. Would you feel uncomfortable about drawing a mustache on a picture of your mother? Taking a pin and poking out the eyes?
- 2. Principle of Non-Allness—A is not all A. By labeling, we leave out information. A writer, fine, also a criminal.
  - a. A map does not represent all of a territory. Words do not say all there is to say about the things they represent. A person cannot say all there is to say about a thing. The word "is" does no mean "equals." Johnny is bad.
  - b. Danger of absolutism, universalism
- 3. Principle of self-reflexiveness. An ideal map would include a map of a map, etc. It is possible to speak words about words, and words about those words, etc. It is possible to react to one's reactions, react to those reactions, etc. Statements about statements, evaluations of evaluations. Metacommunication, recursion.
  - a. Ask—describe what you are doing right now. Like mirror reflecting mirror. Infinite. Mead, consciousness and self-consciousness, imagine self as object, as others see us, and as we see them, etc. Carlyle, man is not unique because he uses tools, animals use tools. Man is unique because he uses tools to make tools. We use machines to answer and watch other machines. (VCR taping and not watching)
  - b. Source of paradox. Barber shaves every man in the village who doesn't shave himself, who shave the barber? To every rule there is an exception (as a rule itself). This statement is false.
  - c. Whitehead and Russell, Theory of Logical Types, class cannot be a member of itself
  - d. Gödel, Incompleteness Theorem
  - e. Hofstadter, *Gödel, Escher, Bach*; self-reflexiveness as basis of consciousness (self-consciousness)

# IV. Abstracting

- A. Key concept in general semantics
- B. Verb indicates process, as opposed to abstraction as a thing
- C. Understood in terms of levels or orders of abstracting
- D. Models: Korzybski, Structural Differential; Hayakawa, simpler, more accessible ladder model
- E. Concept of abstracting unites perception and language/symbolic communication
- F. Levels of abstraction
  - 1. Event level, the reality we can never entirely know, where every phenomenon is a unique event in spacetime, no identity relationships in nature
  - 2. Object level, perception, organize chaotic sensory data, establish continuities, memory, recognition as basic form of identity
  - 3. Verbal levels, assign unique name, establishing identity over time; higher levels involve categorization
    - a. Example: Neighbor's dog, Shirley. Shirley exists on the event level, out there in reality.
    - b. On the object level I know Shirley as a series of encounters, separate experiences, that I relate to one another.
    - c. In giving these experiences a name, Shirley, I tie the experiences together to form a single identity, Shirley, as an unique individual.
    - d. When I say that Shirley is a poodle, the world "poodle" here refers to a class of individuals, a category. All categories only exist in our minds. There may be a physical basis for our creation of the category, but first we must perceive and make the distinction. This is why we call such a category an abstraction, and place poodle on the second verbal level of abstracting. I may then say that a poodle is a kind of dog, and we place dog on the third level. I can go on to say that a dog is a mammal, an animal, a living thing, etc., moving higher and higher up in level of abstracting.
- G. Abstracting is a process of leaving out details, as we proceed from lower to higher levels, more details are left out
- H. Abstracting is a process of categorization, in leaving out more and more details, we put the phenomenon into categories or classes that are increasingly more general. This is stereotyping, and one of the great successes of general semantics in the 20<sup>th</sup> century has been its contributions to educational efforts concerning stereotyping, prejudice, and scapegoating.
- I. Abstracting is a personal, subjective process where we project our evaluations onto reality. Instead of saying Shirley is a poodle, I could say that Shirley is a female. Ask, who feels hot, who feels cold, who feels cold. Differences in categorizing coffee as hot, pizza. Experiment: put left hand in bucket, 35

- degrees, right in 140 degrees, then both in 70 degrees. Left feels warm or hot, right feels cool or cold.
- J. The same words can have different meanings corresponding to different levels of abstracting. This is called multiordinality. For examples, *the chair*, in reference to one specific chair is on a lower level of abstracting than *a chair*, referring to the entire class of chairs.

### V. General Semantics Recommends

- A. Cultivate consciousness of abstracting, be aware of the process (consciousness raising).
- B. Employ an extensional orientation (inductive, gather data, check facts) rather than an intensional orientation (deductive, work off of assumptions, figure things out in your head without bothering to check).
- C. Employ a mutli-valued orientation rather than a two-valued orientation (shades of gray rather than black or white, dimmer switch rather than on or off, more than two sides to every issue).
- D. Avoid elementalism. General semantics is a holistic, ecological approach, cautions against the way that words can separate phenomena that in reality cannot be separated, for example, space and time, mind and body, intellect and emotion.
- E. Don't use allness words: always, never, nothing, nobody, everybody, everything, entirely, absolutely, of course, etc. (never say never).
- F. Deal in probabilities, not absolutes, use qualifying terms (probably, it seems to me, in my opinion, based on my previous experience, to the best of my recollection).
- G. Be conscious of your semantic reactions, and try to employ symbol reactions (reflective, delayed, mindful), rather than signal reactions (reflexive, immediate, kneejerk). Traditional wisdom: Look before you leap, count to ten, don't count your chickens, stop, look, and listen. Remember that there is always uncertainty, so don't prejudge—check it out!
- H. Pavlov's dogs. Dogs are not so bright, employ signal reactions. We need to delay reactions in order to make each reaction appropriate to the particular thing we are reacting to.
- I. Election, propaganda. React like Pavlov's dogs to such words as abortion, welfare, taxes, inflation, war, peace. General semantics has made significant contributions to the study, analysis, and criticism of persuasion and propaganda.
- J. Wendell Johnson, "To a mouse, cheese is cheese. That is why mouse traps are effective. To many humans being Right is Right, Wrong is Wong, Capital is Capital, and Labor is Labor. That is why propaganda is effective."

## VI. Language and Extensional Devices

A. Korzybski advocated the use of visual images because they are more concrete and specific than words, and favored mathematics because it is more flexible and less ambiguous than words.

- B. While general semantics typically recommends avoiding high level abstractions, Wendell Johnson cautioned against dead level abstracting, that is, staying on the same level of abstracting, rather than moving up and down the levels.
- C. Problematic nature of the verb "to be" identified by Korzybski. When Bill Clinton said, "it depends on what the meaning of is is," it sounded like weasel words, and was not a good thing to say under the circumstances, but actually makes sense from a general semantics perspective. Look up "is" in the dictionary. Actually quite complex. Two particular problems.
  - 1. One is the "is" of projection, associated with adjectives. We project all of the adjective's qualities onto the noun it is describing. If we say that Johnny is bad, we are saying that Johnny equals bad, and thus is all bad, always bad. Influenced child psychology, don't say you are bad; better to say, you did a bad thing; better still to say, what you did made me angry.
  - 2. The other problem occurs from the use of the "is" of identification. We confuse the word "is" with the word equals, and identify one noun with another. We may say that one and one is two, but do we mean the same thing when we say Joe is a criminal? That everything there is to say about Joe is summed up by saying he is a criminal, and that everything associated with the term *criminal* applies to Joe?
  - 3. Not a problem to use "to be" as an auxiliary verb (It is raining), or to indicate existence (I am, I am that I am)
  - 4. Some in general semantics try to eliminate the verb "to be" entirely. E-prime (English-prime), English without the verb "to be" (several anthologies published). Difficult, but improves writing, nothing more boring than *is*—It is raining vs. The rain poured down.
- D. Korzybski and others proposed the use of several devices to remind us of the non-Aristotelian laws of thought.
  - 1. Indexing—What is an index in a book? Use indexing—apartment numbers, street address, zip code, phone numbers, social security numbers, drivers license numbers, cataloging in Library. Algebra: X<sub>1</sub>, X<sub>2</sub>
  - 2. Johnny<sub>1</sub> is not Johnny<sub>2</sub> (people are different in different situations). Chair<sub>1</sub> is not chair<sub>2</sub> (one may be cushioned, the other not, size may vary, one may break and the other not). Time<sub>1</sub> is not time<sub>2</sub> (things change over time).
  - 3. Dating—newspapers, magazines, documents, letters. Joe<sup>1980</sup> is not Joe<sup>2010</sup>. Joe may have been a criminal then, but he could change and be a professor of law now.  $$2^{2010}$  does not equal  $$2^{1960}$ .
  - 4. Et cetera—By ending every statement with *etc.* we are reminded that we cannot say all there is to say about anything, that there's always more to be said, always much that we've left out.
  - 5. Hyphens: Space-time, mind-body, emotional-intellectual, to indicate that the separate terms do not exist in isolation of one another in reality
  - 6. Quotes: "Emotional" maladjustment, "intellectual" achievement. In speaking, use of quotation marks gesture

- 7. Plurals—Effect similar to indexing: instead of asking what is the cause of war, lower the level of abstracting by asking what are the causes of wars. Instead of talking about falling in love as one thing, talk about fallings in loves
- 8. Quantifying terms: Don't say hot, say 95 degrees, or 70 degrees (weatherman)
- 9. Qualifying terms: State exceptions, specify conditions—except, but, under conditions of, in our culture, of our time, to me, in my opinion, as I see it, from my point of view, etc. Watergate—"to the best of my recollection."

#### VII. Reification

- A. It is possible to use words that do not refer to anything in reality. The most extreme example would be nonsense words like grib and jabberwocky. Some words refer to things that were thought to exist, but in fact do not, like phlogiston and ether.
- B. Take id, ego, supergo. They are ideas that Freud used to try to describe the way people's minds work. But they are not things that are present in reality. Examine the brain, can't find the id, ego, superego.
- C. High level abstractions do not refer to "things" in reality, although they seem to. The concept of the nation is an example. We talk about nations as if they were real things, but there is no agreement on how to define "nation" or what constitutes a nation, no objective test to determine whether some entity is a nation. Benedict Anderson: nations are imagined communities. Social construction.
- D. Sometimes, words that seem to refer to something real can be dangerous. An example of this is the word "race." One general semanticist, the anthropologist Ashley Montagu, delivered a lecture on race to the American Association of Physical Anthropologists in 1941. He used genetics as his basis for condemning the use of the term "race" among anthropologists, arguing that it concepts of race are nothing more than a product of statistical averaging. In fact, the definition of race differs from one culture to another (in the US we traditionally defined white vs. black on an all or nothing basis of purity, whereas other cultures in the western hemisphere have at least one category of mulatto, and Brazil had 3 different races in between the extremes of black and white), and one time period to another (in the 19<sup>th</sup> century, Italians, Greeks, Jews, etc., were not considered white, and it was common to use race interchangeably with ethnicity).
- E. A similar problem occurs with the use of the word "intelligence" by social and behavioral scientists. Because the word exists, we assume that the thing it refers to exists, and we try to find it, to describe it, to measure it, to test it. We're not sure what it is, but we come up with a test for it anyway. And in the end we mistake the score on an intelligence test for intelligence itself. The score is real, intelligence is not. The score is merely a measure of an individual's ability to take the test. Stephen Jay Gould, *The Mismeasure of Man*, has argued that intelligence testing has been used (perhaps unintentionally) to "prove" that white Americans are superior, in intelligence, to non-whites and immigrants. People institutionalized for scoring a few points below the minimum legal requirement on intelligence tests, even though

- they are capable of taking care of themselves. Howard Gardner, theory of multiple intelligences, extensional device of using plurals.
- F. Modern maps, north as up, top, arbitrary, ideological, vs. ancient orientation
- G. As we go higher up in levels of abstracting, we reach the point where there are words about words, and not things. But because the word exists, we believe that the thing must exist, we must *thingify* the word. This is called *reification*, to make real. When we try to find and measure abstractions like intelligence, patriotism, love, we are guilty of reification.

## VIII. Idealization and Operationalism

- A. Wendell Johnson believed that mistaking high-level abstractions for things often leads to the IFD disease. The IFD disease refers to the following process: Idealization. Frustration. Demoralization.
- B. For example, most people have the same goals: success, happiness, love, peace, fulfillment. Counselors and therapists are constantly finding patients who have been demoralized in their search for these goals, because they have idealized the terms, and therefore have no concrete indicators for having reached the goals. Love is often idealized, so much so that no one seems to be good enough.
- C. Success is a good example. Ask just about anyone who is a part of American culture if he or she wants to be a success, and he or she will say yes (indeed it's an act of courage to say otherwise). But how do you know when you are a success? Therapists say that it's not unusual to find people coming to them who are making a good living, their children are healthy, they have a summer home, their wives or husbands are agreeable, loving people, and yet, somehow there is something missing, something else, but they don't know what it looks like or where it is. The problem is that they have idealized the word success. In idealizing success, you have placed it forever out of reach. This leads to frustration, and eventually to demoralization. Take the even more basic example of rich. Many people would like to be rich, but few think about how to determine if someone is rich or not. What does it take to be rich?
- D. The answer to this problem comes from science. Science teaches us that all terms must have operational definitions. Operational definitions are concrete definitions. An experiment that calls for water specifies exactly what type of water is to be used, from what source (specific lake, river, rain), what type (distilled, demineralized, condensed steam), etc. So, for example, if you say that being rich is having a million dollars in the bank, then your goal becomes measurable, and attainable. When you reach the goal, you can feel a sense of satisfaction, pat yourself on the back. You still can set new goals, of course, you don't have to stop there.
- E. If you say you want to be a rock star, operationalize it. How would you define it. Playing a concert for a certain number of people? Releasing a recording? A certain level of sales? Signed by a label or going on tour? Once you set a concrete goal, you can also outline the steps it would take to get there, the operations required to reach the goal. This is how career counselors help

people, by getting them to set goals, decide on whether they are realistic and obtainable (if not, you need to revise your goals), and then figure out the steps you need to get there. This way, you have a plan to follow, and can also determine if you are not going to meet your goal and it's best to move on.

#### IX. Facts

- A. A fact is not so much a truth as it is a statement about truth. Facts are commonly thought to be true, but actually are statements that can be proven true of false.
- B. A fact, is also know as a statement of fact, as a statement of description, and as a proposition (as in, this is proposed to be true).
- C. Scientific language uses propositions. Simple statements of description are relatively low level abstracting, and can be *proven* true or false based on observation. "It is raining outside right now," is a proposition. We can look out of the window or go outside and determine its validity.
- D. Generalizations represent a higher level of abstracting, for example, whenever dark clouds gather, rain follows. We can test the generalization and see whether it holds true in this particular instance. If it doesn't, we have proven it false. If it does, however, we have not proven it true, because we cannot text for every possible instance, past, present, and future. Karl Popper. All swans are white.
- E. No statement, no idea, no concept, no theory can be called scientific if it does not allow the possibility of being proven false.
- F. "He has \$100,000 is a proposition, if we can gain access to the appropriate information, and prove it true or false. "He is rich," is not a proposition, unless we give the word "rich" an operational definition that allows for testing.
- G. Not all statements are propositions. Most are not. Most statements cannot be proven true or false, or falsified.
- H. Truth in Advertising laws only go so far. If the ad says the price is \$100, and they charge you \$200, that's a false claim. If the ad says the product does the job better than its competitor, and there is an objective test to determine whether that is so, the ad is factual, propositional. If the ad says the product is cheaper and better, works faster, etc., without making a comparison, there is no statement that can be tested, therefore no false claim. How can you prove true or false a statement like, "You're in good hands with Allstate"; "Drivers wanted"; "I love New York"; or "Got milk?"
- I. Some statements are simply definitions, axioms, and in this sense tautolgies (it is what it is because I say it is). Let x=3. A dog is a four-legged mammal that barks. A sentence is a complete thought. You cannot prove a definition true or false, you can only accept or reject it.
- J. Some statements are judgments or opinions, expressing values and emotions. He is evil is a value judgment, as opposed to saying he has been arrested and convicted of a crime. Ethics and aesthetics are based on judgments. You cannot prove that anything or anyone is bad or good, beautiful or ugly, etc.

- K. Some statements are inferences, which are assumptions (and what happens when you assume?). They resemble propositions or facts, in that they are statements that could be proven true or false under the right conditions. But they are deductions or leaps made without access to the need evidence. I say it's raining outside right now, there's a window, so you look out and see that it is, that's a proposition. I say it's raining outside right now, there's no window, you know it was raining when you came in, so you figure it must still be raining, that's an inference.
- L. Distinguishing Between Facts and Inferences
  - 1. Based on the information you have available to you right now, without further investigation, is the statement "I am standing here" a fact or an inference? Is the statement "I am wearing underwear" a fact or inference?
  - 2. In detective stories the hero finds clues and solves the crime by making inferences based on the clues. Using inferences is a sign of intelligence, often tested for in grade school standardized tests for language/reading (which is the best title for this story?). But distinguishing between facts and inferences is a more advanced form of intelligence, appears on IQ tests and LSATs.
  - 3. Exercise: Fact/Inference Test
  - 4. Inferences are used in persuasion and propaganda. Misleading association—actual association—implied association. Presidential candidate Adlai Stevenson worked in state department at the same time as Alger Hiss, who has been convicted of conspiring for communism. US corporation profits doubled in 1968, US casualties in Vietnam doubled in 1968.
  - 5. Inferences used in politics. News leaks, background briefings, pseudoevents. The president said, X. This reporter was also told Y.
  - 6. News reporting, especially based on government or political sources, full of ambiguous language, suggesting inferences, but with deniability.
  - 7. Columnist has someone else do interview for him, write it in passive voice so he never says he asked the questions.
  - 8. General semantics, understanding of propositions and inferences, scientific approach, very useful for journalists, problem of objectivity similar to that in science, reporting the facts
  - 9. Images make no statements (Susanne Langer, Philosophy in a New Key), are not propositional or discursive, cannot be proven true or false. The can be used as evidence to support a claim, but make no claim of their own. As opposed to me saying, it is raining outside right now, if I show you a picture taken outside of rain, it makes no statement, it is what it is, a concrete image of a moment in time. Only if I add the words, this is what it's doing outside right now do we have a proposition. A picture of a bombed out building can be accompanied by a caption that says it was a military target, or a civilian residence. The same picture can be used to make contradictory statements, used by opposite sides. That's why we need to read the caption on an illustration, check the title card of a painting in an art museum. The words

- tell us what we're seeing. Pictures are not worth a 1,000 words, not translatable, apples and oranges. Case of Rodney King, first trial, prosecution let the video recording of the beating stand on its own, major mistake, as defense deconstructed the images.
- Ability to recognize the difference between facts and inference important in the legal sector, reading contracts, understand what they say, and what they don't say
- 11. Robert Heinlein in the science fiction novel *Stranger In a Strange Land* introduces the concept of the fair witness. A fair witness is a person who is specially trained to only report facts and make no inferences. For example, someone would ask a fair witness what color is that house. The fair witness would answer," it is white on this side."
- 12. A colleague of mine served on a jury once, and got into an argument with her fellow jurors over a piece of evidence. The jurors all believe that the suspect was wearing a green army jacket. This evidence was based on a black and white photograph. The jurors could not distinguish between fact and inference, and this distinction is especially important in a trial.
- 13. General semantics does not say "Never make an inference." Inferences are a necessary part of our lives. What General Semantics does say is know the difference between an inference and a fact, and be aware of the fact that when you make an inference or an assumption, you may be making a mistake.

## X. Conclusion

- A. The major assumption of general semantics is that we have a constant need for a constant evaluation and constant re-evaluation because time is constantly flowing and change is constantly occurring.
- B. How we label things determines how we react to them. Power over how we label things is power over our reactions.
- C. The ability to change definitions, to not be tied to one definition, and also to be able to change levels of abstractions, is called reframing, and is an essential skill.
- D. Sanity, individually and most importantly collectively requires that we create and utilize maps that are as similar as possible to the environment that they represent. Our maps may be subjective, and a product of social construction (intersubjectivity), but all maps are not alike, not equally valid or useful. Some maps will leave us lost, others will allow us to arrive at our destination safe and sound.